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Searching for community wellbeing: population, work and housing in the town of Oamaru

Building Better Homes, Towns & Cities: Thriving Regions

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1 Introduction

1.1 Purpose of this working paper

The purpose of this paper is to present recent results of the Oamaru case study of the Thriving Regions Research Programme to the Waitaki Housing Task Force.¹ It is a background paper pulling together information gathered from a literature review, the 2018 census and other secondary data sources. The information extends that already provided to the Task Force from their recent research efforts and is designed to complement information that comes out of the housing survey that the Task Force has underway.² It is expected that all this information, together, will provide the basis for an informed district housing strategy as well as for ongoing research by the research programme.

1.2 The Thriving Regions and Communities research programme

The Oamaru Case Study is part of a research programme considering the basis for thriving regions and communities in New Zealand. The programme is part of the Building Better Homes, Towns and Cities National Science Challenge (“BBHTC”) Ko ngā wā kaingā hei whakamahorahora. The programme comprises a set of studies of South Island regions and communities that are attempting to create positive futures for themselves, while considering issues such as the future of work in rural areas and provincial towns, the supply of workers, demographic changes and the supply of suitable housing and social services.

Researchers in the programme are working directly with community stakeholders in selected South Island regions and settlements as they navigate change, determine their own aspirations, confront impediments to social wellbeing and search for solutions to local problems through sustainable pathways. The aim of The Programme is to reveal what practical approaches are most effective at creating real-world change in different community settings, and document examples where residents, local governments, community groups, and businesses have collaborated to create change. The central research questions are as follows.

- I. How are futures being defined, what strategies are being adopted to create them, and how are related plans, programmes and activities resourced and supported?
- II. What do community leaders, councils, organisations and agencies, mana whenua groups, and Māori organisations need in order to develop strategies that support the capacity and capability of their communities to adapt to future challenges and thrive?

The research programme selected three ‘second-tier’ regional settlements in the South Island, Ashburton, Timaru and Oamaru, which have populations in the range 10,000 to 30,000 and support hinterlands of rural areas and small country towns. The opportunities and challenges for these second-tier settlements differ from those facing our largest cities as they represent populations that hold fewer formal credentials and offer lower wages. They are part of areas that tend to have economic bases emphasising primary production and processing and services to agriculture as well

¹ The research team gratefully acknowledge funding from the Building Better Homes, Towns and Cities National Science Challenge. We appreciate the collaborative approach taken by Helen Agar and Shirley Bee of Safer Waitaki, the Waitaki Housing Task Force and community members, and the useful comments and suggestions from Cilla Taylor.

² The research team has had an input to the survey design.

as active visitor sectors. There are fewer benefits of agglomeration than found in larger cities (Perkins et al., 2019).

In Phase I we made good progress considering the elements for success in economic regeneration in regional centres and how these elements of success can be encouraged. We have studied and worked alongside stakeholders who are attempting to meet their local needs and improve the situations in regional settlements in the South and North Islands (Perkins et al., 2019).

Our research into economic regeneration in these three towns found that in addition to their shared characteristics they each have particular economic histories and geographical contexts (Perkins et al., 2019). What has become apparent is the great variation in the ways that regional settlements experience social, cultural, environmental and economic change, and the capability and resources they have to manage change.

Additionally, and adding another layer of complexity, some settlements and regions display rapid growth, others stasis and a number decline. What is apparent through the research programme is that the stakeholders in regeneration in these settlements require research and other forms of support to help them develop and establish thriving places and sustainable future pathways. So, the success and decline of regional settlements is proving challenging, and raising important research and policy questions:

- I. What does a well-supported, self-sustaining and innovative regional regeneration framework look like and what are the best ways to institute and support such a programme?
- II. How can we integrate improved social, economic, cultural and environmental outcomes, including employment, housing and social services, in ways that support people and their diversifying communities, now and into the future?

2 The Oamaru research - findings from Phase 1

Oamaru has an economy in the surrounding Waitaki District based on agricultural servicing, secondary agricultural processing and tourism. The town is a settlement experiencing moderate growth and a changing demography associated with an aging population and the in-migration of workers from countries such as Tonga. Housing issues are evident and a housing taskforce has been established. Also evident is the work of social entrepreneurs leading community initiatives in local government, community development, heritage preservation, landscape enhancement, economic diversification and social services.

In Phase one of the research, the Oamaru case study provided an analysis of Oamaru's past, present, and future initiatives for regeneration. It asked the essential question: How did Oamaru become an attractive place to live, visit, work and do business? The initial findings were focused on three ongoing and interrelated sets of initiatives evident since the town and district experienced a period of marked economic decline and population loss in the 1980s.

The first set of initiatives is focused on urban renewal, heritage conservation and employment generation. This set is local in nature and proved fundamental to the initial momentum of regeneration. The initiatives are associated with planning and implementing regeneration of the Victorian heritage precinct of Oamaru stone buildings in the harbour area and along the main street,

the eco-tourist attraction of the blue-penguin colony and visitor centre, and rejuvenation of the waterfront area. Property development is a focus, such as rehabilitating former industrial spaces or public facilities for reuse and new commercial uses such as retail or cafes. Plus there is construction of new facilities and spaces for interaction such as playgrounds and parks, a children's bike park, new road access and waterfront amenities. Environmental and heritage conservation in the area leverages natural and built amenities through public and private investment, and community effort.

The second set of initiatives is based around the Alps to Ocean (A2O) cycle trail, part of the New Zealand Cycle Trail, initiated and organised by local groups, councils, the Department of Conservation, Meridian Energy and local businesses. The trail, running from the mountains down the Waitaki to Oamaru, presents many opportunities for rural businesses along it, as well as for the hospitality sector in Oamaru.

The third set of initiatives is broadly involved with the current Geopark proposal led by the Waitaki District Council in conjunction with partners including Ngāi Tahu, University of Otago, Vanished World and others. The Geopark began as a local and then district initiative, then upscaled over the last year as the New Zealand proposal put forward for formal recognition by UNESCO.

Key factors in success of these initiatives include: amenity and attractiveness; heritage, convenient location and natural features; proximity to a range of attractions and transport corridors; and the capacity to plan and implement regeneration. A range of organisations and leadership broadens the base of local capacity to drive initiatives, along with a proactive local council. Influential local people or pressure groups, political will, contributions from central government, planning and governance arrangements are all important.

Finally, the research is considering the underlying challenges that thriving communities must address. They must plan for and respond to cycles of decline (and growth) that are always present in communities with an economic base in natural resources, including primary production and processing and the visitor sector. Recovery from the Covid-19 lockdown is just one example of the ways the resilience of regional communities is tested, alongside economic crashes and natural disasters (droughts, storms and earthquakes). Technological changes offer many opportunities that have to be grasped. There are also changes in demographics, with an ageing population and increasing cultural diversity in the population.

2.1 A change of focus in Phase 2

The first phase of the research revealed important questions for this next phase of the research.

During Phase I of BBHTC, the research team had an active engagement with key people in Oamaru, including the District Council (Mayor, CEO and senior staff), and people active in strategic thinking about the future of work and housing and associated cultural issues in the town and District. Of particular interest to the ongoing research was our interaction with the Safer Waitaki project, a "whole-of-community project with a focus on community safety" including community health and well-being. Useful ideas for further research also emerged from community leaders thinking about the future of work and housing issues, and the wellbeing of the large migrant community of Pacific Islanders (mainly Tongans) in Oamaru, and other migrant workers engaged in primary production and processing.

The Phase I research and discussions with community stakeholders identified several new priority research questions to address over the current two years of the programme (2019-2021):

- I. How is the wellbeing of the people of Oamaru related to the availability of different types of work, housing and social services?
- II. How well are newcomer residents, with skills and social capital, integrated into the capacity of the community to adapt to future challenges and inevitable shocks from external forces and events?
- III. How well is a significant new group, such as the Tongan workers and families in the town, positioned in terms of work, affordable housing and culturally appropriate services?

3 Lessons from elsewhere

As part of this repositioning of the research programme an annotated bibliography and summary literature review was prepared in support of the Oamaru case study and other research in the Thriving Regions research programme of BBHTC (Wilson et al., 2020). The focus of the literature review on strategic thinking about newcomers and their families necessitated a better understanding of the future of work, housing and culturally appropriate services and the lessons from elsewhere that assist the research team to address these issues.

“The material reviewed was broadly focused on rural community transformation and on a range of issues associated with the attraction, integration and retention of immigrants in rural communities. The bibliography therefore presents a review of material on a range of topics associated with immigrant populations and their attraction to and retention in (mainly) rural areas and small towns, including: acculturation; refugee relocation and settlement; labour migrants; the provision of community support services; immigrant organisations; immigrant and immigration discourse; rural housing; rural community transformation and revitalisation; and community resilience” (Wilson et al. page 2).

Some of the key findings from the literature review are as follows:

The reality of successful integration is the ability of a newcomer to participate fully in their new community. Many rural communities host multiple cultures, often with migrant workers from several different countries and cultures, as is the case in Oamaru. Some of these new residents are looking to settle permanently, others are more transient, driven by shorter-term opportunities to work. Therefore, internationally, the focus of “integration” has shifted to an understanding of multiculturalism and the needs of a complex mix of newcomers. This shift reflects the shift from a strategy of assimilation to one recognising the social development needs for multiple groups of residents.

In order to develop appropriate strategies it is important to be able to differentiate sub groups in the population. Ethnicity remains a useful, basic descriptor but it is also important to recognise differences within and between immigrant groups and the host community. These differences can range from basic needs such as housing, to styles of work, recreation activities and participation in other community activities. The predominance of labour migration in rural areas and communities for work in sectors such as agriculture, manufacturing and tourism, necessitates an understanding of the length of residence and the issues of “transience” in particular.

The relationships between newcomers and longer-standing residents will depend on the past experiences a community has of migrant workers and the integration of newcomers into community life. Types of work and work schedules, location (dispersal versus concentration), housing status, age, family types, and participation in education and in leisure activities can all influence how well newcomers are integrated into the new place.

The available research also shows that it is important to understand the community context that migrants are now part of. The size of the settlement, its infrastructure, services and “social milieu” are all important factors. Migrants may be focused in particular places in the community, for housing, work, services, community activities and leisure. Initiatives to ensure that they can play a full part in community life are important to community well-being as a whole. These include educational initiatives in particular.

The provision of affordable housing is an important focus for many groups supporting migrant populations. Rental housing is an important aspect of housing and there are many reports of overcrowded, or otherwise substandard housing. The vulnerability of migrant families is increased by their lack of knowledge of rights and available support services. The provision of housing for very transient workers such as seasonal workers, or short-term construction workers, is a particular issue in many places.

Overall, support for immigrant populations needs to be community driven and broad based – involving a range of stakeholders. Action plans can include support for particular groups of immigrants and often includes support for work such as specific training needs, as well as for housing and adequate social services. The literature review provides a strong basis for developing a strategic approach to welcoming communities, especially in the face of new challenges such as the impacts of Covid-19 on workplaces and employment.

4 Approach and methods

4.1 The research process

The research process over phases one and two has emphasised co-construction of knowledge and a mixed method approach to evaluation and social impact assessment, building a deep understanding of the multifunctional Oamaru economy and issues around work, housing and social wellbeing. In the current phase, we are continuing this approach utilising a mixture of quantitative data, mapping (2018 census data, business frame data, sector-specific data) alongside qualitative methods such as semi-structured interviews, small group discussions and hui, family work and housing histories, and workshops.

The research places emphasis on building relationships with the Council, local runaka, ethnic communities, community organisations and social entrepreneurs to build on and test the research questions, and to identify opportunities for feasible changes in development policies, strategies and investments.

The co-production of knowledge provides for the design and adaptation of opportunities and investments to support future work and housing in Oamaru and associated social services. The combined information is for use of community leaders, and a core group of local regeneration

leaders, including housing and social services stakeholders and providers (eg, Waitaki District Council, Te Rūnanga o Moeraki, Te Whare Koa Community Marae, Safer Waikiki, the Waitaki Housing Task Force, Waitaki Newcomers Network, Waitaki Multicultural Council and cultural groups) to:

- I. Assist with identification and resolution of issues relating to the supply of affordable, healthy and culturally appropriate housing for vulnerable groups in the community, including transient workers, and those on low incomes and currently living in costly, overcrowded or otherwise inappropriate conditions.
- II. Identify and plan for opportunities to skill new and emerging workers, re-skill and up-skill existing workers, and attract suitably skilled newcomers to the various forms of work generated by a multi-functional economy through economic cycles.
- III. Develop strategies that support the community's capacity and capability to adapt to challenges around the future of work and housing.

4.2 The Housing Task Force

The Waitaki Housing Taskforce (WHT) is a community based group convened by Safer Waitaki to address housing issues in the District. The Taskforce brings together a number of organisations to identify and address housing needs through development of a housing strategy. These include Waitaki District Council, Safer Waitaki, MSD, WINZ, Kainga Ora, Corrections, Methodist Mission, PSS and local real estate agents. The research team were invited to join the Taskforce and have attended recent meetings in person and by Zoom.

Leon de la Barra (2020), a statistician, has prepared a summary of secondary data relating to the population and housing of the District for the Taskforce. This working paper builds on and supplements that information, and results from the analysis and mapping of secondary data were presented to a Task Force meeting in February this year.

The taskforce have also developed a community survey that was ready to implement prior to the Covid 19 lockdown and is now underway with the reduction to Level 1 Alert.

At a recent meeting held by Zoom the Taskforce discussed Covid 19 and impacts of the shutdown on the local economy, work, welfare and housing. The research team presented results of the literature review (Section 3 above) to this meeting.

There are plans to convene a housing strategy workshop once the survey is completed. This working paper is written in order to provide additional information to the Taskforce and an informed basis for their strategic thinking.

4.3 Research outcomes

Collaboration between the research team and the WHT is a practical example of the research approach that aims to co-produce knowledge with the people and stakeholders who can use it. In this way the research helps to provide for the design of new opportunities and investments and adjustments to existing ones, supporting future work and housing in Oamaru, and associated social services. This information will be used by the research community to:

- identify and plan for opportunities to skill new and emerging workers, re-skill and up-skill existing workers, and attract suitably skilled newcomers to the various forms of work generated by a multi-functional economy
- assist with identification and resolution of issues relating to the supply of affordable, healthy and culturally appropriate housing for vulnerable groups in the community, including those on low incomes and currently living in costly, overcrowded or otherwise inappropriate conditions.
- Develop strategies that support the community's capacity and capability to adapt to future challenges.

An important additional outcome is the contribution of the research programme to further understanding what makes thriving regions in Aotearoa New Zealand, and how to support the regions through an improved base of knowledge and particular tools such as social impact assessment and programme evaluation. In turn, research in Oamaru benefits from the research and lessons gained from other parts of the country.

4.4 Phase 2 research activities and milestones

In Phase 2 Year 1 we carried out the following activities:

- Exploratory discussions with stakeholders engaged in community issues around the future of work and housing, focusing on population change, newcomer groups and housing issues
- Joining discussions with Safer Waitaki and the Housing Taskforce, including a presentation to the Housing Taskforce.
- A preliminary paper circulated to the Housing Taskforce, Safer Waitaki and Waitaki District Council on spatial issues with the 2018 Census (this information is incorporated in this current working paper and Appendix 1)
- Analysis of secondary data emphasising results of the 2018 census that came available over the first year.
- Write this draft working paper based on these initial investigations – for feedback and discussion with research stakeholders and participants
- Present results from the research to the conference of the Agrifoods Research Network and to the conference of the International Regional Studies Association (available on the BBHTC website).

In Phase 2 Year 2 (from July 2020) we expect to:

- Finalise and publish this working paper on the research.
- Conduct interviews with stakeholders (not possible during the Covid 19 lockdown) to gain an in-depth understanding of issues for the housing market and migrant workers.

- Take part in a strategic planning workshop with district stakeholders to help formulate a district housing strategy.
- Contribute to a workshop to discuss findings across the South Island research projects.
- Make an input to other conferences and published papers on the research.

4.5 Spatial issues and the 2018 Census

This working paper considers the Waitaki District, the town of Oamaru, the periurban area around Oamaru and the towns of the Waitaki Valley. The research has considered the Valley in order to obtain an understanding of part of the rural hinterland of the town. The Valley was also a focus for the first phase of the research on economic development initiatives (Mackay, et al. 2018).

In December 2017, Statistics NZ released the Statistical Standard for Geographic Areas 2018, which replaced the 1992 New Zealand Standard Areas Classification. The most significant change was the creation of new geographic boundaries that are used for the 2018 census. It was important to define these areas before undertaking more detailed analysis of 2018 census data. Further information and maps of statistical areas are provided in Appendix 1.

To obtain a longer-term time series for the population of the towns and area, it was necessary to identify the revised geography of each town to ensure the population figures for each subsequent census were from the same area.³ Given the complexities, and costs, of obtaining the data in consistent geographies, the usually resident population of the towns may differ slightly to the numbers of respondents presented for other variables.⁴

5 The changing population of Oamaru

5.1 Population of the Oamaru area and Waitaki Valley over time

Table 1 shows the usually resident population of the District, Oamaru and environs in the last three censuses, showing a change of plus 8.9% for Oamaru and 10.3% for the District from 2006 to 2018. This growing population of Oamaru over recent years is in contrast to the decline in population from 1986 to 2006⁵ and is creating a demand for additional housing. Also noticeable is strong growth in the population of peri-urban areas of Oamaru indicating a demand for rural lifestyle living (refer to map in Appendix 1, Figure 7). This growth in the population indicates that the District has a relatively strong economy that has kept people living and working there.

Table 1: Usually resident population of Oamaru 2006–18

Area	2006	2013	2018	Change 2006–18	% Change 2006–18
Oamaru	12,036	12,306	13,107	1,071	8.9%
Per-urban Oamaru	1,056	1,197	1,386	330	31.3%

³ There were some very small differences over time in the maps used by Statistics NZ. The areas were reconciled to obtain a time series consistent with the 2018 maps.

⁴ Comparisons of the usual residents totals (table 1) should not be made with other census 2018 tables.

⁵ Based on the old census boundaries.

Waitaki District	20,223	20,829	22,308	2,085	10.3%
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However, not only is the population growing but it is changing in three important ways. There is an increasing number of newcomers, particularly Pacific Islanders, an increasing proportion of elderly and an increasing number seeking rural living close to town. As discussed below, these groups have particular household characteristics and housing needs.

Also important to understanding the demand for housing is the composition of the households in the area. Table 2 provides this data for Oamaru and the District as a whole. In Oamaru there is a relatively low proportion of couple only households and also a low proportion of households with children. There is a high proportion of single-person households, confirming the presence of a large number of elderly (discussed further below). There are very few multiple family households recorded in the 2018 Census.

Table 2: Household composition, census 2018

			Oamaru Total	Waitaki District	Total NZ
One-family household (with or without other people)	Couple only	#	1,671	2,943	
		%	31%	33%	26%
	Couple only and other person(s)	#	78	129	
		%	1%	1%	3%
	Couple with child(ren)	#	1,104	2,076	
		%	21%	23%	27%
	Couple with child(ren) and other person(s)	#	48	75	
		%	1%	1%	3%
	One parent with child(ren)	#	441	579	
		%	8%	6%	9%
	One parent with child(ren) and other person(s)	#	51	72	
		%	1%	1%	2%
Two-family household (with or without other people)	Two 2-parent families	#	6	6	
		%	0%	0%	0%
	One 2-parent family and a 1-parent family	#	3	9	
		%	0%	0%	0%
	Two 1-parent families	#	6	9	
		%	0%	0%	0%
	Other 2-family household	#	42	78	
		%	1%	1%	2%
Three or more family household (with or without other people)	#	6	3		
	%	0%	0%	0%	
Other multi-person household	Household of related people	#	24	39	
		%	0%	0%	1%
	Household of related and unrelated people	#	3	6	
		%	0%	0%	0%
	Household of unrelated people	#	141	237	
		%	3%	3%	4%
One-person household	#	1,746	2,646		
	%	33%	30%	23%	
Total households stated		#	5,364	8,910	

Notes: StatsNZ rate this variable as moderate quality. Currently only SA2 data are available for this variable; if SA1 data become available this table will be updated to include Oamaru peri-urban area and towns of the Waitaki valley.

5.2 Ethnicity, newcomers and the Pacific population

Table 3 shows the ethnic makeup of the population as in the 2018 census. The data confirm anecdotal information about the emerging importance of a Pacific Island (mainly Tongan) population in Oamaru working in meat processing and other manufacturing sectors (Taylor et al. 2019). This table indicates that the Pacific Island population is very strongly focused in the town of Oamaru, much more so than in the peri-urban areas of Oamaru or the rural towns of the valley, although as a proportion of the population (6%) it is still less in Oamaru than New Zealand as a whole (8%).

The background information compiled by the WHTF statistician, Leon de la Barra (2020) shows that the number of Pacific Islanders in the population increased at least four fold from 129 in 2001 and numerous anecdotal reports confirm the rapid increase in this part of the population.⁶

Māori are an important group in the District and Oamaru (8% of those usually resident). There is also an Asian population (5%) that has increasing importance in the town and District, including in the dairy farming sector.

Table 3: Ethnicity for the usually resident population, census 2018

Town	European		Māori		Pacific Peoples		Asian		MELAA		Other Ethnicity		Total stated
	#	%	#	%	#	%	#	%	#	%	#	%	
Omarama	228	78%	12	4%	-	0%	42	14%	-	0%	3	1%	291
Otematata	162	89%	15	8%	3	2%	12	7%	-	0%	-	0%	183
Kurow	342	92%	48	13%	-	0%	15	4%	3	1%	-	0%	372
Duntroon	90	94%	6	6%	-	0%	6	6%	-	0%	-	0%	96
Oamaru	11,394	87%	1,068	8%	786	6%	621	5%	51	0%	15	0%	13,107
Oamaru Peri-urban	1,332	96%	87	6%	3	0%	27	2%	3	0%	-	0%	1,386
Waitaki District	19,641	88%	1,824	8%	858	4%	1,185	5%	114	1%	21	0%	22,308
NZ total		70%		17%		8%		15%		1%		0%	

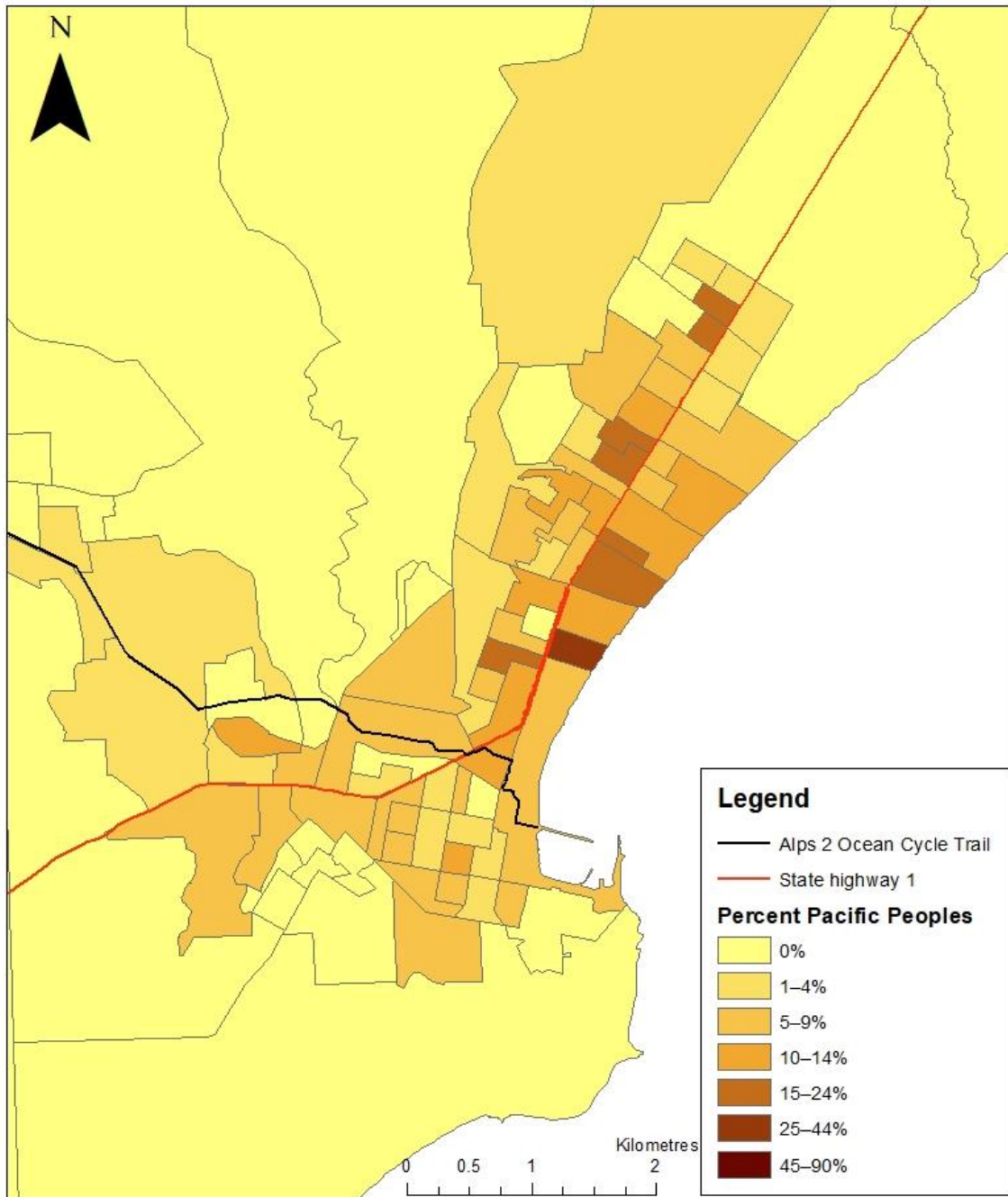
Notes: StatsNZ assesses this variable as high quality and the 2018 Census External Data Quality Panel assesses this variable as moderate quality.

MELAA = Middle Eastern / Latin American / African. Other Ethnicity does not include 'New Zealander'. Respondents can record more than one ethnicity therefore percentages do not add to 100%.

⁶ <https://www.tvnz.co.nz/one-news/new-zealand/oamaru-fast-becoming-most-polynesian-town-in-nz-just-feels-like-tonga>

Figure 1 shows that the Pacific Island population is spread around the town but concentrated north of the town centre, either side of SH1.

Figure 1: Pacific people in Oamaru % of UR Population by SA1, 2018



This map shows usual residents that stated Pacific Peoples as one of their ethnicities (out of all stated ethnicities). Note more than one ethnicity can be chosen.

SA1 boundaries and census data sourced from StatisticsNZ. Landmarks (State highways) sourced from the LINZ Data Service and licensed for reuse under the CC BY 4.0 licence. Ethnicity data based on StatsNZ Census2018 dataset. Census2018 ethnicity data is rated as high quality by StatsNZ and moderate quality by the EDQP.

Table 4 provides information on the birthplaces of the usually resident population of the area, distinguishing those who are born in New Zealand from those born overseas. This breakdown gives a quick perspective on the likely social and cultural diversity of the population. It can be seen that the population of the District has a considerably higher proportion of people born in New Zealand (84%) than overseas (16%) and this is very strongly the case for the peri-urban area. Omarama (26%) and Otematata (23%) have the highest proportion born overseas (closer to the national figure of 27%). By way of comparison, the tourist town of Tekapo in Mackenzie District has a very high proportion of people born overseas (56%), reflecting the changing social make up of tourism communities.

Table 4: Birthplace for the usually resident population, census 2018

Town	NZ born		Overseas born		Total stated
	#	%	#	%	
Oamaru	10,917	84%	2,058	16%	12,978
Oamaru Peri-urban	1,254	91%	135	10%	1,374
Omarama	204	73%	72	26%	279
Otematata	132	77%	39	23%	171
Kurow	324	88%	42	11%	369
Duntroon	81	84%	12	13%	96
Waitaki District	18,651	84%	3,426	16%	22,077
NZ total		73%		27%	
Tekapo	237	44%	303	56%	537

Note: StatsNZ and the 2018 Census External Data Quality Panel assess this variable as high quality.

5.3 The district workforce and underlying trends in the workforce

Nearly half of the District workforce (47%) is engaged in full time work, a little less than New Zealand as a whole (50%) and the level of unemployment is low (

Table 5). An interesting aspect of the labour force is the low level of full time employment in Oamaru (41%) verses the national figure (50%) and 47% for the District.

Another feature is that for Oamaru and some of the valley towns, particularly Kurow, there is a high proportion of those aged 15 plus who are not engaged in the workforce. The primary factor in this lack of engagement with the labour force is most likely retirement, given the high proportion of elderly in these places.

Table 5: Work and labour force status for the usually resident population aged 15 years and over, census 2018

Town	Employed Full time		Employed Part time		Unemployed		Not in the Labour Force		Total stated
	#	%	#	%	#	%	#	%	
Omarama	159	61%	42	16%	-	0%	60	23%	261
Otematata	87	51%	24	14%	-	0%	63	37%	171
Kurow	126	40%	51	16%	6	2%	141	44%	318
Duntroon	36	46%	15	19%	3	4%	27	35%	78
Oamaru	3,927	41%	1,434	15%	273	3%	3,945	41%	9,573
Oamaru Peri-urban	579	52%	189	17%	12	1%	321	29%	1,104
Waitaki District	8,529	47%	2,826	15%	441	2%	6,441	35%	18,237
NZ total		50%		15%		4%		31%	

Note: StatsNZ and the 2018 Census External Data Quality Panel assess this variable as moderate quality.

The top twelve sectors that workers in the district are engaged in are shown in Table 6. Across the District the Agriculture, Forestry and Fishing sector has the most jobs, followed by manufacturing and then Construction. In Oamaru town, Manufacturing and Retail Trade are important sectors and in the valley towns of Omarama and Otematata the Accommodation and Food Services sector stands out, confirming a strong tourism base. In Otematata, Construction is also important indicating the original purpose of this town remains part of its economy. Kurow and Duntroon have a strong base in the Agriculture Forestry and Fishing sector. Together the Oamaru urban and peri-urban area has a diverse economic base and provides nearly two thirds (62%) of the District's jobs.

Table 6: Industry by usual residence address for the working population, census 2018⁷

Town		Omarama	Otematata	Kurow	Dunroon	Oamaru	Oamaru Peri-urban	Waitaki District	NZ total
Agriculture Forestry and Fishing	#	24	12	42	18	252	147	2,034	
	%	12%	11%	25%	35%	4%	19%	18%	6%
Manufacturing	#	6	-	6	3	1,116	84	1,434	
	%	3%	0%	4%	6%	18%	11%	13%	10%
Construction	#	15	24	21	3	540	78	909	
	%	7%	22%	12%	6%	9%	10%	8%	9%
Wholesale Trade	#	-	-	3	6	546	51	777	
	%	0%	0%	2%	12%	9%	7%	7%	5%
Retail Trade	#	30	6	9	3	771	72	1,095	
	%	15%	5%	5%	6%	12%	9%	10%	9%
Accommodation and Food Services	#	63	24	15	6	477	30	861	
	%	31%	22%	9%	12%	8%	4%	8%	7%
Transport Postal and Warehousing	#	6	3	9	-	162	36	339	
	%	3%	3%	5%	0%	3%	5%	3%	4%
Professional Scientific and Technical Services	#	6	3	3	3	270	51	468	
	%	3%	3%	2%	6%	4%	7%	4%	10%
Public Administration and Safety	#	6	-	3	-	222	18	327	
	%	3%	0%	2%	0%	4%	2%	3%	5%
Education and Training	#	15	3	21	3	399	48	648	
	%	7%	3%	12%	6%	6%	6%	6%	8%
Health Care and Social Assistance	#	6	6	12	3	636	42	912	
	%	3%	5%	7%	6%	10%	5%	8%	9%
Other Services	#	3	9	9	3	231	24	393	
	%	1%	8%	5%	6%	4%	3%	3%	4%
Total stated		201	111	171	51	6,222	777	11,355	

⁷ This table shows the top 12 industries (out of a total 19) for the total Waitaki District.

5.4 Social capital

In addition to paid work, unpaid work (Table 7) is an important part of the social make-up of the population and helps to indicate the level of social capital present – often measured by the level of voluntary activity in a population. Social capital enriches communities and strengthens their ability to develop a collective response to solving problems (Taylor and Goodrich, 2011). The level of social capital is influenced by the factors such as the age of the population and the presence of newcomers. When there is a high proportion of people aged over 65, as is the case in Oamaru, then this can boost the people available for voluntary work

Table 7: Unpaid activities, census 2018

Town	No activities		Household activities including looking after a household member (child or ill/disability)		Looking after a child who does not live in own household		Helping someone who is ill or has a disability who does not live in own household		Other helping or voluntary work for or through any organisation, group or marae		Total stated
	#	%	#	%	#	%	#	%	#	%	
Oamaru	27	14%	204	105%	27	14%	15	8%	42	22%	195
Otematata	18	12%	153	100%	27	18%	12	8%	30	20%	153
Kurow	45	17%	276	106%	33	13%	30	11%	48	18%	261
Duntroon	3	5%	78	118%	12	18%	3	5%	15	23%	66
Oamaru	1,080	12%	10,716	116%	1,377	15%	870	9%	1,623	18%	9,231
Oamaru Peri-urban	99	10%	1,236	126%	183	19%	99	10%	195	20%	984
Waitaki District	1,743	11%	18,420	118%	2,289	15%	1,425	9%	2,847	18%	15,618
NZ total		12%		122%		14%		8%		15%	

Note: StatsNZ assess this variable as poor quality and the 2018 Census External Data Quality Panel did not assess this variable. People can state more than one response, hence percentages for household activities (a combination of 3 categories) can be >100%.

5.5 Education

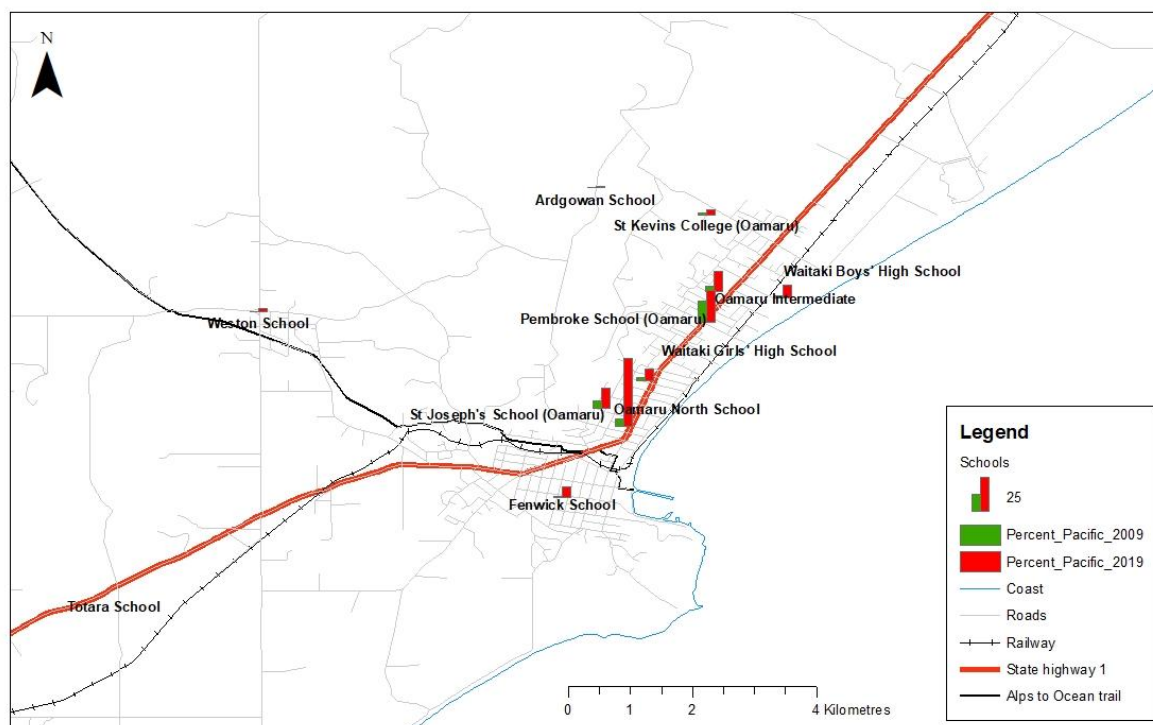
Table 8 provides information on school rolls for Oamaru and Valley areas over 10 years. Some schools in Oamaru have lost pupils in this period, especially Oamaru North, St Joseph's, and Waitaki Girls and Boys. Others have gained pupils, especially Ardgowan, Fenwick and Pembroke in the urban and peri-urban area, and Papakaio, where there is a gain from the presence of dairy farm workers.

Table 8: School rolls 2010–2019 (Source MoE)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Change 2010–2019
Twizel Area School	185	183	186	187	183	204	208	201	205	219	34
Ardgowan School	64	63	75	118	122	127	143	150	177	165	101
Dunroon School	62	75	75	61	70	79	70	70	86	91	29
Fenwick School	262	256	265	274	286	279	292	307	302	327	65
Oamaru Intermediate	295	282	286	259	295	309	283	276	260	296	1
Oamaru North School	169	160	156	148	128	118	106	89	74	76	-93
Omarama School	28	23	38	33	35	35	40	37	48	43	15
Papakaio School	101	102	118	120	136	127	140	143	142	140	39
Pembroke School (Oamaru)	228	229	216	229	224	260	268	269	269	276	48
St Joseph's School (Oamaru)	184	227	220	213	220	225	233	200	196	167	-17
St Kevins College (Oamaru)	430	411	415	405	401	419	451	445	453	449	19
Totara School	56	51	57	59	43	40	35	38	40	43	-13
Waitaki Boys' High School	482	498	507	520	510	469	459	440	431	399	-83
Waitaki Girls' High School	415	412	400	441	422	409	416	430	406	402	-13
Waitaki Valley School	92	96	105	105	114	107	102	115	115	105	13
Weston School	220	202	209	213	219	221	231	239	236	234	14

Figure 2 provides information on the presence of pupils indicating Pacific Islands ethnicity in the schools listed in 2009 and 2019. Growth in the proportion of Pacific Islands pupils is most obvious for Oamaru North School, Pembroke and Oamaru Intermediate, confirming the presence of Pacific Island families in the northern areas of Oamaru urban.

Figure 2: Oamaru schools by percent pupils with Pacific Island ethnicity



The graphs show the percent of the total school roll that identify as Pacific Peoples. School location and school roll data sourced from the Ministry of Education.

Landmarks (State highways, roads, railway and coast) sourced from the LINZ Data Service and licensed for reuse under the CC BY 4.0 licence.

5.6 Housing

Information on dwelling ownership of households in 2018 is provided in Table 9. Across the District, the level of home ownership is relatively high (72%) compared with the country as a whole (65%). Home ownership is also high (72%) in Oamaru and strikingly high (91%) for the peri-urban area.

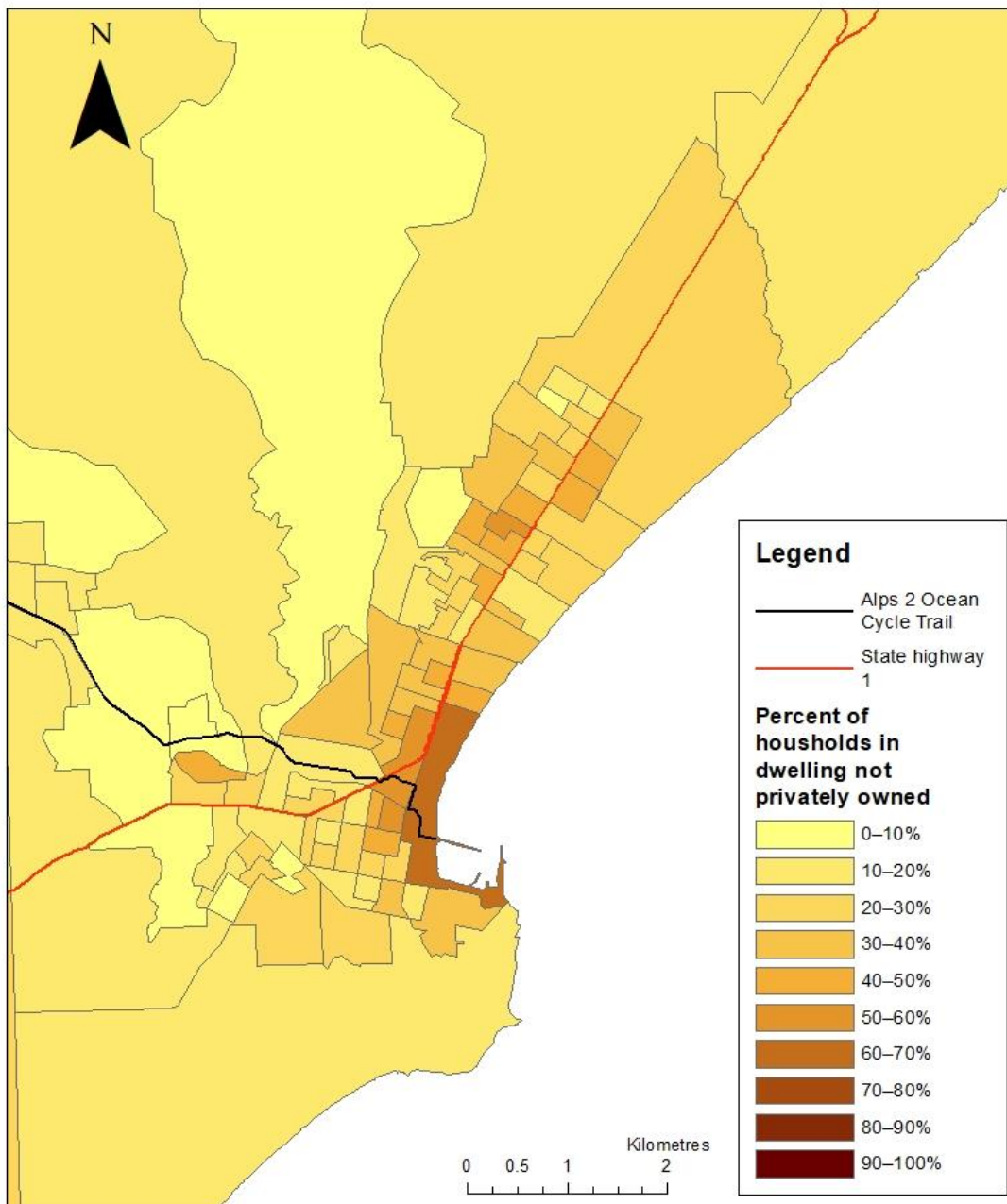
Table 9: Dwelling ownership of households, census 2018

Town	Total owned		Dwelling not owned and not held in a family trust		Total stated
	#	%	#	%	
Omarama	72	65%	36	32%	111
Otematata	66	69%	30	31%	96
Kurow	120	73%	45	27%	165
Duntroon	27	69%	15	38%	39
Oamaru	3,957	72%	1,509	28%	5,463
Oamaru Peri-urban	444	91%	45	9%	489
Waitaki District	6,606	72%	2,556	28%	9,168
NZ total		65%	#	35%	#

Note: StatsNZ and the 2018 Census External Data Quality Panel assess this variable as moderate quality.

Figure 3 shows that at the time of the 2018 census the percentage of households not privately owned, and therefore renting, was concentrated to the north of the CBD, along SH 1, in an area north of the centre of town, and around the historic precinct (where absolute numbers are low).

Figure 3: Oamaru percentage rental housing by SA1, 2018



This map shows the proportion of total households in a dwelling that is not privately owned nor held in a family trust (i.e. the households are renting).

SA1 boundaries sourced from StatisticsNZ. Landmarks (State highways) sourced from the LINZ Data Service and licensed for reuse under the CC BY 4.0 licence. Household data based on StatsNZ Census2018 dataset. StatsNZ and the EDQP rate household tenure data as moderate and not comparable over time.

Further insight into housing is provided by data on dwelling occupancy (Table 10). The level of unoccupied dwellings (residents away) is noticeably high for the Valley towns and Omarama in particular) and generally low in Oamaru and Oamaru peri-urban – close to the national figure of 5%. The number of unoccupied (empty) dwellings is very low in Oamaru and Oamaru peri-urban, suggesting there is little flexibility in this housing market. On the other hand the number of unoccupied (empty) dwellings in Otematata is exceptionally high and also relatively high in Kurow and Duntroon.

The data compiled by Sophia Leon de Barra (2020) shows that across the District total unoccupied dwellings rose a little as a proportion of total dwellings between 2001 and 2018, from 16.1% to 18.8%.

Table 10: Dwelling occupancy, census 2018

Town	Occupied dwelling		Unoccupied dwelling – residents away		Unoccupied dwelling – empty dwelling		Total dwellings	Dwelling under construction
	#	%	#	%	#	%	#	#
Omarama	123	39%	171	54%	18	6%	318	3
Otematata	111	23%	93	20%	264	56%	474	6
Kurow	177	73%	27	11%	36	15%	243	-
Duntroon	42	78%	6	11%	9	17%	54	-
Oamaru	5,556	92%	297	5%	201	3%	6,069	9
Oamaru Peri-urban	498	94%	21	4%	12	2%	531	3
Waitaki District	9,411	81%	1,137	10%	1,053	9%	11,643	45
NZ total	1,673,880	89%	98,664	5%	97,842	5%	1,886,517	16,128

Note: StatsNZ and the 2018 Census External Data Quality Panel did not assess the quality of this variable.

Further information on rental housing and Airbnb is available in a complementary working paper on Waitaki Short and Long-Term Rental Accommodation,

Table 11 provides data on rental prices for Waitaki District and Mackenzie District for comparison. To build this annual time series the 1 March figure is used. Over a 20 year period, rents have increased steadily and almost tripled (rising 2.7 times) in the Waitaki District. In Mackenzie District they increased even more and have been more volatile. In the same period, mean national rentals increased a little less from \$209 to \$504 (2.4 times) and remain well above the District level.

Table 11: Mean rents for March 2000–2020 (based on rental bonds lodged with MBIE)

	Mackenzie District	Waitaki District
1/03/2000	\$83.00	\$109.00
1/03/2001	NA	\$110.00
1/03/2002	NA	\$113.00
1/03/2003	\$132.00	\$124.00
1/03/2004	\$113.00	\$140.00
1/03/2005	NA	\$142.00
1/03/2006	\$143.00	\$159.00
1/03/2007	\$134.00	\$174.00
1/03/2008	\$198.00	\$183.00
1/03/2009	\$211.00	\$211.00
1/03/2010	\$268.00	\$212.00
1/03/2011	\$198.00	\$211.00
1/03/2012	\$247.00	\$219.00
1/03/2013	\$214.00	\$229.00
1/03/2014	\$329.00	\$228.00
1/03/2015	\$284.00	\$240.00
1/03/2016	\$273.00	\$243.00
1/03/2017	\$230.00	\$275.00
1/03/2018	\$299.00	\$262.00
1/03/2019	\$302.00	\$300.00
1/03/2020	\$325.00	\$290.00

The mean rents are sourced from The Ministry of Business, Innovation and Employment (MBIE) and licensed for use under the Creative Commons Attribution 3.0 New Zealand License.

In recent years house values have increased by 43% (Table 12).

Table 12: Residential house values at March 2016–2020

	Average value March 2020	Average value March 2019	Average value March 2018	Average value March 2017	Average value March 2016	Change in value (2016–2020)
Waitaki District	\$336,304	\$322,392	\$303,914	\$261,295	\$235,861	42.60%
Mackenzie District	\$570,930	\$511,505	\$523,181	\$449,520	\$344,297	65.8%

House values are sourced from qv.co.nz.

Sophia Leon de Barra (2020) has provided information on social housing in the District. The District Council owns 91 community housing units, having sold 17 units in 2010 as they did not suit demand. Turnover is very low but they receive 20-15 applications per annum. MSD have one house for transitional purposes. They maintain a social housing register and in F2019 had 18 applications for the social housing register. In the same year they provided Accommodation Supplements to 1,101 recipients averaging \$65 per weekly. Other temporary and emergency grants are made by MSD. At the HTF meeting in May, during the Covid 19 lockdown, MSD noted there was a noticeable increase in applications for assistance with basic needs including housing over the previous year. Social service providers noted concerns about hardship due to lost jobs and spiralling levels of debt.

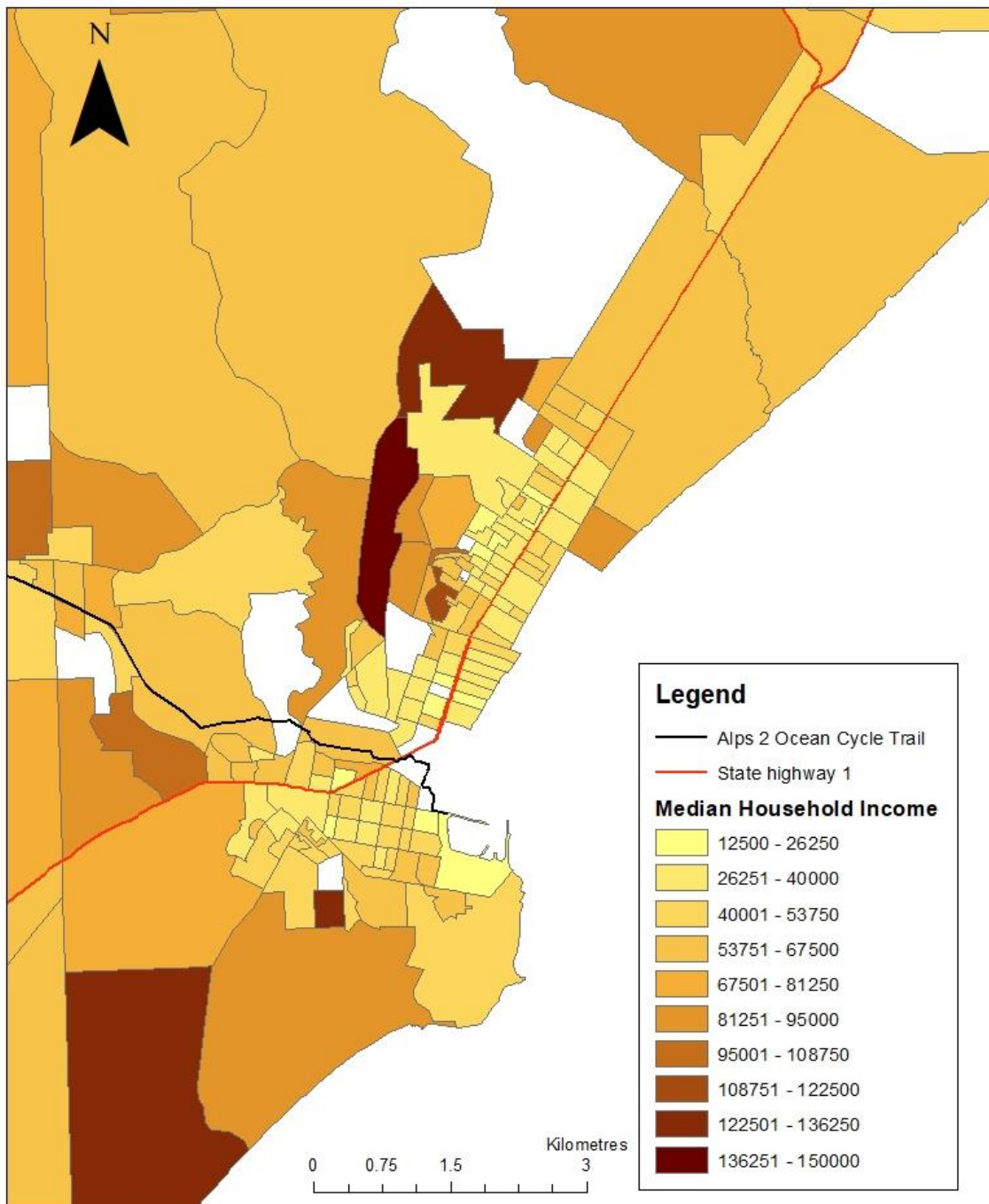
Further data on levels of unemployment, economic hardship and benefit payments should be available later in the year and show the impacts of Covid 19 in Oamaru and the District as a whole.

5.7 Household incomes and social-economic status

The census data allows us to map where households with low incomes and different levels of social deprivation are mostly located in Oamaru.

Figure 4 shows household median income for census 2013, as these data are not available for 2018.

Figure 4: Oamaru median household income by mesh block, 2013

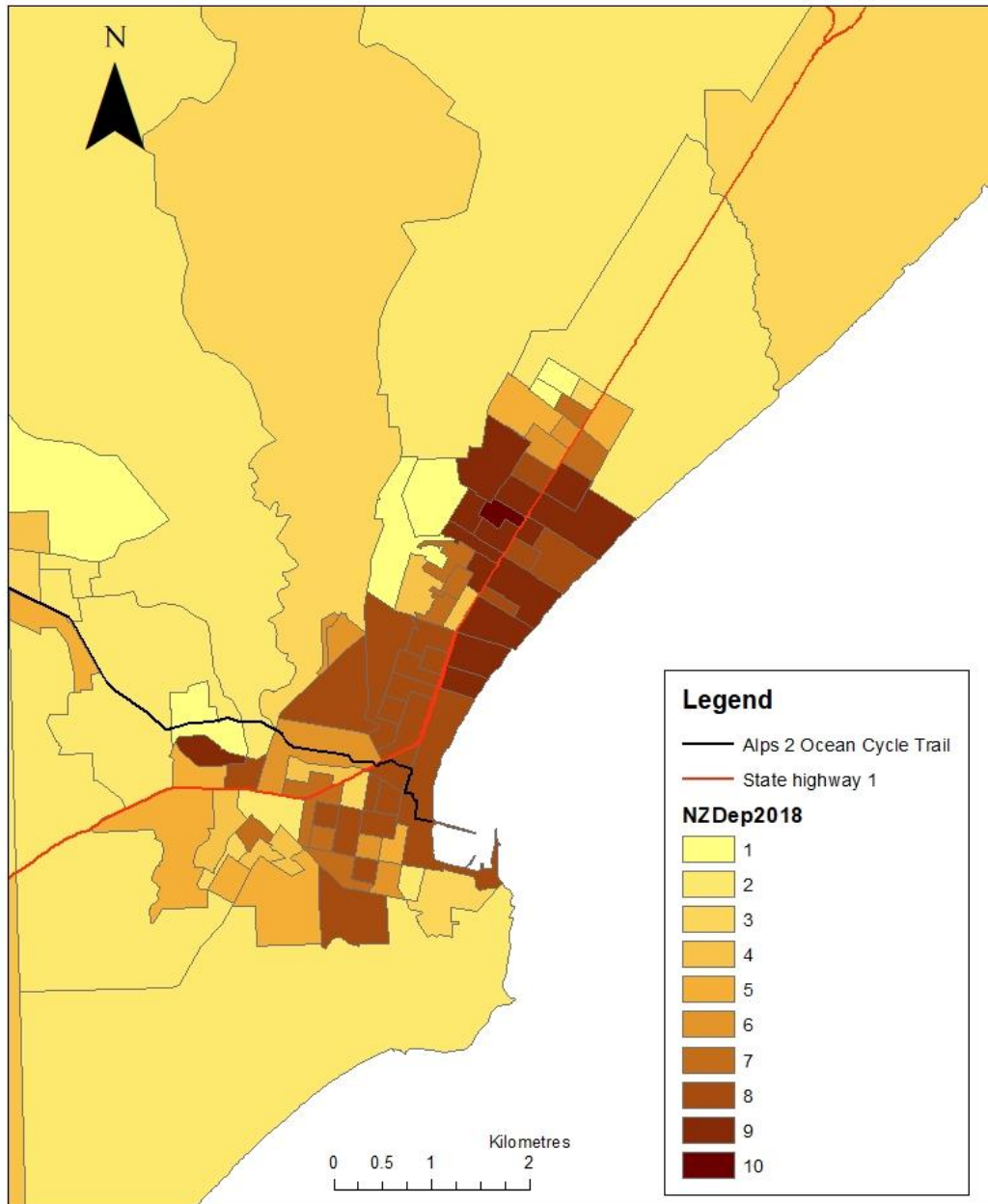


This map shows the median household income for households in each meshblock. Blank meshblocks are where the data are unable to be reported for confidentiality reasons.

Meshblock boundaries sourced from StatisticsNZ. Landmarks (State highways) sourced from the LINZ Data Service and licensed for reuse under the CC BY 4.0 licence. Ethnicity data based on StatsNZ Census2013 Meshblock dataset.

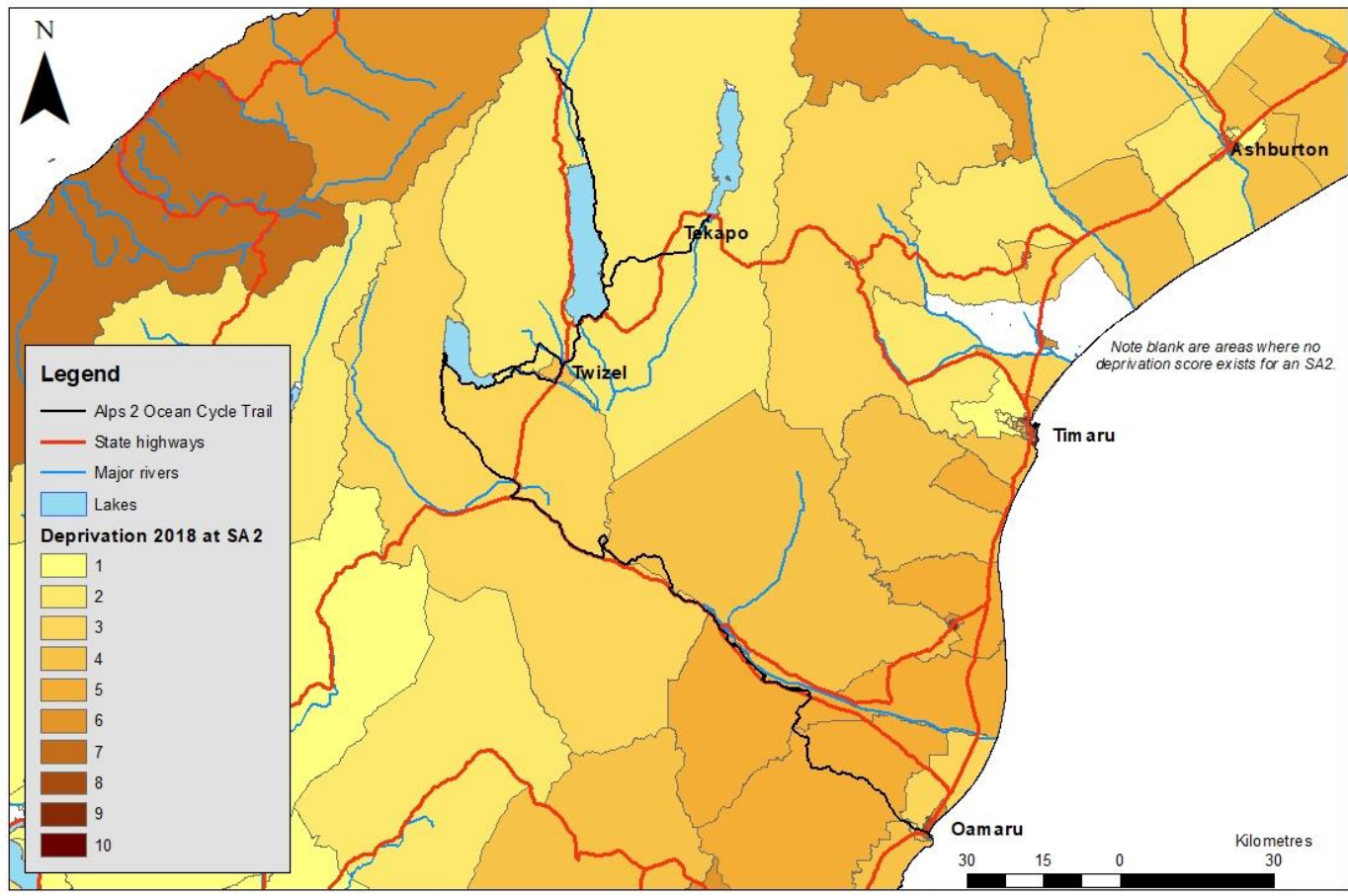
The Deprivation Index provides a more complete picture of social deprivation as it is based on a number of factors and the data are available for 208 as shown in Figure 5 for Oamaru and Figure 6 for the surrounding rural areas or Waitaki and beyond.

Figure 5: Deprivation Index – Oamaru 2018



SA1 boundaries sourced from StatisticsNZ. Landmarks (State highways and rivers) sourced from the LINZ Data Service and licensed for reuse under the CC BY 4.0 licence. Sociodeprivation data: Atkinson J., Salmond C. and Crampton P. 2019. NZDep2018 Index of Deprivation. Dunedin: University of Otago.

Figure 6: Deprivation Index Oamaru Hinterland, 2018



SA2 boundaries sourced from StatisticsNZ. Landmarks (State highways, rivers, coast and lakes) sourced from the LINZ Data Service and licensed for reuse under the CC BY 4.0 licence. Sociodeprivation data: Atkinson J., Salmond C. and Crampton P. 2019. NZDep2018 Index of Deprivation. Dunedin: University of Otago.

6 Conclusions – towards a housing strategy

For community groups to establish a strategic approach to housing in Aotearoa New Zealand the first step is to gather sufficient information on the population, housing need, areas and locations, and potential responses (Community Housing Aotearoa (2015)). Information about the population and housing is therefore an important first step in developing a Housing Strategy for the Waitaki District. To understand the population and housing needs of the District it is also important to understand the nature of the economy and the employment it generates, because in rural areas such as this employment drives both the size and nature of the population. In the Waitaki the primary rural economy comprises agriculture and associated food processing industries and the visitor sector.

Over recent years, the demand for labour in these sectors has required an increasing workforce of overseas migrants, including a large population of Pacific Islanders. At the same time, it is evident that the population has aged and there is a large component of the population who are aged 65 years or over who are not engaged in the labour market. Both these changes create their particular needs for housing and social services and the overall goal of enhanced social wellbeing.

The data presented in this working paper is an additional source of information for the research team and part of the research team's involvement with the Waitaki Housing Taskforce. The data adds to the information already provided by the WHTF statistician at the District level as a starting point for their housing strategy. It will also add to the information gained from a housing survey that the WHTF has initiated.

We have included here results from the 2018 census data broken down for the Oamaru Area, Peri-urban Oamaru. Towns of the Waitaki Valley are included for a sense of differences to rural areas and because of the ongoing research focus on the Alps to Ocean cycle trail as one of the economic development initiatives examined in Phase 1 of the research. Data are presented in tables and maps.

The literature review found that affordable housing, especially rental housing, is an important focus for community organisations and stakeholder groups supporting the wellbeing of migrant workers and populations. These people are particularly vulnerable to disadvantage in accessing housing due to their limited capital and limited knowledge of rights such as visa requirements and available support services. The provision of housing for very transient workers, including seasonal workers, is a particular issue.

Responses to these issues through strategies and action plans are most successful when they are driven by the community and involve a range of stakeholders such as the WHTF. In this next phase of the research programme the researchers will provide an input to development of the housing strategy, while looking for lessons that can be applied within the Thriving Regions Programme.

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Appendix 1 Census 2018 spatial frame issues

Explaining the 2018 census boundaries and how they compare to previous boundaries

From the 2018 census, the new geographical boundaries used are statistical areas 1 (SA1) and 2 (SA2), with SA2s being the larger geographical size. For 2018 and future years, the old CAU (census area units) boundaries are no longer used.

Census 2018 data have been released for SA1 and SA2 boundaries – with some gaps and data quality issues. There is a meshblock dataset (the smallest spatial unit of the preceding censuses) that sits below the SA1 geographies, but data are only available by request from StatsNZ.

The new SA1 and SA2 boundaries are larger than the old meshblock and CAU boundaries, respectively. As shown in the tables that follow, the 2006 and 2013 populations can be different depending on the geography used, but in most of the small towns the population effects is small.

While the 2006 and 2013 census datasets have been recalculated to the new boundaries, older census years (eg 2001) have not.

The greatest difficulties with these changes is for the urban and peri-urban areas of Oamaru, where data on both these areas are needed to understand the character of areas for potential urban growth, recognising that peri-urban Oamaru, as defined here, has a considerable rural component the further away the boundary is from urban Oamaru.

The following maps (Figures 7–11) compare the old CAU boundaries (in beige) with the new SA1 or SA2 boundaries in black outline on top.

For the smaller towns, SA1 boundaries have been used.

The population of Oamaru

In previous years, the population of Oamaru was calculated from nine CAUs. In 2018, there are nine SA2 boundaries that cover the urban area of Oamaru, but less of the peri-urban area (see Figure 7). The population of Oamaru as calculated by SA2s in 2006 and 2013 is shown in Table 13, which shows that the population of Oamaru increased by 1,071 or 8.9% over 12 years.

Table 13: Census usually resident population 2006-18 for Oamaru by SA2

SA2 ID	SA2 Name	2006	2013	2018
343800	Weston	897	984	1050
343900	Oamaru North Milner Park	2184	2313	2529
344000	Oamaru North Orana Park	2658	2661	2907
344100	Oamaru Gardens	1008	1080	1179
344200	Glen Warren	1524	1512	1632
344300	Holmes Hill	1251	1284	1332
344400	Oamaru Central	249	273	294
344500	South Hill	2259	2199	2184

344600	Inlet Port Oamaru	6	0	0
Total Population		12,036	12,306	13,107

Table 14 provides a comparison of the population of Oamaru by SA2 and CAU. Exclusion of the peri-urban areas appears to have an effect of reducing the population by several hundred, reinforcing the need to use SA1 data to understand the adjoining, peri-urban areas (see also Figure 7).

Table 14: Usually resident population Oamaru - CAU and SA2 comparison

	2001	2006	2013	2018
Total Oamaru SA2		12,036	12,306	13,107
Total Oamaru CAU	12,693	12,681	13,044	

Population for key towns

The populations for the towns of the Waikiki Valley are shown in Table 15, with the populations for the new boundaries (SA1 or SA2) for 2006, 2013 and 2018. For the old CAUs the populations are shown for 2001, 2006 and 2013.

Comparing the 2006 and 2013 populations for the two different boundary types for Omarama and Otematata it is important to note that the populations are the same or very similar despite the boundary changes. Kurow has a slight increase, reflecting the larger area of the SA2 compared to the CAU. Duntroon has a lower population for the two years when using the new boundaries, reflecting the loss of area with the new boundary (see Figure 7).

Table 15: Usually resident population for key towns by SA2 and CAU

Town	Boundary type	2001	2006	2013	2018
Omarama	SA1 (7027643 + 7027642)		231	270	291
	Omarama CAU	276	231	267	
Otematata	SA1 (7027647)		189	186	183
	Otematata CAU	243	186	186	
Kurow	SA1 (7027651 + 7027652)		348	321	372
	Kurow CAU	387	339	312	
Duntroon	SA1 (7027655)		99	75	96
	Duntroon CAU	117	114	87	

Figure 7: Oamaru and Oamaru Periurban with old CAU areas shown

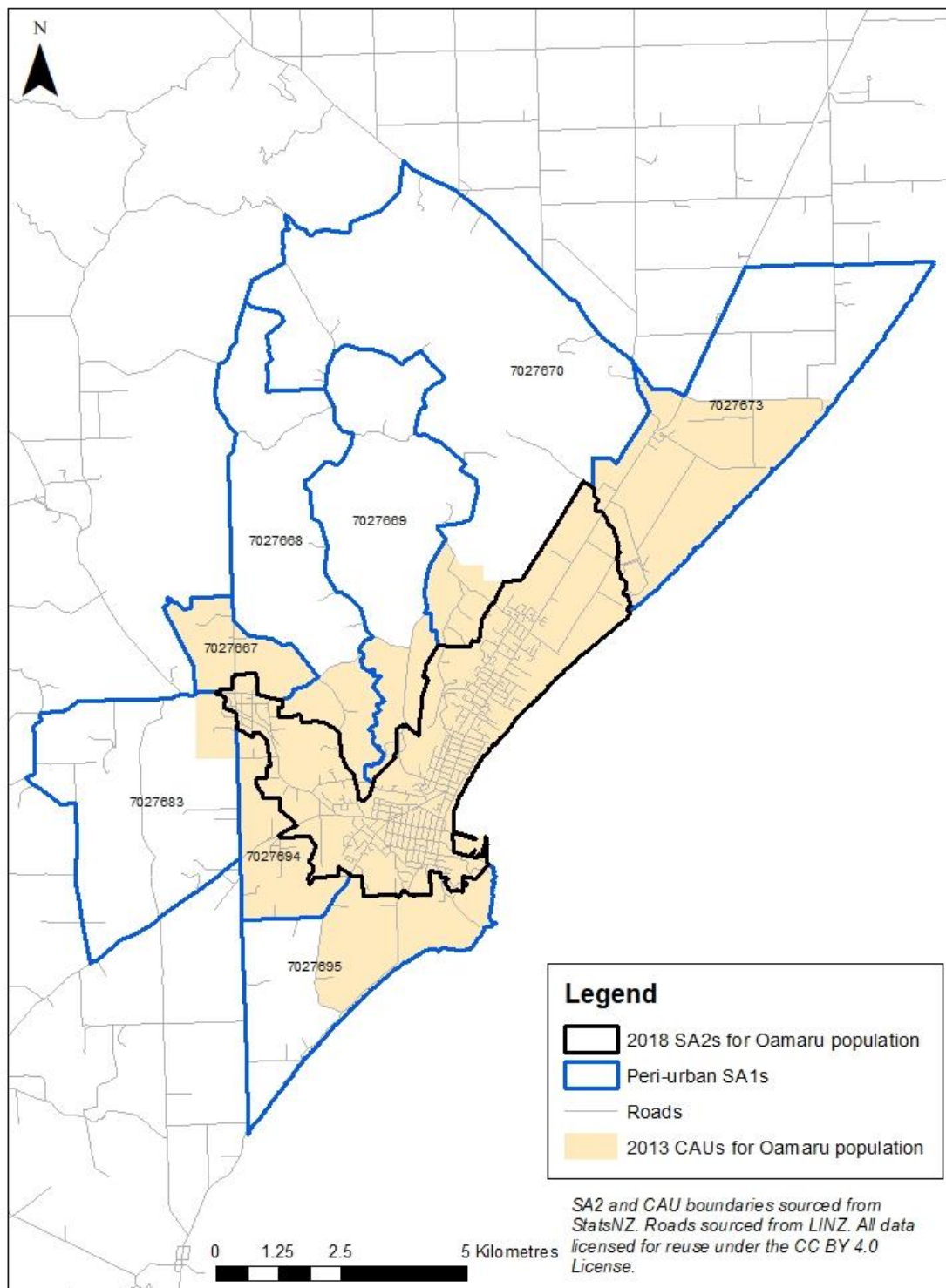
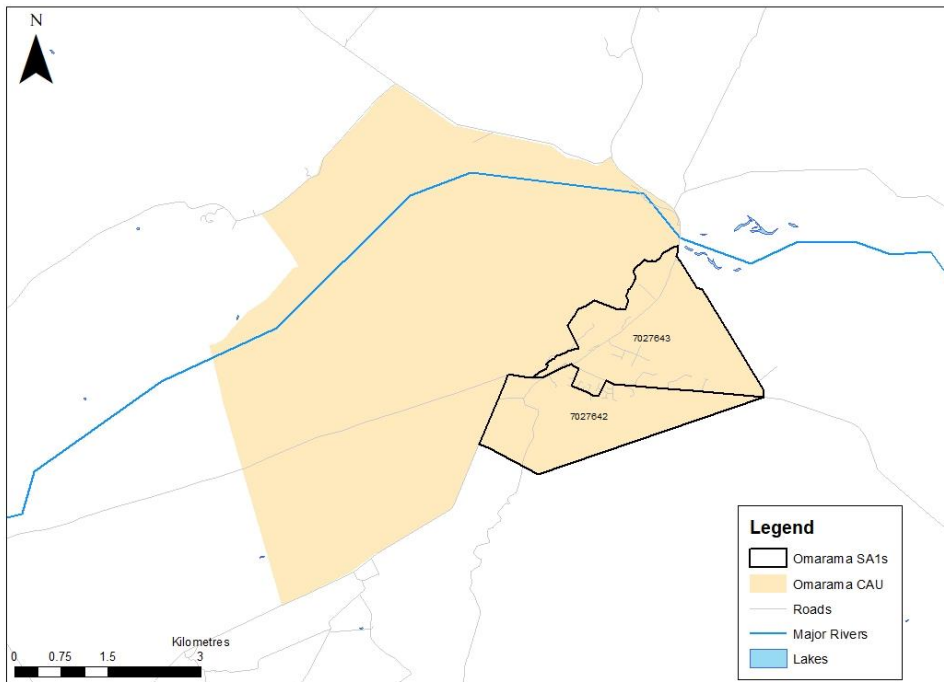
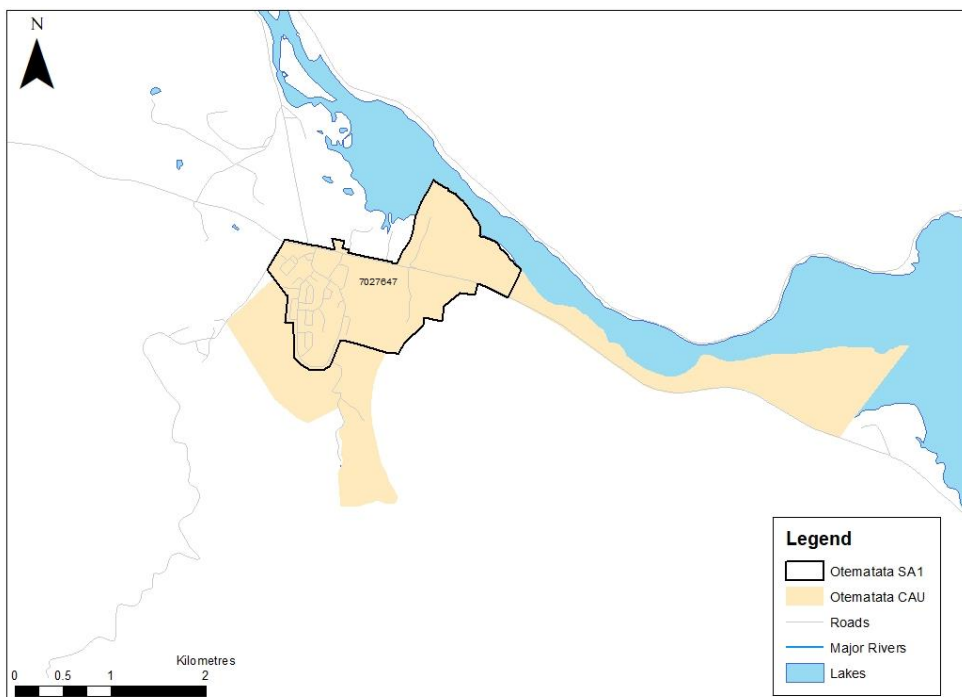


Figure 8: Omarama SA1s and old CAU area



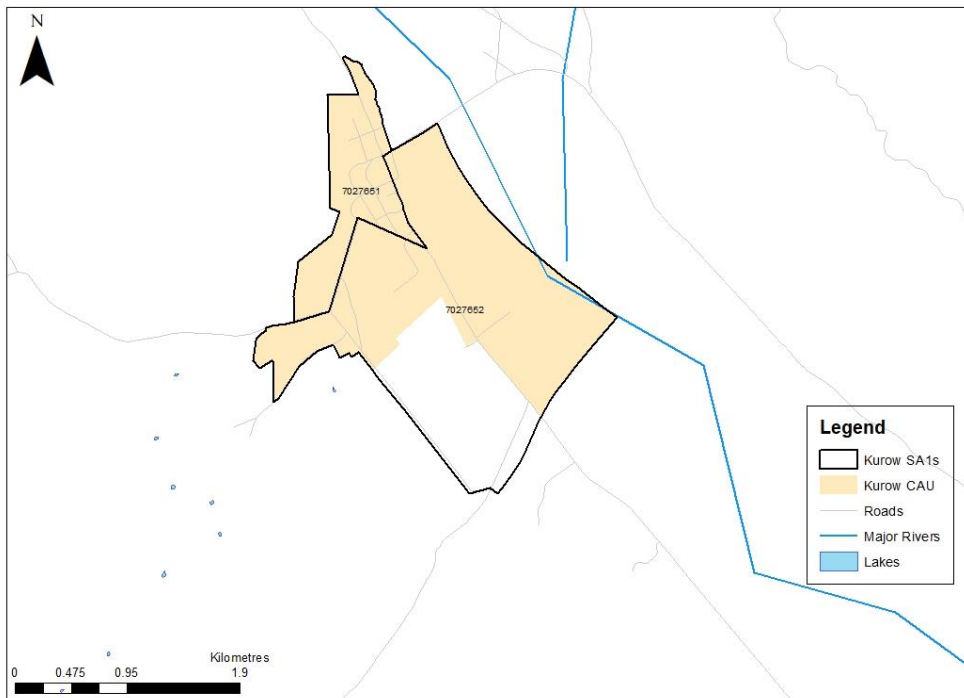
SA1, SA2 and CAU boundaries sourced from StatsNZ. Roads, lakes, and major rivers sourced from LINZ. All data licensed for reuse under the CC BY 4.0 License.

Figure 9: Otematata SA1 and old CAU Area



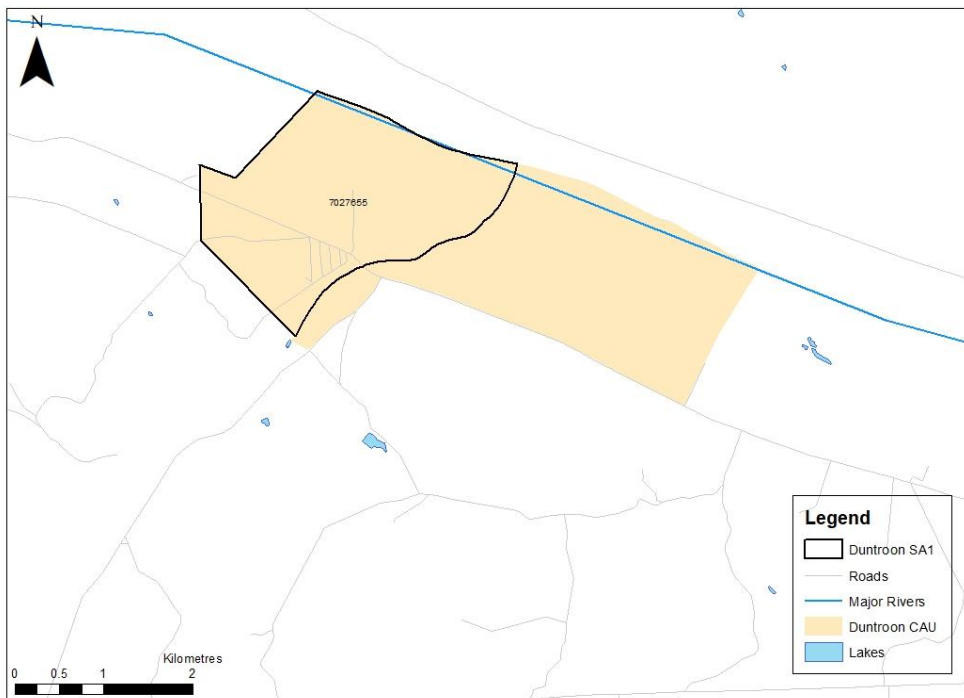
SA1, SA2 and CAU boundaries sourced from StatsNZ. Roads, lakes, and major rivers sourced from LINZ. All data licensed for reuse under the CC BY 4.0 License.

Figure 10: Kurow SA1s and old CAU area



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Figure 11: Duntroon Sa1 and old CAU area



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