Notice is given that an ordinary meeting of the Strategy and Policy Committee will be held on:

Date:	**Thursday 8 July 2021**
Time:	**9.30 am**
Meeting Room:	**Tasman Council Chamber**
Venue:	**189 Queen Street**
	Richmond

Strategy and Policy Committee

AGENDA

MEMBERSHIP

Chairperson	Cr K Maling	
Deputy Chairperson	Cr C Hill	
Members	Mayor T King	Cr D McNamara
	Cr S Bryant	Cr D Ogilvie
	Cr C Butler	Cr T Tuffnell
	Cr M Greening	Cr A Turley
	Cr B Dowler	Cr T Walker
	Cr C Mackenzie	Cr D Wensley

(Quorum 7 members)

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AGENDA

1 OPENING, WELCOME

2 APOLOGIES AND LEAVE OF ABSENCE

Recommendation
That apologies be accepted.

3 PUBLIC FORUM

4 DECLARATIONS OF INTEREST

5 LATE ITEMS

6 CONFIRMATION OF MINUTES

That the minutes of the Strategy and Policy Committee meeting held on Thursday, 27 May 2021, be confirmed as a true and correct record of the meeting.

7 REPORTS OF COMMITTEE

Nil

8 PRESENTATIONS

9 REPORTS

10 CONFIDENTIAL SESSION

8 PRESENTATIONS

8.2 WAIMEA WATER LTD PRESENTATION

Information Only - No Decision Required

Report To:	Strategy and Policy Committee
Meeting Date:	8 July 2021
Report Author:	Tara Fifield, Executive Assistant
Report Number:	RSPC21-07-1

PRESENTATION

Mike Scott and David Wright from Waimea Water Ltd will give an update to Councillors on the Waimea Community Dam project.

Appendices

Nil

9 REPORTS

9.1 CHAIR'S REPORT

Information Only - No Decision Required

Report To:	Strategy and Policy Committee
Meeting Date:	8 July 2021
Report Author:	Kit Maling, Chair - Strategy and Policy Committee
Report Number:	RSPC21-07-2

1 Summary

1.1 This is the Chair's monthly report of the Strategy and Policy Committee.

2 Draft Resolution

That the Strategy and Policy Committee receives the Chair's Report RSPC21-07-2

3 Welcome

3.1 Welcome everyone to today's Strategy & Policy Committee meeting.

3.2 Firstly, I'd like to thank Cr Chris Hill for chairing today's meeting as I am away on a South Island road trip hoping it's not going to snow too much.

4 Natural and Built Environment Act

4.1 The first exposure of the Natural and Built Environment Act was posted today, 29 June, and it appears that there will be one plan for each council but this is yet to be confirmed so we will need to watch this space. This is the first stage of the process and there could be further changes over the coming months.

5 Outstanding Natural Landscapes

5.1 Over the past month the planning team have been carrying out consultations with our residents on Outstanding Natural Landscapes. These meetings have gone well but there are some concerns within our farming sector and our staff and ourselves need to be aware of these going forward. It is very important that we engage with this segment of our community as part of this process.

6 Attachments

Nil

9.2 NATIONAL POLICY STATEMENT ON URBAN DEVELOPMENT: TASMAN HOUSING AND BUSINESS ASSESSMENT AND COMBINED URBAN ENVIRONMENT HOUSING AND BUSINESS ASSESSMENT

Decision Required

Report To:	Strategy and Policy Committee
Meeting Date:	8 July 2021
Report Author:	Jacqui Deans, Urban Growth Co-ordinator
Report Number:	RSPC21-07-3

1 Summary

1.1 Parts of Tasman District form the Nelson Tasman Tier 2 Urban Environment, under the National Policy Statement on Urban Development (NPS UD). Tasman and Nelson are classified as Tier 2 local authorities. The NPS UD requires Tier 2 local authorities to assess demand for housing and business land in Urban Environments and the development capacity that is sufficient to meet that demand in its region in the short, medium and long term. To fulfil this requirement, Council has to publish a Housing and Business Assessment (HBA) every three years.

1.2 This is the second HBA, the last HBA was adopted by Council in 2018. It must be submitted to the Ministry for Environment by 31 July 2021. The HBAs attached to this report cover both housing and business and they will be used to inform the preparation of the new Future Development Strategy (FDS). The Tasman HBA (attached) covers the whole District in addition to the Urban Environment to better inform future strategic planning for Tasman. The second HBA (attached) covers the combined Nelson Tasman Urban Environment.

1.3 In summary, Tasman by itself, has 30 year sufficient development capacity for housing and business both within the Urban Environment and District wide. A small shortfall of industrial land exists in the long term but there is a surplus of land in the short-medium terms which would meet this longer term demand. The business land capacity includes vacant and underutilized zoned business land in Tasman. These levels of vacant land have been recently ground-truthed by Council with on site surveys in 2018/19.

1.4 The HBA for the combined Nelson Tasman Urban Environment shows that adequate housing capacity exists for the first ten years but there is a shortfall in the longer term – by year 19 (2039/40). By 2051, the shortfall amounts to approximately 736 dwellings. This shortfall for the combined Urban Environment exists due to insufficient development capacity in Nelson's part of the Urban Environment.

1.5 Sufficient business land exists for the 30 year period for the combined Urban Environment. This sufficiency relies on vacant and underutilised land, which has been ground-truthed in recent surveys by both Councils.

1.6 Subject to Council's decisions on this report, the HBAs will be submitted to the Ministry for Environment by 31 July 2021 and as soon as practicable after that date, housing bottom lines for the Urban Environment must be inserted into the Regional Policy Statement and

District Plan. In coming months, Council will receive an audit report from the Ministry for Environment on the HBAs, potentially with points of clarification. The draft HBA has already been provided to the NZ Audit office, as a requirement for the Long Term Plan 2021-2031.

2 Draft Resolution

That the Strategy and Policy Committee:

1 receives the National Policy Statement on Urban Development: Tasman Housing and Business Assessment and Combined Urban Environment Housing and Business Assessment; and

2 receives the Tasman Housing and Business Assessment contained in Attachment 1 to this report, dated July 2021 and the Combined Urban Environment Housing and Business Assessment contained in Attachment 2, dated July 2021; and

3 instructs staff to submit the attached Tasman Housing and Business Assessment (Attachment 1, dated July 2021) to Ministry for Environment by 31 July 2021, as required by the National Policy Statement on Urban Development; and

4 instructs staff to submit the Combined Nelson Tasman Urban Environment Housing and Business Assessment to Ministry for Environment (Attachment 2, dated July 2021) by 31 July 2021, subject to Nelson City Council approving its assessment; and

5 instructs staff to insert "housing bottom lines" into the Tasman Regional Policy Statement and District Plan, for the Urban Environment for the period 2021-2051, broken down into the short, medium and long terms, as soon as practicable after the Housing Business Assessment is made publicly available, as required by the National Policy Statement on Urban Development; and

6 agrees that the Mayors of both councils being delegated the ability to make amendments to Attachment 2 (Combined Urban Environment Housing and Business Assessment).

3 Purpose of the Report

3.1 To provide both the Tasman Housing and Business Assessment and Combined Nelson Tasman Urban Environment Housing and Business Assessment for Council's approval to submit to the Ministry of Environment (MfE) by 31 July 2021. In addition, to obtain instructions from Council to insert "housing bottom lines" into the Regional Policy Statement and District Plan for the Urban Environment covering the period 2021-2051, as soon as practicable.

4 Background and Discussion

4.1 The National Policy Statement on Urban Development (NPS UD), was gazetted in August 2020, replacing its predecessor the National Policy Statement on Urban Development Capacity (2016). The NPS UD identifies Nelson and Tasman as a Tier 2 Urban Environment and requires the councils to work together to jointly prepare a Housing and Business Assessment (HBA) for the shared Urban Environment.

4.2 An Urban Environment means any area of land that is intended to be predominantly urban in character and is intended to be part of a housing and labour market of at least 10,000 people. MfE has also confirmed that the Urban Environment can include non-contiguous areas of urban land – so long as they are part of the same housing and labour market.

4.3 On 10 November 2020, the Nelson Tasman Joint Committee approved the inclusion of the settlements of Nelson, Richmond, Motueka, Mapua, Wakefield, Brightwater, Cable Bay and Hira as the 'Tier 2 Urban Environment' in recognition that these communities are part of the same labour and housing market.

4.4 The NPS UD requires Council, as a tier 2 local authority to monitor quarterly demand for dwellings, supply of dwellings, prices and rents, affordability, housing capacity and available data on business land. Council must publish the results of its monitoring at least annually. The purpose of this monitoring is to provide robust and frequently updated evidence to inform decisions, the FDS and to ensure at least enough development capacity is enabled at all times. The most recent annual monitoring report was approved by Council's Regulatory Committee on 15 October 2020, covering the period year ending June 2021.

4.5 In addition, the NPS UD requires Council to assess demand for housing and business land in Urban Environments and determine the development capacity that is sufficient to meet that demand in its region in the short, medium and long term. To fulfil this requirement, Council has to publish an HBA every three years. The last HBA was adopted by Council in 2018. This second HBA must be submitted to the Ministry for Environment by 31 July 2021, but the HBA only has to relate to housing for this deadline. The HBA must apply at a minimum to the tier 2 Urban Environment of the local authority, but may apply to any wider area. The HBAs attached to this report cover housing and business, in order that they can inform the preparation of a new FDS, due to commence July 2021. The FDS in turn informs the review of Council's growth model, the next Long Term Plan and other Council plans:

4.6 Strategic housing and business capacity planning is important for the whole District. At 2019, only 55% of the population of Tasman District resided within the Urban Environment. The Tasman HBA attached to this report covers both the Urban Environment and the whole District. The Tasman HBA is one of three reports that comprise the Nelson Tasman Tier 2 Urban Environment Housing and Business Capacity Assessments 2021. The other two reports are the Nelson City Council HBA and the combined Urban Environment HBA (attached). Together these reports provide the analysis to assess the sufficiency of Nelson and Tasman's residential and business land capacity to meet future needs over 30 years 2021-2051. Nelson City Council is considering its HBA later this month.

4.7 The HBA will also inform the "housing bottom lines" that need to be inserted into each Council's Regional Policy Statement and District Plan as soon as practicable afterwards, which is a new requirement under the NPS UD. The housing bottom lines are intended to clearly state the amount of development capacity that is needed to meet expected housing demand plus the appropriate competitiveness margin in the region and district.

4.8 Under the NPS UD it is a continued requirement for Housing and Business Development Capacity Assessments to be jointly prepared and made publicly available, every three years, in time to inform the next Long Term Plans (LTPs). The next HBA (for housing and business) must be prepared in time to inform the 2024 LTP. Going forward, HBAs must be prepared in time to inform the LTP. It was only due to the fact that the NPS UD was not gazetted until August 2020 that this HBA has been prepared after the LTP 2021-2031.

Key findings of Housing and Business Assessments

Tasman Housing and Business Assessment

4.9 The Government's measure of housing affordability (Housing Affordability Measure Buy), shows that at December 2018, about 81% of first time buyer households in Tasman could not afford a typical 'first home' priced house, spending more than 30% of income on housing costs. Mean incomes in Nelson Tasman are 13% below the New Zealand average and have

only caught up by 2% in the last 20 years. As at November 2020, the Massey University Home Affordability Index showed Tasman as the second least affordable region in the country, after Auckland and Nelson a close third. Prior to August 2020.

4.10 According to MHUD's dashboard, house prices have increased by 64% in Tasman since 2015. REINZ also monitors house prices in the region and it finds that the median house price in Tasman was a record $850,000 in May 2021, an increase of 21% since May 2020. According to REINZ there are only two regions in the country currently with higher median house prices – Auckland and Wellington. These unaffordable house prices are against a backdrop of record consenting activity for Tasman. Building consents for new dwellings for year ending March 2021 reached a new record high of 601. Sections created and resource consents for housing are also all trending upwards.

4.11 Tasman's population continues to grow, outstripping predictions by Stats NZ, with average annual growth between 2015-2020 averaging 2.2%. In the year ending 30 June 2020, the population grew by 2.4%. Population is projected to increase in Tasman by 7,700 residents between 2021 and 2031, from 56,600 to 64,300 (13%) and then slowing but still by a further 11,810 residents to 2051 (18%), totaling 76,110.

4.12 As with population growth, dwelling demand is expected to decrease District wide over time, averaging 451 dwellings a year in the short term, 427 per year medium term and 416 per year long term. However for the Urban Environment dwelling demand remains constant over the 30 years. 67% of the dwellings required in the District are needed in the, demonstrating the role these towns are playing in providing locations Urban Environment to live within commutable distance to the major employment areas of Richmond and Nelson.

4.13 In Tasman District overall there is sufficient development capacity for housing under the medium growth population scenario for 30 years. In its latest LTP, Council has aimed for housing capacity that is 'reasonably expected to be realised' to equal demand District-wide, by Ward and for most individual towns. However some towns are providing capacity for others where demand cannot be met. For example capacity in Richmond in the next 10 years will also meet partial short term demand for Brightwater and Motueka. Council has prioritised infrastructure delivery in the Long Term Plan for Motueka West to commence shortly. Motueka's further development is constrained by a combination of natural hazards, low lying land and productive land. A climate change adaptation strategy is required, together with stormwater and river modelling before brownfield intensification can proceed here. Further greenfield expansion in Motueka is limited to already zoned land. Therefore a longer term growth site in Lower Moutere identified in the FDS could provide for longer term demand from Motueka. The location is between Richmond and Motueka and just 6 km from the centre of Motueka.

4.14 On commercial feasibility for brownfield intensification, using the rules of the intensification Plan Change for Richmond, resource consents have yielded a net addition of 52 dwellings in just over two years. According to QV, the very existence of the Richmond intensive development area (RIDA) has caused land values to rise where it has created potential for redevelopment.

4.15 In terms of type of housing capacity (location and typology), Motueka is the worst mismatch according to the housing preferences survey 2021 with double the amount of people wanting to live there than can actually afford to. Motueka is facing particular housing demands, in terms of opportunities generally as well as affordable options, needs of Māori residents, seasonal workers and renter needs. Affordability is an issue for the whole District but is

worse in Motueka and Golden Bay due to lower incomes. Additional seasonal worker accommodation is needed in the Motueka area where campground facilities are smaller and fewer.

4.16 The Property Economics model (2016 extrapolated to 2051 and latest population projections applied) is used to estimate business land demand for Tasman's Urban Environment and rest of the District. Council has very recently procured a new business model from Sense Partners and this will be used in the preparation of a new FDS and the next HBA. Business land demand for Tasman District (including the Urban Environment) has decreased from the Property Economics model to the more recent Sense Partners model, therefore this HBA is based on the upper extreme of business land demand and future assessments are likely to be lower. That said, the Sense Partners model states that Tasman District needs to provide for 89% of the future business land demand requirements for the Nelson Tasman region, hence the importance of business land capacity in Tasman.

4.17 There is sufficient business land for the Urban Environment and rest of Tasman District for the 30-year period. While a small shortfall of industrial land exists in the long term in the Urban Environment, there is a surplus of land in the short and medium terms which would meet this longer-term demand. The business land capacity includes vacant and underutilized zoned business land in Tasman. These levels of vacant land have been recently ground-truthed by Council with on- site surveys in 2018/19.

Nelson Tasman Urban Environment Housing and Business Assessment

4.18 When the results from the Nelson and Tasman HBAs are combined for the Urban Environment (attachment 2), there is an insufficiency of residential capacity (736 dwellings over the 30 year period). When the Urban Environment is combined the shortfall would commence around year 2039/40. This is due to an insufficiency of Nelson's residential land capacity by year 18 (2038/39).

4.19 In terms of business land, there is sufficient business land capacity for the next 30 years in the whole Urban Environment. This includes vacant and underutilized zoned business land in both Districts. These levels of vacant land have been recently ground-truthed by both Councils with on-site surveys. While a small shortfall of industrial land exists in the long term (3ha), there is a surplus of 24 ha in the short and medium terms which would meet this longer-term demand.

Housing "bottom lines"

4.20 As explained above, as soon as practicable after the HBA is made publicly available, Council must insert housing bottom lines into its Regional Policy Statement and District Plan for the short, medium and long terms. The housing bottom line only refers to the Urban Environment because the NPS UD only requires this obligation in relation to the Urban Environment. The rest of Tasman District is the rural remainder. The housing bottom lines are the amount of feasible, reasonably expected to be realised development capacity along with the competitiveness margin for the short, medium and long terms.

4.21 They are as follows:

Urban Environment	Short term Years 1-3 (2021-2024) Number of dwellings
Richmond	398
Brightwater	77
Māpua/Ruby Bay	109
Wakefield	64
Motueka	262
Total	**910**

Urban Environment	Medium term Years 4-10 (2025-2031) Number of dwellings
Richmond	1006
Brightwater	175
Māpua/Ruby Bay	268
Wakefield	145
Motueka	631
Total	**2225**

Urban Environment	Long term Years 11-30 (2032-2051) Number of dwellings
Richmond	2697
Brightwater	412
Māpua/Ruby Bay	722
Wakefield	377
Motueka	1812
Total	**6020**

4.22 In coming months, Council will receive an audit report from the Ministry for Environment on the HBAs, potentially with points of clarification. The draft HBA has already been provided to the NZ Audit office, as a requirement for the Long Term Plan 2021-2031.

5 Options

5.1 The options are outlined in the following table.

	Option	Advantage	Disadvantage
1.	Submit the full HBA to Ministry for Environment that covers housing and business capacity	Publishing the whole capacity assessment covering housing and business will mean that FDS project team is fully	Not publishing the capacity assessment of business land will mean the FDS project team is ill informed about business capacity and future

		informed about both housing and business capacity and future needs. Preparation of a new FDS is due to start July 2021	needs for the preparation of a new FDS, due to start July 2021
2.	Only submit a HBA to Ministry for Environment that covers housing, rather than housing and business capacity	The NPS UD requires Council to make publicly available a HBA only on housing capacity by July 31 2021.	Not publishing the capacity assessment of business land will mean the FDS project team is ill informed about business capacity and future needs for the preparation of a new FDS, due to start July 2021

5.2 The submission of the full HBAs to the Ministry for Environment, covering both housing and business land is recommended.

6 Strategy and Risks

6.1 Staff at both Nelson City Council and Tasman District Council have worked together, as required by the NPS UD to prepare a joint HBA for the Urban Environment.

6.2 As permitted by the NPS UD, Tasman's HBA also covers the wider area of the District, so as to provide for strategic planning of the whole territorial authority's land area.

6.3 Risks have therefore been minimised during the preparation of the HBA.

6.4 Should Council agree to the insertion of housing bottom lines into the Regional Policy Statement and District Plan, this will also fulfil requirements of the NPS UD. This must be done without using a process in Schedule 1 of the RMA, but any changes to RMA planning documents required to give effect to the bottom lines must be made using a Schedule 1 process.

6.5 Staff have also prepared an assessment of both housing and business land capacity, rather than just housing, in order to better inform the preparation of a new FDS in July 2021.

6.6 The assessment of sufficiency of housing and business land capacity is based on Council's growth model. All models can be theoretical and not always accurate. That said staff have based the assessment of capacity on realistic assumptions including consents, physical constraints of the land, yields allowing consideration of stormwater and roading, the zoning and servicing status of the land and known developer intentions.

6.7 Staff acknowledge that there is unmet latent, or residual demand in some parts of the District. The growth model, like most models around the country, looks forward and does not quantify or include unmet demand in future projections. In December 2020, MHUD revised its data for new dwelling consents compared to household growth, using latest Stats NZ population projections. Unmet demand amounts to approximately 260 dwellings in total for the last ten years. This is a relatively small amount and under the NPS UD, Council monitors housing and business markets regularly and considers reacting with urgent Plan Changes to ensure sufficient developable land capacity is available. Council also considers a higher growth scenario for each LTP and the FDS identifies sufficient housing and business sites for a high growth scenario and is reviewed every three years.

7 Policy / Legal Requirements / Plan

7.1 Sections 30 and 31 of the Resource Management Act require Council to ensure that there is sufficient development capacity in relation to housing and business land to meet the expected demands of the region and district.

7.2 The NPS UD requires Council, as a Tier 2 Local Authority to prepare a HBA (housing only) and submit it to the Ministry for Environment by 31 July 2021. Since jurisdiction over the Tier 2 Urban Environment is shared with Nelson City Council, the two local authorities are jointly responsible for preparing a HBA.

7.3 The NPS UD requires the insertion of housing bottom lines into Council's regional policy statement and district plan, as soon as practicable after the HBA is made publicly available.

8 Consideration of Financial or Budgetary Implications

8.1 This HBA and associated surveys to inform the assessment have been undertaken by Council staff. Any consultancy reports, used to inform this HBA, such as the housing preferences survey 2021 have already been budgeted for.

9 Significance and Engagement

9.1 Overall the decisions themselves are unlikely to be of particular public interest, they do not have a long duration, they do not have a high impact on community well-being, they do not have a major impact on rates or debt levels in the Councils' Long Term Plans, nor do they relate to Council strategic assets. Given the low level of significance of these decisions, officers consider that Council can make the decisions sought through this report without undertaking any public consultation or engagement.

	Issue	**Level of Significance**	**Explanation of Assessment**
1.	Is there a high level of public interest, or is decision likely to be controversial?	low	The submission of the actual HBA to the Ministry for Environment is likely to be of low interest. It is the outcome of the deliberations on the draft Long Term Plan 2021-2031
2.	Are there impacts on the social, economic, environmental or cultural aspects of well-being of the community in the present or future?	Moderate	The decisions in adopting a robust HBA contribute to the following community outcomes: - Strong, resilient, and inclusive communities - Enabling positive and sustainable development

	Issue	Level of Significance	Explanation of Assessment
			Providing for 30 year's worth of housing and business land capacity has implications that contribute to these community outcomes
3.	Is there a significant impact arising from duration of the effects from the decision?	Low	
4.	Does this activity contribute or detract from one of the goals in the Tasman Climate Action Plan 2019?	Moderate	The relevant goals are: 1. Council contributes to New Zealand's efforts to reduce greenhouse gas emissions (including net carbon emissions). 2. Tasman District becomes more resilient to the impacts of climate change. Providing for 30 year's worth of housing and business land capacity has implications that contribute to these goals
5.	Does the decision relate to a strategic asset? (refer Significance and Engagement Policy for list of strategic assets)	No	
6.	Does the decision create a substantial change in the level of service provided by Council?	No	
7.	Does the proposal, activity or decision substantially affect debt, rates or Council finances in any one year or more of the LTP?	No	Infrastructure costs associated with providing the housing and business capacity in the assessment, are already contained within the draft LTP 2021-2031
8.	Does the decision involve the sale of a substantial proportion or controlling interest in a CCO or CCTO?	No	

	Issue	Level of Significance	Explanation of Assessment
9.	Does the proposal or decision involve entry into a private sector partnership or contract to carry out the deliver on any Council group of activities?	No	
10	Does the proposal or decision involve Council exiting from or entering into a group of activities?	No	
11	Does the proposal require inclusion of Māori in the decision making process (consistent with s81 of the LGA)?	Moderate	Staff attendance at Māori housing forums last year meant Council could explain the capacity monitoring that it has to do under the NPS UD. Council has purchased data from Stats NZ to better understand current Māori housing trends in the District and this data informs the HBA. Council staff have also engaged iwi in early discussions on the preparation of a new FDS, seeking to understand housing needs. Council has also recently held discussions with iwi on the possibility of building community housing on Council surplus land.

10 Conclusion

10.1 Under the NPS UD, Tasman District is a Tier 2 Local Authority. Parts of the District form the Nelson Tasman Tier 2 Urban Environment. The NPS UD contains requirements for such councils and these include preparing a HBA every three years.

10.2 This report summarises the high level findings of the HBA. The executive summary of the HBA provides a more comprehensive summary of the assessment. Risks of not meeting the legal requirements set out in the NPS UD are minimised, by preparing a robust HBA. The HBA goes beyond the requirements of the NPS UD in covering both housing and business capacity and in covering the whole District, as well as the Urban Environment. This is in order to make the HBA more useful in informing the new FDS as well as other Council plans, including the review of the Resource Management Plan.

11 Next Steps / Timeline

11.1 Subject to Council's decisions on this report, the HBA will be submitted to the Ministry for Environment by 31 July 2021 and as soon as practicable after that date, housing bottom lines will be inserted into the Regional Policy Statement and District Plan, without using a process in Schedule 1 of the RMA.

11.2 The findings of the HBA will inform the preparation of a new FDS, due to commence July 2021.

Attachments

tasman district council | Te Kaunihera o te tai o Aorere

National Policy Statement on Urban Development:
Housing and Business Assessment for Tasman

July 2021

Cover Page: Photograph showing the largest housing developments currently underway in Tasman, at Lower Queen Street, Richmond, comprising 1,200 dwellings

Contents

1. Executive Summary

This report is one of three that comprise the Nelson Tasman Tier 2 Urban Environment Housing and Business Capacity Assessments 2021. Together these reports provide the analysis to assess the sufficiency of Nelson and Tasman's residential and business land capacity to meet future needs over 30 years 2021-2051. The Tier 2 Urban Environment includes the following city and towns: Nelson, Richmond, Motueka, Māpua, Wakefield, Brightwater, Cable Bay and Hira, in recognition that these communities are part of the same labour and housing market, and these areas are or are intended to be predominantly urban in character.[1]

Tasman District Council (TDC), in this report assesses housing and business capacity for both its part of the Tier 2 Urban Environment and the remainder of the District. There is a third bridging report prepared by both Councils, called *"National Policy Statement on Urban Development – Nelson-Tasman Tier 2 Urban Environment"*. The overview report summarises the capacity assessment for the Urban Environment covering both Councils.

The purpose of this Housing and Business Assessment is to inform RMA Planning documents, the Future Development Strategy and Long-Term Plans. The analysis contained within this assessment has already been used to inform the LTP 2021-2031 and will be used to inform the review of the 2019 Future Development Strategy. In 2022/23 further housing and business analysis will take place to inform the LTP 2024-2034.

1.1 Affordability Context

Tasman District and Nelson City operate and function as a single economic market and business activity flows both ways across the Territorial Authority boundaries. Consequently, Tasman and Nelson also function as a single housing market. Infometrics recently estimated a median multiple (house price to income multiple) in Tasman of 8.0, making it the fourth least affordable local authority, equal to Auckland. There are a number of indicators measuring affordability of house prices, but they all point to Tasman being severely unaffordable. This is not helped by lower than national average household incomes, which are 13% below the NZ average and have only caught up by 2% in the last 20 years. Nelson Tasman is second lowest in NZ.

The Government's measure of housing affordability HAM Buy, shows that at December 2018, about 81% of first-time buyer households in Tasman could not afford a typical 'first home' priced house, spending more than 30% of income on housing costs. Mean incomes in Nelson Tasman are 13% below the NZ average and have only caught up by 2% in the last 20 years. As of August 2020, the Massey University Home Affordability Index showed Tasman as the third least affordable region in the country, after Auckland and Nelson. Prior to August 2020 Tasman had been the second least affordable region for about two years.

According to MHUD's dashboard, house prices have increased by 64% in Tasman since 2015. REINZ also monitors house prices in the region, and it finds that the median house price in Tasman was a record $850,000 in May 2021, an increase of 21% since May 2020. According to REINZ there are only two regions in the country currently with higher median house prices – Auckland and Wellington. These unaffordable house prices are against a backdrop of record consenting activity for Tasman. Building consents for dwellings for year ending March 2021 reached a new record high of 601. Sections created and resource consents for housing are also all trending upwards.

[1] Resolution of the Joint Committee of Tasman District and Nelson City Councils 10th November 2020

1.2 Population Growth

Tasman's population continues to grow, outstripping predictions by Stats NZ, with average annual growth between 2015-2020 averaging 2.2%. In the year ending 30 June 2020, the population grew by 2.4%. Most of this growth is from net migration gains and importantly for Tasman a sizable proportion of this is from internal migration. Population is projected to increase in Tasman by 7,700 residents between 2021 and 2031, from 56,600 to 64,300 (13%) and then slowing but still by a further 11,810 residents to 2051 (18%), totaling 76,110. Population growth projections in the urban environment are slightly higher at 18% for the first 10 years and 18% for the following 20 years. Highest growth continues to be in the 65+ age group, of which the proportion is projected to increase in Tasman from 21% in 2018 to 34% in 2048. The ageing population, driving an increase in one-person households and couples without children, continues to mean smaller average household sizes across the District. Council has its own growth model, now on its sixth iteration that forecasts land requirements for housing and business. A Housing Preferences survey was undertaken earlier this year of the Urban Environment to also inform housing demand.

1.3 Residential Demand

As with population growth, dwelling demand is expected to decrease District wide over time, averaging 451 dwellings a year in the short term, 427 per year medium term and 416 per year long term. However, for the Urban Environment dwelling demand remains constant over the 30 years. 67% of the dwellings required in the District are needed in the Urban Environment, demonstrating the role these towns are playing in providing locations to live within commutable distance to the major employment areas of Richmond and Nelson. Richmond and Motueka, the two largest towns, need the most new dwellings in the future. While the actual number of dwellings varies significantly between the low, medium and high scenarios, the composition by age group and household type remains relatively similar. Unmet demand (new dwellings consented versus actual household growth) amounts to approximately only 260 dwellings in total for the last ten years.

In considering different household group needs, the greatest concentration of Māori residents is in Motueka, where 15% of the population identify as Māori (compared with 8% for the total Tasman population). Tasman's Māori population is projected to increase from 8% of Tasman's population in 2018 to 12% in 2038. Despite having more residents per household, Māori are slightly more likely to live in smaller homes than the general population, but this could be due to affordability constraints.

Home ownership proportions in Tasman have been one of the highest nationally since 2006. Dwellings owned or held in a family trust had increased slightly from 75% to 75.6% between 2013 and 2018, despite affordability worsening. Housing affordability is an issue across all the District, but Motueka and Golden Bay have the highest proportion of households on relatively low incomes and a greater need for affordable housing options. There are about 5,500 seasonal workers in Tasman in a given season and about 1,500 -1,700 of these are RSE workers. In towns such as Motueka and Riuwaka, growers face particular seasonal accommodation challenges with lack of motor camps and motels.

The Housing preferences survey 2021 shows that while the majority (71%) of respondents prefer stand alone dwellings, an increased proportion prefer attached dwellings, when compared with previous surveys – 25%. 4% prefer apartments. The majority (62%) of older residents prefer standalone dwellings, but a significant proportion also prefer attached dwellings (31%) and these would generally be smaller dwellings. A further 6% of older people prefer apartments. Overall, 34% of respondents could not afford to buy a dwelling and only 5% of these could afford to rent.

1.4 Residential Capacity

In Tasman District overall there is sufficient development capacity for housing to meet demand under the medium growth population scenario for 30 years. In its latest Long-Term Plan (LTP), Council has aimed for housing capacity that is 'reasonably expected to be realised' to equal demand District-wide, by Ward and for most individual towns. However, some towns are providing capacity for others where demand cannot be met. For example, capacity in Richmond in the next 10 years will also meet partial short-term demand for Brightwater and Motueka. Council has prioritised infrastructure delivery in the Long-Term Plan for Motueka West to commence shortly. Since Motueka's further development is constrained by a combination of natural hazards, low lying land, productive land, a climate change adaptation strategy is required, together with stormwater and river modelling before brownfield intensification can proceed here. Further greenfield expansion in Motueka is limited to already zoned land. Therefore, a longer-term growth site in Lower Moutere identified in the FDS could provide for longer term demand from Motueka. Such a location is between Richmond and Motueka and just 6km from the centre of Motueka. The housing references survey 2021 has shown that income constrained demand in areas like Lower Moutere is higher than the unconstrained demand. Some of the urban demand may be driven into these more rural areas of Tasman, constrained by affordability issues.

On commercial feasibility for brownfield intensification, using the rules of the intensification Plan Change for Richmond, resource consents have yielded a net addition of 52 dwellings in 2 years. According to QV, the very existence of the Richmond intensive development area (RIDA) has caused land values to rise where there is potential for redevelopment.

Representative greenfield sites within the Urban Environment have been analysed for commercial viability to a developer using the NPS UDC development feasibility tool. These were all found to be commercially feasible at varying densities, depending on the individual site.

In terms of type of capacity (location and typology), the inability of Council to currently provide for all demand in Motueka is highlighted. Motueka is the worst mismatch according to the housing preferences survey with double the amount of people wanting to live there than can actually afford to. Motueka is facing particular housing demands, in terms of opportunities generally, affordable options, needs of Māori residents, seasonal workers and renter needs. Affordability is an issue for the whole District but is worse in Motueka and Golden Bay due to lower incomes. Additional seasonal worker accommodation is needed in the Motueka area where campground facilities are smaller and fewer.

The housing preferences survey showed that for renters, location is key, underlining once more the importance of meeting demand in specific locations.

1.5 Business Demand and Capacity

The Property Economics model (2016 extrapolated) has been used to estimate business land demand for Tasman's Urban Environment and rest of District. Council has very recently procured a new business model from Sense Partners, and this will be used in the Future Development Strategy review and next Housing Business Assessment. Business land demand for Tasman District (including the Urban Environment) has decreased from the Property Economics model to the more recent Sense Partners model, therefore this HBA is therefore based on the upper extreme of business land demand and future assessments are likely to be lower. That said, the Sense Partners model states that Tasman District needs to provide for 89% of the future

business land demand requirements for the Nelson Tasman region, hence the importance of business land capacity in Tasman.

The business land capacity includes vacant and underutilized zoned business land in Tasman. These levels of vacant land have been recently ground-truthed by Council with on site surveys in 2018/19. There is sufficient business land for the Urban Environment and rest of District for the 30-year period. While a small shortfall of industrial land exists in the long term in the Urban Environment, there is a surplus of land in the short and medium terms which would meet this longer-term demand.

1.6 Housing Bottom Lines

As soon as practicable after this HBA is made publicly available, Tasman District Council will insert into its regional policy statement and district plan, a housing bottom line for the short, medium and long term for the Urban Environment. The housing bottom line only refers to the Urban Environment because the NPS UD only requires this obligation in relation to the Urban Environment. The rest of Tasman District is the rural remainder.

The housing bottom lines are the amount of feasible, reasonably expected to be realised development capacity along with the competitiveness margin for the short, medium and long terms. These are:

Urban Environment	Short term Years 1-3 (2021-2024) Number of dwellings
Richmond	398
Brightwater	77
Māpua/Ruby Bay	109
Wakefield	64
Motueka	262
Total	**910**

Urban Environment	Medium term Years 4-10 (2025-2031) Number of dwellings
Richmond	1006
Brightwater	175
Māpua/Ruby Bay	268
Wakefield	145
Motueka	631
Total	**2225**

Urban Environment	Long term Years 11-30 (2032-2051) Number of dwellings
Richmond	2697

Brightwater	412
Māpua/Ruby Bay	722
Wakefield	377
Motueka	1812
Total	**6020**

2. Introduction

Parts of Tasman District form the Nelson Tasman Tier 2 Urban Environment under the National Policy Statement on Urban Development. These comprise Richmond, Brightwater, Wakefield, Māpua and Motueka. Tasman District and Nelson City operate and function as a single economic market and business activity flows both ways across the Territorial Authority boundaries. Consequently, Tasman and Nelson also function as a single housing market. Infometrics recently estimated a median multiple (house price to income multiple) in Tasman of 8.0, making it the fourth least affordable local authority, equal to Auckland. According to MHUD's dashboard, house prices have increased by 64% in Tasman since 2015. REINZ also monitors house prices in the region, and it finds that the median house price in Tasman was a record $801,000 in March 2021, an increase of 19.6% since March 2020. According to REINZ there are only three regions in the country currently with higher median house prices – Auckland, Bay of Plenty and Wellington. These unaffordable house prices are against a backdrop of record consenting activity for Tasman. Building consents for dwellings for year ending March 2021 reached a new record high of 601. Sections created and resource consents for housing are also all trending upwards in Tasman.

2.1 Purpose and Objectives

This Housing and Business assessment (HBA) has been prepared to meet requirements under the National Policy Statement on Urban Development (NPS UD 2020), particularly Policy 2 and implementation clause 3.10 of the NPS. Nelson Tasman is identified as a Tier 2 Urban Environment in the NPS UD.

Policy 2 of the NPS UD requires Tier 2 local authorities, at all times to provide at least sufficient development capacity to meet expected demand for housing and for business land over the short, medium and long term.

The purpose of this HBA is to inform RMA Planning documents, the Future Development Strategy (FDS) and Long-Term Plans (LTPs). The analysis contained within this assessment has been used to inform the LTP 2021-2031 and will be used to inform the preparation of a new Future Development Strategy in 2021. In 2022/23 further housing and business analysis will take place to inform the LTP 2024-2034.

This HBA provides an introduction to the assessment, explains the methodology and approach, analyses residential and business demand and capacity and makes conclusions on sufficiency.

2.2 The Tier 2 Urban Environment and its geographic areas

"Urban environment" is defined in the NPS UD as any area of land (regardless of size, and irrespective of local authority or statistical boundaries) that: (a) is, or is intended to be, predominantly urban in character; and (b) is, or is intended to be, part of a housing and labour market of at least 10,000 people.

Richmond is the only town in Tasman with a population of more than 10,000 people and according to latest medium growth population projections (commissioned privately), no other town would have a population of more 10,000 by itself by 2051. However, as Ministry for the Environment (MfE) confirmed by email (22nd Sept 2020), the definition of urban environment includes non-contiguous areas of urban land – so long as they are part of the same housing and labour market that is greater than 10,000 people.

In determining whether a town in Tasman is part of the Richmond housing and labour market, Council has considered commuter patterns for work and education, travel time to Richmond or Nelson, connectivity to Richmond or Nelson and the real estate market - whether people are likely to move house within this urban environment.

Statistical Area 2 data was used *"New Zealand Commutes* – 2018 Census, Main means of travel to work and education" New Zealand Commutes - Flowmap.blue to understand commuter patterns. The towns included show significant numbers of commuters to Richmond. In addition, some residents of these towns commute beyond Richmond to Nelson. These are (outside of Richmond) Brightwater, Wakefield, Māpua and Motueka. There could also be some smaller towns with relatively high numbers of commuters to Richmond and Nelson, for work and education, but the SA2 area encompassing these towns is too large to be able to draw accurate conclusions e.g., the Moutere Hills SA2 area includes Upper Moutere but is very large at 98 sq km.

The Joint Nelson Tasman Committee resolved on 10 November 2020 that the Nelson Tasman Urban Environment comprises the following city and towns: Nelson, Richmond, Motueka, Māpua, Wakefield, Brightwater, Cable Bay and Hira, in recognition that these communities are part of the same labour and housing market, and these areas are or are intended to be predominantly urban in character. The SA2 map below highlights these areas:

Figure 1: Map showing Tier 2 Nelson Tasman Urban Environment, across both Districts

The Urban Environment within Tasman comprises a very small component of the overall 10,000 sq km land area of the District, as the figure shows below (black boundary represents Tasman District Council boundary, excluding the Coastal Environment):

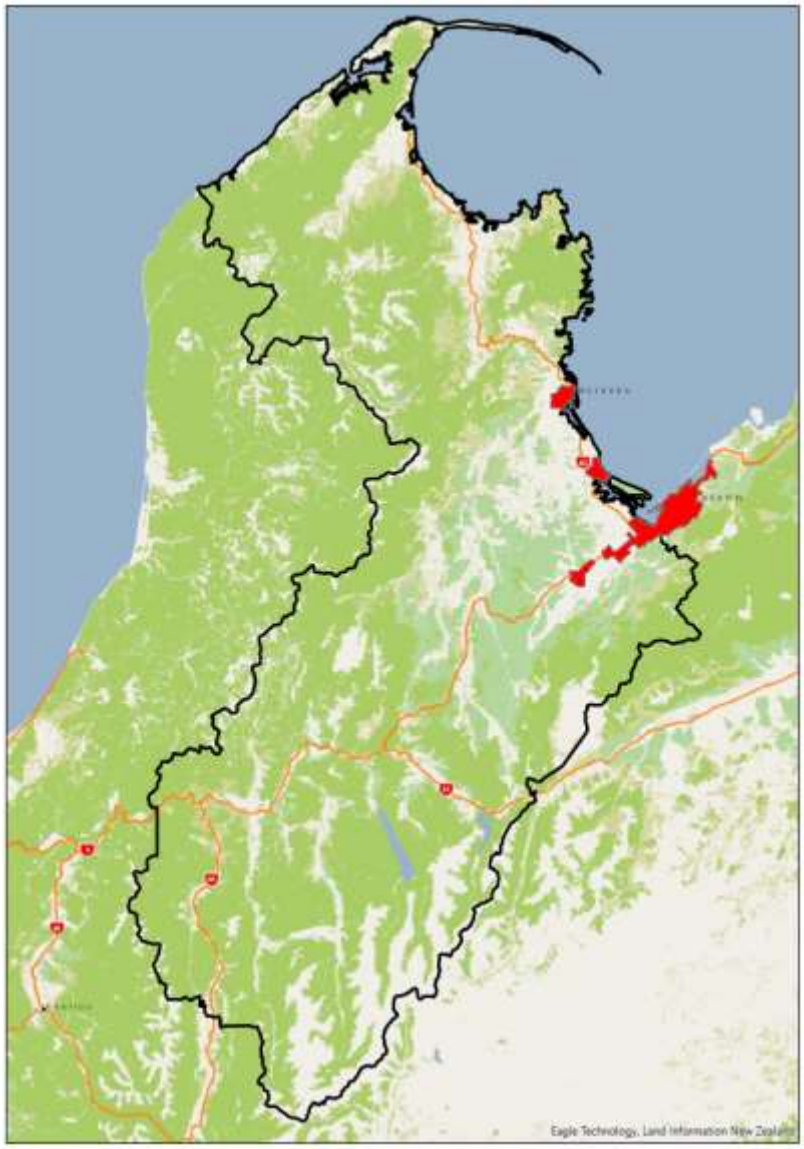


Figure 2: Map showing the Urban Environment within Tasman District as a whole

2.3 Relationship between Nelson City and Tasman District Territorial Authorities

Tasman District and Nelson City operate and function as a single economic market and business activity flows both ways across the Territorial Authority boundaries. The relative isolation of the Tasman and Nelson markets, reinforces this interconnectedness. Tasman and Nelson rely, to varying degrees, on each other to sustain their respective economies and generate significant economic benefits for each other.

Consequently, Tasman and Nelson also function as a single housing market. For these reasons, the Tier 2 Nelson Tasman Urban Environment covers a relatively large non-contiguous area.

2.4 Background to Assessment

Housing affordability is usually measured by house prices in relation to incomes. The Demographia International Housing Affordability[2] uses the "median multiple" to rate middle-income housing affordability. The Median multiple is a price-to-income ratio of the median house price divided by the gross median household income. Middle-income housing affordability is rated in four categories, ranging from the most affordable ("Affordable") to the least affordable ("Severely unaffordable"), as is indicated in the table below.

Table 1: Housing Affordability Ratings (Source International Demographia Survey 2021)

Table 1 DEMOGRAPHIA HOUSING AFFORDABILITY RATINGS	
Housing Affordability Rating	**Median Multiple**
Affordable	3.0 & Under
Moderately Unaffordable	3.1 to 4.0
Seriously Unaffordable	4.1 to 5.0
Severely Unaffordable	5.1 & Over
Median multiple: Median house price divided by median household income	

According to Demographia, in the late 1980s, the median multiple (price to income multiple) in New Zealand was approximately 3 but had risen to 7 in 2019. In March 2021, Infometrics estimated a ratio of 7.5 between Tasman's average house values and average household incomes, making it one of New Zealand's least affordable local authorities.[3]

The Government's measure of housing affordability HAM Buy, shows that at December 2018, about 81% of first-time buyer households in Tasman could not afford a typical 'first home' priced house, spending more than 30% of income on housing costs – which are defined as lower quartile price point of housing in the area. The HAM Buy has not been updated since. Mean incomes in Nelson Tasman are 13% below the NZ average and have only caught up by 2% in the last 20 years. Nelson Tasman is second lowest in NZ, second only to Gisborne.[4] The Ministry of Housing and Urban Development's (MHUD) website comments that the *"affordability of buying a first home for those in the South Island is better than for those living in Auckland, except in Tasman, Nelson and Otago"* (Tasman is in fact the worst.) [5]

[2] Demographia International Housing Affordability - 2021 Edition

[3] Insights - Do Business - NelsonTasman.NZ and Infometrics

[4] Project Kōkiri Nelson Tasman Economic Recovery and Regeneration Plan Discussion Document March 2021

[5] Experimental Housing Affordability Measure for potential first home buyers | Te Tūāpapa Kura Kāinga - Ministry of Housing and Urban Development (hud.govt.nz)

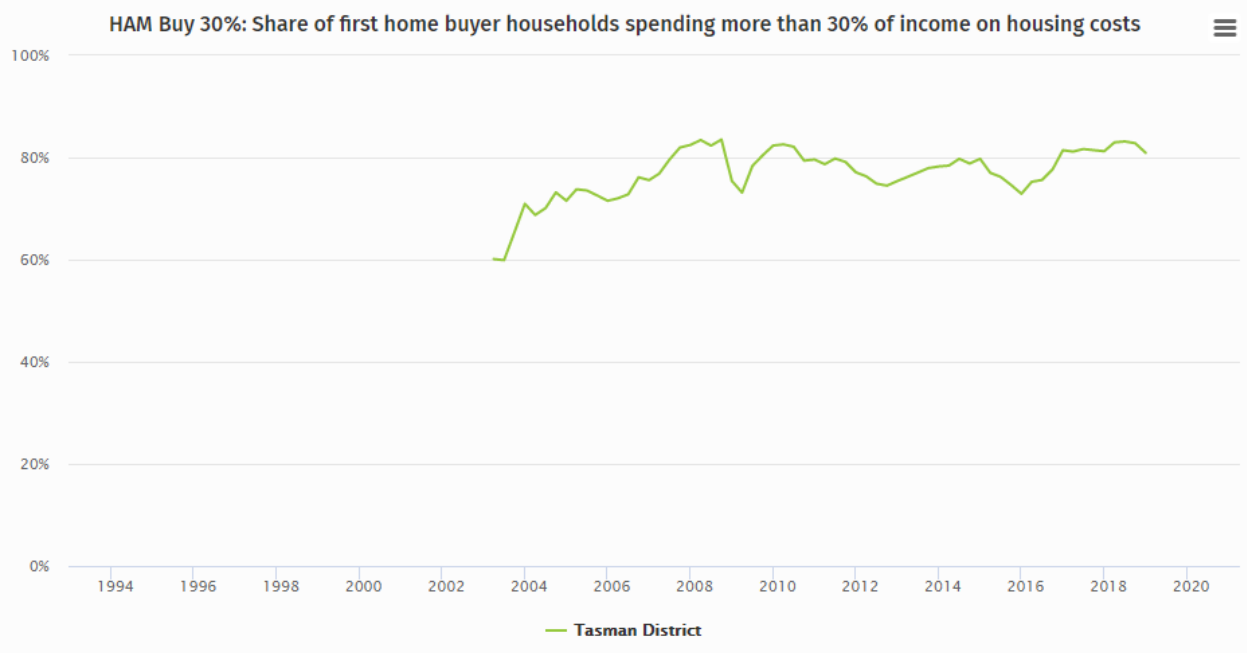


Figure 3: Government's measure of housing affordability HAM Buy for Tasman District

According to the Government's HAM Rent measure, as at Dec 2018, 38% of renting households are spending more than 30% of their income on rent.

Another affordability measure updated more regularly is the Massey Home Affordability Index, which takes into account the cost of borrowing as well as house prices and wage levels. The income data is for both renting and owner occupier households. As at May 2020, Tasman remained the second least affordable region in the country behind Auckland, as had been the case for nearly two years. In August 2020, the Massey index showed Tasman as the third least affordable region in the country, after Auckland and Nelson.

According to MHUD's dashboard, house prices have increased strongly in Tasman since 2015. Compared with six years ago, since March 2015 median house prices in Tasman have increased by around 64%. (Note this data has recently been revised by MHUD following an error on the dashboard). The median actual sale price for the year ended 31 March 2021 was $689,507 in Tasman. Compared with 31 December 2019, when median house prices were $614,995, prices have increased in Tasman by have increased by 11% in Tasman.

REINZ also monitors house prices in the region, and it finds that the median house price in Tasman was a record $850,000 in May 2021, an increase of 21% since May 2020. According to REINZ there are only two regions in the country currently with higher median house prices – Auckland and Wellington. [6] The report notes for the Nelson/Tasman/Marlborough region, *"attendance at open homes eased slightly, however, interest from out-of-town prospective purchasers has remained strong. A shortage of available stock in the region has continued to put upward pressure on prices and resulted in a number of multi-offers being placed on homes. Sales of million dollar plus properties increased from 5.3% in May 2020 of the market to 17.6% in May 2021. Activity is expected to remain steady over the winter months before picking up again in spring."*

2.4.1 Residential Consent Activity

[6] REINZ Monthly Property Report - May 2021.pdf

Council's latest annual monitoring report under the NPS UDC, covering the year ending June 2020 (Monitoring reports | Tasman District Council) noted building consents in Tasman reached a high of 491:

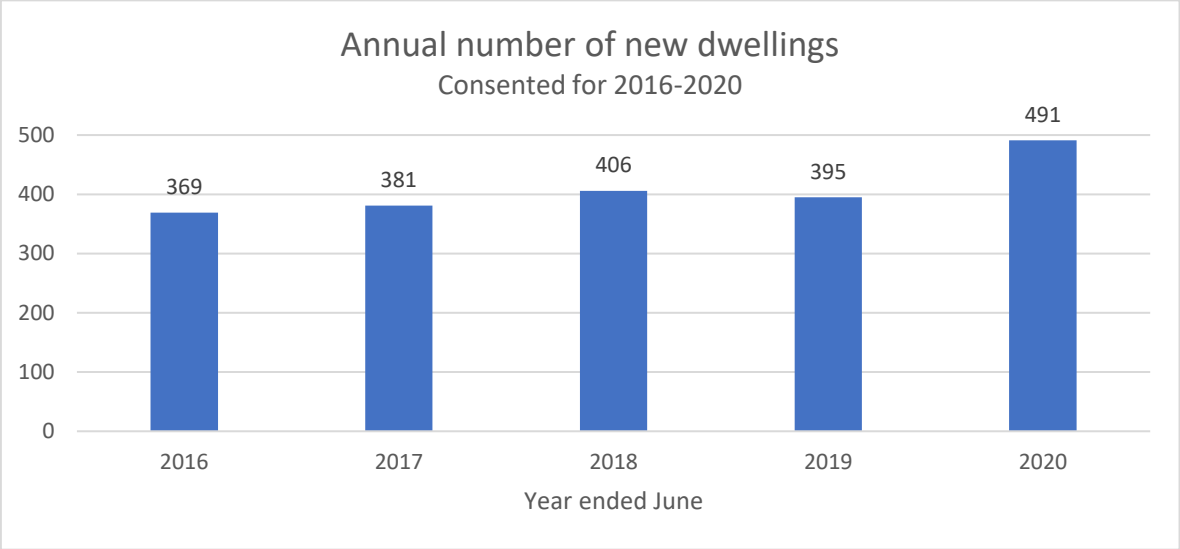


Figure 4: Annual number of new dwellings consented, 2016-2020, Tasman District

(Since this annual report, building consents have actually further increased, for the year ending March 2021 when they reached a new record high of 601.) Returning to the year ending June 2020, 322 sections on residentially zoned land were created, with Richmond accounting for 75% of these sections. Excluded from this count of new sections are a further 92 sections created in the Coastal Tasman Area for residential purposes (Rural 3 zoned land), for the year ending 30 June 2020. These are not counted as they are not on residentially zoned land, but importantly are adding to the District's potential supply of housing.

Similar trends can be seen in the resource consents for residential units. For the year ended 30 June 2020, in Tasman, resource consent was granted for 680 residential lots. This includes a special housing area in Richmond in the September quarter and nine subdivision resource consents granted for intensification within the Richmond intensive development area. There were also additional consents granted that did not involve subdivision.

Tasman District and Nelson City Councils adopted their first Future Development Strategy (FDS) in 2019[7]. This is a high-level plan showing future growth areas across the region that will accommodate future housing and business demands over the next 30 years. It shows the location of future growth, the form of development expected, and the type of infrastructure required. While most of these future growth sites are not zoned appropriately, the review of the Resource Management Plan has commenced. [8] The first round of public engagement occurred late 2020. This new Plan will propose the growth sites for rezoning.

There are a number of factors affecting affordability. Council has obligations under RMA to ensure there is sufficient housing and business land to meet expected demands of the region. Council also has obligations under NPS UD as a Tier 2 Urban Environment:

[7] Future Development Strategy FDS | Tasman District Council
[8] Aorere ki uta Aorere ki tai - Tasman Environment Plan | Tasman District Council

- Planning decisions should seek to improve housing affordability by supporting competitive land and development markets
- Tier 2 authorities, at all times, provide at least sufficient capacity to meet expected demand for housing and for business land over short, medium and long term

A number of special housing areas (SHA) are currently under construction in Lower Queen Street, Richmond and demographic sales data has been provided by the developers to the Council. For stages recently released, between 42% and 50% of sales are to investors and speculative buyers. As Central Government acknowledged in March 2021 in its housing announcement, this level of speculation in the property market is further inflating property prices. Providing zoned, serviced land is therefore only part of the affordability puzzle. Other factors affecting affordability include:

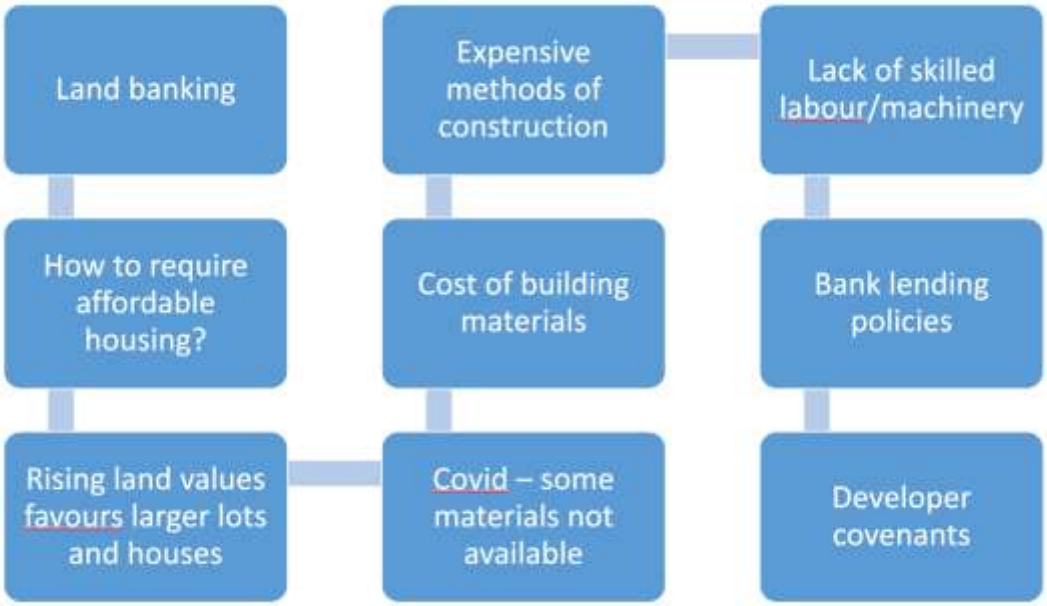


Figure 5: Other factors affecting affordability of housing

3. Methodology and Approach

Tasman's population continues to grow, outstripping predictions by Stats NZ, with average annual growth between 2015-2020 averaging 2.2%. In the year ending 30 June 2020, the population grew by 2.4%. Most of this growth is from net migration gains and importantly for Tasman a sizable proportion of this is from internal migration. Population is projected to increase in Tasman by 7,700 residents between 2021 and 2031, from 56,600 to 64,300 (13%) and then slowing but still by a further 11,810 residents to 2051 (18%), totaling 76,110. Population growth in the urban environment is slightly higher at 18% for the first 10 years and 18% for the following 20 years. Highest growth continues to be in the 65+ age group, of which the proportion will increase in Tasman from 21% in 2018 to 34% in 2048. The ageing population, increase in one-person households and couples without children continues to mean smaller average household sizes across the District. Council has its own growth model, now on its sixth iteration that forecasts land requirements for housing and business. A Housing Preferences survey was undertaken earlier this year of the Urban Environment to also inform housing demand.

3.1 Population Growth and Projections

Tasman's population growth has been significantly higher in recent years, than during the previous decade:

- the annual average population growth over the last ten years to 2020, was 1.8% (which included an increase in 2011 following the Canterbury earthquakes)
- in the five years between 2015 and 2020, average annual growth increased to 2.2% (ranging between 1.9% and 2.4%)
- the latest provisional Stats NZ population estimate for Tasman, estimates the population grew by 2.4%, or 1300 residents, in the last year, to 56,400 as at 30 June 2020

Most of the growth was net migration gains, with half from rest of NZ and half from overseas. Looking at past trends, it is typical for half or more of Tasman's migration to be internal rather than from overseas. In the year ending June 2019, net internal migration accounted for at least three-quarters of the population growth.

Statistics NZ had previously projected that the Nelson Urban Area's population was likely to grow by not more than 9.95% in the ten years between 2013 and 2023, meaning it was classified as 'medium growth', according to the NPS-UDC, falling just below the ten percent threshold defining 'high growth' urban areas. We have exceeded this by some margin, growing by over 15% in the seven years between 2013 and 2020. The Tasman part of the Urban Area grew by 20%, Nelson's by 10%.

In the absence of up-to-date Stats NZ population projections, Council engaged Natalie Jackson Demographics Ltd (NJD)[9] to provide District and Ward population and household projections (2018-base), with low, medium, high scenarios[10]. The projections were based on Tasman's long-term demographic trends (births and deaths) and observed migration trends since 2006. After considering recent estimated population and dwelling growth rates, Council has assumed the medium growth scenario for the Long-Term Plan (LTP). The Covid-19 pandemic

[9] Tasman District Projections 2018-2053 provided by Natalie Jackson Demographics Ltd, November 2019 "*Tasman District Council and Wards – Population, Household and Dwelling Projections 2018-2053"*

[10] Due to delays in Census 2018 data, Stats NZ population projections were not updated in time to inform the growth model and the LTP.

has created more uncertainty in the development of this LTP.

The effects of Covid-19 were considered on the preferred medium population growth trend but for the following reasons, it remained unchanged:

- Population growth in Tasman is driven by net gains in people moving from other parts of New Zealand, rather than overseas
- During the Global Financial Crisis in 2008, Tasman's population growth rate appears to be relatively unaffected
- Strong growth continues in new dwellings built
- The Tasman economy has a relatively strong economic contribution from the primary sector – agriculture, forestry and fishing is Tasman's largest employer, followed by manufacturing, retail trade and construction. These industries account for over half of all employment in Tasman. Tasman Region saw the largest rise nationally in economic activity in the September 2020 quarter according to Infometrics estimates, rising 5.1%p.a. *"More people in the region, and a sustained boost in construction activity, has supported the local economy."* Stats NZ report on national GDP[11] notes that *"the September quarter reflected a bounce back after a slump in the June quarter, due to the COVID-19 national lockdown when many businesses were shut for weeks."*
- In the December quarter, GDP for Tasman was down 0.9% for the year to December 2020 compared to a year earlier. Although growth was still higher than in NZ generally (-2.6%)

Tasman District Council applies up to date population projections to its own growth model every two-three years to inform the LTP. The growth model projections span 30 years in total. The latest projections are for annual population growth of 1.3% for the next 10 years, 2021-2031, based on the medium growth scenario[12]. These are based on population projections undertaken by Dr Natalie Jackson, which note that the projections result in relatively modest annual average growth rates when compared with recent years, but advised against assuming growth would continue at a high level unabated. The report also notes that the projections already assumed relatively high net migration compared with previous Stats NZ projections, and growth rates are likely to decline over time as structural ageing increases. The rates for the medium scenario aligned well with the average growth over 2006-2018.

The following graph shows the three growth scenarios for Tasman's population growth between 2018 and 2053. The graph also shows Stats NZ's population estimates for 2003 to 2018. The three population projections (low, medium, and high growth) incorporate different fertility, mortality, and migration assumptions for Tasman. Further information on the population projections is available in Dr Natalie Jackson's report.

[11] December 2020 quarter GDP drops 1.0 percent after record September rebound | Stats NZ

[12] Growth model | Tasman District Council

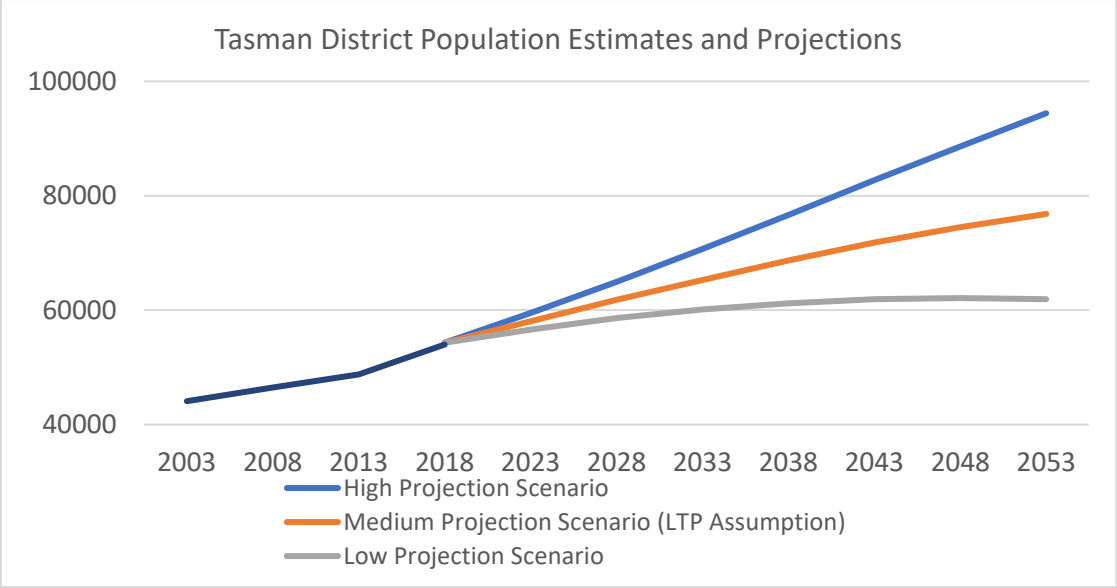


Figure 6: Estimated and projected population series, 2003-2053, Tasman District

Consequently, in adopting the medium projection scenario, the overall population of Tasman is expected to increase by 7,700 residents between 2021 and 2031, from 56,600 to 64,300 (13%) and then slowing but still by a further 11,810 residents to 2051 (18%), totaling 76,110. Most of the overall population growth will be driven by net migration gains (more people moving to Tasman District than leaving).

As at 2019, 55% of Tasman's population is estimated to live in the Urban Environment. Population within the urban environment is forecast to grow by 18% between 2021 and 2031 and a further 18% to 2051.

Under the medium scenario, the Motueka, Moutere-Waimea and Richmond Wards are projected to experience the greatest growth in population, parts of which form part of the Nelson Tasman Tier 2 Urban Environment. The Golden Bay Ward population is projected to peak in the 2030's and then decline slightly, offsetting some of the growth in 2018-2028. The Lakes-Murchison Ward population is projected to plateau around 2038. These projections reflect each Ward's age structure and its migration trends (net gains/losses) for different age groups.

Table 2: Summary of Population Projections (*towns forming part of the Nelson Tasman Tier 2 Environment)

Growth model Area	**Total Population** (as at 30 June)				
	2019	**2021**	**2031**	**2041**	**2051**
Richmond*	15,169	15,606	19,277	21,388	23,255
Brightwater*	2,294	2,391	2,654	2,975	3,307
Māpua/Ruby Bay*	2,657	2,779	3,399	4,005	4,500
Motueka*	8,027	8,306	8,962	9,803	9,409
Wakefield*	2,453	2,528	3,063	3,382	3,662
Subtotal urban environment	**30,600**	**31,610**	**37,355**	**41,553**	**44,133**
Collingwood	270	273	283	274	247
Kaiteriteri	367	371	391	404	415

Growth model Area	Total Population (as at 30 June)				
	2019	2021	2031	2041	2051
Mārahau	142	149	186	212	177
Moutere	5,682	5,908	7,069	8,936	11,386
Murchison	479	491	541	555	542
Pōhara/Ligar/Tata Bay	600	606	632	633	612
Riuwaka	617	620	625	597	575
St Arnaud	114	120	136	132	118
Tākaka	1,387	1,402	1,458	1,449	1,396
Tapawera	305	309	327	330	324
Ward Remainder Golden Bay	3,148	3,177	3,280	3,257	3,167
Ward Remainder Lakes Murchison	2,863	2,892	3,024	3,076	3,049
Ward Remainder Motueka	1,844	1,904	1,975	2,217	2,474
Ward Remainder Moutere Waimea	4,258	4,333	4,497	4,697	4,884
Ward Remainder Richmond	2,403	2,418	2,491	2,558	2,611
Total District	**55,076**	**56,583**	**64,269**	**70,881**	**76,110**

Under the medium scenario, all age groups in Tasman are projected to experience growth. However, the highest growth continues to be in the 65+ age group, of which the proportion will increase from 21% in 2018 to 34% in 2048. This increase, known as structural ageing, means that total population growth rates are projected to slow down over time. Once a population has more than 20% aged 65 years and over, it is usually approaching the end of natural increase.

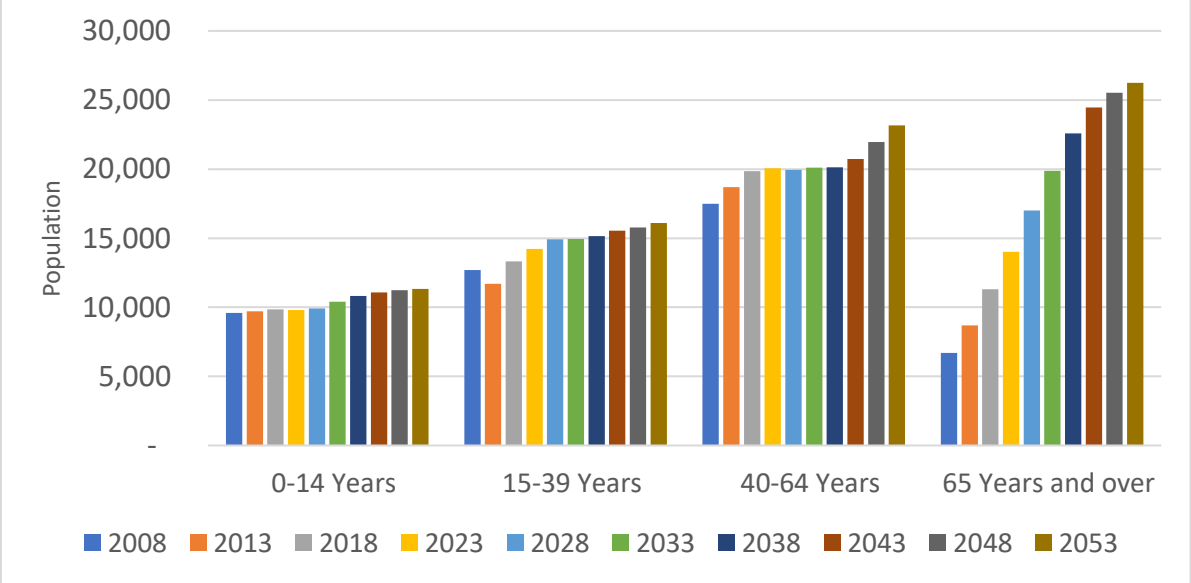


Figure 7 Estimated and projected population by age group, 2008-2053, Tasman District

3.2 Household Size

The ageing population is driving a change in the average household size across the District, projected to decrease from 2.5 residents per household in 2018, to 2.4 in 2028 and 2.3 in 2038. The numbers of one-person households and couple-without-children households are also projected to increase. There are variations in the projected household size across the District. Focusing on the towns in the Urban Environment, Brightwater and Wakefield are projected to have above average household sizes across all the time series.

3.3 Business Land Projections

The medium growth scenario for Tasman[13] also informs demand for business land in Tasman. The Nelson-Tasman business land forecasting model, provided in 2016 by Property Economics, estimates future land requirements for three different types of business land (industrial, office, retail). The model incorporates national and regional economic and demographic trends, employment projections, and employment to land ratios. Further information on how business land projections are calculated are provided in appendix 3. The land requirements assume that development will be 'at grade', i.e., single storey. For Tasman, this is appropriate with few two storey business developments.

3.4 Housing Preferences survey 2021

Tasman District and Nelson City Councils procured a Housing Preferences Survey in 2021 and results of this are discussed in the housing demand section of this report. Appendix 1 outlines the methodology of the survey.

3.5 Consideration of Other Growth Scenarios

Since Council adopted population projections for its Long-Term Plan (LTP), Stats NZ released the Territorial Authority population projections (2018 based) in March 2021. The Stats NZ high projection is very close to Council's adopted population projections for the LTP:

[13] Tasman District Projections 2018-2053 provided by Natalie Jackson Demographics Ltd, November 2019

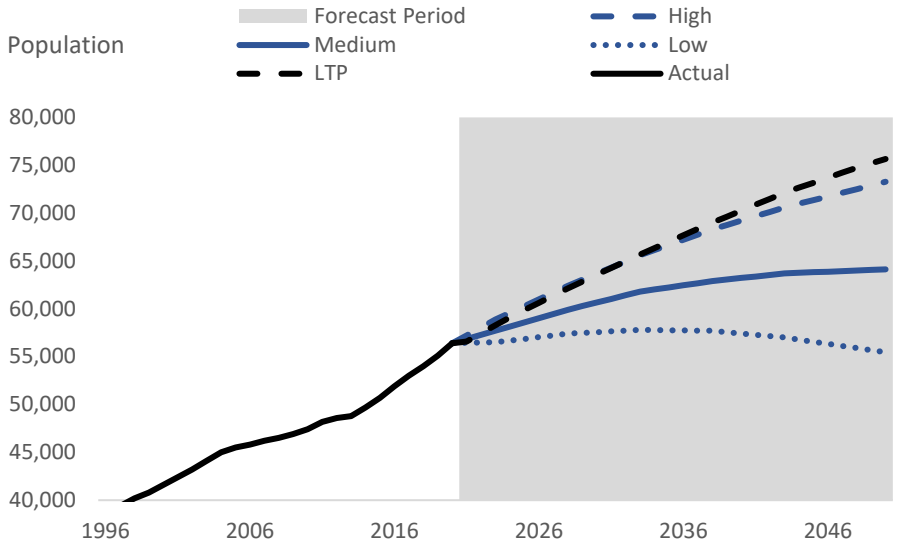


Figure 8: Tasman's LTP population projections compared with Stats NZ Territorial Authority Population Projections (2018 based)

Stats NZ has underestimated population growth for Tasman District since at least 2013. The adopted LTP medium scenario population projections are considered robust as they reflect average growth between 2006 and 2018.

There is always a degree of uncertainty when making assumptions about the future. There are several factors which are difficult to predict such as, population migration (either to/from overseas or within New Zealand); the proportion of dwellings used as holiday houses; developer and landowner activity; and natural events. Positive net migration is the major contributor to the District's population growth and can be affected by housing supply, house prices and incomes in other regions and countries.

In providing the population projections, Dr Natalie Jackson provided three sets, 'high', 'medium' and 'low', and noted *"changing economic, political and social circumstances can have an impact on the underlying assumptions regarding births, deaths, and especially migration, and cause trends to fluctuate between the upper and lower bounds."* [14] It is conventional for the medium scenario to forecast the most likely scenario. However, the high and low scenarios should also be considered for potential effects on Council's financial estimates, infrastructure needs, and zoning requirements. Tasman District Council considered these other scenarios and adopted the medium growth projection.

If population growth is higher than assumed, debt incurred by Council will be repaid more quickly to fund the growth-related portion of infrastructure than assumed under the medium scenario. (This is through the payment of development contributions to Council.) However, higher growth than planned could also result in an insufficient amount of serviced land for development and a potential worsening of housing affordability. Regular monitoring of consents and population trends will inform Council, if it is required to undertake further urgent plan changes to the Tasman Resource Management Plan, rather than wait for the emerging new Tasman Environment Plan and/or increase its investment in infrastructure to make more land available for development. Council is currently considering such an urgent growth plan change.

[14] Growth model | Tasman District Council

If population growth is lower than assumed, it may take longer for development contributions to pay off debt incurred to fund growth related infrastructure. Council may need to revise its capital works programme for growth related infrastructure. The forecast increases in rates and development contributions may be smaller than anticipated.

The Nelson Tasman Future Development Strategy (FDS) (Future Development Strategy FDS | Tasman District Council) will be reviewed in July 2021, to be adopted in July 2022. The growth model will be updated in 2022/23, and the next HBA will be prepared in time to inform the next LTP (2024-2034).

3.6 Growth Model Methodology

Appendix 2 provides a summary of Council's growth model methodology. The Council's growth model was run for a sixth time in 2019/20 to inform this HBA. Estimates of dwellings to be built are made for the period 2019-2021 based on consents, physical constraints of the land, yields allowing consideration of stormwater, roading and the zoning and known developer intentions. Projections are then made for the period 2021-2051. The model has been externally peer reviewed in 2019 and minor changes were made.

4. Residential Demand

As with population growth, dwelling demand is expected to decrease District wide over time, averaging 451 dwellings a year in the short term, 427 per year medium term and 416 per year long term. However, for the Urban Environment dwelling demand remains constant over the 30 years. 67% of the dwellings required in the District are needed in the Urban Environment, demonstrating the role these towns are playing in providing locations to live within commutable distance to the major employment areas of Richmond and Nelson. Richmond and Motueka, the two largest towns, need the most new dwellings in the future. While the actual number of dwellings varies significantly between the low, medium and high scenarios, the composition by age group and household type remains relatively similar. Unmet demand (new dwellings consented versus actual household growth) amounts to approximately only 260 dwellings in total for the last ten years.

In considering different household needs, the greatest concentration of Māori residents is in Motueka, where 15% of the population identify as Māori (compared with 8% for the total Tasman population). Tasman's Māori population is projected to increase from 8% of Tasman's population in 2018 to 12% in 2038. Despite having more residents per household, Māori are slightly more likely to live in smaller homes than the general population, but this could be due to affordability constraints.

Home ownership proportions in Tasman have been one of the highest nationally since 2006. Dwellings owned or held in a family trust had increased slightly from 75% to 75.6% between 2013 and 2018, despite affordability worsening. Housing affordability is an issue across all of the District, but Motueka and Golden Bay have the highest proportion of households on relatively low incomes and a greater need for affordable housing options. There are about 5,500 seasonal workers in Tasman in a given season and about 1,500 -1,700 of these are RSE workers. In towns such as Motueka and Riuwaka, growers face particular seasonal accommodation challenges with lack of motor camps and motels.

The Housing preferences survey 2021 shows that while the majority (71%) of respondents prefer stand alone dwellings, an increased proportion prefer attached dwellings, when compared with previous surveys – 25%. 4% prefer apartments. The majority (62%) of older residents prefer standalone dwellings, but a significant proportion also prefer attached dwellings (31%) and these would generally be smaller dwellings.

4.1 Demand for Dwellings

As with population growth, dwelling demand is expected to decrease District wide over time, whereas for the Urban Environment demand remains constant over the 30 years:

- Over the 30-year period, 11,757 dwellings are required to meet District wide demand
- For the Urban Environment only, 7,847 dwellings are required to meet demand
- District wide, the growth model projects an average of 451 new dwellings a year for 2021-2024

(short term), dropping to 427 a year for 2025-2031 (medium term), 416 a year for 2032-2041 and 337 dwellings a year for 2042 -2051 (long term). Figure 4 below illustrates this.

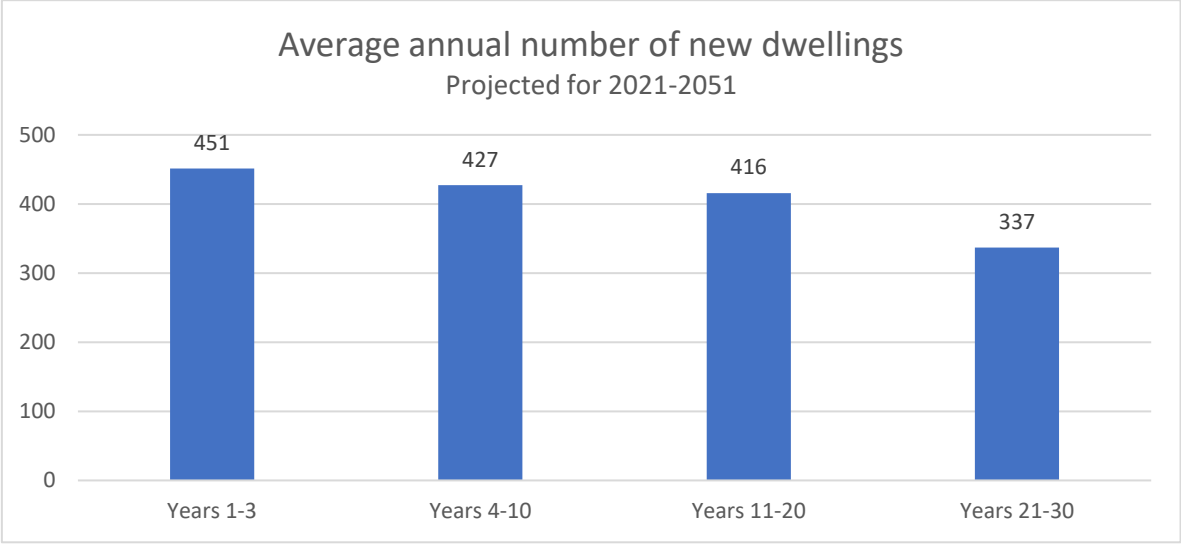


Figure 9: Annual average number of new dwellings projected, 2021-2051, Tasman District

4.2 Demand by Location

Table 3: Demand for new dwellings – Tasman District (*towns forming part of the Nelson Tasman Urban Environment)

Town or ward area	Demand for new dwellings	Demand for new dwellings
	Years 1-10 (2021-2031)	Years 11-30 (2032-2051)
Brightwater*	210	358
Māpua/Ruby Bay*	314	628
Motueka*	744	1,576
Richmond*	1,170	2,345
Wakefield*	174	328
Subtotal for Urban Environment	**2,612**	**5,235**
Collingwood	13	2
Kaiteriteri	46	77
Mārahau	32	60
Moutere area	569	1,130
Murchison	37	25
Pōhara/Ligar/Tata Bay	52	33
Riuwaka	17	33
St Arnaud	74	17
Tākaka	54	25
Tapawera	14	10

Town or ward area	Demand for new dwellings	Demand for new dwellings
	Years 1-10 (2021-2031)	Years 11-30 (2032-2051)
Ward Remainder Golden Bay	132	74
Ward Remainder Lakes Murchison	109	120
Ward Remainder Motueka	165	305
Ward Remainder Moutere Waimea	210	331
Ward Remainder Richmond	61	124
Subtotal for remainder of District	**1,585**	**2,325**
TOTAL DISTRICT	**4,197**	**7,560**

67% of the dwellings required in the District are needed in the Urban Environment. This demonstrates the role these towns are playing in providing locations to live within commutable distance to the major employment areas of Richmond and Nelson. Richmond and Motueka, already the two largest towns by some margin in the District need the most new dwellings in the future.

4.3 Different Growth Scenarios and Effect on Composition of Age Group and Household Type

- While the actual number of dwellings varies significantly between the low, medium and high scenarios[15], the composition by age group and household type remains relatively similar. The population is slightly younger on average under the high scenario, and slightly older under the lower scenario. The majority of households by 2038 under all three growth scenarios are of similar composition, with couples-without-children and one person households the only types expected to increase in number by 2038:

Table 4: Different growth scenarios and effect on age group and household type

•	• **Age composition differences**	• **Family or household type differences**	• **Types of dwellings needed**	• **Number of dwellings required**
• High growth scenario	• Population slightly younger on average, due to fertility rate and net migration all being higher. • Proportion of 65+ years is slightly lower, reaching 32% by 2053 compared with 34% under the medium scenario	• No significant difference to the medium or low scenario. Under all scenarios majority of households by 2038 are expected to be couples-without-children (41%), followed by one-person households (30%)	• Demand for types of dwellings likely to be similar to medium growth scenario	• All Tasman wards experience significantly higher population growth and demand for new dwellings over the next 30 years, including Golden Bay and Lakes-Murchison (which are otherwise projected to stop growing beyond 2033 under the medium growth scenario)

[15] Growth model | Tasman District Council

•	• Age composition differences	• Family or household type differences	• Types of dwellings needed	• Number of dwellings required
• Low growth scenario	• Population slightly older on average, due to lower fertility rate, life expectancy and net migration • Proportion of 65+ years is slightly higher, reaching 36% by 2053 compared with 34% under the medium scenario	• No significant difference to the medium or low scenario. Under all scenarios majority of households by 2038 are expected to be couples-without-children (41%), followed by one-person households (30%)	• Likely increased demand for smaller dwellings	• All Tasman wards experience significantly lower population growth and less demand for new dwellings over the next 30 years. Golden Bay and Lakes-Murchison would see an even larger decline in their population than under the medium growth scenario

4.4 Demand for Type of Dwellings

Holiday Homes

The 2018 census found approximately 14% of private dwellings were unoccupied in Tasman District. Using the methodology described in appendix 2, there is projected demand for a significant proportion of homes not occupied permanently in the following communities: St Arnaud (80%), Kaiteriteri (62%), Mārahau (33%), and Pōhara/Ligar/Tata (55%). These will include holiday homes and homes for seasonal workers. According to the methodology used, the only town within the Urban Environment that is likely to need new holiday homes in the future is Richmond and this is less than 1% of all new dwelling demand. Richmond and the other towns in the Urban Environment (Brightwater, Wakefield, Māpua and Motueka generally provide for permanent residents.

Table 5: Demand for new dwellings in towns with significant proportions of holiday home demand (*town forming part of the Nelson Tasman Urban Environment)

Town	New dwelling demand 2021-2051	Holiday home component	% holiday homes
Kaiteriteri	123	76	62%
Marahau	92	30	33%
Pōhara/Ligar/Tata Bay	82	45	55%
Richmond*	3,515	33	0.9%
St Arnaud	67	54	80%

4.5 Demand for Dwellings by Different Household Groups

Implementation clause 3.23 of the NPS UD requires HBAs to assess current and likely future demands for housing by Māori and different groups in the community (e.g. older people, renters, homeowners, low income households, visitors and seasonal workers.)

4.5.1 Māori

- In terms of Tasman's urban environment, the greatest concentration of Māori residents is in Motueka, where 15% of the population identify as Māori (compared with 8% for the total Tasman population).
- In terms of Tasman's urban Māori population, 43% live in Motueka and 38% live in Richmond, both towns within the Urban Environment.
- In terms of Tasman's total Māori population, 29% live rurally, outside of towns and villages, 26% live in Motueka and 23% live in Richmond.
- Stats NZ are yet to update subnational ethnic population projections to a 2018-base. According to the medium scenario of the 2013-base projections, Tasman's Māori population is projected to increase by 53% between 2018 and 2038, from 4,300 (8% of the population) to 6,600 (12%).
- This means, in terms of Tasman's urban development, it is particularly important for Motueka and Richmond to have housing options that meets the needs of Māori residents.
- There is limited data on the housing preferences of Tasman's Māori population. As at Dec 2020, Tasman has 137 people on the public housing register, according to the Ministry of Social Development. Of these 137 people, 21 in Tasman identify as Māori:

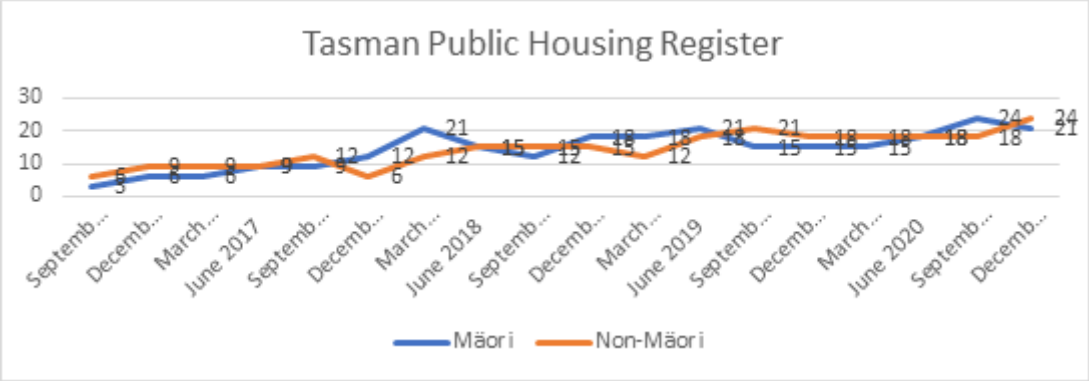


Figure 10: Proportion of Māori and non-Māori on Tasman public housing register

- Figure 10 shows that since 2017, except for a peak towards the end of 2017, people on the public housing register identifying as Māori have roughly tracked non-Māori.
- Staff purchased some bespoke data from Stats NZ that revealed the following:
- According to 2018 Census data for Tasman:
  - Māori households are larger on average, with an average household size of 3 compared to 2.5 for all households in Tasman

- 16% of Māori households have five or more usual residents, compared with 9% of all households in Tasman
- 48% of Māori households are families with children and 5% are multi-family households (these rates are higher than the general Tasman population, 36% and 2% respectively)
- Despite having more residents per household, Māori are slightly more likely to live in smaller homes than the general population, with 25% of Māori living in homes with one or two bedrooms compared with 22% for non- Māori in Tasman

- While Census data provides statistics on current housing situations, this data may be the outcome of a poor range of options for Māori due to affordability, therefore it is difficult to know how much importance to attach to this data.

- Te Kotahi o Te Tauihu Charitable Trust was formed in February by all of the eight iwi of Te Tauihu. The trust was formed to cement partnerships formed in ongoing response to Covid-19 and its variants across Te Tauihu. The trust's guiding principles are:

- Whāngai – Feeding our people - Whānau will not go hungry on our watch
- **Tāwharautia – Shelter and support - Shelter the homeless and keep a roof over the heads of whānau**
- Whiwhi Mahi – Work and Training - Whānau will have access to meaningful work and training
- Whai Oranga – Holistic Wellness - Whānau wellbeing includes mental, emotional, and spiritual support.

- The trust is undertaking contextual analysis for the near future which it will use to inform its actions. The trust is trying to help all Māori (not just iwi) develop their land for housing.

The FDS 2019 allows for a larger area than currently zoned for papakāinga housing at Te Awhina Marae in Motueka. A resource consent has recently been granted for 20 papakāinga homes, housing 70 individuals. 6 will be replacement kaumatua flats and these will be the first to be completed. The FDS review will continue to explore specific housing opportunities for Māori.

4.5.2 Homeowners

Home ownership proportions in Tasman have been one of the highest nationally since 2006. The 2018 census showed that dwellings owned or held in a family trust had increased slightly from 75% to 75.6% from the 2013 census, despite affordability worsening.

Table 6: Tenure of households for occupied private dwellings in Tasman 2006-2018

Tenure of households for occupied private dwellings in Tasman	2006 (%)	2013 (%)	2018 (%)
Dwelling owned or partly owned	62.7	58.6	61.2
Dwelling held in a family trust	13.1	16.4	14.4

Dwelling not owned and not held in a family trust	24.2	25.0	24.4

4.5.3 Renters

Based on table 6 above, the proportion of the community renting is approximately 25%.

The Housing Preferences survey 2021 provides some data about housing preferences of renters. Those survey respondents that could not afford to purchase a house in the Nelson Tasman Urban Environment were asked about preferences for renting. The most important factor in making a decision on rented housing, is location (the area they chose). The location was ranked as most important by 46% of rental respondents – almost twice as high as the next category (house type). Least important in their choice is the dwelling's value.

Table 7: Rental Respondents level of importance for decision factors on housing choice

Feature Set	Most Important	>>>>>>>>>	>>>>>>>>>	Least Important
Dwelling features	27	34	41	18
Dwelling value	13	12	22	74
House type	30	49	32	13
Location	59	25	24	13
Total Responses	129	120	119	118

This result underlines the importance of providing housing in the right location to meet demand in the District and the challenges with the lack of capacity in places like Motueka, where the FDS is seeking to meet such demand in a location close to, but outside of the town.

4.5.4 Low Income Households

- Low income and housing affordability is an issue across most of the District, but Motueka and Golden Bay have the highest proportion of households on relatively low incomes and a greater need for affordable housing options. Mean incomes in Nelson Tasman are 13% below the NZ average and have only caught up by 2% in the last 20 years. Nelson Tasman is second lowest in NZ, second only to Gisborne.[16] The Ministry of Housing and Urban Development's (MHUD) website comments that the *"affordability of buying a first home for those in the South Island is better than for those living in Auckland, except in Tasman, Nelson and Otago"* (Tasman is in fact the worst.) [17]

-

- According to the 2018 census, median household incomes are as follows:

-

Table 8: Median household incomes in Tasman District

	Median household income	% of all households with a household income less than $70,000
Richmond	$70,000	50%

[16] Project Kōkiri Nelson Tasman Economic Recovery and Regeneration Plan Discussion Document March 2021

[17] Experimental Housing Affordability Measure for potential first home buyers | Te Tūāpapa Kura Kāinga - Ministry of Housing and Urban Development (hud.govt.nz)

Brightwater	$81,000	40%
Wakefield	$76,700	43%
Māpua	$77,400	42%
Motueka	$51,000	62%
Tākaka	$46,500	65%

For a household earning $70,000, a house priced over $210,000 is considered unaffordable. This is according to the internationally recognised measure of the median multiple, outlined in section 2.4. Average house prices in Tasman are now $850,000 according to REINZ (May 2021). Housing is not affordable in any part of Tasman District. While average incomes vary from town to town, housing remains unaffordable in all parts of the District.

Council owns 101 houses for older people in various locations, including within the Urban Environment. These units are available for NZ residents or citizens, over 55, receiving Superannuation and in receipt of a supported living payment. Total assets including cash investments must not exceed $50,000. These units are very popular and there is a large waiting list of 120 people. Eighty-three percent of the people on the waiting list wish to live in the Urban Environment. These are the only dwellings that Council owns. A review of Council's community housing is due to commence in August 2021.

Kāinga Ora currently owns 179 homes in Tasman District which house 426 people. Most of these are situated in Motueka. Over the next 4 years (2021-2024) the Government's latest Public Housing Plan proposes 130 new homes for Nelson and Tasman combined. 11 new dwellings have recently been completed in Richmond within the Richmond Intensive Development Area, where rules enable intensification. Three stand-alone dwellings were replaced by 11 smaller units, some attached.

As at Dec 2020, Tasman has 137 people on the housing register, according to the Ministry of Social Development, and 121 of these are category 'A'.[18] The vast majority of demand is for 1 and 2 bed properties. In Dec 2015, there were just 13 people on the housing register, so the demand for state housing has increased markedly.

An alternative to state housing is affordable housing provided by Community Housing Providers (CHPs). In Tasman there are currently four active CHPs – Nelson Tasman Housing Trust, Habitat for Humanity, Golden Bay Housing Trust and Abbeyfield New Zealand. Council held a workshop with the CHPs and Kāinga Ora in February 2021 to understand how it can better help them in the current climate of worsening housing affordability. While a number of issues were raised by the CHPs, some of which Council can help with, the largest issue is acquiring land due to increased prices and lack of available land on the open market.

Council also owns little developable land but is currently exploring whether it can help the CHPs with suitable sites to deliver affordable housing (which evidence shows is in strong demand in Tasman District). Council has adopted in its draft LTP 2021, for CHPs to be exempt from Development Contributions for new housing developments. Council also considered inclusionary zoning at the recent workshop, as a way of leveraging affordable homes funded by the private sector. With legislative change to enable councils to implement inclusionary zoning, this is something Tasman District Council would consider.

4.5.4 Older People

[18] Housing Register - Ministry of Social Development (msd.govt.nz)

Under the medium population projection scenario, highest growth continues to be in the 65+ age group, of which the proportion will increase from 21% in 2018 to 34% in 2048. Under the low or high population projection scenario, the proportions of 65+ age group only vary by 2% (32% under high growth and 36% under low growth). This increase is known as structural ageing, meaning that total population growth rates are projected to slow down over time.

The table below shows the contribution in the District, by ward, to population growth from the 65+ age group, using the medium scenario. The three wards highlighted orange lie partly within the Urban Environment:

Table 9: Breakdown by ward showing ageing, low incomes and percentages of dwellings with one or two bedrooms

Ward	Contribution to ward's population growth from 65+ age group 2018-2053[19]	% of dwellings with one or two bedrooms[20]
Golden Bay	100%	27%
Lakes Murchison	100%	18%
Motueka	45%	27%
Moutere-Waimea	65%	17%
Richmond	74%	22%
Tasman District	66%	22%

According to the Housing Preferences Survey 2021, the majority (62%) of older residents in Nelson/Tasman prefer standalone dwellings, with 20% wanting standalone dwellings with two bedrooms and 31% wanting three bedrooms. However, a significant proportion also prefer attached dwellings (31%) and a further 6% prefer apartments and these would generally be smaller dwellings.

[19] Population, household and dwelling projections 2018-2053 Tasman District Council (Dr Natalie Jackson)
[20] Stats NZ

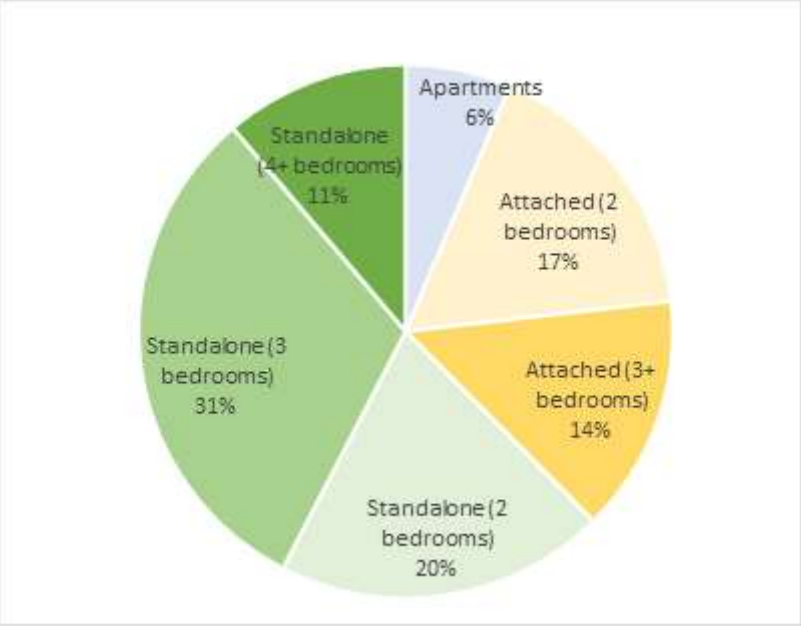


Figure 11: Housing Preferences for Nelson Tasman older people living in the Urban Environment

Tasman District Council also conducted research in 2018 on housing issues for older people, as part of developing Council's Age-Friendly Policy. This included feedback from over 180 groups and individuals.

The main findings in terms of housing were:

- Increasing demand for smaller houses
- Demand for affordable rental properties
- An increasing demand for safe, warm, low-maintenance and accessible housing

4.5.5 Seasonal Workers

Tasman District Council undertook a survey of 39 Tasman growers in March 2021. It received a 74% response rate to the survey with 29 companies responding, representing the wide range of produce grown in Tasman.

Survey of Growers in Tasman 2021

- 38% of employers own accommodation to house seasonal workers and 35% of employers rent or lease properties to house workers, so ownership of property and renting property is fairly even split
- only 5 companies own purpose built accommodation (the type encouraged by Government for employers using the Recognised Seasonal Employer (RSE) scheme)
- Eight companies own existing residential houses bought on the open market to house workers. This may be off site or on site and may have been built or bought by the grower. This is the most common type of worker accommodation
- A significant 72% of respondents (20 companies) require additional accommodation in the future for seasonal workers and this indication is given during the Covid 19 climate
- A significant number (10 companies) want purpose built on-site worker accommodation
- Six companies specifically want on site communal type accommodation with an ablution block and rooms leading to it
- a maximum of 632 additional beds are required from the 20 companies that responded in the survey, most companies (16) want up to 40 beds each
- 70% of these companies requiring further accommodation have as yet only identified the need. Six companies are progressing plans for future accommodation (30%) and two have building consent. Two companies have also started construction
- Discussions with the ex-chair of Apples and Pears NZ and the chair of the Nelson growers governance group revealed that there are about 5,500 seasonal workers in Tasman in a given season and about 1,500 -1,700 of these are RSE workers
- The future demand for types of seasonal worker accommodation is:
    - Purpose built facilities on site for RSE workers
    - "Camp ground" facilities (eg kitchen, ablution block) for Kiwi and European backpackers who want seasonal work and to freedom camp on the orchard. Some Richmond orchards make this group find their own accommodation e.g. at Tahuna motor camp or motels but this becomes harder in areas like Motueka, Riwaka where such facilities don't exist
    - Rented accommodation for permanent seasonal workers (locals) – now 10-11

4.5.7 Demand for different housing typologies and locations

According to the 2018 Census, of the 19,770 occupied private dwellings in Tasman District:

- 90% were separate houses
- 8% were joined dwellings and
- 2% were 'other.'

According to the Housing Preferences Survey 2021, the majority of residents in the Tasman Urban Environment still prefer standalone dwellings, even when financial constraints are taken into account,

although this proportion appears to be reducing from previous surveys, such as the Communitrak annual residents survey of 2018 and 2019 and the Otago University 2015 survey for TDC and NCC.

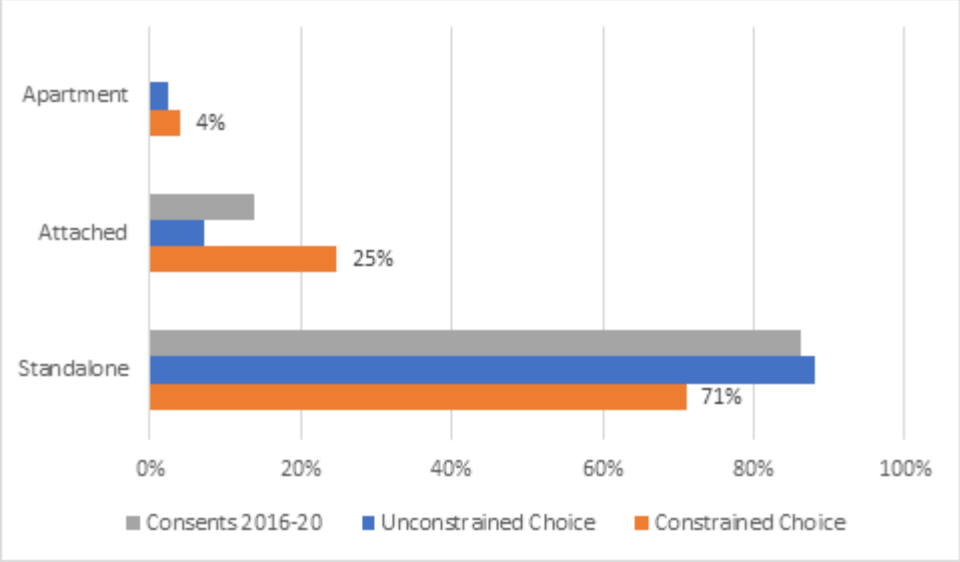


Figure 12: Housing Preferences of respondents in the Tasman Urban Environment 2021

This suggests that current housing stock is too heavily skewed towards stand-alone housing and further efforts should be made for zoning of attached housing and apartments. Applying these percentages to the total number of new dwellings required in the Urban Environment, the following number of dwellings by each are required to meet demand:

Table 10: Tasman Urban Housing Preferences (constrained choice) and Demand by Dwelling Type

	Preference (constrained choice)	Years 1-10	Years 11-30
Apartment	4%	104	209
Attached	25%	653	1309
Standalone	71%	1855	3717
Total Demand for new Dwellings in Tasman Urban Environment	**100%**	**2612**	**5235**

- In terms of locational preference, a proportion of respondents living in the Tasman Urban Environment (Richmond, Brightwater, Māpua, Wakefield and Motueka) would like to live in Nelson, approximately 13% income constrained. Richmond is the most popular location of choice, with 32% of respondents choosing this location (very similar for unconstrained and income constrained). The largest mismatch is observed in Motueka where 26% respondents would live in this location if they could but, given financial constraints, this drops to 11%.

- Conversely the constrained demand in Tasman Rural and Waimea plains is higher than the unconstrained demand. These are therefore locations that people choose less often when unrestrained by their financial situation. The findings indicate that some of the urban demand may be driven to these more rural areas of Tasman, given they are constrained in terms of their first choices by affordability issues. The results showed that respondents traded off location for price rather than choosing a different typology in the same location for lesser cost.

According to the housing preferences survey, out of the 300 Tasman Urban Environment residents' sample, 34% of respondents could not afford to buy a dwelling. 5% of these could afford a rental. The remaining 28% could not afford to buy or rent. This illustrates the known affordability problem.

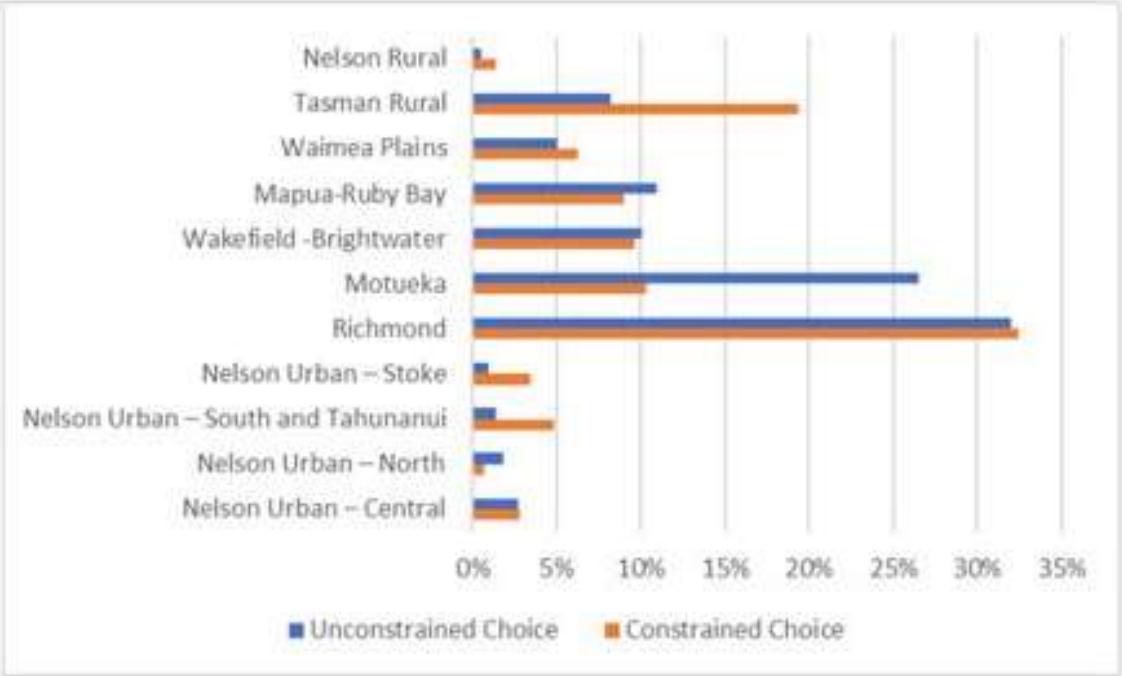


Figure 13: Income constrained and unconstrained housing location preferences – "The Housing We'd Choose" survey 2021

4.6 Unmet Demand

Council acknowledges that there is unmet latent, or residual demand in some parts of the District. The growth model, like most models around the country, looks forward and does not quantify or include unmet demand in future projections. In December 2020, MHUD revised its data for new dwelling consents compared to household growth, using latest Stats NZ population projections. We understand from MHUD that there have

been shortcomings in the model Stats NZ uses to estimate population between censuses. The initial versions of this data were inaccurate. However, the latest one is shown below:

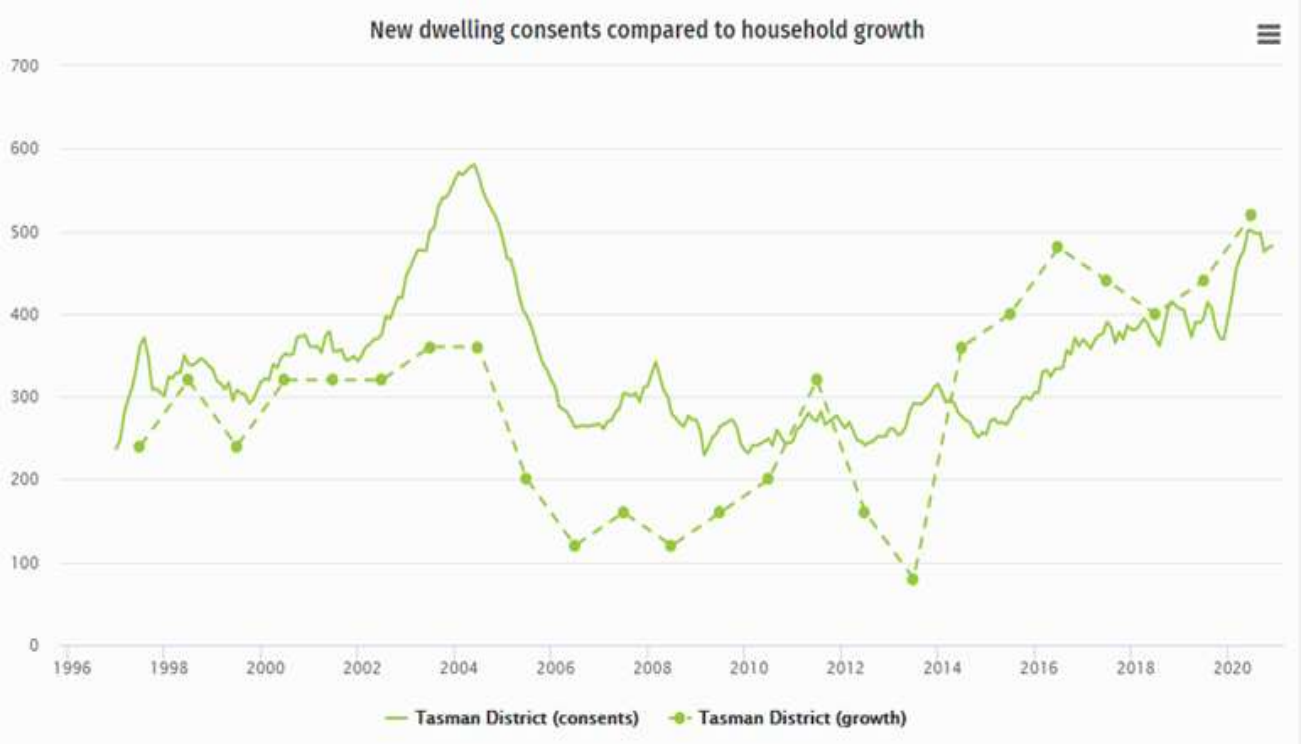


Figure 14: Unmet demand new dwellings consents compared with household growth (Source MHUD)

Assuming this data is now correct, unmet demand amounts to approximately 260 dwellings in total for the last ten years. This is a relatively small amount and under the NPS UD, Council monitors housing and business markets regularly and considers reacting with urgent Plan Changes to ensure sufficient developable land capacity is available. Council also considers a higher growth scenario for each LTP and the FDS identifies sufficient housing and business sites for a high growth scenario and is reviewed every 3 years.

4.7 Consultation on Housing

The growth model projections and infrastructure strategy are components of the LTP 2021-2031. Consultation on the LTP ran from 24th March until 24th April 2021 and full details of the thorough engagement exercise can be found here: Tasman's 10-Year Plan. At least 17 community drop- in sessions were held around the District in March and April. Some 741 submissions were received on growth and housing, relating to Council's approach to growth planning and infrastructure.

Consultation with developers and stakeholders has been continual since preparation of the Future Development Strategy in 2018/19. This has included:

- Developers have provided data on the demographics of sales, from recent subdivisions
- A large number of developers and their surveyors have provided information about market demand and planned intentions for large sites through pre application meetings and regular conversations
- Workshops have been held with four Community Housing Providers, Kāinga Ora and Waka Kotahi
- Meetings have been held with the Ministry of Education, the District Health Board and the Police

- Occupiers of new intensive dwellings in Richmond were surveyed to inform the intensification action plan, adopted by Council in August 2020 (Intensification Action Plan | Tasman District Council)
- Meetings with developers and applicants' agents for intensification proposals were held to understand both frustrations they may have with the plan rules for intensification in Richmond and general housing market information
- A meeting was held with a first-time developer currently undertaking an intensification development in Richmond to better understand brownfield redevelopment commercial feasibility
- Meetings have been held with three developers of greenfield subdivisions to discuss commercial feasibility
- Staff and councillors have undertaken two additional visits to meet with representatives of the community in Murchison, to better understand the specific housing need there
- Meetings have been held with the ex- chair of Apples and Pears Board NZ and the chair of the Nelson growers' governance group
- A number of surveys have been undertaken to help inform this HBA – a business survey to understand future requirements; a survey of growers employing seasonal workers and a housing preferences survey
- A number of audits have been undertaken also to inform this HBA, including of all zoned business land and all the town centres
- Attendance at Te Tauihu Māori housing forum meetings
- Attendance at Top of the South Impact Forum Housing Working Group hui
- Hui with Te Kotahi o Te Tauihu Charitable Trust
- Three huis with iwi of Te Tauihu to discuss housing – Ngāti Toa, Rangitāne O Wairau and Ngāti Rārua

5. Residential Capacity

In Tasman District overall there is sufficient development capacity for housing under the medium growth population scenario for 30 years. In its latest LTP, Council has aimed for housing capacity that is 'reasonably expected to be realised' to equal demand District-wide, by Ward and for most individual towns. However, some towns are providing capacity for others where demand cannot be met. For example, capacity in Richmond in the next 10 years will also meet partial short-term demand for Brightwater and Motueka. Council has prioritised infrastructure in Motueka West in the LTP to commence shortly. Since Motueka's further development is constrained by a combination of natural hazards, low lying land, productive land, a climate change adaptation strategy is required, together with stormwater and river modelling before brownfield intensification can proceed here. Therefore, a longer-term growth site in Lower Moutere identified in the FDS could provide for longer term demand from Motueka. Council has also provided for the competitiveness margin within the urban environment.

Within the rest of the District, capacity meets demand. Golden Bay and Lake-Murchison generally have sufficient land supply to enable enough new dwellings to meet demand, without requiring further Council growth-related infrastructure.

On commercial feasibility for brownfield intensification, using the rules of the intensification Plan Change for Richmond, resource consents have been granted yielding a net addition of 52 dwellings in 2 years. According to QV, the very existence of the Richmond intensive development area (RIDA) has caused land values to rise where there is potential for redevelopment. Representative greenfield sites in the Urban Environment have been analysed for commercial feasibility using MHUD's development feasibility tool. They were all found to be commercially feasible, with profit maximizing densities varying according to the individual site.

In terms of type of capacity (location and typology), the inability of Council to currently provide for all demand in Motueka is highlighted. Motueka is the worst mismatch according to the housing preferences survey in terms of double the amount of people wanting to live there than can actually afford to. Affordability is an issue for the whole District but is worse in Motueka and Golden Bay due to lower incomes. Additional seasonal worker accommodation is needed in the Motueka area where campground facilities are smaller and fewer. Motueka particularly also needs to try and meet the needs of housing for Māori residents, since 15% of the population identify as Māori, compared with 8% in the rest of Tasman.

The housing preferences survey showed that for renters, location is key, underlining once more the importance of meeting demand in specific locations. For older people the survey showed an increase in the proportion of residents that would prefer an attached dwelling – 31% and a further 6% would prefer an apartment, signaling the demand for more intensive forms of dwellings.

5.1 Introduction

The requirements of housing and business land capacity are provided in the table below:

Table 11: Implementation clause 3.4 of the NPS UD

Time frame	Plan enabling and infrastructure ready requirements for Tier 2
Short term (1-3 years)	Zoned for housing or business use in an operative district plan and there is adequate existing development infrastructure
Medium term (4-10 years)	Zoned for housing or business use in an operative or proposed district plan and there is adequate existing development infrastructure, or funding for adequate infrastructure is identified in a long term plan
Long term (11-30 years)	Zoned for housing or business use in an operative or proposed district plan, or on land identified for future urban use or urban intensification in an FDS. There is adequate existing development infrastructure, or funding for adequate infrastructure is identified in a long term plan or the infrastructure is identified in the Infrastructure Strategy

In addition to the above requirements, HBAs must quantify over the short, medium and long term the housing capacity that is 'reasonably expected to be realised' to try and provide a more realistic supply of development capacity (implementation clause 3.25 1(c) NPS UD).

In a Q & A document provided by MfE on 14^{t} September 2021, the Ministry clarified that implementation clause 3.4(2) of the NPS UD on plan enabled capacity, complements deferred zones. This is "*provided the planned release/up-zoning of the deferred zones coincides with the timing of the capacity assessments for the HBA. For example, if a deferred zone is planned to have all the conditions in place to be up-zoned in 10 years, this can be considered as plan-enabled for the long term. This applies only for the long term, as short term requires the zoning to be in an operative district plan 3.4(1)(a), and medium term requires zoning to be in an operative or proposed district plan 3.4(1)(a).)"*

Deferred zoned land in the TRMP that is included in the rollout for this HBA can be serviced within 10 years. Infrastructure is in the latest LTP 2021-2031 where that land is needed in the next 10 years. Land zoned deferred can be uplifted very easily in Tasman, requiring only a development agreement between a developer and the Council. Once that is signed, Council's Strategy and Policy Committee approves the uplifting of the deferred zone. Deferred zone capacity only applies to short term capacity.

The amount of feasible developable capacity and the sequencing of rollout (dwellings) across the District, for both residential and business development is based on the following information and assumptions in Council's growth model:

- an initial assessment of developability of large areas of the District, taking into account land use factors such as hazard risk, network services and settlement form
- geo-spatial data on developable land area, including terrain, topography and existing buildings
- excluding land available for development that is required for other uses, such as stormwater infrastructure, roads, community facilities or open space
- recommendations from the FDS for future growth areas
- future zoning and density, including typical lot size
- recent building consents, subdivision consents and applications, and gazetted Special Housing Areas

- knowledge of forthcoming development proposals together with landowner and developer intentions
- the location and timing of proposed infrastructure capital works programme in the Long-Term Plan 2021-2031, including the Infrastructure Strategy.

Therefore, in the 'rollout' (of dwellings) only capacity is included that is reasonably expected to be realised.

5.2 Rollout strategy and provision of housing by location

"Rollout" of dwellings is the number of new dwellings or business properties Council assumes can and will be built, based on the demand projections, development capacity estimates, landowner and developer intentions. If a town is unlikely to have enough development capacity to provide sufficient rollout to meet demand, due to e.g., hazard constraints in Motueka, this is offset by more rollout in other towns that do have capacity, as permitted under the NPS UD (implementation clause 3.19 (2)). The rollout numbers inform the LTP 2021-2031.

Council has aimed for rollout to equal demand District-wide, by Ward and for most individual towns based on the following rollout and infrastructure strategy i.e., at the town level, some towns are providing capacity for others where demand cannot be met. In addition, Council has provided for the competitiveness margin within the urban environment, and this is considered later in this section of the report. Within the urban environment Council will enable:

- Development in Richmond and Māpua to meet their demand (Y1-30), with excess capacity in Richmond for the next 10 years, enabled to provide for partial undersupply in Brightwater and Motueka in Years 1 - 10.
- Some development in Brightwater by Year 4, once the Waimea Community Dam and new pump station construction are complete, enabling a sufficient water supply. A staged suite of infrastructure upgrades for Brightwater over 30 years, will enable sufficient capacity from Year 10.
- All Motueka's current development capacity west of High Street with infrastructure, (Y1-20), noting this only partly meets demand. Motueka's further development is constrained by a combination of natural hazards, low lying land, productive land. A climate change adaptation strategy is required for Motueka together with stormwater and river modelling before brownfield intensification can proceed
- Development on an FDS growth site in the Lower Moutere area (Years 11-30) (1300 dwellings) to address Motueka's undersupply from approximately 2038 onwards. If this growth site proves unrealistic, e.g., due to landowner preferences, an alternative growth site will be identified in the new FDS.

Within the rest of the District:

- Golden Bay and Lake-Murchison generally have sufficient land supply to enable enough new dwellings to meet demand, without requiring further Council growth-related infrastructure
- Council has not planned to enable increased capacity in Riuwaka as this land is flood prone. This does not prevent new houses from being built in this area, but it does signal that Council's preference is for this demand to be taken up elsewhere in the Motueka Ward area.

By ensuring rollout equals demand District-wide in Tasman, Council has assumed that Nelson City will provide adequately for its growth with a sufficient supply of new residential dwellings and business properties, in line with recent population growth trends.

For years 11-30, rollout is estimated based on an assumption that the new Resource Management Plan (Tasman Environment Plan, TEP) zones will enable the types of development identified in the FDS and will stop

development in hazard risk areas. In fact, housing demand is such that staff are currently proposing a growth Plan Change ahead of the TEP, to seek zoning of some growth options ahead of when they are needed, to provide for extra capacity and flexibility so Council is not behind growth demands.

5.3 Residential Growth strategy

Council has planned for 4,300 new dwellings over the next ten years, and a further 7,500 dwellings between 2031 and 2051, to meet demand shown above in Table 3. As shown below in Tables 12 and 13, Council has identified sufficient capacity to enable enough new dwellings to at least meet the demand both in the Urban Environment and District wide. At the individual area level, some towns are providing for others, as outlined above.

5.4 Dwellings 'reasonably expected to be realised'

Tables 12 and 13 below show residential demand across the District, by Urban Environment and remainder of District. It also shows the 'rollout' i.e., the number of new dwellings Council assumes can and will be built, based on the demand projections and evaluation of the land being suitable for development. This is the capacity reasonably expected to be realised (clause 3.25 (1) (c) of NPS UD). The NPS competitiveness margin is excluded from this table and is considered in the next table.

The growth model goes into considerable detail for each sub area of each town, known as 'development areas'. Once a development area is considered suitable for development, typical lot sizes are factored into the model according to the likely zone, providing an estimate of yield for the area by typical density for each zone.

The tables below (12 and 13) show the dwellings reasonably expected to be realised in both the Urban Environment and the whole District. The intensification numbers shown relate only to the intensive residential rules that exist in Richmond currently and which the FDS proposes also for Motueka, Brightwater and Wakefield in the future, when rules changes are proposed. In fact, other medium density rules are also currently operative in parts of the Urban Environment including the compact and comprehensive residential rules, but these are not included in the intensification estimates. Further details are provided in appendix 6 of the range of residential rule options available in Tasman.

Table 12: Summary of Residential Demand and Rollout Projections in the Urban Environment (*Lower Moutere – new FDS growth area – is helping to meet Motueka's demand years 11-30 by providing approximately 1,000 dwellings, see table below)

Town or ward area	Dwellings					
	Demand	Rollout of dwellings (excludes competitive-ness margin)	Greenfield & intensification split G/I	Demand	Rollout of dwellings (excludes competitive-ness margin)	Greenfield & intensification split G/I
	Years 1-10 (2021-2031)			Years 11-30 (2032-2051)		
Urban Environment						
Brightwater	210	131	111/20	358	360	340/20
Māpua/Ruby Bay	314	317	317G	628	628	588/40
Motueka*	744	449	249/200	1,576	580	380/200

Town or ward area	Dwellings					
	Demand	Rollout of dwellings (excludes competitive-ness margin)	Greenfield & intensification split G/I	Demand	Rollout of dwellings (excludes competitive-ness margin)	Greenfield & intensification split G/I
	Years 1-10 (2021-2031)			Years 11-30 (2032-2051)		
Richmond	1,170	1,781	1,561/220	2,345	2,339	1,513/826
Wakefield	174	242	242G	328	328	302/26
Total for Urban Environment	**2,612**	**2,920**	**2,480/440**	**5,235**	**4,235***	**3,123/1,112**

Table 13: Summary of Residential Demand and Rollout Projections in remainder of Tasman District (*Lower Moutere – new FDS growth area – is helping to meet Motueka's demand years 11-30 by providing approximately 1,000 dwellings)

Town or ward area	Dwellings			
	Demand Years 1-10 (2021-2031)	Rollout of dwellings (competitiveness margin not required) All greenfields	Demand Years 11-30 (2032-2051)	Rollout of dwellings (competitiveness margin not required) All greenfields
Collingwood	13	13	2	2
Kaiteriteri	46	46	77	73
Mārahau	32	32	60	29
Moutere area *	569	569	1,130	2,130
Murchison	37	37	25	25
Pōhara/Ligar/Tata Bay	52	52	33	33
Riuwaka	17	13	33	-
St Arnaud	74	71	17	15
Tākaka	54	54	25	25
Tapawera	14	14	10	10
Ward Remainder Golden Bay	132	132	74	74
Ward Remainder Lakes Murchison	109	112	120	122
Ward Remainder Motueka	165	78	305	325
Ward Remainder Moutere Waimea	210	140	331	307
Ward Remainder Richmond	61	61	124	124

Town or ward area	Dwellings			
	Demand Years 1-10 (2021-2031)	Rollout of dwellings (competitiveness margin not required) All greenfields	Demand Years 11-30 (2032-2051)	Rollout of dwellings (competitiveness margin not required) All greenfields
Subtotal for Urban Environment (Table 12)	**2,612**	**2,920**	**5,235**	**4,235**
Subtotal for rest of District	**1,585**	**1,424**	**2,325**	**3,294**
Total District	**4,197**	**4,344**	**7,560**	**7,529**

Longer term where land has yet to be zoned, certainty of development is less but these sites are in the FDS and have therefore gone through reasonably rigorous testing, against nearly 30 different assessment criteria. It is also worth noting that the 2019 FDS identifies more capacity than is required even under a high growth scenario meaning sufficient capacity is likely to be realised when required. The next FDS review commences July 2021.

5.5 Appropriate zoning for capacity

The towns within the Urban Environment where intensive housing capacity could be provided according to Table 12 are as follows:

- Brightwater – Ellis Street where comprehensive rules can be used now, (after year 10 rules should also be operative for intensive development in this area in the new Resource Management Plan – the area is earmarked in the FDS)
- Māpua/Ruby Bay – In the Māpua Development Area and Māpua Special Development Area, compact and comprehensive housing rules can be used to provide more intensive forms of housing. In the Seaton Valley area where FDS proposes intensification of existing rural residential to standard residential, this should be rezoned by year 10 and may in fact be proposed for rezoning in the near future
- Motueka – Motueka West is being prioritised for a rule change in the near future to enable more intensive housing over and above the standard density currently enabled. The landowner is also prioritising this site for development
- Richmond – Existing operational Richmond intensification area and an additional area is proposed for intensification (Washbourn Drive area) in the FDS – will be proposed for rezoning within 10 years
- Wakefield - limited water and wastewater capacity for growth including intensification. New treatment plant and new water main up to Wakefield needed as well as new wastewater main from Wakefield. Likely to be post 10 years so no intensification assumed until then and then only small amounts.

All land required in 10 years is already zoned. Beyond 10 years the capacity (if not already zoned) is in the Future Development Strategy and will be proposed for rezoning through the Tasman Environment Plan. However, an urgent growth plan change is currently being considered by Council, in advance of the resource management plan review. This is to ensure that Council stays ahead of growth demands due to the potential delay caused by RMA reform to the plan review.

By servicing these development areas for housing, additional capacity is realised, providing for greater numbers of dwellings than is demanded. Subsequent sections of the report examine this excess capacity which is needed to both provide for the competitiveness margin in the Urban Environment. First, the commercial feasibility of the capacity reasonably expected to be realized is examined below.

5.6 Feasibility

5.6.1 Intensification (brownfield) Commercial Feasibility

Between 2015 and 2018 staff at TDC undertook significant work preparing for a housing intensification plan change for Richmond (Plan Change 66), the largest town in Tasman. The area in Richmond to which the intensive rules apply does not cover the whole of Richmond. Fig 15 below shows the part which it covers:

Figure 15: Extent of Richmond Intensive Development Area (RIDA) in Richmond

The land value to capital value ratio for Richmond has been mapped every 3 years and these maps are shown below. The Richmond Intensive Development Areas (RIDA) are character areas 2 (Croucher St), 2A (Croucher St), 3 (Queen St East), 4 (Waverley/Oxford) and 5 (Cautley St), shown on the maps. The other character areas lie outside RIDA.

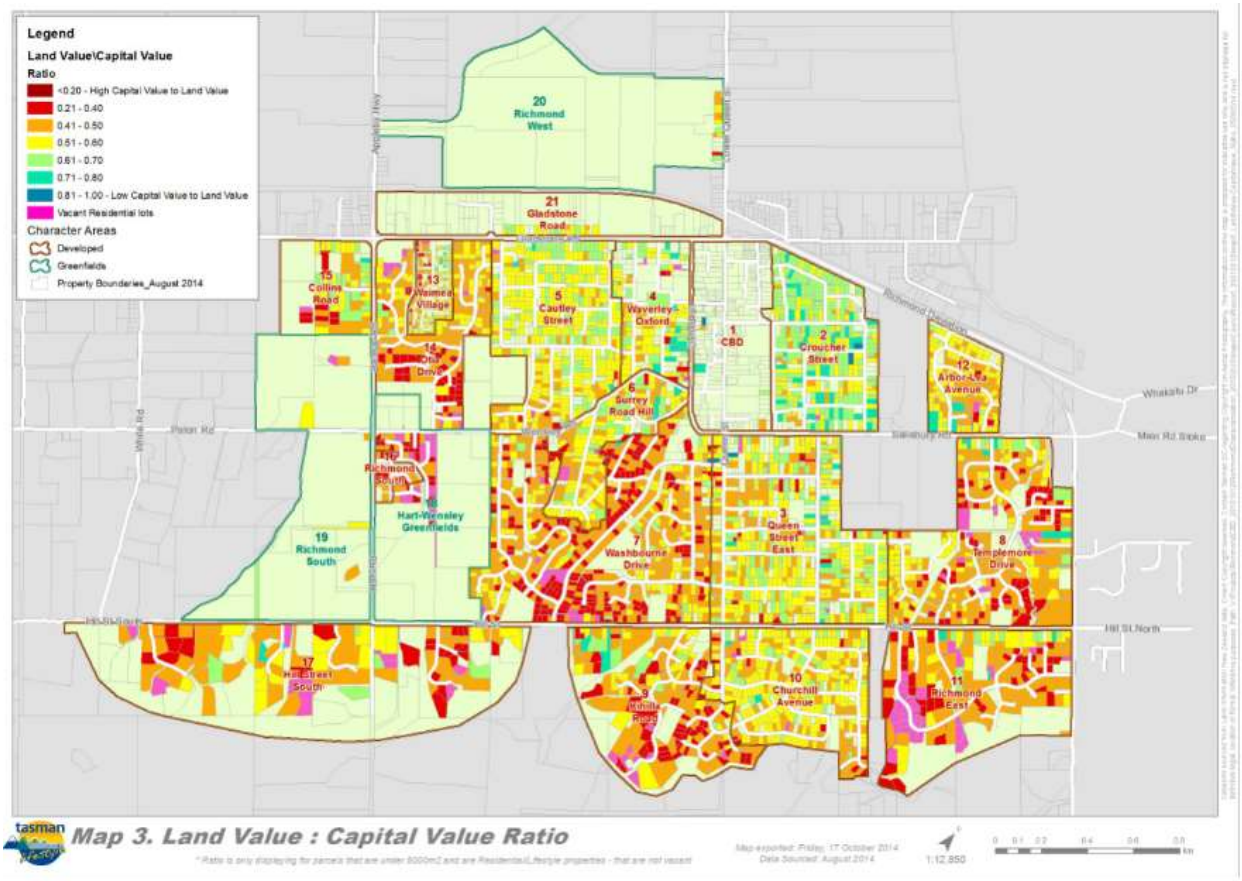


Figure 16: Land Value to Capital Value ratio, Richmond 2014. Note character areas 2, 2A, 3, 4 and 5 inside RIDA

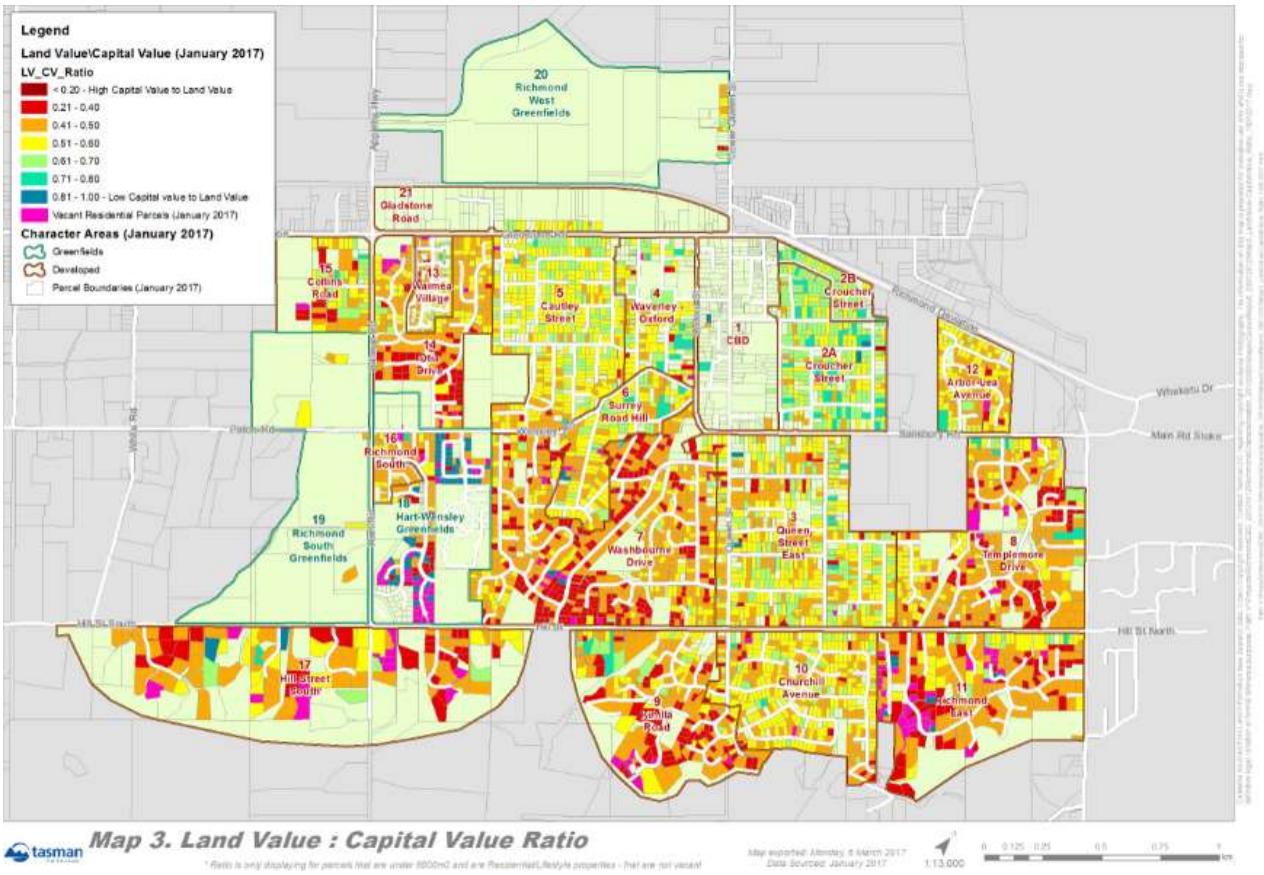


Figure 17: Land Value to Capital Value ratio, Richmond 2017. Note character areas 2, 2A, 3, 4 and 5 inside RIDA

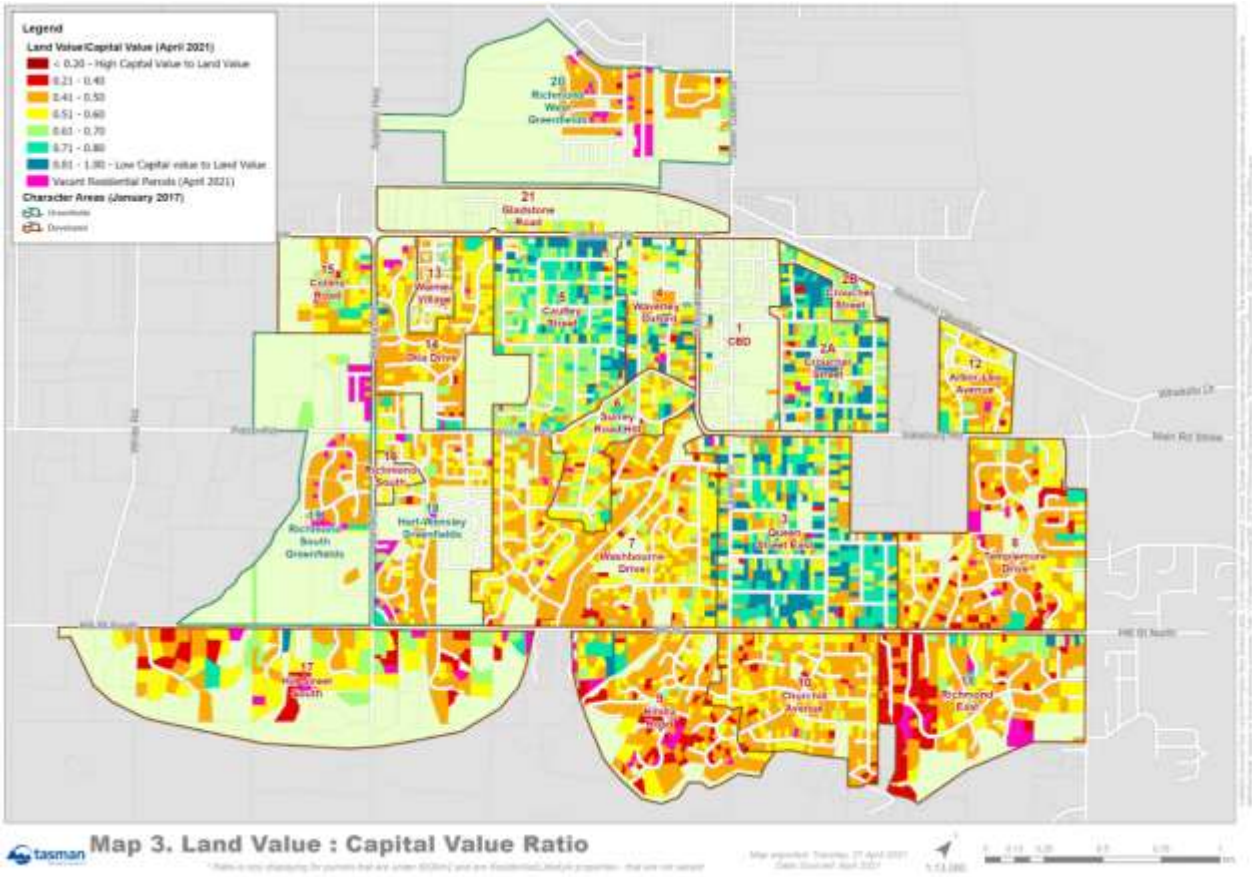


Figure 18: Land Value to Capital Value ratio, Richmond 2021. Note character areas 2, 2A, 3, 4 and 5 inside RIDA

At the time of Plan Change 66, it was generally thought that for intensification one should strive to select an asset where the land represents 70 per cent of the value of the property (0.7 decimalised), with 50 per cent as the minimum. (0.5). A higher land to capital (asset) ratio can result where there is large land size; a high land value per square metre; or an older dwelling.

During the 2021 Tasman revaluation however, QV reported "*consistent strong land sales within the Richmond intensive development area for sites which could be redeveloped into multi-unit type housing, where the original dwelling is demolished. The Plan Change became operative in 2018 and the potential for redevelopment due to the RIDA is apparent. Land values are increasing at significantly faster rates than capital values in RIDA and capital values have increased markedly in Richmond generally."* Figures 16 to 17 illustrate that between 2014 and 2017 for character areas 2, 2A, 3, 4, and 5, there was little change in the land value to capital value ratio in RIDA. The new rules became operative in 2018 and the difference between the 2017 and 2021 maps (figures 17 and 18) are very noticeable with ratios increasing markedly in RIDA. As QV has commented, the very introduction of the RIDA rules in parts of Richmond has pushed land values up markedly, where the section has potential for redevelopment for multi-unit housing. Another factor to note is the whole market movement in the 3 years since last revaluation, leading to increased values everywhere as a whole.

Table 14 below shows locations where intensification by redevelopment has occurred in RIDA since 2018 and provides the land value to capital value ratio for these sites prior to building consent:

Table 14: Land value to capital value ratio where intensification has occurred by redevelopment in RIDA since 2018

Location	Land Value prior to resource consent ($)	Capital Value prior to resource consent ($)	Land Value to Capital Value ratio (decimalised)	Date of valuation
10 Chisnall Street	290,000	425,000	0.68	2019/2020
8A Chisnall Street	335,000	450,000	0.74	2019/2020
8 Chisnall Street	290,000	450,000	0.64	2019/2020
29 Talbot Street	350,000	580,000	0.60	2019/2020
38A D'Arcy Street	285,000	480,000	0.59	2019/2020
11 Florence Street	375,000	730,000	0.51	2019/2020
5 Herbert Street	350,000	460,000	0.76	2019/2020
1 & 3 Oxford Street (two sections, values combined)	600,000	1,000,000	0.6	2019/2020
7 Oxford Street	350,000	640,000	0.55	2019/2020

This analysis shows that intensification developments are being built even where the land represents just over 50% of the value of the property. That said, some of these do include a large number of new dwellings (seven) which will proportionately increase revenue once developed. A land value to capital value ratio of 0.7 for intensification redevelopment does not currently seem to apply in Richmond, possibly helped by a sharply rising property market, although earlier intensification redevelopments in RIDA (pre-2018) also had ratios much less than 0.7.

Tasman's Housing and Business Assessment for 2018 attempted commercial feasibilities for two brownfield intensification sites in RIDA, none of which were feasible according to the analysis and yet both these developments have gone ahead. Given this past experience and the evidence above, this HBA does not contain commercial feasibilities for brownfield redevelopments.

Since the RIDA Plan Change was operative (2018), twenty resource consents have been granted where the intensive rules are used. Nine of these consents are where the house has been removed and replaced with multi units and eleven of these are where a second dwelling is added to the site. The majority of these consents are single storey but some are 2 storey and together these consents have resulted in a net addition of 36 dwellings in two years. Just before the RIDA rules were operative (2026-2017) a further six resource consents were granted within RIDA where the proposals were discretionary due to not complying with original rules, providing 16 net additional dwellings. This makes a total of 52 net additional dwellings from the RIDA rules.

The growth model review that informed the 2018 HBA assumed a net gain of 8 dwellings per year from intensification. The most recent growth model that informs this HBA has therefore been updated in light of consent activity to a net gain of 24 dwellings per year for the next 30 years. This seems feasible based on 18 units per year between 2018 and 2020, although the long-term effects of Covid-19 on the construction industry remain to be seen.

There are current applications for intensification outside of RIDA which will inform the review of the intensive housing boundaries through the new Resource Management Plan, the Tasman Environment Plan. The FDS already recommends extension of the RIDA boundary.

5.6.2 Greenfield Commercial Feasibility

Implementation clauses 3.25(1)(c) & 3.26 of NPS UD explain that feasibility estimates of housing development capacity are based on the current relationship between costs and prices, with flexibility to alter this relationship for long term feasibility. So, the short- and medium-term developments need to be commercially viable today, but longer-term changes can be factored in such as infrastructure costs or new building technologies.

The following representative greenfield examples within the Urban Environment were analysed for commercial viability to a developer using the NPS UDC development feasibility tool (Guidance for local authorities on the NPS-UDC | Te Tūāpapa Kura Kāinga - Ministry of Housing and Urban Development (hud.govt.nz)):

1. **Highland Drive, Richmond** – a gazetted Special Housing Area in the foothills of Richmond, still going through the Resource Consent process. 10.79-hectare site, zoned Residential and Rural Residential Serviced. 61 residential lots are proposed in five stages, varying in size from 400 sq m to 2,000 sq m.
2. **Paton Rise, 20 Paton Road, Richmond South** – 3.64 hectares consented for a 48-lot residential subdivision, in four stages, with remainder of land for future subdivision. Land is zoned Residential. Section sizes range from 500-600 sq m.
3. **100 Bryant Road, Brightwater** – 5.5 hectares, recently zoned Residential (was previously Rural 1 deferred Residential, but the deferral was uplifted with a servicing strategy in agreement). The development assumed on this site (not subject to any current resource consent application) is of standard Residential section sizes between 550-600 sq m. and 30 lots in total. This site suffers from some contamination and so some remediation would be required.
4. **166 Māpua Drive, Māpua** – 3.7 hectares current zoned Rural 1 deferred Residential. The development assumed on this site (not subject to any current resource consent application) is of standard Residential section sizes 450-600 sq m and 45 lots in total. The 1,500 sq m existing house would remain on the site, with the remainder as developable land. This site is a former orchard so some remediation would be required.
5. **Richmond South Future Development Strategy growth site** – The adopted FDS contains a large growth area to the south, totalling 130 hectares, split across two main roads, Paton Road and Hill Street. A small part of this has been examined for commercial feasibility – 11 hectares on the flattest part of the site, south of SH6, but north of Paton Road.

Sources of information:

- Three developers were consulted in order to obtain an indication of civils costs, constructions costs (including professional fees) per section, any unusual costs associated with sites and general levels of profit expected. One notable indicator that has changed since the last HBA (2018) is the general costs per lot (construction and professional fees). These were approximately $45,000 per lot in 2018 for flat land but now range from $110,000 - $150,000 in 2021 depending on the site. For steep sites, costs per lot can be in the region of $180-200,000.
- Colliers International provided residential section values.

- An indication of telecoms connection fees was obtained online from Chorus "our costs and fees to service subdivisions" Pricing .pdf. Electricity connection costs were based on BRANZ data online Mains and Grid power when building (level.org.nz)
- Land values (predevelopment), if not provided by the developer were obtained from the Council's rating database using the 2020 revaluation.

The commercial feasibilities are provided in appendix 5 and the results are summarized below:

1. **Highland Drive Richmond** - The density proposed is low (below 10 dwellings/ha) since although 61 residential lots are proposed, the site is steep and the lot size variable. There are some lots around the 2,000 sq m mark, with smaller ones at 400 sq m. Allowance was made for more earthworks and site preparation as this is steep difficult site to develop with geotechnical challenges. According to the commercial feasibility, this development is feasible at all densities (10-30 dwellings per hectare), providing a return of 30% (as advised by developers). The feasibility shows the density as profit maximising at 30 dwellings per hectare however, but this probably does not take into account the site's steep terrain.

2. **Paton Rise, 20 Paton Road, Richmond South** – the density proposed is approximately 13 dwellings per hectare on this flat site. This is an easy site to develop, close to Richmond, when compared with some steeper options. According to the commercial feasibility, this development is feasible at all densities (10-30 dwellings per hectare), providing a return of 30% (as advised by developers). The feasibility shows the density as profit maximising at 30 dwellings per hectare however.

3. **100 Bryant Road, Brightwater** – the density proposed is approximately 12 dwellings per hectare on this relatively flat site. An extra allowance for road reserve was made for this potential development due to access constraints. According to the commercial feasibility, this development is feasible at all densities (10-30 dwellings per hectare), providing a return of 30% (as advised by developers). The feasibility shows the density as profit maximising at somewhere between 10-15 dwellings per hectare however.

4. **166 Māpua Drive, Māpua** - The density proposed is roughly 12 dwellings per hectare. According to the commercial feasibility, this development is feasible, providing a return of 30% (as advised by developers). The densities shown in the feasibility range from 10 dwellings per hectare to 15 dwellings per hectare, so 12 dwellings per hectare is not a separate category. The feasibility shows the density as profit maximising at 25 dwellings per hectare, so denser than what is assumed typical for this area.

5. **Richmond South Future Development Strategy growth site –** The density proposed is approximately 25 dwellings per hectare, since this is productive land and if it was rezoned for housing, efficient use of that land would be needed. According to the commercial feasibility this development is feasible, providing a return of 30% (as advised by developers). The feasibility shows the density as profit maximising at somewhere between 10 and 15 dwellings per hectare, so less dense than what is assumed for this area.

1.

5.7 Development capacity including competitiveness margin in the Urban Environment

The NPS-UD also requires Council to provide an additional margin of feasible development capacity in the urban environment which is 20% above the projected demand for the next ten years, and 15% above the demand projected for the next eleven to thirty years. By servicing the development areas required to meet demand, further capacity is released, over and above that required to meet demand. This provides for the competitiveness margin.

Using the growth model, calculations have been made of the baseline capacity by each town as at 2019 and the 'rollout' for 2019 and 2020 has been deducted from this baseline capacity. This is because the growth model is run well in advance of the LTP year 2021, so as to be able to inform the LTP.

Council can provide for the additional margin of feasible development capacity for the Urban Environment, (Richmond, Motueka, Māpua, Brightwater and Wakefield) over the 30-year period. The tables below illustrate this:

5.8 Residential Capacity: Short term: (zoned and serviced) in the Urban Environment years 1-3

Table 15: Residential Capacity – Short Term

Town	**Demand (including competitiveness margin) in the Urban Environment**	**Capacity reasonably expected to be realised and remaining capacity** **Number of dwellings**
	Years 1-3 (2021-2024)	
Richmond	398	695
Brightwater	77	100
Māpua/Ruby Bay	109	192
Wakefield	64	150
Motueka	262	237
Total	910	1374
Excess cumulative capacity from year 3	464	

5.9 Residential Capacity: Medium term (zoned and serviced) in the Urban Environment years 4-10

Table 16: Residential Capacity – Medium Term

Town	Demand (including competitiveness margin) in the Urban Environment	Capacity reasonably expected to be realised and remaining capacity Number of dwellings
	Years 4-10 (2025-2031)	
Richmond	1006	1226
Brightwater	175	83
Māpua/Ruby Bay	268	216
Wakefield	145	134
Motueka	631	331
Total	2225	1990
Excess cumulative capacity from year 3	464	
Remaining capacity from years 4-10	229	

5.10 Residential Capacity: Long Term (land identified in FDS and planned to be serviced in LTP or in Infrastructure Strategy) in the Urban Environment years 11-30

Table 17: Residential Capacity – Long Term

Town	Demand (including competitiveness margin) in the Urban Environment	Capacity reasonably expected to be realised and remaining capacity Number of dwellings
	Years 11-30 (2032-2051)	
Richmond	2697	2496
Brightwater	412	639
Māpua/Ruby Bay	722	628
Wakefield	377	372
Motueka	1812	580
Total	6020	4715
Excess cumulative capacity from years 4-10		229
Remaining capacity at year 30	-1076	

Table 17 above shows a deficit by year 30 for the Urban Environment. In order to provide sufficient capacity for primarily Motueka, the Lower Moutere FDS growth area, outside the Urban Environment would provide at least 1,000 houses, as detailed below. Such a location is between Richmond and Motueka and just 6km from the centre of Motueka. The housing preferences survey 2021 has shown that income constrained demand in areas like Lower Moutere is higher than the unconstrained demand. Some of the urban demand may be driven into these more rural areas of Tasman, constrained by affordability issues. If this proves unrealistic, additional sites will be identified in the new FDS.

5.11 Residential Demand, rollout and remaining capacity: short, medium and long terms in the rest of Tasman District years 1-30

Table 18: Housing Capacity remainder of Tasman District 2021-2051

(*Lower Moutere – new FDS growth area – is helping to meet Motueka's demand years 11-30 by providing approximately 1,000 dwellings in the Urban Environment)

Town	Demand	Rollout years 1-30 (dwellings reasonably expected to be realised)	Additional theoretical capacity in Development Areas (DAs)	Comments re additional theoretical capacity
	Years 1-30 (2021-2051)		Years 1-30 (2021-2051)	
Collingwood	15		126 lots DAs 1-3, DA 5, DA 9 and DA13	The FDS future growth area in Collingwood (DA9) is already serviced for water and wastewater. Stormwater would be provided by developer. DA4 is future development area not serviced
Kaiteriteri	123	119	0 lots	80% of demand for dwellings over the next 30 years is for holiday homes in Kaiteriteri
Marahau	92	61	0 lots	33% of demand for dwellings over the next 30 years is for holiday homes in Marahau
Moutere	1699	2,699*	0 lots	Excess rollout is due to providing for demand in Motueka (see table 17). In reality there will be further capacity, due to existence of large Rural 3 zones in this area, however the rule framework is open ended and it is therefore difficult to be certain over future dwelling numbers
Murchison	62	62	94 lots DA1, DAs10-11, DAs18-19	The FDS future growth area in Murchison (DA11) is already serviced, developer is in agreement to extending the wastewater main into the site and

Town	Demand Years 1-30 (2021-2051)	Rollout years 1-30 (dwellings reasonably expected to be realised)	Additional theoretical capacity in Development Areas (DAs) Years 1-30 (2021-2051)	Comments re additional theoretical capacity
				would need to provide stormwater detention.
Pōhara, Ligar, Tata	82	82	100 lots DA1, DA5-7, DAs 16-19, 22	Wastewater and stormwater services are provided in Pōhara/Tata/Ligar. DA5, 6, 7, 16-19, 22 are zoned rural residential unserviced and can be developed as such. DA25 although rural 2 zone has a SHA consented within it but only the portion consented has been included as rollout, since the remainder is not appropriately zoned
Riuwaka	50	13	0 lots	Natural hazards prevent further development here
St Arnaud	67	86	0 lots	80% of demand for dwellings over the next 30 years is for holiday homes in St Arnaud
Tākaka	77	77	154 lots DA1, DA3, DA16 (part)	Council provides wastewater and stormwater here, no retic water supply DA16 – the FDS has recommended a future site of 70 dwellings here which avoids the highly productive soils. This capacity has been included, servicing is achievable in long term. DA14 is rural residential.
Tapawera	24	24	62 lots DAs 1, 2, 4 and 11	Council provides water, wastewater and stormwater here FDS area is DA4 and this is not planned to be serviced until mid 2030s
Ward Remainder Golden Bay	206	206	n/a	Too imprecise over such a large area to include
Ward Remainder Lakes Murchison	229	**234**	**n/a**	Too imprecise over such a large area to include
Ward Remainder Motueka	470	**403**	**n/a**	Too imprecise over such a large area to include
Ward Remainder Moutere Waimea	541	**447**	**n/a**	Too imprecise over such a large area to include

Town	Demand	Rollout years 1-30 (dwellings reasonably expected to be realised)	Additional theoretical capacity in Development Areas (DAs)	Comments re additional theoretical capacity
	Years 1-30 (2021-2051)		Years 1-30 (2021-2051)	
Ward Remainder Richmond	185	**185**	**n/a**	Too imprecise over such a large area to include
Sub total	**3922**	**4,713**	**536**	
Total		**5,249**		
Surplus capacity		**1,327***		

The growth model indicates that in the District overall there is sufficient serviced and zoned capacity to meet demand under the medium growth population scenario for 30 years. Within the Urban Environment, sufficient serviced and zoned capacity also exists when the Lower Moutere FDS area provides for Motueka's demand in the long term (approximately 1,000 dwellings).

There remains approximately 200 dwellings excess capacity in the remainder of the District over the 30-year period, once the capacity required for Motueka is deducted. This is a worst-case scenario as additional capacity in the ward remainder areas exists but it is too difficult to quantify. Different zones and rules apply in these areas, and it is therefore too difficult to estimate the number of dwellings that may eventuate, but there will certainly be some capacity additional here.

5.12 Servicing of land required

In recent years (2015-2020), actual population growth surpassed what Council had estimated would occur. This resulted in more homes being built, taking up infrastructure capacity far sooner than we had anticipated. Our future population projections suggest this period of growth will continue for many years yet. This growth is occurring in all of our key settlements meaning that a number of our networks are under strain and require capacity upgrades. We have planned upgrades in Motueka, Richmond, Māpua, Brightwater and Wakefield (the Urban Environment) to provide capacity for future homes that will need to connect to our networks.

Of the approximately 11,800 new dwellings required over the next 30 years, 60% of these homes will need to connect to Council's infrastructure. Council plans to enable growth within Tasman by investing $317 million in growth related infrastructure over the next 30 years. Council has increased its growth investment significantly compared with the LTP 2018-2028, which had a growth-related infrastructure spend of $100m. Figure 20 overleaf provides a diagrammatic summary of the infrastructure required due to growth.

Figure 19 below shows the total planned investment in growth infrastructure over the next 30 years:

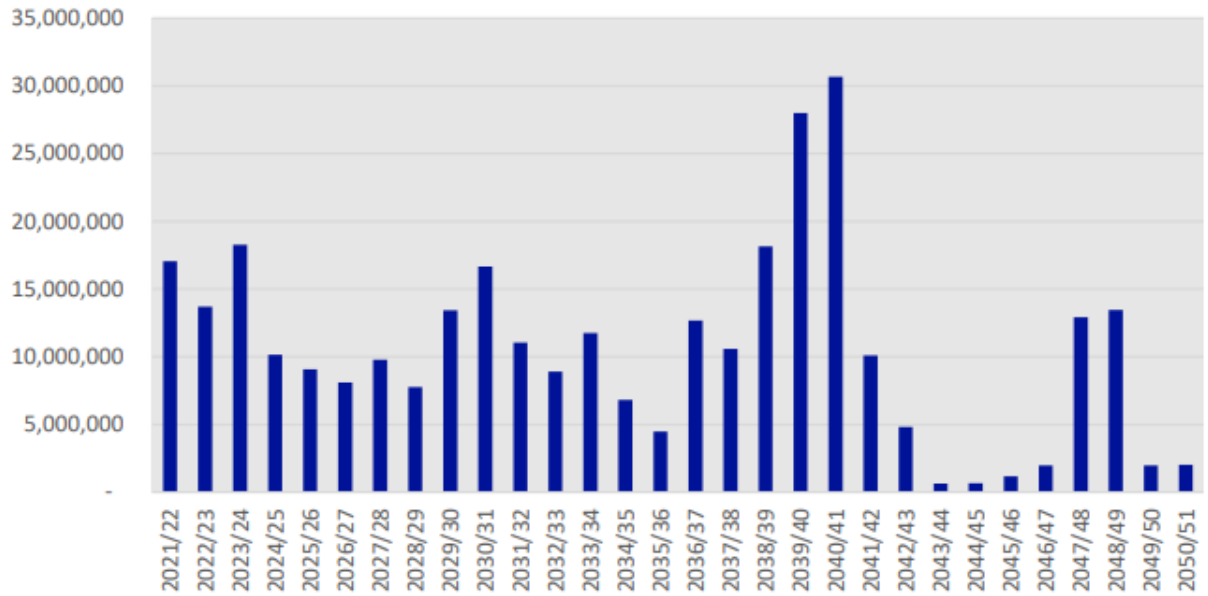


Figure 19: Total Growth Expenditure for Infrastructure for the next 30 Years

Council expects the proposed Three Waters Reforms to have a significant impact on the way in which it delivers services. However, Central Government has not fully developed its proposal and Council is uncertain of how it will take shape. Council has assumed that challenges such as asset renewal, resilience, meeting service standards and meeting growth needs will exist and be important for any entity that is responsible for delivery of the Three Waters services. Council expects more clarity on the reforms in late 2021. In the meantime, Council has assumed that it will continue to own and provide Three Waters services within Tasman District.

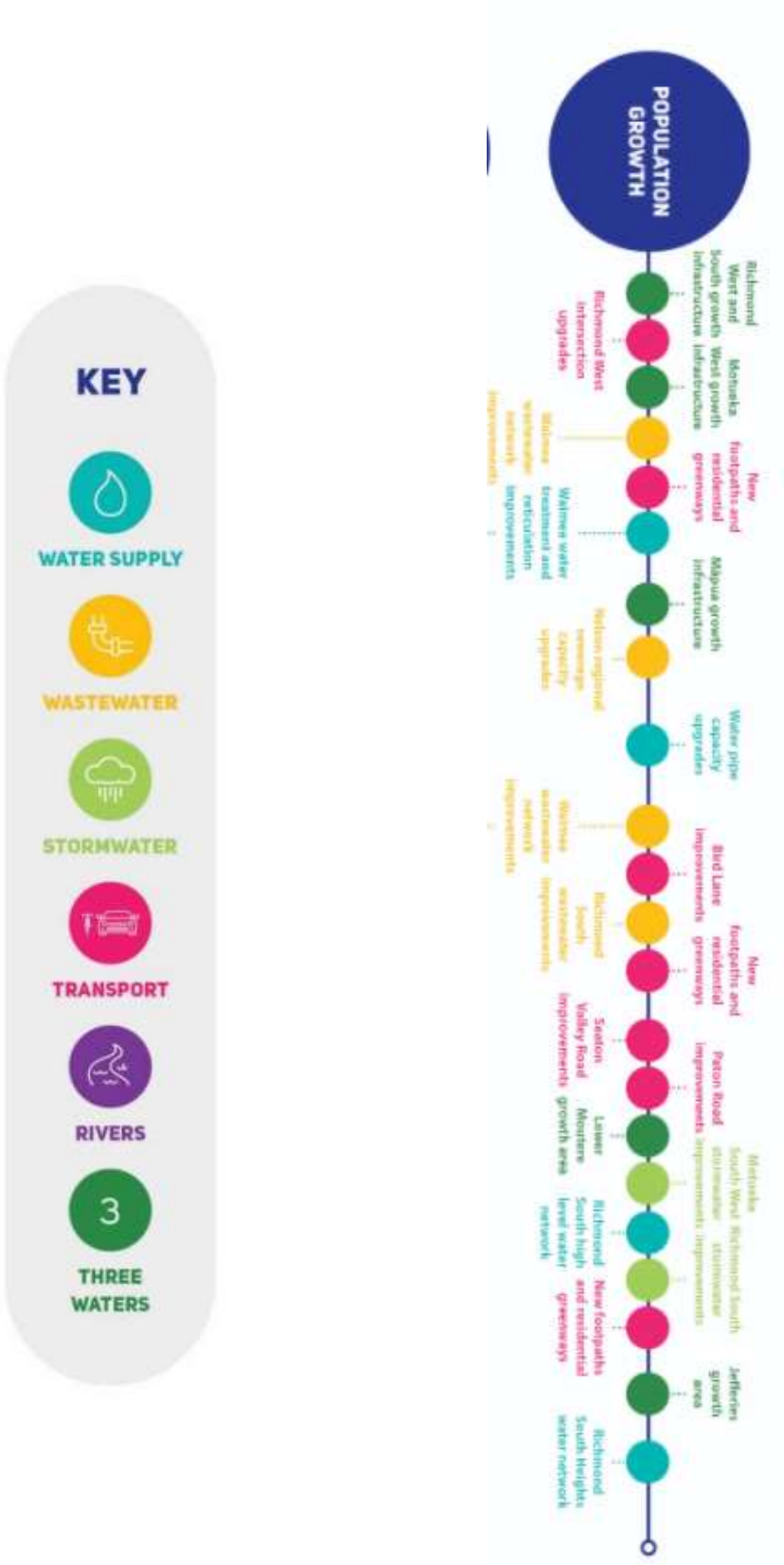


Figure 20: Key growth infrastructure projects in LTP 2021-2031

Appendix 8 provides details of investment in services planned over the period 2021-2031 contained within the LTP, for each town or ward. For each of these capital projects, a detailed business case is prepared, identifying if it is needed for growth. The business case includes cost and risk estimates and preliminary and general costs. The total project costs are then included in the LTP budget, phased over the appropriate time period.

The relevant activity planning advisor for each service (water, wastewater, stormwater and transport) is intrinsically involved in the growth model review. More specifically once the rollout has been settled for each town, the planning advisor verifies that each development area needed to provide capacity is either already serviced or requires servicing and that the project is either budgeted for in the LTP or the infrastructure strategy.

The Waimea Community Dam is estimated to cost between $148 million and $164 million to complete. The dam will be completed in the first half of 2022, and then filled over the winter of 2022, becoming fully operational in October 2022. This will ensure it is ready to operate from the 2022/2023 summer season. Businesses in Waimea and Nelson are already benefiting, directly and indirectly, from the transitional Tasman Resource Management Plan provisions which ensure that water restrictions are applied less often and are less severe than if the dam project had not proceeded. Once the dam is operational, there will be both water supply security and additional water available, along with wider public benefits including improvements to environmental, cultural and recreational values.

In summary, the LTP (and if beyond year 10, the infrastructure strategy) will ensure the following investment in services over the next 10 years in the **Urban Environment**:

- **Richmond** - Council has planned significant growth infrastructure in the medium and long term to enable development of the Richmond South FDS areas. Council has also planned financial support to developers/occupiers for low pressure smart pump wastewater systems in the intensification area of Richmond (likely to be the smart technology elements of the kit.) This budget is $30,000 per year for the next ten years. Council has seen a noticeable increase in traffic congestion on State Highway 6 through Richmond. This is of concern as it highlights the unfavourable impact increased traffic numbers will have on this section of highway without further interventions. A programme business case joint with Waka Kotahi is currently underway for Richmond, to try and alleviate the congestion problems.
- **Motueka** - Council has planned sufficient infrastructure servicing over the next 20 years to enable development of all the residential land in the western side of High Street, Motueka. Development in the other parts of Motueka will remain limited, due to natural hazard risks in the east and a preference to avoid expansion into productive land on Motueka's outskirts. To address the long-term undersupply of residential land in Motueka, Council is planning for development during the 2030's of a significant area of land in Lower Moutere, with potentially 1,200 new houses (medium to low density). Infrastructure for Lower Moutere is in the Infrastructure Strategy. Intensification in the FDS area west of High Street is currently dependant on not only upgrading the stormwater network but also Council's climate change/sea level rise strategy in combination with stormwater and river flooding modelling.
- **Brightwater** – A new bypass wastewater pump station is proposed for Brightwater to support growth, as well as water pipe capacity upgrades and a programme to upgrade capacity of bores, treatment plant, trunk mains, reticulation and reservoirs also to support growth. The location and type of future development after 2031 has been guided by the FDS. Council is expecting some intensification to start by 2028 in the Brightwater Town Centre FDS area and is expecting development to start in the Jefferies Road and Shannee Hills (Katania) FDS areas by 2050

- **Māpua** - Council has recently invested in water and wastewater upgrades in Māpua, and the replacement of the water main, providing a safe and secure water supply for future subdivisions, means the moratorium on new water connections in Māpua will be lifted from August 2021. The location and type of future development has been guided by the FDS. Council is expecting development to start in the Seaton Valley Hills FDS area after 2030, with intensification of rural residential zoning to residential standard.
- **Wakefield** – The urban water supply will be extended in the Eighty-Eight Valley area including new water mains and pump station upgrades. There is also a wastewater network capacity upgrade to replace and upgrade capacity of trunk mains and pump stations to support growth. There is a water programme to upgrade capacity of bores, treatment plant, trunk mains, reticulation and reservoirs also to support growth. The location and type of future development after 2031 has been guided by the FDS. Council is expecting some intensification to start by 2028 in the Wakefield Town Centre FDS areas. There is significant potential capacity for future development in the Pigeon Valley FDS areas but we are currently not expecting these areas to be developed for at least 30 years, unless growth occurs at a higher rate than expected

In summary the LTP (and if beyond year 10 the Infrastructure strategy) will ensure the following investment in services over the next 10 years in the **rest of the District**:

- Moutere – The Moutere area is currently largely self serviced. However Council has planned significant growth infrastructure from 2034/2035 for the Lower Moutere Hills FDS growth area, including new water supply, wastewater and stormwater networks
- Lakes Murchison ward - Council provides water, wastewater and stormwater services to the Murchison and Tapawera settlements and provides wastewater and stormwater services to the St Arnaud settlement, but residents are required to provide their own water supply. No further servicing investments related to growth are currently planned for these towns in the next 10 years. The location and type of future development has been guided by the FDS. The FDS has identified potential growth areas in Murchison and Tapawera and Council is expecting development to start in these areas by the 2030s.
- Golden Bay - Golden Bay's population growth is projected to slow down and eventually decline from approximately 2038. However, due to the decrease in household size, some demand for new houses is expected to continue beyond then. The location and type of future development has been guided by the FDS. The FDS has identified several potential growth areas in Golden Bay. At this stage, Council does not expect development to start in these areas, unless growth occurs at a higher rate than expected.
- Kaiteriteri - Beyond 2031, the future demand for new dwellings in Kaiteriteri and Mārahau is likely to use up all remaining developable land by the 2040s. Changes to zoning to enable further development in these communities will be considered, along with the future implications of climate change and sea level rise, in the development of Tasman's new resource management plan. Significant amounts of demand for housing in these towns is for holiday homes (see table 5), hence the FDS did not focus on these towns for new growth areas.

In accordance with clause 3.4 of the NPS UD, capacity in years 1-3 is serviced. Capacity in years 4-10 is serviced or is in the LTP and will be serviced within 10 years. Capacity in years 11-30 is either in the LTP or Infrastructure Strategy.

5.13 Housing Type/Choice/Location

The residential demand section of this report examined demand by location and type, including holiday homes, workers' accommodation and by household groups including Māori, low income, older persons and seasonal workers. Above sections of this report have explained how Council proposes to provide housing by location.

The housing preferences survey 2021 provides evidence on a sample of residents' income constrained housing choice in the Tasman Urban Environment. Applying these percentages to the total number of new dwellings required in the Urban Environment, the following number of dwellings by each type are required to meet demand:

Table 19: Tasman Urban Housing Preferences (constrained choice) and Demand by Dwelling Type

	Preference (constrained choice)	Years 1-10	Years 11-30
Apartment	4%	104	209
Attached	25%	653	1309
Standalone	71%	1855	3717
Total Demand for new Dwellings	**100%**	**2612**	**5235**

Within the Urban Environment the standard density, compact, comprehensive and intensive residential rules are operative in different areas for residential development. Appendix 6 provides more information on this. The compact, comprehensive and intensive rules allow for medium density forms of housing such as attached and apartments. They allow for more than one dwelling on a site and minimum lot sizes either do not exist or are small in these zones (e.g., 200 sm or 280 sq m). Should the height of the building exceed 7.5 metres, a higher activity consent status applies but it is still possible.

Table 12 shows the reasonably expected to be realised capacity in the Urban Environment by type (greenfield/intensification). The intensification figure in that table is based on a conservative uptake of intensive developments outlined earlier but does not try to calculate medium density capacity provided by the other comprehensive or compact rules. This is because it would be too difficult to predict which rules a developer may use in parts of the Urban Environment where a wide range of options exists. Using the intensive rules only approximately 1,500 dwellings are expected to be provided over 30 years in the Urban Environment. Table 19 above shows a requirement for 2,275 apartments and attached dwellings for the 30-year period in the Urban Environment, based on the housing preferences survey. Given the range of other medium density types that are operative in the Urban Environment, it is entirely feasible that 775 dwellings over 30 years would be apartments or attached dwellings, rather than stand alone. This constitutes just 1% of the greenfield capacity in the Urban Environment according to table 12.

In terms of housing type, demand for holiday homes is not significant within the Urban Environment. The only town with demand for holiday homes according to the growth model is Richmond and constitutes just 0.9% of housing demand over the next 30 years.

In terms of location, the housing preferences survey has shown that Motueka is a popular preference for survey respondents to live in, but more than half of these respondents could not afford to live there when income and house prices were considered. This underlines the strong demand for housing in Motueka and the

fact that Council has been unable to provide sufficient zoned serviced land here to meet demand may be contributing to higher prices. Motueka West has however been prioritised in the current LTP for servicing investment (years 1-3) and the landowner is keen to develop a medium density development here in the next 18 months.

In terms of different types of household groups:

Renters – The housing preferences survey has shown that the most important factor in making a decision on rented housing, is location (the area they chose). The location was ranked as most important by 46% of rental respondents – twice as high as the next most important factors, house type (23%) and dwelling features (21%). This underlines the importance of Council providing zoned serviced residential land in all locations of the District and the issue with e.g., a different part of the District providing capacity for demand elsewhere.

Low-income households – Low income and housing affordability is an issue across most of the District, but Motueka and Golden Bay have the highest proportion of households on relatively low incomes and a greater need for affordable housing options. Council is undertaking a review of its community housing portfolio in August 2021. However, there is already a waiting list of 120 people for these properties. Council is also working with Community Housing Providers and Kāinga Ora to see if it can assist them in providing more affordable housing. In Motueka, Council has prioritised servicing of Motueka West in years 1-3 to provide for 400 medium density dwellings. Through discussions with the developer, it is hoped these will be more affordable since the occupants will lease the land (leases of 100-150 years) making the cost of dwellings cheaper. In Golden Bay, further work is required but recently a project has commenced initiated by a private individual, the Mohua affordable housing project , which will provide a small number of affordable dwellings.

Older people - Only 15% of all houses built in Tasman District between 2013 and 2018 had two beds or less. During the same period there was a decrease in the number of dwellings built that had one bed (e.g., in 2018 there were no one bed dwellings built), so overall between 2013 and 2018 just 12% of new dwellings had one or two beds. The Housing Preferences Survey shows that 31% of older people prefer an attached dwelling (which would typically be smaller than a stand-alone dwelling). The FDS review will seek to identify more opportunities for intensification in the Urban Environment than the 2019 FDS. However, given most of our towns remain rural, opportunities are limited in scale.

Seasonal worker demand - Central Government changed the rules in 2019 for Tasman, over the type of accommodation RSE employers can offer workers. RSE employers cannot rent a residential house they have not previously used as accommodation for RSE workers. The fact Council's survey shows so many respondents appear to rent properties suggests either the house was included in an Agreement to Recruit (ATR) for the RSE worker approved before 26 September 2019, or the properties are used to house employees outside of the RSE scheme. Innovative ways are also in use to provide accommodation for seasonal workers, such as renting a block on another grower's site nearby.

Based on the average figures provided by the grower chairs, approximately 3,800 seasonal workers in Tasman are not RSE workers i.e., they need accommodation in the local area. Of these approximately half are backpackers who wish to freedom camp. This leaves approximately 1,900 workers per season who may need rented accommodation. Notwithstanding Council's growth model takes workers' accommodation into account, anecdotal evidence such as this emphasises the need for additional rental accommodation, particularly in the Motueka area, where campground facilities are smaller and fewer. The growth model

assumes that the proportion of workers' accommodation will stay the same, but this does not take into account growth in the horticultural industry for example.

Accommodation for RSE workers should be provided for by purpose-built accommodation on the site of the employers. A landowner, Wakatu purchased the former Fernwood holiday park in Motueka to house RSE workers, on behalf of its lessees. This was because providing purpose-built worker accommodation is expensive and difficult to obtain consents for. The definition of workers' accommodation in the Tasman Resource Management Plan requires updating to meet the needs of growers and the new Tasman Environment Plan will propose this. The survey and discussions with growers have highlighted that purpose-built facilities are sought after for workers' accommodation in the future and therefore the definition in the Resource Management Plan needs to allow cooking and ablution facilities within the same building as the bedrooms. (The definition of workers' accommodation currently and hence the permitted activity status is that kitchen and bathroom facilities are not located in a separate building to the sleeping area). In addition, it has been suggested that Council should enable more backpackers through the new Tasman Environment Plan zoning to create seasonal worker accommodation.

5.14 How planning and infrastructure decisions impact the competitiveness and affordability of the local housing market

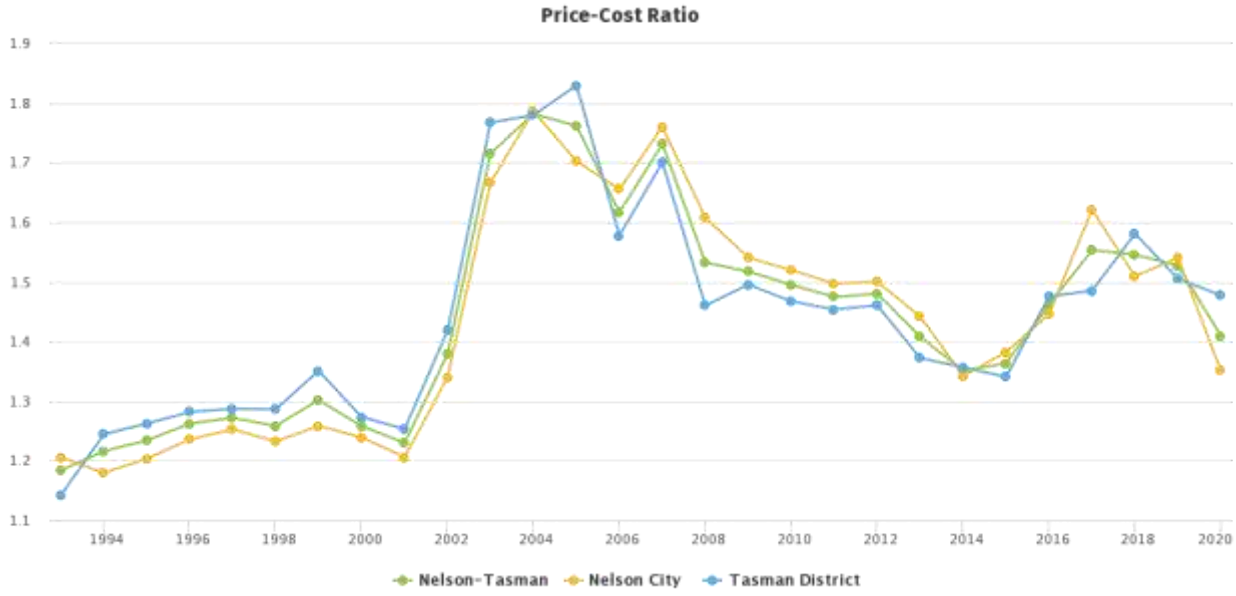
Nelson and Tasman Councils have experienced difficulties in applying the price efficiency indicators in the past for the urban area and now Tier 2 urban environment. Given the previously urban area and now urban environment spans a city and several towns (non-contiguous), the indicators do not seem to work as well as say for a concentric city like Christchurch.

The indicators comprise: Price – Cost ratio (homes), Rural-urban land value differential, Industrial zone differential and land ownership concentration. All these indicators are spatially based on the Nelson main urban area of the NPS UDC (not the current tier 2 urban environment). Therefore, their usefulness in informing planning and infrastructure decisions is limited. In theory, potential planning vehicles to respond to these indicators include development capacity targets, plan changes, district plan reviews and future development strategies.

The price efficiency indicators were analysed for the 2018 HBA. This was after extensive discussions with MBIE over some of the source data. The data is regularly monitored, and analysis of latest data reveals the following:

5.14.1 Price/Cost Ratio Indicator

This is the gap between house prices and construction costs in the Nelson Urban Area for standalone dwellings i.e., the cost of the land. The indicator assumes that if the cost of land is significant and/or increasing, relative to building costs, there is a shortage of sections relative to demand. The price-cost ratio is 1.5 when the cost of a section (land) comprises one-third of the house price. Therefore, the 1.5 price-cost ratio is used as a benchmark for assessment as it signals that the supply of land is relatively responsive to demand. If sufficient development opportunities exist, the ratio should be below 1.5 most of the time. Figure 21 below shows that the price-cost ratio for Nelson-Tasman peaked most recently in 2017 and 2018 before dropping again in 2019 and 2020. The latest ratio of 1.41 indicates that the Nelson Urban Area supply of land is relatively responsive to demand. This is despite house prices having increased by 64% since 2015 and MHUD's indicator on new dwelling consents compared with household growth showing that there has been modest unmet demand in Tasman since 2015.



1 Figure 21: Price/Cost Ratio

5.14.2 Rural-Urban Land Value Differential Indicator

The values of residential land 2km either side of the boundary between urban and non-urban zones are compared, after removing the impact of differences in amenities, geographic characteristics and infrastructure. The impact of zoning is therefore assessed i.e., the rural-urban differential. Nelson's Main Urban Area ratio is currently 2.10 i.e., urban land is valued at roughly twice the value of non-urban land or $153 per sq. m more. The cost per section of the rural-urban differential is estimated at $91,671 for Nelson's Main Urban Area by MBIE. Nelson Main Urban Area land values do not rise as you get closer to the centres of Nelson and Richmond; conversely, they increase steeply as you get closer to the rural-urban boundaries of both Districts. This is not the same as for a more concentric city like Christchurch. However, as in other cities, there is a significant drop off in land values at the rural-urban boundary itself. This indicator has previously been assessed as not suitable for describing the housing market in the Nelson Urban Area. As a result, MfE did not require this measure to be reported for the monitoring reports for the Nelson Urban Area.

5.14.3 Industrial zone differential indicator

This indicator seems to reflect local nuances overall and may be of limited value for the capacity assessments. This indicator has previously been assessed as not suitable for describing the housing market in the Nelson Urban Area. As a result, MfE did not require this measure to be reported for the monitoring reports for the Nelson Urban Area.

5.14.4 Land ownership concentration

Around 65% of the undeveloped residentially zoned land in the Nelson Main Urban Area is owned by just ten people or companies, with the largest land holding being 20.3%. It is difficult to determine the level of ownership concentration that will begin to have an effect on section prices but for comparison, the Nelson Main Urban Area is in the top three worst areas for a large amount of land being held by a small number of owners, along with Napier and Hamilton.

5.14.5 Conclusions on price efficiency indicators

Unfortunately, the price efficiency indicators are of limited use for Tasman District and the Nelson urban area. The price cost ratio, potentially one of the more useful indicators indicates that supply of land is relatively responsive to demand. This is despite house prices having markedly increased and MHUD identifying in a separate indicator that some unmet demand exists over the last 10 years.

6. Business Land Demand and Capacity

The Property Economics model has been used to estimate business land demand for Tasman's Urban Environment and rest of District. Council has very recently procured a new business model from Sense Partners, and this will be used in the FDS review and next HBA. Business land demand for Tasman District (including the Urban Environment) has decreased from the Property Economics model to the more recent Sense Partners model, therefore this HBA is based on the upper extreme of business land demand and future assessments are likely to be lower.

The business land capacity includes vacant and underutilized zoned business land in Tasman. These levels of vacant land have been recently ground-truthed by Council with on- site surveys in 2018/19. There is sufficient business land for the Urban Environment and rest of District for the 30-year period. While a small shortfall of industrial land exists in the long term in the Urban Environment, there is a surplus of land in the short and medium terms which would meet this longer-term demand.

6.1 Introduction

The "business land projections" section in appendix 3 explains how business land projections are calculated and inform Council's growth model.

6.2 Demand for Business Land

Business growth is measured in the number of new business properties (retail, commercial, industrial) in Council's growth model.

As noted in the methodology section, the Property Economics model (2016, extrapolated to 2051 and latest population projections applied), projects demand for business land in hectares. The demand is therefore converted from hectares to lots. The average business lot sizes are based on a District wide field survey in 2018/19, which found the following for developed zoned business sites:

Table 20: Average lot size by business type by town (Urban environment shown in orange)

	Average lot size by business type (sq m)		
Town	Retail	Industrial	Commercial
Richmond	800	3500	2200
Brightwater	600	5000	600
Wakefield	1300	5000	1300
Māpua/Ruby Bay	1400	2000	1400
Motueka	1100	4300	1100
Collingwood	1200	3000	1200
Kaiteriteri			2000
Marahau		5000	5000
Murchison	1600	5000	1600
Pōhara/Ligar/Tata Bay	1200	5000	1200
Riuwaka	600	2700	600
St Arnaud			1600

Tākaka	1300	5400	1300
Tapawera		1500	1500

These average lot sizes are applied to the demand in hectares for different types of business land to estimate number of business lots.

6.3 Demand and Rollout of Business Land

The NPS UD requires councils to express business demand in floor areas or hectares. It also requires councils to identify business sectors in any way it chooses but as a minimum distinguish between commercial, retail or industrial. Unfortunately, these business types do not match Tasman's zoning in the TRMP. In the TRMP there are Central Business, Commercial, Light Industrial, Heavy Industrial, Rural Industrial and Mixed Business zones. Separate retail zones do not exist. Retail could locate in CBD zoned locations in Richmond and Motueka, commercial zoned or mixed business zoned (Richmond and Motueka only). Therefore, business demand and capacity for retail and commercial is combined in the assessment below.

Using the medium growth population projections, according to the Property Economics model, demand exists for the following type of business land:

Table 21: Business land demand in hectares and by type (Urban environment shown in orange)

•	Industrial		Retail/commercial	
Business demand in hectares	2021 - 2031 (10 years)	2031 - 2051 (20 years)	2021-2031 (10 years)	2031-2051 (20 years)
Richmond	2.6	19.3	10.0	16.2
Brightwater	0.2	1.7	0.2	0.4
Wakefield	0.2	1.7	0.5	0.6
Māpua/Ruby Bay	0.0	0.0	1.0	1.7
Motueka	0.3	3.9	3.8	6.5
Sub total urban environment	**3.4**	**26.5**	**15.4**	**25.3**
Collingwood	0.0	0.2	0.2	0.2
Kaiteriteri	0.0	0.0	0.0	0.0
Marahau	0.0	0.0	0	0.0
Moutere	0.0	0.0	0.0	0.0
Murchison	0.1	0.7	0.5	0.5
Pōhara/Ligar/Tata Bay	0.1	0.6	0.7	1.1
Riuwaka	0.0	0.1	0.2	0.3
St Arnaud	0.0	0.0	0.2	0.2
Tākaka	0.2	1.4	1.5	2.6
Tapawera	0.1	0.4	0.1	0.1
TOTAL	**3.9**	**29.8**	**18.9**	**30.4**

6.4 Business Land reasonably expected to be realised

Table 22 below shows business demand across the District and the 'rollout' i.e., business properties Council assumes can be built, based on the demand projections, evaluation of the land, development capacity estimates, landowner/developer intentions. This is the business land reasonably expected to be realized. The same assumptions are made for rollout of business land as for residential land, as detailed on pages 36-37. Table 22 excludes the competitiveness margin.

The analysis of capacity of business land for Tasman includes vacant and underutilized zoned business land. These levels of vacant land have been recently ground-truthed by on-site surveys in 2018-19.

Table 22: Business land demand and capacity reasonably expected to be realised (Urban environment shown in orange) by hectares

•	Industrial demand hectares		Industrial rollout hectares		Retail/commercial demand hectares		Retail/commercial rollout hectares	
Town	2021 - 2031 (10 years)	2031 - 2051 (20 years)	2021-2031 (10 years)	2031 - 2051 (20 years)	2021-2031 (10 years)	2031-2051 (20 years)	2021-2031 (10 years)	2031-2051 (20 years)
Richmond	2.6	19.3	11.6	10.2	10.0	16.2	18.8	51.8
Brightwater	0.2	1.7	1.0	4.5	0.2	0.4	0.1	-
Wakefield	0.2	1.7	1	4.0	0.5	0.6	0.3	0.1
Māpua/Ruby Bay	0.0	0.0	-	-	1.0	1.7	1.0	1.7
Motueka	0.3	3.9	6.0	7.7	3.8	6.5	2.5	6.2
Subtotal Urban Environment	**3.4**	**26.5**	**19.6**	**26.4**	**15.4**	**25.3**	**22.7**	**59.8**
Collingwood	0.0	0.2	-	0.3	0.2	0.2	0.2	0.1
Kaiteriteri	0.0	0.0	-	-	0.0	0.0	-	-
Marahau	0.0	0.0	-	-	0	0.0	-	-
Moutere	0.0	0.0	-	-	0.0	0.0	-	-
Murchison	0.1	0.7	0.5		0.5	0.5	0.3	0.6
Pōhara/Ligar/Tata Bay	0.1	0.6	3.0	5.0	0.7	1.0	-	-
Riuwaka	0.0	0.1	0.3	-	0.2	0.4	-	-
St Arnaud	0.0	0.0	-	-	0.2	0.2	-	-
Tākaka	0.2	1.4	-	1.08	1.5	2.6	1.6	0.5
Tapawera	0.1	0.4	0.3	0.6	0.1	0.1	0.1	-
TOTAL HA	**3.9**	**29.9**	**23.7**	**33.4**	**18.8**	**30.3**	**24.9**	**61.0**
Surplus/ deficit?			**+19.8**	**+3.5**			**+6.1**	**+30.7**

Table 22 shows that:

- for the 30-year period, demand and rollout of business land when combined by business type (industrial/retail/commercial) for the whole District is sufficient

- for the long term in the Urban Environment there is a small shortfall of industrial land of 0.1ha, which will increase when the competitiveness margin is added. However there is excess capacity of 16.2ha industrial land in the short and medium terms which will provide for the long term shortfall. The competitiveness margin is discussed below.

6.5 Competitiveness Margin

As with residential land, according to the NPS UD, a competitiveness margin needs to be applied to the Urban Environment for business land. This comprises an additional margin of feasible development capacity which is 20% above the projected demand for the next ten years, and 15% above the demand projected for the next eleven to thirty years. This results in the following extra business land required:

- industrial – 4.6ha
- retail/commercial – 6.9ha

Given table 22 shows a small shortfall of industrial land of 0.1ha in the longer term, this will increase to 4.7ha when the competitiveness margin is added. Given the excess capacity of 16.2ha in the short and medium terms of industrial land in the Urban Environment, this will provide comfortably for the competitiveness margin also.

The retail/commercial competitiveness margin of business land can be provided for by the 41ha of excess retail/commercial capacity in the Urban Environment, as table 22 shows.

In 2018/19 a zoned business land audit was carried out, with every zoned site in the District visited and assessed for suitability for business use as well as underused and vacant land. This ground-truthed the growth model's assessment of zoned vacant land. It is acknowledged that the surplus land varies with location. Some towns such as Māpua, Tākaka and Wakefield have very small amounts of vacant business land, and these will be looked at in the new FDS. However the Urban Environment contains ample vacant and underutilized land to provide for demand.

Additionally, there is the FDS business site in Richmond South which has not been included in the capacity calculations. This is for 13 ha of land (52 lots). It is not currently zoned but is capable of being serviced.

Council has very recently procured an updated business land forecasting model from Sense Partners. Early outputs from this study show that the business land demand for Tasman District (including the Urban Environment) has decreased from the Property Economics model used. Reasons for this reduction include flattening of industrial growth and decline of retail and more people working from home post Covid. Therefore, it seems likely that this growth model iteration has forecast more business land than may be required. That said, the Sense Partners model states that Tasman District needs to provide for 89% of the future business land demand requirements for the Nelson Tasman region, hence the importance of business land capacity in Tasman.

Council will however investigate the provision of further business land in the review of the FDS and new zoning when developing the Tasman Environment Plan, in order to meet specific shortages in certain locations and for certain types of business land.

6.6 Any Insufficient Business Capacity

There is sufficient business land across the 30-year period for the Urban Environment and remainder of District.

6.7 Suitability of Business Land Capacity (location and site size as a minimum) (feasibility)

In October 2020, Council undertook a survey of 500 businesses in the region. The aim of the survey was to understand whether zoned business land (and future business areas) is of the right type in the right location, ensuring that all our businesses are provided for. A summary of the responses is provided below.

Survey of Tasman Businesses 2020

- 195 businesses responded (40%)
- 70% of the 195 businesses employ 10 or less people
- Amount of floorspace occupied is also small on average – of the 121 businesses that answered this question, 65% occupy 1,000 sq m or less
- 36% of businesses stated that their current site and/or buildings meets their current space requirements
- 19% of businesses stated there was not enough space
- In terms of quality of current premises, 88% of respondents to this question rated the quality of their buildings as average to excellent
- 26 businesses require more floorspace and 18 businesses require more land
- Of those businesses that require more *floorspace*:
    - 15 respondents require less than 500 sq m
    - 5 respondents require between 500-1,000 sq m (Brightwater, Spring Grove, Richmond, Motueka)
    - 4 respondents require between 2-3,000 sq m (Richmond, Riwaka, Motueka)
    - 2 respondents require more than 5,000 sq m (Motueka, Marahau)
    - Of those wanting more than 500 sq m in floorspace, there are retail and commercial businesses, a construction contractor, a manufacturer and 4 engineering workshops
    - In terms of the larger floorspace requirements (more than 3,000 sq m) these comprise a horticulture company, a manufacturer and a holiday park.
- Of those businesses that require more *land*:
    - 7 respondents require 500 sq m or less
    - 4 respondents require between 1-5,000 sq m (Richmond, Brightwater)
    - 3 respondents require between 5-10,000 sq m (0.5-1ha) (Motueka)
    - 3 respondents require between 10-20,000 sq m (1-2 ha) (Richmond, Motueka)
    - 1 respondent requires more than 2ha (2.5ha) (Golden Bay)
        - Of those wanting more than 1,000 sq m of land, there is a haulage company, two manufacturers, two engineering companies and a recycling business
        - Of those wanting more than 10,000 sq m (1ha) of land there are two construction contractors, a manufacturer, a commercial business and an engineering company.
- 83% of businesses (122 respondents answered this question) are not planning to relocate in the short term, with just 9% of businesses planning to relocate in the next 5 years
- Of the businesses considering relocation, most need industrial units or manufacturing/ workshops and warehouses. Converted offices, depot and civil construction and aggregate outlet are also required. Most are required in Richmond
- Reasons for relocation are traffic congestion for Richmond, more space required and high industrial lease costs (Richmond)
- 16% of companies plan to introduce working from home practices and 16% plan to use automation/mechanisation
- The survey responses clearly showed that suitable location, proximity to customers/clients, quality of premises, quality of life, road network access and cost of premises or land are most important to the businesses when selecting premises to locate their business
- Dissatisfaction with the road network was a recurring theme in the survey responses, particularly around Richmond, Lower Queen Street junction with SH6, at peak times

Part of the Urban Environment is therefore a popular location for extra business land and floorspace, with demand for sites in Richmond, Brightwater and Motueka.

While the responses only provide an indication of some demand in the District, since only nearly 3% of all Tasman businesses took part (188 companies of the 7,000 registered), the geographical location of the businesses was widespread around the District. The range of business types was also varied with most industries represented, except public services, fishing, scientific services and admin and support services.

In relation to the specific future needs, it appears that most demands are being provided for in the capacity reasonably expected to be realised. The exceptions to this would be Marahau, Golden Bay and probably Motueka. Zoned business land in Marahau is limited but there is zoned tourist services land available which may be suitable for the requirements specified in the survey.

While business land in Motueka is included in the capacity, based on anecdotal evidence, it is insufficient for light industrial uses. There is a large area of deferred light industrial and deferred mixed business zoned land in Motueka West, yet to be serviced. With the prioritisation of the servicing of adjacent land for housing in years 1-3 of the LTP, this land would be next and could be prioritised in the next LTP 2024-2034. It is already in the Infrastructure Strategy.

In Golden Bay Council is aware of anecdotal shortages of business land and this has been prioritised in the next FDS, for additional sites to be identified.

While not reflected in the survey, Council has evidence of a shortage of cool store facilities in Richmond, Motueka, Lower and Upper Moutere, for orchard, hops and pharmaceutical companies. There have been ten such applications or pre application discussions in the past 3 years. This highlights a need to protect existing zoned business land opportunities, since demand for such facilities is likely to remain high with the Waimea Community dam soon to be operational. Council is currently experiencing demand from developers to rezone business land to residential land. Demand for fruit internationally has translated to increased capacity in terms of cool stores. The Tasman economy base relies heavily on the export of food and food products. So perhaps not unsurprisingly, several applications for resource consent have been made to council recently.

7. Conclusions and Recommendations

Housing affordability has worsened in Tasman District since the last HBA in 2018, largely due to escalating house prices and incomes remaining lower than national average. Mean incomes in Nelson Tasman are 13% below the NZ average and have only caught up by 2% in the last 20 years. Nelson Tasman is second lowest in NZ. However, the number of building consents issued by TDC has risen significantly in 2020 and 2021, reaching a new record of 601 year ending April 2021. According to Central Government's own monitoring unmet housing demand in Tasman only amounts to 260 dwellings in total for the last ten years (this is a measurement of new households created compared with building consents.)

This HBA demonstrates that TDC is providing sufficient development capacity for housing and business land. This is important since insufficient development capacity would only serve to increase house prices further. The FDS 2019 was the first strategic spatial strategy Council had prepared together with Nelson City Council, sharing jurisdiction over the then Nelson urban area. The FDS includes medium and high growth scenarios to ensure capacity will be provided if population growth continues to increase. In a high growth District, it is important to plan strategically for future growth demands. The FDS will be reviewed in July 2021 and latest population projections will be used.

However, as stated in the HBA 2018, there remain a number of constraints that are beyond Council's control, in ensuring serviced zoned land becomes residential and business floor space, meeting identified demand. These include:

- Land ownership concentration - 65% of undeveloped residentially zoned land is owned by 10 people or companies in the Nelson Main Urban Area. This can lead to land banking, as developers release capacity on to the market at a price that maximises their return, hence there are incentives to produce new housing slowly.
- Capacity of skilled labour in the construction industry and the methods of housing construction.
- Construction costs rising several times rate of general inflation according to "A Stocktake of New Zealand's housing".[21]
- No legal requirement exists in New Zealand to provide genuine affordable housing – TDC is currently discussing inclusionary zoning with MHUD. There is scope for this to be included in the RMA reforms.
- Developers' and house builders' preference to provide larger homes when demand is growing for smaller homes. Rising land values in some cases favour larger lot sizes and properties in order to be commercially feasible.
- Policies of banks on lending finance to developers, including high levels of pre-sales.
- Developer covenants on subdivisions that usually have the effect of adding to the cost of building, to a varying degree dependent on the extent of the covenants.

[21] "A Stocktake of New Zealand's Housing" February 2018 by Alan Johnson, Philippa Howden-Chapman and Shamubeel Eaqub page 24

7.1 Sufficiency of Housing capacity

This HBA demonstrates that there is sufficient development capacity for housing both within the Urban Environment, including the competitiveness margin and the rest of the District in the short, medium and long term. Sufficient development capacity exists for both stand-alone dwellings and attached dwellings. The capacity is plan enabled, infrastructure ready and feasible and reasonably expected to be realised in accordance with the specific requirements of the NPS UD.

7.2 Sufficiency of Business Capacity

This HBA demonstrates that there is sufficient development capacity for business both within the Urban Environment, including the competitiveness margin and the rest of the District over the 30 year period. While in the long term in the Urban Environment there is a small shortfall of industrial land, there is excess capacity of 16.2ha industrial land in the short and medium terms which will provide for the long term shortfall. The capacity is plan enabled, infrastructure ready and feasible and reasonably expected to be realised in accordance with the specific requirements of the NPS UD. The business land capacity is deemed suitable in terms of location and site size and a recent survey helped confirm some future business demands.

7.3 Housing bottom lines to be inserted into RPS and District Plan

In accordance with policy 7 and implementation clause 3.6 of the NPS UD, as soon as practicable after an HBA is made publicly available, the regional council must insert into its regional policy statement, a housing bottom line for the short, medium and long term. A District Council must insert the housing bottom lines into its district plan. Once this HBA is approved by Council, steps will be made to insert housing bottom lines into both the regional policy statement and district plan.

The housing bottom lines are the amount of feasible, reasonably expected to be realised development capacity along with the competitiveness margin for the short, medium and long terms. The insertion of bottom lines must be done without using a process in Schedule 1 of the RMA, but any changes to RMA planning documents required to give effect to the bottom lines must be made using a Schedule 1 process.

The housing bottom lines for the Urban Environment are:

Urban Environment	Short term Years 1-3 (2021-2024) Dwellings
Richmond	398
Brightwater	77
Māpua/Ruby Bay	109
Wakefield	64
Motueka	262
Total	**910**

Urban Environment	Medium term Years 4-10 (2025-2031) Dwellings
Richmond	1006
Brightwater	175
Māpua/Ruby Bay	268
Wakefield	145
Motueka	631
Total	**2225**

Urban Environment	Long term Years 11-30 (2032-2051) Dwellings
Richmond	2697
Brightwater	412
Māpua/Ruby Bay	722
Wakefield	377
Motueka	1812
Total	**6020**

Given the HBA applies (at a minimum) to the relevant tier 1 or tier 2 Urban Environment, the housing bottom lines also only apply to the Urban Environment.

In terms of recommendations:

- Due to the growth pressures TDC continues to experience, an urgent Growth Plan Change is currently being considered for parts of the District experiencing the most severe pressures
- The review of the current Resource Management Plan has begun and work on the new Tasman Environment Plan will continue over the next few years.
- Work will commence shortly on a new FDS.

7.4 Assumptions/Limitations

The survey of zoned business land to check for vacant land and under utilised land in 2018/19 has proved very useful. It will however need updating as the current take up of business land particularly in Richmond is relatively quick. This survey will therefore be updated in December 2022 in time to inform the next HBA.

Nelson City Council
Te Kaunihera o Whakatū

tasman district council | Te Kaunihera o te tai o Aorere

National Policy Statement on Urban Development

Nelson and Tasman Tier 2 Urban Environment: Housing and Business Assessment

July 2021

Foreword

This combined Housing and Business Assessment for the Nelson Tasman Tier 2 Urban Environment forms part of a series of reports:

- Housing Business Assessment for Tasman (July 2021) (see Capacity assessments | Tasman District Council)
- Housing Business Assessment for Nelson (July 2021) (see http://www.nelson.govt.nz/building-and-property/city-development/urban-development-capacity)
- Combined Housing Business Assessment for Nelson Tasman Tier 2 Urban Environment

Together these reports provide the analysis to assess the sufficiency of Nelson and Tasman's residential and business land capacity, both individually and for the Tier 2 Urban Environment, to meet future needs over 30 years 2021-2051.

Contents

1. Executive Summary

This is a summary report that combines the results from the Nelson City Council and Tasman District Council's Housing and Business Assessments for their respective parts of the Tier 2 Urban Environment. Table 1 summarises the residential demand-capacity relationship for the tier 2 Urban Environment for the next 30 years.

Table 1: Nelson Tasman Urban Environment housing demand and capacity

	Demand and capacity for housing		
Period	**Demand**	**Capacity**	**Difference**
Short term (1-3 years)	1,430	3,250	+1,820
Medium term (4-11 years)	4,656	3,882	-897
Long term (11-30 years)	11,093	9,311	-1,659
Total	**17,179**	**16,443**	**-736**

Table 1 shows that there is an insufficiency of 736 dwellings over the 30-year period (2021-2051).

Table 2 below summarises the business land sufficiency of the tier 2 Urban Environment for the next 30 years, i.e., the business land capacity minus demand:

Table 2: Nelson Tasman Urban Environment business land sufficiency

	Land in hectares			
Business Land type	**Short term 2021-2024**	**Medium term 2025-2031**	**Long term 2031-2051**	**Total**
Commercial (and retail)	1.3	2.6	22.2	26.1
Industrial (includes some agriculture activity)	12	11.8	-3.3	20.5
Total	**13.3**	**14.4**	**18.9**	**46.6**

In summary there is:

- a combined insufficiency of housing capacity in the whole Urban Environment at approximately year 2039/40
- a sufficiency of business land capacity for the next 30 years in the whole Urban Environment
- Tasman has sufficient housing capacity for its part of the Urban Environment and for the remainder of the District for the 30 years

- Nelson has sufficient housing capacity for its part of the Urban Environment until year 18
- insufficiency of housing capacity for Nelson's part of the Urban Environment

2. Introduction

2.1 Purpose

The purpose of this report is to inform the two Councils on whether they have sufficient housing and business land capacity to meet anticipated population demands for the Nelson-Tasman Urban Environment. This Housing and Business Assessment (HBA) provides an assessment of the combined Tier 2 Nelson Tasman Urban Environment. A separate report provides an assessment of the Tasman District Authority's development capacity, and a further report provides an assessment of Nelson City Authority's development capacity. All three HBAs should be read in conjunction with each other.

Nelson-Tasman is identified as a Tier 2 Urban Environment in the NPS-UD. Policy 2 of the NPS-UD requires Tier 2 local authorities, at all times to provide at least sufficient development capacity to meet expected demand for housing and for business land over the short, medium and long term.

The overall objective is to have a robustly developed, comprehensive and frequently updated evidence base to inform planning decisions in urban environments. In short, the Housing and Business Assessment (HBA) estimates the demand for dwellings and business land and the availability of development capacity to meet that demand over 30 years.

This assessment determines whether there is sufficient capacity enabled by the Nelson Resource Management Plan, the Tasman Resource Management Plan, the Long-Term Plans and 30 Year Infrastructure Strategies (servicing) to meet projected demand. Included in the analysis of sufficiency is the competitiveness margin, as required by the NPS UD. This amounts to an additional margin of feasible development capacity in the Urban Environment which is 20% above the projected demand for the next ten years, and 15% above the demand projected for the next eleven to thirty years.

This report informs the "housing bottom lines" required to be inserted into both Councils' regional policy statements and district plans. These housing bottom lines for the short, medium and long terms need to be inserted into the regional policy statements and district plans as soon as practicable after this HBA is made publicly available. The housing bottom line for Tasman however only refers to the Urban Environment because the NPS UD only requires this obligation in relation to the Urban Environment. (The rest of Tasman District is the rural remainder.) The housing bottom lines are the amount of feasible, reasonably expected to be realised development capacity that must be enabled to meet demand, along with the competitiveness margin for the short, medium and long terms. Further information on the housing bottom lines can be found in the Councils' respective HBAs.

Finally, this report recommends next steps as to how the Councils could initiate a response to the findings of the capacity assessment. This includes a new Future Development Strategy (FDS) being prepared immediately after the completion of this HBA. Both Councils adopted a first FDS in July 2019, under the former National Policy Statement on Urban Development Capacity (NPS UDC).

2.2 The Tier 2 Urban Environment and its Geographic Areas

"Urban environment" is defined in the NPS UD as any area of land (regardless of size, and irrespective of local authority or statistical boundaries) that: (a) is, or is intended to be, predominantly urban in character; and (b) is, or is intended to be, part of a housing and labour market of at least 10,000 people.

The definition of urban environment includes non-contiguous areas of urban land – so long as they are part of the same housing and labour market that is greater than 10,000 people.

The Joint Nelson Tasman Committee resolved on 10th November 2020 that the Nelson Tasman Urban Environment comprises the following city and towns: Nelson, Richmond, Motueka, Māpua, Wakefield, Brightwater, Cable Bay and Hira, in recognition that these communities are part of the same labour and housing market, and these areas are or are intended to be predominantly urban in character. Figure 1 shows the extent of the Nelson Tasman Urban Environment:

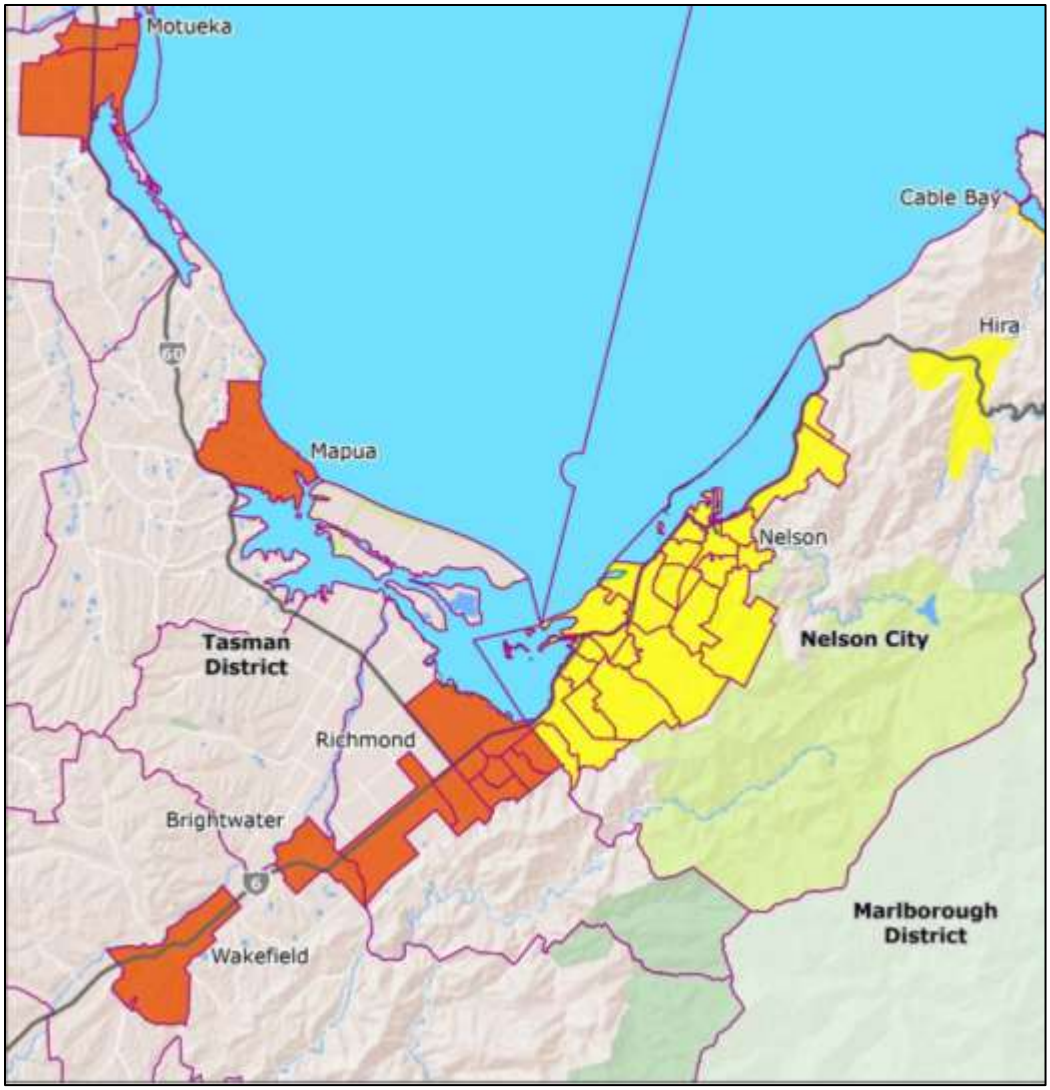


Figure 1: Map showing Tier 2 Nelson Tasman Urban Environment

2 Tasman District and Nelson City operate and function as a single economic market and business activity flows both ways across the Territorial Authority boundaries. The relative isolation of the Tasman and Nelson markets, reinforces this interconnectedness. Tasman and Nelson rely to varying degrees on each other to sustain their respective economies and generate significant economic benefits for each other.

The two authorities have similar populations, the latest estimates are 54,600 residents in Nelson and 56,400 residents in all of Tasman. Internal migration links the two regions with around 1,100 per year relocating their place of residence from Nelson to Tasman and vice versa. Consequently, Tasman and Nelson also function as a single housing market.

From a transport point of view, the networks within both areas are dominated during peak times by residents of one area travelling to and from the other. For example, around 1,400 Nelson residents work and learn in Tasman and around 2,900 Tasman residents work and learn in Nelson. For these reasons, the Tier 2 Nelson Tasman Urban Environment covers a relatively large non-contiguous area.

3. The Local Housing and Affordability Context

The Government's measure of housing affordability (HAM Buy), shows that at December 2018, about 81% of first-time buyer households in Tasman could not afford a typical 'first home' priced house, spending more than 30% of income on housing costs. Similarly, Nelson's share of first home buyer households spending more than 30% of their income on housing costs was 80%. On renting a dwelling, according to the Government's HAM Rent measure, as at Dec 2018, 38% of renting households are spending more than 30% of their income on rent in Tasman. In Nelson, the same indicator is similarly 36% of households.

This is in part due to the lower than national average household incomes, which are 13% below the NZ average and have only caught up by 2% in the last 20 years. Nelson Tasman is second lowest in NZ. As at November 2020, the Massey University Home Affordability Index showed Tasman as the second least affordable region in the country with Nelson placed third, behind Auckland.

Each individual HBA provides an analysis of demand for different housing types and locations as well as for different households groups. This also includes results of a housing preferences survey 2021.

To help with affordability and competitiveness in markets, by providing more housing land capacity, the NPS-UD requires an additional margin (the competitiveness margin) be applied to development capacity. This is aimed at supporting choice and competitiveness in housing and business land markets.

The competitiveness margins for both housing and business land are:

- For the short term, 20%
- For the medium term, 20%
- For the long term, 15%

4. Planning Framework

This HBA determines whether there is sufficient capacity enabled by the Nelson Resource Management Plan, the Tasman Resource Management Plan, the Long-Term Plans and 30 Year Infrastructure Strategies (servicing) to meet projected demand.

In this context, Tasman District Council is currently undertaking a review of its operative district and regional plan, the Tasman Resource Management Plan and the operative regional policy statement (see Aorere ki uta Aorere ki tai - Tasman Environment Plan | Tasman District Council). The review is part way through with notification of a proposed combined plan scheduled for December 2024.

Nelson City Council is also currently undertaking a review of its operative unitary (district and regional) plan, the Nelson Resource Management Plan (NRMP) and the operative regional policy statement. The development of the new Plan, the Whakamahere Whakatū Nelson Plan, has been informed by the analysis that has been undertaken as part of Nelson's HBA. The proposed Plan is expected to be notified mid 2023.

As a Tier 2 Urban Environment, Nelson City and Tasman District Councils must also prepare a new Future Development Strategy. Both Councils previously adopted a joint FDS in July 2019 under the NPS UDC. This HBA will be used to inform the new FDS which will commence in July 2021.

A further HBA for the Tier 2 Urban Environment is required in time to inform the 2024 Long Term Plans. Even though the NPS UD requires a HBA to cover the Urban Environment only, Tasman District Council prepares a HBA for its entire land area as well as the Urban Environment. Tasman is a large district containing over 17 towns. As at 2019, 55% of Tasman's population resides in the Urban Environment. This means a significant proportion of the District's population resides in the smaller towns and some of these towns have their own growth needs, some which can be considered acute.

Once an assessment of sufficiency of development capacity is made, implementation clause 3.7 of the NPS UD requires that if a local authority determines that there is insufficient development capacity over the short term, medium term or long term, it must:

a) Immediately notify the Minister for the Environment; and

b) If the insufficiency is wholly or partly as a result of RMA planning documents, change those documents to increase development capacity for housing or business land (as applicable), as soon as practicable and update any other relevant plan or strategy (including the FDS); and

c) Consider other options for:

   (i) increasing development capacity; and
   (ii) otherwise enabling development

5. Growth Projections and Household Demand

5.1 Choosing a Projection Series

5.1.1 Tasman and Nelson Combined

Population growth in both Territorial Authorities has outpaced the national average and has been a significant contributor to recent economic growth in the region. Figure 2 below shows the combined population growth in the last 20 years for both Nelson City and Tasman District Council areas.

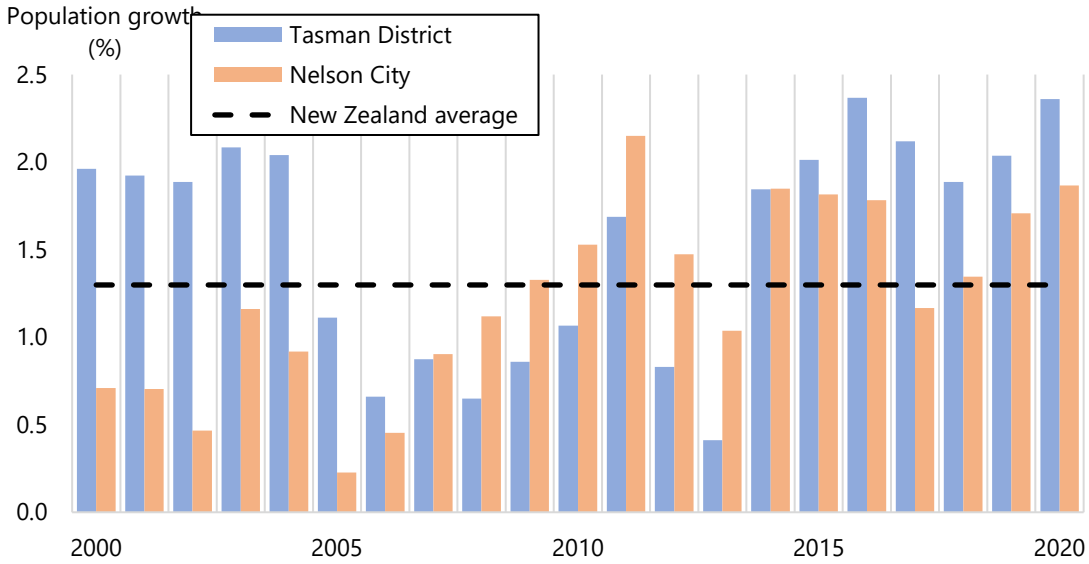


Figure 2: Population growth in Tasman and Nelson outpacing long term New Zealand average (source Sense Partners 'Assessing business land demand for Nelson and Tasman' 2021

Statistics NZ had previously projected in the NPS UDC that the Nelson Urban Area's population was likely to grow by not more than 9.95% in the ten years between 2013 and 2023, meaning it was classified as 'medium growth', according to the NPS-UDC, falling just below the ten percent threshold defining 'high growth' urban areas. The Nelson Urban Area has exceeded this by some margin growing by over 14% in the seven years between 2013 and 2020. Individually, the Nelson part of the Urban Area grew by 10%, the Tasman part grew by 20%.

The population series for the Urban Environment is made up of two sets of individual projections. Selecting a population series is challenging given the uncertainties brought about by Covid19 and its impact on migration-immigration. The Councils have considered these effects relative to the context of their district/city and have adopted projections that reflect differences in international and internal migration trends. A range of population scenarios have been tested and more details on these can be found in each Council's HBA.

5.1.2 Tasman

Tasman District Council adopted medium scenario population projections for its Long-Term Plan (LTP) and information on why this scenario was selected is provided in Annex A to this report.

Since then, Stats NZ released the Territorial Authority population projections (2018 based) in March 2021. The Stats NZ high projection is very close to Council's adopted population projections for the LTP, with the Council's being slightly higher:

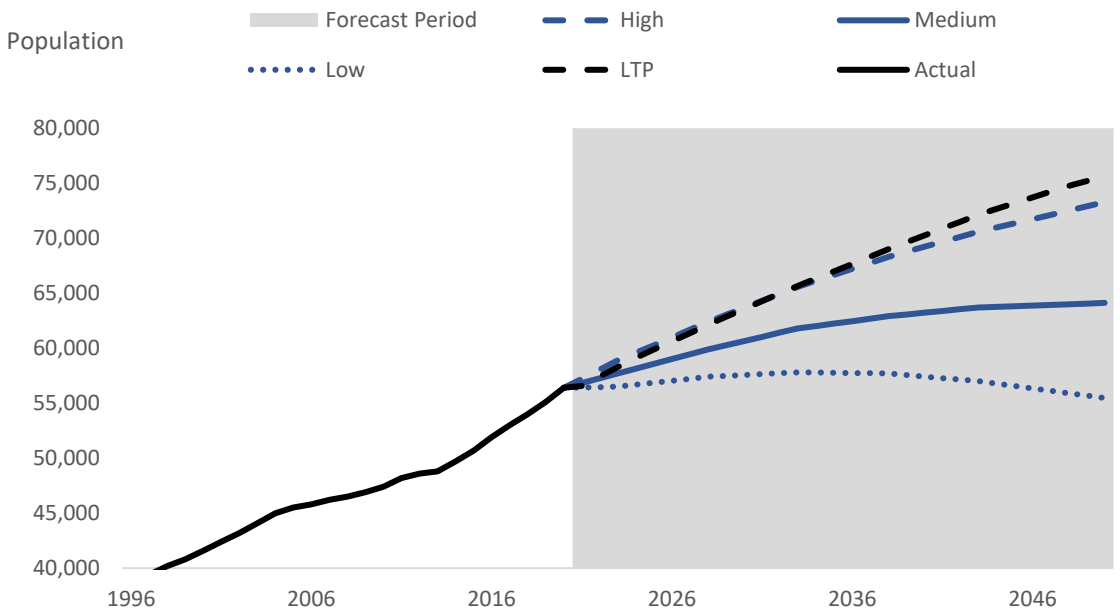


Figure 3: Tasman's LTP population projections compared with Stats NZ Territorial Authority Population Projections (2018 based)

Stats NZ has underestimated population growth for Tasman District since at least 2013. The adopted LTP medium scenario population projections are considered robust as they reflect average growth between 2006 and 2018.

5.1.3 Nelson

Nelson City Council adjusted its population projections in response to Covid 19, adopting low scenario population projections to 2024 with the growth rate gradually increasing to sit between the medium and high growth series thereafter. When compared to Stats NZ's population forecasts (2018 based), Nelson population projections are close to the Stats NZ high projection by 2050, but remain slightly below:

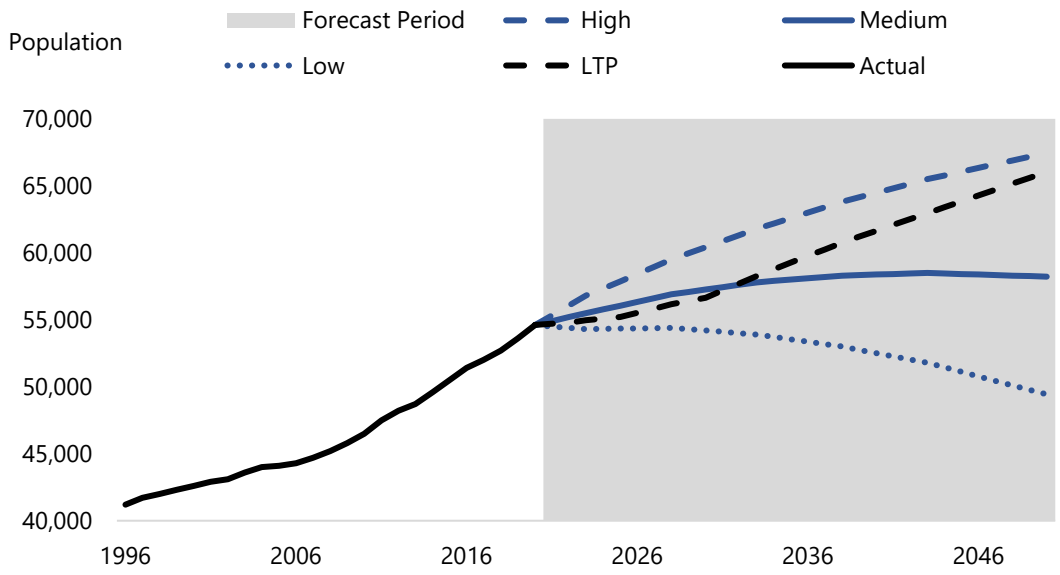


Figure 4: Nelson's LTP population projections compared with Stats NZ Territorial Authority Population Projections (2018 based)

5.1.4 Household Demand

Based on the above population projections, both Councils have calculated household demand for the 30 year period for the Urban Environment, including the competitiveness margin. The projected housing demand is shown in fig 5 below for each of the Councils:

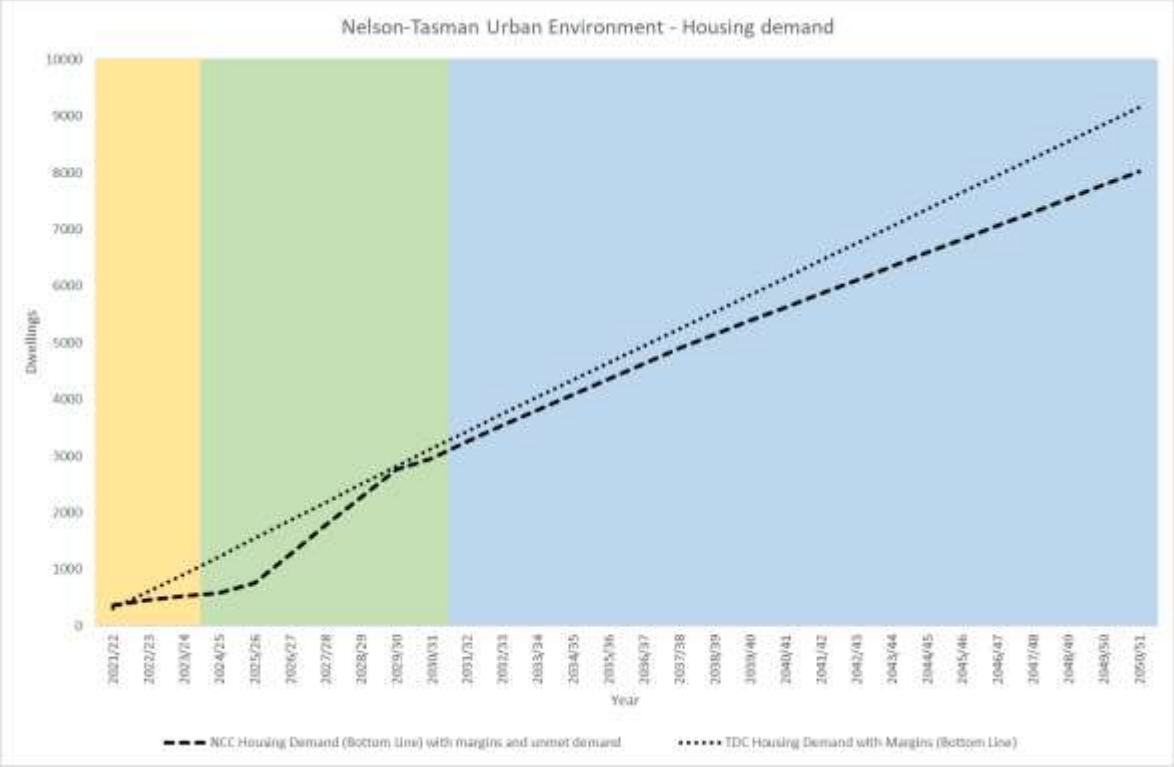


Figure 5: Household demand for Tier 2 Urban Environment for the short, medium and long term

In December 2020, MHUD revised its data for new dwelling consents compared to household growth, using latest Stats NZ population projections. For Tasman, unmet demand only amounts to approximately 260 dwellings in total for the last ten years, hence it has been excluded from the above household demand figures. Nelson has included unmet demand in its demand projections.

5.1.5 Housing Land Capacity

Table 3 below, summarises the demand and capacity numbers for the Nelson-Tasman Urban Environment in tabular form for easy reference:

Table 3: Demand and Capacity Numbers for Nelson Tasman Urban Environment

Demand year	Cumulative NCC housing demand (Bottom line)	Cumulative TDC housing demand (Bottom line)	Cumulative Nelson-Tasman Urban Environment total housing demand (Bottom line)	Cumulative Nelson-Tasman Urban Environment total housing capacity
2021/22	358	303	661	2143
2022/23	456	607	1063	2702
2023/24	521	909	1430	3250
2024/25	586	1227	1813	3883
2025/26	760	1545	2305	4532
2026/27	1268	1863	3131	5176

Demand year	Cumulative NCC housing demand (Bottom line)	Cumulative TDC housing demand (Bottom line)	Cumulative Nelson-Tasman Urban Environment total housing demand (Bottom line)	Cumulative Nelson-Tasman Urban Environment total housing capacity
2027/28	1786	2181	3967	5759
2028/29	2272	2499	4771	6273
2029/30	2768	2817	5585	6703
2030/31	2952	3134	6086	7132
2031/32	3247	3435	6682	7555
2032/33	3541	3736	7277	7978
2033/34	3814	4038	7852	8401
2034/35	4087	4339	8426	8824
2035/36	4359	4640	8999	9297
2036/37	4632	4942	9574	9770
2037/38	4905	5243	10148	10243
2038/39	5145	5544	10689	10716
2039/40	5385	5846	11231	11189
2040/41	5625	6147	11772	11662
2041/42	5865	6448	12313	12143
2042/43	6105	6749	12854	12624
2043/44	6345	7051	13396	13105
2044/45	6585	7352	13937	13587
2045/46	6825	7653	14478	14068
2046/47	7065	7953	15018	14549
2047/48	7305	8254	15559	15030
2048/49	7545	8554	16099	15511
2049/50	7785	8854	16639	15992
2050/51	8025	9154	17179	16443

Table 4: Demand and Capacity housing numbers by period for Nelson Tasman Urban Environment

	Demand and capacity for housing		
Period	**Demand**	**Capacity**	**Difference**
Short term (1-3 years)	1,430	3,250	+1,820
Medium term (4-11 years)	4,656	3,882	-897
Long term (11-30 years)	11,093	9,311	-1,659
Total	**17,179**	**16,443**	**-736**

Figure 6 below and tables 3 and 4 above show that the Urban Environment has adequate housing capacity over the first ten years (short and medium terms). However, there is a shortfall in the long term, expected to occur around 2039 for the Urban Environment, amounting to a deficit of approximately 736 dwellings by 2051.

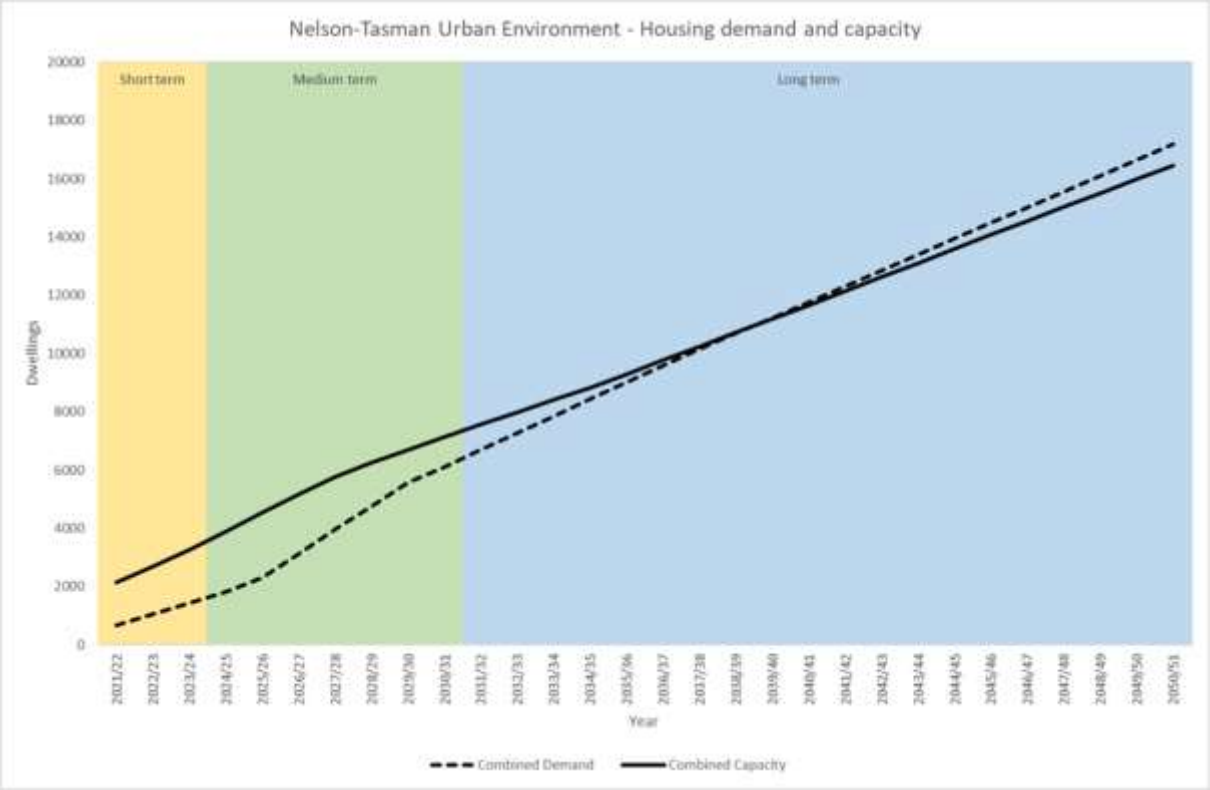


Figure 6: Household demand and capacity for Tier 2 Urban Environment for the short, medium and long term

As the individual Councils' HBAs demonstrate:

- Tasman's Urban Environment and entire District has sufficient development capacity for the 30-year period
- Nelson's Urban Environment and City has sufficient development capacity until year 18 (2038/39), but insufficient development capacity for the 30-year period.

The excess development capacity of the Tasman rural remainder (outside the Urban Environment) amounts to approximately 200 dwellings of the District over the 30-year period. While this is a worst-case scenario, (as additional capacity in the ward remainder areas exists but is too difficult to quantify due to the existence of many different zones and rules in these large areas), it is insufficient to provide for the deficit in Nelson's part of the Urban Environment.

5.2 Business Demand

Although the NPS-UD does not require a business land capacity assessment at this time the Councils jointly decided to proceed with this part of the HBA, so as to enable a new FDS for the Urban Environment to be prepared shortly afterwards.

The Councils have used different methods in assessing business land demand. Due to the lead-in time throughout 2020 for developing Tasman District Council's 2021 Long Term Plan, Tasman has drawn from the Property Economics 2016 model (updated and extrapolated with the population projection for the 2021 Long Term Plan), to estimate business land demand.

The two Councils jointly commissioned Sense Partners to undertake an assessment of business land demand for each city/district as well as the Nelson Tasman Urban Environment in 2021 and Nelson has used the findings from this report. For Tasman, the Sense Partners report forecasts a lower amount of business land is required than the updated Property Economics projection. This means Tasman's business land assessment is based on the upper extreme of business land demand and future assessments are likely to be lower.

5.2.1 Combined Business Land Demand for the Urban Environment

Table 5 below shows the additional business land needed up until 2051 and includes the competitiveness margin required by the NPS-UD:

Table 5: Combined Business Land Demand for the Nelson Tasman Urban Environment

Business Land Demand	Land in hectares			
	Short Term 2021-2024	Medium Term 2025-2031	Long Term 2031-2051	Total
Commercial (and retail)	7.8	16.9	37.6	62.3
Industrial (includes some agriculture activity)	-6.8	6.3	29.7	29.2
Total of additional land required (ha)	**1.0**	**23.2**	**67.3**	**91.5**

5.2.2 Combined Business Land Capacity for the Urban Environment

Table 6 below shows the business land capacity over the 30 year period for the combined Urban Environment:

Table 6: Combined Business Land Capacity for the Nelson Tasman Urban Environment

Business Land Capacity	Land in hectares			
	Short Term 2021-2024	Medium Term 2025-2031	Long Term 2031-2051	Total
Commercial (and retail)	9.1	19.5	59.8	88.4
Industrial (includes some agriculture activity)	5.2	18.1	26.4	49.7
Total of additional land required	**14.3**	**37.6**	**86.2**	**138.1**

The above analysis of capacity of business land for the combined Urban Environment includes vacant and underutilized zoned business land in both Districts. These levels of vacant land have been recently ground-truthed by both Councils with on-site surveys.

5.2.3 Analysis of Sufficiency of Business Land for the Urban Environment

Table 7 below shows the analysis of sufficiency of business land for the combined Urban Environment:

Table 7: Analysis of sufficiency of business land for the Nelson Tasman Urban Environment

Business Land Over/Under Supply	Land in Hectares			
	Short Term 2021-2024	Medium Term 2025-2031	Long Term 2031-2051	Total
Commercial (and retail)	1.3	2.6	22.2	26.1
Industrial (includes some agriculture activity)	12	11.8	-3.3	20.5
Total	**13.3**	**14.4**	**18.9**	**46.6**

As table 7 above shows, there is sufficient business land for the Urban Environment for the 30-year period. While a small shortfall of industrial land exists in the long term (3ha), there is a surplus of 24 ha in the short and medium terms which would meet this longer-term demand.

6. Next Steps and Recommendations

The HBA for Tasman illustrates that there is no insufficiency in either housing or business land for the Urban Environment or for the District overall.

The HBA for Nelson has identified an insufficiency in housing land over the thirty years, with a shortfall occurring around year 18 (2038/39).

When the Urban Environment is combined for both Councils an insufficiency of housing capacity in the whole Urban Environment exists, with a shortfall occurring at approximately year 2039/40.

In situations where an insufficiency is identified, the Council must determine if the insufficiency is due in whole or part to its RMA planning documents, and if so, must change these documents to increase capacity as soon as is reasonably practicable afterwards.

The assessment uses the rules under the Nelson Resource Management Plan to assess Nelson's capacity. Updating Council's RMA planning documents to increase sufficiency of capacity is underway through the draft Whakamahere Whakatū Nelson Plan.

The development of the Whakamahere Whakatū Nelson Plan has been informed by the analysis that has been undertaken as part of this HBA. In response to the shortfall identified the 2018 HBA and subsequent testing under the housing capacity model, the draft Whakamahere Whakatū Nelson Plan has been modified to include provisions for a wider range of higher-density housing and small homes. These provisions include the following:

1.1.1 Smaller minimum lot size

1.1.2 Higher maximum site coverage

1.1.3 Removal or refinement of courtyard and outdoor living rules

1.1.4 Changes to maximum building heights

These proposed changes to planning rules in Nelson City are still in the process of being developed and consulted on so are some way off being operative. Early testing indicates that further work may be required to understand whether the new Plan will enable the current housing insufficiency that needs to be addressed.

A recommendation for this report is therefore to continue to test the additional capacity that the draft Whakamahere Whakatū Nelson Plan will enable to ensure the provisions provide sufficient capacity and meet the NPS UD requirements.

Other recommendations for both Councils include:

(i) Undertake a new Future Development Strategy to ensure sufficient residential and business development capacity is provided in the Urban Environment over the next 30 years. This will replace the adopted 2019 FDS and work will commence in July 2021.

(ii) The latest Sense Partners model (2021) - forecast of business land demand will be analysed by Tasman District to inform future business land needs for the FDS.

(iii) Build and strengthen developer relationships and identify potential partnership opportunities, including with Central Government agencies such as Kāinga Ora.

(iv) Continue work on respective Resource Management Plan reviews

(v) Tasman District will continue to actively monitor the housing and business demand, so that it is appropriately positioned to bring forward more land if needed.

Annex A

Tasman population projections

Tasman's population growth has been significantly higher in recent years, than during the previous decade:

- the annual average population growth over the last ten years to 2020, was 1.8% (which included an increase in 2011 following the Canterbury earthquakes)
- in the five years between 2015 and 2020, average annual growth increased to 2.2% (ranging between 1.9% and 2.4%)
- the latest provisional Stats NZ population estimate for Tasman, estimates the population grew by 2.4%, or 1300 residents, in the last year, to 56,400 as at 30 June 2020

Most of the growth was net migration gains, with half from rest of NZ and half from overseas. Looking at past trends, it is typical for half or more of Tasman's migration to be internal rather than from overseas. In the year ending June 2019, net internal migration accounted for at least three-quarters of the population growth.

In the absence of up-to-date Stats NZ population projections, Council engaged Natalie Jackson Demographics Ltd (NJD)[22] to provide District and Ward population and household projections (2018-base), with low, medium, high scenarios[23]. The projections were based on Tasman's long-term demographic trends (births and deaths) and observed migration trends since 2006. After considering recent estimated population and dwelling growth rates, Council has assumed the medium growth scenario for the Long-Term Plan (LTP). The Covid-19 pandemic has created more uncertainty in the development of this LTP.

The effects of Covid-19 were considered on the preferred medium population growth trend but for the following reasons, it remained unchanged:

- Population growth in Tasman is driven by net gains in people moving from other parts of New Zealand, rather than overseas
- During the Global Financial Crisis in 2008, Tasman's population growth rate appears to be relatively unaffected
- Strong growth continues in new dwellings built
- The Tasman economy has a relatively strong economic contribution from the primary sector – agriculture, forestry and fishing – which is Tasman's largest employer, followed by manufacturing, retail trade and construction. These industries account for over half of all employment in Tasman. Tasman Region saw the largest rise nationally in economic activity in the September 2020 quarter according to Infometrics estimates, rising 5.1%p.a. *"More people in the region, and a sustained boost in construction activity, has supported the local economy."* Stats NZ report on national GDP[24] notes that *"the September quarter reflected a bounce back after a slump in the June quarter, due to the COVID-19 national lockdown when many businesses were shut for weeks."*
- In the December quarter, GDP for Tasman was down 0.9% for the year to December 2020 compared to a year earlier. Although growth was still higher than in NZ generally (-2.6%)

[22] Tasman District Projections 2018-2053 provided by Natalie Jackson Demographics Ltd, November 2019 "*Tasman District Council and Wards – Population, Household and Dwelling Projections 2018-2053"*

[23] Due to delays in Census 2018 data, Stats NZ population projections were not updated in time to inform the growth model and the LTP.

[24] December 2020 quarter GDP drops 1.0 percent after record September rebound | Stats NZ

Nelson population projections

Over the last ten years, Nelson has experienced growth of approximately 1.7% every year. In its 2018 Long Term Plan (LTP), Nelson City Council (NCC) adopted a high growth series for the years to 2028 and a medium series after that. The 2018 Housing and Business Assessment was undertaken on the basis of the population and household projections adopted in the LTP.

More recently Covid19 has introduced some uncertainties, particularly associated with migration, expected to affect Nelson's population growth over the short term. Consequently, the post-Covid modelling of Nelson's future population anticipates a low growth rate for the next three years with the growth rate gradually increasing again to sit between the medium and high growth series as previously anticipated before the Covid 19 pandemic.

Due to the variation of this projection to earlier projections, two independent reviews of the population projections were undertaken by Infometrics. The first in June 2020 as a basis for the original estimate and the second in February 2021 in response to Nelson's stronger than expected economic performance. Infometrics confirmed that the population projection adopted in November 2020 should be retained and these have then been used to established demand in this report.

Appendix 1: Nelson Tasman Housing Preferences Study 2021

Tasman District and Nelson City Councils procured a housing preferences survey from Market Economics and Research First in 2021. This is a survey of 600 residents from Nelson and Tasman, with at least 80% from within the Urban Environment. The survey first asked questions on the importance respondents place on aspects and characteristics of dwellings and locations. These responses are then tied to demographic characteristics to understand how people choose dwelling typologies and locations in an unconstrained manner (i.e. prices playing no part in choices). In the second section of the survey, the respondents are asked a series of questions about their finances. It is not possible to be as accurate as the online banking mortgage calculators as they ask for significantly more detail. However, the answers that emerge from the survey estimates are similar to the online mortgage calculators, although they include consideration of equity that the respondent may hold.

The survey then presented options (drawn from approximately 200 combinations) that are at or below the amount respondents are able to spend and the respondent chooses a number of preferred options, eventually narrowing down to one preferred option. The prices are in the middle of the range for each typology, drawn from Quotable Value, recent sales, build costs etc. Finally, the survey asks whether the option in the final assessment represents a typology the respondent would choose in real life and if not, why not? The survey therefore gains a detailed understanding of factors important to respondents in choosing types of housing (and therefore to Nelson Tasman residents in general), in an unconstrained manner as well as in a situation where they must make trade-offs in the price experiment section.

The results from this survey have informed the Council about housing preferences and will enable the council to zone for the correct type of housing in the emerging Tasman Environment Plan.

Appendix 2: Tasman District Council's Growth Model Methodology

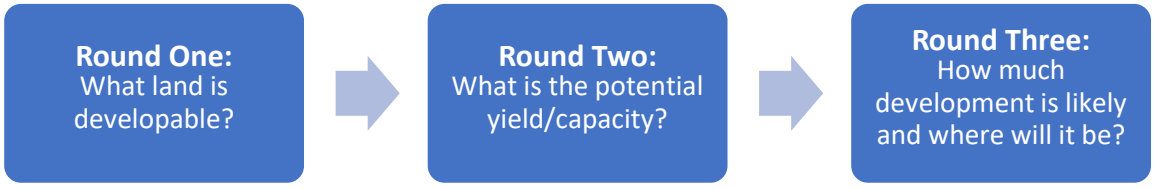
This is the sixth iteration of the Council's growth model, as it is continuously subject to review and improvement. The model was rerun on 2019 to inform this HBA, however the period modelled extends from 2019 to 2051. Estimates of dwellings likely to be built are made for the period 2019-2021, based on consents and known developer intentions. Projections are then made for the period 2021-2051.

In March 2019, Utility Ltd conducted a peer review of the growth model, to identify potential improvements. As a result, the most significant changes to the model were:

- Consistent definitions and interpretation of Demand and Rollout outputs of the growth model, to meet the requirements of the ratings model and development contributions model
- Use of a top-down approach to population projections by growth model area, (i.e. ward population projections), based on demographics, development trends and developable capacity (i.e. ward population projections
- Estimates of household size change for each growth model area use percentage change, rather than an absolute decrease
- Review of growth model area boundaries to more closely align with new Stats NZ boundaries (SA1, SA2 and urban-rural areas) and with FDS growth areas
- Use of consistent conversion rates for business land, from hectares to lots, for demand and rollout

There is an internal quality assurance process of the pre-work calculations and inputs, including the population, household size, and business land projections by growth model area. The inputs and outputs of the growth model are checked against recent trends in population and dwelling growth, and against latest Stats NZ projections.

Each update of the growth model involves three rounds of staff workshops involving a multi-disciplinary team, including engineers, planners and resource scientists. Development capacity and rollout is calculated for growth model areas by splitting the area into smaller sections, known as Development Areas (DA). The boundaries of growth model areas and DA's are reviewed to align with the FDS, which has identified future housing and business growth areas.



In the first round of workshops, each DA is assessed for developability, taking into account land use constraints and opportunities such as infrastructure availability and zoning. Preference is given to land which minimises hazard risks, is capable of being serviced, compliments settlement form and avoids productive land.

In the second round of workshops, the potential yield of each DA is calculated i.e. how many lots can be created from the area. Council's GIS team provide spatial data on the total developable area and staff estimate the following variables for each DA:

- average lot size once developed (based on zoning or likely zoning)
- the proportion needed for roads, other infrastructure, greenspace, and community buildings
- the extent that a DA's terrain will affect its potential for development
- the proportion of properties which are realistically likely to subdivide or redevelop over the next 30 years.

In the third round of workshops, staff estimate the location and timing of new development (rollout) for 2021-2051, in line with the latest population growth scenario (demand) and the sequencing of sites in the FDS.

This is based on the:

- potential yield of each DA (from Round 2)
- availability and cost of infrastructure
- current zoning or potential rezoning
- past development trends
- current or planned subdivisions
- developer or landowner intentions
- typology of development envisaged in the FDS

Following the workshops there is a reconciliation process to ensure there is sufficient rollout to meet the total projected demand for Tasman, including the competitiveness margin required under the NPS UD. If a town is unlikely to have enough rollout to meet demand, it will be offset by more rollout in other nearby towns which have capacity.

The ward population projections by Dr Natalie Jackson informed population growth estimates in each growth model area, for each year set in the model. The population growth in each growth model area was based on the following:

- Establishing a baseline 2018 population for each area based on Stats NZ geographic boundaries (SA2 or urban-rural areas), Census 2018 data, Stats NZ population estimates as at June 2018, and Council data on residential dwellings
- Allocating a share of each ward's population growth, taking into consideration demographic trends, development trends (e.g. building consents), and future development capacity.

Population projections for each town (from the ward projection) were then calculated based on the model's forecasts and knowledge about developments likely to go ahead. The population growth at the District level is consistent with the 30-year projections provided by Dr Natalie Jackson, based on demographic trends. However, Council's projections at the Ward level may differ slightly, based on our knowledge of the location and likely timing of new residential dwellings.

At this stage, projections by age group are only available by ward and are used as a proxy for the growth model areas within each Ward.

Growth Model Assessment of Holiday Homes and Workers' Accommodation

The growth model considers non-resident demand for holiday home properties or seasonal worker accommodation and assumes that each town will maintain the current proportion of dwellings which are used for these purposes. It estimates how many dwellings are needed in Year 1 for the base population, based on household size. If the existing dwelling count is higher, it estimates the difference is the % of dwellings that are 'non-resident dwellings'.

The dwelling count data set was initially based on dwelling numbers from Council's rating database for a previous iteration of the growth model. The rating database was not designed to provide this information and therefore it is a source of uncertainty through limited accuracy. However, the dataset has been progressively updated using building consents for new dwellings and estimates the base year count of dwellings for each area.

Appendix 3: Business Land Projections

The medium growth scenario for Tasman[1] also informs demand for business land in Tasman. The Nelson-Tasman business land forecasting model, provided in 2016 by Property Economics, estimates future land requirements for three different types of business land (industrial, office, retail). The model incorporates national and regional economic and demographic trends, employment projections, and employment to land ratios. Further information on how business land projections are calculated are provided in the appendices. The land requirements assume that development will be 'at grade', i.e. single storey. For Tasman, this is appropriate with few two-storey business developments.

[1] Tasman District Projections 2018-2053 provided by Natalie Jackson Demographics Ltd, November 2019

The Property Economics report estimates future land requirements in five-year periods to 2038. Latest population projections have been applied to the model and the projection period has been extrapolated to 2053, assuming the same growth rates as the 2033–2038-year set. The Property Economics model produces projected demand for business land in hectares while the Council's growth model requires demand to be expressed as the number of lots. The projections are therefore converted from hectares to lots using an average lot size, by business type, by geographical area. More information on this is provided in the business demand section of the report. The average lot sizes are based on a District wide field survey conducted over summer 2018/2019 of all zoned business land, split by type of business and location.

The Property Economics model projections cover larger areas than the growth model areas, for some parts of the District. For those areas that do not align, the Property Economics projections are apportioned to the growth model areas based on population share. For Richmond/Māpua, we have assumed a greater share will be in Richmond, due to the relatively higher share of zoned business land there.

Property Economics Model Area	Growth Model Areas
Tākaka	Tākaka, Pōhara/Ligar Bay/Tata Beach
Richmond	Richmond, Māpua/Ruby Bay
Motueka	Motueka, Riuwaka

The business land projections for each growth model area are based on the distribution of zoned land across the District. However, the Property Economics Model report noted that, under the zoned distribution scenario, Brightwater has an elevated industrial land demand due to the Carter Holt Harvey Mill being zoned industrial. This is a 'one off' anomaly and the estimated land requirements for Brightwater are more appropriately added to Richmond's future requirements (the adjacent town with significantly more growth). The future demand for industrial land in Brightwater has been assumed to be the same as Wakefield, as the two areas have similar population, location and settlement form.

Nelson City and Tasman District Councils have recently procured an updated business land forecasting model, by Sense Partners, which will inform the review of the FDS, next HBA and the LTP 2024-2034. Unfortunately, there was insufficient time between receiving this new data and being able to rerun the growth model for this HBA. However, its projections for future business land requirements are more modest than the Property Economics report, hence Tasman has considered worst case scenario.

Appendix 4: Survey of growers in Tasman regarding seasonal worker accommodation

Seasonal Worker Accommodation in Ownership of Employers

Of those employers that own accommodation for workers, only 5 companies own purpose-built accommodation (the type encouraged by Government for employers using the Recognised Seasonal Employer (RSE) scheme). This is a specific, usually large complex built for worker accommodation containing units, recreational areas, large kitchen facilities and sometimes on-site pastoral care. In terms of other types of accommodation owned:

- None of the respondents own new build residential houses (i.e. a house in the community, built from scratch to meet their requirements rather than altering an existing house.)
- Eight companies own existing residential houses bought on the open market to house workers. This may be off site or on site and may have been built or bought by the grower.
- Only one company owns a non-residential property (e.g. ex-motel, ex-backpackers) for housing seasonal workers and this is an ex-packhouse shed, providing 14 beds.
- Two companies own caravans or tiny homes to house seasonal workers, providing between 6-10 beds per company.

This analysis shows that for the respondent sample of 29 companies, existing residential houses bought on the open market or dwellings built themselves on site are the most common, to house workers. Despite Government encouraging RSEs to plan for and build purpose-built accommodation for employees, only 5 respondents own such buildings. Some growers identified less need for accommodation this year due to the effects of Covid and travel restrictions, as well as the hailstorms in Motueka on Boxing Day 2020.

Accommodation Rented or Leased by Employers for Seasonal Workers

Of the 35% of employers that rent accommodation (predominantly orchards plus a winery), they generally rent or lease between 1 and 6 properties each. The rented/leased properties provide 56 beds in total. Just three companies rent or lease non-residential properties, such as motel units. These are all orchards and provide for 150 beds in this way, between 40-60 beds per company.

In terms of other forms of rented accommodation, four orchards provide accommodation in this way, and this includes one orchard hiring cabins and placing them at existing accommodation sites. Another rents an accommodation block on a local winery and another orchard rents 80 beds from another company.

Central Government changed the rules in 2019 for Tasman, over the type of accommodation RSE employers can offer workers. RSE employers cannot rent a residential house they have not previously used as accommodation for RSE workers. The fact so many respondents appear to rent properties suggests either the house was included in an Agreement to Recruit (ATR) for the RSE worker approved before 26 September 2019, or the properties are used to house employees outside of the RSE scheme. Innovative ways are also in use to provide accommodation for seasonal workers, such as renting a block on another grower's site nearby.

Additional Accommodation for Seasonal Workers in the Future

A significant 72% of respondents (20 companies) require additional accommodation in the future for seasonal workers and this indication is given during the Covid 19 climate. 28% do not require further accommodation.

In terms of the type of accommodation required in the future, the majority (10 companies) want purpose built on-site worker accommodation. In addition:

- One company wants self-contained units
- One company wants to redevelop its existing accommodation
- One company wants to share accommodation for its workers with another company
- Six companies specifically want on site communal type accommodation with an ablution block and rooms leading to it
- One company requires new accommodation

In terms of numbers of beds required in the future, a maximum of 632 additional beds are required from the 20 companies that responded in the survey. This is a significant number of beds. Most companies (16) want up to 40 beds each. Some larger orchards want between 40 and 80 beds and one orchard wants 150 beds.

However, while there is strong demand for worker accommodation in the future, 70% of these companies have as yet only identified the need. Six companies are progressing plans for future accommodation (30%) and two have building consent. Two companies have also started construction. As part of the review of the RSE scheme by the Government, accommodation requirements will be considered more comprehensively. The Government expects employers to plan for more purpose-built accommodation as soon as possible and Government may increase the number of workers on the RSE scheme but only if there is evidence that employers are reducing the amount of rented housing and increasing the amount of purpose-built accommodation.

Existing TRMP Definition of Workers' Accommodation

10 companies (30%) thought the definition of workers' accommodation in the TRMP is either very useful or partially useful. 2 companies found it not useful. One respondent felt it would be good if they can build purpose-built accommodation with the same TRMP definition but outside of grower's land. (It is worth noting that existing rules in the TRMP do not prevent this.) The TRMP rules also do not prevent workers accommodation on a site where there is an existing dwelling. If the workers accommodation does not meet the definition of workers accommodation within the TRMP (whereby the kitchen and bathroom facilities are not located in a separate building to the sleeping area), then it may meet the TRMP definition of a dwelling instead. However, this poses additional complicated rules for growers.

Additional Comments

One respondent felt the Government should be focusing on providing accommodation for seasonal workers. This is because in Tasman where rents are high, employers have to provide accommodation all year round for their local workforce, otherwise they have no employees. Three respondents called for better understanding of workers' accommodation by Council and an easier consent process. Another commented that it was easier to purchase a backpacker lodge for conversion than trying to get something through council.

Conclusion

Discussions with the ex-chair of Apples and Pears NZ and the chair of the Nelson growers' governance group revealed that there are about 5,500 seasonal workers in Tasman in a given season and about 1,500 -1,700 of these are RSE workers.

The future demand for types of seasonal worker accommodation is:

- Purpose built facilities on site for RSE workers (Central Government requires employers to provide these)
- "Camp ground" facilities (eg kitchen, ablution block) for Kiwi and European backpackers who want seasonal work and to freedom camp on the orchard. Some Richmond orchards make this group find their own accommodation e.g. at Tahuna motor camp or motels but this becomes harder in areas like Motueka, Riuwaka where such facilities don't exist
- Rented accommodation for permanent seasonal workers (locals) – the harvesting season now lasts 10-11 months in Tasman

Response

Based on the average figures provided by the grower chairs, approximately 3,800 seasonal workers in Tasman are not RSE workers i.e. they need accommodation in the local area. Of these approximately half are backpackers who wish to freedom camp. This leaves approximately 1,900 workers per season who may need rented accommodation.

Notwithstanding Council's growth model takes workers' accommodation into account, anecdotal evidence such as this emphasises the need for additional rental accommodation, particularly in the Motueka area, where campground facilities are smaller and fewer. The growth model assumes that the proportion of workers' accommodation will stay the same, but this does not take into account growth in the horticultural industry for example. Increases in RSE workforces (facilitated by Central Government) should be provided for by purpose-built accommodation on the site of the employers.

The definition of workers' accommodation in the Tasman Resource Management Plan requires updating and improvement to meet the needs of growers and the new Tasman Environment Plan will propose this. The survey and discussions with growers have highlighted that purpose-built facilities are sought after for workers' accommodation in the future and therefore the definition in the Resource Management Plan needs to allow cooking and ablution facilities within the same building as the bedrooms.

Appendix 5: Greenfield Commercial Feasibility Analysis for Urban Environment

How many homes could be built?
A development feasibility tool for the National Policy Statement on Urban Development Capacity

Return to 'Getting Started'

Key inputs	Type	Item	Units	Value	Type	Section price function		Comment
	Physical	Gross site area	ha	11.0	Revenue	Note: This requires users to enter local prices for two lots of varying size, eg a price for a 400m2 and a 800m2 lot. This allows prices for sections of varying sizes to be estimated below.		
		Land capital value (CV)	$	$10,050,000				
		Land sale price relative to CV, ex C	%	100%				
		Road Reserve area for 15 dw/ha	% of area	20%				
		Extra roading for increased dw/ha	% per dw/ha			New Lot Area 1	300	m2
		Landscape Reserve for 15 dw/ha	% of area	11%		New Lot Price 1	$330,000	Section price $
		Extra landscape reserve for dw/ha	% per dw/ha	0.05%		New Lot Area 2	350	m2
		Wastewater/stormwater Reserve	% of area	0%		New Lot Price 2	$400,000	Section price $
		Other constraints that reduce net s	% of land area	0%		m	1.248	Section price gradient
		Minimum net density	dwellings/ha	10		c	6	Section price intercept
		Maximum net density	dwellings/ha	30				
		Time to develop	months	24				

View modelled section price gradient

Notes / Comments
- Council input cells using GIS
- Council input cells with review from propert
- Input based on quantity surveyor data with
- Input based on new sales price data with p
- Calculated output cells

Key inputs	Type	Item	Units	Density of dwellings [dwellings / ha] 10	15	20	25	30
	Ancillary	DC contributions factor	%	100%	100%	100%	95%	90%
	Cost parameters	Project contingency	%	10%	10%	10%	10%	10%
		Civil works		Select civil works costs				
		Fees and charges		Select fees and charges				

Key outputs	Type	Item	Units	Density of dwellings [dwellings / ha] 10	15	20	25	30
	Net Land Area Calcs	Road Reserve Area	ha of land	2.20	2.20	2.20	2.20	2.20
		Landscape Reserve Area	ha of land	1.18	1.21	1.24	1.27	1.29
		Stormwater Reserve Area	ha of land	-	-	-	-	-
		Other constraints that reduce net s	ha of land	-	-	-	-	-
		Net Developable land Area	ha of land	7.62	7.59	7.56	7.54	7.51
	Revenue	Subdivision Lots created	total lots	76	114	151	188	225
		Average section size	sqm / site	1,000	667	500	400	300
		Average sales price (inc GST)	per section	$1,482,651	$893,895	$624,266	$472,532	$330,000
		Average sales price (ex GST)	per section	$1,289,262	$777,300	$542,840	$410,897	$286,957
		Total revenue		$ 98,209,516	$ 88,495,578	$ 82,104,505	$ 77,402,733	$ 64,629,783
	Costs	1 Raw land purchase and holding cost		$12,160,500	$12,160,500	$12,160,500	$12,160,500	$12,160,500
		2 Civil works, incl holding costs		$12,952,667	$13,157,308	$13,361,950	$13,566,591	$13,771,232
		3 Fees and charges, incl holding costs		$12,278,300	$12,881,106	$13,765,574	$14,788,049	$15,090,190
		4 Project contingency		$3,739,147	$3,819,891	$3,928,802	$4,051,514	$4,102,192
		Total costs		$41,130,614	$42,018,805	$43,216,826	$44,566,654	$45,124,115
		per section costs (excl raw land)		$380,310	$262,260	$205,331	$172,030	$146,359
		per section (total)		$539,949	$369,072	$285,731	$236,585	$200,351
	Profit	Pre tax profit $		$57,078,902	$46,476,772	$38,887,678	$32,836,079	$19,505,668
		Pre tax margin %		30.0%	30.0%	30.0%	30.0%	30.0%

All costs ex GST, unless stated

Development feasible?	Yes	Yes	Yes	Yes	Yes
Profit maximising?	Yes	No	No	No	No
Margin maximising?	Yes	Yes	Yes	Yes	Yes

Commercial feasibility assessment for Highland Drive, Richmond

How many homes could be built?

A development feasibility tool for the National Policy Statement on Urban Development Capacity

Return to 'Getting Started'

Key inputs	Type	Item	Units	Value	Type	Section price function		Comment
		Gross site area	ha	3.6		Note: This requires users to enter local prices for two lots of varying size, eg a price for a 400m2 and a 800m2 lot. This allows prices for sections of varying sizes to be estimated below.		
		Land capital value (CV)	$	$3,800,000				
		Land sale price relative to CV, ex G	%	100%				
		Road Reserve area for 15 dw/ha	% of area	20%				
		Extra roading for increased dw/ha	% per dw/ha		Revenue	*New Lot Area 1*	580	m2
	Physical	*Landscape Reserve for 15 dw/ha*	% of area	11%		*New Lot Price 1*	$430,000	Section price $
		Extra landscape reserve for dw/ha	% per dw/ha	0.05%		*New Lot Area 2*	650	m2
		Wastewater/stormwater Reserve	% of area	0%		*New Lot Price 2*	$450,000	Section price $
		Other constraints that reduce net s	% of land area	0%		*m*	0.399	Section price gradient
		Minimum net density	dwellings/ha	10		*c*	10	Section price intercept
		Maximum net density	dwellings/ha	30				
		Time to develop	months	24				

View modelled section price gradient

Notes / Comments

- Council input cells using GIS
- Council input cells with review from property develop
- Input based on quantity surveyor data with property c
- Input based on new sales price data with property de
- Calculated output cells

Key inputs	Type	Item	Units	Density of dwellings [dwellings / ha] 10	15	20	25	30
	Ancillary	*DC contributions factor*	%	100%	100%	100%	95%	90%
	Cost parameters	*Project contingency*	%	10%	10%	10%	10%	10%
		Civil works		Select civil works costs				
		Fees and charges		Select fees and charges				

Key outputs	Type	Item	Units	Density of dwellings [dwellings / ha] 10	15	20	25	30	
	Net Land Area Calcs	*Road Reserve Area*	ha of land	0.72	0.72	0.72	0.72	0.72	
		Landscape Reserve Area	ha of land	0.39	0.40	0.41	0.41	0.42	
		Stormwater Reserve Area	ha of land	-	-	-	-	-	
		Other constraints that reduce net s	ha of land	-	-	-	-	-	
		Net Developable land Area	ha of land	2.49	2.48	2.48	2.47	2.46	
	Revenue	*Subdivision Lots created*	total lots	25	37	50	62	74	
		Average section size	sqm / site	1,000	667	500	400	333	
		Average sales price (inc GST)	per section	$534,389	$454,569	$405,276	$370,753	$344,740	
		Average sales price (ex GST)	per section	$464,686	$395,277	$352,414	$322,394	$299,774	
		Total revenue		$ 11,584,632	$ 14,728,026	$ 17,444,473	$ 19,875,581	$ 22,096,363	
	Costs	*1 Raw land purchase and holding cost*		$4,598,000	$4,598,000	$4,598,000	$4,598,000	$4,598,000	All costs ex GST, unless stated
		2 Civil works, incl holding costs		$4,239,055	$4,306,028	$4,373,002	$4,439,975	$4,506,949	
		3 Fees and charges, incl holding costs		$2,210,590	$2,963,875	$3,676,162	$4,359,902	$5,021,694	
		4 Project contingency		$1,104,764	$1,186,790	$1,264,716	$1,339,788	$1,412,664	
		Total costs		$12,152,409	$13,054,694	$13,911,880	$14,737,665	$15,539,307	
		per section costs (excl raw land)		$303,025	$226,964	$188,159	$164,471	$148,437	
		per section (total)		$487,461	$350,368	$281,048	$239,054	$210,817	
	Profit	*Pre tax profit $*		-$567,777	$1,673,332	$3,532,593	$5,137,915	$6,557,057	
		Pre tax margin %		30.0%	30.0%	30.0%	30.0%	30.0%	

Development feasible?	Yes	Yes	Yes	Yes	Yes
Profit maximising?	No	No	No	No	Yes
Margin maximising?	Yes	Yes	Yes	Yes	Yes

Commercial feasibility assessment for Paton Rise, Richmond South

How many homes could be built?

A development feasibility tool for the National Policy Statement on Urban Development Capacity

Return to 'Getting Started'

Key inputs	Type	Item	Units	Value	Type	Section price function		Comment
	Physical	*Gross site area*	ha	5.5	Revenue	Note: This requires users to enter local prices for two lots of varying size, eg a price for a 400m2 and a 800m2 lot. This allows prices for sections of varying sizes to be estimated below.		
		Land capital value (CV)	$	$5,000,000				
		Land sale price relative to CV, ex G	%	100%				
		Road Reserve area for 15 dw/ha	% of area	32%				
		Extra roading for increased dw/ha	% per dw/ha			*New Lot Area 1*	550	m2
		Landscape Reserve for 15 dw/ha	% of area	11%		*New Lot Price 1*	$350,000	Section price $
		Extra landscape reserve for dw/ha	% per dw/ha	0.05%		*New Lot Area 2*	600	m2
		Wastewater/stormwater Reserve	% of area	0%		*New Lot Price 2*	$390,000	Section price $
		Other constraints that reduce net s	% of land area	0%		*m*	1.244	Section price gradient
		Minimum net density	dwellings/ha	10		*c*	5	Section price intercept
		Maximum net density	dwellings/ha	30				
		Time to develop	months	24				

View modelled section price gradient

Notes / Comments

- Council input cells using GIS
- Council input cells with review from pro
- Input based on quantity surveyor data v
- Input based on new sales price data wi
- Calculated output cells

Key inputs	Type	Item	Units	Density of dwellings [dwellings / ha] 10	15	20	25	30
	Ancillary	*DC contributions factor*	%	100%	100%	100%	95%	90%
	Cost parameters	*Project contingency*	%	10%	10%	10%	10%	10%
		Civil works		Select civil works costs				
		Fees and charges		Select fees and charges				

Key outputs	Type	Item	Units	Density of dwellings [dwellings / ha] 10	15	20	25	30	
	Net Land Area Calcs	*Road Reserve Area*	ha of land	1.76	1.76	1.76	1.76	1.76	
		Landscape Reserve Area	ha of land	0.59	0.61	0.62	0.63	0.65	
		Stormwater Reserve Area	ha of land	-	-	-	-	-	
		Other constraints that reduce net s	ha of land	-	-	-	-	-	
		Net Developable land Area	ha of land	3.15	3.14	3.12	3.11	3.09	
	Revenue	*Subdivision Lots created*	total lots	31	47	62	78	93	
		Average section size	sqm / site	1,000	667	500	400	333	
		Average sales price (inc GST)	per section	$736,159	$444,603	$310,877	$235,540	$187,754	
		Average sales price (ex GST)	per section	$640,138	$386,611	$270,328	$204,817	$163,264	
		Total revenue		$ 20,156,353	$ 18,180,376	$ 16,875,236	$ 15,911,759	$ 15,152,980	
	Costs	*1 Raw land purchase and holding cost*		$6,050,000	$6,050,000	$6,050,000	$6,050,000	$6,050,000	All costs ex GST, unless stated
		2 Civil works, incl holding costs		$7,496,966	$7,599,287	$7,701,607	$7,803,928	$7,906,249	
		3 Fees and charges, incl holding costs		$3,394,937	$3,823,080	$4,304,942	$4,811,574	$5,330,931	
		4 Project contingency		$1,694,190	$1,747,237	$1,805,655	$1,866,550	$1,928,718	
		Total costs		$18,636,093	$19,219,604	$19,862,204	$20,532,052	$21,215,898	
		per section costs (excl raw land)		$399,717	$280,055	$221,261	$186,414	$163,404	
		per section (total)		$591,857	$408,710	$318,177	$264,290	$228,589	
	Profit	*Pre tax profit $*		$1,520,260	-$1,039,227	-$2,986,968	-$4,620,292	-$6,062,918	
		Pre tax margin %		30.0%	30.0%	30.0%	30.0%	30.0%	

Development feasible?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Profit maximising?	**Yes**	**No**	**No**	**No**	**No**
Margin maximising?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Commercial feasibility assessment for Bryant Road, Brightwater

How many homes could be built?

A development feasibility tool for the National Policy Statement on Urban Development Capacity

Return to 'Getting Started'

Key inputs

Type	Item	Units	Value	Type	Section price function		Comment
Physical	*Gross site area*	ha	3.7	Revenue	Note: This requires users to enter local prices for two lots of varying size, eg a price for a 400m2 and a 800m2 lot. This allows prices for sections of varying sizes to be estimated below.		
	Land capital value (CV)	$	$3,375,000				
	Land sale price relative to CV, ex G	%	90%				
	Road Reserve area for 15 dw/ha	% of area	8%				
	Extra roading for increased dw/ha	% per dw/ha			*New Lot Area 1*	440	m2
	Landscape Reserve for 15 dw/ha	% of area	11%		*New Lot Price 1*	$400,000	Section price $
	Extra landscape reserve for dw/ha	% per dw/ha	0.05%		*New Lot Area 2*	550	m2
	Wastewater/stormwater Reserve	% of area	0%		*New Lot Price 2*	$450,000	Section price $
	Other constraints that reduce net s	% of land area	0%		*m*	0.528	Section price gradient
	Minimum net density	dwellings/ha	10		*c*	10	Section price intercept
	Maximum net density	dwellings/ha	30				
	Time to develop	months	24				

View modelled section price gradient

Notes / Comments

- Council input cells using GIS
- Council input cells with review from property develop
- Input based on quantity surveyor data with property
- Input based on new sales price data with property de
- Calculated output cells

Key inputs

Type	Item	Units	Density of dwellings [dwellings / ha] 10	15	20	25	30
Ancillary	*DC contributions factor*	%	100%	100%	100%	95%	90%
Cost parameters	*Project contingency*	%	10%	10%	10%	10%	10%
	Civil works		Select civil works costs				
	Fees and charges		Select fees and charges				

Key outputs

Type	Item	Units	Density of dwellings [dwellings / ha] 10	15	20	25	30	
Net Land Area Calcs	*Road Reserve Area*	ha of land	0.80	0.29	0.29	0.29	0.29	
	Landscape Reserve Area	ha of land	0.40	0.40	0.41	0.42	0.43	
	Stormwater Reserve Area	ha of land	-	-	-	-	-	
	Other constraints that reduce net s	ha of land	-	-	-	-	-	
	Net Developable land Area	ha of land	2.45	2.96	2.95	2.94	2.93	
Revenue	*Subdivision Lots created*	total lots	35	55	70	90	88	
	Average section size	sqm / site	1,000	667	500	400	300	
	Average sales price (inc GST)	per section	$616,962	$498,225	$427,921	$380,375	$326,787	
	Average sales price (ex GST)	per section	$536,488	$433,239	$372,106	$330,760	$284,162	
	Total revenue		$ 18,777,097	$ 23,828,160	$ 26,047,389	$ 29,768,444	$ 24,970,413	
Costs	*1 Raw land purchase and holding cost*		$3,675,375	$3,675,375	$3,675,375	$3,675,375	$3,675,375	All costs ex GST, unless stated
	2 Civil works, incl holding costs		$4,438,707	$3,840,013	$3,907,917	$3,975,820	$4,043,724	
	3 Fees and charges, incl holding costs		$3,240,467	$4,419,746	$5,194,255	$6,292,677	$5,792,982	
	4 Project contingency		$1,135,455	$1,193,513	$1,277,755	$1,394,387	$1,351,208	
	Total costs		$12,490,004	$13,128,647	$14,055,302	$15,338,260	$14,863,289	
	per section costs (excl raw land)		$251,847	$171,878	$148,285	$129,588	$127,318	
	per section (total)		$356,857	$238,703	$200,790	$170,425	$169,144	
Profit	*Pre tax profit $*		$6,287,093	$10,699,513	$11,992,087	$14,430,185	$10,107,123	
	Pre tax margin %		30.0%	30.0%	30.0%	30.0%	30.0%	

Development feasible?	Yes	Yes	Yes	Yes	Yes
Profit maximising?	No	No	No	Yes	No
Margin maximising?	Yes	Yes	Yes	Yes	Yes

Commercial feasibility assessment for Māpua Drive, Māpua

How many homes could be built?
A development feasibility tool for the National Policy Statement on Urban Development Capacity

Return to 'Getting Started'

Key inputs

Type	Item	Units	Value
Physical	Gross site area	ha	11.0
	Land capital value (CV)	$	$10,050,000
	Land sale price relative to CV, ex G	%	100%
	Road Reserve area for 15 dw/ha	% of area	20%
	Extra roading for increased dw/ha	% per dw/ha	
	Landscape Reserve for 15 dw/ha	% of area	11%
	Extra landscape reserve for dw/ha	% per dw/ha	0.05%
	Wastewater/stormwater Reserve	% of area	0%
	Other constraints that reduce net s	% of land area	0%
	Minimum net density	dwellings/ha	10
	Maximum net density	dwellings/ha	30
	Time to develop	months	24

Type	Section price function		Comment
Revenue	Note: This requires users to enter local prices for two lots of varying size, eg a price for a 400m2 and a 800m2 lot. This allows prices for sections of varying sizes to be estimated below.		
	New Lot Area 1	300	m2
	New Lot Price 1	$330,000	Section price $
	New Lot Area 2	350	m2
	New Lot Price 2	$400,000	Section price $
	m	1.248	Section price gradient
	c	6	Section price intercept

View modelled section price gradient

Notes / Comments
- Council input cells using GIS
- Council input cells with review from prope
- Input based on quantity surveyor data wit
- Input based on new sales price data with
- Calculated output cells

Key inputs

Type	Item	Units	Density of dwellings [dwellings / ha] 10	15	20	25	30
Ancillary	DC contributions factor	%	100%	100%	100%	95%	90%
Cost parameters	Project contingency	%	10%	10%	10%	10%	10%
	Civil works		Select civil works costs				
	Fees and charges		Select fees and charges				

Key outputs

Type	Item	Units	Density of dwellings [dwellings / ha] 10	15	20	25	30
Net Land Area Calcs	Road Reserve Area	ha of land	2.20	2.20	2.20	2.20	2.20
	Landscape Reserve Area	ha of land	1.18	1.21	1.24	1.27	1.29
	Stormwater Reserve Area	ha of land	-	-	-	-	-
	Other constraints that reduce net s	ha of land	-	-	-	-	-
	Net Developable land Area	ha of land	7.62	7.59	7.56	7.54	7.51
Revenue	Subdivision Lots created	total lots	76	114	151	188	225
	Average section size	sqm / site	1,000	667	500	400	333
	Average sales price (inc GST)	per section	$1,482,651	$893,895	$624,266	$472,532	$376,372
	Average sales price (ex GST)	per section	$1,289,262	$777,300	$542,840	$410,897	$327,280
	Total revenue		$ 98,209,516	$ 88,495,578	$ 82,104,505	$ 77,402,733	$ 73,711,563
Costs	1 Raw land purchase and holding cost		$12,160,500	$12,160,500	$12,160,500	$12,160,500	$12,160,500
	2 Civil works, incl holding costs		$12,952,667	$13,157,308	$13,361,950	$13,566,591	$13,771,232
	3 Fees and charges, incl holding costs		$12,278,300	$12,881,106	$13,765,574	$14,788,049	$15,888,846
	4 Project contingency		$3,739,147	$3,819,891	$3,928,802	$4,051,514	$4,182,058
	Total costs		$41,130,614	$42,018,805	$43,216,826	$44,566,654	$46,002,636
	per section costs (excl raw land)		$380,310	$262,260	$205,331	$172,030	$150,259
	per section (total)		$539,949	$369,072	$285,731	$236,585	$204,252
Profit	Pre tax profit $		$57,078,902	$46,476,772	$38,887,678	$32,836,079	$27,708,927
	Pre tax margin %		30.0%	30.0%	30.0%	30.0%	30.0%

All costs ex GST, unless stated

Development feasible?	Yes	Yes	Yes	Yes	Yes
Profit maximising?	Yes	No	No	No	No
Margin maximising?	Yes	Yes	Yes	Yes	Yes

Commercial feasibility assessment for part of the Future Development Strategy site in Richmond South

Appendix 6: NPS Urban Development - Requirements of Policy 5 for Tasman District Council

Policy 5

"Regional Policy Statement and District Plans applying to tier 2 ……urban environments enable greater heights and density of urban form commensurate with the greater of:

(a) the level of accessibility by existing or planned active or public transport to a range of commercial activities and community services; or

(b) relative demand for housing and business use in that location"

Must implement policy 5 by not later than 2 years after commencement date (I.e. 20th August 2022)

Existing TRMP Rules

Figure 6.8A: Richmond Residential Housing Choices

C66 10/17
Op 12/18

Type of Residential Development	District: Everywhere except 'development areas' and exceptions	Development areas: Richmond South, Richmond West, Richmond East, Motueka West, and Mapua Development Areas, Mapua Special Development Area and Motueka West Compact Density Area	Richmond Intensive Development Area
Standard - Average density - 3 or 4 bedroom house (220 m^2) on a 350m^2 - 600m^2 site.	✓	✓	✓
Comprehensive - Three or more dwellings on a site - Building coverage – 40% - Minimum site size = 280m^2 in Richmond and Motueka and 350m^2 elsewhere	✓	**X** Except for Richmond East below Hill Street and Mapua Development Area where allowed	**X**
Compact - One or more dwellings on a site - All consents (subdivision, and building) applied for together - No minimum lot size	**X**	✓ Except for Richmond East; Motueka West Development Area outside of the Motueka Compact Area; and Mapua Development Area outside of the Mapua Special Development Area	**X**
Intensive - One or more dwellings on a site - Minimum lot size 200m^2	**X**	**X**	✓

Nelson Tasman Joint Committee (Nov 2020)

NT Joint Committee approved the inclusion of the settlements of Richmond, Motueka, Māpua , Wakefield and Brightwater as part of the tier 2 'Urban Environment'.

The TRMP enables the following types of housing in the Tasman towns listed above:

Type of housing	Richmond	Motueka	Māpua	Wakefield	Brightwater
Intensive	Yes in RIDA, operational 2018	No	No	No	No
Comprehensive (outside of new greenfields areas)	All of Richmond, except for (i) RIDA and (ii) the Development Areas, except Richmond East development area where it is allowed below Hill Street	Yes, outside of Motueka West development area and Motueka compact density area	Yes, in Māpua Development Area (large area)	yes	yes
Compact (new greenfields areas)	Yes in specific locations - Richmond West and Richmond South Development Areas	Yes in a specific location - Motueka compact density area, (Grey St)	Yes in a specific location - Māpua Special Development Area (Aranui Rd/Tahi St see map 87 TRMP)	No	No
Standard	yes	yes	yes	yes	yes

Activity Status of Each Type of Housing

Intensive housing

Subdivision – controlled

Land Use (Building and Construction) - Restricted Discretionary

Compact housing

Subdivision – Restricted Discretionary

Land Use – Controlled and need subdivision application at same time

Comprehensive housing

Subdivision – Discretionary

Land Use – Restricted Discretionary, submitted with subdivision

Comprehensive provides for a limited form of medium density housing in the rest of the Residential zone throughout the District unless specifically excluded. The rule framework for Comprehensive development, which has existed in the TRMP since its inception, provides limited encouragement for medium density development in practice as it requires high levels of consent, and, other than provisions for minimum site size and coverage, provides no design guidance for the public or decision makers. That said it has been used in Richmond a lot, especially before the RIDA rules came into operation.

Standard housing

Subdivision - Controlled

Land Use – Permitted in certain zones where first house i.e.. – Rural residential, Residential and Rural 2

Appendix 7: Extracts from the Growth Model for each town in the District showing the rollout of dwellings and excess capacity released once development area is serviced in the short, medium and long term (refer tables 15-17 of the main report)

- See “remaining lots” final column of tables for indication of excess capacity.
- Note these tables exclude the competitiveness margin – tables 15-17 have assessed capacity including the margin for the Urban Environment (Richmond, Brightwater, Motueka, Wakefield and Māpua)
- Where a DA has rollout within the 30 years, there is servicing planned. Where a DA does not have rollout within the 30 years, it is not planned for further infrastructure

Brightwater

Rollout Strategy for Positively Scored DAs

Projections							Pre-Model Years 2019/20 and 2020/21		Years 1-3 2021/22 - 2023/2024		Years 4-10 2024/25 - 2030/31		Years 11-20 2031/32 - 2040/41		Years 21-30 2041/42 - 2050/51		Remaining Lots
							Meet demand		Meet demand		Meet demand		Meet demand		Meet demand		
	DA	End Use	Score	Existing Vacant Lots	Expected New Lots	Total Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	
	1	Residential	4	33	1	34	5	0	6	0	14	0	9	0	0	0	0
	2	Residential	1	3	2	5	1	0	1	0	1	0	0	1	0	1	0
	3	Residential	3	1	1	2	2	0	0	0	0	0	0	0	0	0	0
	4	Residential	6	0	136	136	0	0	0	0	0	40	0	96	0	0	0
	5	Residential	1	3	31	34	3	2	0	29	0	0	0	0	0	0	0
	6	Residential	4	0	35	35	0	0	0	0	0	0	0	18	0	17	0
	21	Residential	6	1	81	82	0	0	0	12	0	0	0	35	0	0	35
	22		1	2	35	37	0	0	0	0	0	0	0	0	0	23	14
	23	Residential	4	2	417	419	0	0	0	0	0	0	0	0	0	140	279
	27	Residential	9	9	100	109	0	0	0	0	8	0	0	0	0	0	101
	28		13	3	27	30	3	0	0	0	0	20	0	20	0	0	-13
Subtotals							14	2	7	41	23	60	9	170	0	181	

Totals	Pre-Model Years 2019/20 and 2020/21	Years 1-3 2021/22 - 2023/2024	Years 4-10 2024/25 - 2030/31	Years 11-20 2031/32 - 2040/41	Years 21-30 2041/42 - 2050/51
	Meet demand	Meet demand	Meet demand	Meet demand	Meet demand
Totals planned in rollout	16	48	83	179	181
Totals required to meet demand	125	64	146	197	161
Under/over-supply?	-109	-16	-63	-18	20

Richmond

Rollout Strategy for Positively Scored DAs

Projections							Pre-Model Years 2019/20 and 2020/21		Years 1-3 2021/22 - 2023/2024		Years 4-10 2024/25 - 2030/31		Years 11-20 2031/32 - 2040/41		Years 21-30 2041/42 - 2050/51		Remaining Lots
							Meet demand		Meet demand		Meet demand		Meet demand		Meet demand		
	DA	End Use	Score	Existing Vacant Lots	Expected New Lots	Total Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	
	1	Residential	6	31	42	73	7	0	12	0	12	16	0	25	0	0	1
	2	Residential	16	29	449	478	30	6	0	50	0	140	0	200	0	52	0
	6	Residential	2	4	421	425	0	60	0	115	0	295	0	0	0	0	-45
	8	Residential	5	62	733	795	65	230	0	200	0	300	0	0	0	0	0
	24	Residential	4	25	170	195	22	0	0	50	0	105	0	15	0	0	3
	25	Residential	1	2	0	2	0	0	0	0	0	0	0	0	0	0	2
	26	Residential	2	11	5	16	6	0	5	5	0	0	0	0	0	0	0
	27	Residential	8	55	137	192	49	0	0	40	0	50	0	53	0	0	0
	28	Residential	11	3	243	246	0	0	0	0	0	0	0	0	0	246	0
	30	Rural Residential	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1
	32	Rural Residential	1	0			0	0	0	0	0	0	0	0	0	0	0
	33	Residential	4	17	96	113	13	0	0	15	0	68	0	17	0	0	0
	34	Residential	2	6	172	178	0	0	0	5	0	80	0	93	0	0	0
	41	Residential	8	0	145	145	0	0	0	30	0	95	0	20	0	0	0
	42	Residential	1	0	70	70	0	0	0	0	0	30	0	40	0	0	0
	44	Residential	3	1	10	11	0	5	0	6	0	0	0	0	0	0	0
	57	Residential	14	5	947	952	0	0	0	0	0	0	0	565	0	230	157
	59	Residential	1	12	15	27	0	0	12	0	0	5	0	0	0	10	0
	60	Residential	15	15	316	331	0	0	5	0	0	15	0	110	0	200	1
	61	Residential	16	18	266	284	0	0	5	0	0	15	0	110	0	154	0
	62	Residential	1	17	0	17	0	0	0	0	0	0	0	0	0	0	17
	63	Residential	2	6	0	6	0	0	0	0	0	0	0	0	0	0	6
	64	Residential	1	2	7	9	0	0	0	0	0	0	0	0	0	0	9
	67	Rural Residential	3	3	196	199	0	0	0	0	0	0	0	0	0	199	0
	68		11	7			0	0	0	0	0	0	0	0	0	0	0
Subtotals							192	301	39	516	12	1214	0	1248	0	1091	

Totals	Pre-Model Years 2019/20 and 2020/21	Years 1-3 2021/22 - 2023/2024	Years 4-10 2024/25 - 2030/31	Years 11-20 2031/32 - 2040/41	Years 21-30 2041/42 - 2050/51
	Meet demand	Meet demand	Meet demand	Meet demand	Meet demand
Totals planned in rollout	493	555	1226	1248	1091
Totals required to meet demand	218	332	838	1273	1072
Under/over-supply?	275	223	388	-25	19

Motueka

Rollout Strategy for Positively Scored DAs

Projections							Pre-Model Years 2019/20 and 2020/21		Years 1-3 2021/22 - 2023/2024		Years 4-10 2024/25 - 2030/31		Years 11-20 2031/32 - 2040/41		Years 21-30 2041/42 - 2050/51		Remaining Lots
							Meet demand		Meet demand		Meet demand		Meet demand		Meet demand		
	DA	End Use	Score	Existing Vacant Lots	Expected New Lots	Total Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	
	1	Residential	2	26	104	130	26	10	0	30	0	30	0	34	0	0	0
	2	Residential	3	20	4	24	5	0	5	4	10	0	0	0	0	0	0
	3	Residential	1	13	14	27	5	5	5	5	3	4	0	0	0	0	0
	4	Residential	1	7	165	172	2	0	3	2	0	0	0	165	0	0	0
	7	Residential	4	15	0	15	15	0	0	0	0	0	0	0	0	0	0
	36	Rural Residential	1	4	0	4	4	0	0	0	0	0	0	0	0	0	0
	44	Residential	3	6	97	103	0	0	0	0	0	0	0	103	0	0	0
	45	Residential - some papakainga (20)	4	6	78	84	3	0	3	30	0	48	0	0	0	0	0
	50	Residential	2	6	20	26	2	0	4	3	0	7	0	10	0	0	0
	52	Residential	1	16	-1	15	5	0	5	5	0	0	0	0	0	0	0
	56		7	48	464	512	10	0	10	0	10	214	18	250	0	0	0
	57	Residential	2	5	6	11	1	1	2	2	2	3	0	0	0	0	0
Subtotals							78	16	37	81	25	306	18	562	0	0	

Totals	Pre-Model Years 2019/20 and 2020/21	Years 1-3 2021/22 - 2023/2024	Years 4-10 2024/25 - 2030/31	Years 11-20 2031/32 - 2040/41	Years 21-30 2041/42 - 2050/51
	Meet demand	Meet demand	Meet demand	Meet demand	Meet demand
Totals planned in rollout	94	118	331	580	0
Totals required to meet demand	321	218	526	816	760
Under/over-supply?	-227	-100	-195	-236	-760

Māpua

Rollout Strategy for Positively Scored DAs

Projections							Pre-Model Years 2019/20 and 2020/21		Years 1-3 2021/22 - 2023/2024		Years 4-10 2024/25 - 2030/31		Years 11-20 2031/32 - 2040/41		Years 21-30 2041/42 - 2050/51		Remaining Lots
							Meet demand		Meet demand		Meet demand		Meet demand		Meet demand		
	DA	End Use	Score	Existing Vacant Lots	Expected New Lots	Total Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	
	1	Residential	5	15	27	42	6	0	2	5	0	22	0	7	0	0	0
	2	Residential	1	6	15	21	0	0	0	0	0	0	0	0	0	0	21
	5	Residential	3	18	62	80	15	7	3	13	0	12	0	10	0	12	8
	7	Residential	2	2	10	12	0	0	0	0	2	10	0	0	0	0	0
	8	Residential	4	7	169	176	0	0	7	23	0	83	0	70	0	53	-60
	9	Residential	5	7	47	54	0	0	7	7	0	25	0	8	0	7	0
	11	Residential	12	0	82	82	0	0	0	0	0	15	0	30	0	37	0
	12	Rural Res	2	14	33	47	4	0	4	0	4	6	20	0	0	0	9
	13	Residential	5	1	10	11	0	0	0	0	0	0	0	0	0	0	11
	16	Residential	1	11	6	17	3	0	5	0	3	0	0	0	0	0	6
	24	Residential	1	4	2	6	2	0	2	0	2	0	0	0	0	0	0
	25	Residential	2	0	1	1	0	0	0	0	0	0	0	0	0	0	1
	26	Residential	1	3	1	4	1	0	2	0	0	0	0	0	0	0	1
	27	Residential	9	15	575	590	5	0	5	5	0	5	0	174	0	160	236
	28	Residential	3	2	5	7	2	0	0	1	0	4	0	0	0	0	0
	29	Residential	5	1	46	47	0	0	0	0	0	0	0	0	0	0	47
	30	Residential	5	0	18	18	0	0	0	0	0	0	0	0	0	0	18
	34	rural Residential	1	11	77	88	5	0	5	5	0	23	0	20	0	20	10
Subtotals							43	7	42	59	11	205	20	319	0	289	

Totals	Pre-Model Years 2019/20 and 2020/21	Years 1-3 2021/22 - 2023/2024	Years 4-10 2024/25 - 2030/31	Years 11-20 2031/32 - 2040/41	Years 21-30 2041/42 - 2050/51
	Meet demand	Meet demand	Meet demand	Meet demand	Meet demand
Totals planned in rollout	50	101	216	339	289
Totals required to meet demand	108	91	223	339	289
Under/over-supply?	-58	10	-7	0	0

Wakefield

Rollout Strategy for Positively Scored DAs

Projections							Pre-Model Years 2019/20 and 2020/21		Years 1-3 2021/22 - 2023/2024		Years 4-10 2024/25 - 2030/31		Years 11-20 2031/32 - 2040/41		Years 21-30 2041/42 - 2050/51		Remaining Lots
							Meet demand		Meet demand		Meet demand		Meet demand		Meet demand		
	DA	End Use	Score	Existing Vacant Lots	Expected New Lots	Total Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	
	1	Residential	11	14	29	43	17	0	0	18	0	8	0	0	0	0	0
	2	Residential	3	12	30	42	0	0	12	0	0	0	0	8	0	0	22
	4	Residential	4	3	65	68	3	6	0	30	0	28	0	0	0	0	1
	6	Residential	4	14	153	167	6	0	0	20	0	55	0	46	0	40	0
	12	Residential	10	2	163	165	6	0	0	20	0	37	0	40	0	40	22
	13	Residential	4	2	126	128	0	0	0	0	0	0	0	64	0	64	0
	14	Residential	1	0	12	12	0	0	0	0	0	0	0	0	0	0	12
	22	Residential	2	2	8	10	0	0	0	0	0	0	0	0	0	0	10
	23	Rural Residential	1	3	0	3	0	0	0	0	0	0	0	0	0	0	3
	26	Rural 2	3	1	15	16	0	0	0	0	0	0	0	0	0	0	16
	27	Residential	13	9	1000	1009	0	0	0	0	0	0	0	0	0	0	1009
	28		11	8	46	54	1	0	2	5	0	5	0	8	0	8	25
	29		11	4	9	13	1	0	1	0	1	0	0	5	0	5	0
Subtotals							34	6	15	93	1	133	0	171	0	157	

Totals	Pre-Model Years 2019/20 and 2020/21	Years 1-3 2021/22 - 2023/2024	Years 4-10 2024/25 - 2030/31	Years 11-20 2031/32 - 2040/41	Years 21-30 2041/42 - 2050/51
	Meet demand	Meet demand	Meet demand	Meet demand	Meet demand
Totals planned in rollout	40	108	134	171	157
Totals required to meet demand	56	53	121	177	151
Under/over-supply?	-16	55	13	-6	6

Collingwood

Rollout Strategy for Positively Scored DAs

Projections							Pre-Model Years 2019/20 and 2020/21		Years 1-3 2021/22 - 2023/2024		Years 4-10 2024/25 - 2030/31		Years 11-20 2031/32 - 2040/41		Years 21-30 2041/42 - 2050/51		Remaining Lots
							Meet demand		Meet demand		Meet demand		Meet demand		Meet demand		
	DA	End Use	Score	Existing Vacant Lots	Expected New Lots	Total Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	
	1	Residential	2	5	0	5	1	0	0	0	0	0	0	0	0	0	4
	2	Rural Residential	1	7	1	8	0	0	0	0	0	0	0	0	0	0	8
	3	Rural Residential	2	1	0	1	0	0	0	0	0	0	0	0	0	0	1
	4	Rural Res	2	3	6	9	0	0	0	0	0	0	0	0	0	0	9
	5	Rural Residential	1	7	1	8	0	0	0	0	2	0	0	0	0	0	6
	9	Residential	10	0	84	84	0	0	0	0	0	0	2	0	0	0	82
	13	Residential	6	34	2	36	3	0	4	0	7	0	0	0	0	0	22
Subtotals							4	0	4	0	9	0	2	0	0	0	

Totals	Pre-Model Years 2019/20 and 2020/21	Years 1-3 2021/22 - 2023/2024	Years 4-10 2024/25 - 2030/31	Years 11-20 2031/32 - 2040/41	Years 21-30 2041/42 - 2050/51
	Meet demand	Meet demand	Meet demand	Meet demand	Meet demand
Totals planned in rollout	4	4	9	2	0
Totals required to meet demand	3	4	9	2	-12
Under/over-supply?	1	0	0	0	12

Kaiteriteri

Rollout Strategy for Positively Scored DAs

Projections							Pre-Model Years 2019/20 and 2020/21		Years 1-3 2021/22 - 2023/2024		Years 4-10 2024/25 - 2030/31		Years 11-20 2031/32 - 2040/41		Years 21-30 2041/42 - 2050/51		Remaining Lots
							Meet demand		Meet demand		Meet demand		Meet demand		Meet demand		
	DA	End Use	Score	Existing Vacant Lots	Expected New Lots	Total Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	
	1	Residential	11	6	0	6	0	0	0	0	6	0	0	0	0	0	0
	2	Residential	15	13	44	57	5	0	4	0	3	2	0	25	0	18	0
	3	Residential	2	0	11	11	0	0	0	0	0	0	0	0	0	11	0
	5	Rurl Residential	1	2	4	6	0	0	0	0	2	0	0	4	0	0	0
	16	Residential	13	37	1	38	10	0	6	0	8	0	12	0	0	2	0
	17	Residential	10	8	0	8	0	0	0	0	8	0	0	0	0	0	0
	23	Residential	11	6	2	8	0	0	5	0	0	2	0	0	1	0	0
Subtotals							15	0	15	0	27	4	12	29	1	31	

Totals	Pre-Model Years 2019/20 and 2020/21	Years 1-3 2021/22 - 2023/2024	Years 4-10 2024/25 - 2030/31	Years 11-20 2031/32 - 2040/41	Years 21-30 2041/42 - 2050/51
	Meet demand	Meet demand	Meet demand	Meet demand	Meet demand
Totals planned in rollout	15	15	31	41	32
Totals required to meet demand	9	15	31	41	36
Under/over-supply?	6	0	0	0	-4

Marahau

Rollout Strategy for Positively Scored DAs

Projections							Pre-Model Years 2019/20 and 2020/21		Years 1-3 2021/22 - 2023/2024		Years 4-10 2024/25 - 2030/31		Years 11-20 2031/32 - 2040/41		Years 21-30 2041/42 - 2050/51		Remaining Lots
							Meet demand		Meet demand		Meet demand		Meet demand		Meet demand		
	DA	End Use	Score	Existing Vacant Lots	Expected New Lots	Total Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	
	1	Residential	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	Residential	1	12	0	12	3	0	6	0	3	0	0	0	0	0	0
	3	Residential	1	2	46	48	0	0	0	0	0	19	0	29	0	0	0
	10	Residential	2	6	1	7	3	0	4	0	0	0	0	0	0	0	0
Subtotals							6	0	10	0	3	19	0	29	0	0	

Totals	Pre-Model Years 2019/20 and 2020/21	Years 1-3 2021/22 - 2023/2024	Years 4-10 2024/25 - 2030/31	Years 11-20 2031/32 - 2040/41	Years 21-30 2041/42 - 2050/51
	Meet demand	Meet demand	Meet demand	Meet demand	Meet demand
Totals planned in rollout	6	10	22	29	0
Totals required to meet demand	6	10	22	32	28
Under/over-supply?	0	0	0	-3	-28

Moutere

Rollout Strategy for Positively Scored DAs

Projections							Pre-Model Years 2019/20 and 2020/21		Years 1-3 2021/22 - 2023/2024		Years 4-10 2024/25 - 2030/31		Years 11-20 2031/32 - 2040/41		Years 21-30 2041/42 - 2050/51		Remaining Lots
							Meet demand		Meet demand		Meet demand		Meet demand		Meet demand		
	DA	End Use	Score	Existing Vacant Lots	Expected New Lots	Total Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	
	21	Residential	1	0			0	0	0	0	0	0	0	0	0	0	0
	29	Residential	1	3	5	8	1	0	1	1	1	2	0	2	0	0	0
	41	Residential	5	5	12	17	1	0	2	0	2	2	0	5	0	5	0
	1	Rural Residential	9	139	389	528	42	0	40	0	60	81	0	215	0	100	-10
	2	Rural Residential	3	38	6	44	10	0	10	0	14	5	0	5	0	0	0
	3	rural mix	1	41	-10	31	6	0	5	5	15	5	10	0	0	0	-15
	6	Rural Residential	9	184	368	552	45	0	67	0	75	100	0	217	0	53	-5
	13		6	7	64	71	0	0	0	0	0	0	0	36	0	35	0
	14		8	8	76	84	0	0	0	0	0	0	0	42	0	42	0
	15		8	6	17	23	0	0	0	0	0	0	0	12	0	11	0
	16	residential	5	16	1094	1110	0	0	0	0	0	0	0	300	0	900	-90
	17		1	348			23	0	21	0	35	0	50	0	50	0	-179
	18		1	128			7	0	6	0	14	0	20	0	20	0	-67
Subtotals							135	0	152	6	216	195	80	834	70	1146	

Totals	Pre-Model Years 2019/20 and 2020/21	Years 1-3 2021/22 - 2023/2024	Years 4-10 2024/25 - 2030/31	Years 11-20 2031/32 - 2040/41	Years 21-30 2041/42 - 2050/51
	Meet demand	Meet demand	Meet demand	Meet demand	Meet demand
Totals planned in rollout	135	158	411	914	1216
Totals required to meet demand	209	158	411	616	514
Under/over-supply?	-74	0	0	298	702

Murchison

Rollout Strategy for Positively Scored DAs

Projections							Pre-Model Years 2019/20 and 2020/21		Years 1-3 2021/22 - 2023/2024		Years 4-10 2024/25 - 2030/31		Years 11-20 2031/32 - 2040/41		Years 21-30 2041/42 - 2050/51		Remaining Lots
							Meet demand		Meet demand		Meet demand		Meet demand		Meet demand		
	DA	End Use	Score	Existing Vacant Lots	Expected New Lots	Total Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	
	1	Residential	11	20	37	57	5	0	2	0	0	0	0	0	0	0	50
	2	Residential	1	0	7	7	0	0	0	0	0	0	0	0	0	0	7
	9	Residential	7	0	17	17	0	0	0	0	0	0	0	0	0	0	17
	10	Residential	1	4	7	11	0	0	4	0	0	0	0	0	0	0	7
	11	residential but business in FDS	3	4	56	60	0	0	0	0	0	22	4	18	0	3	13
	13	Residential	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	18		1	15	4	19	0	0	0	0	0	0	0	0	0	0	19
	19	Residential	3	12	2	14	0	0	6	0	3	0	0	0	0	0	5
	20	Residential	2	0	2	2	0	0	0	0	0	0	0	0	0	0	2
	21	Residential	2	0	2	2	0	0	0	0	0	0	0	0	0	0	2
Subtotals							5	0	12	0	3	22	4	18	0	3	

Totals	Pre-Model Years 2019/20 and 2020/21	Years 1-3 2021/22 - 2023/2024	Years 4-10 2024/25 - 2030/31	Years 11-20 2031/32 - 2040/41	Years 21-30 2041/42 - 2050/51
	Meet demand	Meet demand	Meet demand	Meet demand	Meet demand
Totals planned in rollout	5	12	25	22	3
Totals required to meet demand	8	12	25	22	3
Under/over-supply?	-3	0	0	0	0

Pōhara

Rollout Strategy for Positively Scored DAs

Projections							Pre-Model Years 2019/20 and 2020/21		Years 1-3 2021/22 - 2023/2024		Years 4-10 2024/25 - 2030/31		Years 11-20 2031/32 - 2040/41		Years 21-30 2041/42 - 2050/51		Remaining Lots
							Meet demand		Meet demand		Meet demand		Meet demand		Meet demand		
	DA	End Use	Score	Existing Vacant Lots	Expected New Lots	Total Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	
	1	Residential	2	47	2	49	8	0	8	0	12	0	11	0	0	0	10
	5	Residential	1	12	0	12	0	0	0	0	0	0	0	0	0	0	12
	6	Residential	1	11	14	25	0	0	0	0	0	0	0	0	0	0	25
	7	Residential	2	1	8	9	0	0	0	0	0	0	0	0	0	0	9
	15	Residential	2	11	39	50	8	0	6	0	4	8	0	9	0	0	15
	16	Rural Residential	2	15	6	21	3	0	0	0	0	0	0	0	0	0	18
	17	Residential	1	12	3	15	2	0	0	0	0	0	0	0	0	0	13
	18	Rurl Residential	1	5	3	8	1	0	0	0	0	0	0	0	0	0	7
	19	Rural Residential	1	4	0	4	0	0	0	0	0	0	0	0	0	0	4
	20	Residential	3	9	1	10	0	0	0	0	0	0	0	0	0	0	10
	22	Rural Residential	2	1	1	2	0	0	0	0	0	0	0	0	0	0	2
	25	Residential	4	0	171	171	0	0	0	3	0	11	0	13	0	0	144
	29	Residential	1	5	3	8	1	0	0	0	0	0	0	0	0	0	7
Subtotals							23	0	14	3	16	19	11	22	0	0	

Totals	Pre-Model Years 2019/20 and 2020/21	Years 1-3 2021/22 - 2023/2024	Years 4-10 2024/25 - 2030/31	Years 11-20 2031/32 - 2040/41	Years 21-30 2041/42 - 2050/51
	Meet demand	Meet demand	Meet demand	Meet demand	Meet demand
Totals planned in rollout	23	17	35	33	0
Totals required to meet demand	11	17	35	33	-3
Under/over-supply?	12	0	0	0	3

Riuwaka

Rollout Strategy for Positively Scored DAs

Projections							Pre-Model Years 2019/20 and 2020/21		Years 1-3 2021/22 - 2023/2024		Years 4-10 2024/25 - 2030/31		Years 11-20 2031/32 - 2040/41		Years 21-30 2041/42 - 2050/51		Remaining Lots
							Meet demand		Meet demand		Meet demand		Meet demand		Meet demand		
	DA	End Use	Score	Existing Vacant Lots	Expected New Lots	Total Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	
	1	Residential	2	8	3	11	3	0	5	0	0	3	0	0	0	0	0
	2	rural?	1	1	12	13	0	0	0	0	1	0	0	0	0	0	12
	7	Residential	1	2	0	2	0	0	0	0	2	0	0	0	0	0	0
	8	Residential	2	1	0	1	0	0	0	0	1	0	0	0	0	0	0
	9	Residential	1	1	0	1	0	0	0	0	1	0	0	0	0	0	0
Subtotals							3	0	5	0	5	3	0	0	0	0	

Totals	Pre-Model Years 2019/20 and 2020/21	Years 1-3 2021/22 - 2023/2024	Years 4-10 2024/25 - 2030/31	Years 11-20 2031/32 - 2040/41	Years 21-30 2041/42 - 2050/51
	Meet demand	Meet demand	Meet demand	Meet demand	Meet demand
Totals planned in rollout	3	5	8	0	0
Totals required to meet demand	44	5	12	18	15
Under/over-supply?	-41	0	-4	-18	-15

St Arnaud

Rollout Strategy for Positively Scored DAs

Projections							Pre-Model Years 2019/20 and 2020/21		Years 1-3 2021/22 - 2023/2024		Years 4-10 2024/25 - 2030/31		Years 11-20 2031/32 - 2040/41		Years 21-30 2041/42 - 2050/51		Remaining Lots
							Meet demand		Meet demand		Meet demand		Meet demand		Meet demand		
	DA	End Use	Score	Existing Vacant Lots	Expected New Lots	Total Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	
	1	Residential	3	18	3	21	0	0	0	0	15	5	1	0	0	0	0
	2	Residential	2	4	1	5	0	0	0	0	5	0	0	0	0	0	0
	3	Residential	1	5	10	15	0	0	5	0	0	10	0	0	0	0	0
	4	Residential	4	40	5	45	18	0	17	5	5	0	0	0	0	0	0
	9	Residential	1	0	14	14	0	0	0	0	0	0	0	14	0	0	0
	12	Residential	4	3	1	4	0	0	0	0	3	1	0	0	0	0	0
Subtotals							18	0	22	5	28	16	1	14	0	0	

Totals	Pre-Model Years 2019/20 and 2020/21	Years 1-3 2021/22 - 2023/2024	Years 4-10 2024/25 - 2030/31	Years 11-20 2031/32 - 2040/41	Years 21-30 2041/42 - 2050/51
	Meet demand	Meet demand	Meet demand	Meet demand	Meet demand
Totals planned in rollout	18	27	44	15	0
Totals required to meet demand	18	27	47	17	-24
Under/over-supply?	0	0	-3	-2	24

Tākaka

Rollout Strategy for Positively Scored DAs

Projections							Pre-Model Years 2019/20 and 2020/21		Years 1-3 2021/22 - 2023/2024		Years 4-10 2024/25 - 2030/31		Years 11-20 2031/32 - 2040/41		Years 21-30 2041/42 - 2050/51		Remaining Lots
							Meet demand		Meet demand		Meet demand		Meet demand		Meet demand		
	DA	End Use	Score	Existing Vacant Lots	Expected New Lots	Total Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	
	1	Residential	3	18	16	34	2	0	3	0	0	0	0	0	0	0	29
	3	Residential	5	1	84	85	0	0	0	0	0	15	0	15	0	0	55
	6	Residential	4	11	2	13	5	0	7	0	1	0	0	0	0	0	0
	9	Residential	6	1	0	1	0	0	0	0	0	0	0	0	0	0	1
	14	rural Residential	8	24	4	28	0	0	3	0	0	0	0	0	0	0	25
	15		2	7	0	7	0	0	0	0	0	0	0	0	0	0	7
	16	Residential	10	6	356	362	0	0	5	0	0	20	0	10	0	0	327
	18	Residential	4	1	1	2	0	0	0	0	0	0	0	0	0	0	2
	19	Residential	2	6	19	25	0	0	0	0	0	0	0	0	0	0	25
	20	Residential	3	1	0	1	0	0	0	0	0	0	0	0	0	0	1
	21	Residential	2	7	0	7	0	0	0	0	0	0	0	0	0	0	7
	22	Residential	2	7	18	25	0	0	0	0	0	0	0	0	0	0	25
	25	Residential	9	20	165	185	0	0	0	0	0	0	0	0	0	0	185
Subtotals							7	0	18	0	1	35	0	25	0	0	

Totals	Pre-Model Years 2019/20 and 2020/21	Years 1-3 2021/22 - 2023/2024	Years 4-10 2024/25 - 2030/31	Years 11-20 2031/32 - 2040/41	Years 21-30 2041/42 - 2050/51
	Meet demand	Meet demand	Meet demand	Meet demand	Meet demand
Totals planned in rollout	7	18	36	25	0
Totals required to meet demand	46	18	36	25	-2
Under/over-supply?	-39	0	0	0	2

Tapawera

Rollout Strategy for Positively Scored DAs

Projections							Pre-Model Years 2019/20 and 2020/21		Years 1-3 2021/22 - 2023/2024		Years 4-10 2024/25 - 2030/31		Years 11-20 2031/32 - 2040/41		Years 21-30 2041/42 - 2050/51		Remaining Lots
							Meet demand		Meet demand		Meet demand		Meet demand		Meet demand		
	DA	End Use	Score	Existing Vacant Lots	Expected New Lots	Total Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	Units on Existing Lots	Units on New Lots	
	1	Residential	14	8	0	8	0	0	4	0	0	0	0	0	0	0	4
	2	Residential	3	0	18	18	0	0	0	0	0	9	0	0	0	0	9
	4	Residential	7	0	53	53	0	0	0	0	0	0	0	8	0	2	43
	6	Residential	10	0	1	1	0	0	0	1	0	0	0	0	0	0	0
	11	Residential	3	2	7	9	2	1	0	0	0	0	0	0	0	0	6
Subtotals							2	1	4	1	0	9	0	8	0	2	

Totals	Pre-Model Years 2019/20 and 2020/21	Years 1-3 2021/22 - 2023/2024	Years 4-10 2024/25 - 2030/31	Years 11-20 2031/32 - 2040/41	Years 21-30 2041/42 - 2050/51
	Meet demand	Meet demand	Meet demand	Meet demand	Meet demand
Totals planned in rollout	3	5	9	8	2
Totals required to meet demand	13	5	9	8	2
Under/over-supply?	-10	0	0	0	0

Appendix 8:

Summary of investment proposed for the next 10 years for infrastructure and community facilities by major town

Richmond

WHAT INVESTMENT IS PROPOSED IN THE NEXT TEN YEARS FOR INFRASTRUCTURE AND COMMUNITY FACILITIES?

Council currently provides the Richmond settlement with water, wastewater and stormwater services, as well as a well-established road, footpath and cycle network. Tasman's Great Taste Trail passes through Richmond providing a cycle connection to the rest of Tasman. The Richmond community is currently serviced by a range of parks, reserves and community facilities, including the Library, Aquatic Centre, Town Hall, and Saxton Field.

Council has proposed further investment, including these projects, to address anticipated growth, improve the services we provide, and make sure our public infrastructure is maintained and fit for purpose.

RICHMOND WEST AND SOUTH STORMWATER IMPROVEMENTS, AND LAND ACQUISITION
2021–2029 · $43.4 million
Stream widening and other network upgrades, including associated land acquisition, to convey flows from future development areas

RICHMOND SOUTH RESERVOIR AND MAIN
2021–2030 · $9.8 million
New water trunk main and storage reservoir to service growth and improve resilience

RICHMOND SOUTH WASTEWATER INFRASTRUCTURE
2021–2031 · $6 million
New pump station and pressure main to support growth in Richmond South

RICHMOND AQUATIC CENTRE
2021–2031 · $5.6 million
Various works (building maintenance and improvements, and pool plant renewals) to the Centre to provide a safe and comfortable environment for our community

RICHMOND RESOURCE RECOVERY CENTRE SITE IMPROVEMENTS
2021–2031 · $1.9 million
New bunker to divert dry waste, second weighbridge and improvements to the waste pit and waste bin storage area

RICHMOND WEST ROAD CORRIDOR AND INTERSECTION IMPROVEMENTS
2021–2031 · $15.3 million
Upgrade of McShane Road, Lower Queen St and intersections in Richmond West to cater for traffic growth and residential development

RICHMOND BUS TERMINAL
2022–2028 · $1.8 million
Creation of a new bus terminal in Richmond to cater for new bus routes

RICHMOND CYCLEWAY PRIMARY ROUTE
2024–2030 · $14.8 million
Creation of a safe cycle route through Richmond

RICHMOND CENTRAL STORMWATER IMPROVEMENTS
2025–2031 · $10.3 million
Diversion of stormwater from Washbourn Gardens to Poutama Stream to protect Richmond Central from flooding

Note: Although the full project costs are included in Council's budget, funding can be from a variety of sources, including targeted rates (for projects which serve a specific area), development and financial contributions, government funding, as well as general rates.

Motueka

WHAT INVESTMENT IS PROPOSED IN THE NEXT TEN YEARS FOR INFRASTRUCTURE AND COMMUNITY FACILITIES?

Council currently provides the Motueka settlement with wastewater and stormwater services. However, Motueka is only partially serviced with water supply. Many properties have their own private bores and are not connected to the Council network. Motueka is serviced by a well-connected road and footpath network, and Tasman's Great Taste Trail passes through Motueka. The Motueka community is currently serviced by a range of parks, reserves and community facilities.

Council has proposed further investment, including these projects, to address anticipated growth, improve the services we provide, and make sure our public infrastructure is maintained and fit for purpose.

The timing and location of new infrastructure, to enable future development, is based on the LTP growth scenario. Growth projections are updated every three years as part of each LTP. If actual growth starts occurring at a faster rate, Council will respond by considering necessary changes to projects and plans.

COMPLETION OF THE NEW MOTUEKA LIBRARY
2020 – 2022 · $520,000
A new, purpose-built, 1,100m² single-storey library to meet our community's current and future needs

STOPBANK IMPROVEMENTS
2021 – 2022 · $6 million
Refurbishment of Motueka stopbanks

MOTUEKA WEST STORMWATER IMPROVEMENTS
2021 – 2024 · $5.9 million
Stormwater system to convey flows from the development area west of High Street towards Woodland drain

MOTUEKA GROWTH WASTEWATER INFRASTRUCTURE
2021 – 2024 · $6 million
New pressure mains for Motueka West to wastewater treatment plant to enable development of Motueka West

NETWORK IMPROVEMENTS
2021 – 2030 · $3.4 million
New pump station, reservoir and water mains to increase network capacity

MOTUEKA WEST WATER RETICULATION
2021 – 2031 · $2.2 million
New water main to Motueka West to provide water to proposed developments

MOTUEKA COMMUNITY POOL
2024 – 2025 · $3.3 million
(incl. 1/3 community contribution)
We are working with the Motueka community to contribute to the building of an indoor swimming facility. This work will include a feasibility study

NEW WASTEWATER TREATMENT PLANT
2024 – 2029 · $7.6 million
Designation, resource consent, and land purchase for new inland wastewater treatment plant in Motueka

PORT MOTUEKA FACILITIES
2025 – 2026 · $570,000
Compliant facilities for boat maintenance activities to improve environmental protection

Note: Although the full project costs are included in Council's budget, funding can be from a variety of sources, including targeted rates (for projects which serve a specific area), development and financial contributions, government funding, as well as general rates.

You can see the locations of these projects on a map at LTP.tasman.govt.nz. Also available are maps of the parks and community facilities in your area.

Brightwater

WHAT INVESTMENT IS PROPOSED IN THE NEXT TEN YEARS FOR INFRASTRUCTURE AND COMMUNITY FACILITIES?

Council currently provides the Brightwater settlement with water, wastewater and stormwater services, as well as a well-established road and footpath network. Tasman's Great Taste Trail passes through Brightwater providing a cycle connection to Richmond and Wakefield. The Brightwater community is currently serviced by a range of parks, reserves and community facilities.

You can see the locations of these projects on a map at LTP.tasman.govt.nz. Also available are maps of the parks and community facilities in your area.

Council has proposed further investment, including these projects, to address anticipated growth, improve the services we provide, and make sure our public infrastructure is maintained and fit for purpose.

WAIMEA WASTEWATER NETWORK IMPROVEMENTS
2021–2031 · $24.5 million
New bypass pump station in Brightwater to support growth and provide network resilience

BRIGHTWATER WATER PIPE CAPACITY UPGRADES
2022–2028 · $2.8 million
Various projects to increase water supply capacity in Brightwater

WAIMEA WATER NETWORK CAPACITY UPGRADES
2023–2031 · $34.4 million
Programme of work to upgrade capacity of bores, treatment plant, trunk mains, reticulation, pump stations and reservoirs to support growth and improve resilience

BRIGHTWATER/WAKEFIELD MULTI-PURPOSE COMMUNITY FACILITY
2026–2029 · $8.6 million
(1/3 community contribution)
A new community facility to service the Brightwater, Wakefield and surrounding communities. A feasibility study will take place, and a location is still to be decided

Note: Although the full project costs are included in Council's budget, funding can be from a variety of sources, including targeted rates (for projects which serve a specific area), development and financial contributions, government funding, as well as general rates.

Māpua

WHAT INVESTMENT IS PROPOSED IN THE NEXT TEN YEARS FOR INFRASTRUCTURE AND COMMUNITY FACILITIES?

Council currently provides the Māpua/Ruby Bay settlement with water, wastewater and stormwater services, as well as a well-established road and footpath network in most residential streets. Council has recently invested in water and wastewater upgrades in Māpua, and the replacement of the water main, providing a safe and secure water supply for future subdivisions, means the moratorium on new water connections in Māpua will be lifted from August 2021.

The Māpua/Ruby Bay community is currently serviced by a range of parks, reserves and community facilities.

You can see the locations of these projects on a map at LTP.tasman.govt.nz. Also available are maps of the parks

Council has proposed further investment, including these projects, to address anticipated growth, improve the services we provide, and make sure our public infrastructure is maintained and fit for purpose.

MĀPUA RESERVOIR UPGRADE
2021–2022 · $2.1 million
New concrete reservoir at Pomona Road with additional capacity to support residential and business growth

MĀPUA WHARF PRECINCT RENEWALS
2021–2031 · $580,000
Annual capital renewal programme for Māpua Wharf

MĀPUA WASTEWATER NETWORK CAPACITY UPGRADES
2022–2031 · $1.8 million
New pump stations and trunkmains to increase network capacity

MĀPUA STORMWATER IMPROVEMENTS
2024–2029 · $2.6 million
Combination of detention wetlands and network upgrades to convey flows from future development areas

MĀPUA PUMP STATION CAPACITY UPGRADES
2026–2028 · $800,000
Upgrade Ruby Bay and Aranui-Higgs pump stations with additional storage capacity

TOWN CENTRE CYCLING IMPROVEMENTS
2029–2031 · $1.8 million
Providing facilities to support walking and cycling access and safety in Māpua Village Centre

MĀPUA CYCLE LANES
2029–2031 · $340,000
Providing new cycle lanes on key cycling routes in Māpua

SEATON VALLEY ROAD IMPROVEMENTS
2030–2031 · $500,000
Upgrade Seaton Valley Road to support adjacent residential development

Wakefield

WHAT INVESTMENT IS PROPOSED IN THE NEXT TEN YEARS FOR INFRASTRUCTURE AND COMMUNITY FACILITIES?

Council currently provides the Wakefield settlement with water, wastewater and stormwater services, as well as a well-established road and footpath network. Tasman's Great Taste Trail passes through Wakefield providing a cycle connection to Brightwater and Richmond. The Wakefield community is currently serviced by a range of parks, reserves and community facilities.

You can see the locations of these projects on a map at LTP.tasman.govt.nz. Also available are maps of the parks and community facilities in your area.

Council has proposed further investment, including these projects, to address anticipated growth, improve the services we provide, and make sure our public infrastructure is maintained and fit for purpose.

EIGHTY-EIGHT VALLEY NETWORK IMPROVEMENTS
2021–2025 · $3.5 million
Extend urban water supply to Eighty-Eighty Valley including new water mains and pump station upgrades

WAIMEA WASTEWATER NETWORK CAPACITY UPGRADE
2021 - 2031 · $24.5 million
Programme of work to replace and upgrade capacity of trunk mains and pump stations to support growth and improve resilience

WAIMEA WATER NETWORK CAPACITY UPGRADES
2023–2031 · $34.4 million
Programme of work to upgrade capacity of bores, treatment plant, trunk mains, reticulation, pump stations and reservoirs to support growth and improve resilience

BRIGHTWATER/WAKEFIELD MULTI-PURPOSE COMMUNITY FACILITY
2026–2029 · $8.6 million
(1/3 community contribution)
A new community facility to service the Brightwater, Wakefield and surrounding communities. A feasibility study will take place, and a location is still to be decided

Note: Although the full project costs are included in Council's budget, funding can be from a variety of sources, including targeted rates (for projects which serve a specific area), development and financial contributions, government funding, as well as general rates.

Tākaka

WHAT INVESTMENT IS PROPOSED IN THE NEXT TEN YEARS FOR INFRASTRUCTURE AND COMMUNITY FACILITIES?

Council provides wastewater and stormwater services to the Tākaka settlement, as well as a limited reticulation for fire-fighting purposes in the town centre. Residents are required to supply their own water and Council has not planned to install a reticulated public water supply in Tākaka. Council provides wastewater and stormwater services to most residential properties within the Pōhara / Ligar Bay / Tata Beach settlement area. A public water supply is only provided to part of Pōhara. Council provides water, wastewater and stormwater services to Collingwood. The road network stems from SH60 and varies from urban to rural. The main settlements have limited footpath and cycleway connections. Council recently completed a new cycleway between Tākaka and Pōhara. The Golden Bay community is serviced by a range of parks, reserves and community facilities.

You can see the locations of these projects on a map at LTP.tasman.govt.nz. Also available are maps of the parks and community facilities in your area

Council has proposed further investment, including these projects, to improve the services we provide, and make sure our public infrastructure is maintained and fit for purpose.

WATER SAFETY IMPROVEMENTS
2021–2022 · $1.2 million
Upgrade of Pōhara water treatment plant to provide safe water and meet the Drinking Water Standards New Zealand

TĀKAKA AERODROME RUNWAY EXTENSION
2021–2022 · $260,000
Extension and sealing of the cross runway to improve safety during strong winds

GOLDEN BAY RECREATION PARK GRANDSTAND
2021–2024 · $950,000
(incl. Community contribution)
Upgrade the grandstand at Golden Bay Recreation Park

GOLDEN BAY WASTEWATER NETWORK UPGRADES
2021–2027 · $5.1 million
Upgraded pump stations and pressures mains at Pōhara and Tarakohe

PORT TARAKOHE RENEWALS
2023–2030 · $3 million
Provision to allow for replacement of the plastic floating marina and other capital renewals

CYCLE LANES
2026–2028 · $500,000
Providing new cycle lanes on key transport routes

TOWN CENTRE CYCLING IMPROVEMENTS
2027–2029 · $1.6 million
Providing facilities to support walking and cycling in the Tākaka town centre

TĀKAKA STORMWATER IMPROVEMENTS
2027–2029 · $2 million
Network upgrades and water quality improvements

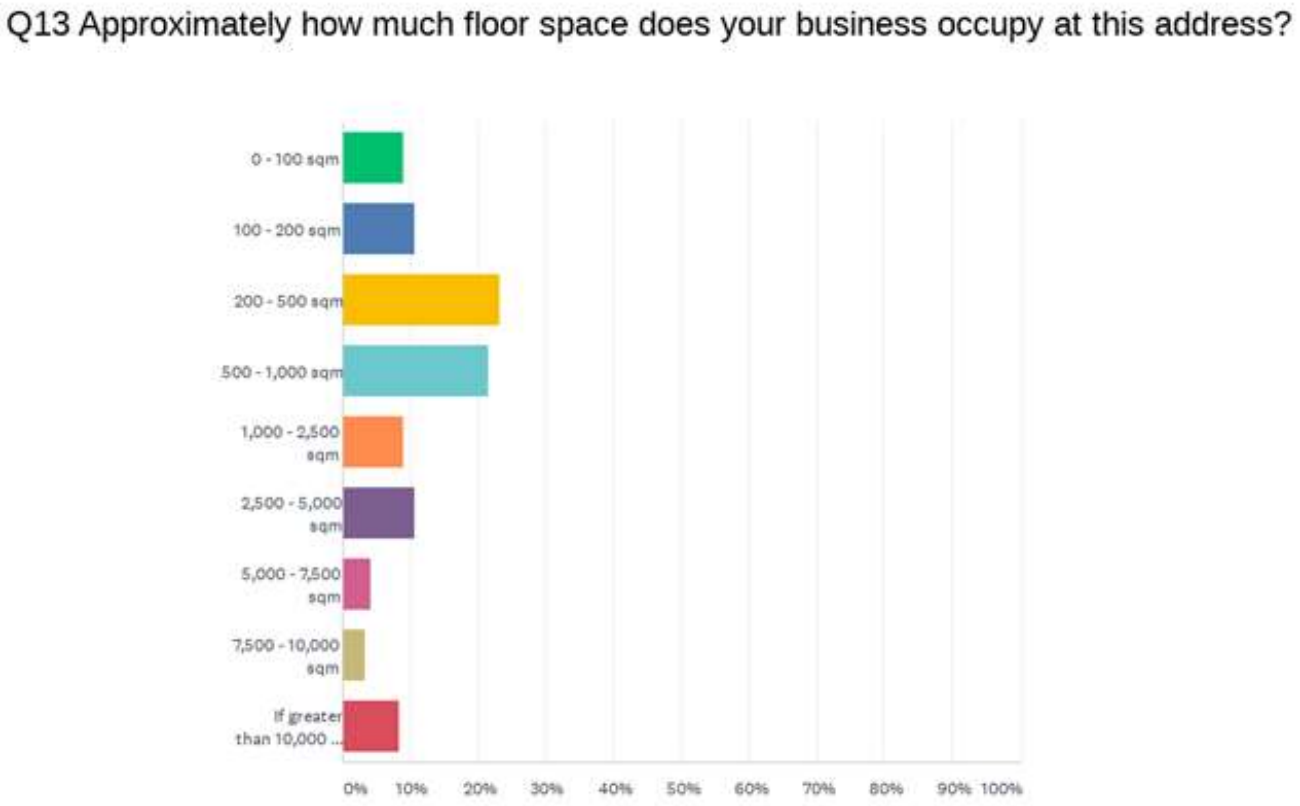
Note: Although the full project costs are included in Council's budget,

Appendix 9: Survey of Businesses 2020

In October 2020, Council undertook a survey of 500 businesses in the region. The aim of the survey was to understand whether zoned business land (and future business areas) are of the right type in the right location, ensuring that all our businesses are provided for.
A 20 minute survey was designed and sent to 500 businesses that were of average or above average size, in terms of space occupied, according to type of business zone. A total of 195 responses were received (40%). Some of the key responses useful to inform this HBA are provided below.

Size of Companies

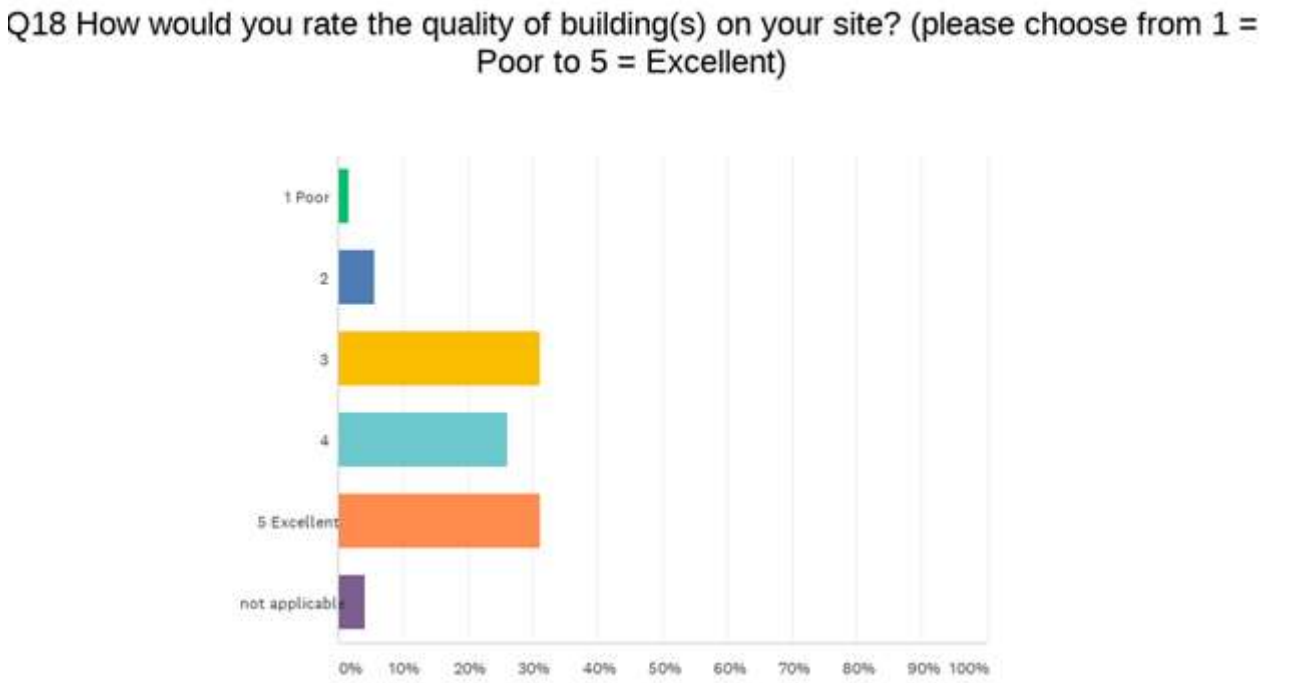
- 70% of businesses employ 10 or less people
- Amount of floorspace occupied is also small on average:



The companies occupying more than 10,000 sq m are farms, tree nurseries, contracting businesses and a holiday park.

Suitability of current site and buildings in meeting space requirements

- 70 businesses felt that their current site and/or buildings meets their current space requirements
- 37 businesses felt there was not enough space
- 11 businesses identified spare capacity on site and
- 4 businesses could not answer due to uncertainty over Covid-19



In terms of quality of current premises, 88% of respondents to this question rated the quality of their buildings as average to excellent:

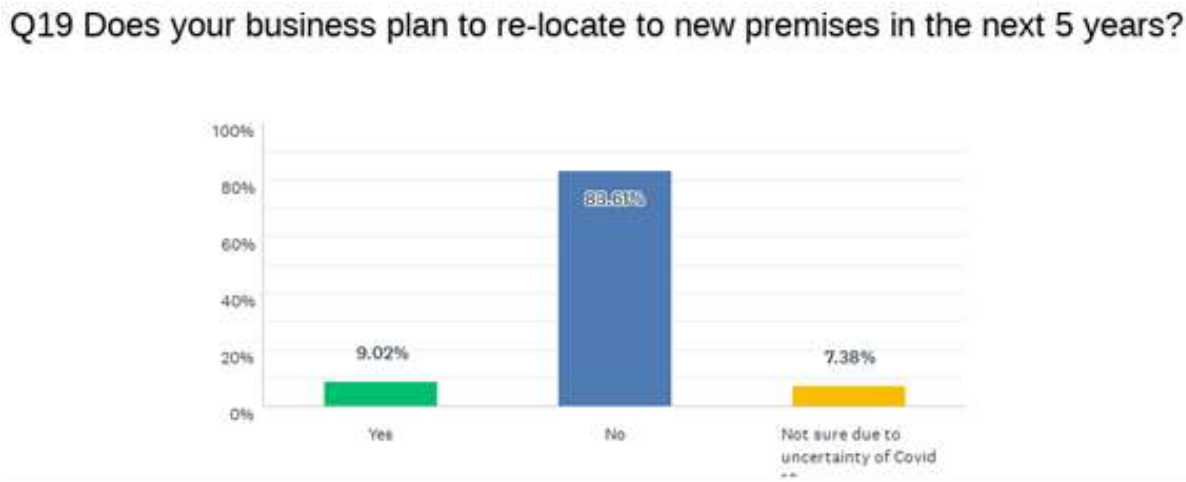
Demands for Extra Floor Space or Land

- 26 businesses require more floorspace
- 18 businesses require more land
- 7 businesses could not answer due to uncertainty over Covid-19
- Of those businesses that require more floorspace:
    - 7 respondents require 100 sq m or less
    - 8 respondents require between 100-500 sq m
    - 5 respondents require between 500-1,000 sq m (Brightwater, Spring Grove, Richmond, Motueka)
    - 4 respondents require between 2-3,000 sq m (Richmond, Riuwaka, Motueka)
    - 2 respondents require more than 5,000 sq m (Motueka, Marahau)
    - Of those wanting more than 500 sq m in floorspace, there are retail and commercial businesses, a construction contractor, a manufacturer and 4 engineering workshops
    - In terms of the larger floorspace requirements (more than 3,000 sq m) these comprise a horticulture company, a manufacturer and a holiday park.
- Of those businesses that require more land:
    - 7 respondents require 500 sq m or less
    - 4 respondents require between 1-5,000 sq m (Richmond, Brightwater)
    - 3 respondents require between 5-10,000 sq m (0.5-1ha) (Motueka)
    - 3 respondents require between 10-20,000 sq m (1-2 ha) (Richmond, Motueka)
    - 1 respondent requires more than 2ha (2.5ha) (Golden Bay)
    - Of those wanting more than 1,000 sq m of land, there is a haulage company, two manufacturers, two engineering companies and a recycling business
    - Of those wanting more than 10,000 sq m (1ha) of land there are two construction contractors, a manufacturer, a commercial business and an engineering company.

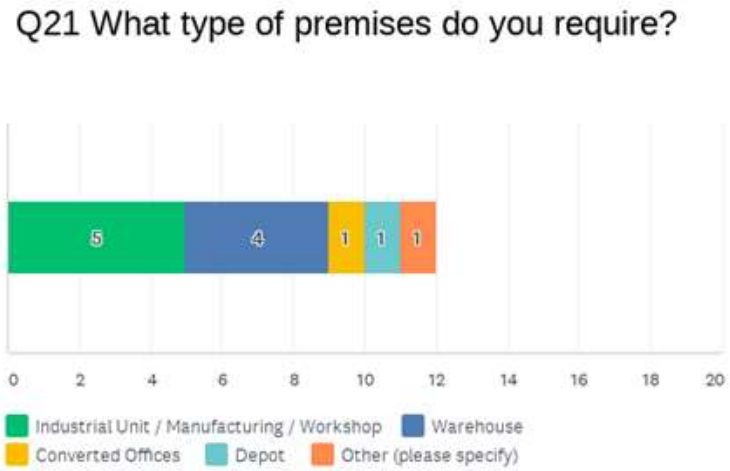
Part of the Urban Environment is therefore a popular location for extra land and floorspace (Richmond, Brightwater and Motueka).

Future Relocation Plans and Requirements

- 83% of businesses (102 of the 122 respondents to this question) are not planning to relocate in the short term
- 7% are unsure due to uncertainty over Covid 19
- Just 9% of businesses (9 respondents) are planning to move to new premises in the next five years.



Of the 9 businesses considering relocation, most need industrial units/manufacturing/workshops and warehouses. Converted offices, depot and civil construction and aggregate outlet are also required:



Most companies are seeking sites in Richmond.

While not reflected in the survey, Council has evidence of a shortage of cool store facilities in Richmond, Motueka, Lower and Upper Moutere, for orchard, hops and pharmaceutical companies. There have been ten such applications or pre application discussions in the past 3 years.

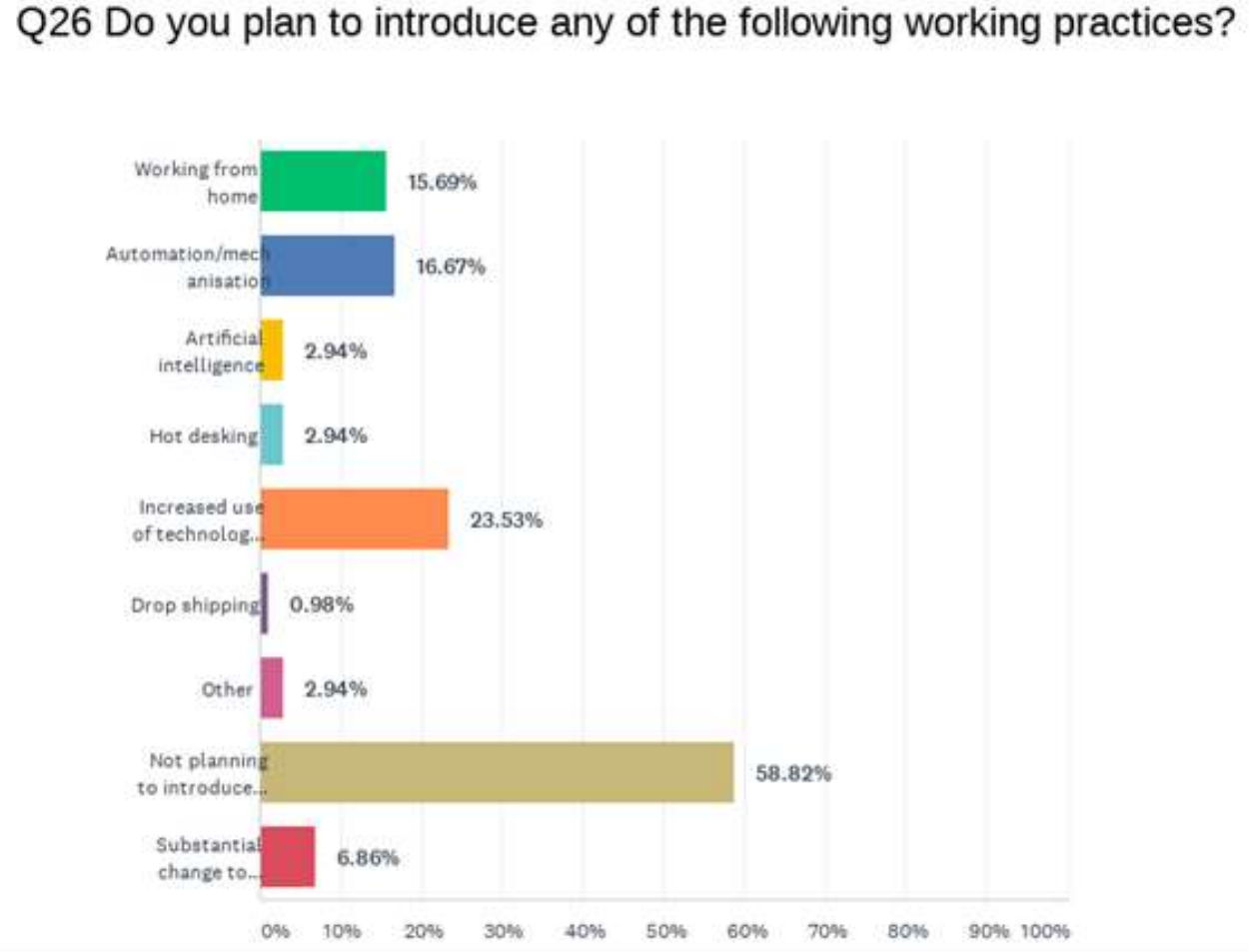
In terms of reasons for relocation, the businesses responded:

- *"bad roads"* and *"unable to navigate easily and safely out of Beach Road due to intensive building practices and poor Council town planning"* (from companies in the Beach Road industrial area of Richmond
- *"too small an area,"* (2), *"quality of building and more space required"* (from three companies in the Beach Road area in Richmond) and *"need more capacity"* (from a company in Motueka
- *"larger site needed which I own"* and *"I own the land and extension is half done"*
- *"high cost of industrial space to lease; traffic congestion on local roads, contraction of good industrial customers in current economic climate"* (Richmond)
- *"Location and need for a more commercial space"* (Richmond)

The reasons can therefore be summarised as traffic congestion for Richmond, more space required and high industrial lease costs (Richmond).

Downsizing of Company Floor Space

- Just 7 companies have downsized due to technological developments, operational practices or uncertainty created by Covid-19
- In terms of new practices for their business (which may have an impact on their space requirements), the survey revealed the following:



Factors affecting Business Location

The survey responses clearly showed that suitable location, proximity to customers/clients, quality of premises, quality of life, road network access and cost of premises or land are most important to the businesses when selecting premises to locate their business. Central Government funding assistance is the least important factor on average.

Dissatisfaction with the road network was a recurring theme in the survey responses, particularly around Richmond, Lower Queen Street junction with SH6, at peak times. This was given as a reason for relocation outside of Tasman; disadvantages of the current local area as a business location (23 companies cited this); local issues affecting business (9 companies); and in further comments (16 companies).

9.3 CLIMATE CHANGE UPDATE

Information Only - No Decision Required

Report To:	Strategy and Policy Committee
Meeting Date:	8 July 2021
Report Author:	Julie Nguyen, Graduate Policy Advisor; Anna Gerraty, Policy Advisor
Report Number:	RSPC21-07-4

1 Summary

1.1 This report provides a progress update on implementation of the Tasman Climate Action Plan (Action Plan), along with climate change updates in brief at the regional, national and international level.

1.2 The Resource Management Act (RMA) reforms will introduce three new pieces of legislation, all of which will have implications for climate change, particularly the Climate Change Adaptation Act. This report provides an emerging picture of how the various pieces of legislation that relate to climate change fit together.

1.3 The Climate Change Commission's (the Commission) first package of advice was released to the Government in June 2021. In response to this advice, the Government will set Aotearoa/New Zealand's first emissions budgets by the end of 2021, along with an Emissions Reduction Plan that will outline policies and actions to achieve these budgets.

1.4 Staff will continue to monitor and report on developments across the legislative landscape to ensure that Council has a good understanding of the implications for the Council and District as these become clearer. Reports will be presented to alternative meetings of the Strategy and Policy Committee, to update Council on implications and opportunities relating to climate change.

2 Draft Resolution

That the Strategy and Policy Committee receives the Climate Change Update report.

CLIMATE CHANGE UPDATE

3 Purpose of the Report

3.1 This report provides:

- a quarterly update on the Action Plan;
- climate change updates in brief at the regional, national and international level;
- a summary of the latest climate change developments and legislative reforms at the national level; and
- a brief overview of the Climate Change Commission's final advice to the Government.

3.2 Note that this inaugural 'Climate Change Update' report includes extensive discussion on the national legislative context. Staff anticipate that future reports are likely to focus on brief updates.

4 Background

4.1 The Action Plan was adopted by the Council at a Full Council meeting on 12 September 2019 (RCN19-09-11). The Action Plan contains three focus areas and actions under four goals.

4.2 An internal working group, comprising of 12 staff from across Council, meet bi-monthly to ensure the Action Plan progresses.

4.3 Quarterly progress updates on implementing the Action Plan have previously been included in the Chief Executive Officer's report to Full Council. These updates will now be provided in a separate 'Climate Change Update' report to alternate Strategy and Policy Committee meetings.

4.4 Attachment 1 provides an overview of the national, regional, and local climate change context, in brief.

5 Update on progress with implementing the Tasman Climate Action Plan

5.1 The following table highlights progress on some of the projects contained within the Action Plan. A more detailed annual report on implementation of the Action Plan will be presented to the 11 November 2021 Strategy and Policy Committee meeting.

Goal	Target	Action	Status	Progress Update
1. Council contributes to New Zealand's efforts to reduce Green House Gas (GHG) emissions (incl. net carbon emissions).	1(a) Council's emissions* of methane reduce by 10% below 2017 levels by 2030 and 47% by 2050 or earlier. Council's net emissions* of all other greenhouse gases reduce to zero by 2050.	(i) Undertake a baseline inventory by end of 2020; and then annual monitoring of Council's greenhouse gas emissions.	Delayed expected completion 30 June 2022	Staff engaged Toitū Envirocare to run an 'Emissions scope and boundary' workshop with staff on 3 June 2021. This enabled staff to identify potential Scope 1, 2 and 3 emissions[25] that Council produces and to start considering which sources to include in the Council's baseline inventory of greenhouse gas emissions. Toitū has prepared a draft report, outlining findings and recommendations from the workshop. The next step is to engage a provider to guide the work required to measure emissions for the baseline year 2020/2021 and have the inventory audited.
1. Council contributes to New Zealand's efforts to reduce GHG emissions (incl. net carbon emissions).	1(a) Council's emissions* of methane reduce by 10% below 2017 levels by 2030 and 47% by 2050 or earlier. Council's net emissions* of all other greenhouse gases reduce to zero by 2050.	(viii) Investigate energy efficient design and renewable energy options for Council buildings and activities.	On track	Staff applied to the Lotteries Commission and secured $250,000 of funding to install a solar photovoltaic system at the new Motueka Library.

[25] The Greenhouse Gas Protocol is an international standard to measure and manage greenhouse gas emissions. The Protocol categorises emissions sources to avoid double counting. Scope 1 emissions are categorised as direct emissions (e.g. fuel). Scope 2 emissions are categorised as indirect emissions (e.g. purchased energy). Scope 3 emissions are categorized as other indirect emissions (e.g. staff commute).

CLIMATE CHANGE UPDATE

1. Council contributes to New Zealand's efforts to reduce GHG emissions (incl. net carbon emissions).	1(b) Council decisions for planning and infrastructure design supports private individuals and businesses to reduce their emissions by 80% by 2050.	(i) Investigate options to encourage low carbon footprint buildings, highly energy-efficient buildings, renewable energy use in buildings, reductions in refrigeration emissions from air conditioning and disposal of refrigerants, enhanced urban/subdivision design.	On track	Staff are working with communities to trial 'green ways' in subdivisions around the District. The 'Streets for People' trial in D'Arcy/Croucher Streets (funded by Waka Kotahi) is complete and the 'Neighbourhood Greenways' trial (funded by Council), which covers over 10 small streets in Richmond around Middlebank Drive and Blair Terrace, is about to start this month.The aim of these projects is to improve safety for pedestrians and cyclists by forcing vehicles to drive slower in residential areas through physical changes to the streets. This has the added benefit of each vehicle producing less emissions. If the trial is successful, staff will look to make more permanaent changes, e.g. by planting trees instead of planter boxes. The Ministry of Business, Innovation, & Employment (MBIE) is reviewing how Aotearoa can reduce emissions from buildings during construction and operation. Council's Building Assurance Manager has been involved in MBIE's Code Advisory Panel (CAP), helping to shape advice on the New Zealand Building Code. The CAP will be taking feedback received from the public recently on MBIE's climate change emissions mitigation frameworks into account as it continues to provide advice. Agenda and minutes of these CAP meetings

CLIMATE CHANGE UPDATE

Goal	Target	Action	Status	Progress Update
				is available for anyone to download and read here: https://www.building.govt.nz/building-code-compliance/code-advisory-panel/
1. Council contributes to New Zealand's efforts to reduce GHG emissions (incl. net carbon emissions).	1(b) Council decisions for planning and infrastructure design supports private individuals and businesses to reduce their emissions by 80% by 2050.	(iii) Investigate options for supporting the local Warmer Homes programme.	On track	Council resolved in May 2021 to provide Warmer Healthier Homes (WHH) with an additional third party funding of $60,000 from the 2020/2021 climate change budget, to insulate homes in Tasman District over a three year period. Since the Warmer Healthier Homes Trust made its submission, the Government has reviewed the Energy Efficiency Conservation Authority (EECA) funding for this programme and reduced it slightly, from 90% to 80%.
1. Council contributes to New Zealand's efforts to reduce GHG emissions (incl. net carbon emissions).	1(c) Year on year, use of alternative transport modes increases, whereas use of single-occupancy internal combustion-engine vehicle on roads in Tasman District declines.	(j) In conjunction with the New Zealand Transport Agency (NZTA) and Nelson City Council (NCC), investigate options for increasing use of public transport (where this will provide the best outcome) and prepare action plan to increase public transport use.	In progress	As part of the LTP process, and the consultation for the Regional Public Transport Plan, both Tasman District and Nelson City Councils proposed to bring the public transport plans forward from 2026 to 2023. Council proposes to have more frequent buses (every 30 minutes), and extended bus routes from Motueka/Māpua and Brightwater/Wakefield to Richmond/Nelson. Council also recently approved $20,000 to promote use of the NBus. Staff will start planning and implementing promotion from July.

CLIMATE CHANGE UPDATE

Goal	Target	Action	Status	Progress Update
4. Council shows clear leadership on climate change issues.	4(a) Council's elected representatives demonstrate regional leadership.	(i) Promotion of innovations, changes and initiatives that individuals and businesses can take to reduce emissions, benefit from climate changes and improve resilience.	On track	FutureFit is an online carbon footprint tool that is free for anyone to use. It encourages people to reduce their carbon emissions in an accessible and fun way. There has been some uptake of FutureFit by staff and the public. We have been updating social media and our website with progress posters, see: https://www.tasman.govt.nz/my-region/climate-change/futurefit/.There will be more FutureFit promotions in the coming months.

6 Regional update

6.1 As part of their Long Term Plan (LTP) 2021-2031 deliberations, Nelson City Council (NCC) has included the following in their budgets:

- Nelson Tasman Climate Forum - $100,000 per year for three years (total $300,000, includes $50,000 allocated for community climate change projects in those years);
- Businesses for Climate Action - $65,000 in Years 1 and 2, and $45,000 in Year 3 (total $175,000 across three years);
- Tasman Environment Trust's Blue Carbon research project - $10,000 in Years 1-3 (total $30,000); and
- Community Compost - $32,000 in Year 1.

6.2 Marlborough District Council has:

- completed their first emissions inventory, with a report to be presented this month;
- completed Light Detection and Ranging mapping of their region, and plans to start conversations with its coastal communities on options in relation to sea level rise predictions, using the Dynamic Adaptive Policy Pathways approach;
- commissioned a report, detailing the projected impacts on climate change on the region;
- adopted a Waste Management and Minimisation Plan in May 2021; and
- committed further funding of $30,000 per year for three years in their LTP 2021-2031 to the Warmer Healthier Homes programme.

Nelson-Tasman Climate Forum

6.3 The Nelson-Tasman Climate Forum (the Forum) released its 'Climate Action Book – A Climate Action Plan for Nelson Tasman' in February 2021. The 24-page document contains a summary of actions that the community, businesses, and governing bodies in the region could take to reduce greenhouse gas emissions. The Forum Chair presented the Climate Action Book to the May 2021 Strategy and Policy Committee meeting.

6.4 Councillor Walker regularly attends full Forum hui and Forum Leadership hui on behalf of Council. A staff member also attends monthly Forum Leadership hui. Councillor Wensley recently stepped down as a Council representative on the Forum, with Councillor Ogilvie taking up this role.

6.5 Mayor King spoke at the most recent Forum hui in May. Several new appointments were made to the Leadership group, including a new Co-Chair. The other Co-Chair position, to be selected by tangata whenua iwi, will remain open until iwi make a selection.

6.6 Government funding to implement 'Te Tauihu Intergenerational Strategy' (the Strategy) was withdrawn, but Wakatū Inc. continue to work to implement the Strategy. Staff from Wakatū, Tasman District and Nelson City Councils recently discussed future steps for implementing the climate change section of the Strategy and linkages with the work of the

Climate Forum. Wakatū is involved with the work of the Indigenous Peoples Major Group of the upcoming United Nations Climate Change Conference (COP26).

7 National update in brief

7.1 Recent actions taken by central government:

- Ministry for the Environment (MfE) released its NZ Greenhouse Gas Inventory 1990-2019 (see https://environment.govt.nz/publications/new-zealands-greenhouse-gas-inventory-1990-2019/), showing that both gross and net emissions for Aotearoa increased by 2% in 2018/2019. StatsNZ, who collate the data that forms this national inventory, recently sent a survey to all councils, requesting feedback on how data collection and presentation at a regional level can be improved. Staff worked with NCC and the Nelson Tasman Climate Forum to provide a joint response to this survey;
- a ban on new low and medium temperature coal-fire boilers starts from December 2021. The Government is also working with the private sector to transition away from fossil fuels;
- funds have been made available for the education sector, hospitals and other government organisations to replace coal and fossil fuel boilers;
- submissions closed in May on new legislation requiring the financial sector (around 200 entities) to disclose the impacts of climate change and explain how they will manage climate-related risks and opportunities;
- funds committed for electric vehicles (EVs) and charging infrastructure for the state sector; and
- submissions closed in June on options to meet the recommendations proposed by the Ministry of Transport to move toward a zero carbon transport system by 2050.

7.2 MfE held a webinar with climate staff from councils on 28 June, in preparation for workshops they're running in June and July on the Emissions Reduction Plan and National Adaptation Plan. The webinar contained a series of slides that provide a succinct overview of the Zero Carbon framework and upcoming climate-related workstreams that MfE are engaging with councils on over the next year. These slides are included as Attachment 2 to this report.

8 International updates of interest

8.1 The International Energy Agency recently released the first energy road map of what it would take for the World to get carbon dioxide emissions to net zero by 2050. The report states that all the technologies and policies required to meet net zero by 2050 already exist and are already proven.

CLIMATE CHANGE UPDATE

Climate change litigation risk for corporate entities

8.2 A Dutch Court has recently ruled that Royal Dutch Shell (Shell), due to its global reach, is partially responsible for global climate change. The Court ordered Shell to reduce the carbon emissions that it is responsible for, including in its value chain.

8.3 This is a significant ruling. Up until now, for a range of reasons, large emitters have not been found liable in climate change cases. It is perhaps a signal for other "carbon majors" that legal links can be drawn between their actions and the effects of climate change. Simpson Grierson have written a short summary of what has happened, the significance of the decision, and how it relates to Aotearoa. Further details about this case are provided in Attachment 3 to this report.

9 Climate Change Policy Context: Overview of Legislative Changes[26]

Legislative Framework

9.1 Aotearoa's response to climate change at a national level is framed by central government's Climate Change Response (Zero Carbon) Amendment Act 2019, which covers both mitigation (reducing greenhouse gas emissions) and adaptation (building resilience and managing the impacts of climate change). Under this Act, the Government will establish a system of emissions budgets, reduction plans and a series of national climate change risk assessments and national adaptation plans.

9.2 The Resource Management Amendment Act came into force on 30 June 2020, with the climate change provisions applying from 31 December 2021. These will require councils to have regard to emissions reduction plans and national adaptation plans when making and amending regional policy statements, regional plans and district plans. The provisions also enable councils to consider greenhouse gas emissions when consenting discharges to air under the RMA. The RMA reforms, announced in February 2021, will repeal the current RMA 1991 and replace it with three new pieces of legislation, all of which will have implications for climate change, particularly the Climate Change Adaptation Act.

Alignment with Council's Strategic Priorities and Community Outcomes

9.3 Responding to climate change was identified as one of the Council's big choices in Tasman's 10-Year Plan 2021-2031. The context for Council considering climate change continues to change, with the Climate Change Commission's (the Commission) advice to the Government, forthcoming emissions budgets, RMA reform, Three Waters reform, and Future of Local Government review, all impacting on legislative landscape in which Council operates, which will be felt across Council's Community Outcomes.

9.4 Climate change has wide ranging effects on all aspects of our society. The Commission's advice and the forthcoming legislative reforms will similarly have some effects. Whilst the overall impacts on the four aspects of community well-being are expected to be positive due to these reforms, the substantial shifts needed to transition to a low-emissions society

[26] Sections 9 and 10 of this report have been adapted from a report presented to the Bay of Plenty Regional Council's Strategy and Policy Committee on 4 May 2021.

will involve trade-offs that may negatively impact community well-being of particular sectors at certain points in time.

Central Government Direction on NZ's Climate Change Response

9.5 Climate change is an issue which has implications and linkages across a wide and diverse range of sectors and policies. Until recently, central government direction in this area has been lacking. The Climate Change Response Act originally came into force in 2002, creating a legal framework to enable Aotearoa to meet its international obligations, but it did not include effective climate change policies.

9.6 The introduction of the Climate Change Response (Zero Carbon) Amendment Act in 2019 included the introduction of the national emissions reductions targets, the establishment of 'He Pou a Rangi: the Climate Change Commission' (the Commission), and the requirement for government to develop and implement policies for climate change adaptation (building resilience and managing the impacts of climate change) and mitigation (reducing greenhouse gas emissions).

9.7 The amended Climate Change Response Act provides Aotearoa with a framework to develop climate change policies towards meeting its international obligations, targets and emissions budgets by 2050, to contribute to the global effort to limit the global average temperature increase to 1.5ºC above pre-industrial levels.

9.8 Policy direction in this space is still evolving. The Commission's final advice on emissions budgets is a critical step towards establishing a suite of policies that are focused on delivering the required emissions reductions. In parallel, the RMA reforms should provide greater clarity around the role of local government in climate change adaptation.

Central Government Agency Responsibilities

9.9 The lead government agency for climate change is the Ministry for the Environment (MfE). This Ministry provides advice and support to the Minister for Climate Change, who has responsibility for developing central government's climate change policy. Other Ministries also work on climate change related issues, such as Ministry for Primary Industries (MPI) (through Te Uru Rākau) with responsibility for the One Billion Trees Programme, and MBIE leading on the Just Transitions Unit and the Building for Climate Change programme.

Climate Change Commission's Perspective

9.10 The Commission is tasked with providing independent expert advice to the Government, as well as monitoring and reviewing the Government's progress towards its emission reduction and adaptation plans.

9.11 The Commission released its first package of draft advice to central government for public consultation in February 2021. The final advice, 'Ināia tonu nei: a low emissions future for Aotearoa', was presented to the Government on 9 June 2021. The advice will inform the first three emissions budgets (2022-2025, 2026-2030 and 2031-2035) which will be set by the Government at the end of 2021 for its first emissions reduction plan 2022-2025.

9.12 In its final advice, the Commission highlights the challenge presented by the siloed "government machinery of Aotearoa", with policy levers for different sectors currently

sitting with a range of other agencies, and recommends that there be "coordinated action across government departments and agencies" and "clear lines of accountability for delivering on climate outcomes" (Recommendation 9 in the final advice).

9.13 The Commission acknowledges that a well-supported local government is critical to Aotearoa meeting its emissions reduction targets. Central government should enable local government "through legislation, removing regulatory barriers, and providing increased and targeted funding." The Commission also recommends central and local government work collaboratively with iwi, businesses, industries, NGOs, and the community to co-design and enable a low-emissions society, with accountability milestones and measures that are tailored to the District.

9.14 Whilst these recommendations are provided in the context of emissions reductions, the same issues apply within the adaptation space. The Commission has identified a need for greater clarity on roles and responsibilities and policy alignment in both mitigation and adaptation areas, which is also being addressed through the RMA reform.

Resource Management Act Reforms

9.15 Last year a Government-appointed Independent Panel released a comprehensive review of the RMA (known as 'the Randerson Report'). In relation to climate change, the review found that integration between the Climate Change Response Act and the RMA was lacking. The Panel suggested managed retreat, funded in an equitable manner of burden sharing in the form of an adaptation fund for central and local government to address climate change adaptation and reduction of natural hazard risks. It also recommended there be more flexibility in changing land uses, and options for compensation.

9.16 Following on from the review, central government announced RMA reforms in February 2021. This will repeal and replace the RMA with three new laws; the Natural and Built Environments Act (NBA), Strategic Planning Act (SPA), and the Climate Change Adaptation Act. An exposure draft of the NBA is expected this month. There are no dates for any drafts of the other two pieces of proposed legislation as yet.

9.17 The objectives of the RMA reform is to provide Aotearoa with a more strategic and systemic approach to protecting and restoring the environment; development within natural environmental limits; greater recognition of Te Tiriti of Waitangi/Treaty of Waitangi and te ao Māori; preparing, adapting, and mitigating climate change risks and natural hazards; and reducing complexity whilst retaining local democratic input.

Legislative Overview

9.18 The current state of flux in the climate change policy space is illustrated in Table 1 below, along with the linkages across key sectors for Council. This highlights the current state of uncertainty (hopefully to be resolved over the next few years as legislation is finalised) and the interdependencies between different pieces of legislation.

9.19 We can expect to see greater clarity around the specific roles for local government in both mitigation and adaptation as central government policies are developed. However, the signals through the Climate Change Commission's advice and the RMA reform process

mean that local government can have some confidence in undertaking initiatives now, that are in line with this overall direction.

9.20 At this stage, the implications on the roles and responsibilities of local government are expected to be:

- greenhouse gas emissions will be a RMA policy/consenting consideration for local government in terms of managing discharges (effective from 31 December 2020). MfE is currently undertaking consultation on a National Environmental Standard (NES) or National Policy Statement (NPS) to help councils' decision-making on greenhouse gas discharges to air. Earlier this year MfE also consulted on proposals to phase out fossil fuels in process heat;
- local government must 'have regard to' emissions reduction plans and national adaptation plans when preparing RMA plans and policy statements (effective from 31 December 2021);
- local government must undertake local risk assessments and adaptation plans within specific timeframes[27]. MfE is currently preparing guidance for local government risk assessments, which is due to be released in July or August 2021. Otago Regional Council has recently completed their first risk assessment at an estimated cost of $100,000, requiring one FTE equivalent to work on this project for a full year;
- explicit consideration of climate change policies in the new generation "RMA" plans and policy documents; and
- consideration of emissions reduction plans and budgets within transport planning documents.

9.21 Staff are involved in a few working and interest groups at a national level. Staff will continue to monitor and report on developments across the legislative landscape, to ensure that Council has a good understanding of the implications for the Council and District as these become clearer.

[27] Note that in December 2020, the Council published a Coastal Risk Assessment as part of the Coastal Management Project work programme (see: Coastal Management – responding to climate change | Tasman District Council)

Table 1 – Expected timeline of climate change policy and legislation changes

YEAR	CLIMATE CHANGE RESPONSE ACT	RMA REFORMS	TRANSPORT & URBAN FORM	OTHER
2020	Emissions Trading Reform Amendment Act 2020 into force First National Climate Change Risk Assessment released		MfE National Policy Statement on Urban Development takes effect	MPI He Waka Eke Noa 5-year joint action plan agreed – advancing work on climate change action in the primary sector Department of Conservation adopts 2nd Climate Change Adaptation Plan National Policy Statement on Freshwater Management takes effect MBIE Building for Climate Change consultation
2021	Feb: The Commission's draft advice on emissions budgets for consultation June: The Commission's final advice to Government released Oct: Public consultation on draft National Adaptation Plan (NAP) Dec: Government adopts first three emissions budgets (2022-2035)	Feb: RMA reform timetable announced July: Exposure draft of NBA Bill. SPA & Climate Change Adaptation Act developed in parallel Dec: RMA reform Bills introduced to Parliament Dec: RMA Amendment Act climate change provisions in force	June: Regional Land Transport Plan 2021-2031 adopted July: Transport Government Policy Statement (GPS) 2021 takes effect	April: Future of Local Government review announced June: Tasman's 10-Year Plan 2021-2031 adopted July-Sept: Consultation on Review of New Zealand Waste Strategy and Waste Minimisation Act expected Sept: Interim report on Future of Local Government National Policy Statement on Highly Productive Land expected to take effect. Dec: MfE Minister's decision on proposed NPS for Indigenous Biodiversity.

CLIMATE CHANGE UPDATE

2022	Aug: Government releases first National Adaptation Plan (NAP) Dec: The Commission's emissions budget annual report	Natural and Built Environments, Strategic Planning, Climate Change Adaptation Acts come into force		30 Sept: Public consultation on draft report on Future of Local Government The Commission reviews He Waka Eke Noa progress
2023	Dec: The Commission's emissions budget annual report		Transport Government Policy Statement 2024 released	30 April: Final Future of Local Government report presented to Minister and LGNZ
2024	The Commission's advice on including international shipping and aviation emissions in 2050 target Aug: The Commission's first progress report on NAP Dec: The Commission's emissions budget annual report		June: Regional Land Transport Plan 2024-2034 adopted	June: Tasman's LTP 2024-2034 adopted
2025	Dec: The Commission's emissions budget annual report			He Waka Eke Noa implementing a framework and environment plans to reduce agricultural greenhouse gas emissions.
2026	The Commission releases 2nd National Climate Change Risk Assessment Dec: The Commission emissions budget annual report			

10 Implications of the Climate Change Commission's Advice

10.1 As stated above, the Commission is tasked with providing independent expert advice to the Government, as well as monitoring and reviewing the Government's progress towards its emission reduction and adaptation plans.

10.2 The Commission's first package of advice is focused on the steps Aotearoa must take to reduce greenhouse gas emissions, which includes suggestions for high level policy direction. In response, the Government will set the first of three emissions budgets by the end of 2021, and produce the first Emissions Reduction Plan, which will describe how Aotearoa will deliver on the emissions budgets and make progress towards meeting the net-zero carbon 2050 target.

10.3 Council prepared a submission on the Commission's draft advice. As part of the submissions process, staff have considered the possible implications of the draft advice for Council. Staff will revisit specific implications in detail at the end of the year, once there is certainty around the final emissions budgets set by the Government and associated policies that the Government decides on.

10.4 Council activities impacted by the advice include: transportation; environmental information and management; environmental policy; waste management and minimisation; reserves and facilities; and council enterprises (forestry). The industrial, agricultural and forestry sectors are also impacted at the District-wide level.

10.5 The Commission's advice does not clearly compare relative emissions impacts on each point of the recommendations, so it is not possible to assess the level of reductions delivered by any one of their recommendations.

Government consultation opportunities

10.6 Staff prepared a Council submission on the Climate Change Commission's draft advice to the Government earlier this year. Since then, a number of other central government consultations have and continue to take place, including the New Zealand Infrastructure Commission's 'Infrastructure Strategy' and the Ministry of Transport's 'Public Transport Operating Model' and 'Transport Emissions: Pathways to Net Zero by 2050'. While staff have drafted Council submissions on the latter three, there was insufficient time to apply a climate lens to these.

11 Conclusion

11.1 Staff will continue to monitor and report on developments across the legislative landscape, to ensure that Council has a good understanding of the implications for the Council and District as these become clearer. Reports will be presented to alternative meetings of the Strategy and Policy Committee, to update Council on implications and opportunities relating to climate change.

12 Next steps

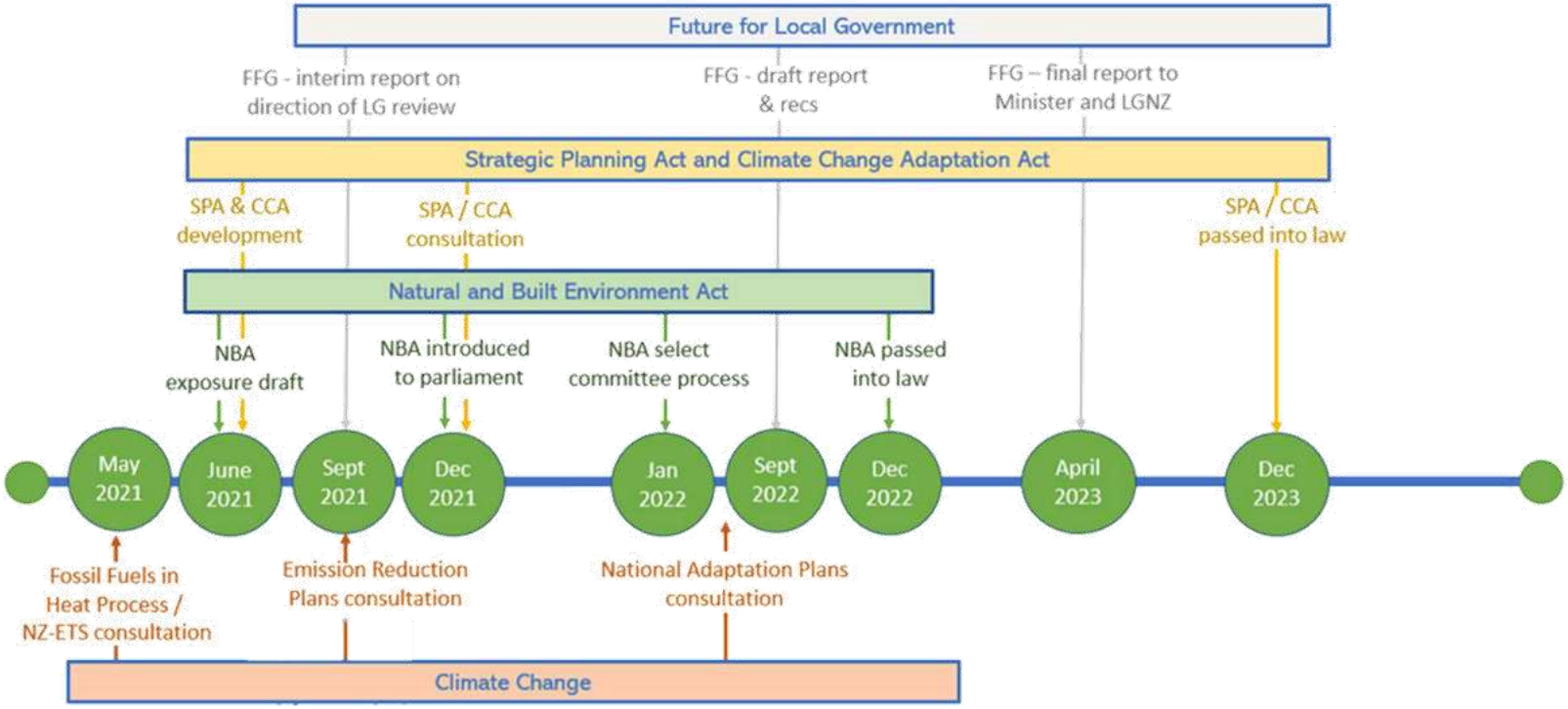
12.1 Work on implementing the Tasman Climate Action Plan will continue, and staff will continue to report on progress quarterly through the Strategy and Policy Committee.

12.2 Staff will present a detailed annual report on the Action Plan at the 30 November 2021 Strategy and Policy Committee meeting.

12.3 The Action Plan is designed to be a living document and is scheduled to be reviewed prior to adoption of the LTP 2024-2034. Staff will begin the Plan review later this year.

Attachments

	Agencies	Legislation	Planning Instruments/Strategies
National	Climate Change Commission Minister for Climate Change Ministry for the Environment	Local Government Act Treaty of Waitangi Climate Change Response Act Resource Management Amendment Act Resource Management Reforms: - Climate Change Adaptation Act - Natural and Built Environments Act - Strategic Planning Act	Climate Change Commission Advice National Environment Standards National Policy Statements
Tasman	Tasman District Council		Tasman Environment Plan Tasman Climate Action Plan
Regional	Tasman District and Nelson City Council		Future Development Strategy and Intensification Action Plan Te Tau Ihu Regional Land Transport Plan Nelson-Tasman joint Regional Public Transport Plan
	Nelson-Tasman Climate Forum		Climate Action Book
	Wakatū Inc		Te Tauihu Intergenerational Strategy


Future for Local Government
FFG - interim report on direction of LG review
FFG - draft report & recs
FFG – final report to Minister and LGNZ
Strategic Planning Act and Climate Change Adaptation Act
SPA & CCA development
SPA / CCA consultation
SPA / CCA passed into law
Natural and Built Environment Act
NBA exposure draft
NBA introduced to parliament
NBA select committee process
NBA passed into law
May 2021
June 2021
Sept 2021
Dec 2021
Jan 2022
Sept 2022
Dec 2022
April 2023
Dec 2023
Fossil Fuels in Heat Process / NZ-ETS consultation
Emission Reduction Plans consultation
National Adaptation Plans consultation
Climate Change

MfE webinar on the Zero Carbon Framework – 28 June 2021

Today's session

Environment

Welcome

The Zero Carbon framework

Why we are here

Reducing emissions (mitigation)

- Emissions budgets
- Emissions reduction plan
- New Zealand's Nationally Determined Contribution, 2021-2030

Managing climate risks and impacts (adaptation)

- National Climate Change Risk Assessment
- National Adaption Plan
- Climate Adaptation Act
- Adaptation Preparedness results

Pātai/Question time

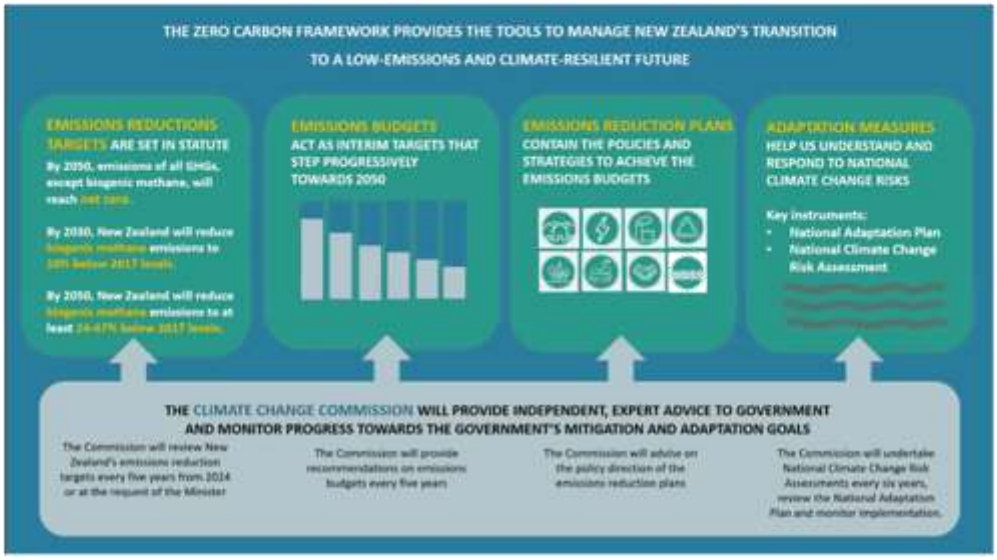
Closing

Schedule of engagement

Environment

Event	Type	Date and time
ERP – how can government and local government work together to enable outcomes and successfully reduce emissions	Workshop	Today, 2pm-4pm
ERP and NAP overview (same content as today)	Webinar	Thursday 8 July, 10am-11am
NAP – Actions needed to address risks	Workshop	Thursday 15 July, 10am-12pm
NAP – Actions needed to address risks	Workshop	Thursday 22 July, 10am-12pm

- If you have any further pātai or require additional information, please contact adaptation@mfe.govt.nz



The Climate Change Commission has now provided its final advice

Environment

What did this include?

- The first three emissions budgets (2022-2025, 2026-2030, 2031-2035)
- The policy direction of the emissions reduction plan (2022-2025)
- The compatibility of New Zealand's NDC with global efforts to limit temperature rise to 1.5˚C above pre-industrial levels
- The eventual reductions that may be required in biogenic methane

What did the Commission say about emissions budgets?

Recommendation 1 - Emissions budget levels

We recommend the Government set and meet the emissions budgets as outlined in the table below. These emissions budgets are expressed using GWP_{100} values from the IPCC's *Fifth Assessment Report (AR5)* for consistency with international obligations relating to inventory reporting.

	2019	Emissions budget 1 (2022 - 2025)	Emissions budget 2 (2026 - 2030)	Emissions budget 3 (2031 - 2035)
All gases, net (AR5)		290 $MtCO_2e$	312 $MtCO_2e$	253 $MtCO_2e$
Annual average	78.0 $MtCO_2e$	72.4 $MtCO_2e$/yr	62.4 $MtCO_2e$/yr	50.6 $MtCO_2e$/yr

Note: The Commission has not made substantive changes to its proposed emissions budgets. While the headline numbers are higher than those in the draft advice, this is due to the shift in baseline numbers and modelling assumptions. There is no material change in ambition or the amount of abatement required.

What did the Commission say about emissions budgets?

Key messages –

- There are multiple ways of meeting the Commission's proposed emissions budgets.
- Gross Domestic Product (GDP) impacts will be lower if New Zealand acts now.
- The Government should seek cross-party support for the emissions budgets.

Next steps for emissions budgets

The Commission's role is to provide independent expert advice on climate change matters, including emissions budgets.

The Government remains the decision maker.

Before taking decisions on emissions budgets the Minister of Climate Change must meet the statutory requirements.

The first three emissions budgets must be in place by 31 December 2021.

What did the Commission say about the direction of the emissions reduction plan?

The Commission's advice included –

- Key sector recommendations
- Advice on Te Tiriti and Māori partnership
- Recommendations in a number of cross-cutting areas
- Advice on a fair and equitable transition.

Local government specific recommendations

Recommendation 8 – Aligning central and local government efforts

Aligning policy and investments to enable local government to make effective decisions for climate change mitigation and adaptation.

Recommendation 12 – Make investments net-zero compatible

Ensuring policy decisions and investments made now support Aotearoa moving towards a thriving, climate-resilient and low-emissions society.

Recommendation 16 – Enable emissions reductions through changes to urban form, function and development

Enabling emissions reductions through changes to urban form, function and development.

Recommendation 28 – A fair, inclusive and equitable transition

Develop an Equitable Transitions Strategy that aims to deliver a well-signaled and inclusive transition, so it maximises opportunities, and minimises disruption and inequities.

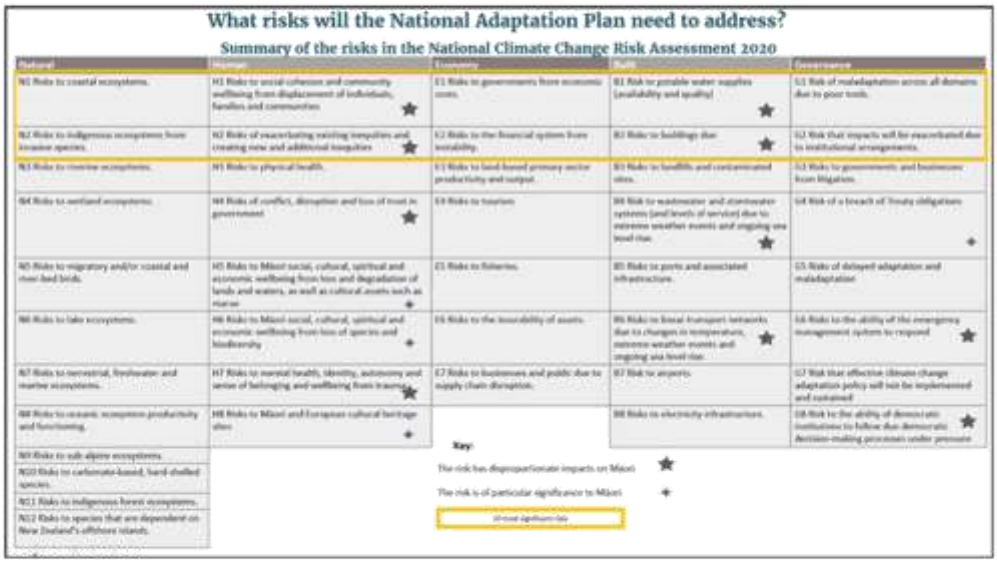
Next steps for the emissions reduction plan

- **The Commission's role is to provide independent expert advice on climate change matters, including emissions budgets.**
- **The Government remains the decision maker.**
- In preparing the emissions reduction plan, the Minister of Climate Change must:
  - consider the advice received from the Climate Change Commission for meeting emissions budgets
  - ensure that consultation has been adequate, including with sector representatives, affected communities, and iwi and Māori and, if not, undertake further consultation
- **Consultation on the emissions reduction plan is planned for August – September 2021 (to be confirmed).**
- **The first emissions reduction plan must be in place by 31 December 2021.**

New Zealand's Nationally Determined Contribution 2021-2030

The Prime Minister and the Minister of Climate Change have indicated that the ambition of New Zealand's NDC will be revised this year, following receipt of the Commission's final advice.

The process for amending the ambition of New Zealand's NDC is not provided under the Climate Change Response Act 2002.



43 priority risks, yellow = 10 most significant risks

The 2019 Zero Carbon Amendment added adaptation into the purpose of the Climate Change Response Act. It also set up a framework to ensure there is a regular national risk assessment every six years, to identify which risks are most important. MfE produced the first risk assessment, but the CCC will produce them in future. The amendment also added the requirement to produce national adaptation plans.

National Adaptation Plan

The National Adaptation Plan is an all-of-government response to the risks identified in the National Climate Change Risk Assessment.

The Plan will set out the government's adaptation work programme for the next 6 years.

What does it need to include?

- **Objectives** for adapting to the effects of climate change
- **Strategies, policies and proposals** to achieve the objectives
- **Timeframes** for implementing actions
- **How** the objectives and actions will address the most significant risks identified in the risks assessment
- **Indicators to measure progress** and enable regular monitoring and reporting by the Commission.

Information request under the Climate Change Response Act

Summary of all responses (56% response rate)

Risks and impacts	Risks of most significance	Support and resources
85% of respondents consider how climate change impacts their ability to carry out their functions, whether that developing policy or delivering services: • Of this 85%, 83% indicated they only partially understand and document these impacts. 76% of respondents have access to some form of data related to the impacts of climate change. • Of the respondents who have access to climate impact data, 30% hold this at the **regional, local and asset level.** 38% of respondent indicate they have used this data to develop plans or strategies to manage the impacts of climate change.	The risks of most concern from the National Climate Change Risk Assessment were identified as: • **B1** risks to buildings (72%) • **H1** risk to social cohesion and community wellbeing (66%) • **N1** risk to coastal ecosystems (70%)	Priority actions or resources that could better help local government prepare for the impacts of climate change were identified as: • tools to help quantify impacts from climate change (79%) • guidance on how to assess and consider the impacts of climate change on an organisation (75%) Barriers to effective adaptation action were identified as: • lack of awareness/education of impacts of climate change by decision-makers/the wider community (60%) • lack of tools/methods by which to engage decision-makers/the community (49%)

Information request under the Climate Change Response Act

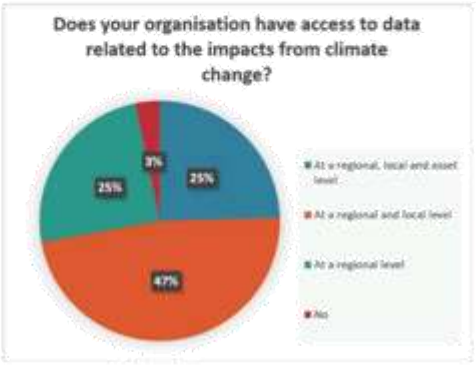
What we heard from local government (78% response rate)

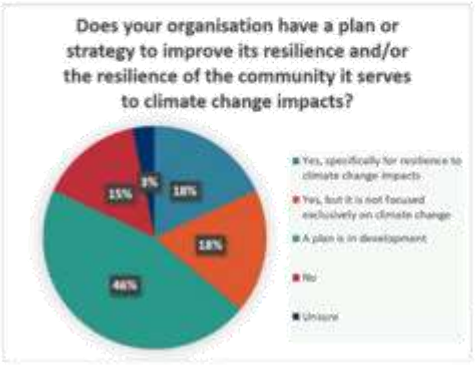
For local government agencies, the risks of most concern from the National Climate Change Risk Assessment included:

Natural	Human	Economy	Built	Governance
N1 Risks to coastal ecosystems, including the intertidal zone, estuaries, dunes, coastal lakes and wetlands, due to ongoing sea level rise and extreme weather events.	H1 Risks to social cohesion and community wellbeing from displacement of individuals, families and communities due to climate change impacts.	E1 Risks to governments from economic costs associated with lost productivity, disaster relief expenditure and unfunded contingent liabilities due to extreme events and ongoing, gradual changes.	B1 Risk to potable water supplies (availability and quality) due to changes in rainfall, temperature, drought, extreme weather events and ongoing sea level rise.	G1 Risk of maladaptation across all domains due to the application of practices, processes and tools that do not account for uncertainty and change over long timeframes.
N2 Risks to indigenous ecosystems and species from the enhanced spread, survival and establishment of invasive species due to climate change.	H2 Risks of exacerbating existing inequities and creating new and additional inequities due to differential distribution of climate change impacts.	E2 Risks to the financial system from instability due to extreme weather events and ongoing, gradual changes.	B2 Risks to buildings due to extreme weather events, drought, increased fire weather and ongoing sea level rise.	G2 Risk of exacerbating impacts across all domains because current institutions, legislation, decision-making frameworks, funding mechanisms are not fit for climate change.

Information request under the Climate Change Response Act

What we heard from local government (78% response rate)





Information request under the Climate Change Response Act

What we heard from local government (78% rate)

Actions or resources that would help your local government better prepare for the impacts of climate change were identified as:

Climate Adaptation Act

Resource management reform: a once in a generation opportunity

Review of the system

- Led by former Appeals Court Judge, Tony Randerson QC
- Expert Panel engaged widely over issues and option
- Made over 140 recommendations
- Produced a platform for reform .

Reforming the system

- The Government announced the repeal of the Resource Management Act on 10 Feb 2021
- Three news laws to be enacted
  - Natural and Built Environments Act
  - Strategic Planning Act
  - **Climate Adaptation Act.**

Climate Adaptation Act

- Support New Zealand's response to climate change
- Address complex legal and technical issues associated with managed retreat and funding and financing adaptation
- MfE will be undertaking targeted engagement over the coming months.

Upcoming engagement opportunities

Phase one: Targeted engagement

- Online webinar and workshop series

Phase two: Public consultation

We will be running consultation over the next year:

- Quarter 3 2021 - emissions reduction plan (TBC)
- Early 2022 – National Adaptation Plan

Schedule of engagement

Environment

Event	Type	Date and time
ERP – how can government and local government work together to enable outcomes and successfully reduce emissions	Workshop	Today, 2pm-4pm
ERP and NAP overview (same content as today)	Webinar	Thursday 8 July, 10am-11am
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Climate change litigation risk for corporate entities

A Dutch Court has recently ruled that Royal Dutch Shell (Shell), due to its global reach, is partially responsible for global climate change. The Court ordered Shell to reduce the carbon emissions that it is responsible for, including in its value chain.

This is a significant ruling. Up until now, for a range of reasons, large emitters have not been found liable in climate change cases. It is perhaps a signal for other "carbon majors" that legal links can be drawn between their actions and the effects of climate change. Simpson Grierson have written a short summary of what has happened, the significance of the decision, and how it relates to New Zealand.

The Shell decision

The Dutch Court ruled that Shell, as a group, must cut its carbon emissions (including by making appropriate decisions in relation to the energy package offered to end-users) by 45% as against its 2019 levels by 2030. The Court found that Shell must reduce its emissions in order to meet its obligation to comply with a standard of care it owes to people in the Netherlands. There were three key drivers to this decision; the Dutch civil code, the size of Shell's emissions (including by supply to end-users) and the clear link to climate change impacts, and the effect these emissions had on international human rights, including the right to life.

Significance of the decision

The Court's ruling is significant for two reasons:

- The ruling is the first time a major corporation has been ordered by a Court to take steps to meet specific emissions reductions. No doubt, it will feature prominently in future arguments of claimants in the more than 40 ongoing climate cases worldwide against carbon major companies.
- To do that, it extends the developing new tort in the climate field, based on a government or emitter's duty of care. Shell is in the same vein as *Urgenda v The State of the Netherlands* (Supreme Court of the Netherlands), and the Australian case of *Sharma v Minister for the Environment (*released a day after the *Shell* ruling). In *Urgenda* and *Sharma* the courts found their respective governments owed a public duty of care, imposing obligations to avoid harm caused by the future impacts of climate change. The Dutch ruling extends this duty of care to a corporate entity.

What does this mean to New Zealand?

The Shell decision will be welcomed by New Zealand climate change claimants. Recently, the High Court refused, in the case of *Smith v Fonterra Co-Operative Group*, to strike out a potential new common law claim against the corporate defendants, arguing that there is the potential for such a tortious duty to exist. *Urgenda, Sharma*, and now the *Shell* decision, all support the idea of a new tortious duty being better established.

Whether these decisions will increase the chances of success for a claim in negligence in New Zealand is unclear. In *Smith*, the Court struck out claims of negligence due to a lack of policy factors supporting a duty of care and a lack of connection between emissions and harm caused. The *Sharma* and the *Shell* decisions place more weight behind potential liability of carbon major emitters for their contributions to climate change.

Impact on litigation risk

Simpson Grierson consider these decisions to further increase the risk of litigation being brought against New Zealand companies that might be targets for this type of litigation. Directors should be alert to the extent to which climate change litigation and the related reputational damage (whether the claim is successful or not) should feature on their risk registers and what steps should be taken to mitigate this.

However, whether these cases materially increase the chances of litigation succeeding in New Zealand Courts is unclear. The upcoming decision in *Smith* remains the most important decision on the horizon in New Zealand.

The other point of note in the *Shell* decision was the company's climate policies, or lack of follow-through on them. Shell was being held to account for its own commitments. Care should be taken by companies when describing their commitment to make emissions related changes. Shell's own publications and policies were canvassed extensively in the Dutch Court and Shell was held to account partly based on its own recognition of international human rights. Companies must be aware that although they may express actions and policies as progressive, they may be measured by the courts against these targets and their real impact. As with any public representation, companies and their directors should be very clear about what they are committing to and ensure they have the resources to follow through.

9.4 STRATEGIC POLICY, ENVIRONMENTAL POLICY & ACTIVITY PLANNING REPORT

Decision Required

Report To:	Strategy and Policy Committee
Meeting Date:	8 July 2021
Report Author:	Jenna Neame, Acting Strategic Policy Manager; Barry Johnson, Environmental Policy Manager; Wouter Woortman, Senior Activity Planning Advisor
Report Number:	RSPC21-07-5

1 Summary

1.1 This report provides the Committee with an update on some of the key highlights of the Community Development, Environment & Planning and Engineering Departments' strategic and environmental policy work and the activity planning work. This report covers the work undertaken by the Strategic Policy, Environmental Policy and Activity Planning sections of the three Departments. This will be the last time these activities are reported from three different Departments. From 5 July these activities will be within the Service and Strategy Group's Strategic Policy and Environmental Policy sections.

1.2 The report seeks decisions on a hearing panel to hear plan change 73 – Omnibus 2 and to wait for the gazettal of the National Policy Statement on Indigenous Biodiversity before progressing policy work on Significant Natural Areas for the Tasman Environment Plan.

2 Draft Resolution

That the Strategy and Policy Committee:

1. **receives the Strategic Policy, Environmental Policy & Activity Planning Report RSPC21-07-5; and**
2. **retrospectively endorses the Council's submission (Attachment 2) on the Ministry of Transport Discussion Document: Enabling Drone Integration; and**
3. **approves the authority to hear and consider submissions and to make recommendations to the Strategy & Policy Committee on Plan Change 73 Omnibus 2 be delegated to Cr _____ (Chair) and Crs _____ and _____; and**
4. **agrees to pause policy work for the Tasman Environment Plan in relation to Significant Natural Areas until the forthcoming National Policy Statement on Indigenous Biodiversity has been gazetted.**

3 Purpose of the Report

3.1 This report provides the Committee with an update on some of the key highlights of the Community Development, Environment & Planning and Engineering Departments strategic and environmental policy work and the activity planning work.

4 Strategic Policy Update – Jenna Neame

4.1 The following table contains an update of the key projects and activities that the Strategic Policy Team staff either manage or are involved in:

Project	Description	Status	Comments
Long Term Plan (LTP) 2021-2031	Comprehensive plan of Council's activities and projects for 10 years and how Council will fund them. The LTP is reviewed every three years.	On track	The final LTP is to be adopted on 30 June 2021. The final designed version will be prepared after adoption and prior to 31 July 2021. Letters to submitters will be sent after adoption of the LTP.
Draft Schedule of Fees & Charges 2021/2022	Under the Revenue and Financing Policy, Council can set fees and charges to recover some, or all costs associated with its services. Some of these fees and charges are set by statute, and others by the Council. Staff review the fees and charges annually and recommend changes, additions or deletions.	Complete	The public consultation period was concurrent with the LTP consultation (Council received 72 submissions points from 68 submitters). Council adopted the final Schedule of Fees and Charges 2021/2022 at the Full Council meeting held on 4 June 2021.
Reserve Management Plan projects	Staff are preparing a draft Moutere-Waimea Ward Reserve Management Plan (RMP). Further information about this project (including an updated timeline) is available online at: www.tasman.govt.nz/my-council/projects/moutere-waimea-reserves-project/	On track	The final step in the process of classifying reserves in Moutere-Waimea Ward was completed on 29 June 2021, when a notice to that effect was published in the New Zealand Gazette (GN2021-ln2599). Staff are preparing a draft Moutere-Waimea Ward RMP. The two-month submission period is planned to take place from late August to late October 2021. Staff anticipate presenting the final plan to Council for adoption in December 2021.

Project	Description	Status	Comments
Tasman Climate Action Plan	Council adopted the Tasman Climate Action Plan (TCAP) in September 2019. The Plan is available online at www.tasman.govt.nz/link/climate-action	On track	A cross-Council team is working on a number of projects to implement the TCAP. Budget has been included in the LTP 2021-2031 to implement the TCAP over the next decade. Staff recently engaged Toitū to assist staff to define the scope and boundaries of the Council's greenhouse gas emissions, with a report due to be received by late June. Going forward, staff will provide an update on TCAP initiatives, along with other relevant information, in a standalone 'Climate Change Update' report to alternate Strategy and Policy Committee meetings. The first of these reports is included on today's agenda.
Waimea Inlet Action Plan	Council adopted the 'Waimea Inlet Action Plan' in March 2019. The action plan was developed to implement the 'Waimea Inlet Management Strategy 2010'. Both are available online at: https://www.tasman.govt.nz/my-council/key-documents/more/environment-reserves-and-open-space/waimea-inlet-management-strategy/	On track	The Waimea Inlet Coordination Group's next major task is to review both the Management Strategy and Action Plan documents. The Group have agreed upon the proposed work programme for the review. Staff are in the initial planning stages and have scheduled a hui that will include iwi. Staff anticipate that both documents will be reviewed by June 2022. Updates on the MfE-funded projects relating to Waimea Inlet are included in the Environmental & Planning report to Council's Operations Committee.
Annual Report 2020/2021	Financial and performance reporting for 2020/2021, Year 3 of the Long Term Plan 2018/2028.	On Track	Project planning is underway. Audit NZ has provided the Audit Plan, with the audit opinion and Annual Report scheduled for adoption on 21 October 2021.
Annual Residents Survey	A survey of a representative sample of residents to get feedback on Council performance	On Track	Research First has completed this survey, which was conducted by telephone from Research First's landline and cell-phone databases. Results from the survey are expected at the end of June to feed into the Annual Report.

Project	Description	Status	Comments
Project Kōkiri - the Nelson Tasman Economic Response & Regeneration Action Plan	Project Kōkiri is a collaboration that NRDA is leading in partnership with Council, the Nelson Tasman Chamber of Commerce, Nelson City Council, iwi, and the regionally-based government agencies. It sets out our plan for targeted economic stimulus activity over the next 12 months to help protect and create new jobs, stimulate local spending, and attract investment into the region.	On Track	Project Kōkiri are turning their attention to the next five years. Their aim is to ensure the region has an enduring response plan in place as we continue to adapt and navigate the challenges of Covid-19. It will shift the focus to the "Recovery & Regeneration" phase as an evolution of the initial Project Kōkiri Action Plan. In March 2021, NRDA released the Project Kōkiri 2.0 Discussion Document. The document seeks input from stakeholders across the region on the challenges, missions and mission projects people would like to see prioritised as part of the new five year strategy.
Interim Policy on Giving Consent to Fly Unmanned Aircraft over Council Land	Staff have commenced a review of this policy as part of the periodic review of Council policies.	Delayed	Staff will re-commence work on this Policy now LTP work is largely complete.

Submission on Ministry of Transport Discussion Document: Enabling Drone Integration

4.2 The Ministry of Transport released a discussion document (Attachment 1) on enabling drone integration in the aviation regulations for consultation. The discussion document has the safety and security drone use as its primary focus and does not consider aspects such as privacy as this is covered by other legislation. The document recognised that drones are rapidly emerging technology that is challenging the way aviation is regulated in New Zealand. It acknowledges that drones can be used for a wide range of activities never envisioned for manned aircraft and that in some respects drones are becoming more accepted by the general public.

4.3 The Council's interest in the discussion document comes from several different perspectives across the Council's activities, as follows. The Council:

- operates two aerodromes in Motueka and Takaka, and is a 50% shareholder in Nelson Airport;
- owns and operates drones which it uses for infrastructure development, maintenance and renewals, river management, environmental monitoring, enforcement and compliance;
- employs contractors that operate drones in for instance commercial forestry management; and
- provides consent for drone pilots to fly over Council land via a policy and by considering individual requests.

4.4 The discussion document identifies a number of issues with the current regulatory arrangements including: a lack of compliance by drone pilots, enforcement can be difficult and ineffective, some of the current rules are not fit for purpose, and the current aviation system does not enable drone integration.

4.5 One of the potential changes to the regulatory system suggested in the discussion document is a change to the rule on giving consent to fly drones by the landowner of the land over which a drone is being flown. The Council manages this requirement through its Interim Policy Giving Consent to Fly Unmanned Aircraft Over Council Land (2015) (pages 7-11 in Attachment 2). Staff have begun work to review this policy but it has not yet reached a stage for Council consideration.

4.6 The discussion document also seeks feedback on a number of other changes of interest to the Council, including reviewing the minimum flying distance from aerodromes, introducing the requirement for a basic drone pilot qualification, drone registration, remote identification of drones, and geo-awareness (i.e. pilots or autonomous platforms ability to directly know, perceive and understand the environment in which they operate).

4.7 Staff drafted a Council submission (Attachment 2 - pages 1-6) on a number of the changes suggested in the discussion document and this was signed by the Mayor to enable the submission to be submitted prior to the closing date. Staff now seek retrospective approval for this submission.

5 Environmental Policy Update – Barry Johnson

Hearing Panel –Plan Change 73 Omnibus 2

5.1 Plan Change 73 Omnibus 2 (PC 73) was publicly notified on 19 December 2020. The Plan Change proposes a number of relatively simple changes to the existing plan covering:

5.1.1 minor amendments to correct errors and anomalies;

5.1.2 simple adjustments to improve clarity of interpretation or implementation and to remove redundant rules and other items from the TRMP;

5.1.3 changes to rules that currently result in unnecessary resource consent processes;

5.1.4 zone updates, including fixing the locations of some mapped Plan items; and

5.1.5 improving consistency of some rules across the District.

5.2 Proposed PC 73 received 23 submissions and five further submissions. The further submissions and updated summary of the submissions are on Council's website: Change 73: Omnibus 2 | Tasman District Council.

5.3 The next process step, hearing preparation, includes drafting of s42A staff assessment reports, appointing a hearing panel and setting a hearing date. The hearing date is likely to be mid to late October 2021 and the hearing will take one to two days.

5.4 The recommendation is to delegate the authority to hear and consider submissions and to make recommendations on the PC73 to three or more Councillors that are accredited hearings commissioners.

Update on significant environmental policy projects

Outstanding Natural Features and Landscapes, and the Coastal Environment

5.5 Following the development of a draft Tasman Landscape Study and draft Tasman Coastal Environment Study, the Council has led a period of landowner engagement on these topics. Given the spatial extent of the Outstanding Natural Features and Landscapes (over 70% of the District has been identified as being ONFL) and the extent of the Coastal Environment

(around 500km of coastline), it was considered efficient to engage on these topics together. A large proportion of the identified areas are public land e.g. National Parks, but areas also overlap private land ownership.

5.6 The programme of engagement included:

- mailout - around 3,500 letters were sent out to landowners with information on the projects, links to the website and information on open day events;
- website – this provides an interactive mapping tool to identify overlay areas, links to public webinars, links to the technical reports, FAQ's, contact details and a feedback form;
- webinars - four webinars were held during the week of 12 April 2021 to give a summary of the coastal and landscape topics and the work undertaken to date, and allow live question and answer sessions to address participants concerns; and
- open day events and meetings – 13 open day events were held over the course of two weeks (late May/early June) across the District to meet with landowners and discuss property specific issues, as well as some separate meetings with small groups and individuals.

5.7 Next steps proposed for these topics include:

- follow up to engagement – feedback from this engagement process has been extensive and we are working through responding to the hundreds of questions and comments;
- meetings and site visits –follow up meetings and site visits to review boundaries of the areas with some landowners are being planned where this has not been resolved through the engagement process to date. In addition, there will be specific discussion on possible rules to better understand the possible management approach. Iwi engagement is also being scheduled. Meetings and site visits are likely to be scheduled in August–October 2021;
- testing of possible rules – a group will be established to test possible rules and to provide specific feedback on the implications of rules as they would apply on the ground; and
- documentation – feedback on the engagement process, mapping, study changes and rule concepts will be documented in a brief report and brought back to Councillors later this year.

Significant Natural Areas

5.8 The recent landowner engagement on Outstanding Natural Landscapes and the Coastal Environment has highlighted the stress that many in our communities, including rural landowners and iwi are experiencing due to the volume and pace of change. Changes to environmental legislation and regulation are a large contributor to the stress and anxiety. This is playing out around the country as recent media coverage on Far North District Council's decision to pause work on significant natural areas illustrates.

5.9 The Hon James Shaw Associate Minister for the Environment (biodiversity) and the Hon Nanaia Mahuta Minister of Local Government wrote to all local authorities on 11 June regarding progress on the National Policy Statement for Indigenous Biodiversity (NPS-IB) (Attachment 3). The letter from Ministers essentially says that the NPS-IB has been delayed

again and encourages councils to continue work to identify Significant Natural Areas (SNAs). Gazettal of the NPS-IB is likely to now be toward the end of 2021.

5.10 A key component of the proposed NPS-IB is the requirement for councils to map SNAs and to include SNAs, along with rules requiring protection in all district plans. To date Tasman District Council has had a position of not including SNAs in its plan. Instead there has been a voluntary survey programme where landowners with potential SNA's are approached to be part of the survey programme. If they agree, an ecologist completes a survey, discusses what they find with the landowner and provides a detailed report on the significance of the land and management options to maintain it. The report is held at Tasman District Council but is considered private and only given out with landowner consent.

5.11 This programme comes under the umbrella of the Native Habitats Tasman oversight group that was established in 2007 following appeals on the Tasman Resource Management Plan related to indigenous biodiversity. Membership of the group comprises Department of Conservation, Forest and Bird, Federated Farmers, Friends of Nelson Haven and Tasman Bay, Ministry of Primary Industries and Tasman District Council.

5.12 To date, the majority of the Tasman District has been covered. Work is currently underway in Golden Bay and the Moutere with the Buller to come next. It will take another 18 months – two years to complete the voluntary programme of surveys across all of Tasman. Uptake of the volunteer programme has seen on average, about 70% of landowners that have been contacted take up the offer of having SNAs surveyed and mapped. The voluntary landowner buy-in has built significant trust and knowledge to date. Under the Jobs for Nature programme, Tasman has successfully secured $2 million to undertake weed control in SNA's. This will support landowners with identified SNAs and may serve as an incentive for some additional landowners to be part of the programme.

5.13 The proposed requirements in the NPS-IB to regulate SNAs will change all of this and risks undoing the good work and good will to date. However, until the NPS-IB is gazetted we will not know precisely what the legal ramifications for landowners and Council will be. For that reason staff intend to wait for the gazettal of the NPS-IB before commencing any work on SNAs related to the development of the Tasman Environment Plan. That means until the NPS-IB is gazetted and staff have the opportunity to understand its implications, the only work related to the identification of SNAs that Tasman District Council will be involved with will be the voluntary programme through Native Habitats Tasman. There will be no desk top or aerial assessment of potential SNAs outside of the voluntary work.

5.14 The following table gives a brief update on all of the significant environmental policy work streams.

Project	Description	Status	Comments
Whole of Plan review	Review of the Tasman Regional Policy Statement and Tasman Resource Management Plan	On track – but future unclear	Team is developing issues and options on plan topics. Resource Management legislation review has created uncertainty. Project timelines will need to be reviewed when further information becomes available.

Project	Description	Status	Comments
E-Plan	Procurement and implementation of an electronic plan to replace paper based planning documents	On hold	Placed on hold due to current uncertainty around future plans. Will be revised when more information is available
Takaka & coastal catchments water management (Takaka FLAG)	Development of a plan change to implement the National Policy Statement for Freshwater Management	On Track	Draft plan change is in development. Staff are completing further analysis to aid decisions on some outstanding recommendations.
Te Waikoropupū WCO (note: not a Council process)	Application for a Water Conservation Order over Te Waikoropupū and the supporting aquifer.	In progress	Court mediation is ongoing. Expert conferencing is likely to be August/September. No hearing date yet. Anticipate hearing could be late 2021/early 2022.
Waimea Plains water quality management (Waimea FLAG)	Project to activate nutrient management plan requirements in Tasman Resource Management Plan.	On track	Working with stakeholders and past Waimea FLAG members to develop an issues and options paper.
Action for healthy waterways	Government's package of legislative reforms around management of freshwater	In progress	Working with iwi, Nelson City Council and Marlborough District Council to develop a Te Tau Ihu wide plan for implementing new NPS requirements. New policies required by NPS were inserted into TRMP on 19 December.
Coastal Hazards	Project to identify and manage coastal hazards in Tasman.	On track	Vulnerability and Risk assessment complete. Working with iwi to identify iwi values at risk. Next round of community engagement August/September 2021.
Growth/Future Development Strategy	Ongoing work to implement the Nelson Tasman Future Development Strategy.	On track	Housing needs assessment and a business needs survey completed. Review of current FDS commenced 1 July 2021.
Mooring management review Coastal occupation charges	Project to change the way moorings are managed and to develop policy on coastal occupation charges.	On track	Hearings completed. Decision soon to be released.
Programme of urban re-zonings arising from Special Housing Areas (SHA).	Plan change project to fix zoning anomalies that resulted from SHA gazettals.	On track	Hearing panel appointed. Awaiting hearing date.

Project	Description	Status	Comments
Omnibus 2 plan change	Omnibus to tidy up a number of minor errors and anomalies in the TRMP	On track	Decision on hearing panel part of this report. Hearing likely to be October 2021.

6 Activity Planning Update – Wouter Woortman

Infrastructure Commission, Infrastructure Strategy Submission

6.1 Staff drafted a submission on the Commission's Strategy discussion document. This was approved at the 24 June Operations Committee meeting.

Significant Stormwater Milestone

6.2 On 26 May 2021 Council was granted District Wide Stormwater Consents that allow for stormwater activities associated with its stormwater networks and associated discharges to land, freshwater and the coastal marine area for a duration of 20 years. The consent applies to all 15 Urban Drainage Areas. This success was led by Wouter Woortman. It is the latest in a string of successes for stormwater planning at Council (noted below), led by Wouter.

- **Development of a Council's Urban Stormwater Strategy** - that guides our management of stormwater, including environmental, cultural, and flooding management, and provides the strategic context for our catchment management plan programme. Northland District Council has requested to use Tasman District Council's strategy as the template for their own Stormwater Strategy.
- **Catchment Management Plans** – Council currently has just one (Richmond), but Motueka is in progress and Mapua/Ruby Bay will be started in 2021. More importantly, when Wouter arrived, he took several years of works by our consultants and concluded the process for Richmond using an innovate storymaps format - click here or go to https://tdc.maps.arcgis.com/apps/MapSeries/index.html?appid=ea92237d9c8446caa391e55061cc879d. This format has been picked up by consultants elsewhere and other councils (Hastings/Hawkes Bay, Environment Canterbury, and Otago) have all started using the storymap format for presenting catchment management plans and information.
- **Development of pan-council flood modelling specifications** - the specifications have helped the Council to become a better, smarter consumer of modelling services. Apart from being more useful, the modelling undertaken is now cheaper and faster. For example, the Richmond Stormwater Model cost over $200,000 to develop and nearly two years to complete. New models now cost $20,000-$50,000 and take a few months to develop.
- **Development of several stormwater models** – Richmond, Motueka, Mapua/Ruby Bay, Brightwater, and Wakefield. Three years ago, we were still only finalising the first one. The model results, in combination with (survey) data of building floor levels, has allowed staff to take a risk based planning approach, based on likelihood and consequence of stormwater flooding. Apart from infrastructure planning for the stormwater activity, our stormwater models also provide valuable input into other workstreams across the organisation (consenting, Land Information Memorandums/Property Information Memorandums, landuse planning, natural hazards mapping, growth model and Future

Development Strategy) and has enabled much better decision making for Council. The models are also available to developers to use, helping them plan their developments.

- **Overland flowpath mapping** – overland flowpath mapping for the entire region has been completed and verified for urban areas. Overland flowpaths play an essential role in the management of stormwater during extreme rainfall events that exceed the capacity of our piped networks. The maps help staff to manage flowpaths as stormwater assets requiring a form of protection and maintenance. The known location of overland flowpaths informs decision making right across Council, especially consenting. It helps ensure development and landuse changes do not place people or property at risk.
- **Stormwater section of the Land Development Manual (LDM)** – the LDM stormwater section was changed substantially in 2019 to provide better guidance on managing stormwater from new development, including meeting environmental requirements (not just flood management or mitigation). The new LDM was also accompanied by new practice notes, two of which Wouter developed (bio–retention and constructed wetlands).
- **Natural Stream Design Guideline –** the lessons learned from the development of Borck Creek, Poutama Creek and other land use developments in the District have been combined with international best practice for Natural Stream Design. The key principles have been translated into a guideline for Natural Stream Design that will form the basis for future stream upgrades in Richmond South and other developments in the District.
- **Kingsland Forest Stormwater Modeling –** effects from forestry harvesting in the Kingsland Forest on stormwater flows and flood risks in Richmond have been investigated. The results helped guide the harvesting programme to minimise effects on flows and provided input into the development of the Kingsland Forest Management Strategy.

6.3 The table below provides a summary of key strategic planning projects currently in progress.

Project	Description	Status	Comments
Transportation: Strategic Policy and Research			
Richmond Programme Business Case (NZTA Project)	The Richmond Programme Business Case (PBC) is led by Waka Kotahi / NZTA to identify issues and develop an improvement plan to address these issues. This work is being undertaken alongside the Nelson Future Access Project (NFAP) to ensure consistency across the network.	On track	**Target completion date: late 2021** Officers have developed an emerging preferred programme of works based on workshops with key stakeholder and a technical assessment. Officers will undertake community engagement on the preferred programme to complete the draft programme for Waka Kotahi and Council consideration. The final PBC (including endorsement from Waka Kotahi and Council) is expected in the fourth quarter of 2021.

Project	Description	Status	Comments
Active Transport Strategy	Develop an active transport strategy to guide development of our walking and cycling networks across the District. This will help address a key transportation issue for our District – "*our ageing population requires access to more diverse transportation options to ensure personal mobility is maintained*". This work is in line with the direction that Central Government has given and with our community expectations.	Delayed	**Target completion date: September 2021** Staff are developing a draft document which will be presented and discussed with Council in July. The final strategy is planned to be adopted by the end of September 2021 after public consultation in August 2021.
Public Transport Review	Work with Nelson to undertake a joint review of public transport services and recommend changes for inclusion in the 2021 Regional Public Transport Plan (RPTP) for funding from NZTA.	On track	**Target completion date: June 2021** The RPTP signals a step change in public transport within Tasman. This includes new services to Wakefield and Motueka and improved services between Richmond and Nelson. The Regional Transport Committee has recommended that Full Council approve the final RPTP document. The final Public Transport Plan is planned to be adopted at Full Council on 30 June 2021.
Regional Boat Access Study	Undertake a study to determine a location, and scope of works for a boat ramp and associated facilities within Tasman Bay.	On track	**Target completion date: September 2021** During the LTP deliberations Council resolved to provide funding to a new boat ramp in Mapua at Waterfront Park. Staff will complete the Boat Access Study. A follow up hui with iwi to discuss revised options will be scheduled for July.

Project	Description	Status	Comments
Regional Land Transport Plan	The Regional Land Transport Plan (RLTP) is a statutory document that every regional council has to undertake to be eligible for funding from the National Land Transport Plan.	On track	**Target completion date: June 2021** Staff have been working with Marlborough, Nelson and Waka Kotahi to create a joint RLTP that represents Te Tauihu. The RLTP reflects the direction of Council's LTP. The Regional Transport Committee has recommended that Full Council approve the final RLTP document. The final RLTP is planned to be adopted at Full Council on 30 June 2021.
Transport related submissions	Submissions on Waka Kotahi's proposed Speed Management Plan and the Ministry of Transport green paper on Transport	Completed	Staff drafted submissions on both sets of proposals and these were approved by the Operations Committee on 24 June 2021.
Stormwater: Strategic Policy and Research			
Richmond South Stormwater planning	Development of a stormwater management plan for existing and future development areas in Richmond South, including cross section designs for planned drain upgrades. Stormwater Management Plan will feed into a structure plan for the area.	On track	**Target completion date: December 2021** The model has been updated with new Lidar and updated hydrology and is being used to determine flow capacity and future channel designs for Richmond South.
Motueka Catchment Management Plan (CMP)	The Motueka CMP will identify and address key issues such as flooding, water quality, stream health and effects from developments in a holistic manner, similar to the Richmond CMP.	On track	**Target completion date: fourth quarter 2021** The individual components that feed into the CMP have been finalised and the digital "storymap" format has been drafted. Staff have engaged iwi partners to discuss the various elements of the plan. A workshop is planned with Council in the third quarter of 2021.

Project	Description	Status	Comments
Discharge Consent	A resource consent is required for the diversion and discharge of stormwater from Council's public stormwater networks in accordance with the provisions of the Tasman Resource Management Plan.	Completed	On 26 May 2021 Council was granted District Wide Stormwater Consents that allow for stormwater activities associated with its stormwater networks and associated discharges to land, freshwater and the coastal marine area for a duration of 20 years. The consent applies to all 15 Urban Drainage Areas. Staff are working with Resource Consent to address a few minor corrections under S133a of the RMA. The first actions required by condition of consent are the completion of the Motueka CMP and development of a monitoring plan and reporting process for the Richmond CMP.
Māpua, Ruby Bay and Coastal Tasman Stormwater Modelling	A stormwater model for Māpua, Ruby Bay and Coastal Tasman to identify locations that are at risk of stormwater flooding in 1% and 10% AEP events.	On track	**Target completion date: June 2022** The Māpua/ Ruby Bay stormwater model is currently being used to identify and test high level solutions for future growth and key areas of concern.
Overland Flowpath Management	Overland flowpaths have been mapped and verified in the field for all urban area. This next phase of the project is about identification of key overland flowpaths and works required to reinstate or improve them. The aim is also to put legal mechanism in place that protect overland flowpaths from development.	On track	**Target completion date: TBC** A consultant has been engaged and staff are awaiting a proposal that addresses the scope.

Water: Strategic Policy and Research			
Water Network Modelling	Modelling of various water supply networks.	On track	**Target completion date: Brightwater (August 2021) & Mapua/Ruby Bay (complete)** Staff have engaged a consultant to develop a hydraulic model for the Brightwater network and are collating data for the model build. Staff anticipate the model to be completed in August 2021. Consultants have recently completed modelling growth scenarios to determine how much surplus water from the Mapua/Ruby Bay Water Supply can accommodate further development in the surrounding area.
Water Safety Consultation	Public consultation on chlorination of all Council water supplies	Completed	**Target completion date: May 2021** On 20 May 2021 Full Council agreed to use chlorine to provide permanent residual disinfection of all Council water supplies including Richmond, Riwaka/Kaiteriteri, Motueka, Hamama and Upper Takaka.
Three Waters Submissions	Consultation on the supplementary Order Paper (SOP) No. 38 on the Health (Fluoridation of Drinking Water) Amendment Bill. At present, the Health (Fluoridation of Drinking Water) Amendment Bill, would empower district health boards (DHBs) to direct a local authority drinking-water supplier to add or not to add fluoride to drinking water supplied from a drinking water supply. The SOP would instead confer the power on the Director-General of Health.	Completed	Consultation on the SOP was open for only eight days in June and staff provided a written submission on 18 June. The Operations Committee ratified the submission on 24 June 2021. Staff plan to make submissions on the exposure drafts relating Water Services Bill.
Wastewater: Strategic Policy and Research			
Wastewater Network Modelling	**Modelling of Motueka network**	Completed	**Target completion date: March 2021**

			The four-staged wastewater modelling project has been completed. Staff and consultants recently had a close out meeting to discuss model outputs and recommendations for operations, renewals and strategic planning.
	Modelling of Waimea network Network monitoring, data analysis and model outputs will inform the timing of specific capital works projects that are planned as part of the Waimea Wastewater Network Strategy.	On track	**Target completion date: December 2021** Staff have engaged consultants to undertake a four staged modelling project for the Waimea wastewater trunk main. Consultants have recommended to collect additional flow data before building and calibrating the model.
Motueka Wastewater Strategy	Development of a long-term wastewater network strategy for Motueka, including for the relocation of the Waste Water Treatment Plant.	Delayed	**Target completion date: 2021/22** Staff are working with iwi to refine cultural criteria for the site criteria framework. Staff plan to present the completed and score framework at the next hui (likely to be held in July/August). Target completion date has been delayed due to resourcing constraints within the working group.

Attachments

Discussion Document

Enabling Drone Integration

6 April 2021

Ministry of Transport
TE MANATŪ WAKA

Enabling New Zealanders to flourish

Finding your way around this document

How to have your say

This discussion document seeks feedback on a proposed approach to enhance the New Zealand drone regulatory regime and enable the integration of drones into the civil aviation system. It does not represent Government policy nor does it predetermine the options the Government may consider when making final decisions.

What consultation process will be followed?

Written submissions must arrive by 5:00 pm Friday 21 May 2021.

Submissions can be sent to the Ministry at:

enablingdroneintegration@transport.govt.nz

or

Enabling Drone Integration - Consultation
Ministry of Transport
PO Box 3175
WELLINGTON 6140

You can also have your say online at www.transport.govt.nz/drone-consultation .

Publishing and releasing submissions

All or part of any written submission (including names of submitters), may be published on the Ministry of Transport's website.

Your submission is public information and we will publish a summary of submissions. If you do not want your name or any identifying information to be included in anything we publish (including because you believe your comments are commercially sensitive), please indicate this clearly in your submission.

Please note that your submission is also subject to the Official Information Act 1982 (OIA). This means that other people will be able to obtain copies of submissions by making a request under the OIA. If you think there are grounds for your information to be withheld under the OIA, please note this in your submission. We will take your reasons into account and may consult with you when responding to requests under the OIA.

You must let us know, when making your submission, if you do not want us to pass details of it (including your name) on our website.

Expected next steps

Our next steps and timeline will be informed by the public consultation and post-consultation policy development. The timing of these steps is dependent on the nature of the feedback and alignment with other Government priorities.

We intend to provide an indicative timeline when presenting final policy recommendations.

Milestone	**Status**	**When**
Drone Integration paper *Taking Flight* released	Done	July 2019
Early engagement with key stakeholders	Done	September – November 2019
Public consultation	**We are here**	**6 April – 21 May 2021**
Post-consultation policy development	TBC	2021
Final policy recommendations to Minister and Cabinet approval	TBC	Late 2021
Rules development process	TBC	2022 – 2023

Glossary

Beyond visual line of sight (BVLOS)	An operation in which the remote pilot does not use visual references to the remotely piloted aircraft in the conduct of flight.
International Civil Aviation Organisation (ICAO)	United Nations specialised agency, established by States in 1944 to manage the administration and governance of the Convention on International Civil Aviation (Chicago Convention).
Joint Authorities for Rule Making on Unmanned Aircraft (JARUS)	JARUS is a group of international experts gathering regulatory expertise from all around the world with the purpose "to recommend a single set of technical, safety and operational requirements for all aspects linked to the safe operation of the Remotely Piloted Aircraft Systems (RPAS).
Notice to Airmen (NOTAM)	A notice providing pilots with general information essential for the safe and efficient operation of airplanes (such as the establishment or condition of, or change in, any aeronautical facility, service, procedure, or hazard).
RealMe, Tēnei au	New Zealand Government service to easily and securely prove online identity.
Remotely Piloted Aircraft (RPA)	An aircraft and its associated elements which are operated with no pilot on board.
Remotely Piloted Aircraft System (RPAS)	A remotely piloted aircraft, its associated remote pilot station(s), the required command and control links and any other components as specified in the type design.
Unmanned Aircraft (UA)	An aircraft designed to operate with no pilot on board, and that includes unmanned balloons, control line model aircraft, free flight model aircraft and remotely piloted aircraft.
Unmanned Aircraft Systems (UAS)	An aircraft and its associated elements which are operated with no pilot on board.
Unmanned Aircraft Vehicles (UAV)	An aircraft with no pilot on board. An Unmanned Aircraft Vehicle is a component of an Unmanned Aircraft System.
Visual line of sight (VLOS)	An operation in which the remote pilot or RPA observer maintains direct unaided visual contact with the remotely piloted aircraft.

Introduction

1 Drones are rapidly emerging technologies that are challenging the way we regulate the existing aviation system in New Zealand. Drones are aircraft that can be remotely piloted or flown autonomously. Drone capabilities and costs vary widely, and they come in various forms, including blimp, fixed-wing and rotary-wing. Many retail drones can be bought by anyone and operated without the need to complete training or licensing.

Throughout this document, the term '**Drone**' is used to describe Unmanned Aircraft (UA) flown under Part 101 or 102 of the New Zealand Civil Aviation Rules (the Rules).

Under the Rules, a UA is an **aircraft 'designed to operate with no pilot on board'**. This includes unmanned aerial vehicle (UAV) (also know as remotely piloted aircraft (RPAS)), unmanned aerial system (UAS), and model aircraft.

2 Drones can also perform a wide variety of activities never envisioned for manned aircraft. Drone technology has rapidly developed and drones are now used for many purposes, e.g. in emergencies such as fires or search and rescue operations, for surveying and mapping, agriculture, inspecting, maintaining rail and energy infrastructure, as well as more recently, for delivering goods and carrying people.

3 In recent years, the global drone market has increased substantially, particularly in terms of civilian applications, with significant investment in development for both hobbyist and commercial purposes. Drones are expected to continue to grow in popularity, leading to efficiency and productivity gains across various sectors. The global drone market generated USD 25.59 billion (NZD 38.29 billion) in 2018 and is estimated to grow at 8.45 percent during the forecast period, 2019-2029. The Asia-Pacific region is shown as having the highest growth rate during the forecast period.[1]

4 The Government is aware of the rapid growth of the drone sector with data showing an increasing number of drones being purchased and operated in New Zealand. New Zealanders are finding interesting and innovative ways of using this technology in their businesses and everyday lives. This trend is not unique to New Zealand as many countries are currently grappling with the same drone uptake and related challenges.

[1] See *Global Unmanned Aerial Vehicle (UAV) Market – Analysis and Forecast, 2019-2029 - Focus on VLOS and BVLOS UAVs using Satellite Communications*, BIS Research, 2019: https://bisresearch.com/industry-report/unmanned-aerial-vehicle-market.html

Drones in the civil aviation system today

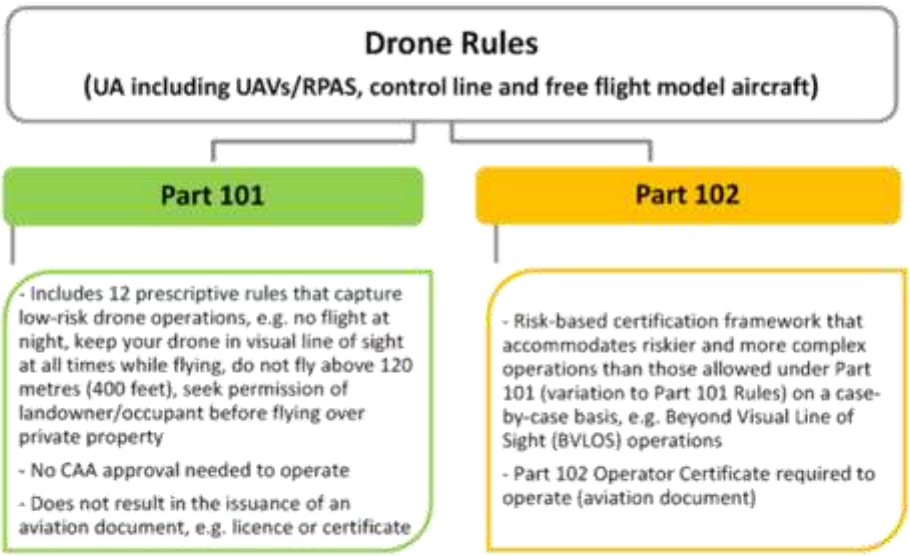
New Zealand regulatory framework applicable to drone operations

5 The Civil Aviation Act 1990 (the Act) and the Civil Aviation Rules (the Rules) govern and regulate civil aviation in New Zealand. Both set the minimum aviation safety and security standards in New Zealand that apply to all civilian aircraft, pilots and persons operating, including drones. The Civil Aviation Authority (CAA) oversees the safety and security standards of the aviation system.

6 Rules for drone operations date back to the mid-1990s. Amendments were made in 2015 to create Part 102 Rule – *Unmanned Aircraft Operator Certification* – in addition to the existing Part 101 Rule. Recognising the rapid changes occurring in the drone sector, this was intended as an interim step to manage and mitigate short-to-medium-term safety risks of more advanced drone operations.

7 Since 2015, New Zealand has had a two-tiered, risk-based regulatory regime for drones operations as shown in Figure 1 below. This recognises that prescriptive rules alone cannot anticipate all potential drone applications or future requirements. Unlike other countries such as Australia and the United States, no distinction is made between commercial and recreational operations. Instead the Rules consider the safety risks of an operation, rather than the purpose of the operation.

Figure 1: Current regulatory regime applicable to drone operations



8 The Rules and the level of CAA approval required to fly a drone are also differentiated by weight, as set out in Table 1.

Table 1: Drone differentiation by weight

Weight of drone	CAA approval
Less than 15 kilograms and operating within Part 101 limits	No approval required
15 – 25 kilograms and operating within Part 101 limits	Must be inspected and the operation approved by a person or organisation approved by the Director
25 kilograms and over *OR* Operating outside Part 101 limits	Approval required: operation must be certified under Part 102

9 Persons wanting to operate outside the bounds of Part 101 (i.e. when they need a variation to Part 101 Rule(s), e.g. to fly at night or operate BVLOS), must apply for a Part 102 *Operator Certificate* from the CAA. To obtain their certificate, Part 102 operators must demonstrate that they are trained, that their aircraft can be safely operated, and pass a fit and proper person test. When certified, they can enter the civil aviation system and must conduct their operations under the conditions of their certificate, as prescribed by the CAA.

10 This contrasts significantly with Part 101 operators who are not required to get CAA approval or to pass any test to enter and operate in the aviation system, as long as they operate their drone in compliance with the set of prescriptive Rules under Part 101.

11 An overview of the types of drone operations taking place in New Zealand is provided in Appendix 1.

Enforcement and penalties

12 The CAA investigates breaches of the Act and the Rules, can issue warnings and infringement notices under the Act and the Civil Aviation (Offences) Regulations 2006 and initiates prosecutions for offenses. The Police can also carry out enforcement action.

13 Some general offences under the Act are applicable to drone operations, such as operating an aircraft in a careless manner.[2] Act level offences are usually major offences requiring high thresholds for enforcement.

14 For Rules-level offences involving breaches of the Rules, the Civil Aviation (Offences) Regulations 2006 sets out the amounts that may be imposed as infringement fees by the CAA and as fines by courts upon conviction.[3]

Other relevant legislative frameworks applicable to drone operations

15 Beyond civil aviation legislation, the misuse of drones is also addressed through the Privacy Act 2020, the Conservation Act 1997 and the Department of Conservation (DOC) concession regime, the Summary Offences Act 1981, and the Crimes Act 1961.

The **Privacy Act 2020** promotes and protects individual privacy, and establishes principles on the collection, use, and disclosure of information relating to individuals; and access by individuals to information held about them.

There are unique **privacy concerns** associated with drones equipped with cameras or other technologies, allowing personal information to be collected. They can have a significant adverse impact on privacy. Unlike phones or other cameras, drones can fly to greater heights and capture imagery that cannot be obtained under ordinary circumstances.

There are important provisions relating to drone use in the **Conservation Act 1987**. This Act promotes the conservation of New Zealand's natural and historic resources and captures the effects of Aircraft on wildlife, tangata whenua values for particular sites, and manages visitor experiences under Part 3B.

Applying the Conservation Act 1987 and the consent requirements of Part 101, all drone use on conservation land requires a permit, for both recreational and commercial purposes. For more information, see https://www.doc.govt.nz/get-involved/apply-for-permits/drone-use-on-conservation-land/.

16 Similarly, some local authorities have enacted bylaws applicable to drones. The AirShare website has a page that summarizes and provides links to local authority and DOC policies regarding drone use in public spaces throughout the country.[4]

[2] See sections 43, 43A and 44 of the Act.

[3] Some Rules under Part 101 have been introduced with associated offences and penalties such as Rule 101.11 (controlled airspace) with an offence penalty up to NZD 2000, or Rule 101.12 (airspace knowledge) with an offence penalty up to NZD 500.

[4] See AirShare website: https://www.airshare.co.nz/my-flights/property-owner-consent-information

The New Zealand drone sector and current trends

17 The drone sector in New Zealand includes an increasing number of commercial and recreational operators, researchers, manufacturers, consulting services firms, various associations, and training organisations.

18 The exact number of Part 101 operators is uncertain. We know that, as of October 2020, there are 125 Part 102 operators.[5] This number has been steadily increasing with further growth expected in the future.

19 Gathering data relating to drones and their users is inherently difficult, as there are no central systems in place to track their purchase or use. To improve the evidence base around the use of and perceptions towards drones in New Zealand, the Ministry of Transport (the Ministry), the CAA and the Ministry of Business, Employment and Innovation (MBIE) commissioned a research study in 2019, *New Zealand Drone Research 2020* (the Survey), from Colmar Brunton, which was published in August 2020.[6]

20 The Survey estimates that, as of February 2019:

- 271,121 New Zealanders have used a drone solely or mainly for recreational purposes in the last six months
- 7,939 New Zealand businesses or organisations have used a drone in the last six months
- 20,721 New Zealanders have used a drone solely or mainly for business or scientific purposes
- 156,610 drones have been used solely or mainly for recreational purposes
- 15,322 drones have been used solely or mainly for business or scientific purposes.[7]

21 The Survey is just one input to inform our policy analysis to date. It aimed to gather independently sourced information on drones to supplement existing data sources (e.g. data from Government agencies such as CAA, Accident Compensation Corporation (ACC), Airways New Zealand (Airways), Police; commercially sensitive retail and manufacturer data; various industry surveys).

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[5] See List of Part 102 unmanned aircraft operators (CAA website): https://www.aviation.govt.nz/drones/list-of-part-102-unmanned-aircraft-operators/.

[6] See *New Zealand drone research*: https://www.aviation.govt.nz/assets/about-us/news/New-Zealand-drone-research-2020.pdf.

[7] Id. at slide 10.

22 Despite not knowing the exact number of users and drones in New Zealand, the Survey and other datasets confirm there is a growing trend of drone use in New Zealand, and that New Zealanders are finding interesting and innovative ways of using this technology in their businesses and everyday lives.

New Zealand takes an all-of-government approach to drones

Taking Flight: an aviation system for the automated age

23 In 2019, Cabinet released the vision paper *Taking Flight: an aviation system for the automated age* (Taking Flight), which sets the strategic direction of the drone work.[8] The long-term objective set in Taking Flight is the safe integration of drones into New Zealand's civil aviation system and ultimately within the wider transport system.

24 Integration requires an iterative and phased approach, and is a collaborative exercise that involves working towards the best outcomes for all airspace users. In an integrated system, both manned and unmanned aircraft can operate safely and seamlessly in the same airspace and with other transport modes.

25 To achieve this vision, elements of the existing aviation system (e.g. infrastructure, procedures, the funding framework, policies) need to be modified to support the wide range of new capabilities and characteristic of drones. The challenge is to integrate all these diverse drone capabilities in an evolving aviation system without undue burden on current airspace users and service providers, and without compromising safety.

26 Taking Flight states that drone integration should be based on a set of complementary building blocks, consisting of regulation, funding and investment, infrastructure and technology, research and development.

27 The Unmanned Aircraft Integration Leadership Group,[9] which is made up of senior officials from the Ministry, CAA, MBIE and Airways, develops and approves a programme of work that is consistent with the Government's vision for drone integration.

28 This programme of work is and must remain aligned with the strategic direction set out in the Transport Outcomes Framework that the Ministry released in 2018,

[8] For more information on Taking Flight, visit: https://www.transport.govt.nz/area-of-interest/technology-and-innovation/taking-flight/

[9] For more information on the Unmanned Aircraft Integration Leadership Group, visit: https://www.transport.govt.nz/area-of-interest/technology-and-innovation/unmanned-aircraft-integration-leadership-group/

which underscores that the aim of the transport system as a whole is to improve the wellbeing and liveability of New Zealanders.[10]

Where does this work fit in the bigger picture?

29 Additional drone-related projects are underway which contribute to the Government's wider efforts to build a productive, sustainable and inclusive national drone ecosystem that support the wellbeing of everyone in New Zealand. Appendix 2 provides details of these projects, the main ones being:

- Civil Aviation Bill that aims at modernising the Act, better incorporate drones as aircraft and related requirements, and mitigates the risk of rogue operators and better manages aviation safety and security risks[11]
- Unmanned Aircraft Traffic Management (UTM) as a potential long-term solution for the management of drone traffic in New Zealand
- Testing and Trialling of Drone Technology that MBIE is facilitating through its Airspace Integration Trials Programme.

[10] The Transport Outcome Framework identifies that the key contributors to wellbeing and liveability are resilience and security, economic prosperity, environmental sustainability, inclusive access, and healthy and safe people. For more information see: https://www.transport.govt.nz/area-of-interest/strategy-and-direction/transport-outcomes-framework/

[11] To access to the latest exposure draft of the Bill and related updates, consult the following link: https://www.transport.govt.nz/area-of-interest/air-transport/civil-aviation/.

An effective commitment to drone integration is necessary

30 The fast development of the drone industry has given rise to significant opportunities for economic, innovation and social benefits for New Zealand and prompted Government commitment to drone integration.

31 To better understand the potential impact of drones on the New Zealand economy and quantify the economic benefits of using drones across different sectors, the Ministry commissioned the Drone Benefit Study that was published in 2019.[12] One of the key findings for New Zealand's drone sector is that commercial drone use is estimated to be worth NZD 4.6 billion to NZD 7.9 billion over the next 25 years.

32 The rapid growth of the sector has caused an increasing demand for more advanced drone operations under Part 102. Such operations continue to manifest in ways that push aviation systems designed for manned aircraft and test traditional approaches to safety oversight, e.g. BVLOS and autonomous operations.

33 There is the key opportunity to develop a safe, sustainable, and innovative drone ecosystem and to realise the identified benefits. Government would need to take steps now to progressively cater for this growth and ensure it has the tools necessary to progress efficient and effective drone integration.

34 There is an evolving international approach to the regulation of drones operations. Many jurisdictions, including New Zealand's key aviation counterparts, also recognise the potential of drones and are working to enable drone integration. They are re-assessing regulations, investments, developments, and infrastructure needed to achieve this goal.

35 Remaining aligned internationally, i.e. maintaining some degree of consistency with overseas systems, would simplify future international cooperation and system interoperability. International engagement is critical in the absence of harmonised international standards to better understand the implications of new measures and enable the sharing of information and ideas. The Ministry and the CAA have actively engaged with overseas aviation counterparts, and participated in key drone international fora such as the ICAO Unmanned Aircraft Systems Advisory Group (UAS-AG), Joint Authorities for Rulemaking on Unmanned Systems (JARUS), and the International Transport Forum (ITF). Appendix 3 provides an overview of what ICAO and some of our key aviation counterparts are doing.

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[12] See Drone Benefit Study: https://www.transport.govt.nz/area-of-interest/technology-and-innovation/drone-benefit-study/.

How do we propose to achieve this?

36 The Ministry, with the support of the CAA, has undertaken a review of New Zealand's regulatory regime applicable to drone operations to ensure it can rapidly respond to evolving technologies, applications and international practices, while maintaining appropriate levels of safety and security.

37 Any changes to the current system will require balancing several, sometimes opposing, objectives, including:

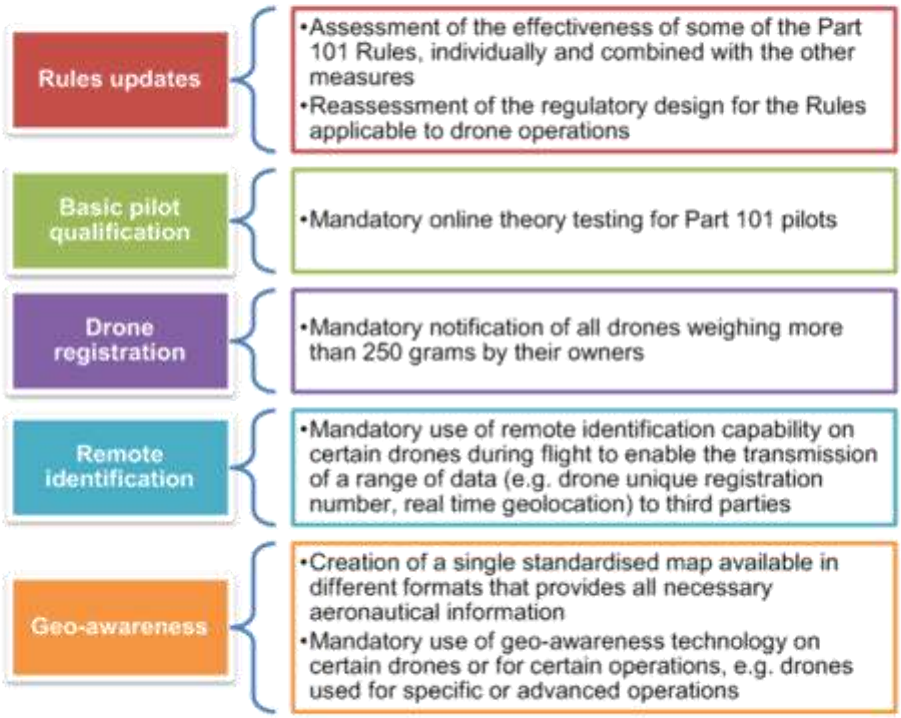
- enabling innovation and development in the drone sector, while supporting the interests of the wider aviation sector
- appropriate standards of safety and security by deterring and identifying drone pilots operating illegally
- laying the early groundwork for future integration of drones into the transport system
- fostering social licence as there are a growing number of public concerns about drones' use, including safety and security as well as privacy and nuisance.

We propose to introduce a series of regulatory measures to support the integration of drones into the aviation system

38 To achieve the objectives, the Ministry and CAA have agreed to explore new policy initiatives and a series of complementary regulatory measures as shown in Figure 3. These proposed regulatory requirements build on each other, with each component contributing to an effective regulatory regime.

39 This series of measures provides a proportionate intervention to the size of the challenge of integration, and enables some degree of flexibility to adapt our regulatory approach in the future, if needed. This proposal has been assessed considering the effectiveness of the measures, ease of implementation, proportionality, cost efficiency, and international alignment.

Figure 3: proposed series of regulatory measures



…which would be gradually implemented and whose efficiency and benefits would be maximised once they are all implemented

40 The Ministry proposes a phased implementation of the measures as shown in Figure 4. Although complementary, these regulatory measures require separate implementation. Each of them has distinct benefits and challenges that are identified further in the chapters of this document.

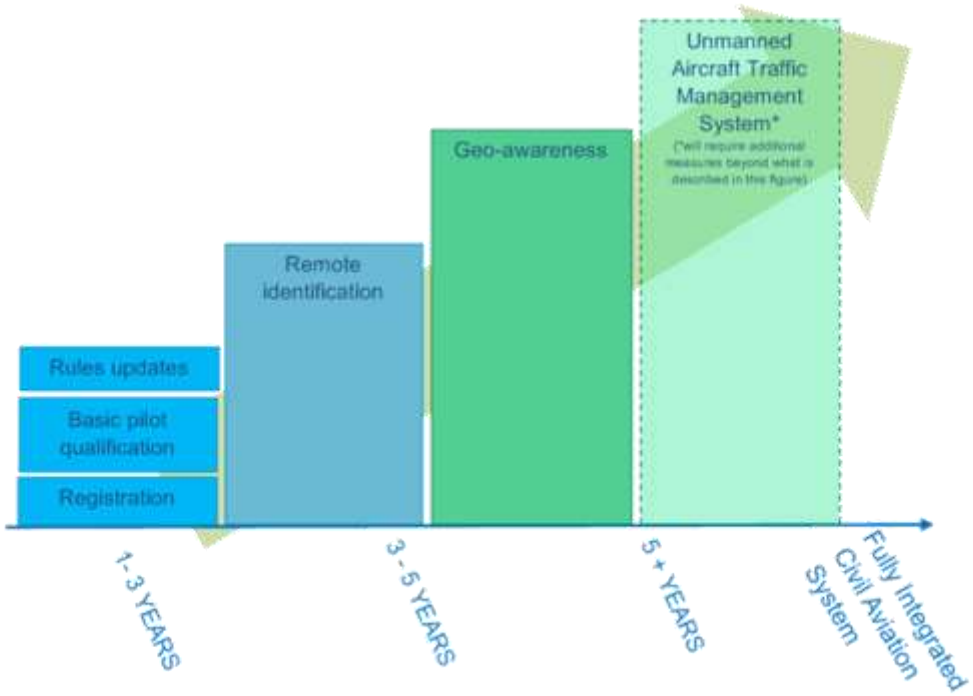
41 The combination of these measures maximises their respective benefits over time, and effectively addresses the identified problems and opportunities. For example, a registration system combined with remote identification (Remote ID) will maximise the ability to identify drones and enhance pilots' situational awareness.

42 On that basis, we suggest starting with the implementation of Rules updates, drone registration and basic pilot qualification, the main reasons being:

- the need to address the current aviation safety, security and privacy issues caused by non-compliant drone pilots, and confidence that those breaching the law can be identified

- the need to start laying the groundwork for drone integration – this starts with a clear identification of 'who flies what'
- the need to wait for further developments on remote identification and geo-awareness standards and technology to better understand their implications and consequences as the industry matures.

Figure 4: Indicative integration timeline



43 Importantly, this proposal is also aligned with the work programmes of New Zealand's main aviation partners. The challenges and opportunities presented by drone integration are not unique to New Zealand. To varying degrees, these are common to all jurisdictions, and as mentioned above, most of them have implemented, or are working towards implementing, similar regulatory measures to integrate drones into their transport systems.

These proposed measures would effectively address existing problems related to aviation safety and security, as well as privacy

44 As drone accessibility and popularity increases, issues of aviation safety, security, and privacy are becoming increasingly prevalent. The following four sections illustrate the overarching challenges identified through policy investigation.

There is currently a lack of compliance from drone pilots

45 Most drone users operate under Part 101, often with limited knowledge of the Rules and the aviation system. Research shows that some Part 101 operators do not know that there are Rules, or do not understand that the Rules apply to them, while some others deliberately ignore them. This can result in heightened levels of non-compliance that impact the existing levels of aviation safety and security. For example, it can increase the risk of mid-air collision between a drone and another aircraft, person and property, or raise the number of privacy-related issues.

46 Overall, the CAA-led education initiatives have proved to be effective non-regulatory options to boost education and promote drone safety. However, they have reached the limit of their effectiveness due to narrow outreach and a rapidly growing drone sector.

47 This lack of compliance is evidenced by the significant number of drone reports and complaints submitted to the CAA. Since 2015, the number of reports has gone from 120 in 2015 to 469 in 2019. From January to July 2020, the CAA received 356 reports (210 being in relation to the consent of people under flight path not obtained). Table 2 provides a detailed breakdown of CAA drone-related complaints by categories since 2015.

Table 2: Annual drone reports by type (CAA)

Report Type	2015	2016	2017	2018	2019	2020
Air proximity	22	12	38	55	45	30
Consent of people under flight path not obtained	21	56	123	190	183	384
Crash	1	5	12	8	13	20
Hazardous operation	18	39	46	46	49	38
Night flying	9	11	24	24	17	25
Operating in controlled airspace without clearance	20	43	45	67	63	32
Within 4km of aerodrome	21	22	46	60	48	62
Other	8	24	29	56	51	89
Grand Total	120	212	363	506	469	680

48 Similarly, Airways has also reported an increase in the number of incursions in controlled airspace that have increased from 33 in 2015 to 81 in 2019.

Table 3: Number of drone incursions in controlled airspace recorded by Airways through reports by air traffic controllers, pilots and members of the public

Year	Number of incursions
2015	33
2016	57
2017	63
2018	111
2019	81
2020	**42**

49 Finally, Police have received 2760 complaints regarding drones since 2015.[13] If the number of complaints continues to grow, it will quickly become unsustainable and undermine public confidence.

Enforcement can be difficult and ineffective

50 This lack of compliance from some pilots and operators combined with current drone technology often makes enforcement difficult, and sometimes impossible, as pilots and drones cannot be identified or located. The main difficulty is identifying the wrongdoer, whether directly on the spot when only the drone can be seen at a distance (the pilot's location cannot be known if too far from the drone or intentionally hidden), or at a later stage, after receiving a complaint. This tends to compromise the effectiveness and credibility of the Rules.

51 More generally, the inability to enforce Rules effectively erodes the required public acceptance that is necessary to support the integration of drones into the aviation system.

Some of the current Rules are no longer fit for purpose

52 The Ministry and CAA must review the Rules as part of their ongoing regulatory stewardship to ensure they remain fit for purpose, while monitoring international developments.

[13] As of August 2020.

53 Much has changed since the 2015 interim updates to Part 101 and introduction of Part 102. These Rules were intended to be reviewed given the fast changing nature of the drone sector.[14] Since then, there has been a significant growth in the number of users and drones and an increasing demand for more complex operations.

54 At present, Part 102 is considered to be working as intended and is still fit for purpose content-wise, although some improvements are needed at an implementation level. As aviation participants, Part 102 operators are relatively well integrated into the current aviation system.

55 In contrast, some Part 101 requirements may not be proportionate to the safety outcomes they are trying to achieve. Some recurrent examples are the consent provision (Rule 101.207) or the prohibition to operate a drone within four kilometres of aerodromes (Rule 101.205), which are perceived as unjustified or disproportionate by some operators in the sector. This can inhibit the legitimate use of drones and the growth of the sector.

56 Moreover, Part 101 operators are currently not integrated into the current system. Part 101 operators are not aviation participants (as they do not hold an aviation document) but can operate in controlled and uncontrolled airspace which is shared by other aviation airspace users. This unconventional situation and the increase in the number of drone operations have caused a growing range of problems in the air, and are misaligned with the long-term objective of integration.

The current aviation system and infrastructure do not enable drone integration

57 The current regulatory framework limits the ability to integrate drones effectively into New Zealand's civil aviation system. It is not sustainable for more diverse and advanced drone operations on a wider scale, and may no longer effectively tackle the risks triggered by the growth and popularity of drones. Traditional airspace management systems are not adequate to enable rapid growth in numbers and complexity of drones entering the aviation system, now and in the future. New tools and systems that are digital and automated are needed to manage future air traffic and navigation.

58 Unlike manned aviation, drones often operate at low altitudes. Many future use-cases envisage drones operating over urban or suburban environments, most likely along designated air corridors. This has created new challenges (like safety and privacy), and careful planning will be needed to manage issues such as noise pollution, visual disturbance, and environmental impacts (such as disturbance of wildlife). The growing use of drones at low altitudes has also generated public

[14] See Regulatory Impact Statement, Remotely Piloted Aircraft Systems: https://www.treasury.govt.nz/sites/default/files/2015-07/ris-transport-rpa-jul15.pdf, 2015.

concerns and suspicion, which could lead to a large, sometimes unjustified, criticism against these aircraft.

59 It is evident that an incremental implementation of new regulatory measures is needed to enable drone integration. If we do not lay the groundwork for drone integration, we risk falling behind international safety standards and creating barriers to innovation.

Benefits, costs and risks associated with the proposed approach

60 This section does not attempt to quantify and monetise any impacts of the proposed approach at this stage. While it is too early to quantify its benefits and costs, the following assessment discusses the potential economic risks, costs, and benefits of the series of measures, how they could be estimated and information gaps identified.

Short-term benefits

Reduced airspace incursions

61 Illegal drone incursions (i.e. unapproved drone activity) in controlled airspace have become a growing concern worldwide over the last few years, and have caused numerous airspace closures, e.g. disruptions caused at Gatwick and Heathrow airports in 2019 in the United Kingdom.[15] The drone incursion that disrupted Gatwick for three days pre-Christmas cost the airport GBP 1.4 million (NZD 2.6 million) and more than GBP 50 million (NZD 95 million) to airlines.

62 In New Zealand, controlled airspaces are designated around 17 aerodromes with air traffic control required to maintain the safety and efficiency of aircraft operations. Drone incursions into these zones result in their closure for 15 minutes as per Airways' guidelines. There were 81 such closures in 2019.

63 This results in significant costs being incurred by the industry (mainly airlines and airports) and passengers due to delays in operating other aircraft. It is difficult to quantify the costs incurred as this varies depending on the location, time and delayed activity. The proposed measures would help reduce the number of drone incursions, therefore resulting in cost savings.

Reduced personal injuries and property damages

64 There are benefits of reducing personal injury to individuals from drones. Between 2015 and September 2020, ACC recorded 247 claims for drone-related injury

[15] *Gatwick airport: Drones Ground Flights*, BBC, 20 December 2018, https://www.bbc.com/news/uk-england-sussex-46623754

(most involving lacerations or punctures), of which 224 resulted in a payment, total costs being NZD 88,918 (excluding GST).

65 As with individuals, there are likely benefits of reduced property damage from drone related incidents. However, the number and scale of these are currently unknown, with the most likely source of this information being insurance claims.

Reduced costs to society and improved social acceptance

66 As explained, drone use may have negative impact on society. For example, it can cause privacy (for drones equipped with cameras) and noise issues, or damage the environment (for lost or abandoned drones) and wildlife. The proposed measures would help promote responsible drone use and ensure negative impacts are minimised.

67 These measures are necessary to legitimise recreational and, more importantly, commercial drone use. Implementing them would improve public attitudes towards the use of drones and lead to greater acceptance as their use would be better understood and seen as safe, orderly and non-disruptive. This would eventually facilitate their integration into daily use.

Reduced investigation costs

68 The Police and CAA both receive calls and complaints about drone incidents, which incur costs of investigation, enforcement, and legal action. The proposed measures are assumed to improve enforcement through more effective resolution of reported incidents. This would result in cost reductions for Police and CAA over time, and eventually enable the agencies to reinvest their efforts elsewhere.

Long-term benefits

69 There are many opportunities for more advanced and innovative drone use, especially for commercial and freight purposes that will become available as the technology develops and drones become more commonplace. Drones have the potential to bring significant long-term benefits to the economy and environment, such as those identified in the Drone Benefit Study.

Laying the groundwork for drone integration

70 The proposed approach includes the foundational regulatory elements that would enable drone integration, especially for UTM. It provides the tools needed for more advanced and innovative drone services and applications, such as seamless BVLOS or automated drone operations at low altitudes, while ensuring that appropriate levels of safety, security, privacy and environmental protection are maintained.

Enabling BVLOS operations

71 Being able to fly BVLOS (i.e. pilots operating without having natural visual sight of their drones) remains a critical objective for many operators and is a key element of the Government's drone integration vision.

72 These operations allow a drone to cover far greater distances without the spotters or observers aiding its journey. Drones flying BVLOS are controlled by data provided by on-board sensors.

73 Under Part 101, a pilot operating a drone must maintain visual line of sight of the drone (Rule 101.209(c)(1)). BVLOS operations requires a Part 102 certificate due to the risks such operations could cause to the system. To date, the CAA has not been assured that safety risks have been appropriately mitigated to allow BVLOS operations beyond limited and controlled trials. But more tools and methodologies are being made available to enable drones operators to achieve better safety outcomes under Part 102, e.g. JARUS Specific Operations Risk Assessment (SORA).[16]

74 The CAA has started work to consider what the regulatory pathway to allowing BVLOS operations could be and what the risk tolerance for these operations is. Engagement with international counterparts, including Australia, Canada, Singapore, United States and the United Kingdom, on this is crucial to help improve the CAA certification process.

75 The ability to fly BVLOS could be improved if the proposed series of measures is adopted. The development and implementation of technical standards and capabilities like Remote ID and geo-awareness and the potential introduction of a UTM system would help the CAA adopt a nuanced approach when assessing Part 102 applications that involve BVLOS operations.

76 BVLOS operations could also be facilitated through the development of standard scenarios, such as those developed by JARUS.[17] A standard scenario would cover specific types of drone operations with attributes like flying BVLOS with visual air risk mitigation, over sparely populated areas, and in uncontrolled airspace.

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[16] See *JARUS guidelines on Specific Operations Risk Assessment (SORA)*: http://jarus-rpas.org/sites/jarus-rpas.org/files/jar_doc_06_jarus_sora_v2.0.pdf

[17] See Standard Scenarios SORA STS-01 and -02 for Aerial Work Operations, published by JARUS (JARUS doc 06 SORA (package)): http://jarus-rpas.org/content/jar-doc-06-sora-package .

Creation and/or improvement of markets leading to new job opportunities

77 This proposal would facilitate the creation of new markets or help enhance existing ones, such as precision agriculture and civil construction. Drones present opportunities to improve freight operations, such as moving cargo within distribution centres or providing freight and courier services to customers.

78 This could improve the efficiency of core industry sectors in New Zealand (in terms of time and resource spent), leading to increases in productivity and economic growth. This would also likely result in environmental advantages over other modes of transport.

79 It would also help strengthen existing business models, create job opportunities and promote new skillsets. Drone operations also have the potential to change how people travel, with an increasing number of testing and trialling initiatives, such as those found in the Airspace Integration Trials programme led by MBIE. Eventually, this would help strengthen the social acceptance needed for increasing drone use.

Reduced barriers to access

80 Drones have the potential to increase the coverage and flexibility of a range of goods and services. This may improve access to these opportunities overall, but it may especially benefit people that currently face barriers to access, examples being providing goods and services to people who are less mobile or live in remote areas, or reducing the costs of accessing goods and services.

Costs

System costs

81 Costs to Government relate to the implementation of the measures. As described in each of the following chapters, all the measures would have administrative, digital infrastructure, education and publicity costs.

82 Government may wish to recover some of the costs via fees or levies for the proposed measures, particularly with drone registration and basic pilot qualification. In principle, such costs would likely be on a cost recovery basis, but alternative or additional funding options could also be considered. A key principle is that any costs should fall equitably so that participants are paying their fair share based on the risk they pose to the system and its participants. If any changes are planned for the drone sector, they will follow the established process of considering fees and levy funding changes in the civil aviation sector.

83 Internationally, implementation and maintenance costs vary based on existing system each country has and drone sector size. For example, Australia has recently implemented both registration for commercial users and pilot accreditation, calculating their costs for the year 2019-20 at approximately AUD

7.3 million (NZD 7.7 million).[18] In the United Kingdom, the Civil Aviation Authority estimated ongoing annual costs of GPB 2.8 million (NZD 4.4 million) for their registration and drone pilot testing systems.[19] This was comprised of fixed costs, registration campaign, variable costs based on volume, and functionality and service improvements. In the 2018 fiscal year, the United States Federal Aviation Administration (FAA) obligated USD 725,000 on maintaining their drone registration system and USD 520,000 towards estimating compliance with the registration regime (total NZD 1.8 million).[20] However some of the FAA's systems are also used for other purposes and other UAS programs.

Compliance costs

84 Drone manufacturers and retailers may incur costs from the imposed measures if the measures decrease drone uptake, and therefore drone sales, and if it requires them to build in additional software or hardware on board the aircraft.

85 Similarly, drone operators would have to spend time and resource complying with the proposed measures.

Risks

86 Maintaining the status quo and making changes later could be viable in the short term and give the Ministry and the CAA more time to assess the impact of potential regulatory changes on the aviation system. However, it does not support drone integration, nor creates an enabling environment for more advanced operations. It does not achieve the objectives outlined in this document, and does not enable the realisation of the identified benefits.

87 Moreover, the current system is not sustainable as it does not cater for the current number of drones and anticipated growth. It would become increasingly difficult to address the demands of safety, security and privacy risks over time, and we would very likely end up with more problems than those already identified.

88 If we do not take action now, it is likely that the Rules' effectiveness will continue to erode, as they will become further outdated as the characteristics of aviation activity shifts away from the scope of the existing framework.

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[18] See the Remotely piloted Aircraft Systems: Cost Recovery Implementation Statement here https://consultation.casa.gov.au/stakeholder-engagement-group/proposed-remotely-piloted-aircraft-rpa-regulatory/supporting_documents/Cost%20Recovery%20Implementation%20Statement%20%20RPAS%20Regulatory%20Charges%20%20draft%20for%20consultation.pdf

[19] See 2019 Drone Registration Scheme: Charge Proposal Consultation Document CAP 1775, https://consultations.caa.co.uk/finance/drone-registration/

[20] See FAA Should Improve Drone-Related Cost Information and Consider Options to Recover Costs, https://www.gao.gov/products/GAO-20-136

89 The following Chapters further describe each of the proposed measures.

Questions

Q.1 What is your view on the proposed series of measures? Are there any other alternatives you suggest we consider?

Q.2 Would the proposed approach help achieve the desired objectives?

Q.3 Would the proposed approach help address the problems and opportunities identified?

Q.4 Are there any other problems and opportunities you can think of?

Q.5 Do you agree with the proposed order of implementation of the measures?

Chapter I – Rules updates

The first part of this chapter focuses on Part 101 Rules changes, which are part of the suite of measures proposed. These rule changes will help ensure the Rules remain fit for purpose and create a more proportionate approach to maintaining aviation safety.

The second part of this chapter outlines some minor Rules changes to Part 101, which will happen in due course to clarify the Rules.

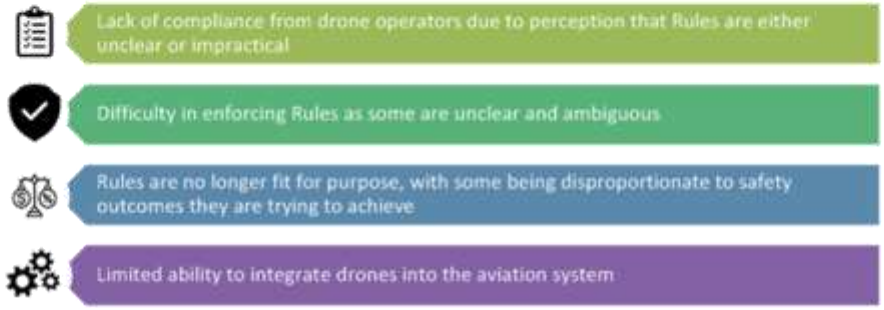
What is currently in place?

90 The current Rules applicable to drone operations were introduced in 2015.

91 Part 101 includes a set of 12 prescriptive Rules that apply to low-risk drone operations. This Part applies to drones weighing less than 25 kilograms. Under Part 101, operators do not need CAA approval to operate.

92 In contrast, Part 102 provides a risk-based certification framework that accommodates riskier operations than what is allowed under Part 101.

What problems are we trying to solve?



What are we proposing?

93 Since the Rules introduction in 2015, and the 2016 post-implementation review of the Rules, we have noted that some Rules need to be changed to ensure the system in place remains fit for purpose, effective, and proportionate.

94 We are not intending or proposing to make any substantive changes to the current Part 102 Rule. However, some of the proposed changes to Part 101 Rules, such as the review of the consent provision or that of the minimum flying distance from aerodromes, would have flow-on effects and enable some operators currently operating under Part 102 to do so under Part 101. Similarly, some of the other

measures described in this document, including drone registration, Remote ID and geo-awareness, would also apply to Part 102 operations.

95 The proposed Rules updates are strongly aligned with the Government's expectations for regulatory stewardship and will result in Rules that are:

- clear, easier to navigate, risk-based, and responsive to sector changes and innovation
- necessary, supported by evidence and proportionate (the standard level is justified by the risk).

Major rules changes

96 Adopting the proposed series of regulatory measures would provide an opportunity to change, remove or relax some of the current Part 101 Rules.

Creating a standalone Rule part for drone operations

97 One of the major recommendations from the post-implementation review was the creation of a standalone Rule Part for drones operations.

98 This Rule part would exclusively capture the current Rules applicable to drones operations, and would also encompass the new regulatory requirements proposed in this document. This would greatly enhance clarity for drone operators, and ease any future changes to the Rules.

Specific changes to Rules

99 With the overarching goal of creating a safer, more effective, and integrated drone sector, there are a few Rules in the current regime that could be relaxed or removed, should we adopt the proposed measures in this document. This could be achieved through the introduction of basic pilot qualification that would improve education and knowledge of Part 101 pilots, drone registration and Remote ID that would allow for better enforcement, and geo-awareness that would enable better situational awareness.

100 This is not a comprehensive list changes. We have listed the Rules that will be most likely changed based on our analysis, industry feedback,[21] and a more enabling technological environment.

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[21] The Drone Safety and Regulation Engagement with Key Stakeholders gathered feedback from industry on the proposals captured in this Discussion Document.

Changes to the consent provision

101 The consent provision (Rule 101.207(a)(1)(i)-(ii)) was introduced as part of the Part 101 updates in 2015 to minimise risk to people and property of an uncontrolled drone crashing.

102 The consent provision is a unique imposition on drones; neither general nor commercial aviation require such permission. However, those aircraft do have other operational restrictions that have a similar effect (e.g. some cannot operate below 500 feet); and there are a number of established airworthiness standards they must meet to provide assurance around the safety of the aircraft.

103 Since its enactment, the consent provision has proved to be impractical, ineffective, and inefficient because:

103.1 there is little to no safety benefits due to lack of compliance from operators and general misunderstanding of the Rule

103.2 there is limited ability to enforce due to the inability to associate a drone to a person

103.3 the Rule was not intended to address privacy or nuisance issues that may occur when a drone is operating, as other government agencies are responsible for addressing these issues.[22]

104 This has prompted us to consider relaxing or removing this provision. Any changes to this Rule would be based on the outcome of a safety case conducted by the CAA.

105 If this provision is relaxed, it could be replaced with another means of managing the safety risks. A potential alternative for relaxing the consent provision could be the introduction of a 'safe distance' requirement or Rule.[23] Instead of requiring property owners consent or that of people being overflown, drones operators would have a presumptive right to fly over private property and people, provided they follow flight rules that impose minimum flying distances from people and property. They would also have to adhere to other legal requirements such as New Zealand privacy law and principles.

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[22] The Office of the Privacy Commission and Police deal with privacy, nuisance and harm complaints under other laws, such as the Privacy Act 2020 and Crimes Act 1961.

[23] A workshop held on 21 November 2019 as part of the Drone Forum discussed the consent provision and safe distances with stakeholders – a summary of that forum can be found on our website: https://www.transport.govt.nz//assets/Uploads/Paper/Consent-Provision-Workshop-Summary.pdf

106 Safe distance requirements have been implemented in other jurisdictions but with different distances, ranging from 25 feet (7.62 metres) in the United States to 50 metres in the United Kingdom.

107 Alternatively, we could decide to remove completely this provision if we consider the introduction of the series of measures proposed in this discussion as being sufficient to mitigate the identified safety and security risks. In this case, further consideration would need to be given to the impact such removal may have for other systems, e.g. public conservation land managed by DOC, where the consent provision allows DOC to manage the effects of drone use on wildlife, tangata whenua values, DOC operations, and visitor experience.

Reviewing the minimum flying distance from aerodromes

108 Rule 101.205 specifies that you cannot fly a drone closer than four kilometres from any aerodrome, controlled or uncontrolled, except in some circumstances.[24] A controlled aerodrome is one which has air traffic control services, provided by Airways.

109 After five years' experience with this Rule, we think it may be too restrictive at some sites. It does not consider the large variation in use of uncontrolled aerodromes across New Zealand.

110 Considerations could include setting a standard baseline of four kilometres from aerodromes and publishing alternative areas available for drones to operate inside four kilometres. This could lead to a graduated altitude with lower levels close to the aerodrome and in the circuit area, increasing as the distance from the aerodrome increases. Consideration would also need to be given to the protection of arrival and departure areas for other aircraft.

111 Whilst we are reconsidering this Rule's application, the decision will ultimately rest on the establishment of a robust safety case. A key challenge would be in ensuring drone operators know where and when they can fly, particularly if standards differ across the country. However, the potential introduction and adoption of Remote ID and geo-awareness requirements could help manage these concerns as well.

[24] There are two ways to fly a drone within controlled airspace - one is to get clearance from Air Traffic Control and the other is to conduct a shielded operation outside the airfield boundary.

Minor rules changes

Changes we will make to Part 101 Rules

112 Table 5 outlines examples of some of the high-level changes that will further clarify the Rules and ensure they are fit for purpose.

Table 5: Proposed changes to Part 101 Rules

Rule	Proposed changes
101.202 Approved person or organisation	This Rule does not work well for commercial off the shelf drones and needs to be amended to better reflect the needs of an evolving sector.
101.205 Aerodromes	This Rule needs to be rewritten and clarified for drone operators. It will help make it easier to read and understand.
101.7 Restricted, military operating and danger areas	'Danger Areas' should be separated out from 'Restricted Areas' and 'Military Operating Area' and 'unmanned aircraft' should be stipulated. There are some problems with subpart (c), and the requirement for permission and how that intersects with the other Rule parts.
101.209 Visual line of sight operation	Parts of this Rule need to be tightened, e.g. VLOS should be defined.
101.215 Aircraft mass limits	There is a need to define what gross mass is. Weight boundaries are not clear. We could consider the removal of the 15 - 25 kilograms category.

Definitions to be added to Part 101

113 We are proposing to introduce new definitions under Part 101 for improving clarity. Examples of definitions include: 'barrier' (for shielded operations), 'visual line of sight' (VLOS), 'direct supervisions', 'direct communication', and 'active.'

114 While this list is not exhaustive, we believe that these are the definitions that would benefit users and provide the most clarity.

The introduction of 'tethered drones' under the Rules

115 A tethered drone system uses a permanent physical link, such as a cable, to provide power and communication to a drone to significantly increase its flight endurance. These systems have become popular over the last few years for many

reasons, but present some obvious safety risks, such as the cable causing another drone to crash.

116 Given the uptake and related risks, we believe the introduction of a new Rule under Part 101 is necessary to ensure a tethered drone is flown safely and does not endanger other drones operators and aviation participants.

Relaxing the spotter/observer requirements for First-Person View

117 First Person View (FPV) systems provide a video stream from a drone to an operator through a remote pilot station to extend their visual line of sight. This makes the operators feel as if they are on board the drone.

118 Part 101.209(c)(1) currently specifies that you must be able to see an aircraft with your own eyes to ensure safety in the air, or use a spotter/observer to do this. This rule applies to FPV because a person's field of view is generally more restricted using equipment than if they were maintaining natural visual line of sight. However, some operators consider this is often not justified, particularly in closed conditions, and it can be unnecessarily limiting.

119 FPV systems continue to gather momentum, as does its acceptance, particularly for activities such as 'drone racing' in closed conditions. Despite this, FPV remains a difficult area to address. There are no common FPV standards and no other jurisdictions have departed from what Part 101 currently allows.

120 We believe this Rule could be clarified, particularly around the use of a trained and competent observer, as this is difficult to measure.

Benefits of the Rules updates

121 Table 6 shows the benefits that would be brought by Rules updates.

Table 6: Beneficiaries and benefits associated with the Rules updates

Beneficiaries	Benefits
Drone operators	• Increase regulatory compliance through clearer Rules • Expand the scope of possible operations
General Public	• Increase confidence that the aviation system is safe and secure, with clearer Rules enabling better compliance and enforcement

Beneficiaries	Benefits
Industry	• Benefit from a safer, more secure and innovative aviation system • Support the development of the commercial drone industry
CAA and other regulatory and enforcement authorities	• Improve ability to enforce Rules, with more clarity in the way Rules are written and how they apply in practice • Decrease the amount of regulatory oversight, enabling a better focus on more pressing safety concerns
Air Navigation Service Provider	• Increase confidence that drones are being operated safely near aerodromes • Progress drone integration and enable a more drone-friendly airspace
Government	• Provide assurance that the regulatory system for drones is effective, fit for purpose and aligned with regulatory best practice • Enable changes to existing Rules deemed too restrictive or disproportionate to some operators

Questions - Rules updates

Major changes to the Rules

Q.1 Should drones have their own standalone Rule Part?

Q.2 Should we review the four-kilometre minimum flight distance from aerodromes?

Q.3 Should we change the requirement to gain consent to fly above property by:

a. Using 'safe distances' as an alternative?

b. Relaxing the requirement in another way?

c. Removing the requirement completely?

Q.4 Should we change the requirement to gain consent to fly above people by:

a. Using 'safe distances' as an alternative?

b. Relaxing the requirement in another way?

c. Removing the requirement completely?

Q.5 If we use 'safe distances' as an appropriate alternative to the consent provision, what distance(s) would you consider is appropriate?

a. 10 metres

b. 30 metres

c. 50 metres

d. Other.

Q.6 Are there any other major Rules changes we should consider?

Minor changes to the Rules

Q.7 Are there any minor changes to the Rules that would make them easier to understand?

Q.8 What do you think of the proposed minor Rules changes?

Q.9 Are there any other changes we should consider?

Chapter II – Basic pilot qualification

We are proposing the introduction of mandatory qualification for all Part 101 pilots. This would improve drone pilots' baseline level awareness of the airspace they are operating in, and understanding of the relevant Rules and risks of flying a drone.

What is currently in place?

122 People operating under Part 101 are not the traditional participants in the aviation system. The Rules do not require those operating drones under Part 101 to have any training or qualification, unless the operation is conducted on or near an aerodrome. This means that there is nothing in place to ensure knowledge of the Rules and procedures around operating in uncontrolled airspace.

123 While numbers are difficult to accurately capture, the Survey, conducted by Colmar Brunton, suggests that up to 271,121 New Zealanders have used a drone solely or mainly for recreational purposes. This same survey suggests that 15,322 drones are being used solely or mainly for business or scientific purposes, and that most of those users operate under Part 101.

124 Drone pilots operating under Part 102 must undergo training based on the risks identified in their exposition in order to ensure they are competent drone pilots. They are generally compliant with the Rules and present less of a safety and security risk for the aviation participants and the public.

What problems are we trying to solve?

Lack of awareness and knowledge of the Part 101 Rules amongst drone pilots

What are we proposing?

125 We are not proposing a review of the existing Part 102 certification scheme or the introduction of a comprehensive drone pilot licensing scheme at this stage for Part 101 pilots.

126 We have considered two possible options to improve pilot competency. First, we considered continuing efforts to enhance the education initiatives and campaigns led by the CAA. As noted above, this has improved the level of compliance with the Part 101 Rules. While we think these campaigns and initiatives are useful tools, they, by themselves, have not been effective in reducing the growing number of safety, security and privacy risks.

127 The second option is to introduce mandatory basic pilot qualification for Part 101 drone pilots, in addition to CAA-led education initiatives. If this is implemented, it will mean that anyone operating a drone under Part 101 will have to either:

- pass a theory test and obtain a basic pilot qualification; or
- be supervised by someone who holds a basic pilot qualification and is at least 16 years old; or
- be tested/trained through a Part 141 or 101.202 approved training organisation.

What is basic pilot qualification?

128 Basic pilot qualification entails being officially recognised as a competent drone pilot who knows all the associated Rules and safety requirements for drone flight. It aims to improve Part 101 drone pilots' awareness of the Rules and understanding of the environment in which they intend to operate before they start flying.

129 This new measure would take the form of an online basic theory test that involves a number of questions based on specific knowledge and skills related to aviation safety, security and privacy. This online site would be a secure digital platform that would comply with New Zealand legislation and privacy principles. The test would ensure compliance with existing legal and regulatory requirements, and standard operating conditions. The basic pilot qualification would be gained if the test is successfully completed.

130 This would foster effective and systematic compliance, and consequently increase the level of safety and security while reducing privacy and nuisance risks within the aviation system.

Is it a form of pilot licensing?

131 This form of basic pilot qualification would be distinguished from traditional licensing regimes that already exist in the civil aviation system. Basic pilot qualification would include legal responsibilities and specific requirements for drone pilots as well as associated offences, but would not be an aviation document.

132 This proposed test should not be confused with a pilot licence or certificate such as those issued under Rule Part 61, or with a Part 102 certification, as these involve more stringent testing and higher requirements such as practical training, medical certification, and a fit and proper person test. Imposing similar requirements on drone pilots at such an early stage would be disproportionate, given the lower risk and prescriptive nature of Part 101 operations.

What would the basic pilot qualification cover?

133 Most Part 101 pilots do not need advanced, in-depth, aviation knowledge to operate a drone safely, but basic knowledge is required.

134 This test would be primarily focused on aviation safety and security, and standard operating conditions. This would include a list of questions about the Rules and relevant laws, airspace, and any potential penalties for infringements and unlawful behaviour. It would also cover privacy-related questions.

135 Pilots would be required to demonstrate their theoretical understanding of how to fly safely before operating a drone. A well-designed system would offer a quick and easy means of finding the information they need to know, and education materials would be developed and provided by the relevant agencies to prepare them for the test.

Who would be required to take the test?

136 To ensure the effectiveness of this proposed measure, mandatory testing and qualification would apply to any person operating a drone under Part 101 in New Zealand, regardless of the weight of the drone. This also includes tourists operating a drone while visiting New Zealand. However, there may be some exceptions or special authorisations. This is outlined further on in the document.

What age do I need to be to take this test?

137 Currently, there is no minimum age in the Part 101 Rules. Considering the variation in age of drone pilots, we propose not to introduce a minimum age for this test. We believe that any person with the necessary ability to pass the test should be able to do so.

138 No minimum age reflects the purpose of this qualification, to ensure that everyone flying a drone is competent. A blanket application of compulsory competency testing for all ages would ensure that everyone who can acquire a basic pilot qualification would and can do so. This would help increase pilots' awareness of the Rules, the aviation environment and associated risks.

139 We understand that enforcement may be an issue for children, should we introduce infringement offences for people operating without a basic pilot qualification and are under the age of 14 years old.[25] The current legislative framework deals with instances of children committing an offence, whereby guardians and parents are responsible for wrongdoing of children in their care.

[25] See section 2 Oranga Tamariki Act 1989 for definition of young child.

There is a responsibility for those guardians and parents to ensure their children are not left without responsible supervision and care. [26]

Supervision of people wanting to fly drones

140 There is a broad range of people engaging with drones, including young persons, children, and people just wanting to fly a friend's drone. We believe that it would be disproportionate to require every person who wants to fly a drone to pass a test to obtain a basic pilot qualification.

141 We are therefore proposing that a drone pilot holding a basic pilot qualification and aged 16 years old or over could directly supervise (on a one-to-one basis) and assist a non-qualified person wanting to fly a drone. This would come with strict and specific conditions.

142 Direct supervision means the act of being with and watching a person, or activity, to ensure that the operation is conducted correctly and safely. A basic pilot qualification holder effectively becomes responsible for the person flying the drone and must ensure that this person operates the drone safely and abides by the Rules. Both, the supervisor and the pilot, must be aware of what supervision means, and how it is conducted. Supervision would reduce the risk of a flight being conducted unsafely without unduly burdening the sector.

143 This basic pilot qualification holder would have to be aged 16 years old and over to be able to supervise a non-qualified pilot. Although there is no minimum age for a supervisor in New Zealand law, we have determined that 16 years old is appropriate to have the maturity to assume responsibility over another person operating a drone, and ensure the operation is conducted safely.

144 We consider that the supervisor would be primarily responsible for the person being supervised, but would not be legally responsible or liable for any wrongdoings of the person being supervised, unless:

- that person is under 14 years old; or
- the supervisor does not ensure the drone is operated safely or take reasonable steps to prevent an incident.

145 For those operating a drone who are over the age of 14 years old, liability would fall on the person who causes an incident or accident.

[26] Section 10B, in the Summary Offences Act 1981.

Who would not be required to take the test?

146 We acknowledge that there are drone pilots who have already undertaken some form of theory or practical training, or are members of associations requiring more knowledge to fly a drone.

147 We propose that holders of qualifications obtained through Part 141 and Part 101.202 CAA approved training organisations do not need to undertake this test, as long as they can prove so. The training undertaken by these organisations is more comprehensive than the basic pilot qualification proposed in this document. Making those qualification holders undertake the compulsory basic pilot qualification test would be unnecessary.

148 The proposed theoretical test for basic pilot qualification is not designed to replace the training provided by training organisations. It would instead constitute the first natural step that pilots would have to undertake before flying a drone if they decided not to go through training with these training organisations.

How would someone obtain a basic pilot qualification?

149 Obtaining the basic pilot qualification would require passing an online theory test. We believe that an online and user-friendly portal that provides all the information and education materials necessary to complete the test is appropriate.

150 The test would be neither lengthy nor difficult, but one that aims at improving the pilot's knowledge of the Part 101 Rules and general competency. We propose the test have an unlimited amount of attempts with a fair pass rate, and that the results from the test be valid indefinitely.

151 We do not think it is appropriate to require drone pilots to undertake practical lessons to learn how to fly a drone as part of this basic training.

What if I fly my drone without basic pilot qualification?

152 General deterrence is achieved only if enforcement is conducted at sufficiently intense levels, and in a visible manner to increase the public's perception of the risk they will be caught if they are operating illegally. The consequences that follow for a pilot operating illegally are also important.

153 For this reason, the proposed regulatory requirements relating to basic pilot qualification would be enacted with associated offences and penalties, which would apply in case of breach.

154 Examples of possible offences that would be introduced alongside the new obligations are flying a drone without a qualification, or flying a drone that is not physically marked. These would be infringement offences. Infringements are strict

liability offences and are intended to be dealt with outside of the criminal courts. The penalty for an infringement offence is a fixed fee, which is issued "on the spot" by an enforcement officer. If an individual challenges or fails to pay this fee, then the matter will be heard by a court. Infringement offences cannot result in a criminal conviction.

155 Some offences like that of communicating false information are already covered under the Civil Aviation Act and would apply to anyone breaching the related provisions.

Benefits of a basic pilot qualification

156 There are immediate and lasting benefits of basic pilot qualification as listed in Table 7.

Table 7: Beneficiaries and associated benefits of basic pilot qualification

Beneficiaries	Benefits
Drone operators	• Provide an official platform to find verified and up to date information about Rules and requirements to fly drones in New Zealand
General Public	• Provide assurance that drones are operated in compliance with the Rules and the law • Increase assurance that drone pilots are aware of their obligations and know how to operate a drone safely • Increase confidence that the aviation system is safe and secure
Industry	• Benefit from a safer aviation system (e.g. decreases the risk of accidents and incidents) • legitimise drone use
CAA and other regulatory and enforcement authorities	• Improve drone pilots' education and compliance with the Rules • Improve the ability to take action against non-compliant pilots when required
Air Navigation Service Provider	• Increase confidence that drone pilots are competent and aware of their regulatory obligations resulting in a reduction in airspace incursions
Government	• Increase assurance that drone pilots are aware of Rules and legislation and are operating accordingly • Foster a more cohesive aviation system

What are the likely costs and challenges associated with implementing basic pilot qualification?

157 It is difficult to estimate what the costs would be at this stage. To determine the costs of basic pilot qualification, we would have to consider both the implementation costs (e.g. creation of the test and related materials, implementation of a digital system and potential additional resources to run it) and the ongoing costs related to maintenance of the system. We would also need to estimate the number of pilots concerned, i.e. the user base, which is a tenuous exercise at present given the absence of registration requirements.

158 By comparison, some CAA Rule education campaigns, which include the creation of websites setting up rules and promotion, have cost the CAA close to NZD 100,000. This cost has included the website and promotional campaign, which would be included in the pilot competency testing, but does not take into account the digital platform for the test and the ongoing upkeep of the system.

Questions - Basic pilot qualification

Q.1 Should we introduce basic pilot qualification for Part 101 drone pilots?

Q.2 What impact would a basic pilot qualification likely have on you?

Q.3 What format should this test take?

a. Electronic/online theory test

b. Paper based written theory test (at a provider)

c. A practical examination of skill and a paper based written theory test (at a provider)

d. Other

Q.4 Should there be a minimum age for basic pilot qualification?

Q.5 Do you agree with the proposed special authorisations given to Part 141 and Part 101.202 approved training organisations?

Q.6 Is there any other special authorisations you would like to see? Why?

Chapter III – Drone registration

We are proposing the introduction of mandatory registration of drones and their owners. Registration would enable us to associate a drone to a person, to build accurate datasets on the number of drones and operators in New Zealand. Registration is the first natural step to enable drone integration into our civil aviation system, along with Remote ID and geo-awareness.

What is currently in place?

159 The Rules do not require drones or their owners operating under Part 101 to be registered. Drones, as unmanned aircraft, are specifically exempted from Part 47 *Aircraft Registration and Marking* requirements.

160 Operators certified under Part 102 must maintain an exposition which records the drone or drones they intend to operate. Whilst the CAA maintains this list of operators, it is not considered as a formal registration system.[27] Details collected include the number of drones and the specifications of each drone to be used, including any identification system used on the aircraft.

161 Some Part 102 operators are required to have their drones registered and display markings in accordance with Rule Part 47 if the CAA considers it necessary in the interests of aviation safety. This is generally for larger drones.

What problems are we trying to solve?

[27] See the List of Part 102 unmanned aircraft operators here: https://www.aviation.govt.nz/drones/list-of-part-102-unmanned-aircraft-operators/

What are we proposing?

162 We are proposing to require owners of drones to register their drones with the CAA (more specifically with the Director of Civil Aviation). This would be a new requirement under both Parts 101 and 102 of the Rules.

What is drone registration?

163 Registration means owners of drones are required to provide specific information about their aircraft and themselves to the Director of Civil Aviation before the first flight. Once a drone has been registered, an owner would be required to physically mark it with a unique identification number issued by the CAA.

164 Under the Act, 'register' and 'registration' have specific meanings, and result in issuing an 'aviation document'. To obtain this document, a fit and proper person test is required and the CAA has to decide on a case-by-case basis if an application can be approved. Once approved, the aircraft is entered on the New Zealand Aircraft Register by the CAA.

165 Imposing these requirements on drone owners at this early stage and in the current context would be disproportionate and too onerous not only for them, but also for Government. This position is justified mainly due to the prescriptive nature of Part 101 operations and the significant number of drone operators.

166 To keep drone registration simple and distinct from traditional aircraft registration, we propose that the Rules be updated requiring drone owners to 'notify' their drone and relevant information to the CAA. The proposed notification requirement would not involve the issuance of an aviation document, and the drones being registered would not form part of the New Zealand Aircraft Register.

167 Drone registration would not significantly change or impact on the current certification process under Part 102. This includes maintaining the Rule for operators who have been required to register their drone under Part 47 and appear on the New Zealand Aircraft Register.

Who would be required to register a drone?

168 We propose that anyone who is legally entitled to possess a drone would be required to register with the CAA by providing information about themselves and the drone before the first flight.

169 In most instances, this would be the owner[28] of the drone. An owner can be either:

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[28] This is distinct from the operator of a drone or the person piloting the drone. However we expect that in most instances the owner and operator or pilot will be the same person.

- an individual person; or
- an organisation such as a company, government department or an incorporated society or club.

170 We suggest a minimum age of 14 years for an individual to register a drone. Anyone younger that 14 years would need a parent or guardian to be registered as the drone owner. The rationale for this is that it is the youngest age for which a person can be issued with an infringement notice. This is consistent with the definition of a young person and ensures the law can be applied. Also, 14 years is generally used as the minimum age for authentication of identity services, e.g. RealMe.[29]

What drones would need to be registered?

171 We are proposing that all drones weighing 250 grams or over should be notified. Drones being operated under both Part 101 and 102 would have to be notified. For those being operated under Part 102, notification would be part of the certification process.

172 At present, 250 grams is considered by the vast majority of our aviation counterparts, including the United States, Canada, the United Kingdom, Australia and European Union Member States (through European Aviation Safety Agency regulations), as being the appropriate minimum safety threshold for registration purposes, as shown in Appendix 3.

173 The rationale for introducing a minimum threshold for drone registration is based on studies carried out internationally. The literature on drone weights notes that factors such as maximum speed, capacity, and the level of pilot competency can influence the level of risk alongside the weight of a drone. [30] It has shown that a drone that weighs 250 grams and above is able to transfer 80 Joules of terminal kinetic energy capable of injuring a person if it falls from a height of 120 metres.[31]

174 We propose to exclude very small drones that present a negligible safety risk for the environment they operate in from being registered. These drones often have very limited capabilities and performance (e.g. not able to carry a payload, minimum speed, and battery life), and a short life span[32]. Given the low safety

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[29] www.realme.govt.nz – RealMe allows you to access multiple online services with one username and password, and securely prove who you are online.

[30] See "Mass Threshold for 'harmless' drones", Anders la Cour-Harbo, International Journal of Micro Air Vehicles.

[31] Ibid.

[32] *New Zealand drone research* (June 2020), pp.28-30: https://www.aviation.govt.nz/assets/about-us/news/New-Zealand-drone-research-2020.pdf.

risks of drones weighing less than 250 grams, we believe that introducing this threshold is proportionate to the desired safety outcomes and will avoid overregulation.[33]

175 In New Zealand, it is estimated that nearly a quarter of the drones operated recreationally, and four percent commercially, weigh under 250 grams.[34] We believe that, as long as their pilots follow the Rules and fly safely and securely, these drones do not need to be registered.

176 Aligning our regulatory framework with that of aviation counterparts would provide some form of certainty to the industry, especially manufacturers, and help ensure future harmonisation and systems' interoperability.

177 This minimum threshold could be changed in the future if further evidence or data emerges to warrant a higher or lower weight threshold. Conversely, drones under 250 grams may become more prevalent as technology advances and becomes smaller and cheaper.

What drones would not be required to be registered?

178 We propose that the following drones would not need to be registered:

- drones used solely indoors
- drones weighing less than 250 grams
- drones operating within Model Flying New Zealand (MFNZ) designated areas and under supervision of MFNZ.

179 MFNZ gives members special privileges to operate model aircraft and drones. Model aircraft generally operate under the Rules Parts 101 and 102, and comply with MFNZ's Rules and Codes of Practice that are reviewed regularly to ensure compliance with the Rules. Model aircraft are flown by members of model aircraft clubs in specifically designated areas (i.e. danger areas) under the supervision of MFNZ.

180 We propose that if a model aircraft is solely being flown within a designated area and under supervision of MFNZ, then registration of the drone would not be

[33] In addition to safety reasons, some overseas regulations also take privacy and personal data into consideration, security risks, and international alignment. For example, EASA regulations require drones under 250 grams to be registered if they have a camera or sensor that is able to capture personal data and the drone is not consider to be a toy. See Easy Access Rules for Unmanned Aircraft Systems (Regulations (EU) 2019/947 and (EU) 2019/945): https://www.easa.europa.eu/document-library/easy-access-rules/easy-access-rules-unmanned-aircraft-systems-regulation-eu .

[34] See *New Zealand drone research*, June 2020, pp.22 and 26, https://www.aviation.govt.nz/assets/about-us/news/New-Zealand-drone-research-2020.pdf.

required. However, if a model aircraft is flown outside of a designated area, then it would have to be registered.

How long would registration be valid for?

181 At this stage, we propose that drone registration be a one-time event for each drone. However a drone owner would be required to keep their details up to date and notify the CAA of any changes such as a sale or transfer to another person, loss, destruction, or no longer in use. This obligation to maintain accuracy of information would come with associated penalties in case of non-compliance.

What information would need to be provided when registering?

182 To ensure the effectiveness of the system, the following information would need to be provided:

- drone information including make, model, serial number, weight and type of drone, purchase date (if applicable), or if custom made, photograph of the drone, plus any other relevant information
- personal details of the owner such as name, physical address, date of birth, identification numbers (e.g. passport, driving licence), contact details including phone numbers and email address.

Who would be responsible for administering the registration system?

183 The CAA would be responsible for maintaining the registration record and administering the overall system.

184 Even though this new system would not officially form part of the Civil Aviation Register, it would be set up and managed in compliance with the Public Records Act and New Zealand privacy law and principles.

What would the system for drone registration look like?

185 The registration system would need to be fit-for-purpose to accommodate the volume of owners and drones. It also needs to be flexible enough to cater for any future regulatory changes. Importantly, we want to ensure it can accommodate other measures we are proposing in this document like Remote ID and potentially be interoperable with overseas registers.

186 We believe this new system should have the following features:

- digital, automated and user-friendly (i.e. accessible both online and via mobile)

- developed as a platform that supports the use of open Application Programming Interface (API) to ensure that multiple apps can be linked to the system
- enable identity authentication to protect against identify fraud, e.g. through integration with RealMe.

Who would have access to the information in the registration system?

187 We would consider providing either full or limited access to the registration system to law enforcement authorities like New Zealand Police, as required. This would provide them with the ability to access the registration system or request specific information to identify the owner of a drone when required for enforcement purposes.

188 We could consider making certain information available publicly like the New Zealand Aircraft Register. Drone owners could authorise this on either an opt-in or opt-out basis during the registration process. For example making some registration information publically available would facilitate the recovery of lost drones such as Drones Reunited in the United Kingdom.

What do I get once I have registered my drone to the CAA?

189 A unique identification number would be assigned to each drone once the registration process is completed (similar to a licence plate for a car).

190 The owner would be then required to ensure the identification number is adequately displayed on the drone and that it remains so, e.g. requiring permanent label, engraving or marking with indelible ink.

191 This would also apply to Part 102 operators unless they have been required by the Director to register and display marking under Part 47.

What happens in case of non-compliance with the notification requirements?

192 As within any regulatory system, there would be intentional or non-intentional cases of non-compliance. We believe that most people are willing to do the right thing, so we expect most drone owners to comply with the registration requirements. However, we also expect some drone users to be deliberately non-compliant, as to avoid being identified or caught by enforcement agencies.

193 To ensure a good functioning system, the regulatory requirements would be introduced with associated offences and penalties, which would be applied in case of non-compliance. These would include for example the failure to notify the drone to the CAA before first flight, the failure to display identification number or markings on drone before flight, and that of notifying changes of information.

194 We anticipate most of these new offences to be infringement offences. Any new offences and penalties would be created under the Rules and apply alongside other applicable penalties for breaches against Part 101 or Part 102 and within existing provision in the Act.

Benefits of drone registration

195 There are both immediate and flow-on benefits as a result of implementing a registration scheme for drones as listed in Table 8 below.

Table 8: Beneficiaries and benefits associated with drone registration

Beneficiaries	Benefits
Drone owners and operators	• Encourage responsibility and accountability • Enable direct communication of important safety, education, and operational information such as NOTAMs or rule amendment • Enable an owner or operator to recover a lost or missing drone
Public	• Increase confidence that the aviation system is safe and secure • Ensure that drones are being operated within the law and that their owners can be identified
Industry	• Benefit from a safer aviation system • Aid commercial arrangements relating to regulatory compliance, maintenance, health and safety, and insurance • Build accurate datasets to inform planning and infrastructure to support sector growth
CAA and other regulatory and enforcement authorities	• Enable direct communication of important safety, education, and operational information such as NOTAMs or rule amendment • Improve education initiatives, including the development of more targeted tools • Improve the ability to identify operators and/or take action against non-compliant pilots/owners when required • Improve the gathering of information and data on drone use to support management of regulatory systems and risk assessments

Beneficiaries	Benefits
Air Navigation Service Provider	• Increase confidence that non-compliant owners and operators can be identified, and where required appropriate enforcement action taken
Government	• Ensure that the regulatory system for drones remains effective, flexible, fit for purpose and aligned with the all of Government long-term strategy, regulatory best practice and evolving international obligations • Constitute the first step toward achieving integration, needed for other things like Remote ID • Improve services provided by other government agencies (e.g. applying for permits to fly in a national park)

What are the likely costs and challenges associated with implementing drone registration?

196 It is difficult to estimate what the cost of registration would be at this stage.

197 If a registration system is introduced, there would be costs associated with its implementation (e.g. setting up an automated system able to issue a unique identification number to each drone being notified), maintenance (e.g. resourcing), and ongoing administration (i.e. education and enforcement). The need for the registration system to be automated may have higher initial set-up costs, but lower ongoing administration costs.

198 A fee may be charged to drone owners for registration. However any potential new fee should not become a barrier or disincentive to comply.

199 If a new fee for drone registration is to be introduced, we would need to consider whether to charge either per drone or per owner and whether is should be a one-off or annual fee.

Questions - Drone registration

Q.1 Should we introduce the proposed drone registration system? Why?

Q.2 What impact would drone registration likely have on you?

Q.3 What do you think of the proposed system design (e.g. digital platform) and requirements (e.g. identity authentication)?

Q.4 Should there be a minimum weight threshold for registering a drone? If so, is 250 grams appropriate? If not, what would be an appropriate weight threshold and why?

Q.5 Should certain drones not need to be registered (such as drones flown solely indoors or within specific designated areas (e.g. Model Flying New Zealand sites) from registration? What other drones should not need to be registered and why?

Chapter IV – Remote Identification

This Chapter elaborates on the concept of Remote ID as one of the proposed regulatory measures. It is intended to provide a preliminary overview of our thinking and a conceptual understanding of the measure. Any potential implementation would be considered once drone registration and basic pilot qualification are in place.

We are proposing to introduce Remote ID requirements for certain drones under the Rules. This measure would enable the identification of aircraft information (while preserving operators' personal information) in near real time and complement the proposed registration measure. It aims at enabling greater operational capabilities and progressing drone integration. It would also help address safety, national security and law enforcement concerns around drone use.

What is currently in place?

200 There are no rules or standard in place requiring electronic identification and tracking of drones operating under Part 101 of the Rules. Although Part 102 does not expressly require it, the CAA may impose it as a condition of a Part 102 Certificate as part of the unmanned aircraft operator exposition.

What problems are we trying to solve?

What are we proposing?

201 We are proposing to mandate the use of Remote ID capability on certain drones.

202 The objective is to support drone integration by improving situational awareness for drone pilots and aviation participants sharing the airspace. It would underpin information sharing for more advanced operations, like BVLOS operations. It would also provide a new form of capability for law enforcement and increase drone pilots accountability.

What is Remote ID?

203 Remote identification refers to a system on board a drone that will enable the sending of identification information during a flight to other parties that can directly receive it, without needing physical access to the drone.

204 Remote ID technology can provide snapshots of near real-time information about:

- drone identification (e.g. serial number, registration number)
- flight characteristics (location, altitude, speed, direction)
- latitude and longitude of the control station and drone
- a Coordinated Universal Time (UTC) time mark
- an indication of the emergency status of the drone (e.g. lost-link or downed aircraft).

205 Remote ID systems are already available and many drones are already equipped with this technology. Remote ID systems are either embedded into drones' software or hardware (e.g. small beacons, transponders). Most large manufacturers have already included some form of Remote ID capability in their drones. For example, many current models of DJI drones are equipped with receivers that enable operators to detect nearby aircraft and avoid them. Overall, the technology is still developing and, as of today, is not a fail-safe solution.

206 When required, the information sent from the drone would assist the CAA, law enforcement authorities and other security agencies in identifying a drone and locating its operator. This functionality is particularly important for drones that are breaching the Rules in a given area, or those operating in restricted airspace near aerodromes and other sensitive facilities.

207 It could also enable the general public to identify a drone in a way that would protect the privacy of the owner or operator's information. Remote ID would provide more transparency while still ensuring drone owners, pilots, businesses and customers' privacy.

208 The registration system proposed in Chapter III of this document would be the basis to provide the information necessary to identify drones and their owners when required (through a unique identification number). Remote ID requirements would thus build on this measure, and be implemented after the set up of the registration system. This concept would be developed in adherence with New Zealand privacy principles and legislation.

209 The ability to remotely identify drones in flight is considered an important step in the development of the commercial drone industry and drone integration. The

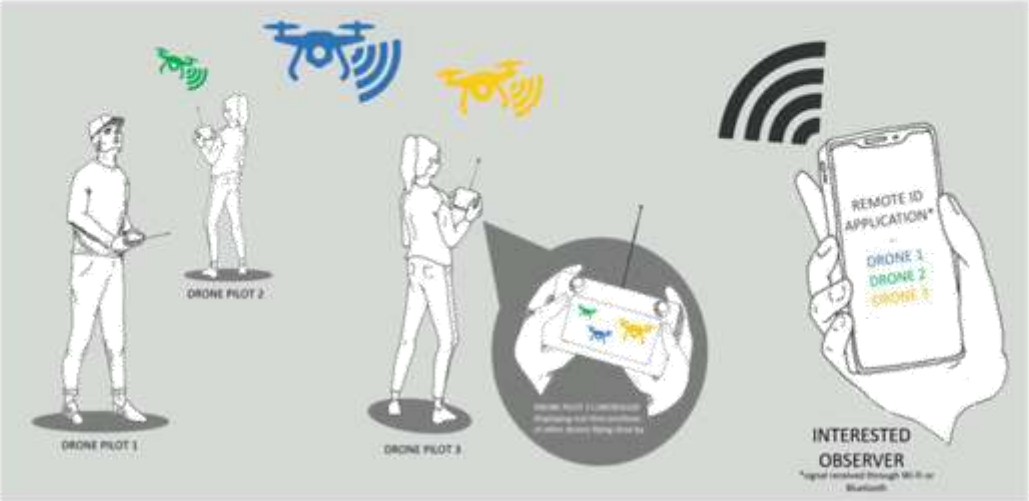
ability to identify a drone remotely would better enable BVLOS operations through near real time information sharing and help address the safety and security challenges that come with these operations. More generally, Remote ID would also play a key role in the development of a potential future UTM system.

A technical standard for Remote ID has been developed

210 The United States FAA commissioned ASTM International, an international standards development organisation, to develop a technical standard for Remote ID. The Committee F38 on Unmanned Aircraft Systems, with the support of industry experts, published the F3411 Standard Specification for Remote ID and Tracking at the end of 2019.

211 This standard is currently supported by the CAA. However new technical standards may be developed, and further analysis will be required to determine what is appropriate for New Zealand.

Figure 5: Remote ID – simplified representation of how it works



Benefits of Remote ID

212 The primary benefits of introducing Remote ID requirements in New Zealand are listed in Table 9.

Table 9: Beneficiaries and benefits associated with Remote ID

Beneficiaries	Benefits
Drone owners and pilots	• Improve situational awareness and mitigates the risk of collision • Facilitate more advanced operations, e.g. BVLOS
General Public	• Provide the assurance that drones can be reported if required • Increase social acceptance and confidence that the aviation system is safe and secure
Aviation sector	• Benefit from a safer, secure and innovative aviation system • Support the development of the commercial drone industry
CAA and other regulatory and enforcement authorities	• Improve the gathering of information and data on drone use to support management of system development, safety promotion, and risk assessment • Improve the ability for authorities to deal with complaints and support enforcement action when required
Air Navigation Service Provider	• Improve situational awareness, mitigates the risk of collision and unnecessary disruptions for airspace users • Increase confidence that drones are being operated safely and in accordance with the Rules
Government	• Provide assurance that the regulatory system for drones is effective, fit for purpose and aligned with regulatory best practice • Enable changes to existing Rules deemed too restrictive or disproportionate to some operators • Constitute a key building block for drone integration, including a possible UTM system

What are the likely costs and challenges associated with Remote ID?

213 It is difficult to estimate the costs associated with mandating Remote ID as it is still at an early stage.

214 We anticipate that the costs will be mainly incurred by drone manufacturers. However, most drones are already equipped with this functionality, and we expect this capability to become more common in newer models.

215 For operators of drones without such capability, there would be the cost to equip with Remote ID and meet the standard. However, we anticipate it to be minimal as the majority of drones operating in New Zealand should already be equipped with some forms of Remote ID capability. Moreover, most drones currently operating either for commercial or recreational purposes have a life span averaging one to two years.[35] By the time a Remote ID technical standard is adopted and new rules are enacted, most drones would have had to be replaced, and so the costs of retro fitting a drone might not arise.

216 For Government, the main costs would be in setting up interoperable and future proofed systems and infrastructure.

217 If the requirement for Remote ID is progressed, we would need to consider the following challenges:

- adoption of a technical standard for Remote ID technology
- interaction between Remote ID requirements and other measures, such as registration and any potential future drone traffic management system
- scope of Remote ID requirements, i.e. who, what, where, and when
- interaction and interoperability of Remote ID with other forms of electronic conspicuity
- potential privacy and security considerations
- any transition period, including requirements for existing or custom drones.

Questions - Remote ID

Q.1 Should we consider introducing Remote ID? Why?

Q.2 What impact would Remote ID likely have on you?

[35] See *New Zealand drone research*, June 2020, pp.28-30, https://www.aviation.govt.nz/assets/about-us/news/New-Zealand-drone-research-2020.pdf.

Chapter V – Geo-awareness

Geo-awareness rules, tools, technology and capabilities on drones can significantly improve situational awareness for drone operators and help increase compliance. Together with drone registration and Remote ID, it constitutes a key building block for drone integration.

This chapter aims to help understand what geo-awareness is at a conceptual level and why it is important. The adoption of geo-awareness, as one of the proposed regulatory measures, would follow drone registration and basic pilot qualification.

What is currently in place?

218 Drone pilots and operators are required to be aware of the airspace they are operating in and comply with the Rules. They need to know where they can and cannot fly, and when applicable, what airspace they need to request clearance for (e.g. controlled or special use airspace).

219 At present, pilots and operators have access to aeronautical information such as air navigation charts, and can use mobile applications and online services like AirShare and AirMap to help them with their flying. Currently there is no official map that has been specifically designed for drone usage and to meet the needs of their users.

220 There is currently no regulatory requirement that supports the use of geo-awareness capabilities on drones. Some manufacturers have incorporated geo-awareness capabilities and features into their drone hardware and flight software. Current technology is still at an early stage of development.

What problems are we trying to solve?

What are we proposing?

221 We are proposing to require:

- the creation of a single standardised map available in different formats (i.e. paper or digital) that provides all necessary aeronautical information for drone operations to all pilots and industry; and

- the use of geo-awareness technology on certain drones or for certain operations, e.g. drones used for specific and/or advanced operations (e.g. BVLOS).

What is geo-awareness?

222 Geo-awareness is primarily the pilots or autonomous platforms' ability to directly know, perceive and understand the environment in which they operate. This ability is developed through knowledge of airspace based on specific sources of information, e.g. rules, aeronautical maps.

223 With respect to drones, a geo-awareness system alerts the pilot when the drone enters or is about to enter a prohibited zone in near real time so, that he/she can take immediate action to prevent a potential breach of airspace limitations. It works both in two and three dimensions (geographic area and altitude) and is based on satellite navigation networks, such as GPS.

224 Geo-awareness must be distinguished from the concept of geo-fencing. Geo-fencing is a sophisticated system that actively prevents drones from entering into restricted zones. Put simply, drones equipped with such a function cannot enter or take-off from geo-fenced areas (in which drone flights could raise other safety or security concerns). As with geo-awareness, geo-fencing is a technological system in drone software used to protect high-risk or sensitive areas, such as aerodromes, prisons, conservation lands or crowded places (e.g. major events) from improper drone use – whether intentional or accidental.

225 Conversely, geo-caging capability can contain a drone in a designated area by preventing it from flying outside of the zone. For example, it could be used by businesses to prevent their drones from unintentionally leaving their property boundary or by model aircraft clubs to ensure their members remain within their operating area.

226 Geo-awareness, geo-fencing and geo-caging technology is still developing and is not fail-safe. Manufacturers have indicated that it cannot be guaranteed in all conditions. As with Remote ID, it is currently not a fool proof solution. Some operators may deliberately override it and find a way to circumvent flight restrictions imposed by the manufacturer on its products.

227 There is considerable investment internationally, led by industry, in developing this technology. Some manufacturers have pre-empted regulatory change and voluntarily equipped their drones with geo-awareness and geo-fencing software. [36]

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[36] For example, DJI uses GPS receivers on its drones to disable its drones from flying in designated areas. Its drones also come with automatic altitude limits.

Benefits of geo-awareness

228 Geo-awareness has the potential to improve aviation safety, security, and help further integrating drones in our civil aviation system. The key benefits of introducing geo-awareness requirements are listed in Table 10.

Table 10: Beneficiaries and benefits of geo-awareness

Beneficiaries	Benefits
Drone owners and pilots	• Improve situational awareness and mitigate the risk of entering prohibited zones or sensitive areas • Reduce the risk of accidents and incidents involving other aircraft, people and property in high-risk areas
General Public	• Increase social acceptance and confidence that the aviation system is safe and secure
Industry	• Benefit from a safer, secure and innovative aviation system • Support the development of a commercial drone industry
CAA and other regulatory and enforcement authorities	• Increase compliance by drone pilots • Reduce complaints from inadvertent breach of airspace
Air Navigation Service Provider	• Improve situational awareness • Mitigate the risk of collision and unnecessary disruptions for airspace users • Increase confidence that drones are being operated safely and in accordance with the Rules
Government	• Provide assurance that the regulatory system for drones is effective, fit for purpose and aligned with regulatory best practice • Constitute a key building block for drone integration, including a possible UTM system

What are the likely costs and challenges associated with implementing geo-awareness?

229 We anticipate that the majority of costs would fall initially on Government if an approved drone navigation map that can be used by pilots and software developers is designed and updated.

230 The main costs of geo-awareness would be associated with the requirement for certain drones to be equipped with the appropriate technology, e.g. software being regularly updated. We expect these costs would mainly fall on manufacturers and be absorbed into the price of the drones. We anticipate a decrease of the costs as the technology advances and becomes more widely available.

231 Some costs may fall on drone owners and operators where their drones are not equipped with such capability and need to be upgraded. Given the current lifespan of drones, we anticipate that the majority of new drones will have this capability by the time new rules come into effect.

232 If we opt to introduce geo-awareness requirements, we would need to work through the following considerations:

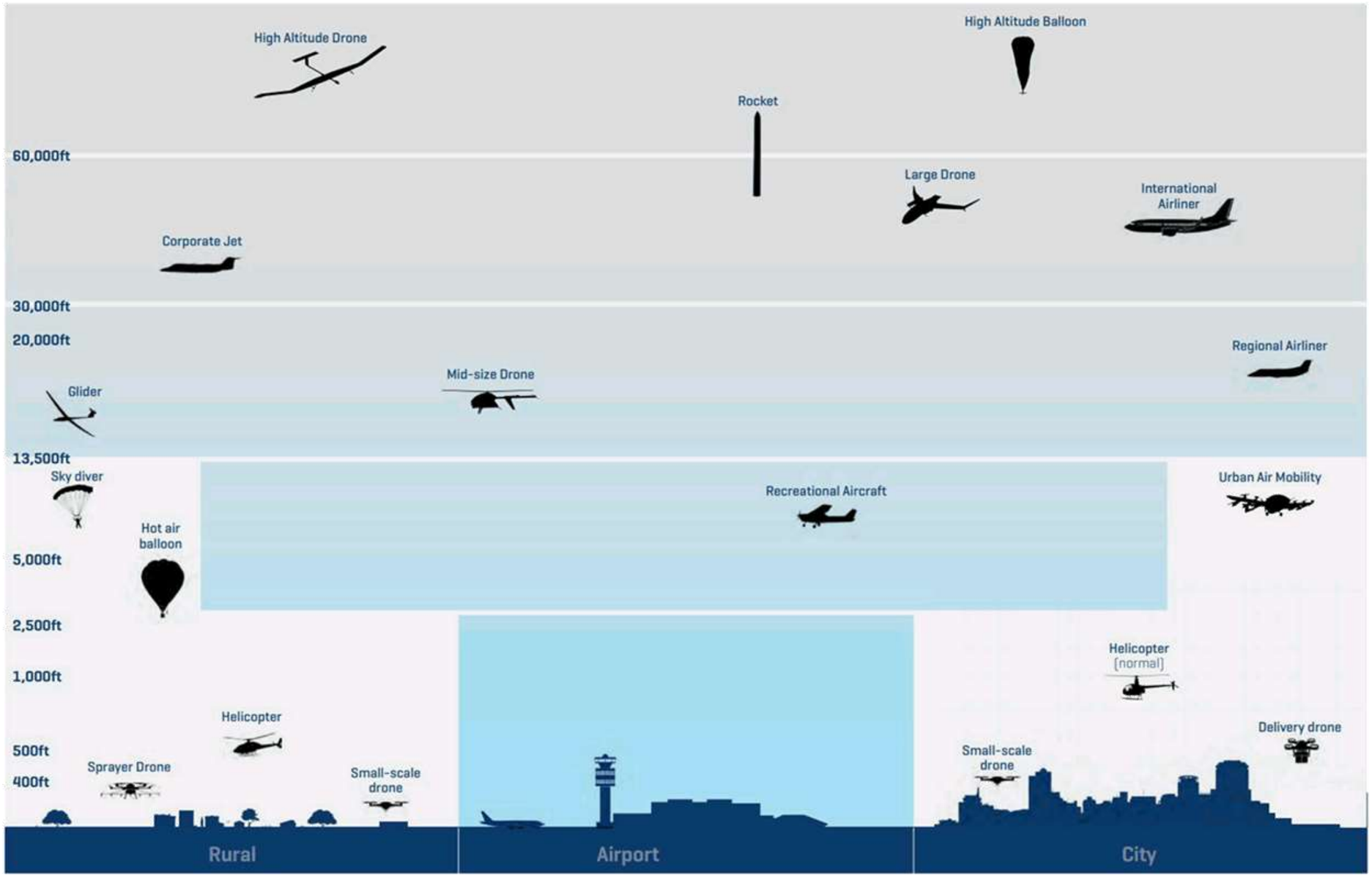
- scope of geo-awareness requirements, i.e. who, what, how, where, and when
- determine what zones should be geo-fenced and what criteria and policies should apply
- interaction between geo-awareness requirements and other measures and any potential future drone traffic management system
- potential privacy and security considerations
- any transition period, including requirements for existing or custom made drones.

Questions - Geo-awareness

Q.3 Should we consider introducing geo-awareness? Why?

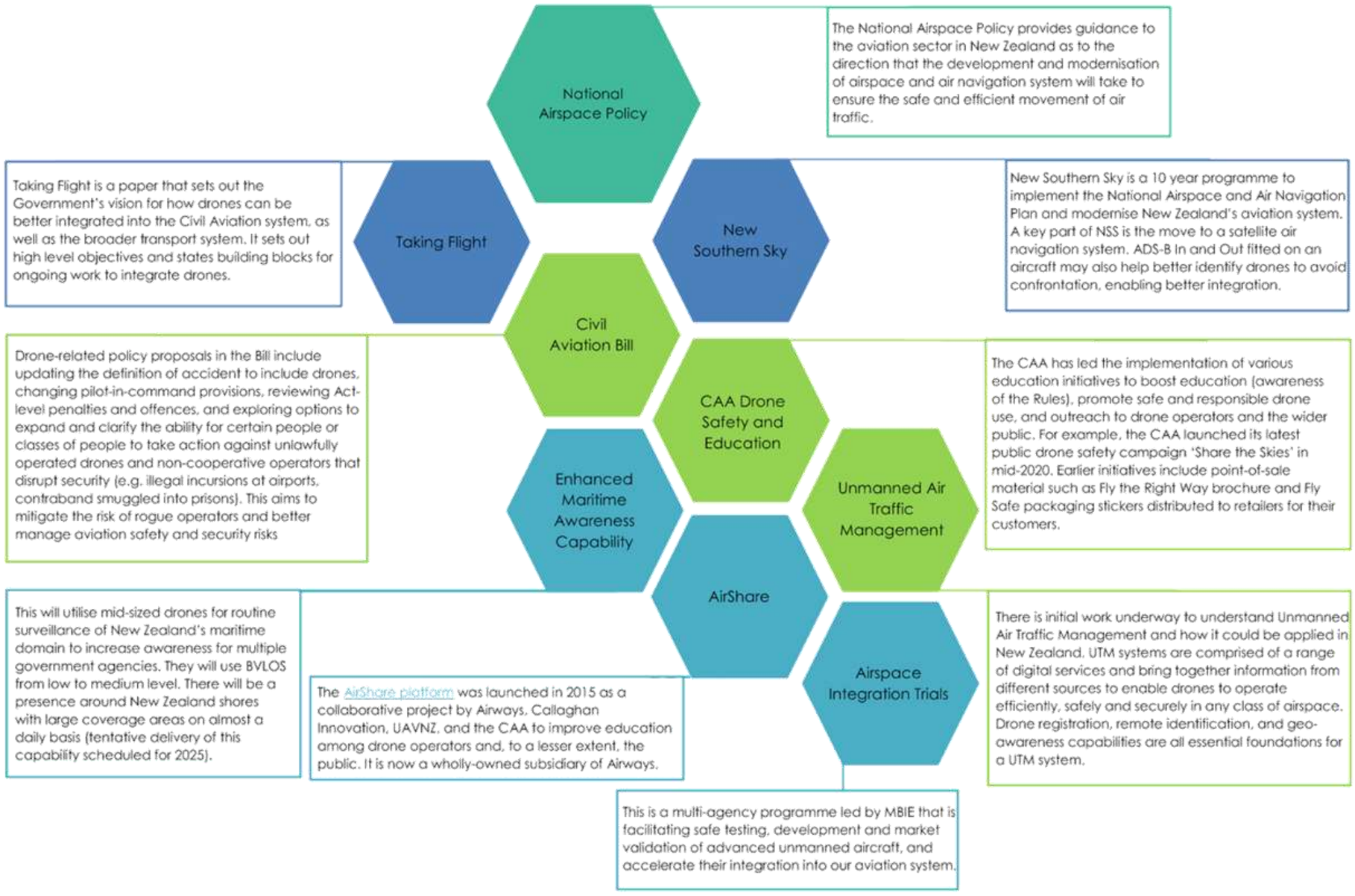
Q.4 What impact would geo-awareness likely have on you?

Appendix 1 – Drone operations in New Zealand



Source: Taking Flight: An aviation system for the automated age

Appendix 2 – Drone projects across government



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Appendix 3 – Overview of ICAO and what others are doing

International Civil Aviation Organisation (ICAO) update

The International Civil Aviation Organization's (ICAO) Remotely Piloted Aircraft Systems (RPAS) Panel is developing Standards and Recommended Practices (SARPs) for certificated international drone operations. These are operations that are within controlled airspace and conducted using instrument flight rules in non-segregated airspace and at aerodromes from 2031.

Related to this, ICAO's Unmanned Aircraft Systems Advisory Group (UAS-AG) is developing guidance material for smaller drones as these operations fall outside ICAO's primary mandate and UTM. The UAS-AG consists of ICAO Member States, including New Zealand, and aviation industry partners. As part of this work it has published Model UAS Regulations and supporting Advisory Circulars to provide a template for Member States to adopt or supplement their existing drone regulations.

ICAO is also working with other groups (e.g. standard organisations like EUROCAE) to develop the specific technical standards that support ICAO SARPs. Other groups, such as JARUS, are focused on the aircraft systems of drones generally used in smaller and local operations, which are outside the scope of ICAO's RPAS Panel mandate.

What others are doing

Internationally, drone rules are changing rapidly. The information in this table is based on best efforts to collate the information available at the time of writing (November 2020).

		Registration			Competency Testing			Identification				
	Where are they up to?	**Who/what?**	**Cost**	**Validity**	**Who?**	**Cost**	**Validity**	**Physical and electronic ID**	**Remote ID**	**Minimum age**	**Special authorisations**
Australia Civil Aviation Safety Authority (CASA)	Online registration and accreditation schemes to be introduced together Implementation from **30 September 2020** for commercial drones and **March 2022** for recreational drones	• All drones used commercially • Recreational drones above 250g	Free until 30 June 2021. Pricing to be to be reviewed for 2021/22 financial year.	1 year	• **Accreditation**: pilots must take the test if drone weighs more than 250g. The test will consist of a short video followed by a quiz. Takers have unlimited attempts to pass. *Will be available March 2022 and required by 20 May 2022.* • Remote pilot licence (RePL) or remotely piloted aircraft operator's certificate (ReOC) for commercial operations with drones more than 2kg	Free	3 years	Unique manufacturer's marking (e.g. serial number barcode or QR code) linked to drone at registration; or if not available a CASA unique identifier can be affixed	No current requirements (CASA indicated might be introduced in future, but if so unlikely to require retrofitting of existing drones)	For registration: • 16yrs • Operators under 16yrs must be supervised by an accredited person above 18yrs For accreditation: • 16yrs	Model aircraft association members operating at CASA-approved airfields (approximately 1,000 sites) will not need to register their drones or gain an accreditation.
United States Federal Aviation Administration (FAA)	Online or paper-based registration system in place since **2015** Testing requirements in place since 2017 for drones under 25kg used commercially (Part 107)	All drones between 250g and 25kg	USD5 per drone	3 years	**Remote pilot certificate** (Part 107) for drones under 25kg used commercially: knowledge test that includes 60 question multiple choice test to answer in 2 hours at FAA-approved Knowledge Testing Centre	USD150 (Part 107)	2 years	Operators must: • mark each of their drones with unique registration number before operating (one number for all drones) • be able to provide FAA registration certificate	RID required on all registered drones operating in the US airspace (standard RID UAS and limited RID UAS) Notice of proposed rulemaking (NPRM) – RID of UAS – aiming for publication by end of 2020	For registration: • 13yrs for recreational use • 16yrs for commercial (Part 107) For remote pilot certificate: • 16 yrs	Community-based organisations that have a set of safety guidelines that were developed in coordination with the FAA have a special authorisation. The FAA to issue guidance for how it will recognize community based organizations.
Canada Transport Canada	New rules published January 2019. Online registration system implemented from **1 June 2019**	• All drones between 250g and 25kg • Drones over 25kg do not need to be registered, but operators must have special flight operations certificate (SFOC)	CAD5 per drone	New drones or on transfer of ownership (registration number remains the same)	• **Basic Pilot Certificate** required for basic operations: online small basic exam with 35 multiple choice questions to answer in 90 minutes (65% to pass) • **Pilot certificate – Advanced Operators** required for other flights below 25kg: online small advanced exam with 50 multiple choice questions to answer in 60 minutes (80%) to pass	CAD10 (per attempt)	2 years	• Operators must mark (write, label, engrave) drones with unique registration number before flying	No current requirement	For registration: • 14yrs For pilot certificate: • 14yrs for basic operations • 16yrs for advanced operations (unless supervised by a qualified person)	Model Aeronautics Association of Canada is exempt from the requirements set out in Part IX of the *Canadian Aviation Regulations*, i.e. registration and certification.

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		Registration			Competency Testing			Identification			
	Where are they up to?	**Who/what?**	**Cost**	**Validity**	**Who?**	**Cost**	**Validity**	**Physical and electronic ID**	**Remote ID**	**Minimum age**	**Special authorisations**
United Kingdom Civil Aviation Authority (CAA)	New rules effective from 30 November 2019 *UK CAA will review and implement any changes from April 2021*	• All owners of drones between 250g and 20kg • Operators of drones above 20kg must obtain an exemption before any flight can take place	GBP9 per operator	1 year	Operator gets **a Flyer ID** on passing Online theory test/online education package based on a new Drone and Model Aircraft Code mandatory for all drone operators • 20 multiple choice questions • Pass mark of 16 • Unlimited number of attempts	Free	3 years	Operators must label each drone with unique digital *Operator ID* issued by UK CAA (one code for all drones)	Mandatory Remote ID will be introduced at a later stage (details not yet decided)	For registration: • 18yrs For competency testing: • None, but children under 13 can only register with a parent or guardian present	Exemptions from the competency test apply to: • holders of current CAA permissions or exemptions for drone operations • operators holding an achievement certificate issued by a UK model aircraft association Exemption from registration and education apply to control line model aircraft flying
European Union European Aviation Safety Agency (EASA)	Member States must implement a digital national registration scheme by **Jan 2022** according to the requirements set out in the implementing regulation. The schemes must be interoperable within the EU, and allow for mutual access and information exchange	• All drones above 250g • Drones below 250g that i) have a sensor able to capture personal data (unless classed as toy) or ii) are able to transfer energy of more than 80 joules to a human in the event of a collision • Drones above 25kg or flying beyond visual line of site (BVLOS) must be registered, alongside other authorisation and certification requirements	Member States to determine	Member States to determine	• For flying drones **between 250-900g** and those **up to 25kg flown far from people**: online training course and online foundation test • For flying drones **up to 4kg flown close to people**: same as above with additional theoretical knowledge exam to receive *Certificate of Remote Pilot Competency*	Member States to determine	Member States to determine	Operators must display unique digital registration number issued by EU Member State on each drone	Every drone in the open category >250g must be equipped by July 2022	For registration: • 16yrs for Open and Specific category (Members States can lower it) For competency testing: • 16yrs for Open and Specific category (Members States can lower it) • Any age if supervised by an operator above 16yrs that passed test.	Member States can issue special authorisations to model clubs and associations to deviate from EU regulations (should be received by June 2022)
Singapore Civil Aviation Authority of Singapore (CAAS)	New rules since **January 2020**	All drones weighing more than 250g must be registered before use	SGD15 per drone (i.e. per label) Fee collected at the point of purchase of the registration label	One-off registration fee	**UA Basic Training Certificate (UBTC)** required for recreational or educational operations using drones weighing more than 1.5kg but not exceeding 7kg • Online theory training conducted by any CAAS-approved UA Basic Training organisation. ** Application and enforcement dates for UA Basic Training will now come into effect from 1 June 2020 and 1 February 2021 respectively* **UA Pilot Licence (UAPL)** required for commercial activities/business purposes, or for drones weighing more than 7kg • Theory test administered by CAAS • Practical assessment conducted by an Authorised Flight Examiner within an approved organisation	UBTC: based on CASS-approved UA Basic training Organisations. Initial application for a UAPL is SGD500, and theory test being SGD125	**For UA Basic** Training: one-off **For UAPL**: 4 yrs (proficiency check)	Operators must display label with unique operator registration number issued by CAAS on each drone (labels to be purchased online or over the counter at designated post offices)	No current requirement	For registration: • 16yrs For UA basic training and UA Pilot License: • 16yrs • Below 16 yrs, users may operate under the supervision of another person who is at least 16 years old and has obtained the UA Basic Training Certificate, or holds a UAPL.	None

Appendix 4 – Part 101 Civil Aviation Rules applicable to drones (rpas) operations

Part 101 Rules	Description
101.7 Restricted, military operating, and danger areas	A person must not fly in special use airspace without the permission of the controlling authority of the area
101.13 Hazard and risk minimisation	A person operating an unmanned aircraft must take all practical steps to minimize hazards to person, property and other aircraft.
101.202 Approved person or organisation	An approved person is one who has appropriate knowledge of airspace designations and restrictions.
101.205 Aerodromes	A person must not operate a remotely piloted aircraft or a free flight model aircraft on or within 4 km of an aerodrome.
101.205 Aerodromes	A person may fly within controlled airspace if they have gotten approval from the relevant aerodrome operator or ATC unit.
101.207 Airspace	A person operating an unmanned aircraft must avoid operating in airspace above people or property unless you have prior consent.
101.207 Airspace	A person operating a remotely piloted aircraft must not operate the aircraft at any height above 400 feet above ground level.
101.209 Visual line of sight operation	A person who operates an aircraft to which this rule applies must at all times maintain visual line of sight with the aircraft; and be able to see the surrounding airspace in which the aircraft is operating; and operate the aircraft below the cloud base.
101.211 Night operations	A person must not operate a remotely piloted aircraft or free flight model aircraft at night unless it is indoors or a shielded operation.
101.213 Right of way	A person who is operating a remotely piloted aircraft, control line model aircraft or a free flight model aircraft must ensure the aircraft that the person is operating gives way to, and remains clear of, all manned aircraft on the ground and in flight.
101.215 Aircraft limits	A person must not operate a remotely piloted aircraft, a control line model aircraft or a free flight model aircraft with a gross mass of more than 25 kg.

References

Global Unmanned Aerial Vehicle (UAV) Market – Analysis and Forecast, 2019-2029 - Focus on VLOS and BVLOS UAVs using Satellite Communications, BIS Research, 2019, https://bisresearch.com/industry-report/unmanned-aerial-vehicle-market.html

BBC News, *Gatwick airport: Drones Ground Flights*, BBC, 20 December 2018, https://www.bbc.com/news/uk-england-sussex-46623754

Civil Aviation Authority (UK), *Charge proposal for the UK Drone Registration Scheme*, 2019, https://consultations.caa.co.uk/finance/drone-registration/

Civil Aviation Safety Authority, *Remotely piloted Aircraft Systems: Cost Recovery Implementation Statement*, 2020, https://consultation.casa.gov.au/stakeholder-engagement-group/proposed-remotely-piloted-aircraft-rpa-regulatory/supporting_documents/Cost%20Recovery%20Implementation%20Statement%20%20RPAS%20Regulatory%20Charges%20%20draft%20for%20consultation.pdf

Colmar Brunton, *New Zealand drone research,* June 2020, https://www.aviation.govt.nz/assets/about-us/news/New-Zealand-drone-research-2020.pdf.

ME Consulting, *Drone Benefit Study*, July 2019, Ministry of Transport, https://www.transport.govt.nz/air/unmanned-aircraft-systems-or-drones/drone-benefit-study/

Ministry of Transport, Taking Flight: An aviation system for the automated age - Drone Integration Paper, July 2019, https://www.transport.govt.nz//assets/Uploads/Paper/Drone-Integration-Paper-Final.pdf

Ministry of Transport, *Drone Safety and Regulation Engagement with Key Stakeholders*, September 2019, https://www.transport.govt.nz/assets/Import/Uploads/Air/Documents/Drone-Safety-and-Regulation-Engagement-with-Key-Stakeholders-2019.pdf

Ministry of Transport, *Drone Safety and Regulation Engagement with Key Stakeholders* https://www.transport.govt.nz/assets/Uploads/Report/Early-Engagement-on-Drone-Safety-and-Regulation-Key-Stakeholders-Summary.pdf

Standard Scenarios SORA STS-01 and -02 for Aerial Work Operations, published by JARUS (JARUS doc 06 SORA (package)): http://jarus-rpas.org/content/jar-doc-06-sora-package

UK Ministry for Transport, *Drone use: dialogue conducted to understand public attitudes,* 2016, https://www.gov.uk/government/publications/drone-use-in-the-uk-public-dialogue

US Government Accountability Office, *Unmanned Aircraft Systems:*

FAA Should Improve Drone-Related Cost Information and Consider Options to Recover Costs, December 2019, https://www.gao.gov/products/GAO-20-136

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3 June 2021

Enabling Drone Integration consultation
Ministry of Transport,
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Tasman District Council Submission - Enabling Drone Integration: Discussion Document

Introduction
The Council welcomes the opportunity to provide feedback on the Discussion Document on Enabling Drone Integration.

The Council interest in the Discussion Document comes from several different perspectives across the Council's activity, as follows. The Council:

- Operates two aerodromes in Motueka and Takaka, and is a 50% shareholder in Nelson Airport.
- Owns and operates drones which it uses for infrastructure development, maintenance and renewals, river management, environmental monitoring, enforcement and compliance.
- Employs contractors that operate drones in for instance commercial forestry management.
- Provides consent for drone pilots to fly over Council land via a policy and by considering individual requests.

The Council's current Interim Policy on Giving Consent to Fly Unmanned Aircraft 2015 is attached to this submission. Council staff have been preparing a review of this policy however at this stage there has been no engagement with the Council's governance on possible changes to the existing policy.

General Comments
The Council agrees with the need to address the current issues caused by non-compliant drone pilots and to have confidence that those breaching the law can be identified.

In recent years the Council has received few complaints from the public about drone use over Council land. The number of requests to fly drones over Council land has also been quite low. We suspect that there are high levels of ignorance about the rules that apply to flying drones amongst pilots and significant levels of non-compliance. This view seems to be supported by the information in the Discussion Document.

The Council agrees with the view that drones are rapidly developing technologies that are challenging the way aviation is regulated in NZ. Similarly, we agree that drones can perform a wide range of activities never envisioned for manned aircraft and the range of uses of drones is only likely to expand further in the future.

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Drones are expected to grow in popularity. The range of applications of drones in business and operations are likely to grow in the future. Drone flying is already a popular recreational activity and we see this is likely to continue to grow in the future.

Given this situation the Council supports the Ministry's work to further consider the regulatory measures to support the integration of drones into the aviation system.

Whole of Government Approach and Holistic Approach Required
The Council supports the all of Government approach noted in the discussion document to drone integration. The Council would like to see this holistic approach extended to incorporate a coherent view across the range of regulations that apply to drones and their enforcement. The Council doubts that a fragmented approach, where for instance CAA takes responsibility for the enforcement for aviation regulations, the Privacy Commissioner is required to enforce the privacy regulations and Councils are expected to enforce noise issues from drones, is likely to be successful in to the future. A more joined up, comprehensive approach to enforcement would be desirable.

We are unsure whether the CAA and Privacy Commissioner are currently equipped and resourced to be able to carry increased enforcement loads. We also consider, that unless at the very serious level, drone regulation infringements will be at the low end of the priorities for NZ Police.

The meaning of excessive noise in the RMA section 326(1)(a) appears to exclude aircraft during, immediately before or after flight. Consequently, councils' ability to regulate noise issues from drones via the RMA looks doubtful. Even if the legislation enabled this, the practicalities of councils taking enforcement action would be challenging.

There are a range of potential reasons for regulating the use of drones in certain spaces/over certain land. In examining the Council's current Policy on Giving Consent to Fly Unmanned Aircraft and considering its review there are a number of reasons why we have not provided consent or may not provide consent in the future as the default position for certain areas. These reasons include the following:

- Risk of health and safety of people (including risk to drone pilots entering areas with hazardous chemicals or other hazards to retrieve crashed drones).
- Risk of damage to property (including risk of drone pilots causing damage to public infrastructure e.g. water treatment plants, water reservoirs, when retrieving crashed drones).
- Risk of disturbance of wildlife
- Risk of disturbance of mourning/solemn remembrance of the deceased (cemeteries)
- Risk of noise and visual disturbance of people in quiet, sedentary enjoyment of garden parks etc.
- Risk of igniting fire.

The Council notes the Ministry's intention to further consider the impact of its proposals on public conservation land managed by DOC, where the consent provision allows DOC to manage the effects of drone use on wildlife, tangata whenua values, DOC operations, and visitor experience. However, we draw the Ministry's attention to the land managed by this Council (and many others) which has conservation values and contains wildlife that is sensitive to drone use. In enabling drone integration consideration needs to be given to how best to manage drone use to avoid negative impact on these values.

The Council is unclear how the Ministry's proposals will intersect with other (non-aviation) forms of regulation. The current prohibition of drone use in the Moturoa/Rabbit Island

Reserve Management Plan is one example of this interaction of different regulations that needs further consideration.

Drone use on Moturoa/Rabbit Island
Under the Reserves Act the Council is expected to develop Reserve Management Plans for its reserves. These plans 'shall provide for and ensure the use, enjoyment, maintenance, protection, and preservation, as the case may require, and, to the extent that the administering body's resources permit, the development, as appropriate, of the reserve for the purposes for which it is classified…'.
In the case of Moturoa/Rabbit Island the Council has developed a reserve management plan and in that has prohibited the flying of drones in order to give effect to the requirements in the Reserves Act.
There is an acknowledgement in the discussion document of the interaction between the aviation regulations and some other legislation but not the Reserves Act.

Should we review the four-kilometre minimum flight distance from aerodromes?
As noted at the start of this submission, the Council is the operator of two aerodromes. We are particularly concerned about ensuring the safety of manned aircraft in and around aerodromes. Clearly drone use in close proximity to aerodromes has the potential to create significant health and safety and damage risk for manned aircraft.

The Council accepts the view expressed in the Discussion Document that there is wide variation in the use of uncontrolled aerodromes and a one-size fits all circumstances may not be appropriate. However, having a consistent standard around all aerodromes helps in communicating a clear message to all drone pilots.

In considering the specific arrangements for use of drones in close proximity to individual aerodromes the Council would like some assurance that there will be adequate engagement with the aerodrome operators and local pilots to gain a really good understanding of the local conditions and use of the aerodrome. This engagement should ensure that those developing the arrangements for drone flying are well informed about the specifics of the individual aerodromes.

Should we change the requirement to gain consent to fly above property by:
a. Using 'safe distances' as an alternative?
b. Relaxing the requirement in another way?
c. Removing the requirement completely?

In general, the Council considers there to be some merit in relaxing the requirement to gain consent because:

- The current provisions generate administrative costs for us in developing/reviewing a policy to give effect of the requirement, and considering and responding to requests for consent.
- We have the strong suspicion that many drone pilots either are not aware of the requirement to gain consent and/or ignore the requirement.
- Even for drone pilots knowledgeable and motivated to meet the requirement, doing so can be problematic.

- The arrangements are different between Council areas, adding to the complexity for drone pilots.
- Widespread drone use is gradually becoming more publicly accepted.

However, the Council notes that there may be a number of legitimate reasons why the owners and/or users of land may not want drones operating. Only some of these relate to safety which appears to be the CAA's focus. Earlier in this submission we listed the range of reasons we may limit drone use over certain areas of Council land. The Council would be concerned if private landowners are completely excluded from having some sort of say in drones flying over their property.

In the recent question and answer session organised with LGNZ, the idea that Council's may introduce bylaws to control aspects of drone use, not associated with safety concerns, was contemplated. Such an approach would lead to inconsistent rules around the country for drone operators which could be problematic. The Council considers that the general bylaw provisions in the Local Government Act 2002 should not be relied upon as a mechanism to develop bylaws to control drones. This is because the enforcement tools available to Council's to take action on bylaws created under these powers are extremely limited and of little practical use in many situations. Rather if bylaws are considered to be part of the fabric of drone regulation and control, there should be some specific legislation providing councils the power to make the bylaws with appropriate enforcement measures.

We consider that if the requirement to gain consent is relaxed there needs to be an effective alternative (in addition to the other measures proposed in the discussion document). Safe distances seems to be the only method really identified as a current alternative. The Council understands that the relaxation of the requirement to gain consent would only proceed in combination with some of the other measures such as the requirement to register drones and remote identification. This could be effective but depends on how it is applied. The Council would like to consider nature of this control and how it would be applied before commenting further.

The Council agrees that drone pilots would have to adhere to other legal requirements such as privacy law and principles. As noted earlier in the submission we have concerns about how this will operate in a comprehensive and coherent way.

Q.4. Should we change the requirement to gain consent to fly above people by:
a. Using 'safe distances' as an alternative?
b. Relaxing the requirement in another way?
c. Removing the requirement completely?

As noted earlier in this submission we feel that drone use is becoming more generally accepted. There remain significant privacy risks and we understand that the Privacy Commissioner is responsible for regulating the privacy aspects. Again, we seek a coherent and joined up approach across the various agencies involved.

Drones flying over people at events, playing sport and a range of other situations can be annoying, disruptive and potentially hazardous, in addition to the privacy concerns. Safe distances may be an appropriate alternative to the requirement to gain consent to fly above people, but the Council would like to consider the nature of this control and how it would be applied before commenting further.

One particular instance in which there will be a desire to regulate drone use over people is the case of major events, particularly where the broadcast rights have been sold.

Should we introduce basic pilot qualification for Part 101 drone pilots?
The Council is supportive of the proposal to introduce a national level basic pilot qualification for Part 101 drone pilots. This could be a useful method of at very least ensuring that pilots are made aware of the regulations, knowledge and skills involved in flying drones.

Achieving the right balance between ensuring that pilots have an appropriate level of ability and not making the requirement so arduous many pilots will ignore it is tricky. We consider that an online basic theory test would be a good way of striking this balance. Common to other online testing there is a risk that the person whose details are entered may not be the person actually taking the test.

As with all regulation, having an effective form of compliance and enforcement is important. For this reason the Council considers that the introduction of a requirement for basic pilot qualification would mean that a register of qualified pilots would need to be established and maintained. We appreciate that creates significant complexities in terms of data management and privacy.

The Council's drone pilots have been through suitable training and we support the proposal to exempt pilots who have qualifications through Part 141 and Part 101.202 CAA approved training organisations should be exempt from taking the test as long as they can prove so. However it will be important that these people are included in the register of qualified pilots to support good enforcement.

Should we introduce the proposed drone registration system? Why?
The Council supports the introduction of a national level drone registration system and sees clear advantages for enforcement from being be able to easily connect a drone to its owner. In addition, drone pilots knowing their drone can be connected to them should also play a role in encouraging pilots to take more care to stay within the rules.

Any drone registration system needs to be simple for both drone owners and enforcement agencies to use. It needs to be at the national level to ensure consistency across New Zealand, as pilots can easily move around New Zealand.

The Council does not have a view on the specific minimum weight threshold for registering a drone, however considers it sensible to include all drones of a weight that have the potential to create health and safety issues, damage property or disturb wildlife etc.

Should we consider introducing Remote ID? Why?
The Council supports the introduction of remote ID being further considered. We see clear potential benefits in improved health and safety, better detection of rule breaking and improved enforcement, as well as better understanding of drone use in general to inform future policy development and system management.

We consider that there may be issues with transitioning to this requirement. Many older drone models will not have this capability and may have quite long operational lives. We are unsure whether retrofitting this capability on older drones is possible and if so whether it is cost effective.

Should we consider introducing geo-awareness? Why?
The Council considers that there are significant potential benefits from introducing geo-awareness. We see particular benefits from there being one source of truth in map form. We consider that this is comprehensive and authoritative, including all areas where flying drones in prohibited or restricted through the full range of legislation and regulations. A map of areas subject to aviation regulations alone would be significantly less useful.

We consider that geo-fencing seems like a sensible option to avoid drones inadvertently being flown into prohibited airspace, as the technology advances. Geo-fencing may have application for e.g. major events, maybe emergency situations and other occasions where there is a desire to exclude drones for a limited period of time. We would be concerned if geo-fencing resulted in there being no drone flying whatsoever in controlled airspace. Some parts of the Tasman District such as Waimea pains and Motueka have relatively large controlled airspace, however flying drones in these areas periodically is important for us for river management for example.

Yours faithfully

Tim King
Mayor

Attachment 1

Interim policy giving consent to fly unmanned aircraft over Council land

Policy effective from 15 September 2015

Policy Summary

Provided you follow the CAA operating rules and subject to conditions*, you have Tasman District Council's permission to fly unmanned aircraft over Council land, with the exception of:

- Council offices and libraries;
- Council land managed as plantation forest;
- Mapua precinct and wharf area, and Waterfront Park;
- Washbourn Gardens;
- Pethybridge Rose Gardens;
- Takaka Memorial Gardens;
- Council cemeteries;
- Motueka sandspit (Council owned portion. Refer to the Department of Conservation on rules for its portion of the spit);
- any Council land that is leased to another party (e.g. bowling greens, tennis courts, grazing licences); and
- any location on Council land during an organised gathering of people (including sporting events).

Council may consider specific requests to fly over these areas.

If you want to fly over land within the 4km zones around aerodromes, you will either need to stick to shielded operation (stay low), or obtain permission from the aerodrome operator and comply with their requirements. Council's Property Services Manager is the aerodrome operator for the Motueka Aerodrome.

***Tasman District Council conditions when flying unmanned aircraft over Council land**

- Comply with the Office of the Privacy Commissioner guidance on preserving peoples' personal privacy by not flying over other people or adjoining private property without their consent.
- Be courteous of other park users, who often are there for the quiet enjoyment of the park.
- Do not operate over a sports field if in use by others.
- Do not operate within 20 metres of or be flown over other users of a park or livestock.
- Do not operate within 20 metres of sensitive wildlife habitats (such as coastal or river margins).
- Do not operate within 20 metres of nesting or roosting birds (such as godwits, banded rail, terns, NZ dotterel).
- Do not operate within 20 metres of, or be flown over, any building on Council land.
- Do not operate during a fire ban period.
- Cease operation if requested by Council staff.

- Any person proposing to use unmanned aircraft for commercial purposes must obtain specific permission from Council.

Any breach of the above conditions could result in termination of your permission to fly unmanned aircraft over Council land.

Introduction

Property owner consent is required to fly drones/UAVs/model aircraft over land that is owned, managed or leased by Council. This page outlines the interim approach Tasman District Council is taking to property owner consent. The interim approach will be reviewed once national guidance from Local Government New Zealand becomes available.

The Civil Aviation Authority (CAA) regulates civil aviation in New Zealand, and sets the rules around the use of Remotely Piloted Aircraft Systems: Unmanned Aerial Vehicles (UAV), Unmanned Aerial Systems (UAS), model aircraft and drones – unmanned aircraft.

New rules introduced by the CAA came into effect on 1 August 2015. These rules require people to obtain approval from the land owner or the occupier of the land you want to fly over. This rule comes in addition to the existing CAA and Air Traffic Control rules on where and how you can fly unmanned aircraft, and what permissions you need to get before doing so.

Council isn't responsible for setting, monitoring or enforcing these rules, but we are summarising them here in an attempt to make them clearer to users, especially casual UAV/drone operators.

Where can you fly and what permissions do you need?

General CAA rules and Air Traffic Control

Part of Tasman District (including Rabbit Island, the Waimea Plains, Eves Valley and parts of Redwood Valley and the Richmond Range) sits below the Nelson controlled airspace. This means that if you want to fly anything in that airspace, you need permission from Air Traffic Control.

In addition, CAA defines four-kilometre zones around all aerodromes, where the use of the airspace is further restricted. In these zones, you need to have a pilot licence (or to be accompanied by someone who does) in addition to having permission from Air Traffic Control. This restriction applies specifically to any aerodrome listed in the Aeronautical Publication of New Zealand. These aerodromes are shown on the map linked to below.

In the case of the 4km zone around the Motueka Aerodrome, 'Flight Restriction Zones' have been established to protect aircraft using this aerodrome. Within the Purple flight restriction zone you can fly up to 20 metres above sea level without prior approval. If you want to fly higher than 20 metres above sea level you will also need permission from The Property Services Manager at Council (he is the Motueka Aerodrome Operator).

Map of controlled airspace and 4km zones (shows the controlled airspace for Nelson Airport and the location of aerodromes at Takaka, Motueka, Eves Valley, Nelson, Lake Station/Nelson Lakes, Murchison and Murchison Hospital)

- Flight Restriction Zones for the Motueka Aerodrome

Airspaces within Tasman District:

- NZMR – Murchison
- NZUR – Murchison Hospital
- NZLE – Lake Station/Nelson Lakes
- NZTK – Takaka
- NZMK – Motueka
- NZEV – Eves Valley
- NZNS – Nelson (controlled aerodrome)
- Nelson controlled airspace

To obtain authorisation from Air Traffic Control, register and log your flights on the Airshare UAV hub. The hub also provides a wealth of other information, including links to the CAA rules and news on the UAV industry.

Exemption: shielded operations

You don't need to get a pilot licence or Air Traffic Control authorisation if you're flying as a "shielded operation" which CAA defines as "an operation of an aircraft within 100m of, and below the top of, a natural or man-made object". This means you can fly your unmanned aircraft in Tasman District as long as you keep your aircraft lower than the highest tree / building / ridge within 100m of where you're standing. But you need to have permission from landowners first.

Landowner / occupier permission

The new rules introduced by the CAA require people to obtain approval from the landowner or the occupier of the land you want to fly over. What this means:

On private land

Fly over your own property or get permission from whoever owns / occupies / is in charge of the land you want to fly over.

On land owned, managed or leased by Council (including parks and reserves)

Provided you follow the CAA operating rules and subject to Council's conditions (set out below), you have Tasman District Council's permission to fly unmanned aircraft over Council land, with the exception of:

- Council offices and libraries;
- Council land managed as plantation forest;
- Mapua precinct and wharf area, and Waterfront Park;
- Washbourn Gardens;
- Pethybridge Rose Gardens;
- Takaka Memorial Gardens;
- Council cemeteries;

- Motueka sandspit (Council owned portion. Refer to the Department of Conservation on rules for its portion of the spit);
- any Council land that is leased to another party (e.g. bowling greens, tennis courts, grazing licences); and
- any location on Council land during an organised gathering of people (including sporting events).

Council may consider specific requests to fly over these areas.

If you want to fly over land within the 4km zones around aerodromes, you will either need to stick to shielded operation (stay low), or obtain permission from the aerodrome operator and comply with their requirements. Council's Property Services Manager is the aerodrome operator for the Motueka Aerodrome.

The CAA rule also says you need to get consent from any person you want to fly over (this can be given verbally).

CAA rules also have an overriding requirement to not operate in a manner that is hazardous to people or property.

How must you fly?

Other rules and conditions apply, whether you're flying with or without a pilot licence and authorisation from Air Traffic Control/the aerodrome operator. We advise people to always read the rules in full, along with the relevant advisory circulars on the CAA website. The advisory circulars aim to help people interpret the rules and understand how to comply with them.

CAA operating rules

- never fly higher than 120 metres / 400 feet above ground level
- only fly during daylight hours
- always fly within visual line of sight – you need to be able to see the aircraft with your own eyes at all times (i.e. not through binoculars, a monitor, or smartphone)

  at all times take all practicable steps to minimize hazards to persons, property and other aircraft (i.e. don't do anything hazardous). Give way to all other aircraft, and have abort systems in place in the event of a system failure (know how your aircraft will behave if a failure occurs)

If you are concerned that these rules are being breached, please contact the CAA on isi@caa.govt.nz or phone 0508 4SAFETY. If there is an imminent threat to people or property, please contact the Police.

Tasman District Council conditions when flying unmanned aircraft over Council land

- Comply with the Office of the Privacy Commissioner guidance on preserving peoples' personal privacy by not flying over other people or adjoining private property without their consent.
- Be courteous of other park users, who often are there for the quiet enjoyment of the park.
- Do not operate over a sports field if in use by others.
- Do not operate within 20 metres of or be flown over other users of a park or livestock.
- Do not operate within 20 metres of sensitive wildlife habitats (such as coastal or river margins).

- Do not operate within 20 metres of nesting or roosting birds (such as godwits, banded rail, terns, NZ dotterel).
- Do not operate within 20 metres of, or be flown over, any building on Council land.
- Do not operate during a fire ban period.
- Cease operation if requested by Council staff.
- Any person proposing to use unmanned aircraft for commercial purposes must obtain specific permission from Council.

Any breach of the above conditions could result in termination of your permission to use Council land for the above purposes.

Privacy Act

You also need to comply with the Office of the Privacy Commissioner guidance on preserving peoples' personal privacy by not flying over other people using the park or over adjoining private property without their consent. Note that the Privacy Commissioner's CCTV guidelines apply to how someone might use drones fitted with cameras and comply with the Privacy Act:

What types of aircraft can you fly over Council land?

You are only permitted to fly unmanned aircraft weighing less than 25kgs on public land. However, anyone operating an unmanned aircraft that weighs between 15 - 25kgs must be a member of an organisation approved by the CAA (e.g. Model Flying New Zealand).

The rules and permissions set out on this page cover electric-powered, remote-controlled model aircraft commonly referred to as "drones" that are capable of vertical take-off and landing. They also cover small hand-launched gliders less than 1.5m wing span.

The rules and permissions set out on this page do not cover the following:

- Fixed-wing electric-powered model aircraft greater than 1m wing span;
- Gliders greater than 1.5m wingspan and bungee-launched gliders;
- All internal combustion engine (petrol)-powered aircraft; or
- All jet-powered models.

These types of unmanned aircraft can only be flown on private property or officially recognised sites under the control of approved operators, such as model aircraft clubs.

What about flying my kite?

As long as your kite is moored (i.e. you have it on a string) and kept under 120m / 400ft, you can fly it where you like so long as it is used carefully and you take into consideration nearby people, stock and wildlife.

More tips and resources

Read up on CAA rules Civil Aviation Authority website

Map it out Visual Navigation Charts

Get authorisation Airshare UAV hub

Check before you fly Controlled airspace and 4km zones

Know your responsibilities Duties of pilot-in-command

Use the right frequencies Frequencies legal for unmanned aircraft

Hon James Shaw
Minister of Climate Change
Associate Minister for the Environment (Biodiversity)

11 June 2021

Local authorities
Local Government New Zealand

Dear local authorities,

Progress on the National Policy Statement for Indigenous Biodiversity

Thank you for your continued work to protect indigenous biodiversity in your regions and districts. We recognise this work can be challenging and we have heard your calls for improved clarity on the progress of the National Policy Statement for Indigenous Biodiversity (NPSIB).

Almost 4,000 of our native plants and wildlife are currently threatened or at risk of extinction. The NPSIB will be crucial part of our Government's plan to halt the loss of indigenous biodiversity and protect what is unique about Aotearoa New Zealand.

The requirement to protect areas with significant habitats of indigenous biodiversity has existed under the Resource Management Act (RMA) for several decades. However, we acknowledge that local councils are at different stages in the process of meeting this requirement. Part of the reason for this is that no previous Government has provided guidance to councils on how they should identify those areas of significant indigenous biodiversity.

In most cases, the NPSIB requirement to identify Significant Natural Areas (SNAs) is not new. A large number of councils have already identified the equivalent areas. Many others are legally required to do so because the regional policy statement applying in their region requires it.

The NPSIB will provide standardised ecological criteria and process that would apply across the country on how SNAs should be identified. The criteria can be used to ensure consistency between local plans, and effective implementation of the RMA and the Aotearoa New Zealand Biodiversity Strategy.

The NPSIB will also enable councils and tangata whenua to work together to identify and protect biodiversity on Māori land. It will also ensure that the processes councils will need to follow to identify and manage an SNA is transparent and inclusive. Put simply, the NPSIB will provide councils with the regulatory tools to identify and protect SNAs.

Since public consultation concluded in March 2020, officials have been working through the 7000+ submissions and further developing the policy to ensure the NPSIB hits the right

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balance of protecting biodiversity while providing for the social, economic, environmental and cultural wellbeing of people and communities.

The next phase of development is to test this thinking through an exposure draft process in the coming months. We will be looking for feedback on the workability and practicality of implementation of the proposal. This will be an opportunity to work together to get this important work right. Our intention is to finalise the NPSIB by the end of this year.

Following gazettal, the implementation of the NPSIB will focus on supporting councils, iwi/Māori and other landowners to work together to identify, protect and restore the ngahere and the precious native plants and animals that live there. An implementation plan will also be developed to support local communities. The government's intention is to release this alongside the final NPSIB.

As New Zealanders, we all love getting out in nature. We also need development to occur in a way that meets the needs of current and future generations. One should not come at the expense of the other. That's what the NPSIB will help to ensure.

Once finalised, the NPSIB will be crucial to our efforts to reverse the decline of Aotearoa New Zealand's unique biodiversity and protect our natural taonga for generations to come. The NPSIB has been decades in the making and we look forward to working with you as it is finalised and we turn our attention to its implementation.

Yours sincerely,

Hon James Shaw
Associate Minister for the Environment (Biodiversity)

Hon Nanaia Mahuta
Minister of Local Government

9.4 ACTION SHEET

Information Only - No Decision Required

Report To:	Strategy and Policy Committee
Meeting Date:	8 July 2021
Report Author:	Tara Fifield, Executive Assistant
Report Number:	RSPC21-07-6

1 Summary

1.1 The action items are attached from previous Strategy & Policy Committee meetings.

2 Draft Resolution

That the Strategy and Policy Committee receives the Action Sheet RSPC21-07-6;

3 Attachments

1. Action Sheet July 2021 289

Action Sheet – Strategy & Policy Committee

Item	Action required	Responsibility	Completion Date	Status
Meeting Date – 1 October 2020				
Strategic Policy, Resource Policy & Other Matters Activity Report – RSPC20-10-03	Staff to write a letter for the Mayor's signature to Network Tasman advocating for them to install an EV charging station in Springs Junction as soon as possible	A Gerraty/D Bryant	Staff will provide information in the Cr update dated 5 July 2021	Complete

10 CONFIDENTIAL SESSION

10.1 Procedural motion to exclude the public

The following motion is submitted for consideration:

That the public be excluded from the following part(s) of the proceedings of this meeting. The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution follows.

This resolution is made in reliance on section 48(1)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by section 6 or section 7 of that Act which would be prejudiced by the holding of the whole or relevant part of the proceedings of the meeting in public, as follows:

10.2 Waimea Water Ltd Presentation

Reason for passing this resolution in relation to each matter	Particular interest(s) protected (where applicable)	Ground(s) under section 48(1) for the passing of this resolution
The public conduct of the part of the meeting would be likely to result in the disclosure of information for which good reason for withholding exists under section 7.	s7(2)(h) - The withholding of the information is necessary to enable the local authority to carry out, without prejudice or disadvantage, commercial activities.	s48(1)(a) The public conduct of the part of the meeting would be likely to result in the disclosure of information for which good reason for withholding exists under section 7.