tasman district council | Te Kaunihera o te tai o Aorere

Environmental Scan

2023

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Kia ora!

This document is an *Environmental Scan* – a snapshot of the current issues and opportunities facing the Tasman District. An Environmental Scan helps us consider the regional, national, and international context shaping the region.

An environmental scan is the process of evaluating and analyzing the external factors that may impact a specific community or region. This analysis considers factors such as demographic changes, economic trends, technological advancements, and social, political, and legal changes to identify challenges, opportunities, and trends that may affect our ability to provide services and meet the needs of the community. We do an environmental scan to inform our decision-making and help proactively respond to changes in their operating environment.

The Council has developed this document to identify the long-term trends affecting the district. We hope that it will support you in understanding Tasman and how it will change in the future.

This document has up to date figures as of February 2023.

OUR PEOPLE

CURRENT POPULATION
58,700

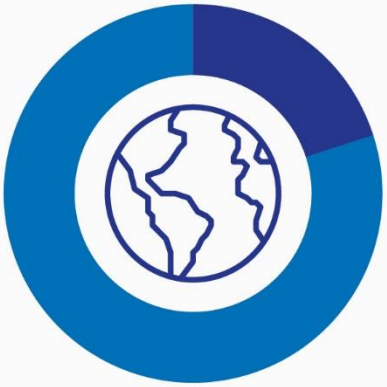
STATS NZ PREDICTS POPULATION OF
78,000* BY 2050

2 SECOND FASTEST GROWING REGION *in the last 30 years*

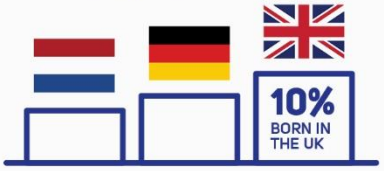
Current MEDIAN AGE
46.9

12 YEARS OLDER THAN NZ AS A WHOLE

BY 2050
35% OVER 65 YEARS
MEDIAN AGE **54**

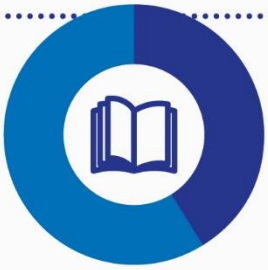


20% BORN OVERSEAS



Our population includes

9% MĀORI — **12%** BY 2050
3% ASIAN — **5%** BY 2050
2% PACIFIC — **3%** BY 2050



41.3%
OF RESIDENTS ARE RELIGIOUS

9% *Speak multiple languages*

1.8% SPEAK TE REO
1.9% SPEAK GERMAN

HIGHEST IN THE COUNTRY

OUR ECONOMY

GDP **$2.9 BILLION**

$36,864 PER CAPITA

Below the national average

PRODUCTIVITY LOWER THAN NZ AND NOT CATCHING UP

12.2%

OF GDP IS AGRICULTURE, FORESTRY, AND FISHING

27,732

PEOPLE EMPLOYED

UNEMPLOYMENT RATE ONLY **3%**

Below the national rate of **3.3%**

5.4%

OF JOBS ARE ON APPLE AND PEAR ORCHARDS

AVERAGE ANNUAL EARNINGS

$57,862

$10K BELOW NATIONAL AVERAGE

AVERAGE HOUSE PRICE

$823,000

15% below the national average

620,000

VISITORS IN 2022

90%

OF NEW ZEALAND'S BOYSENBERRIES COME FROM TASMAN

New Zealand is the world's biggest producer

OUR ENVIRONMENT

9,616 KM²

TOTAL LAND AREA

5th largest territorial authority in New Zealand

6 PEOPLE PER KM²

Over

700KM

OF COASTLINE

THREE NATIONAL PARKS

Abel Tasman, Kahurangi, Nelson Lakes

58% OF THE DISTRICT IS A NATIONAL PARK

66% OF THE DISTRICT IS MANAGED BY DOC

KAHURANGI NATIONAL PARK HAS...

67 PLANT SPECIES THAT ARE FOUND NOWHERE ELSE

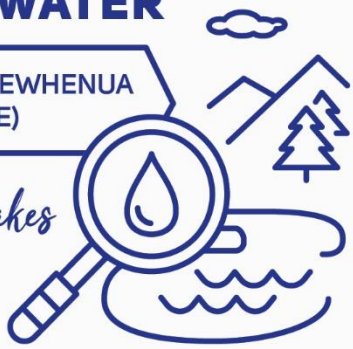
OVER **50%** OF NZ'S NATIVE PLANT SPECIES

80% OF ALL ALPINE PLANT SPECIES

WORLD'S CLEAREST FRESHWATER

ROTOMAIREWHENUA (BLUE LAKE)

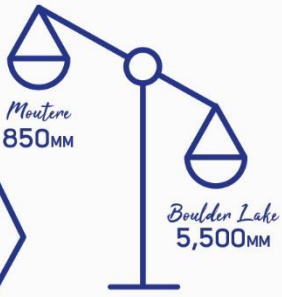
Nelson Lakes National Park



Average

ANNUAL RAINFALL

VARIES ACROSS THE DISTRICT



27%

OF THE GLOBAL BREEDING POPULATION OF

VARIABLE OYSTER CATCHERS

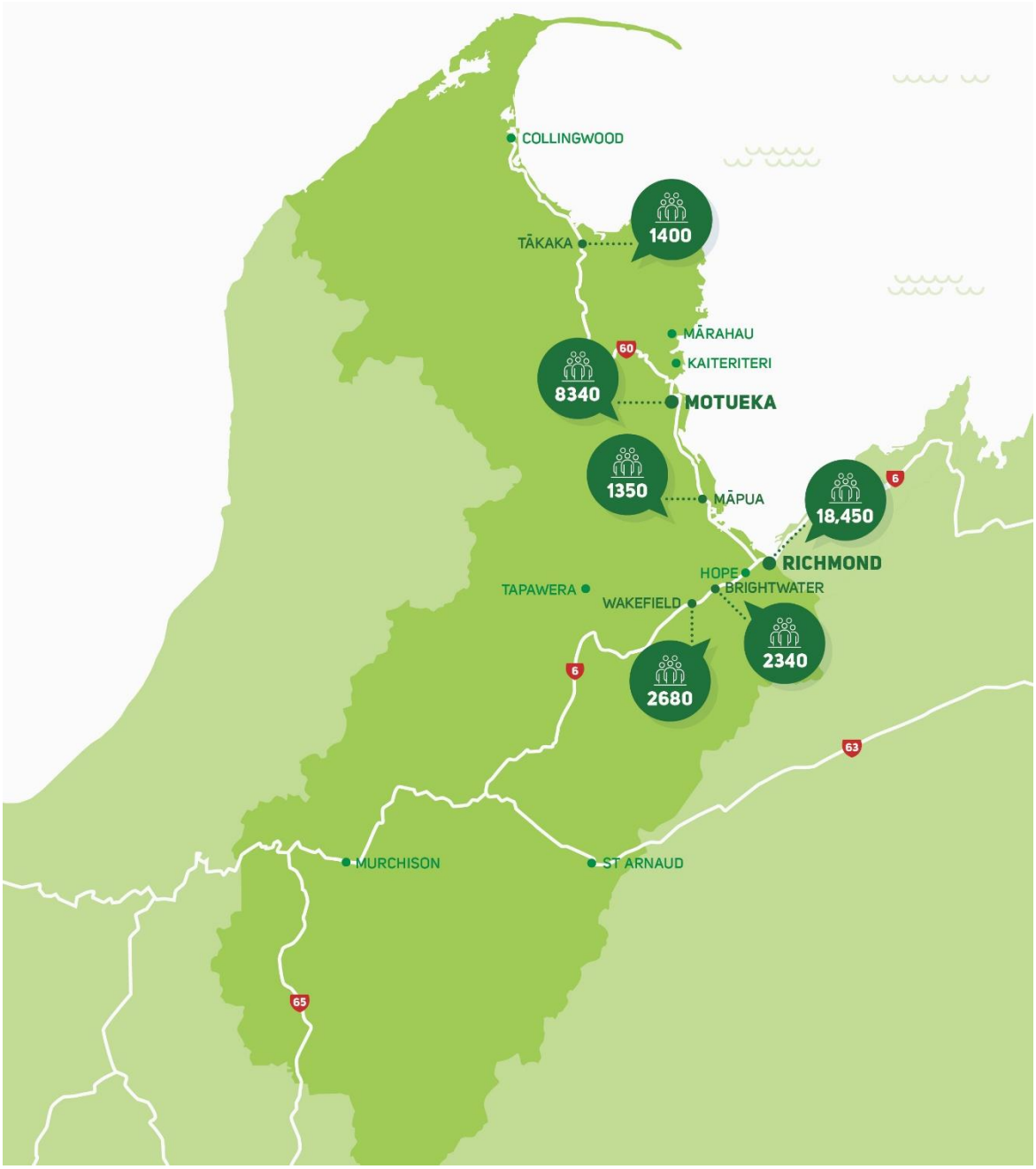
Tasman at a glance

The Tasman District covers 9,616 square kilometres of the northern South Island, stretching from the sandy beaches of Golden Bay to the north, the Southern Alps in the south, and Richmond in the east. Tasman is positioned south of Nelson City, west of Marlborough, and northeast of the West Coast.

The landscape is diverse, ranging from pristine alpine slopes to world-renowned beaches. Major rivers like the Buller, Motueka, Aorere and Waimea meander across the district. Tasman contains three national parks – Abel Tasman, Nelson Lakes, and Kahurangi – which comprise 58% of the district's land area.

58,700 people call Tasman home, living across a range of towns and rural areas. The district has a low population density of 6.02/km^{2,} and most people live around Tasman Bay, close to Nelson City.

The district has six towns with a population of over 1,000. Together they are home to 58.9% of the district's population. [1]

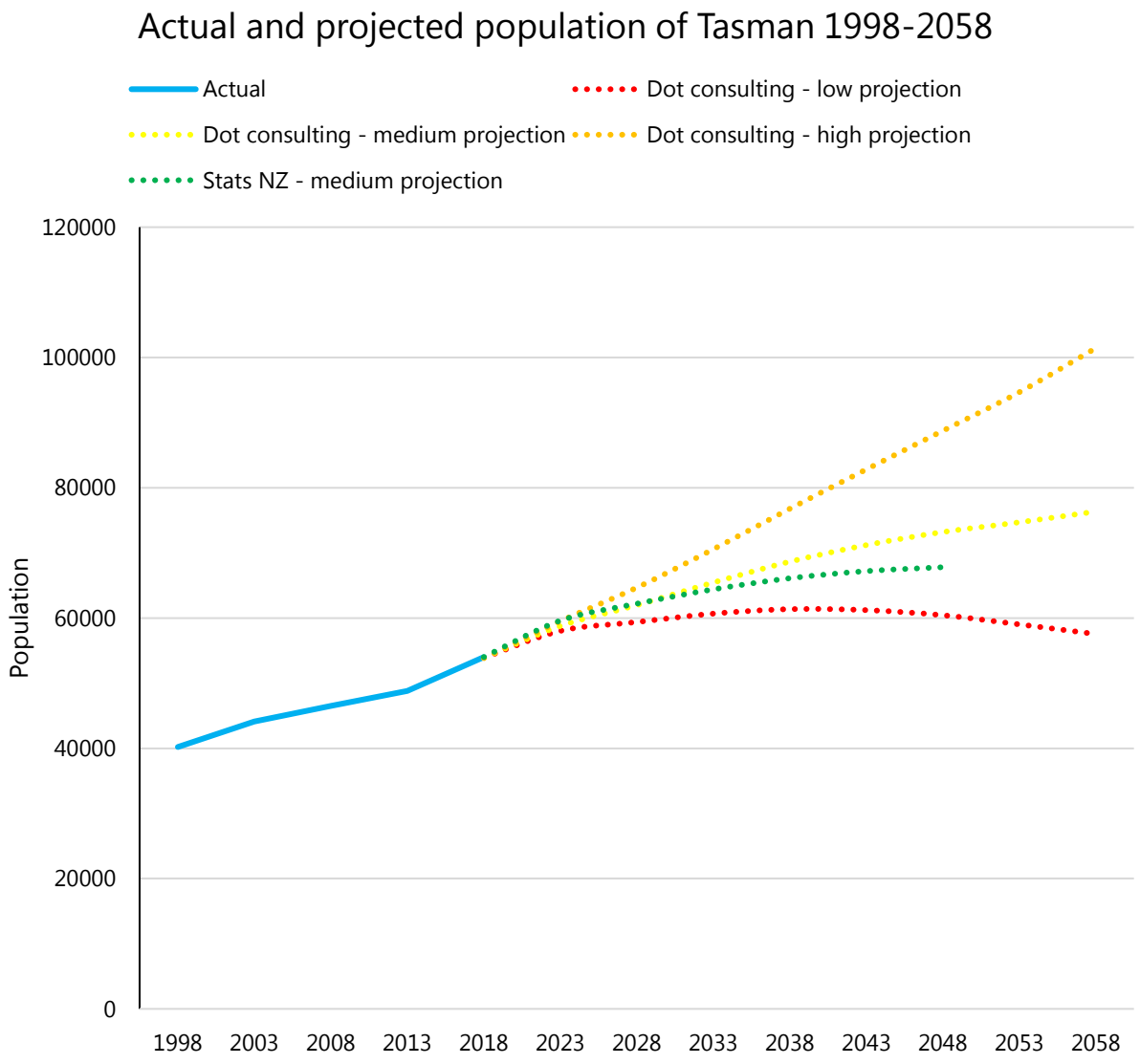


[1] Stats NZ: Subnational population estimates (urban rural), by age and sex, at 30 June 1996-2022 (2022 boundaries)

Tasman's people

Population growth

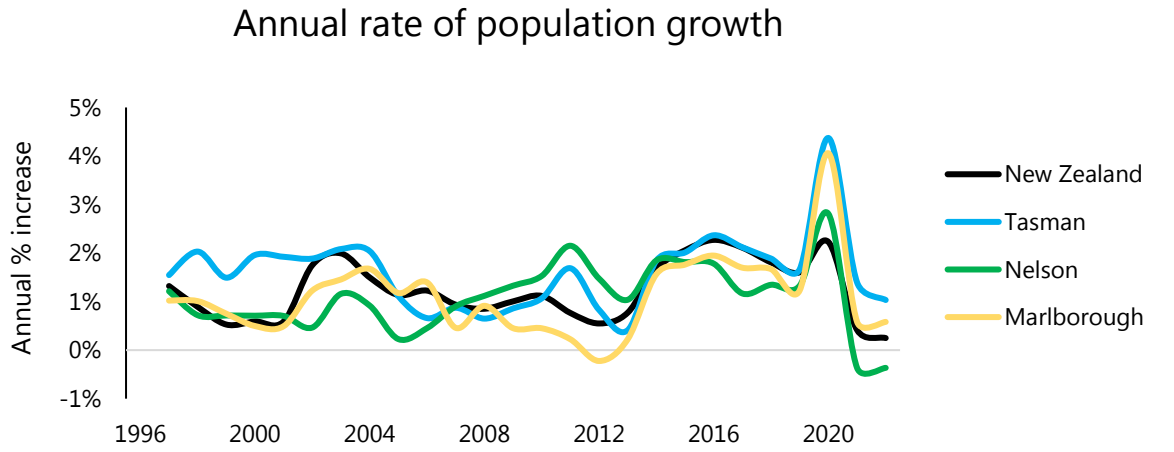
Tasman currently has a population of 58,700 people. This is an increase of around 11% since 2017. By 2050, Tasman's population is projected to rise to almost 75,000 residents - an increase of about 16,000 people. Some key growth factors for Tasman include its proximity to Nelson and its sunny climate. Tasman is a desirable place to live with comparatively high internal migration rates, particularly from Nelson, Auckland, and Canterbury.



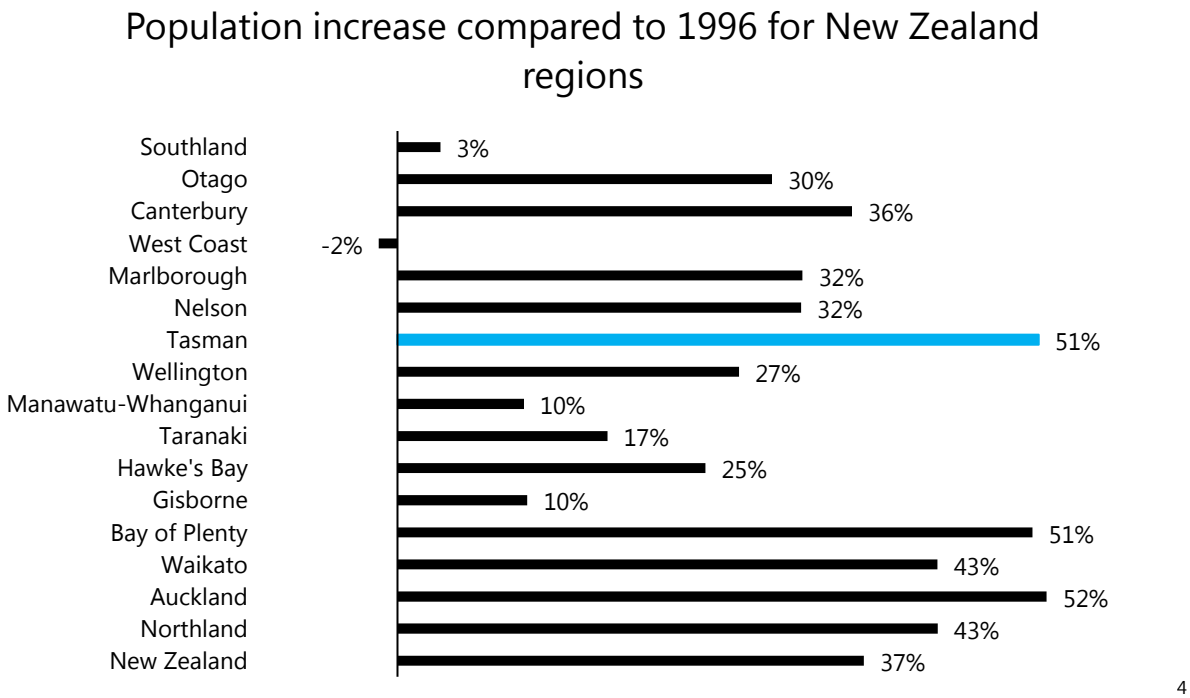
[2]

[2] Stats NZ: Statistical area 2 population projections, by age and sex, 2018(base)-2048, Subnational population estimates (RC, SA2), by age and sex, at 30 June 1996-2022 (2022 boundaries); Dot Consulting, unpublished projections for Nelson City and Tasman District

Tasman has grown faster than predicted and has outpaced national growth over the last 30 years. Tasman has been the second fastest-growing region in New Zealand over the previous 30 years, behind Auckland. Tasman's annual growth peaked at 4.4% in 2020; in 2022, it was 1.1%. Our growth has slowed over the past ten years, although we still have a comparatively high growth rate compared to other regions.



[3]

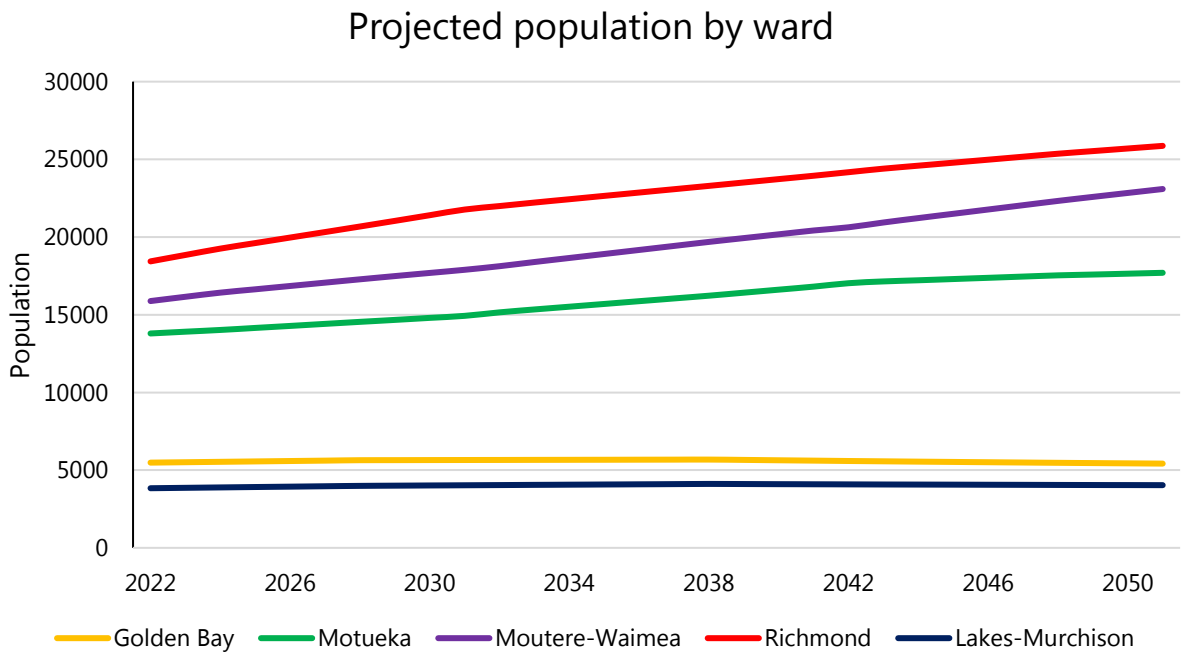


[4]

[3] Stats NZ: Subnational population estimates (RC, SA2), by age and sex, at 30 June 1996-2022 (2022 boundaries)

[4] Stats NZ: Subnational population estimates (RC, SA2), by age and sex, at 30 June 1996-2022 (2022 boundaries)

Most of Tasman's future growth will occur in the Richmond, Moutere-Waimea, and Motueka wards. The Lakes-Murchison and Golden Bay wards are projected to increase more slowly than the rest of the district. Their population is projected to decline from around 2040.



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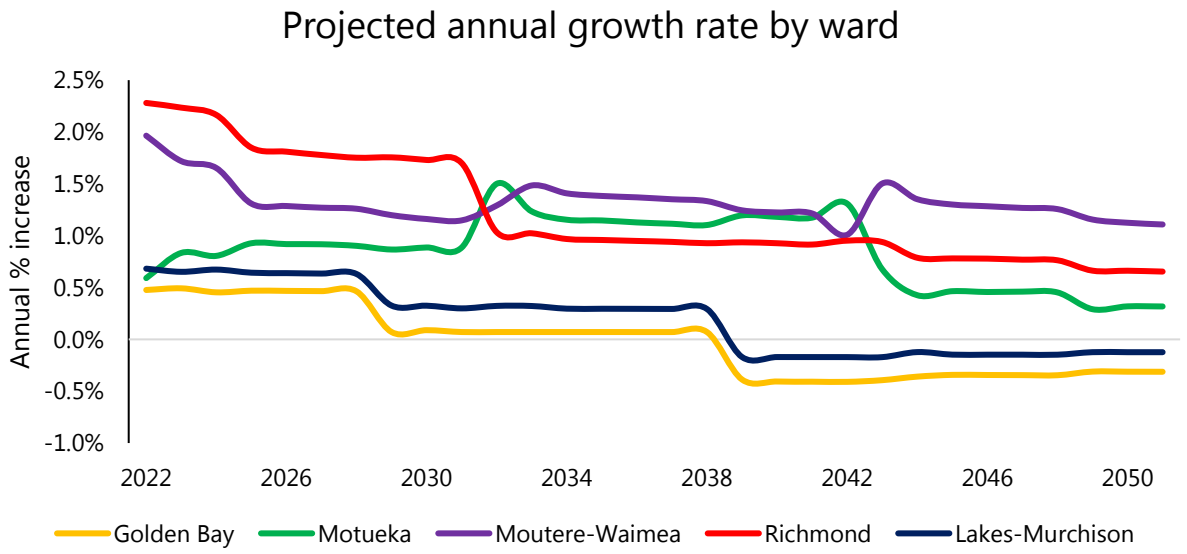
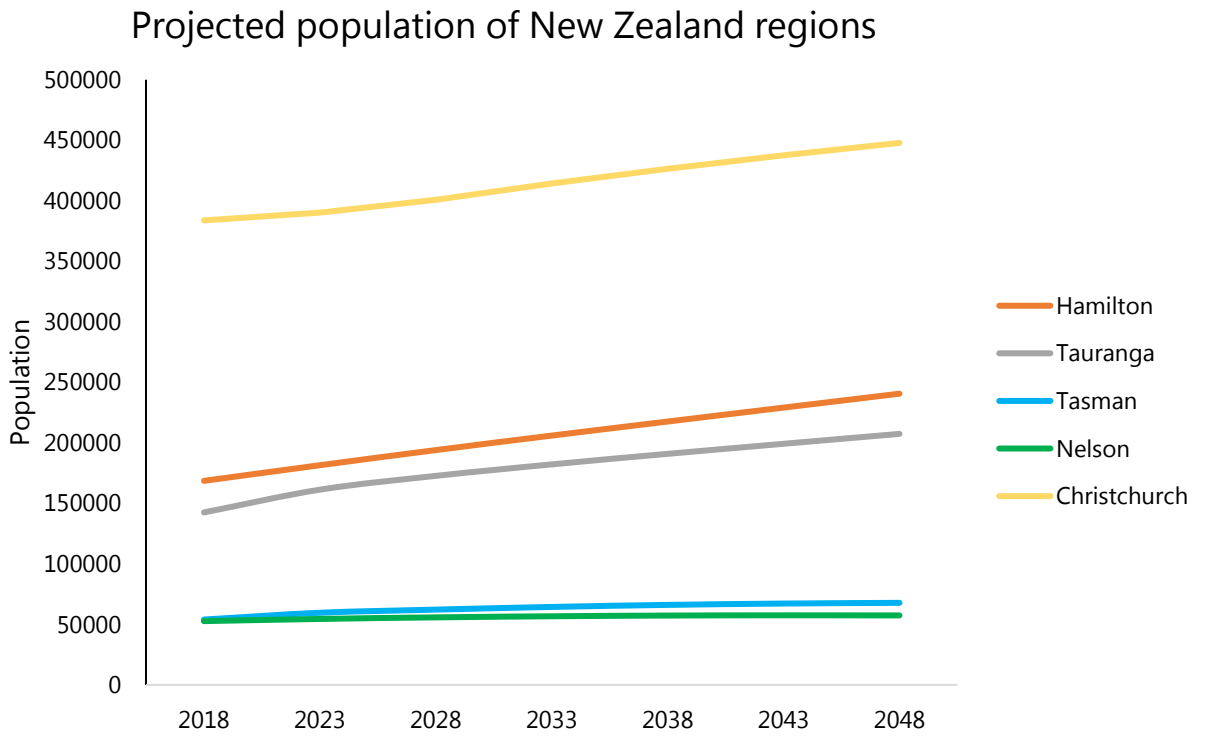


[6]

[5] Tasman District Council: Unpublished growth model data
[6] Tasman District Council: Unpublished growth model data

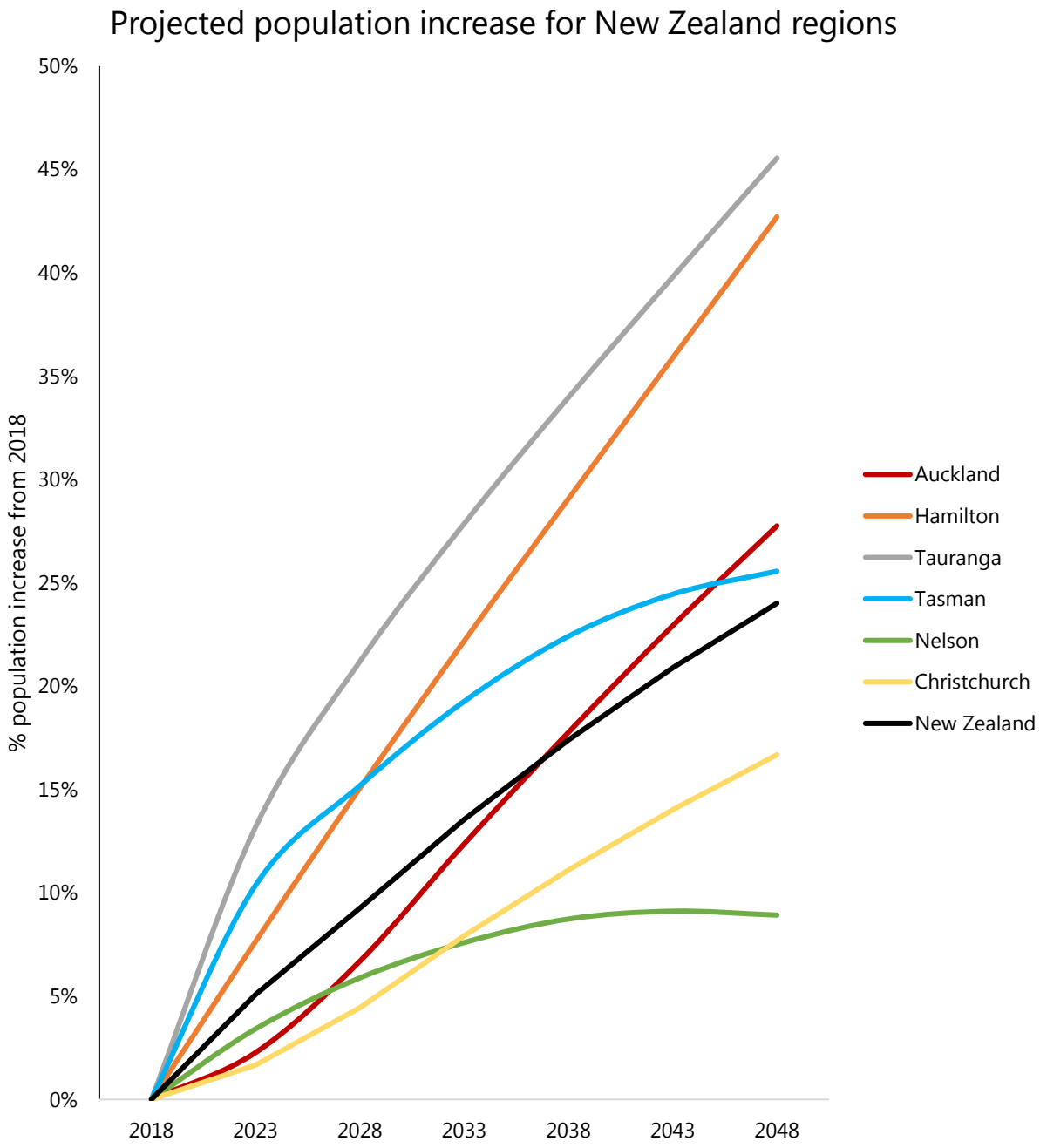
Nationally, New Zealand's population is expected to continue concentrating in and around the upper North Island. Auckland, Hamilton, and Tauranga are expected to have two-thirds of the total population growth. Over 70% of population growth in the South Island will be in Christchurch.



[7]

[7] Stats NZ: [Statistical area 2 population projections, by age and sex, 2018(base)-2048]

National population growth will start slowing down over the next 30 years. Tasman will slow down more quickly and its population will begin to stagnate earlier than New Zealand as a whole, despite having a relatively high growth rate in the 2020s and 2030s. Nelson will stagnate earlier than Tasman and will likely see a population decline from around the 2040s.



[8]

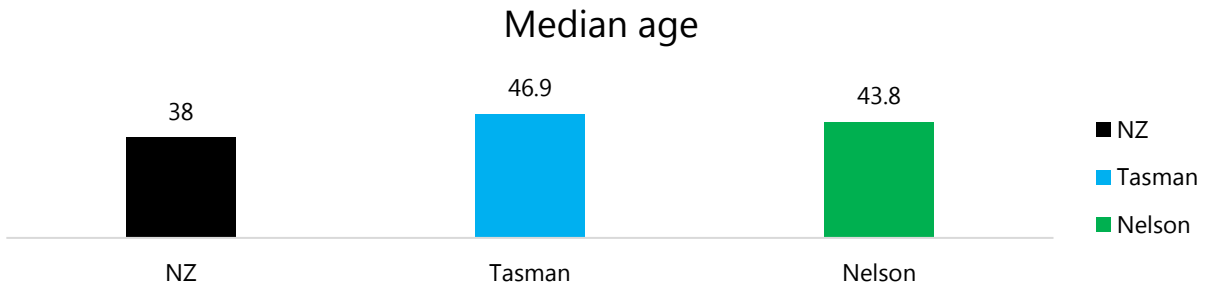
[8] Stats NZ: Statistical area 2 population projections, by age and sex, 2018(base)-2048

Key issues:

- Population growth will likely enhance the vibrancy of our town centres and support businesses. Still, it will also put pressure on infrastructure, particularly if growth occurs too fast or in the wrong places.
- Our rural areas are likely to experience low growth or decline. It will be harder to maintain existing populations and provide amenities that support people who live in rural communities.
- Population growth will place strain on our existing transport systems, resulting in longer and less predictable travel times. However, growth will make public transport networks more viable and enable more frequent services. Housing growth in greenfield areas will result in more private car use unless accessible public transport exists.
- There will likely be high competition for central government investment amongst high-growth areas of the country. Tasman is far from major population centres and will not benefit from population-based funding.
- As population growth slows, it will be increasingly challenging to recruit staff and grow businesses.

An ageing population

Tasman is older than New Zealand as a whole. Tasman has a median age nine years older than New Zealand and has a larger proportion of its population over 40 years of age.



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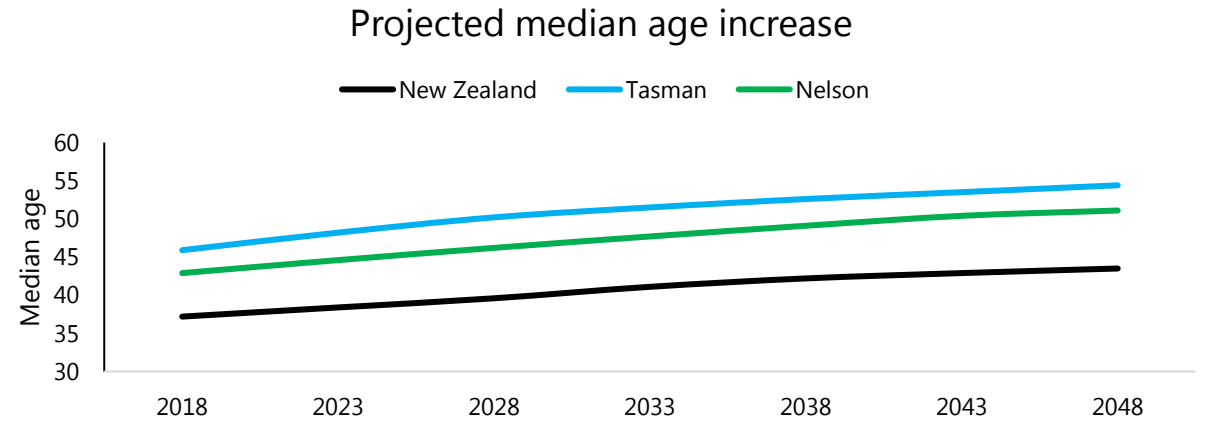
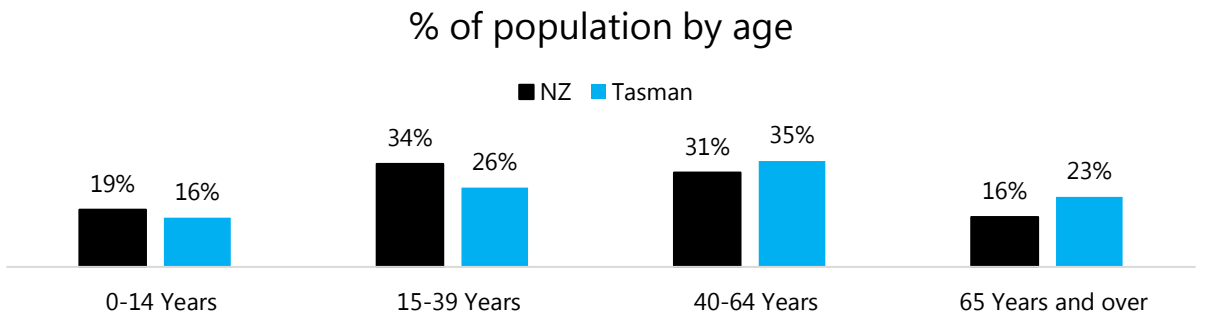


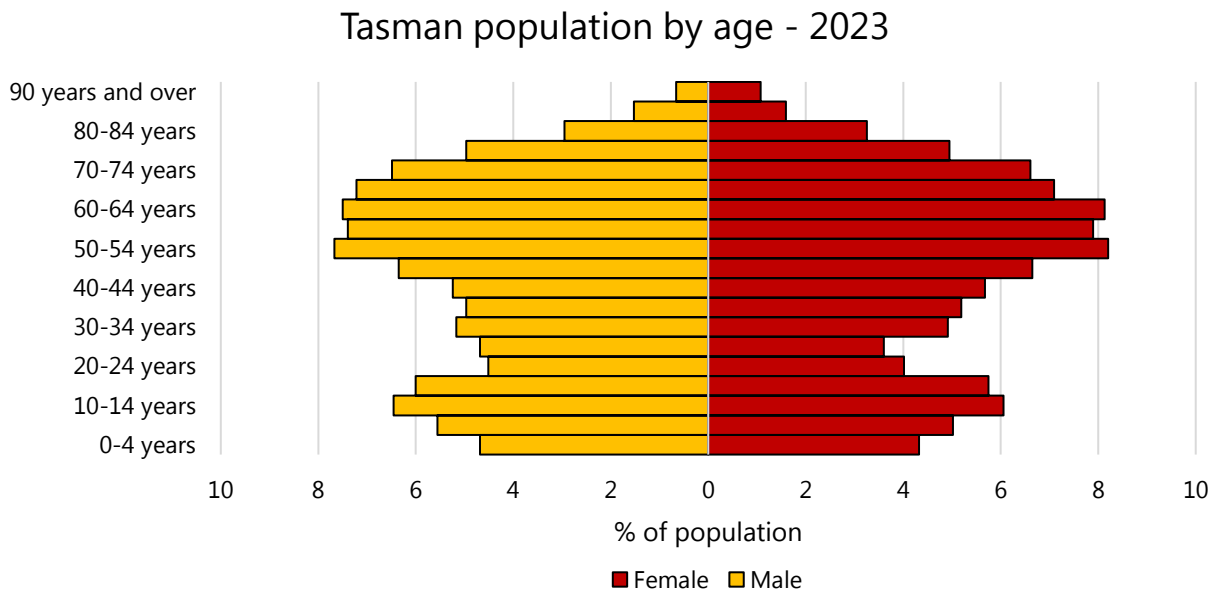
[10]

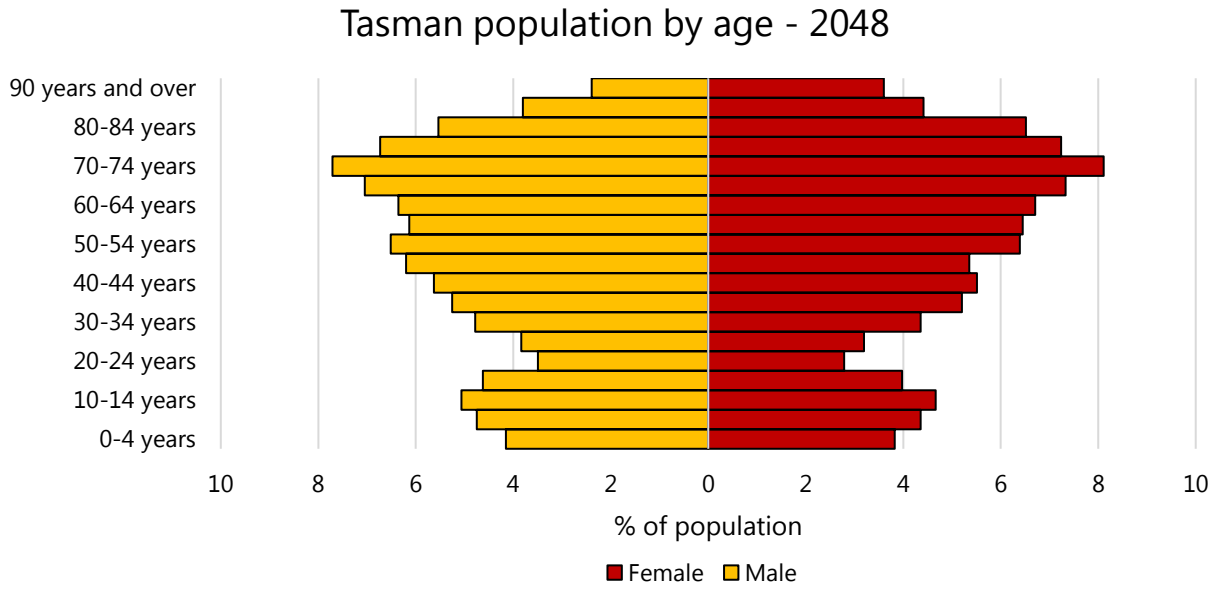


[11]

[9] Stats NZ: Subnational population estimates (RC, SA2), by age and sex, at 30 June 1996-2022 (2022 boundaries)
[10] Stats NZ: Subnational population projections, characteristics, 2018(base)-2048 update
[11] Stats NZ: Subnational population estimates (RC, SA2), by age and sex, at 30 June 1996-2022 (2022 boundaries)

Like most of New Zealand, Tasman's population is expected to get older. The 65+ age group is projected to increase from 21% in 2018 to 34% in 2048. This increase is known as structural ageing. Once a population has more than 20% aged 65 years and over, it is usually approaching the end of natural increase. [12]





[12] Stats NZ: Subnational population estimates (RC, constituency), by age and sex, at 30 June 2018-2022(provisional 2023 boundaries), Subnational population projections, by age and sex, 2018(base)-2048 update

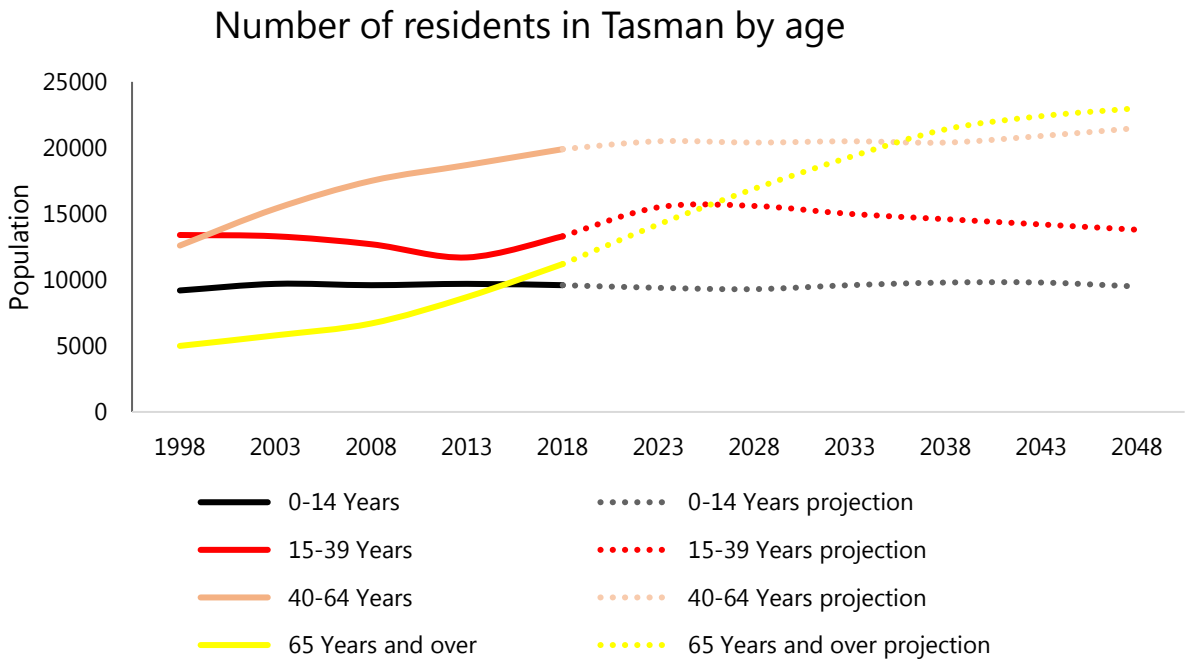
This table shows the projected population for Tasman in 5-year age bands. [13]

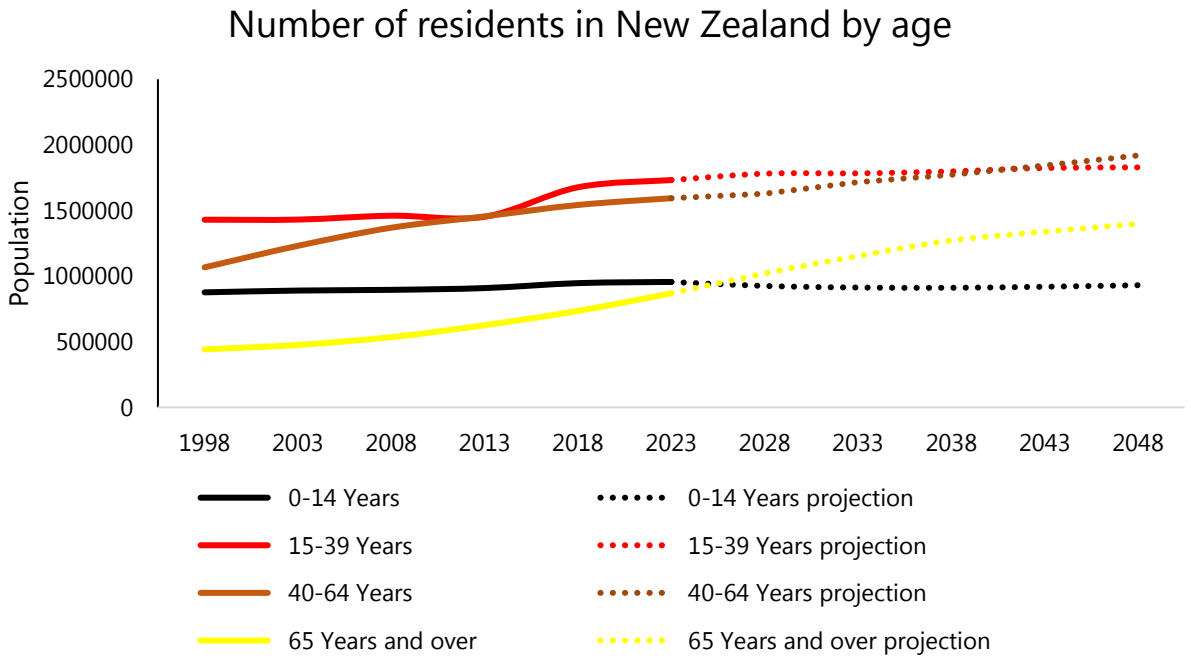
Projected population of Tasman by age groups

Age	2018	2023	2028	2033	2038	2043	2048	2053	2058
0-4 years	2565	3037	3252	3587	3763	3677	3479	3414	3543
5-9 years	3285	2980	3356	3598	3966	4168	4082	3867	3790
10-14 years	3720	3333	2917	3327	3557	3925	4117	4018	3801
15-19 years	3360	3298	2662	2366	2800	2952	3279	3410	3296
20-24 years	2215	3208	2970	2422	2137	2487	2636	2921	3048
25-29 years	2550	2763	3679	3536	2942	2575	2902	3095	3416
30-34 years	2525	3259	3354	4383	4322	3656	3186	3507	3750
35-39 years	2705	3107	3765	3913	5042	5057	4335	3772	4081
40-44 years	3285	3195	3476	4192	4386	5606	5682	4913	4273
45-49 years	4180	3688	3459	3745	4503	4733	6013	6131	5332
50-54 years	4130	4529	3929	3674	3958	4744	5006	6324	6490
55-59 years	4225	4480	4780	4179	3897	4177	4988	5283	6637
60-64 years	3940	4562	4726	5038	4439	4129	4402	5235	5564
65-69 years	3835	4101	4654	4826	5143	4541	4222	4492	5335
70-74 years	3085	3754	3980	4518	4682	4989	4403	4094	4357
75-79 years	2040	2849	3428	3625	4122	4266	4548	3997	3720
80-84 years	1205	1723	2348	2814	2955	3379	3477	3713	3229
85 years and over	1025	899	1247	1699	2033	2131	2441	2510	2683
Grand Total	53875	58765	61982	65442	68647	71192	73198	74696	76345

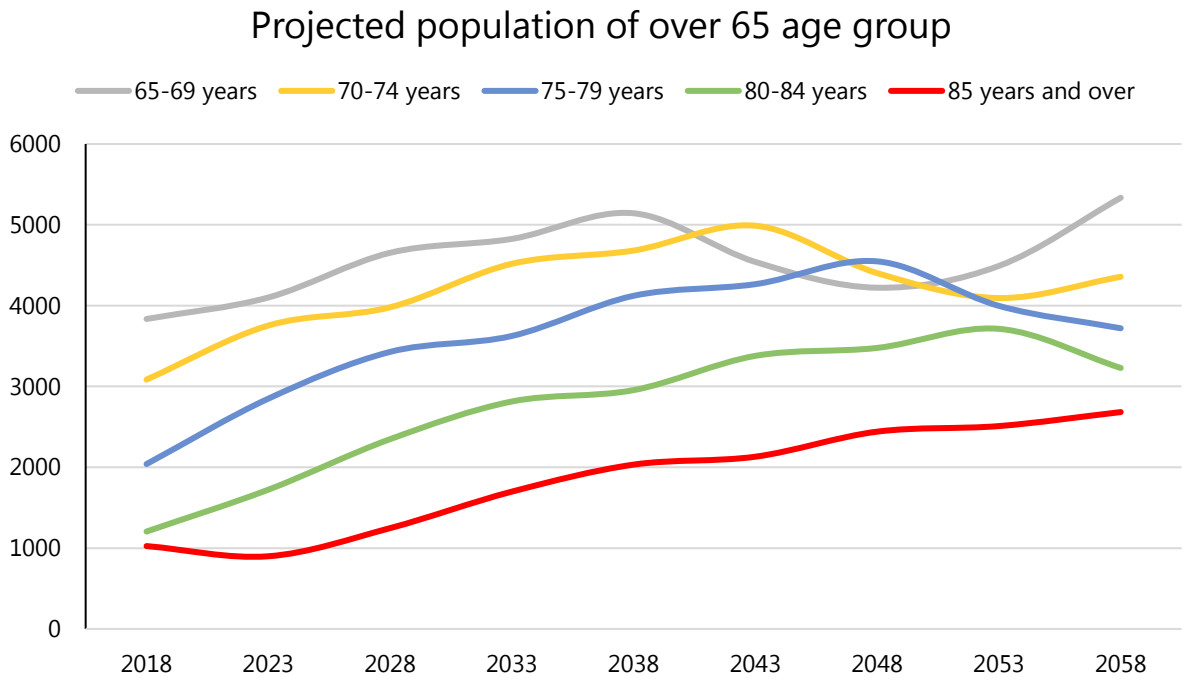
[13] Source: Dot Consulting projections, 2023

Ageing populations are a nationwide trend, and Tasman will age faster than New Zealand as a whole. In Tasman, projections show that the number of people below 65 will remain amount the same as it is now, but the number of 65 year olds will significantly increase to become our largest demographic. This will have significant consequences for our district, as we will need to plan our communities and design our services for an older population.



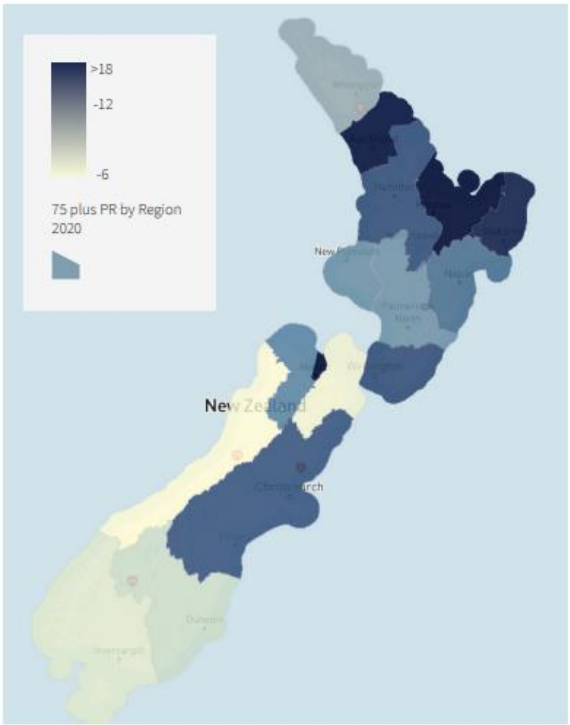


The following graph shows the projected population of the over 65s age group.



The latest JLL New Zealand Retirement Village and Aged Care Report (2022)[14] (p.17) states that roughly 14% of New Zealanders over the age of 75 are in a retirement village or aged care.

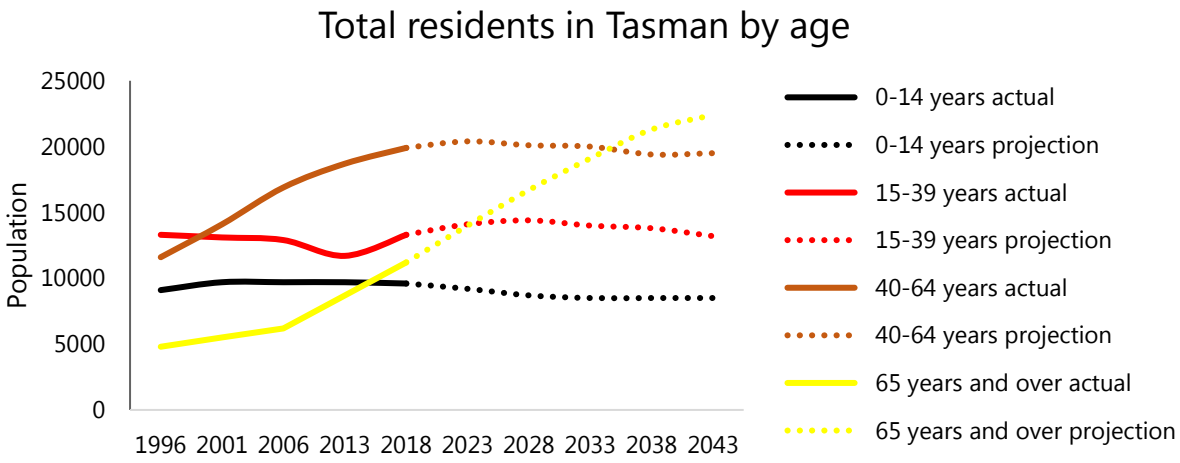
While we don't have exact figures, the map to the right shows the % of residents aged 75 or older in a retirement village or aged care facility. The map shows that Tasman sits at roughly 10% and is lower than Nelson and the majority of the North Island.

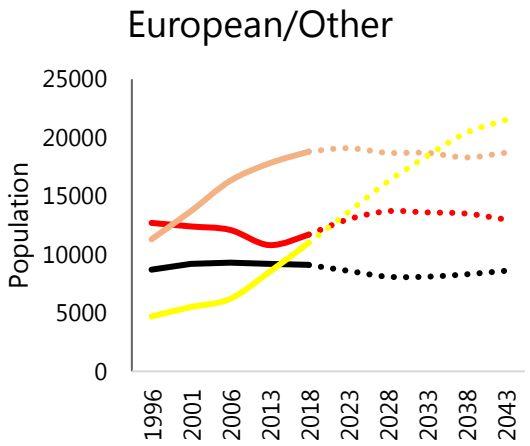


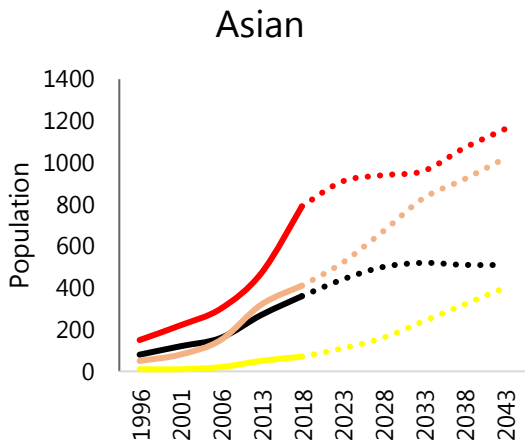
Source: JLL NZRVD

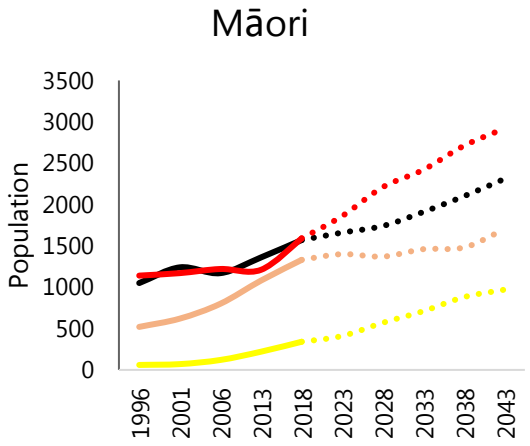
[14] JLL New Zealand Retirement Village and Aged Care Report, 2022, p. 17

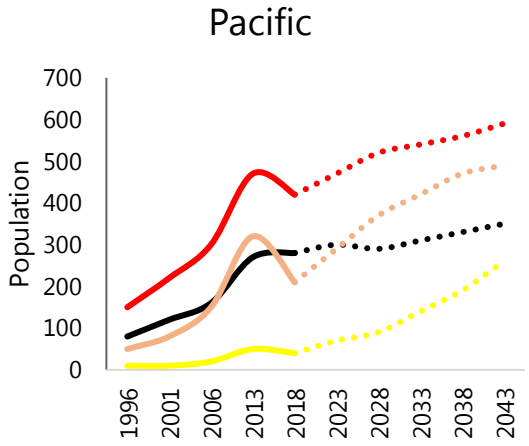
Many ethnic groups (especially Māori and Pacific groups) have a generally younger age profile than the national average. Māori, Pacific, and Asian populations will be younger on average and have a smaller proportion that is over 65. While these populations are also ageing, they are ageing more slowly.





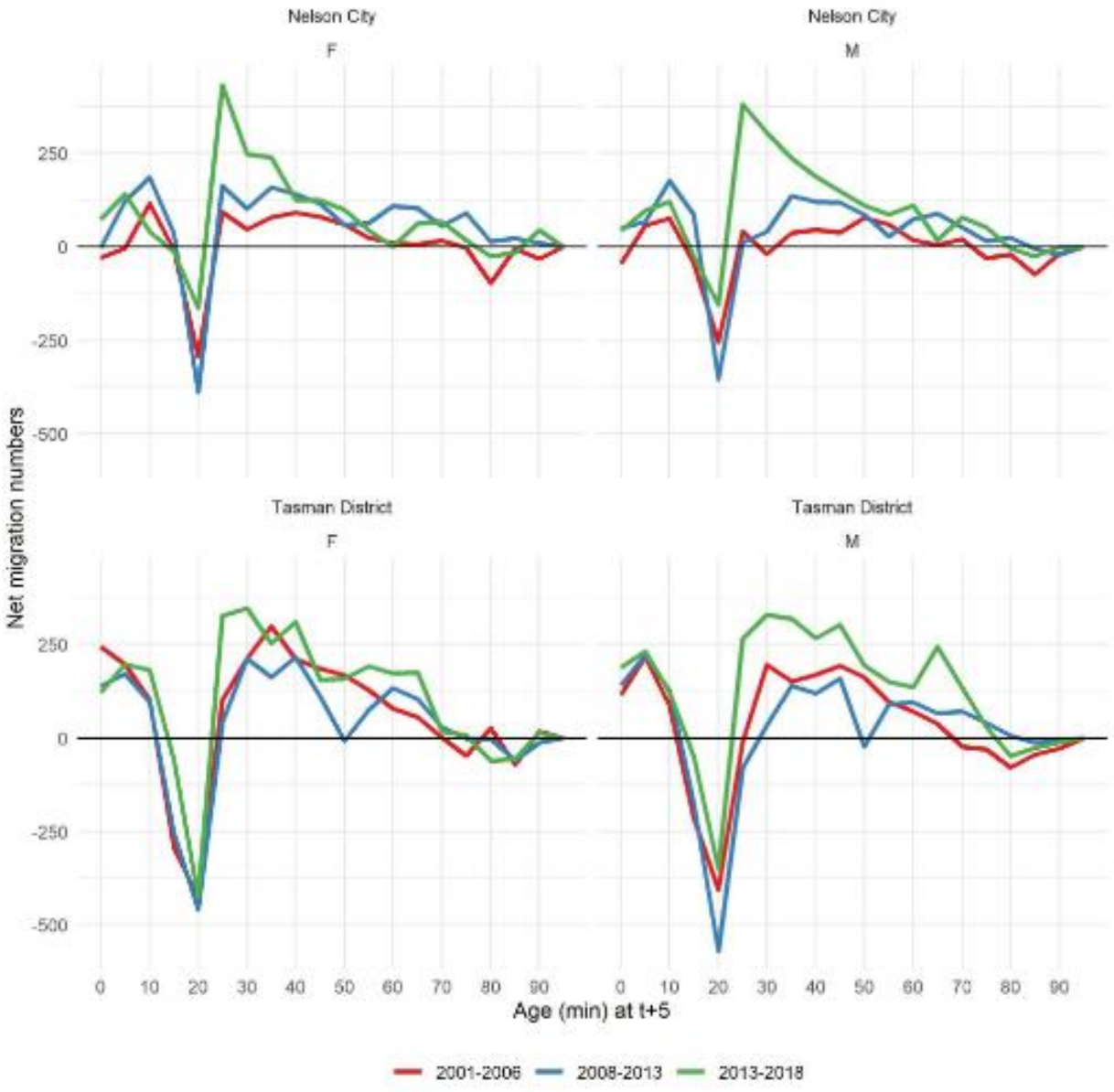






Migration to and from Tasman is also related to age. Both Tasman and Nelson currently see a comparatively high number of 15–24-year-olds leaving, most commonly to go to universities elsewhere in the country. Both districts make up for this loss with people in their 30s migrating into the region. While Tasman has stereotypically been regarded as a place for older adults to retire, the number of people moving to Tasman in old age is roughly equal to those leaving.[15]

Estimated net migration numbers by sex and age: 2001-2006, 2008-2013, 2013-2018 for Nelson City and Tasman District



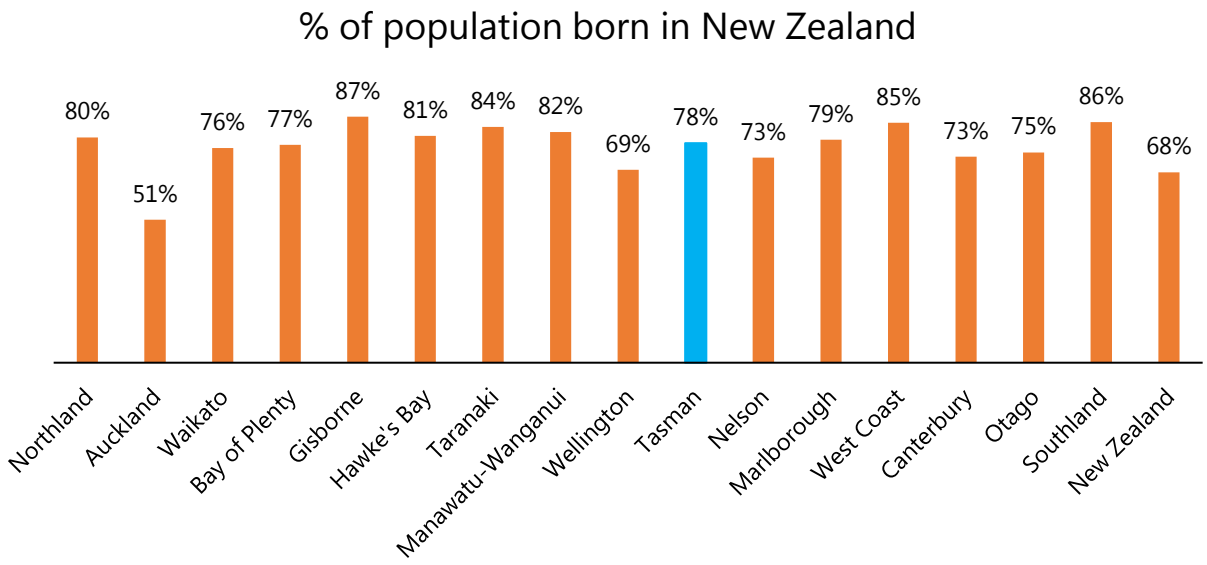
[15] Source: Dot Consulting, Tasman District Council and Nelson District Council proposed population projection assumptions, unpublished

Key issues:

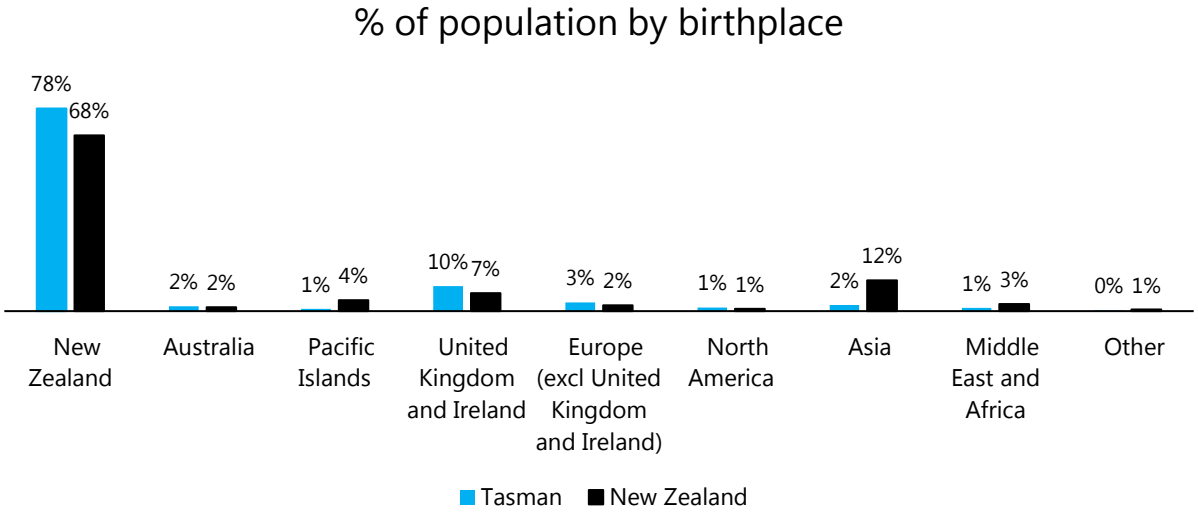
- Current housing is mainly designed for families. Smaller houses, assisted living homes, and extended family living will be needed to meet future demand.
- Older people will increasingly continue to work, especially as retirement schemes change or become more precarious.
- An ageing population will likely result in labour shortages in some industries and require migration into the region. There will be increased demand for health, recreation, and leisure services. A greater proportion of residents will live on fixed incomes.
- New business opportunities to service the older population will arise, as well as an increased number of volunteers wanting to give back.
- Young adults will continue to leave in greater numbers than those moving to the region.
- Technological developments over the next few decades could help to improve the lives of older people, health care services, connections with families, and facilitate lifelong learning.

Diverse communities

At the last census, 78% of Tasman residents were born in New Zealand. This is higher than the national average, although this is skewed heavily by Auckland. Auckland's sizeable overseas-born population is primarily driven by migration from Asia.[16]

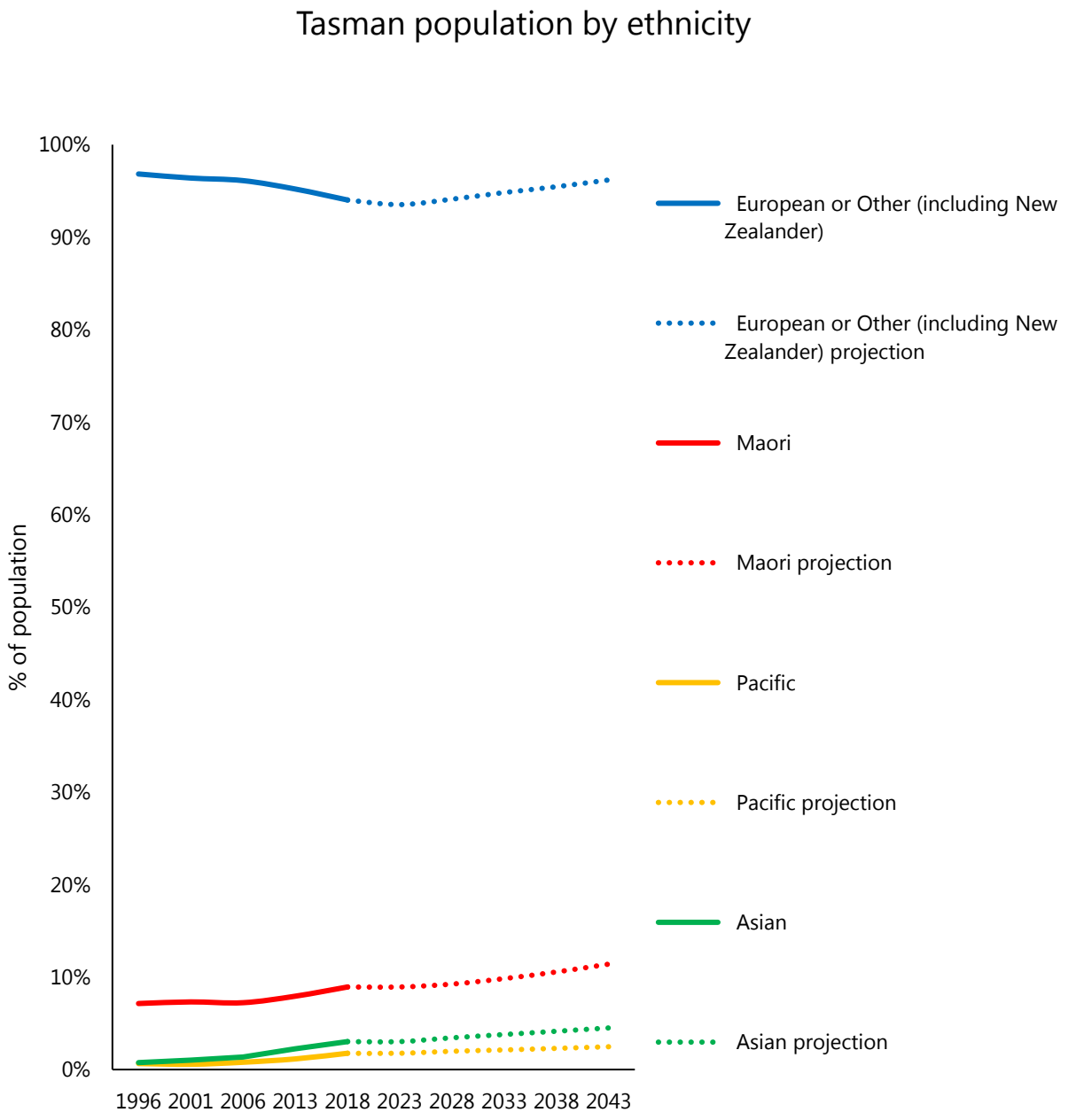


Around 22% of Tasman residents were born overseas. Tasman has a particularly high number of European migrants and has the highest proportion of German, Dutch, Irish, and British-born citizens in the country.



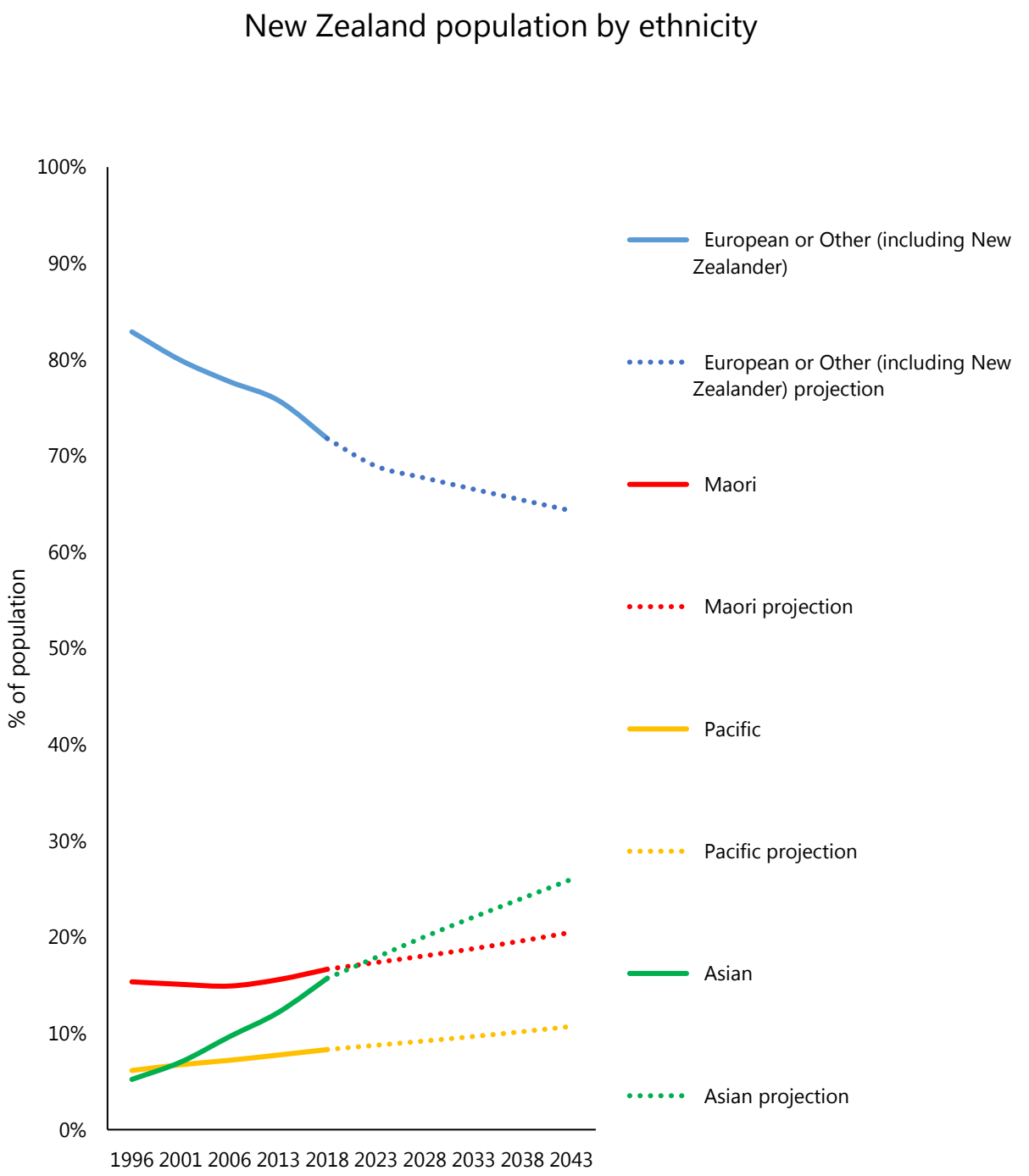
[16] Source: Stats NZ, Birthplace (broad geographic areas) and work and labour force status by age and sex, for the census usually resident population count aged 15 years and over, 2006, 2013, and 2018 Censuses (RC, TA, SA2, DHB)

Tasman will continue to become more ethnically and culturally diverse. In thirty years, the proportion of residents who are Māori will increase from 9% to 12%, the proportion of Asian residents will increase from 3% to 5%, and the proportion of Pacific people will increase from 2% to 3%. The European/Other group will still be the most common ethnic group in 2050, and residents will increasingly identify with multiple ethnicities (which is why the percentages do not add up to 100%).[17]

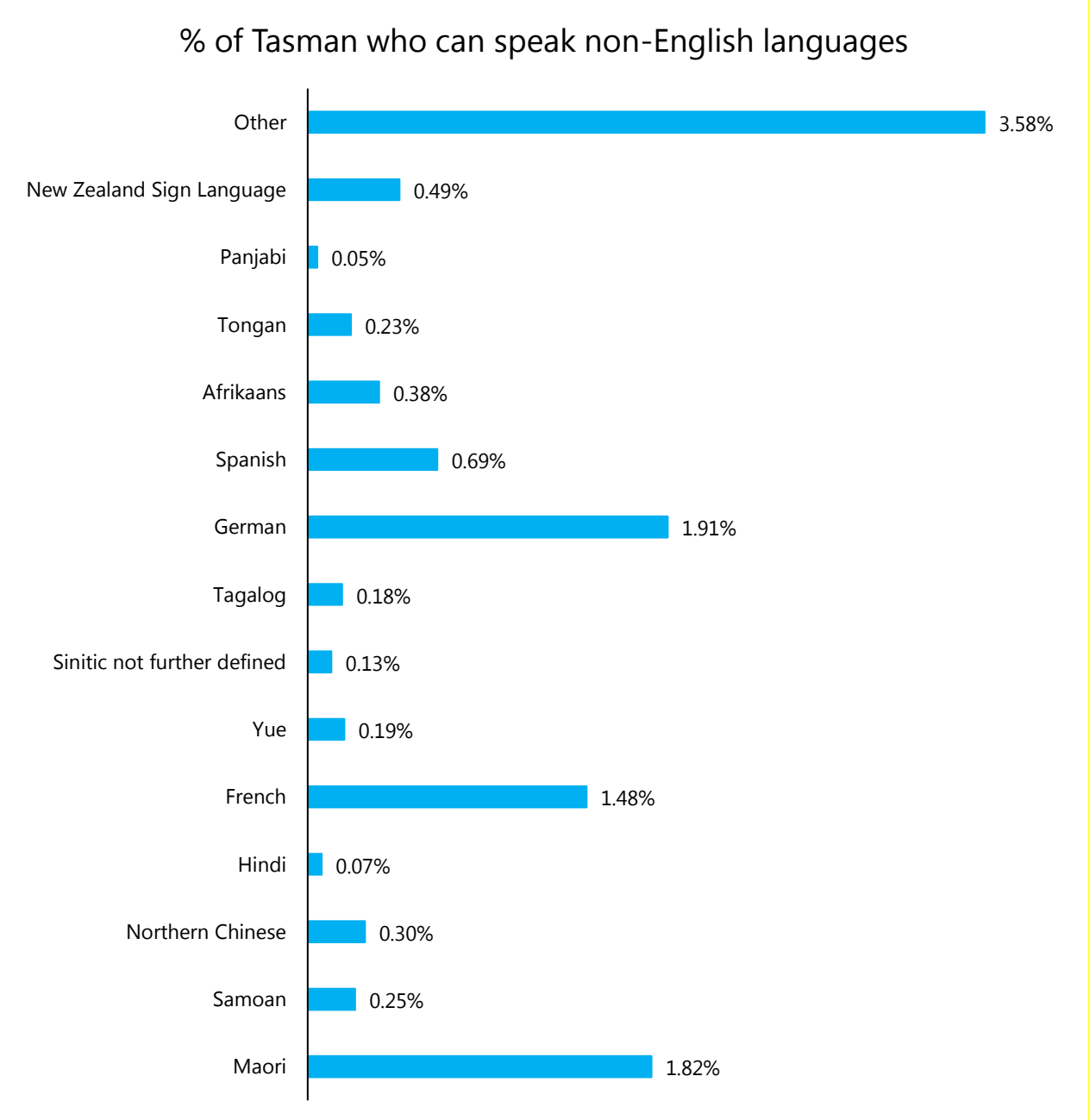


[17] Source: Stats NZ, Subnational ethnic population projections, by age and sex, 2018(base)-2043

New Zealand is changing more rapidly. In 2043, New Zealand will be home to just over six million people, with just over a quarter being Asian, 21% being Maori, and 11% being Pacific Islander. Population changes will be most prominent in Auckland where 43% of the city is projected to be Asian.

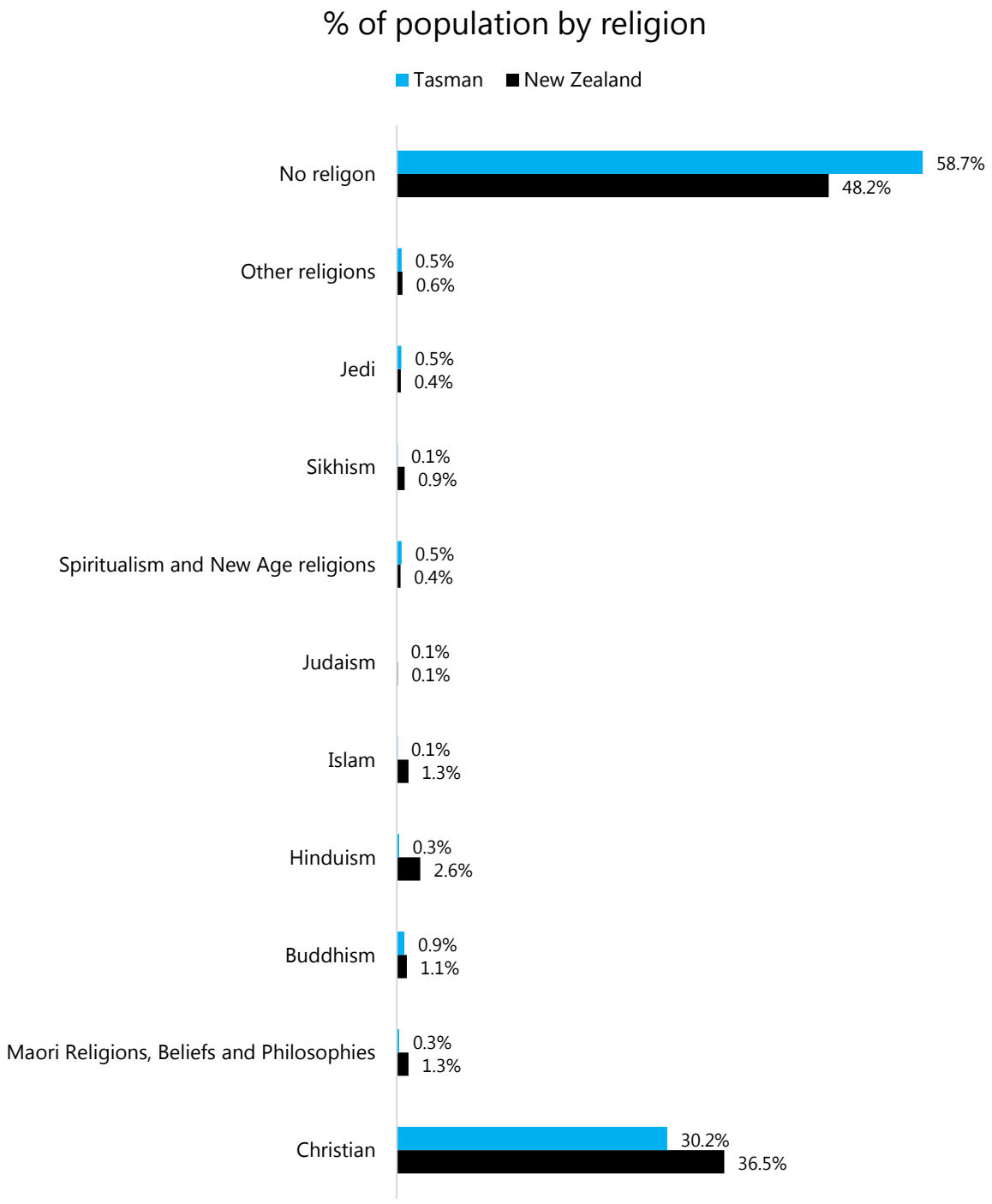


Tasman is home to a large number of spoken languages. At the 2018 census, 4929 people (9%) spoke more than one language. Tasman has the country's highest proportion of the population who can speak German.[18]



[18] Source: Stats NZ, Languages spoken (total responses) and birthplace (broad geographic areas) by age group and sex, for the census usually resident population count, 2006, 2013, and 2018 Censuses (RC, TA, DHB)

Tasman is less religious than the national average. 41.3% of Tasman residents are religious, most of them Christian. [19]



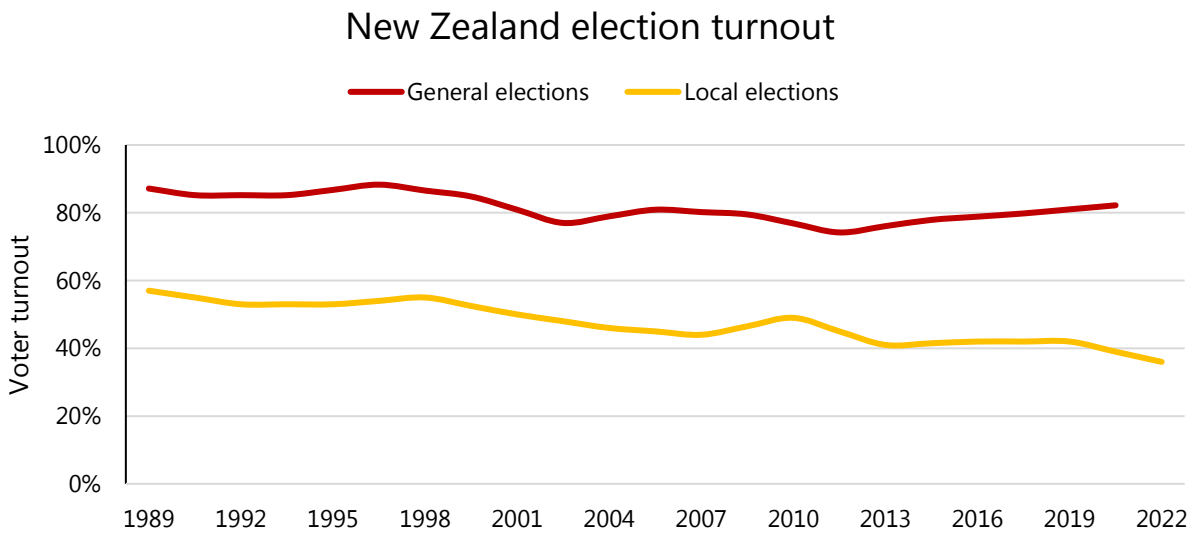
[19] Source: Stats NZ, Religious affiliation (total responses) and birthplace (broad geographic areas) by age group, for the census usually resident population count, 2006, 2013, and 2018 Censuses (RC, TA, SA2, DHB)

Key issues:

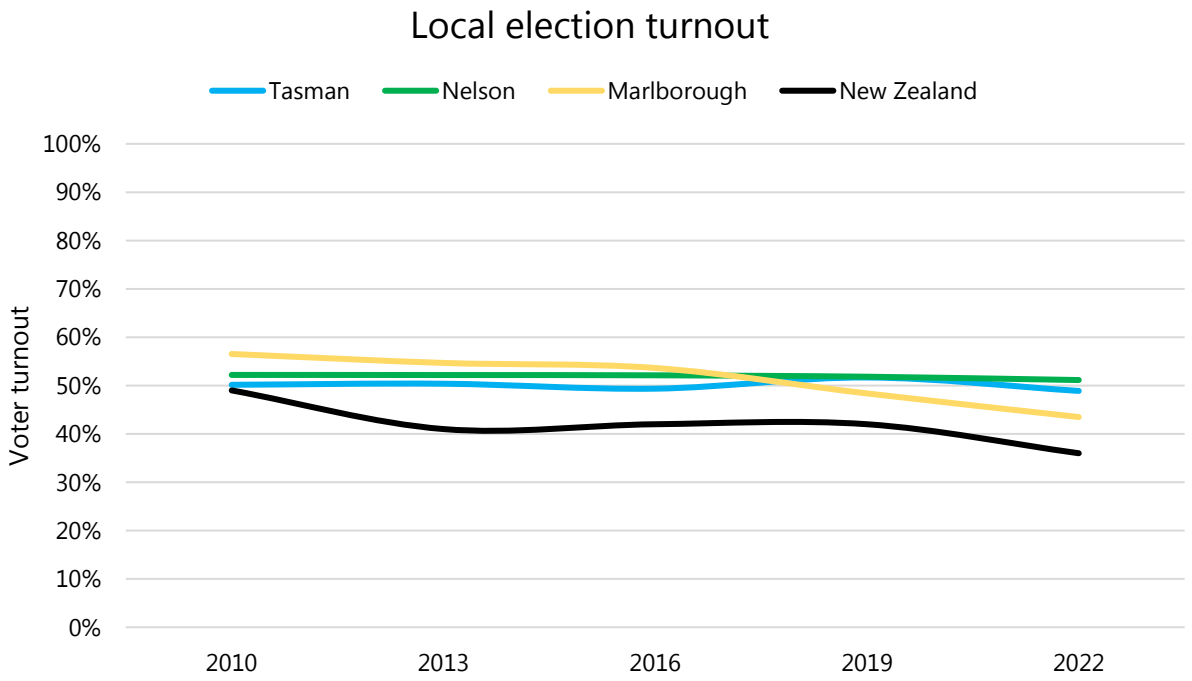
- Housing in the district has traditionally been built for nuclear families. In contrast, different ethnic and cultural groups may prefer more communal and extended family housing. Different cultural norms may influence the delivery and use of health, recreation, and social services.
- There will be uncertainty about how to acclimate within the region for recent arrivals. These residents may face stress, social isolation, and discrimination. There is an ongoing need for culturally appropriate information and services to promote participation in in the community (including elections).
- Having people from diverse backgrounds living in Tasman brings economic and social opportunities and will contribute to the vibrancy and culture of the region. Increased diversity is also an opportunity to promote the region as a welcoming and vibrant region for tourists, investors, and new residents. This will be pronounced as our population ages and new residents are needed to fill job vacancies.

Participation in local government

New Zealanders are less engaged in local government processes than in previous decades. Just 36% of New Zealanders cast their vote in the last local election, down from nearly 55% 30 years ago. This is far below the turnout for general elections, which is also dropping.[20]



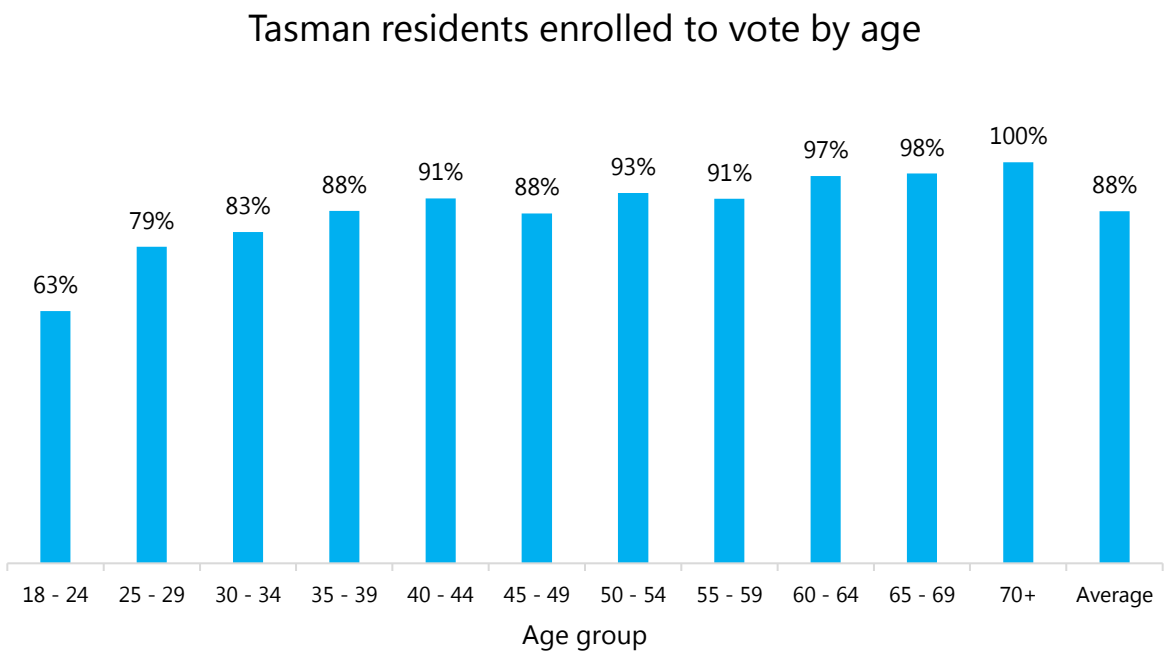
At the last local election, Tasman has a slightly higher turnout than the national average at 49%.[21]



[20] Source: Electoral Commission, New Zealand election results; Taituara, Vote 2022

[21] Source: Nelson City Council, Tasman District Council, Marlborough District Council websites

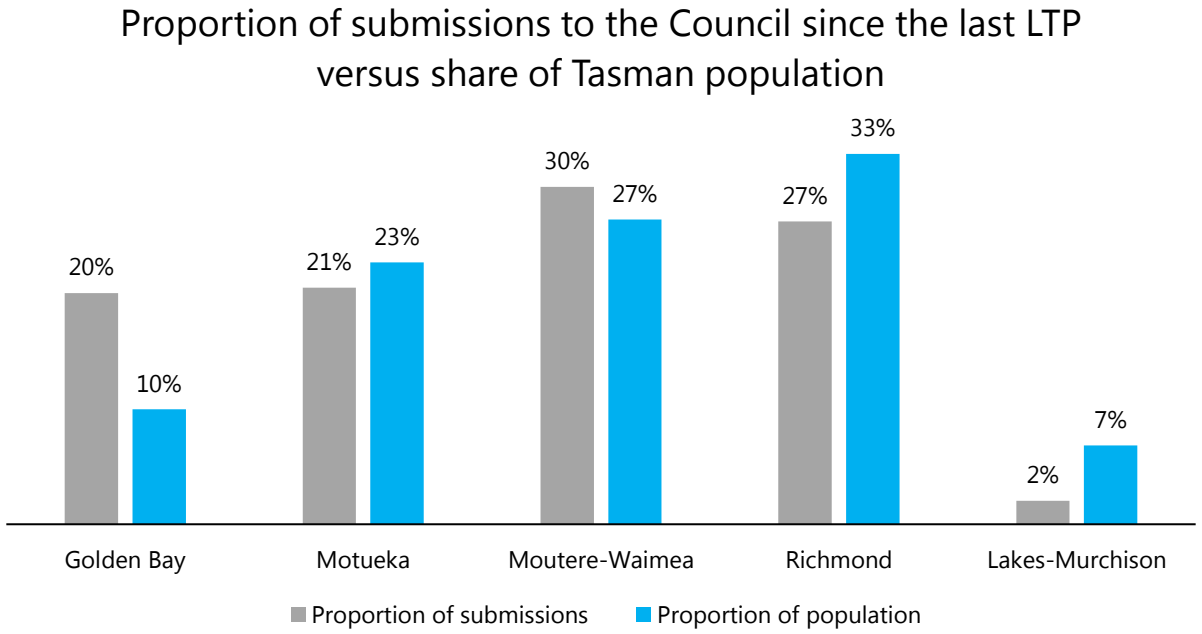
Most Tasman residents are enrolled to vote in elections, but this is highly dependent on age. Far fewer young people are registered to vote compared to older people. This trend is also seen nationwide.[22]



[22] Source: Electoral Commission, Enrolment by local council

The Council usually relies on consultation processes to engage the community on decisions and issues relevant to them. However, research has consistently shown that those who make a submission to the Council are not representative of the general population – they tend to be older, male, Pakeha, and homeowners. This is reflected in our recent resident survey results, which showed that only half of Tasman residents were happy with our methods of consultation.

Public engagement traditionally has problems engaging with youth, migrants, diverse communities, and renters. Many people feel that decisions have already been made when they are consulted. Preliminary analysis also shows that engagement is geographically skewed. For example, 20% of submissions to the Council since the last LTP came from Golden Bay despite only making up 10% of Tasman's population. [23]



Key issues:

- Local government consultation frequently does not hear from a representative subset of the population. We may not be sufficiently engaging with the correct channels or providing easy, quick, and meaningful ways for our community to engage.
- There is a genuine need to engage with a representative population to make decisions that best fit everyone. However, councils have found it challenging to develop ways to reach people who do not usually engage in Council processes.
- Voter turnout is decreasing for both general and local elections
- Young people are not as engaged in voting as older people.

[23] Source: Stats NZ, Subnational population estimates (urban rural), by age and sex, at 30 June 1996-2022 (2022 boundaries)

Tasman's economy

Regional economy[24]

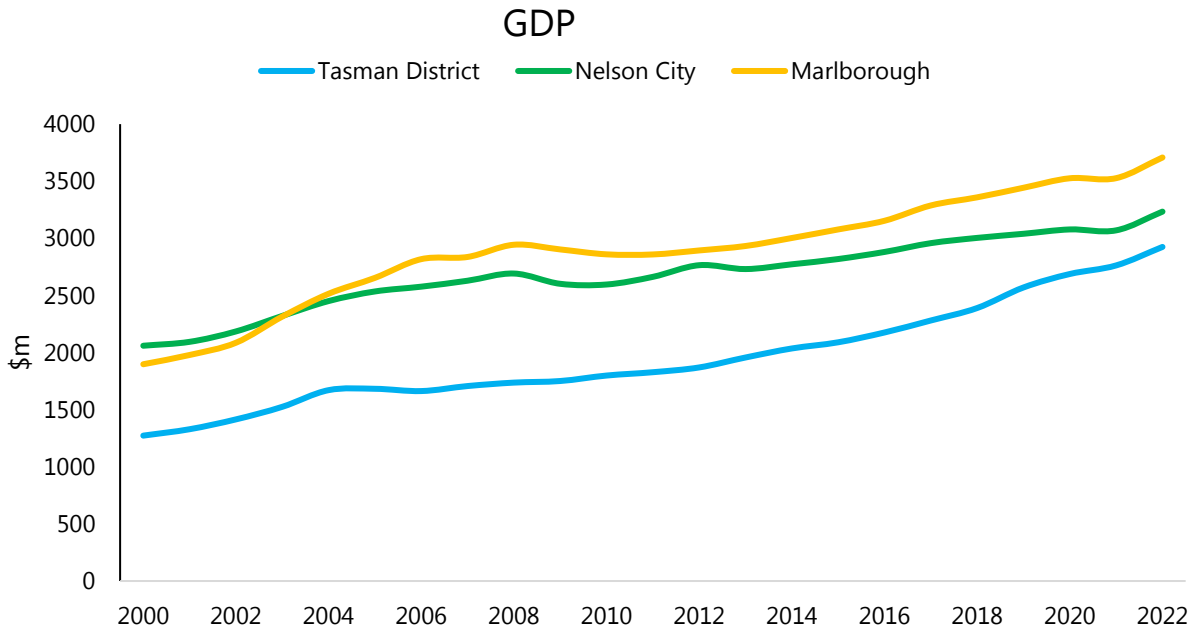
Tasman shares much of its economic profile with Nelson City, and the two regions are highly interconnected. Project Kokiri, an economic development alliance of agencies in the region, identifies that the Nelson Tasman region has several 'anchor sectors' that underpin our economy:[25]

- The Oceans Economy – 70% of New Zealand's aquaculture is based in Te Tau Ihu, and Nelson Tasman has Australasia's largest fishing port. There are more than 2600 fishing, agriculture, and processing jobs in the region.
- Food, Beverage & Wellness Products - We are a significant horticultural region that creates high-value food and beverage products due to our favourable climate. This represents more than 4,000 jobs in Nelson Tasman.
- Forestry & Wood Processing - About 5% of New Zealand's plantation forests are in Nelson Tasman. The region has New Zealand's highest concentration of specialist processing, particularly in laminated and structural wood products. Tasman is home to one of the largest MDF plants in the world and produces approximately 10% of New Zealand's sustainable roundwood harvest. This sector accounts for more than 2,000 jobs in Nelson Tasman.
- Research, Science & Technology – Nelson Tasman is home to New Zealand's largest independent research establishment, the Cawthron Institute, and a Plant and Food Research facility. We have a strong relationship between our science and technical establishments and the food, beverage and wellness products sector, especially in seafood, aquaculture and extending into algae, seaweed products and beyond: recent developments in extracts are progressing into medical products.
- The Visitor Economy – Nelson Tasman has a long history of attracting international and domestic visitation. Around 7.7% of jobs in Nelson Tasman were supported by visitation in 2021, compared to 5.6% nationally.

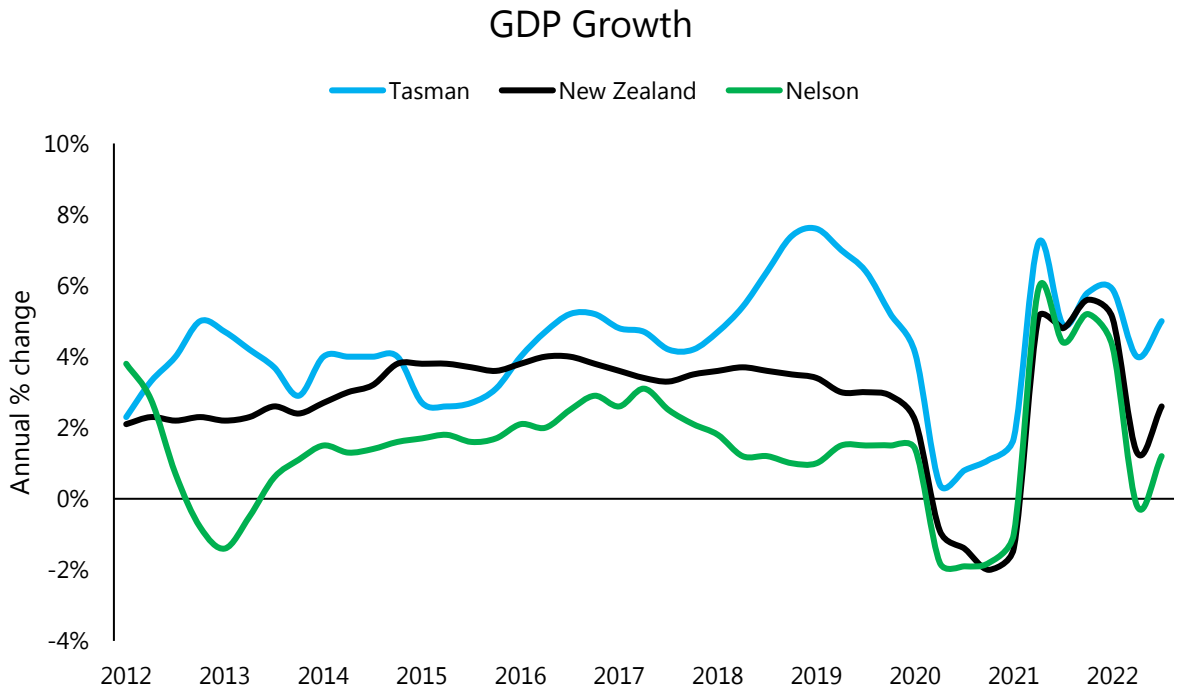
[24] Source for this section; Infometrics Regional Economic Profile and Quarterly Economic Monitor, unpublished

[25] Source: Project Kokiri, Nelson Tasman Regeneration Plan 2021-2051

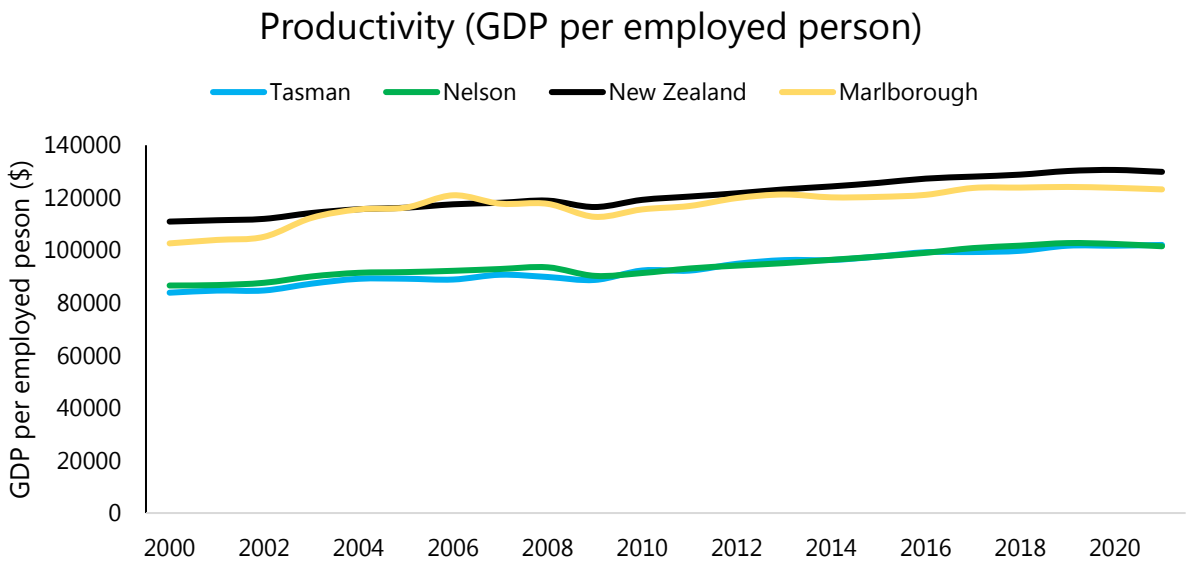
In 2022, Tasman's GDP was $2.9 billion, approximately $400 million less than Nelson City and $800 million less than Marlborough District



Over the last ten years, Tasman's GDP has increased significantly, almost doubling the growth rate of New Zealand as a whole. Tasman was more resilient than the rest of New Zealand's economy during COVID, and GDP did not decline at any point during the pandemic.



Both Nelson and Tasman have had lower productivity than New Zealand over the last 20 years. Both regions are not closing the gap in productivity between Nelson-Tasman and the New Zealand average.



Productivity is a measure of how much stuff we produce from a given quantity of inputs. If we have higher productivity, then we get more (output) for less (input). Put simply, productivity is about making people' work smarter' rather than 'work harder'. Productivity emphasises using processes, skills, technology, machinery, and natural resources more effectively. There are many ways to measure productivity – but due to data availability considerations the most common measures of productivity usually centre around comparing how much Gross Domestic Product (GDP) an economy generates for each labour resource (eg. per employee). Measuring productivity this way essentially tells us how effective a sector or a region is at turning the work of its people into income. This productivity measure includes contractors who are doing work outside the district.

Productivity in Nelson-Tasman is 24% below the national average. There are two key reasons for this lower productivity outcome:

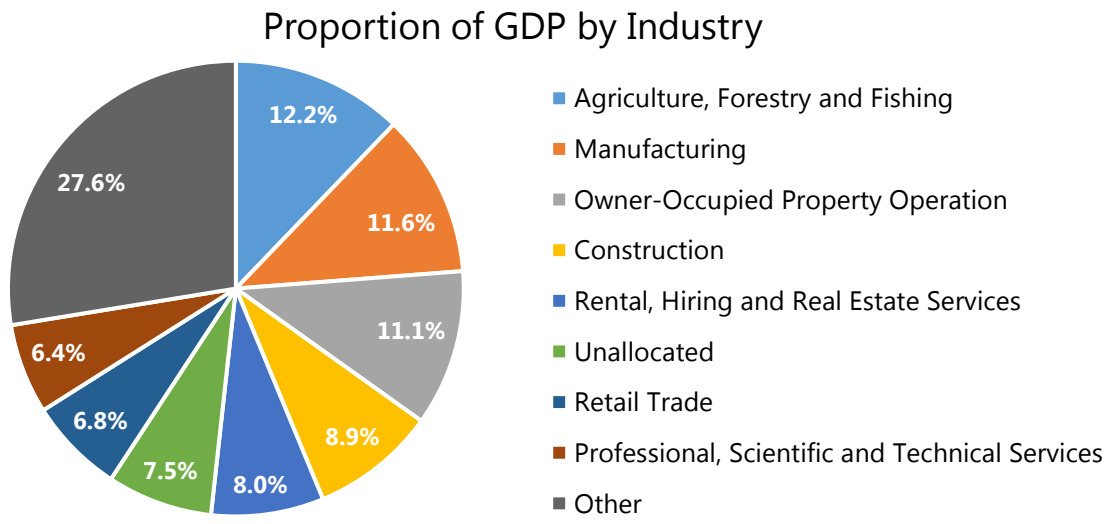
1. Nelson-Tasman has a higher concentration of resources in industries which have lower productivity than the national average. For example, accommodation, hospitality, and retailing are more prominent in Nelson-Tasman than nationally (17.2% share of employment in Nelson-Tasman, compared to a 15.6% share of employment nationally).

2. Productivity outcomes within Nelson-Tasman industries are generally lower than productivity outcomes within those same industries nationally.

Productivity in Nelson-Tasman and New Zealand by industry (2020) [26]

Industry	Nelson-Tasman	New Zealand
Electricity, Gas, Water, and Waste Services	$333,387	$483,361
Rental, Hiring, and Real Estate Services	$286,933	$399,422
Financial and Insurance Services	$180,101	$274,046
Transport, Postal and Warehousing	$130,178	$125,629
Information Media and Telecommunications	$113,334	$293,069
Mining	$109,869	$642,217
Wholesale Trade	$97,059	$129,675
Manufacturing	$95,794	$125,532
Professional, Scientific and Technical Services	$90,202	$111,563
Public Administration and Safety	$77,823	$109,680
Construction	$75,989	$82,963
Healthcare and Social Assistance	$67,800	$75,212
Retail Trade	$62,927	$69,335
Agriculture, Forestry and Fishing	$60,631	$114,512
Arts and Recreation Services	$54,063	$87,683
Administrative and Support Services	$48,053	$50,964
Education and Training	$44,052	$60,356
Accommodation and Food Services	$36,167	$39,259
Other	$35,765	$56,307
Total	$95,100	$124,988

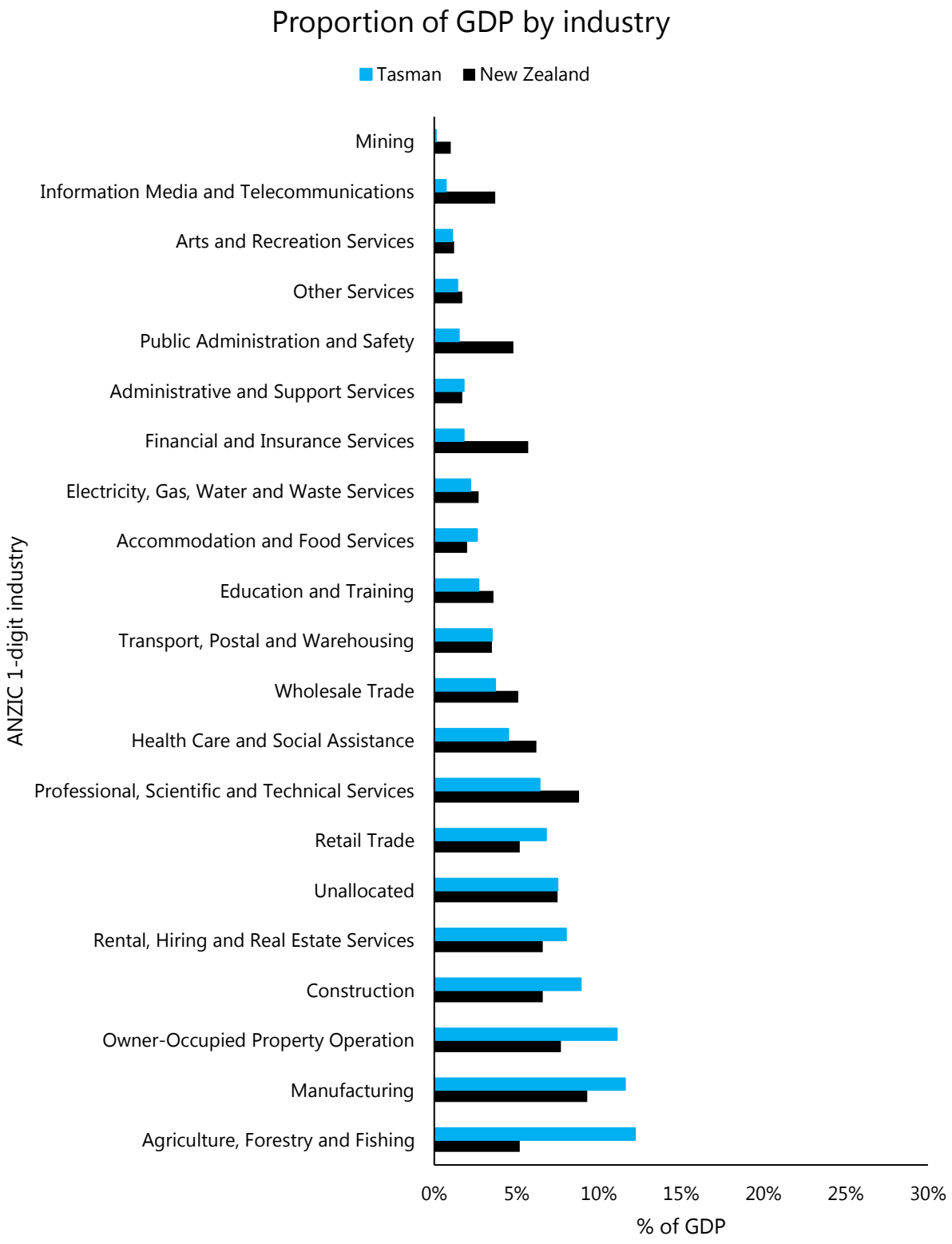
Agriculture, fishing and forestry account for the greatest share of Tasman's GDP, followed by manufacturing and owner-occupied property operation.[27]



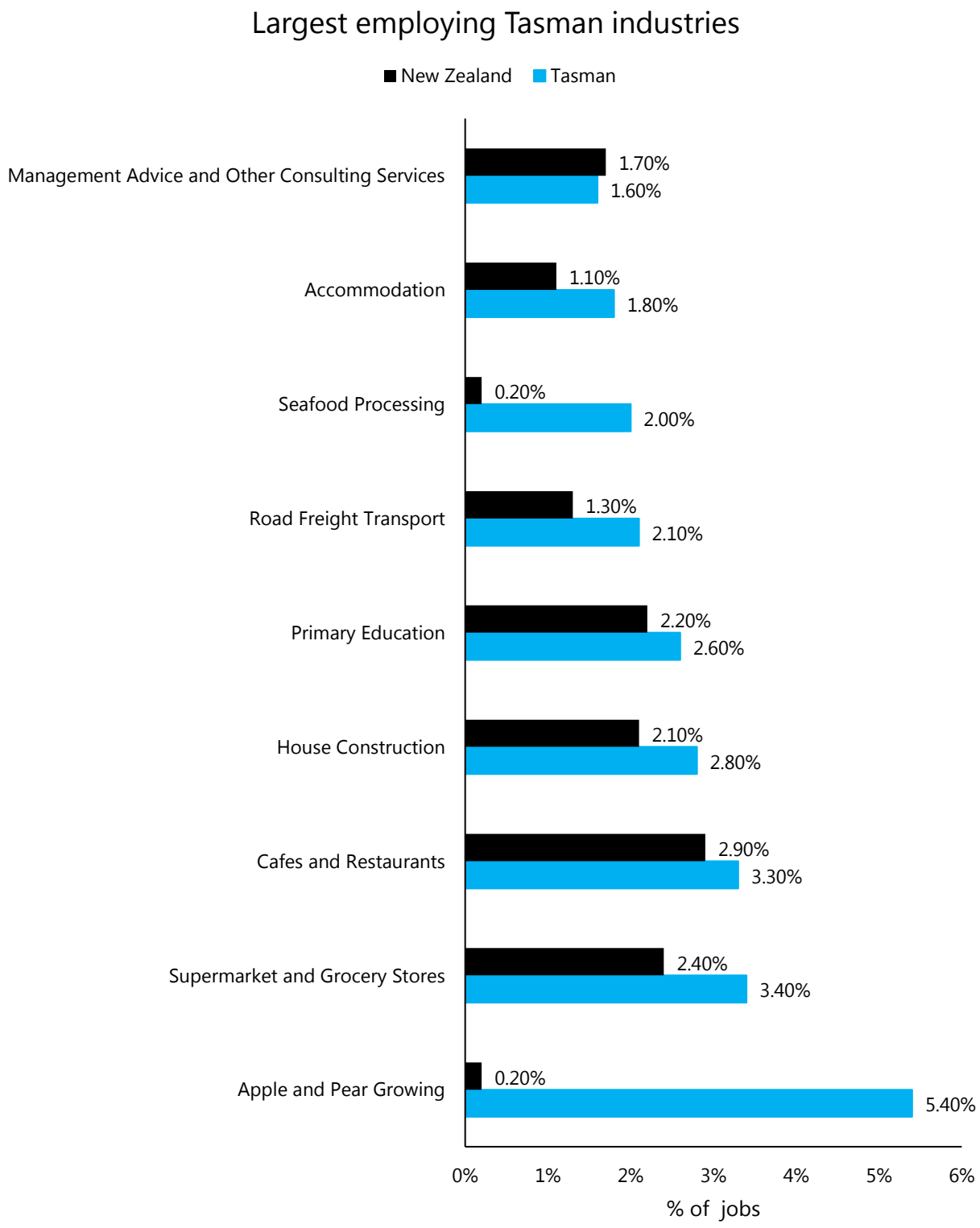
[26] Source: NRDA - Understanding productivity in Nelson-Tasman (nelsontasman.nz), 2021. Further information on productivity can be found in this report.

[27] Owner-occupied property operation represents the economic services that a house-owner gets from living in their house, equivalent to a tenant renting a house.

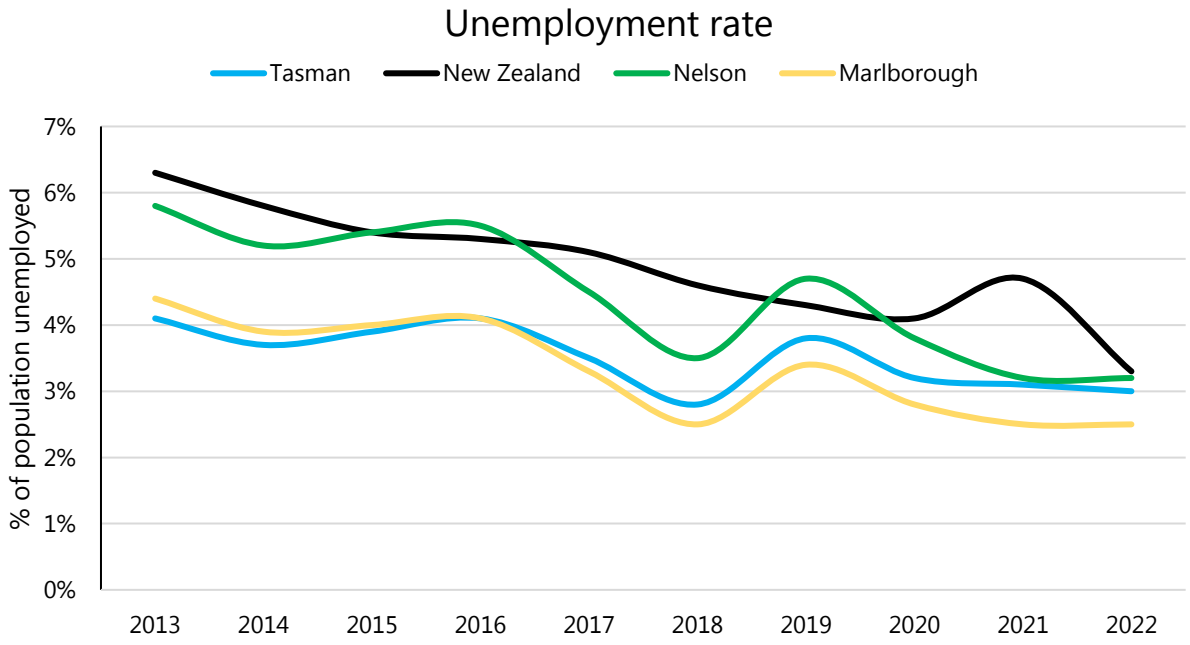
Looking at specific industries, Tasman's economy is more oriented towards the primary sector and manufacturing than New Zealand as a whole.

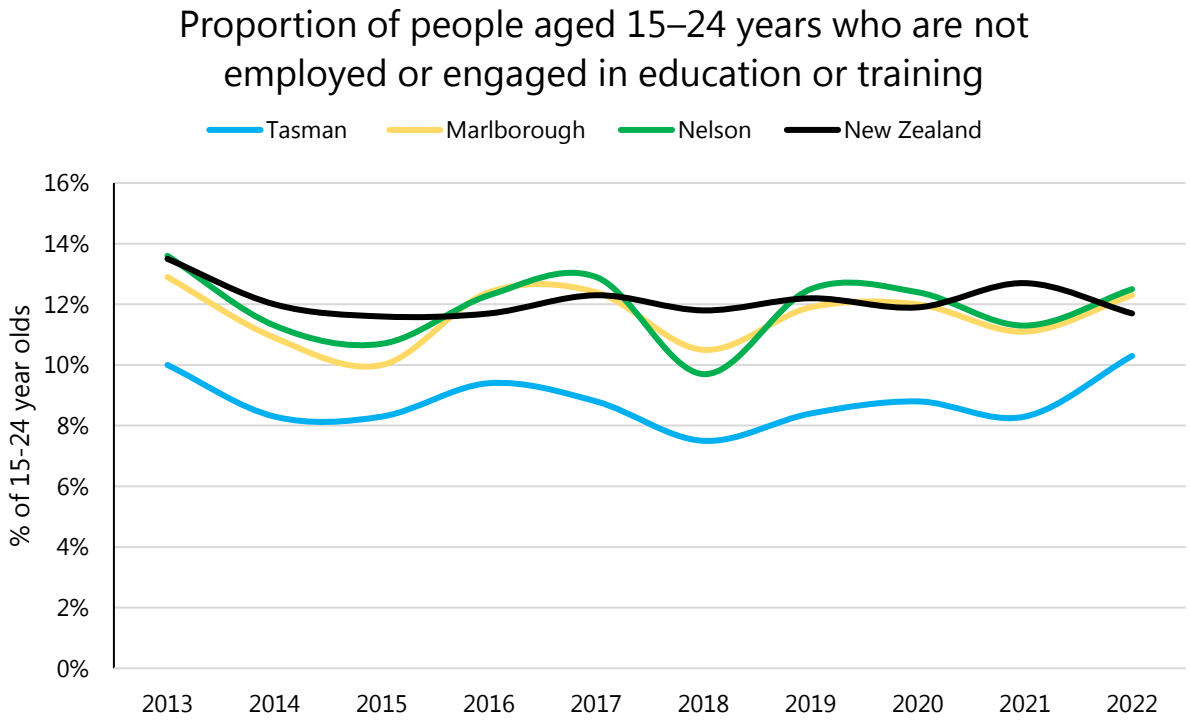


Tasman has a higher proportion of its population employed in agricultural industries than New Zealand as a whole. The makeup of Tasman's industry has not changed significantly over the last 20 years.

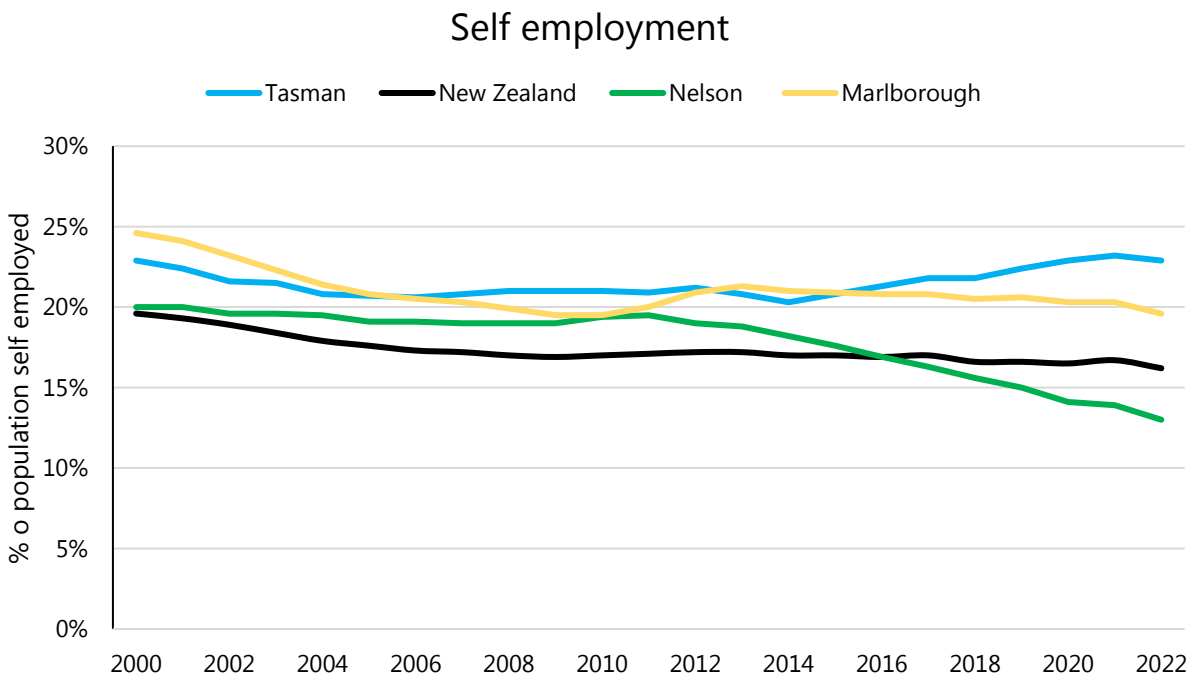


Over the past 20 years, Tasman has had lower unemployment than the national average and currently sits at 3% unemployment, below the national average of 3.3%. Tasman also has a lower rate of youth not employed in education or training, at 10.3% compared to 11.7% nationwide. Tasman is very close to the natural unemployment rate – this is good for job seekers but also leads to challenges in recruiting staff, particularly for seasonal work.

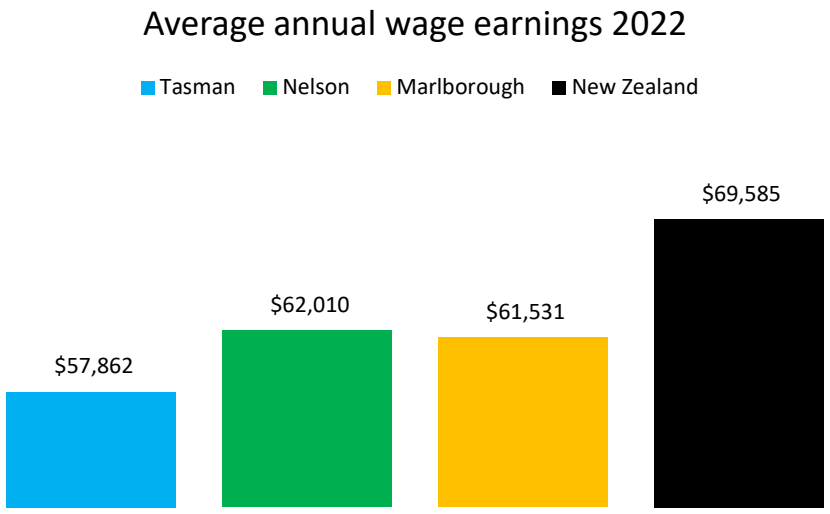


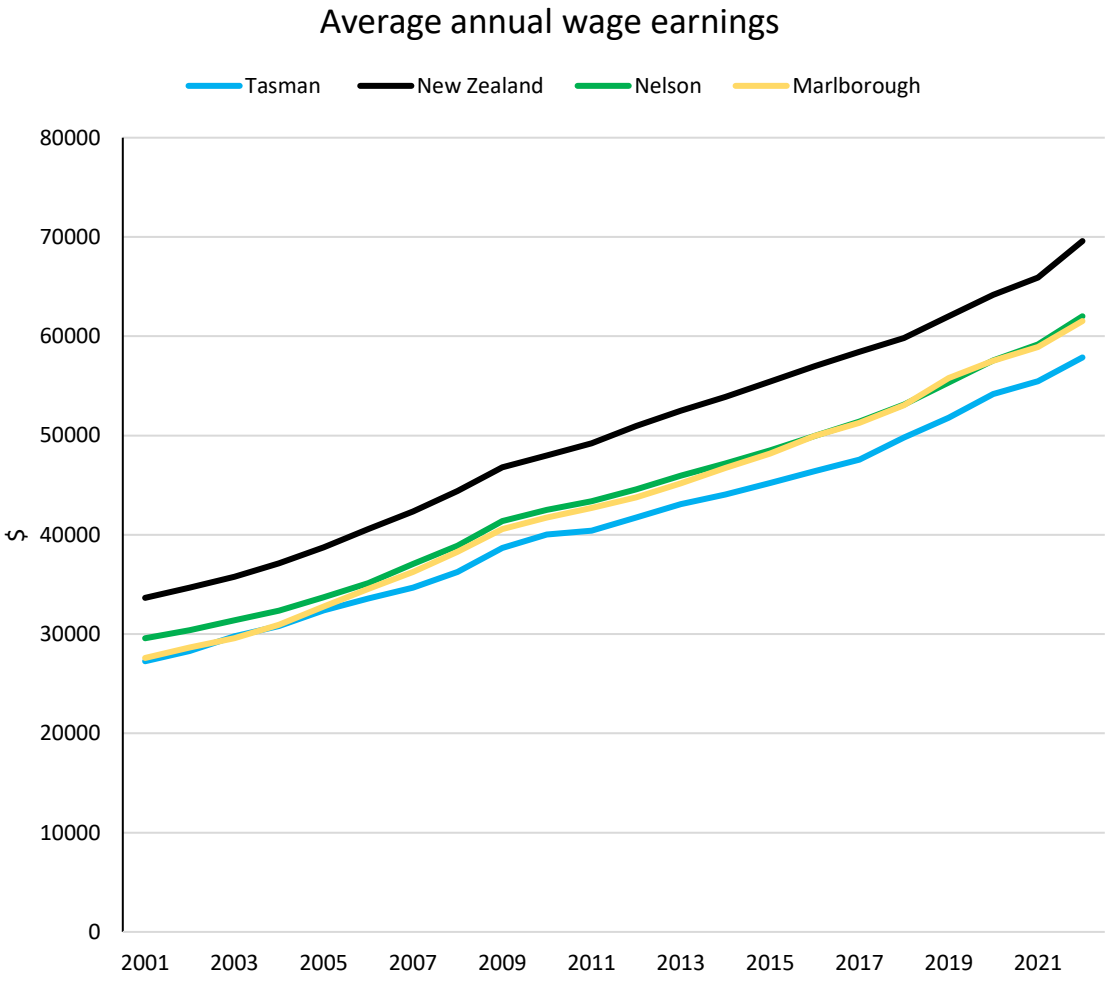


The number of people working for themselves in Tasman has increased in recent years. It is higher than the national average at 22.9% compared to 16.2%.



Tasman has lower earnings than the New Zealand average. The average wage earnings is $57,862, more than $10,000 below the New Zealand average. This income gap has increased since 2000.





The regional economic development alliance, Project Kokiri (which includes the Council), suggests that the main challenges for our Nelson Tasman economy are:

- There are still supply chain and labour market issues resulting from COVID-19.
- We rely heavily on our port and airport, with a relatively small population within driving distance.
- We are a small region spread across a large geographical area, making infrastructure challenging to fund and deliver.
- Our small and medium enterprises struggle to invest in change and development.
- We are often seen as a 'high-decile" region without major issues and consistently fail to attract public sector investment.
- Our low wages hinder the attraction of talent.

Other general challenges in Nelson-Tasman's economic context include:

- Both productivity and average household earnings sit more than 20% under the national averages.
- The region has a high share of older workers and the availability of workers is already tight.
- Housing affordability and availability are low.
- Horticulture and tourism have highly seasonal workforce needs, and a high reliance on migration to meet these needs has exacerbated shortages amid border closures.
- Youth retention after secondary school is low.
- The region has a high proportion of small businesses (91% have less than 10 employees) and more than 10,000 self-employed – these groups need more support to adapt to change.

Other long-term megatrends that are relevant for the region include:

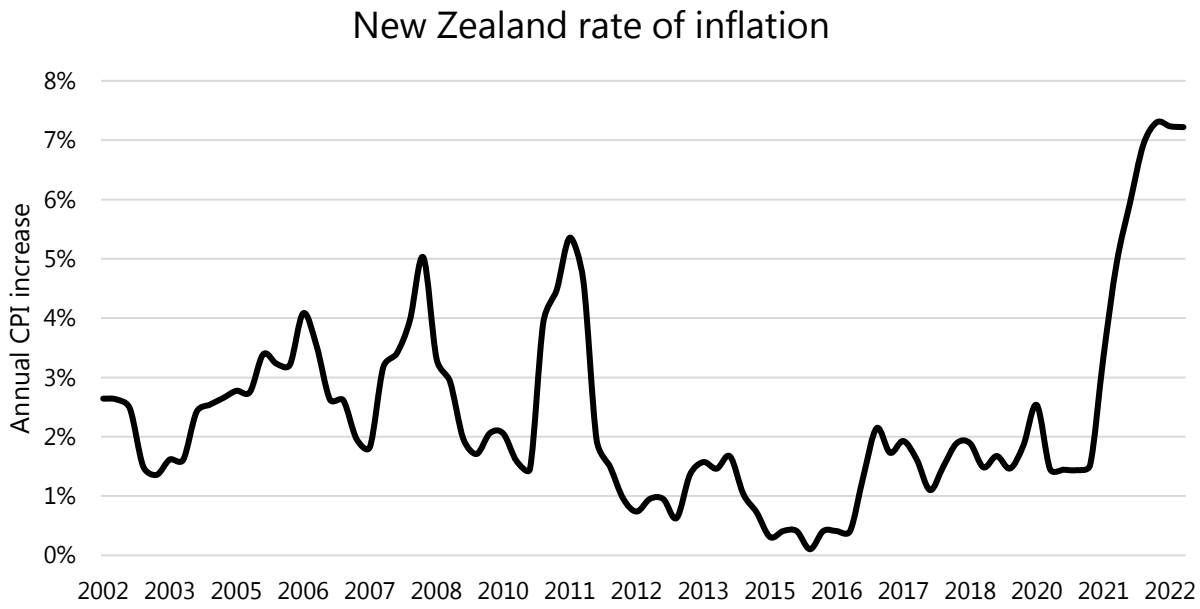
- Economic development is increasingly focusing on wellbeing alongside economic growth
- Possible permanent changes to consumer behaviour and business practice after the pandemic.
- Changing attitudes to working, including working from home
- People are working longer before they retire.
- Automation offers productivity benefits, but the workforce will need support to adapt.
- The global economic and geopolitical landscape is changing, which offers opportunities and risks.
- The indirect effects of climate change from shifting consumer preferences and government policy are as relevant as the direct effects of an evolving climate.
- Adaptation to stringent water quality regulations will challenge some businesses.

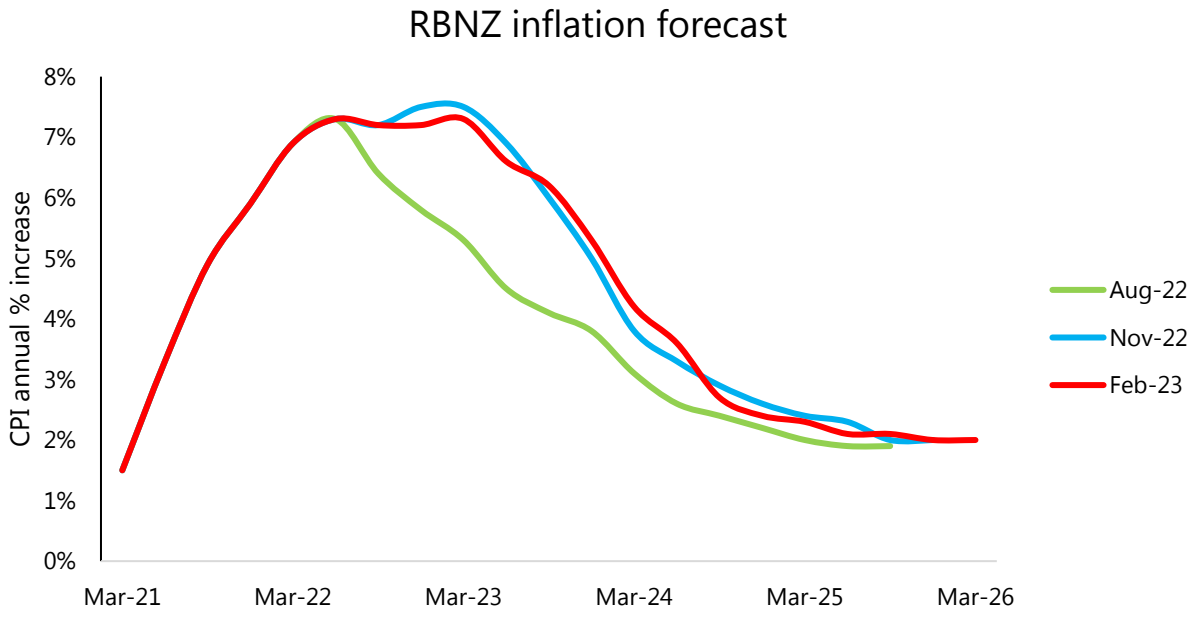
Project Kokiri has identified a number of economic opportunities, including:

- Raising the productivity bar – closing Nelson Tasman's productivity gap with New Zealand could bring the region an extra $1.67 billion in GDP.
- The ocean economy –The region is the part of New Zealand with the highest share of employment dedicated to food production from the ocean and could continue to grow
- Forestry and wood product manufacturing –An increasing consumer focus on wood products could benefit the region.
- Embracing te ao Māori – Diversity can help foster innovation and Māori models of business offer many lessons. Opportunities exist globally for products whose provenance is underpinned by an authentic indigenous story. Creating career opportunities for Māori in key sectors will also help alleviate skills shortages, given the Māori population is younger and growing faster than the national average.
- The visitor economy – Around 7.7% of jobs in Nelson-Tasman were supported by tourism in 2021, compared to 5.6% nationally. There are opportunities for the visitor economy to strengthen its linkages to other sectors and act as a 'shop front'. Tourism can connect visitors to consuming the region's other key products when they return home.
- Lifestyle and wellbeing – Covid-19 has placed more weight on lifestyle and wellbeing, which favours regions such as Nelson-Tasman where migration has recently driven 92% of population growth. Many of the same factors that attract visitors to the region, also attract migrants.
- Health care and social assistance – A rapidly aging population creates opportunities in health care and social assistance. There are also opportunities for businesses more generally to adjust their service delivery to better tap into the 'silver economy' of spending by older people.

The economic picture in the near future

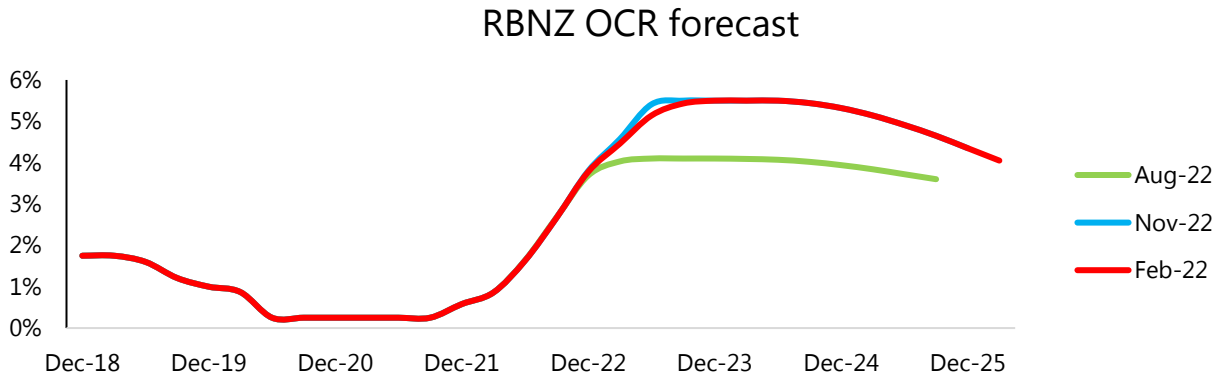
New Zealand is experiencing a cost of living crisis driven by high inflation. Inflation is at an almost-40 year high and has exceeded Reserve Bank expectations. The Reserve Bank forecast inflation to rise to a peak of 7.3% in March 2023 and fall slowly over the subsequent two years. Essentially, there is too much money in the economy and too few goods, resulting in increased demand and corresponding cost increases.[28]





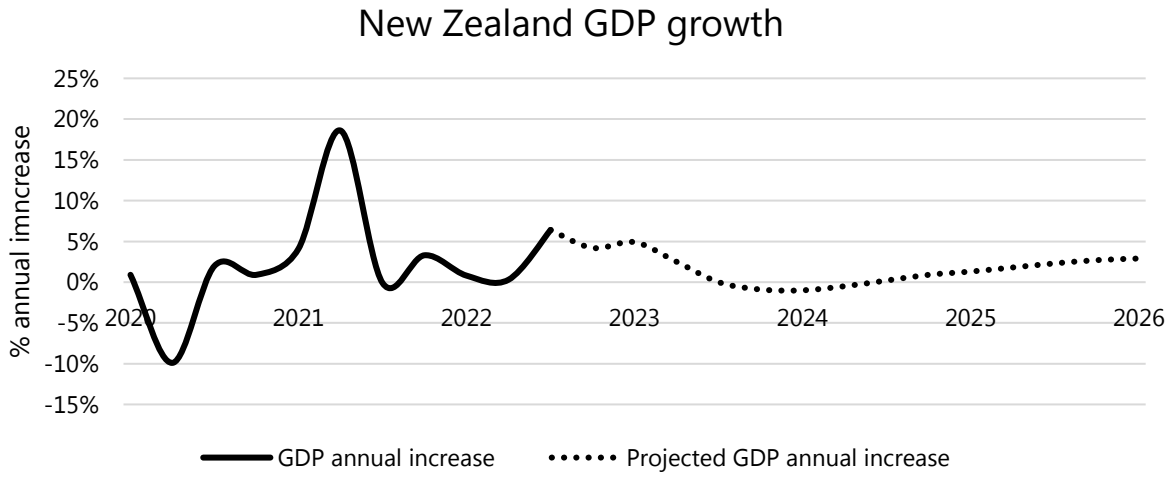
[28] Source: RBNZ, Prices (M1); Monetary Policy Statement, February 2023

The Reserve Bank (RBNZ) is responding to high inflation by increasing the official cash rate (OCR). The Reserve Bank forecasts the OCR to peak at 5.5% throughout 2023 before slowly decreasing. The Reserve Bank has continually updated its forecasts to account for exceeding inflation figures, so the OCR may need to be raised even further.[29]



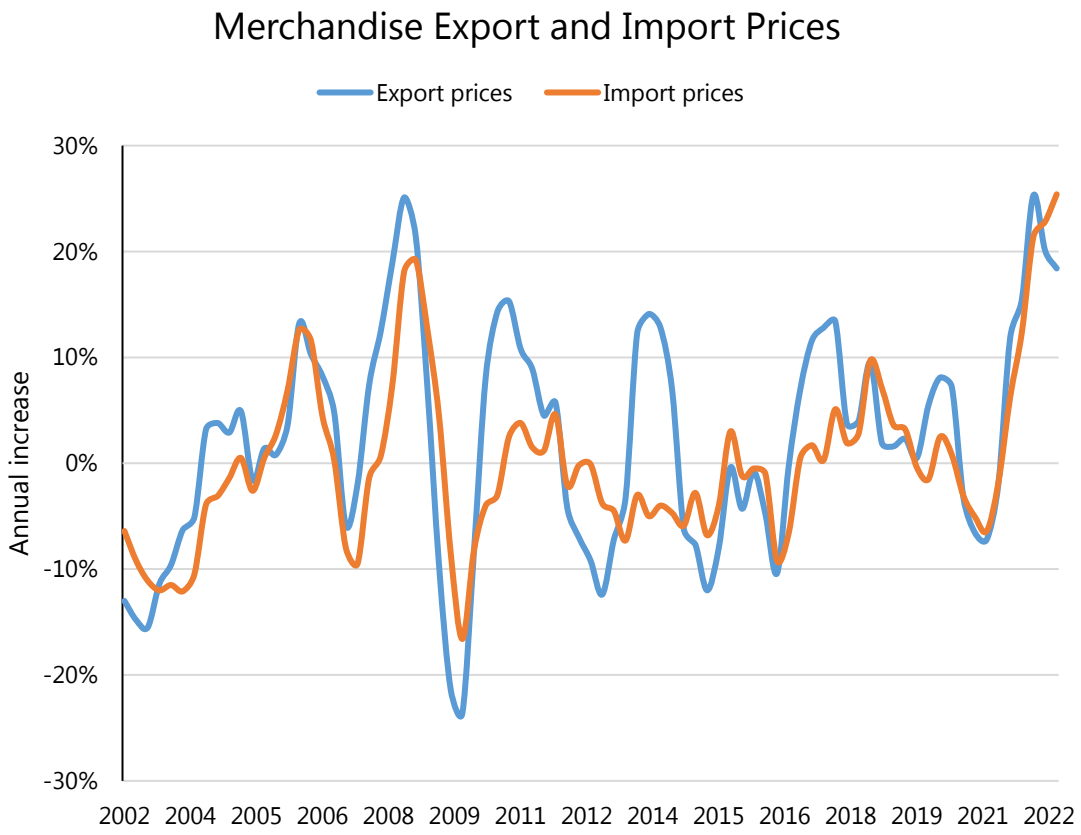
The Reserve Bank is increasing the OCR to suck money out of the economy. By increasing the OCR, interest rates will rise, meaning it will be more expensive to service loans and mortgages. This means consumers will spend more money on servicing debt and have less money to spend on other things. The idea is that by reducing demand for goods, prices should begin to ease and inflation should become more controlled.

The RBNZ has concluded that a recession is needed to slow the economy to reduce inflation. A recession is where GDP falls for two or more quarters. The Reserve Bank forecast New Zealand will be in recession from Q4 2023 to Q3 2024.[30] It should be noted that this is a global problem, and most other countries are taking similar actions to take money out of the economy.



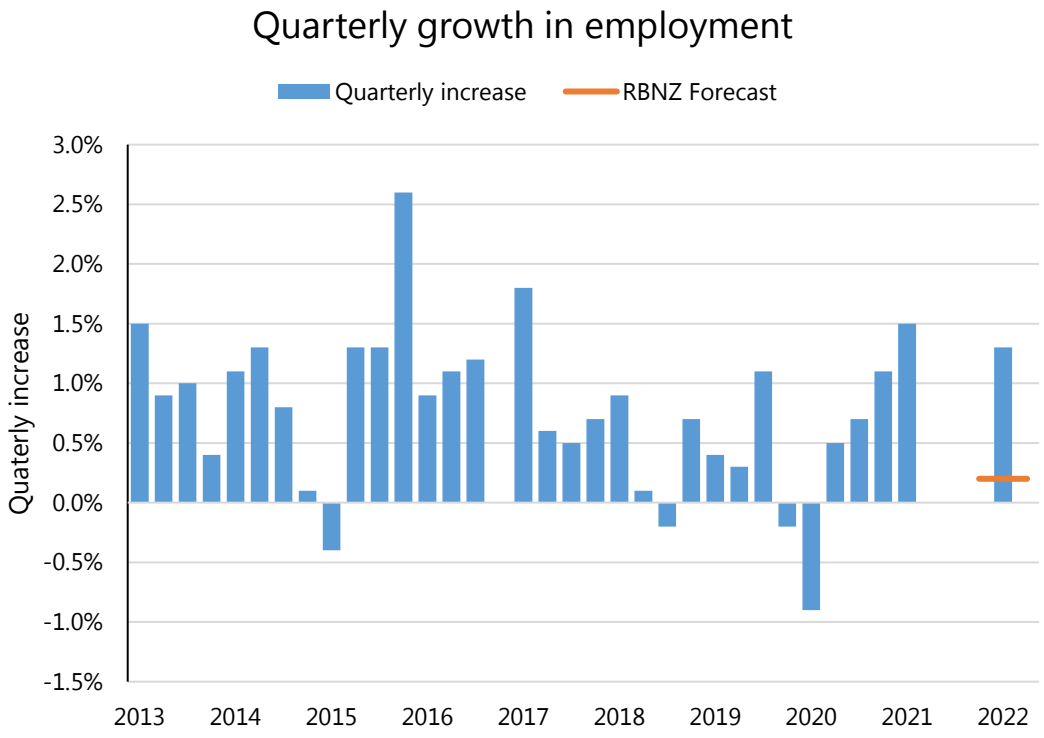
[29] Source: RBNZ, Prices (M1); Monetary Policy Statement, February 2023
[30] Source: RBNZ, Prices (M1); Monetary Policy Statement, February 2023

Inflation is driven by factors that increase the supply of money, such as government stimulus, business profits, and wage increases. As a trading nation, New Zealand is heavily connected to the global economy, and our economic conditions are shaped by external factors. External inflation (inflation coming from outside New Zealand) is high due to worldwide economic stimulus, and there is little the Government can do to affect it. The following graph shows that both export and import prices have increased dramatically, indicating high external inflation.[31]



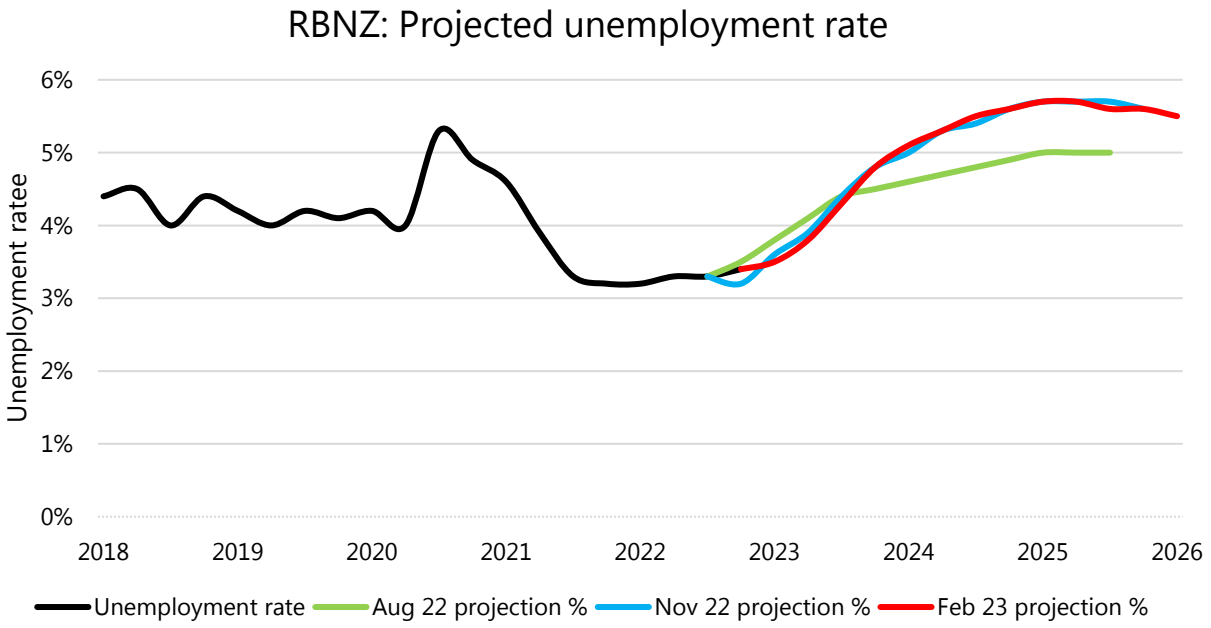
[31] Source: Infometrics, unpublished

Employment is stronger than forecasters predicted, and unemployment is at an all-time low. Additional employment was primarily 15-19 year olds and over 60's coming back into the labour pool. Employers paying higher wages to attract and retain staff also fuels inflation[32].

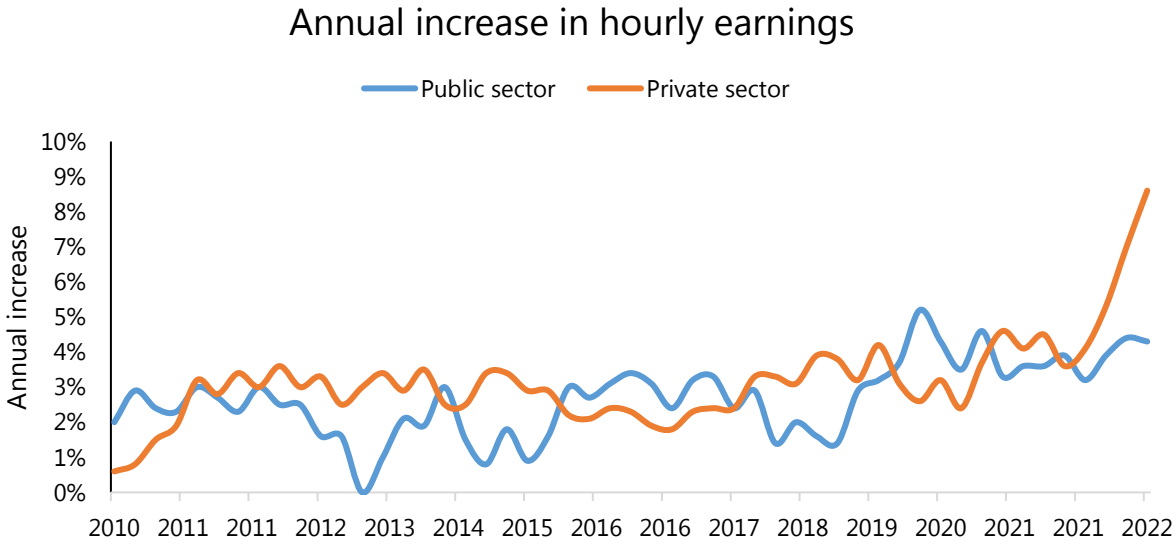


[32] Source: RBNZ, Prices (M1); Monetary Policy Statement, February 2023

The Reserve Bank has indicated that unemployment will need to rise above 5% to slow the economy down and reduce inflation, which could mean more layoffs and mortgage foreclosures.[33]

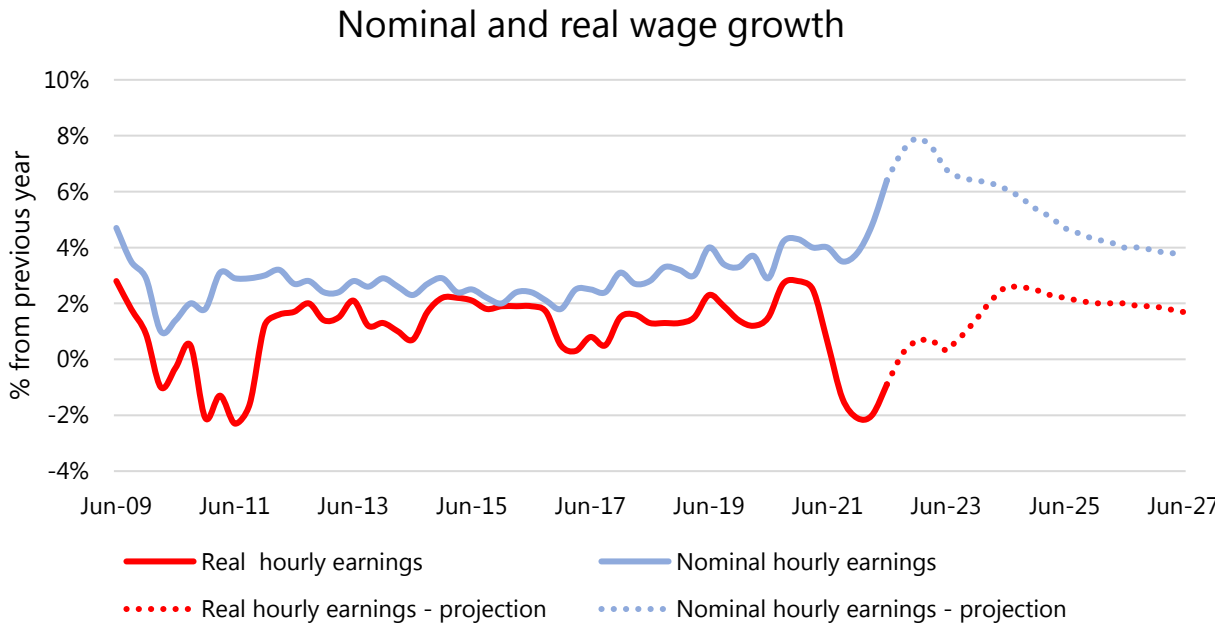


High inflation has also increased pressure on employers to increase wages. Wage increases are at their highest rate in 10 years. This is primarily driven by the private sector, where wages are currently 9% higher than last year. This is also helping to fuel inflation. There is a large discrepancy between private and public sector wage increases, so it will be increasingly challenging for the public sector to attract and retain staff. Increased salary levels are mainly driven by staff moving between jobs.

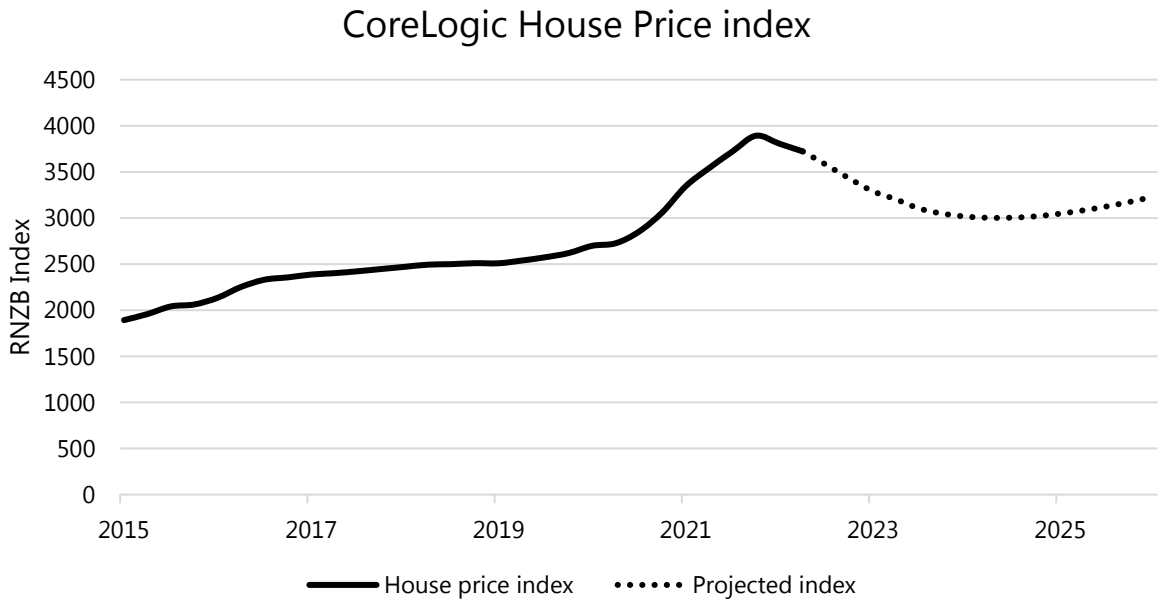


[33] Source: RBNZ, Monetary Policy Statement, February 2023

High inflation has seen real wages decline in recent years. The Treasury predicts that real wages will begin to increase again from 2023 onwards.



Increasing interest rates will lead to fewer people buying houses due to rising mortgage costs. While house prices are likely to fall while we are in recession, the RBNZ that house prices will remain high and will not fall back to pre-pandemic levels.[34]



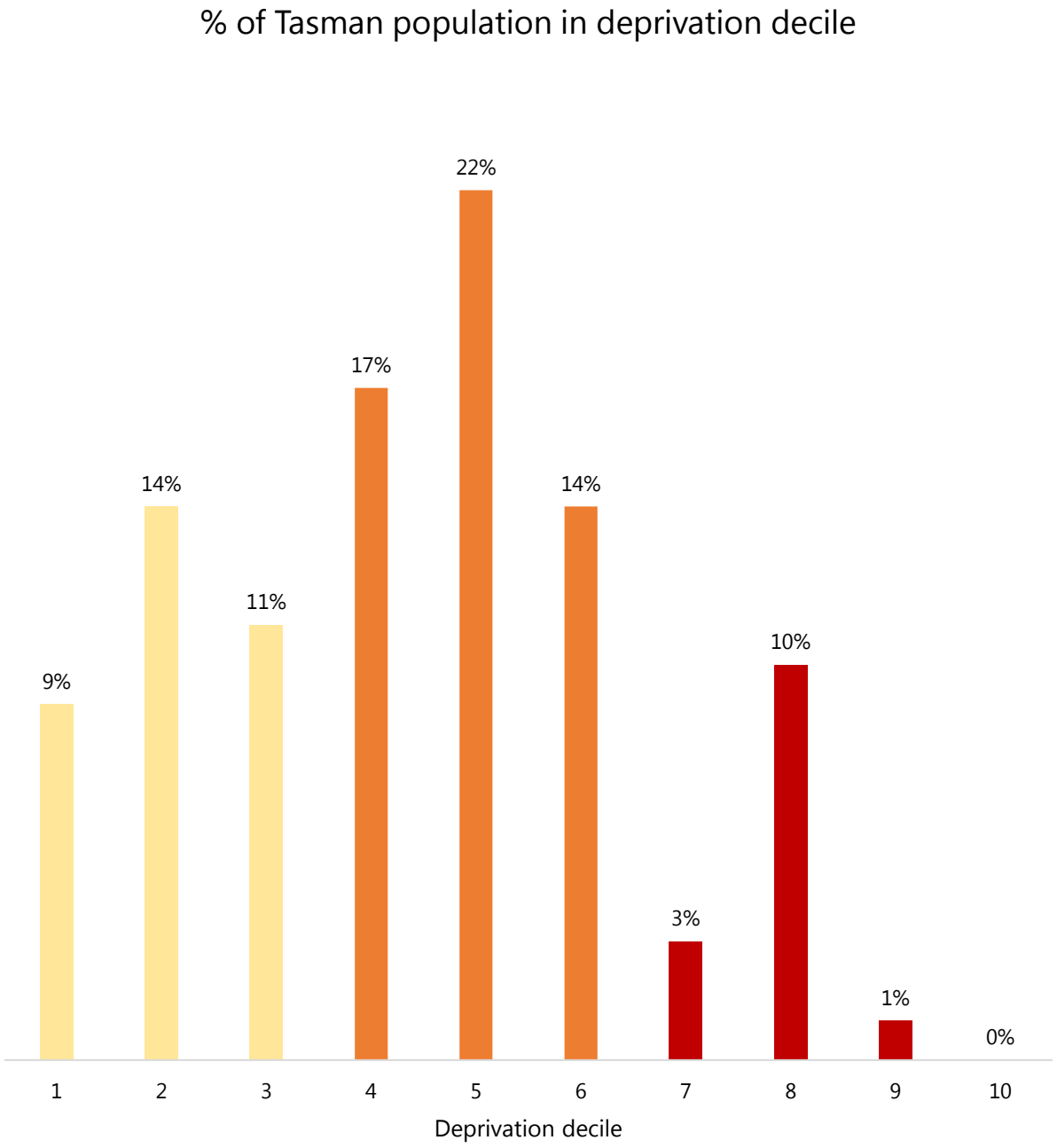
[34] Source: RBNZ, Monetary Policy Statement, February 2023

The full impact of interest rates increases has not yet been fully felt by the economy. Middle earners are facing the most significant hit, earning too much for benefits and impacted by higher mortgage costs.

There is some good news; several leading indicators, including retailer confidence, retail sales, commodity prices, and construction cost inflation are falling, indicating that the economy is gradually cooling. Government finances are in a good position and can stimulate the economy if the recession gets too deep.

Deprivation

Tasman is considered less deprived than the New Zealand average. 14% of our population is considered highly deprived. Deprivation combines nine socio-economic variables from the 2018 Census, representing eight deprivation factors: income, employment, communication, transport, support, qualifications, living space, and home ownership. Deprivation is divided into ten deciles representing 10% of the country – the top 10% of the country who are the most deprived are in Decile 10. The most deprived areas of Tasman are in Richmond, Motueka, and Takaka which are in Deciles 8 and 9.

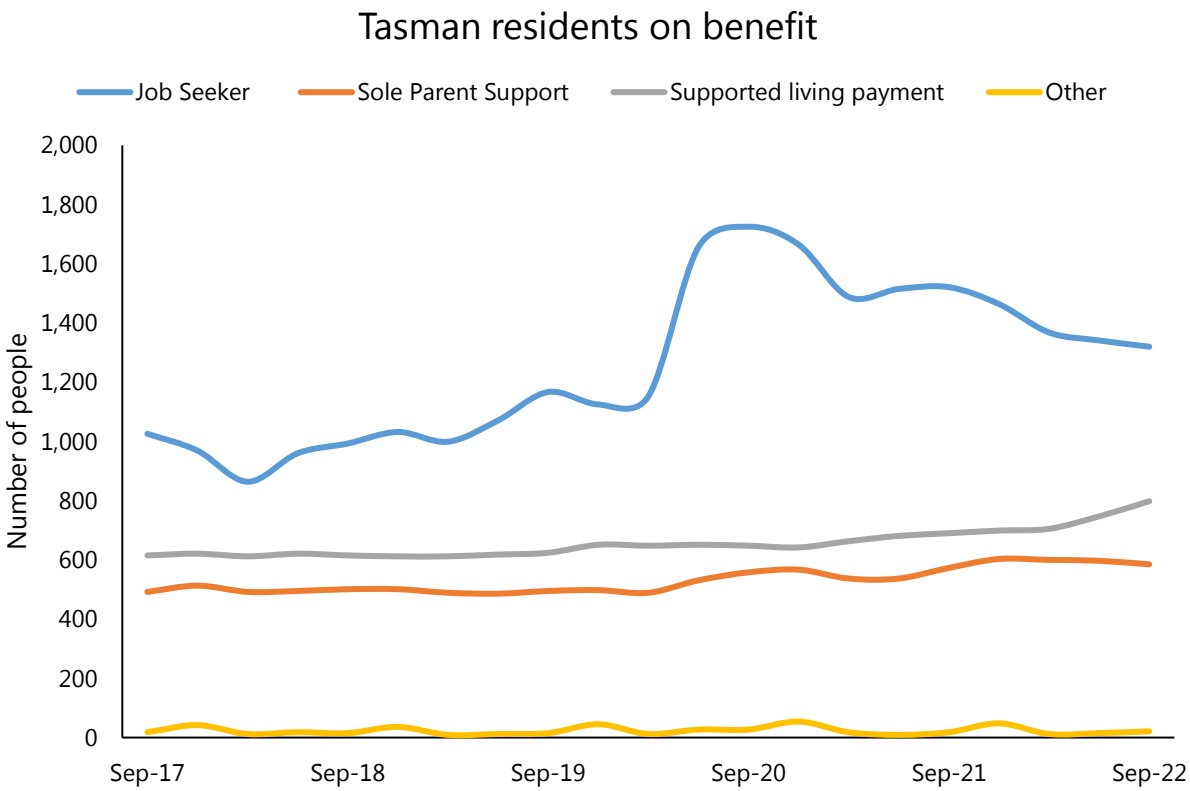


2018 New Zealand Index of Multiple Deprivation (IMD18) -Tasman SA2 areas[35]

SA2	Index	Employment	Income	Crime	Housing	Health	Education	Access	Population
Total	4	5	5	4	3	3	6	8	52,398
Aniseed Valley	1	1	1	3	1	1	1	9	498
Appleby	4	6	5	6	3	2	6	8	783
Ben Cooper Park	5	5	6	5	3	4	7	4	2,358
Brightwater	3	3	3	4	2	3	6	9	2,133
Easby Park	4	5	5	3	4	2	5	4	2,757
Fairose	1	2	2	3	1	1	3	7	1,620
Golden Bay/Mohua	5	6	5	4	3	1	4	10	2,430
Golden Downs	5	4	4	3	3	3	8	10	1,830
Hope	4	4	5	5	3	3	5	8	930
Islands Tasman District	3	5	2	6	1	2	3	9	105
Kaiteriteri-Riwaka	5	6	4	5	5	2	6	9	1,758
Lower Moutere	5	6	5	3	5	3	6	9	1,692
Motueka East	6	7	5	5	3	4	6	6	3,009
Motueka North	6	7	7	5	5	4	8	6	2,472
Motueka West	7	7	7	5	6	5	8	7	2,523
Moutere Hills	2	3	3	2	1	1	3	9	3,171
Murchison-Nelson Lakes	3	1	2	8	4	1	7	10	1,269
Pohara-Abel Tasman	5	7	6	4	3	1	5	10	1,467
Richmond Central	8	8	9	9	6	4	8	2	1,857
Richmond South	4	4	4	5	2	3	4	8	612
Richmond West	8	8	7	8	5	7	9	4	924
Ruby Bay-Mapua	2	3	2	4	1	1	2	9	2,574
Takaka	7	8	7	4	3	2	6	9	1,332
Takaka Hills	6	8	5	5	4	2	7	10	1,203
Templemore	3	4	3	4	1	4	5	5	2,004
Upper Moutere	5	6	5	1	4	1	6	10	1,956
Waimea West	3	4	3	4	2	1	5	10	1,134
Wakefield	4	3	5	2	2	3	7	9	2,439
Wakefield Rural	3	3	3	2	2	2	6	10	1,251
Wilkes Park	4	4	4	4	1	4	6	3	2,307

[35] Source and Methodology: 2018 New Zealand Index of Multiple Deprivation (IMD18) - The University of Auckland

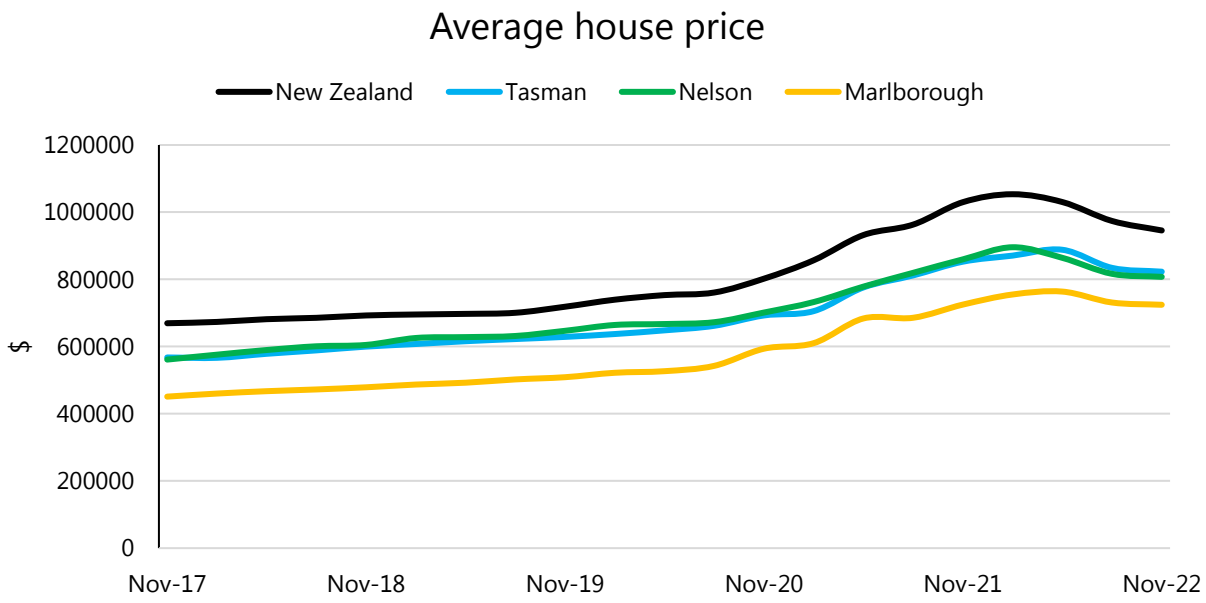
As of September 2022, there are 2724 people in Tasman on a benefit (1662 female, 1089 male). This includes 1320 people on Jobseeker support, 798 on the Supported Living Payment, and 585 on Sole Parent Support. These figures are lower than during the COVID pandemic but are also higher than pre-COVID. Most of these people have been on a benefit for more than one year. [36]

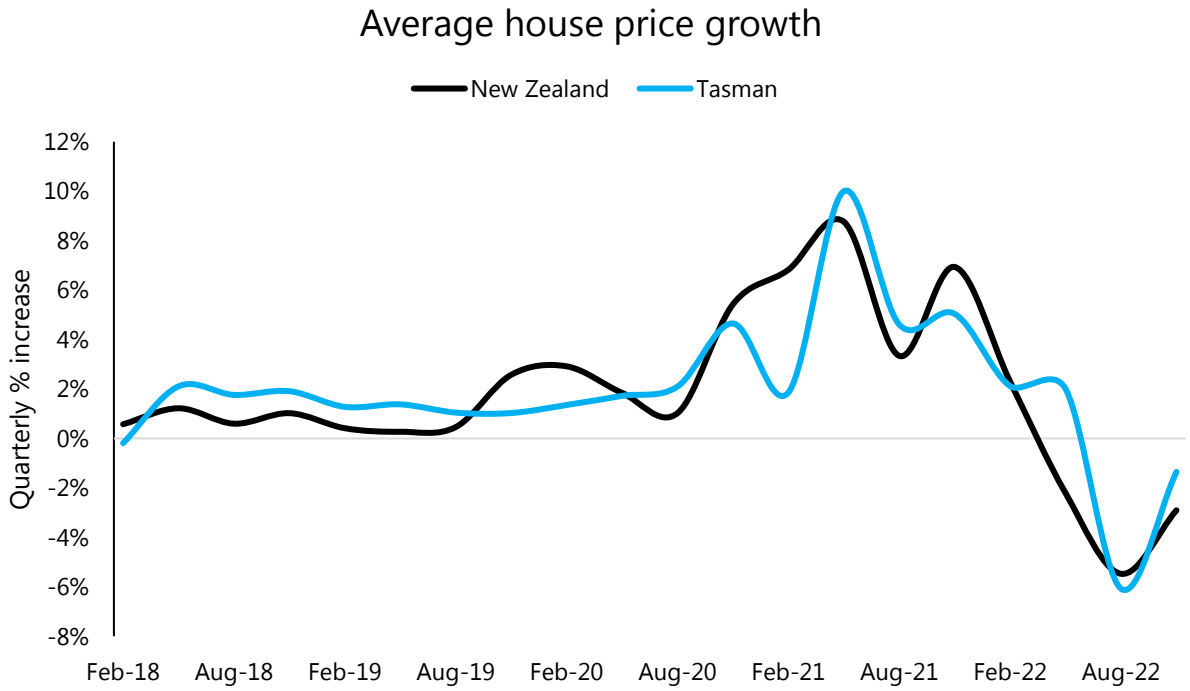


[36] Source: Ministry of Social Development, Benefit Fact Sheets

Housing and income

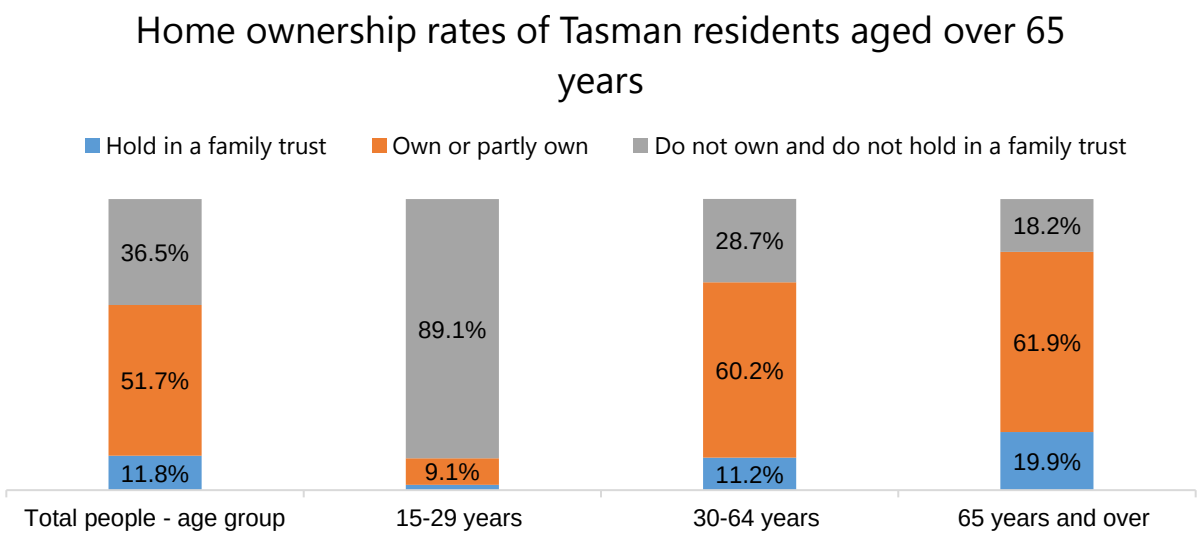
In November 2022, the median house price in Tasman was $823,000, $807,000 in Nelson, $724,000 in Marlborough, and $954,000 nationally. The current average house price is 4% lower than the previous year.[37]



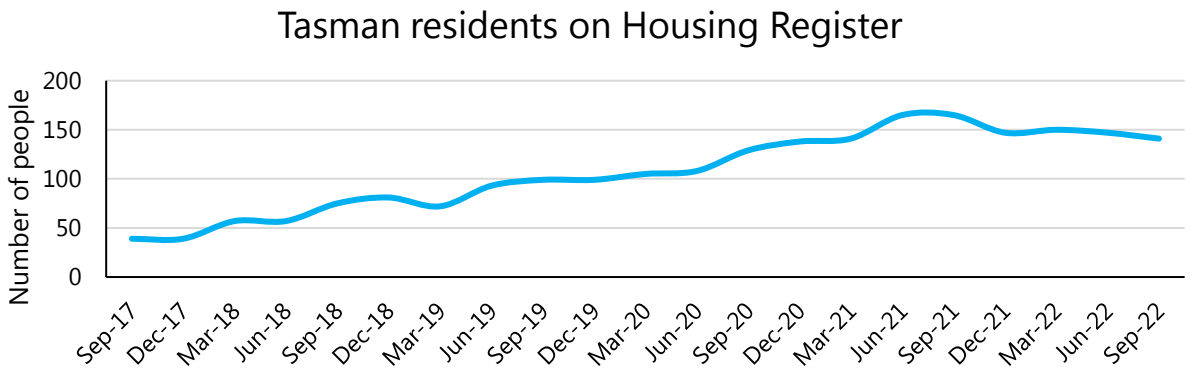


[37] Source: Infometrics, unpublished

At the 2018 census, Tasman had the country's highest homeownership rate. However, homeownership rates are declining, and increasingly people are retiring with mortgages or renting. Those relying on superannuation will find it increasingly difficult to cover increasing mortgage rates and rents.



There are currently 141 applicants on the central government Housing Register in Tasman, more than double what it was in 2018.



[38]

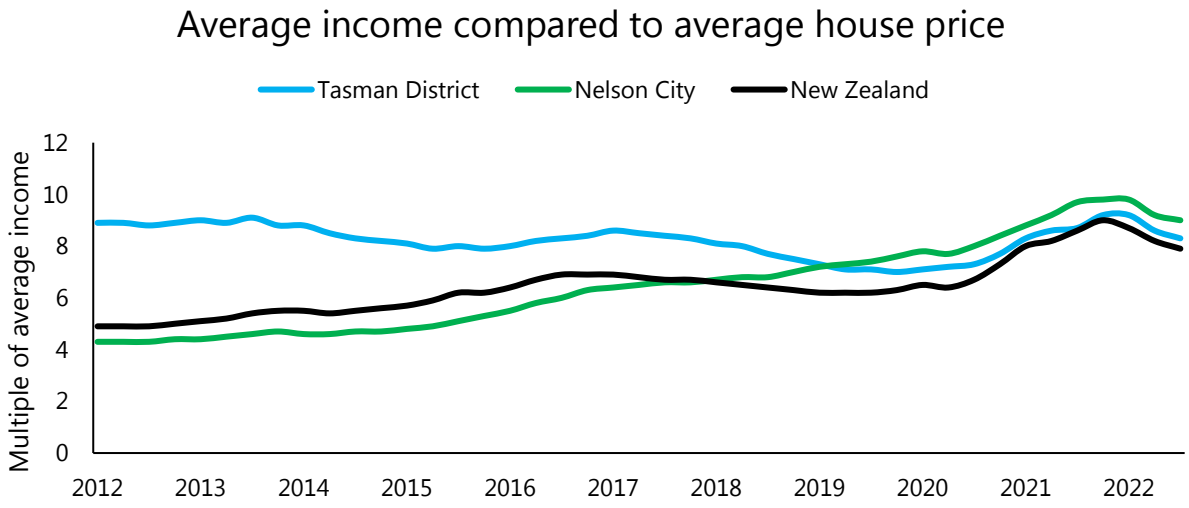
We currently have 138 people on the waiting list for Council-owned pensioner cottages. This includes 81 in Richmond, 31 in Motueka, 16 in Takaka, 3 in Brightwater/Wakefield, and 7 in Murchison. Approximately half of these prospective tenants have been on the waiting list for over 18 months.

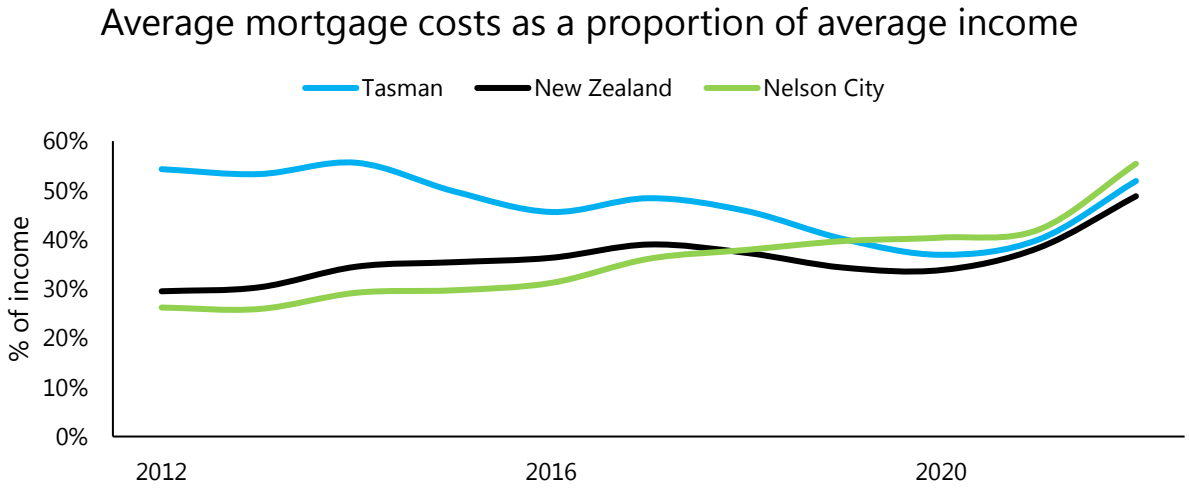
We have 101 pensioner cottages, mostly in Motueka and Richmond. The selection process is graded to accommodate the most in need – for example, an over 70 year old with manageable

[38] Source: Ministry of Social Development, Benefit Fact Sheets

health issues who is homeless or is in unsuitable accommodation will be moved high up the waiting list. This also means a longer wait for the older adults who are in adequate housing but just want something cheaper.

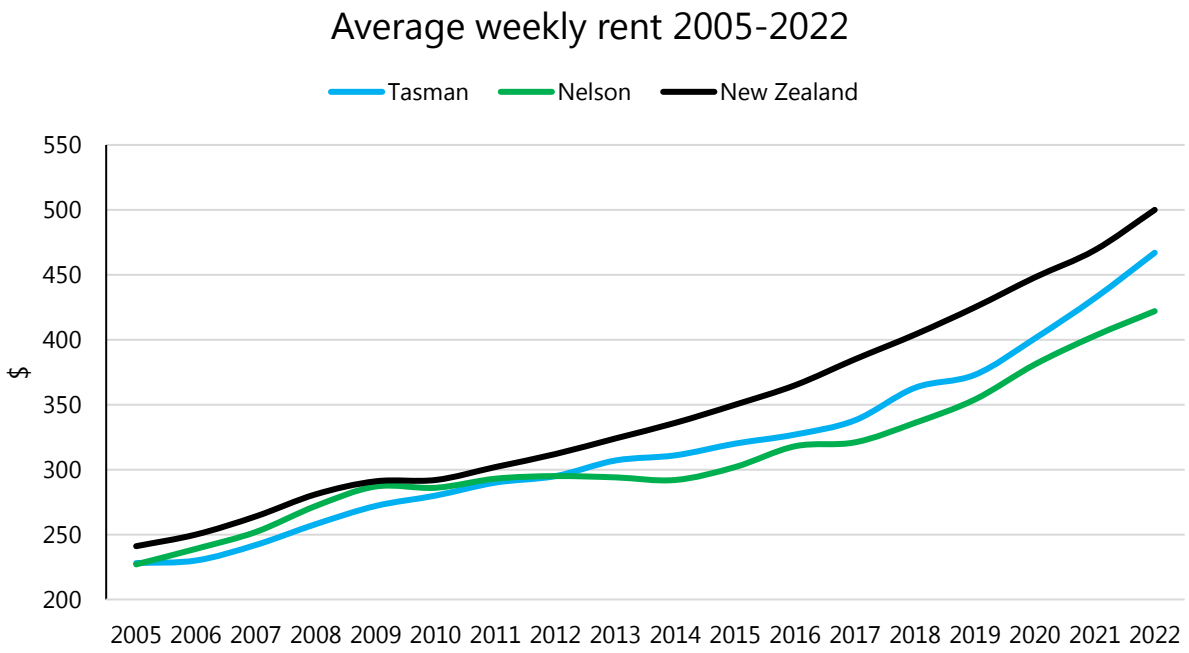
Housing affordability has become worse nationally over the last 10 years as wage increases have not kept up with house prices.[39] The first graphcompares the mean household income to the average house value. Tasman's housing affordability has actually improved over the last 10 years as income has increased faster compared to house prices. The second graph presents the proportion of average household income that would be needed to service a 20 year mortgage on the average house value, with a 20% deposit at average 2-year fixed interest rates. This also shows that income has increased at a faster rate than the average mortgage costs.

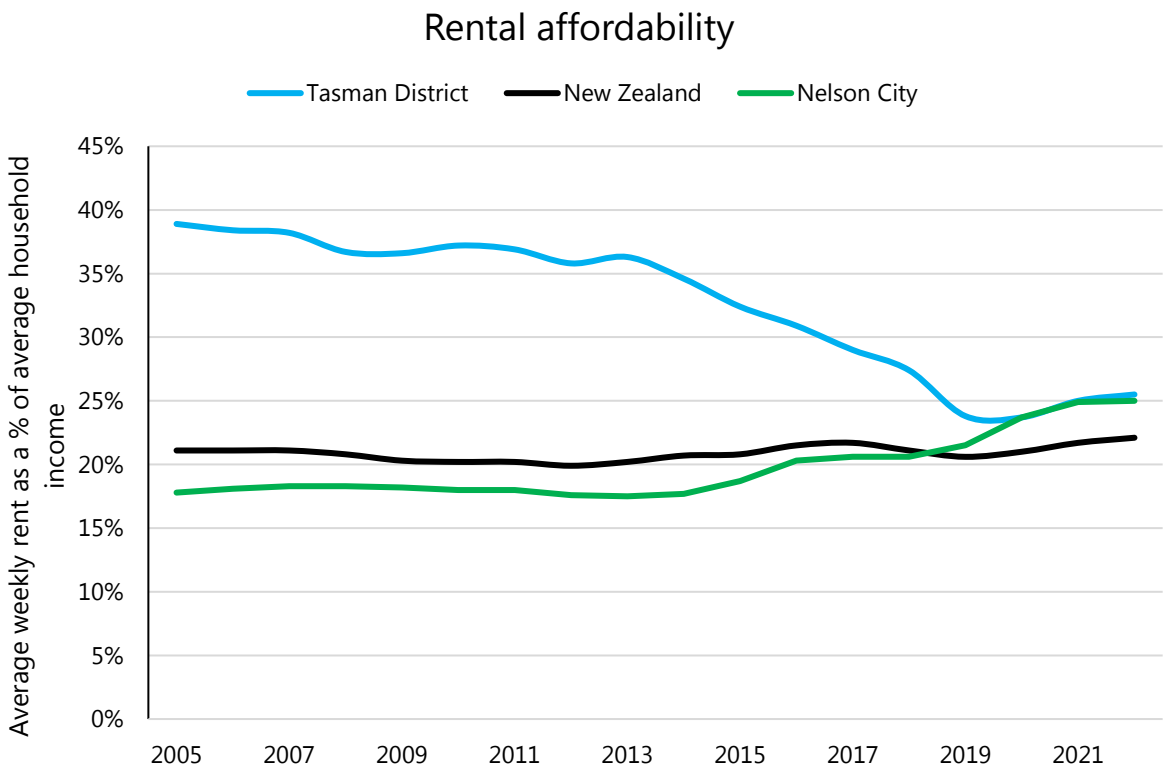




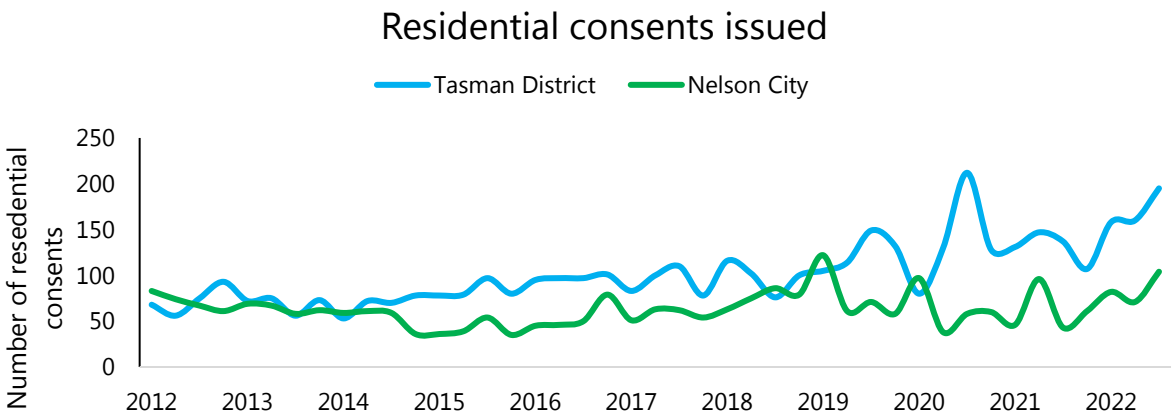
[39] Source: Infometrics, unpublished data

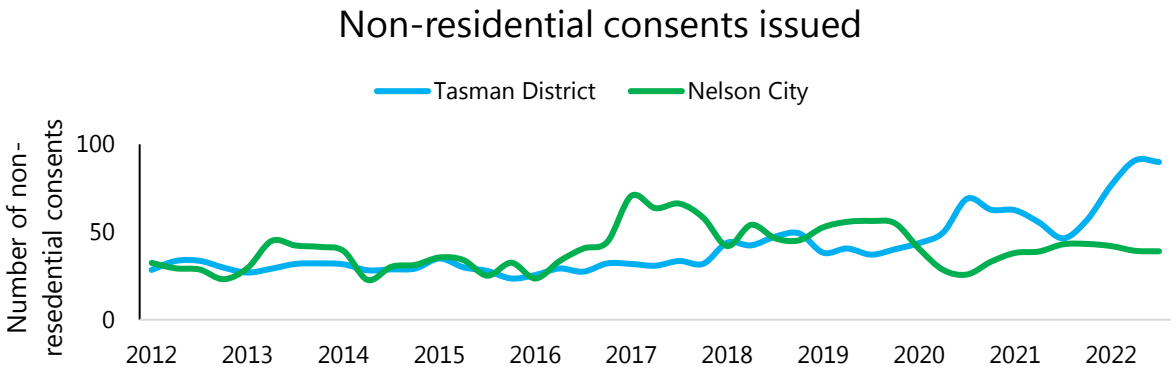
Renting in Tasman District was less affordable than last year but is more affordable than it was 15 years ago.





The district has been experiencing residential building growth, mainly driven by new subdivision developments. Despite having a similar-sized population, Tasman is issuing more consents than Nelson.





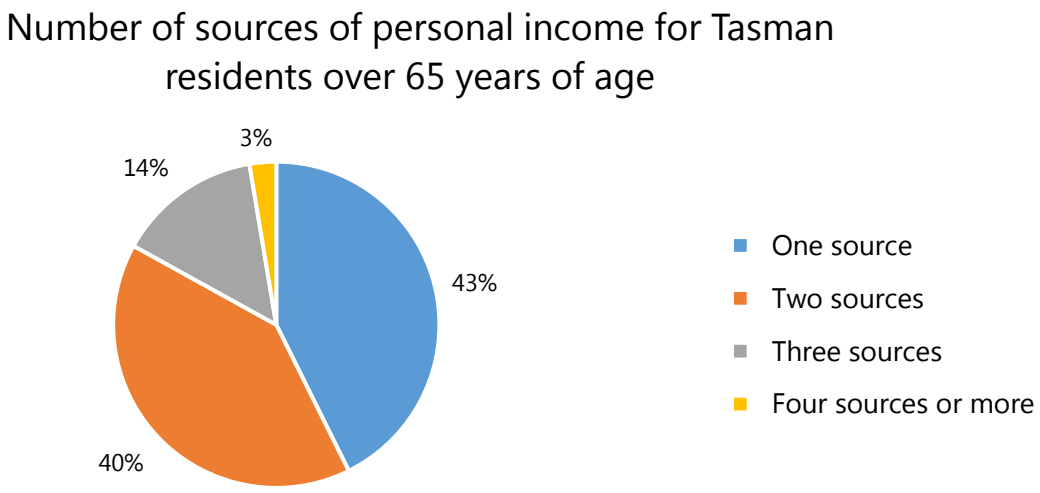
Since approximately 2015, housing supply in Nelson and Tasman has not kept up with the increasing demand for housing, although the gap appears to have narrowed in recent years. Most recent Central Government data shows that for the last year the number of consents have exceeded growth. Of the 396 new dwellings in Tasman's part of the Urban Environment granted building consent in 2021/2022, the majority (89%) have been in previously undeveloped areas, mostly in Richmond West. There have been 50 new dwellings in the existing urbanised areas of Richmond and Motueka. [40]

In Tasman, stand-alone houses continue to be the dominant housing typology, with attached dwellings at 11% of total dwellings. According to the Home Affordability Index, Tasman is the second least affordable region to buy a house (behind Auckland). Nelson is currently the 11th-least affordable.

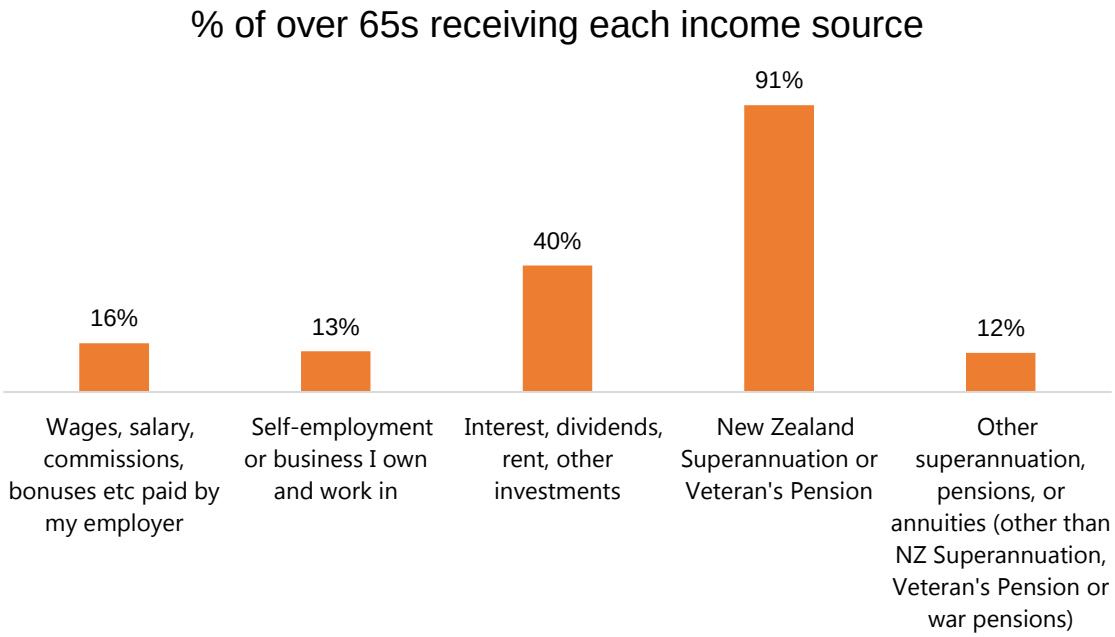
[40] Source: Tasman District Council NPS UD Monitoring Report 2022, unpublished

Financial health of the over 65s age group

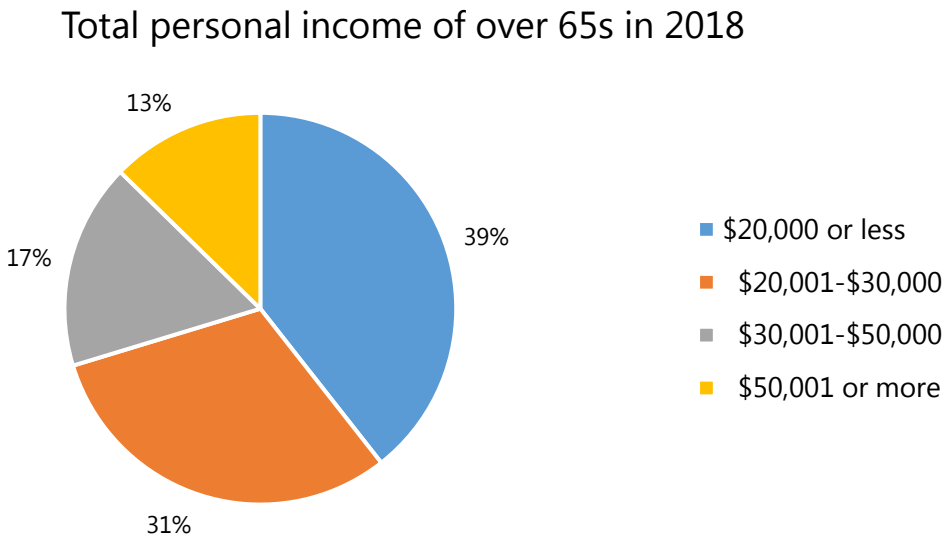
The 2018 Census found 42% of residents over 65 are on one income source. Because 90% of residents over 65 are on superannuation, we can assume that most of these residents are only on superannuation and are therefore on low incomes. 57% of residents are on two income sources or more.



Approximately 40% of Tasman residents over 65 are earning income from interest dividends, rent, or other investments, and 29% are earning income from employment.

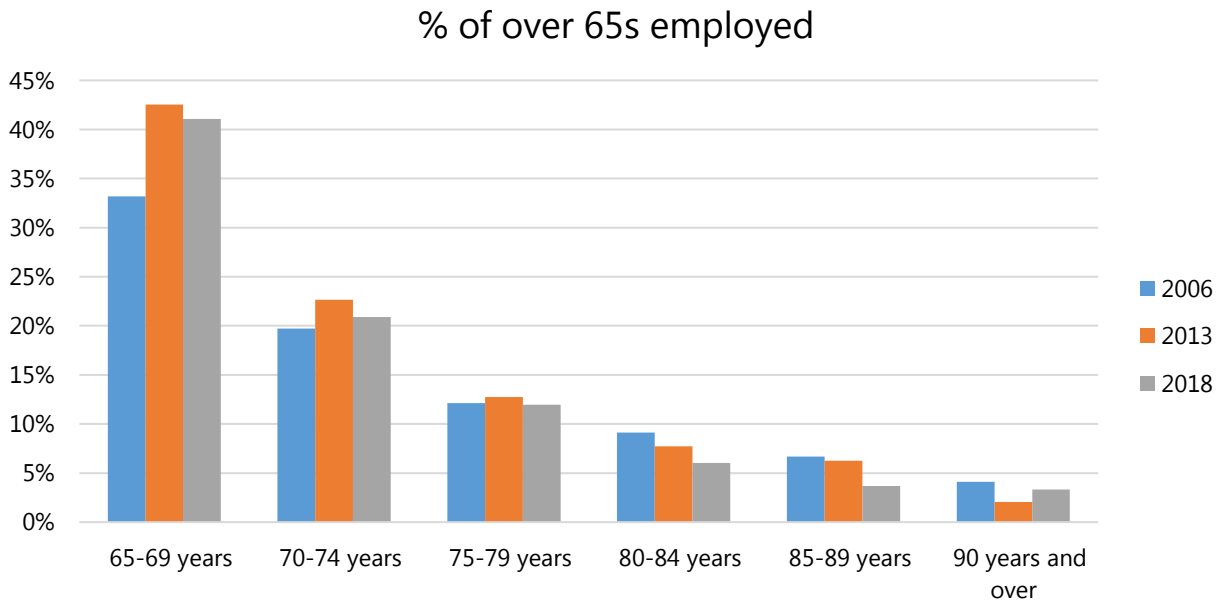


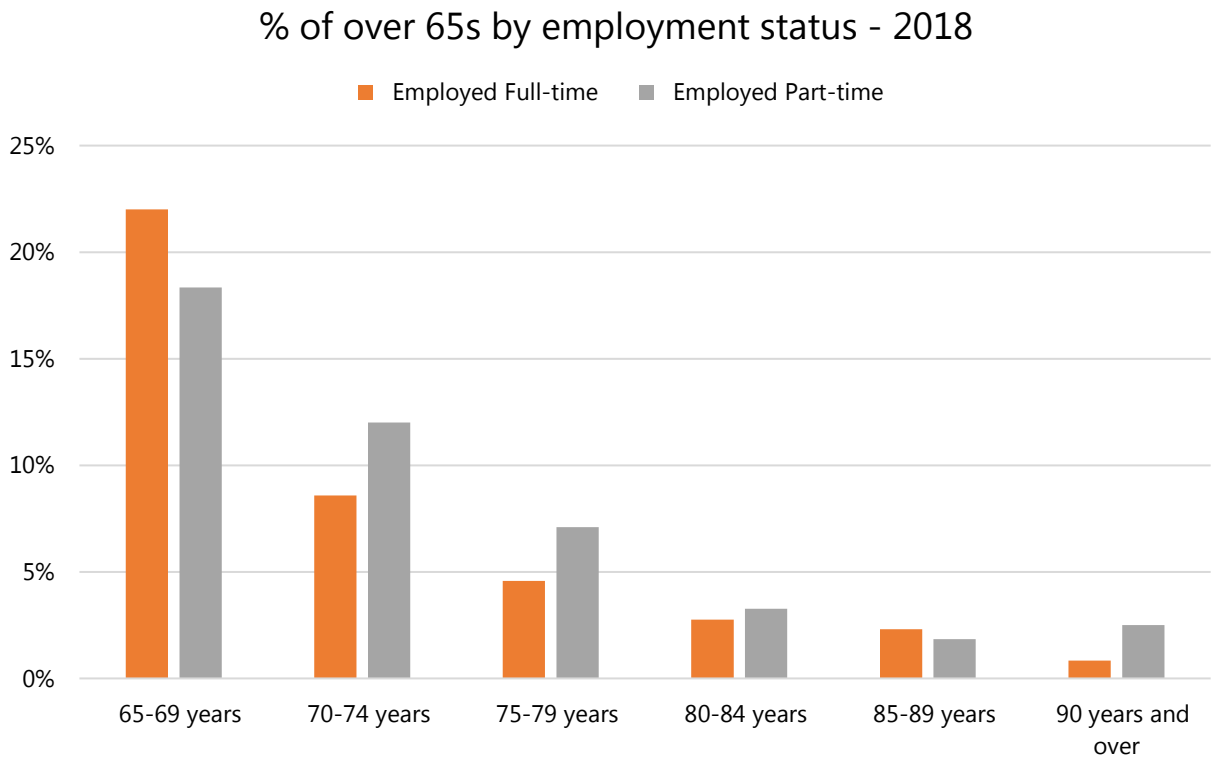
The median personal income of over 65s in Tasman in 2018 was $22,500, with 70% earning less than $30,000. We can assume from this data that the majority of these residents will only be on superannuation or will be working only a small number of hours in addition to superannuation. 13% of residents are on $50,000 or more – this figure will include full time workers as well as residents receiving income from other sources.



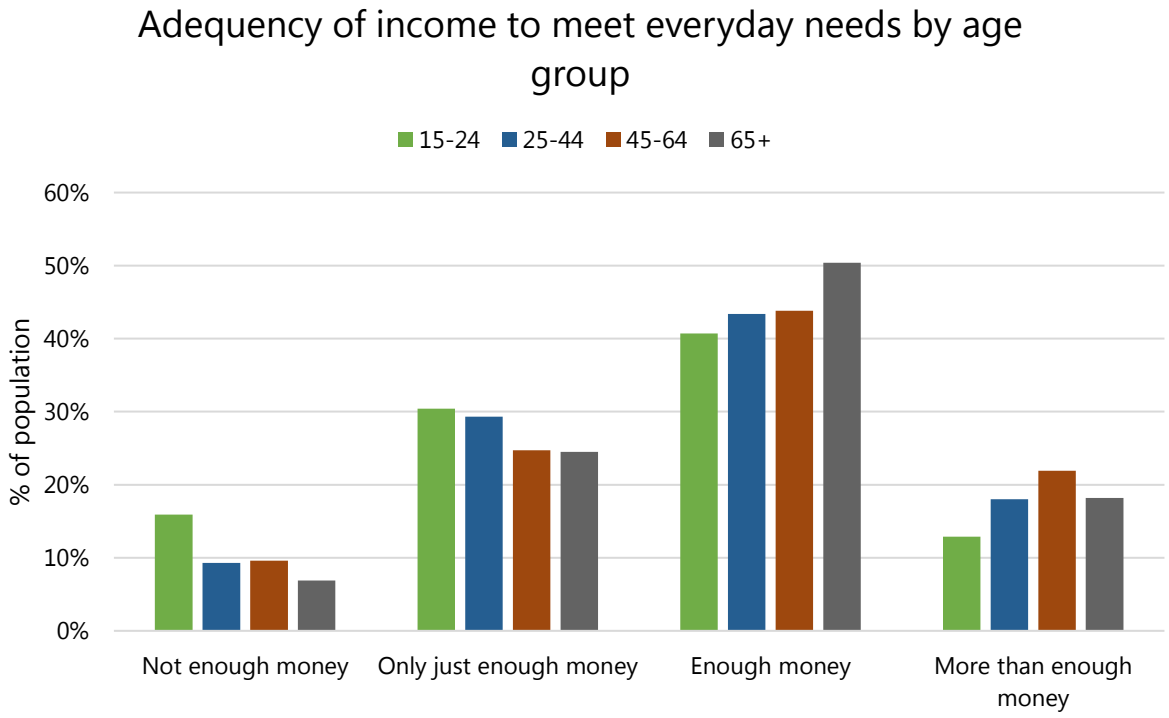
Approximately 20% of those over 65s are still working in some capacity (part-time or full-time). This includes 40% of 65–69-year-olds, 20% of 70-75-year-olds, and 10% of 75-79-year-olds. Approximately 20% of 65–69-year-olds are working full time.

This is an increase from 2006, but there was no increase in 2013 to 2018.





On a national scale, older residents were more likely than other age groups to say that they had enough money or more than enough money to meet everyday needs.



Tasman's environment

Rivers and streams

As part of its obligations under the Resource Management Act, Tasman District Council monitors the state of surface water quality and river health at more than 57 sites throughout the Tasman District. Most of the rivers and streams in Tasman are generally in good health. However, those in lowland, unshaded, urban, or depositional environments with more intensive land use are more likely to be in poor health.

[41]

Tasman District is fortunate to have relatively few water quality issues compared to other parts of New Zealand. The main threats to water quality and stream health in the Tasman District are intensive agriculture and, to a lesser extent, the expansion of residential development. The main problems with water quality are currently found in small streams in intensively developed land.

Streams in pastoral and urban land cover had higher concentrations of disease-causing organisms, greater quantities of deposited fine sediment, and lower water clarity than sites with forest land cover. Generally, nitrogen concentrations remained low except for spring-fed streams of the Waimea, Motueka and Takaka Plains. High nitrate levels will be a key issue for the upcoming ten years, as environmental regulation and the introduction of national policy statements will be more stringent on reducing the impact of agriculture on waterways.

There are 20 species of indigenous freshwater fish in Tasman, 16 of which migrate to and from the sea to complete their life cyle. Of the native fish species in Tasman, more than half (currently 12) are listed as At Risk or Nationally Vulnerable by the Department of Conservation. This high proportion of species with declining populations is largely due to broad-scale land use changes which has led to the degradation of fish habitat. At a national scale, the occurrence of all native fish is declining, with particularly severe reductions in pasture and urban catchments.

[41] Wainui Falls – credit: www.nelsontasman.nz

Surveys at Onekaka River at Shambala Road found the highest native fish diversity of any site in Tasman and may be the highest native fish diversity of any site in New Zealand.

The Council has functions under the RMA to monitor and manage the life-supporting capacity and natural character of waterways. Alongside processing consents that might impact waterways, the Council undertakes stream rehabilitation projects, such as riparian plantings and removing barriers to fish migration. While our efforts are making an impact, it is clear there is still more work required to reverse declining trends.

[42]

[42] Totaranui Rd Culvert 31 with rubber apron and mussel spat rope attached to the outlet to encourage fish passage

Coasts

Tasman's coasts have a diverse range of habitats, high biological diversity, and high economic value. The health and productivity of the coastal habitats, including its extensive estuarine systems, are a cornerstone of the region's quality of life and vibrant economy, from fishing to shellfish production to tourism.

Some of the key coastal issues are:

- Excessive muddiness, nutrient enrichment, and disease risk in estuaries;
- Habitat loss through sea level rise, and ecological change through sea temperature and acidity change caused by climate change
- Duneland and saltmarsh loss through overstabilisation, reclamation, and shoreline armouring

Tasman's beaches and estuaries are considered to have generally good water quality for most of the time according to NZ Microbiological Water Quality Guideline criteria. However, particularly after heavy rain in the catchments, faecal bacterial runoff (primarily from intensive farming) presents an elevated risk of disease. Aside from serious human health risks posed through recreational contact and shellfish consumption, pathogen contamination can also cause economic losses due to closed commercial shellfish beds in the region.

Tasman's coastal sand dunes are currently in relatively good condition. However, 30% of active duneland has been lost in the Tasman and Golden Bay areas since 1940, largely due to the overstabilisation of dunes through exotic forest planting, development, and building of seawalls.

Currently, 28% of Tasman Bay, and 12% of Golden Bay, have hard armouring (seawalls, causeways, stopbanks, and reclamations). The largest proportion of beach that is armoured is at Ruby Bay (55% of the beach), and the largest proportion of an estuary is Moutere Inlet (43%). In the future, pressure to protect the Tasman coastline using artificial structures is expected to increase because of pressure to allow and protect existing coastal development, combined with the greater predicted frequency of storms.

Tasman Bay and Golden Bay estuaries are typically broad and shallow. They have extensive intertidal sand and mud flats, wetlands and limited coarse-grained habitats. means that our estuaries are areas of generally high local productivity and biodiversity.

Input of fine-grained sediment is a significant issue for Tasman Bay and Golden Bay estuaries. Increases in sediment deposition resulting from human activity can drastically increase the amount of muddy habitat. Mud may reduce or replace more productive coarser-grained sediments such as those supporting eelgrass communities and/or shellfish beds. The expansion of mud-flat habitat can therefore reduce estuarine biodiversity with follow-on effects to the coastal food web.

30% of the saltmarsh in the Tasman and Golden Bay estuaries has been lost since 1900. Saltmarsh is one of the most productive environments on earth and serves as an important nursery ground and wildlife habitat. Overall, 718ha of high cover (>50%) seagrass has been lost from the Whanganui estuary since 1948, with most of the losses occurring in the 8 years between 2013 and 2021. The significant loss of seagrass in the last decade likely represents one of the largest recent losses of seagrass recorded in New Zealand. It is theorised that the most likely trigger of this loss is climate change. Moutere and Ruataniwha estuaries have suffered the next largest losses at 50% and 40% respectively.

The latest coastal bird survey counted sixty-seven bird species and 25,200 individual birds in Tasman. Fifty-one of these bird species (76%) are native to New Zealand, and 26 species (39%) are ranked as either Nationally Threatened or At Risk. Hotspots of high native species diversity occurred along the sandy beaches and inlets of Golden Bay and Tasman Bay, particularly on areas adjacent to large areas of intertidal flats. In contrast, lower-than-average numbers of native species were recorded along much of the rocky coastline of Abel Tasman National Park. In Waimea Inlet, particularly high numbers of native bird species were encountered along the Richmond foreshore, along the western and southern shorelines of Rabbit Island, at the Bell Island Shellbank, the Waimea River mouth, and along the Mapua foreshore.

A major highlight of this survey was the discovery that the Tasman District coastline supports up to 27% of the global breeding population of Variable Oystercatchers, indicating that this coastline is of international importance for this species. The survey also revealed that the breeding populations of Spotted Shags, Reef Herons, Banded Dotterels and White-fronted Terns are declining.

The survey found 240 threats to our bird populations, the most prominent being climate change, cats, mustelids (stoats, ferrets, and weasels), hedgehogs, and recreational users. As urban areas continue to spread into bird-friendly areas, there will be a need to increasingly manage how people engage with coastal bird habitats.

Biodiversity

Tasman has a wide range of flora and fauna, many of which are found nowhere else on Earth. Unfortunately, our native animals are particularly vulnerable to predation and our plants to browsing by introduced animals and competition from introduced plants. The Tasman District has an active Biodiversity Strategy which states, in no uncertain terms, that "indigenous biodiversity is in crisis". More detail on biodiversity in the region can be found in the Biodiversity Strategy.

Tasman is home to hundreds of species found nowhere else in the world. The region has temperate marine environments, with an exceptional diversity of habitats ranging from extensive intertidal flats to wild and exposed coasts. The region has a wide range of species and ecosystems which are now rare elsewhere in New Zealand (e.g. shorebirds, coastal birds and great spotted kiwi/roroa). Many are found nowhere else (e.g. giant landsnails, giant cave spiders and coastal peppercress). Tasman is the beech forest capital of New Zealand, and despite considerable modification of its land cover by human activity, the district still retains nearly three-quarters of its indigenous-dominated terrestrial ecosystem cover.

The arrival of humans and predators led to the loss of habitat and the extinction of many species. Tuatara, native frogs and several species of seabirds were extinct in the region before the 1800s. Takahe, orange-fronted parakeet and saddleback were gone by 1975, as did the short-tailed bat. Red-crowned parakeet, yellowhead, kakapo, kokako, little-spotted kiwi, and the Australasian crested grebe have died out in the last 30 years. Other species, such as kaka, kea, rock wren, blue duck and great-spotted kiwi, are in decline except where there are predator control operations.

The most significant losses of terrestrial ecosystems have occurred in lowland areas, particularly in the east of the region where significant land use changes have occurred. Most of Tasman's wetlands have been lost, while lowland forests have reduced in extent by approximately 75%. Forests occupying mild climates have reduced in extent by around 60%. In comparison, forests in

cool and cold climates still occupy over 90% of their former range. Ecosystems above the treeline still occupy almost all of their former range, having suffered minimal losses. However, the condition of these native ecosystems is poor, except where intensive animal pest and weed management has occurred.

Many landowners are keen to enhance the biodiversity on their land but lack the resources to sustain and restore biodiversity on their own. Revegetation of river margins is a prime example where landowners around the region are planting extensively and are struggling with weed control, while many would also like to have integrated animal pest management in these areas. Some landowners now face high fencing costs and increasing challenges from weeds and pests. Most documented significant natural areas on private land in the region are degrading through a lack of resources to sustain them. Without active programmes, the little that remains will be lost to pests and weeds. Public programmes are essential to their restoration.

Many committed individuals in Tasman District are actively involved in restoration programmes, either on their own property or on public land. These programmes include:

- Predator control projects - eg. Friends of a Flora, Friends of Rotoiti, Friends of the Cobb.
- Predator control and planting projects - eg. Milnethorpe Park Society, Friends of Mangarākau Swamp, the Onekaka Biodiversity Group.
- Planting projects - eg. Coast Care, Friends of Māpua Wetland, Mārahau Wetland, Wakefield Bush Restoration Society, NZ Landcare Trust, Murchison Environmental Care Group.

There are also organisations such as Forest and Bird, whose members undertake a wider range of restoration work, either through their own projects or through the organisations listed above. More and more farmers are becoming more aware of the importance of the ecological benefits of wetlands and riparian plantings and are fencing off areas to establish and protect them.

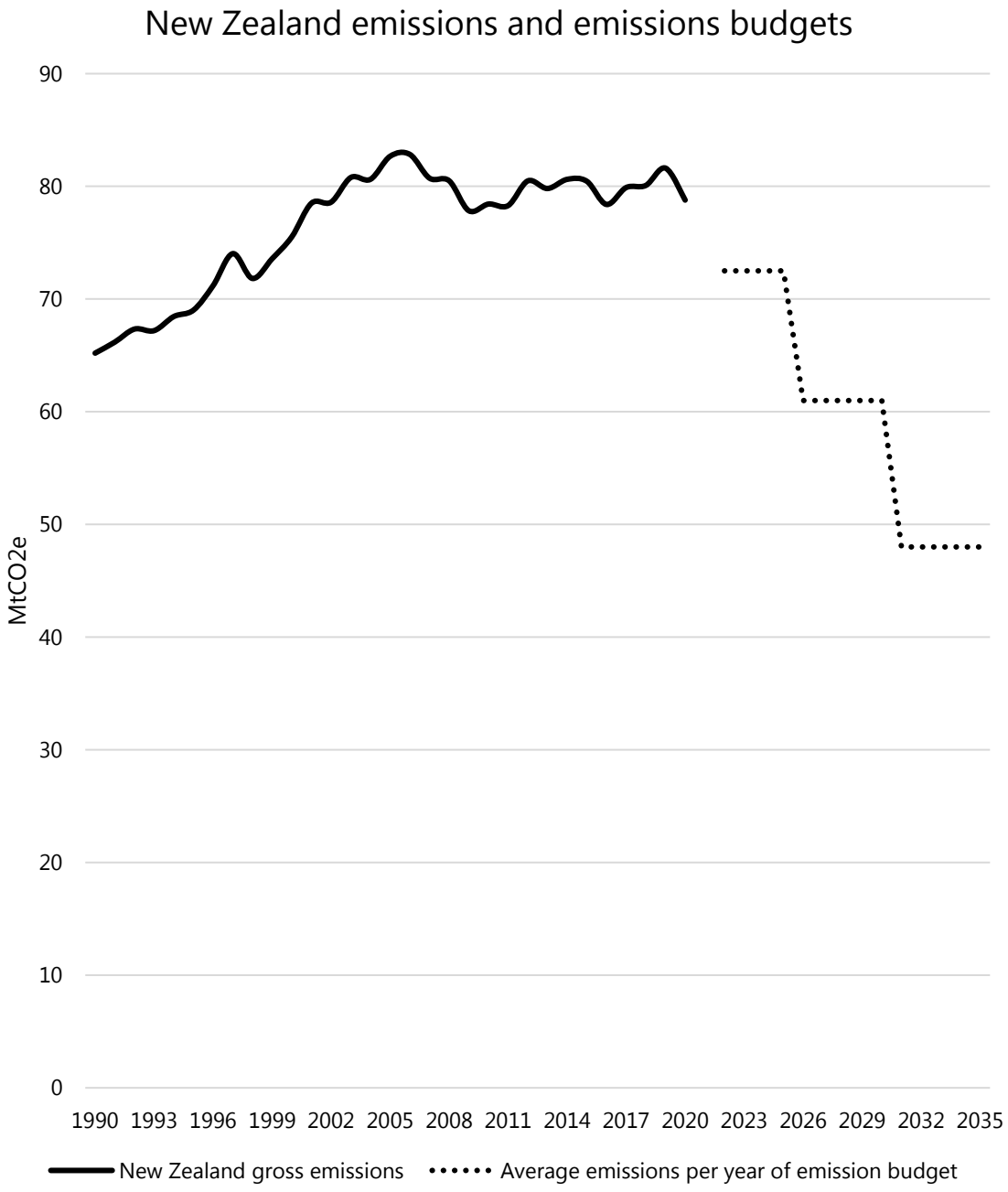
Some of the key issues for biodiversity in the region include:

- The uplands in the Kahurangi and Golden Bay areas are degrading under pressure from pests.
- Lowlands throughout the region are highly modified. Most natural ecosystems in these areas are now small remnants and are highly threatened or degraded.
- The region is a centre for naturally uncommon ecosystems, such as coastal turf communities. Nationally, 63% of such naturally uncommon ecosystems are threatened.
- Other species, such as kaka, rock wren/tuke, blue duck/whio and great-spotted kiwi/roroa,are in decline, except where there are pest control operations;
- Many terrestrial bird species, such as kēā and falcon/kārearea, are threatened or at risk in the Tasman Region.

- Thirty-one percent of marine birds nationally are threatened, and this region provides vital habitat for many coastal species. Examples from this region include:
    - Nationally critical: Australasian bittern/matuku hūrepo, black-billed gull/tarāpuka, and white heron/kotuku.
    - Nationally endangered: black-fronted tern/tarapirohe, New Zealand king shag/kawau pāteketeke and reef heron/matuku moana.
    - Nationally vulnerable: Caspian tern/taranui.
    - At risk or declining: moho pererū (banded rail), matata (fernbird), kotoreke (marsh crake), tarāpunga (red-billed gull), pūweto (spotless crake) and tara (white-fronted tern).
- Tasman is particularly rich in invertebrate species. The beech forests and sub-alpine tussocks of the northwest are home to about half the known sub-species of giant landsnails (Powelliphanta). Tasman District has nationally significant areas of karst (limestone and marble). These karst areas support a cave fauna that contains several species known from a very restricted number of locations. Many of these indigenous invertebrates are under pressure from habitat loss and pests, such as wasps.
- Freshwater species of plants and animals are also threatened in the region. Most native freshwater fish species are at risk and declining. Examples of already threatened species are: blue duck/whio, freshwater mussel/kākahi, grey duck/pārera and lamprey/piharau.
- Both of the bat species/pekapeka in the region are threatened, with the short tailed bat probably extinct in the region.
- Although some marine mammals, such as the fur seal/kekeno, are increasing in numbers, those of Hector's dolphins/tutumairekurai remain very low.

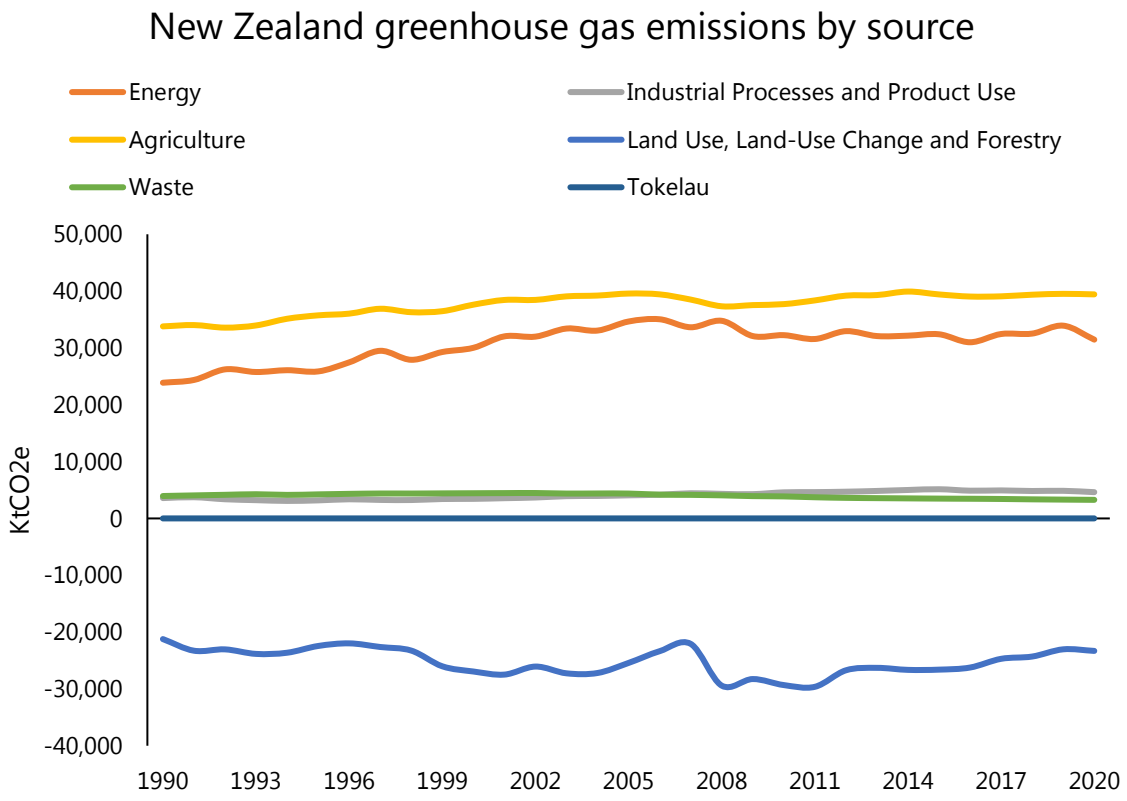
Climate change

New Zealand's greenhouse gas emissions have increased slightly since 1990. New Zealand has emissions budgets which set the total amount of greenhouse gases we are allowed to emit over certain periods. These budgets are 290Mt for 2022-2025 (72.5Mt per year), 305Mt for 2026-2030 (61Mt per year) and 240Mt for 2031-2035 948Mt per year). [43]

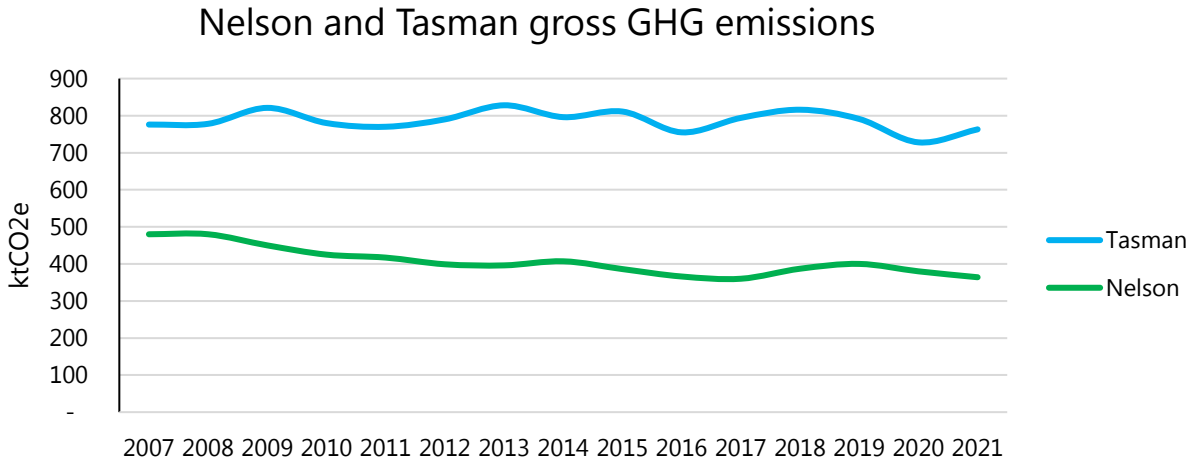


[43] Source: Ministry for the Environment, Emissions budgets; Stats NZ, New Zealand's greenhouse gas emissions

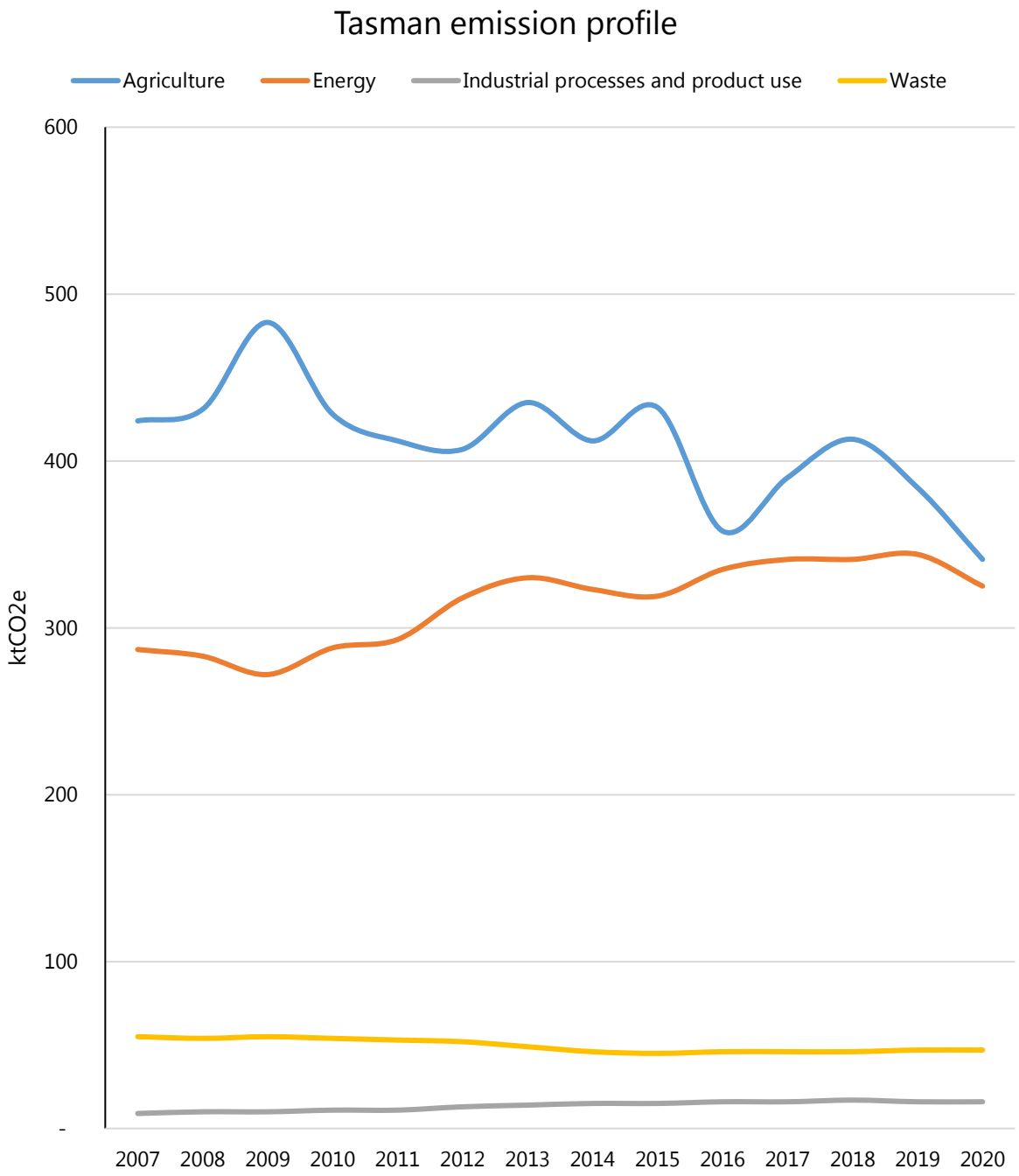
New Zealand's emissions profile is dominated by agriculture and energy (mostly transport emissions). New Zealand's extensive forestry stock sequesters a large proportion of carbon, helping reduce our net carbon emissions.



Over the last 15 years, Tasman's emissions have largely remained stable, while Nelson's emissions have decreased.

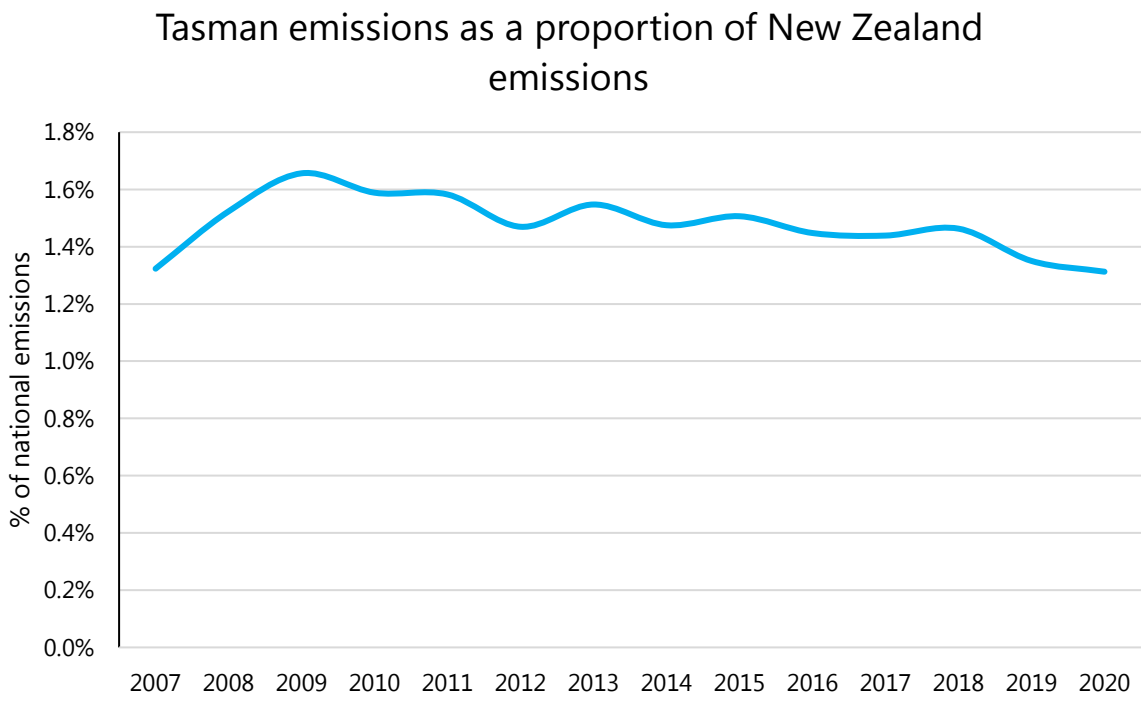


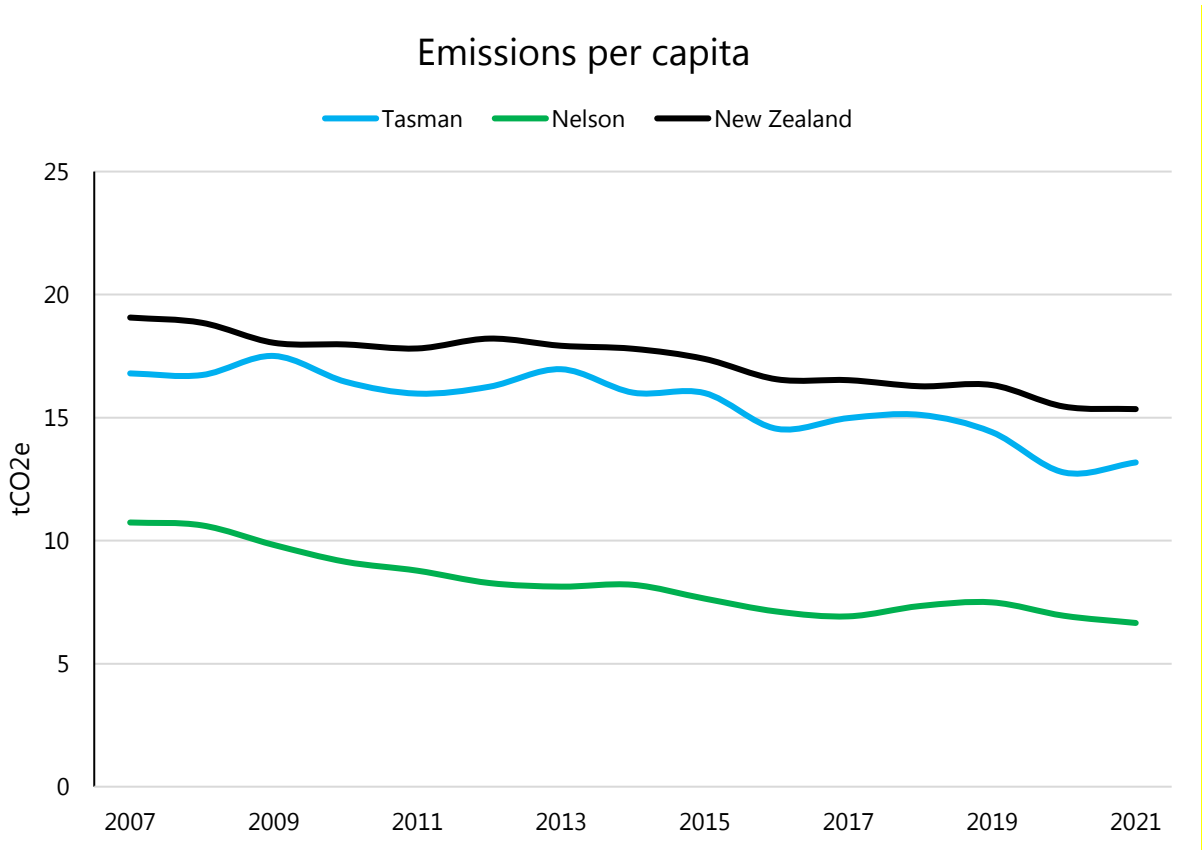
Tasman's emissions profile is dominated by agriculture and energy, like the rest of New Zealand. Agriculture emissions have decreased over the last 15 years, likely because of more efficient farming practices. An increase in energy emissions is expected because of predicted population growth and associated vehicle use.[44]



[44] Source: Stats NZ, Greenhouse gas emissions by region (industry and household): Year ended 2021

As a result of declining agriculture emissions, Tasman is now proportionately less of a contributor to New Zealand's total emissions than previously.





There are several significant challenges for Tasman from climate change over the next few decades and will require conversations with the community about how we respond. Planning is needed for how we adapt to sea level rise and erosion. Increased frequency and severity of flooding events will heighten risk to people and infrasructure and increase sedimentation of waterways. Increased drought conditions will lead to decreased water quality, more algal blooms, pressure on instream ecosystems, and impact parts of our economy reliant on water use. Biodiversity may not be able to adapt to new climatic conditions.

Higher temperatures will increase the incidence of heat stress, illness, and death, especially among vulnerable residents who are more likely to be adversely affected by multiple impacts of climate change.

We must ensure that we work closely with our communities to adapt to climate change and share the burdens fairly. Climate change will likely have disproportionate impacts, and we must ensure our actions are equitable. There will also need to be complex discussions about infrastructure, planning and climate risks.

The New Zealand Coastal Policy Statement 2010 (NZCPS, 2010) requires that the identification of coastal hazards includes the effects of sea level rise over at least a 100-year planning period. The MfE 2017 Guidance notes that because of the uncertainty about future changes in climate, it is necessary to examine a range of scenarios, known as representative concentration pathways (RCPs). Four RCPs have been developed for New Zealand, representing a range of climate model scenarios and possible sea level rise futures:

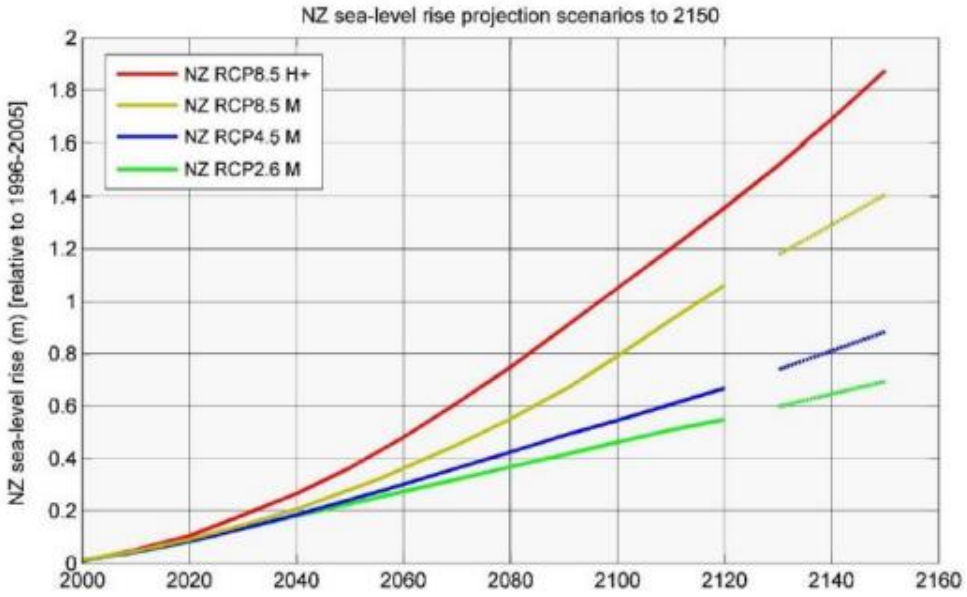
- a low to eventual net-zero emission scenario (RCP2.6)
- an intermediate-low scenario based on the RCP4.5 median projections
- a scenario with continuing high emissions, based on the RCP8.5 median projections
- a higher H+ scenario, taking into account possible instabilities in polar ice sheets, based on the RCP8.5 (83rd percentile) projections.

The latest MfE guidance recommends that councils assume the RCP8.5 H+ scenario (the worst-case scenario) in planning for sea level rise. The RCP8.5 H+ scenario assumes a 1.9m sea level rise by 2150 (not accounting for land subsidence) The effects of other scenarios on sea level rise at different dates are shown below. They are from the Council's latest Coastal Risk Assessment, part of its Coastal Management Project.[45]

[45] Source: Tasman District Council - Coastal Risk Assessment

Approximate years when specific sea level rise increments (metres above 1986-2005 baseline) could be reached for various projection scenarios for New Zealand

Sea Level Rise (m)	Year reached for RCP 8.5 H+ (83%ile)	Year reached for RCP8.5 (median)	Year reached for RCP4.5 (median)	Year reached for RCP2.6 (median)
0.3	2045	2050	2060	2070
0.4	2055	2065	2075	2090
0.5	2060	2075	2090	2110
0.6	2070	2085	2110	2130
0.7	2075	2090	2125	2155
0.8	2085	2100	2140	2175
0.9	2090	2110	2155	2200
1.0	2100	2115	2170	>2200
1.2	2110	2130	2200	>2200
1.5	2130	2160	>2200	>2200
1.8	2145	2180	>2200	>2200
1.9	2150	2195	>2200	>2200



The maps on the following pages show the effect of a 2m sea level rise on some coastal areas, which is the assumed effect of climate change by 2150. Current projections indicate a 1m sea level rise by 2100. The green layer is the median high-water mark. The banded green layer is the median high-water mark with a 1% annual event probability storm tide.[46]

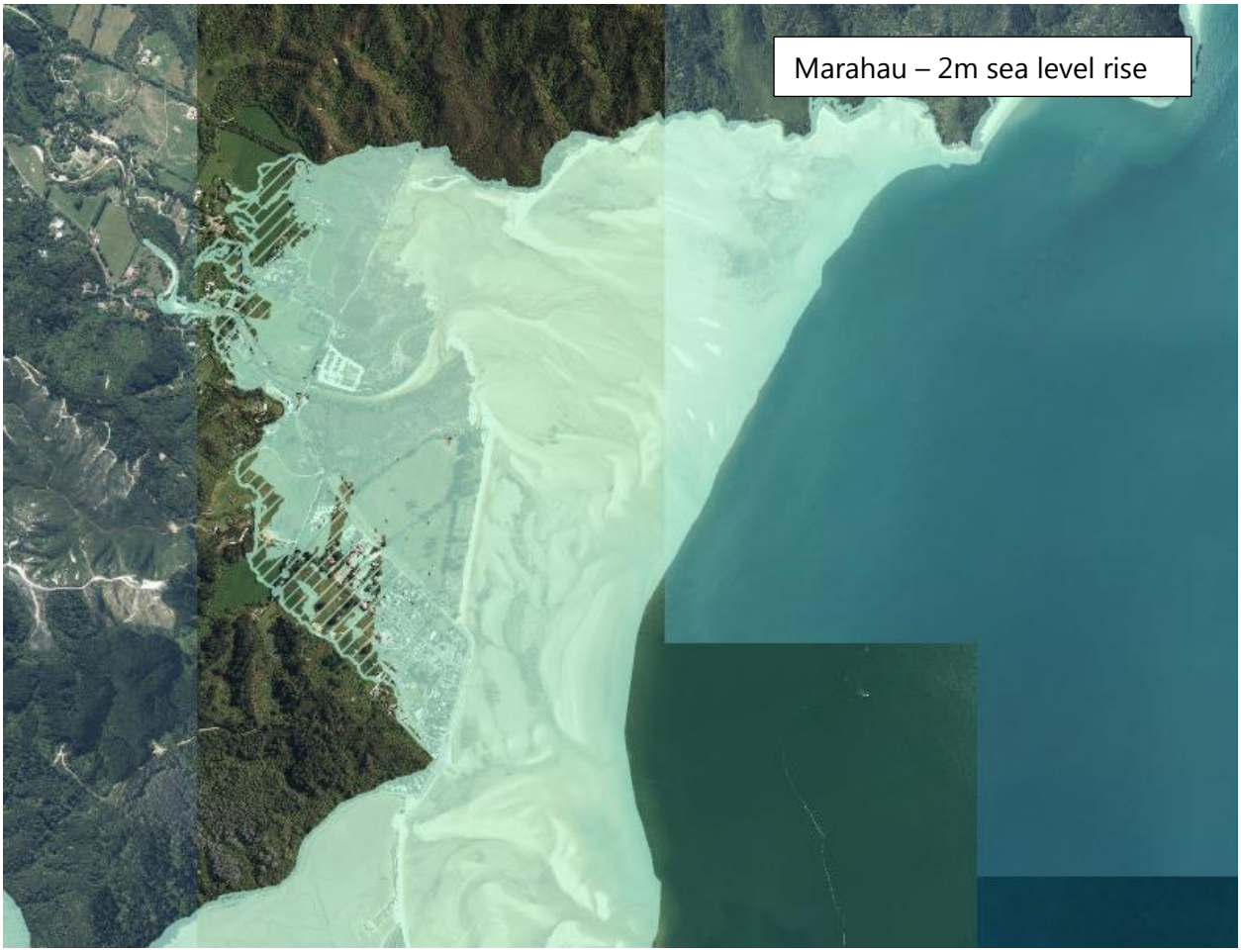
[46] Source: Coastal Hazards Map Viewer

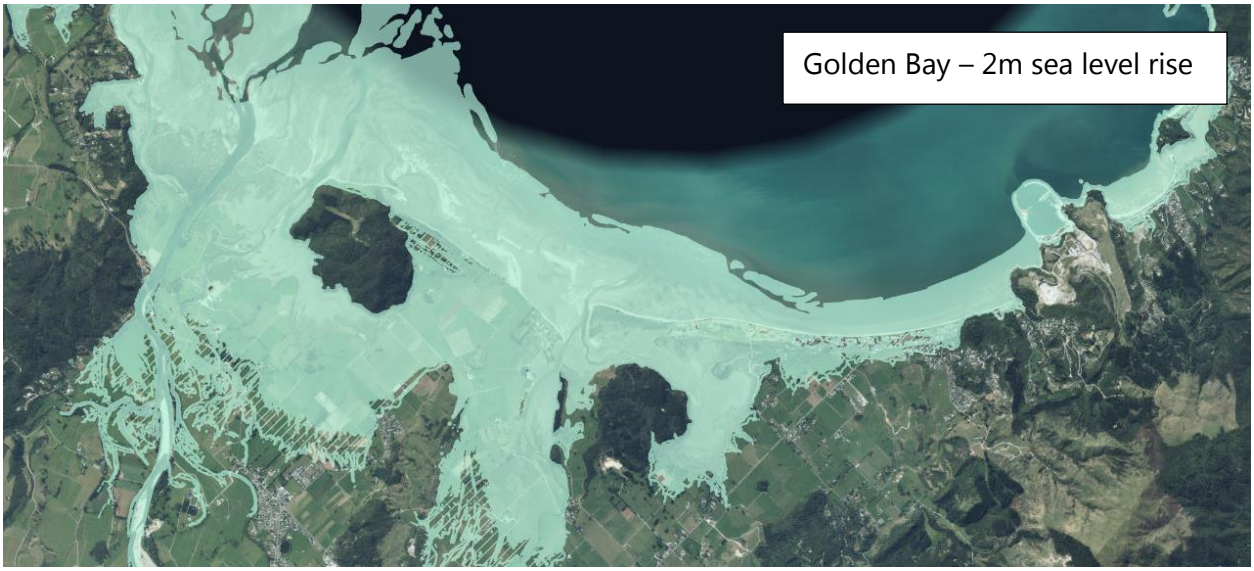

Waimea estuary – 2m sea level rise


Mapua – 2m sea level rise


Motueka – 2m sea level rise


Kaiteriteri –
2m sea level rise


Marahau – 2m sea level rise


Golden Bay – 2m sea level rise


Collingwood – 2m sea level rise

The following table is the climate change assumptions that we used for the last LTP. The effects of climate change are based on the RCP 4.5 and RCP 8.5 scenarios and are based on NIWA projections for our region.

	Changes to Tasman's climate
Changing Temperatures and seasonality	**Average temperature will rise** • 0.9°C to 1.0°C by 2040 • 1.4°C to 3.0°C hotter by 2090 **More very hot days (greater than 25°C) *** • +8 to +9 more 25°C+ days per year by 2040* • +14 to +43 more 25°C+ days for Tasman by 2090 *Calculated for areas <500m altitude **More heatwave days (≥ three consecutive days with maximum temperatures > 25°C)** • +20 more heatwave days per year by 2040 • +25 and +60 more heatwave days per year by 2090 (RCP 4.5 and RCP 8.5) **Fewer frosts per year** • Average of 13 fewer frosts per year by 2040 • Average of 28 fewer frosts per year by 2090 • 90+ fewer frosts per year in southeast part of district by 2090 (RCP 8.5) **More growing degree days (GDD = sum of daily average temps above a 10°C base)** • +250 sum GDD per year by 2040 • +300 and +900 sum GDD per year by 2090 (RCP 4.5 and RCP 8.5) **Seasonal change in temperature** • Temperature will change the most in summer and autumn • least in spring **Increased evapotranspiration from soils** • Up to 140 mm moisture deficit in areas of Tasman by 2040 • 140 mm and 200 mm deficit by 2090 (RCP 4.5 and 8.5)
Changing rainfall patterns and intensity	**Seasonal change in rainfall patterns** • More rainfall in all seasons (except spring, for coastal areas) by 2040

	• Slightly less (-5%) rainfall in western parts of Tasman for all seasons, except winter (up to 40% increase; RCP 8.5) by 2090. **Rainfall patterns within seasons will change:** • Longer dry periods: more intense, more frequent drought. • Extreme rainfall: more frequent and more extreme rainfall events
Changes to sea level and coastal hazards	**Permanent sea level rise:** Our planning for sea-level rise (SLR) is based on the SSP5-8.5 (83%ile) in line with the Ministry for the Environment's Interim Guidance on the use of New Sea-level Rise Projections (August 2022) and sourced from the NZ SeaRise: Te Tai Pari O Aotearoa platform, i.e.: • 0.32m by 2050 • 0.9m by 2090 • 1.66m by 2130, and • 2.02m by 2150 (using a baseline of 1995-2014 with a mid-point (zero) at ~2005). For coastal subdivisions, greenfield developments and major new infrastructure, we are planning for 1.66m SLR by 2130, and also factoring in the relevant rate of vertical land movement locally (as per the MfE 2022 guidance). The Tasman coastline is generally subsiding with rates typically in the order of -1.0mm to -4.0mm/year (i.e. -0.10 metres to -0.40 metres per 100 years) which will further exacerbate SLR. **Permanent groundwater rise:** • Shallowing of groundwater in coastal areas in response to sea level rise. **More frequent storm surge (temporary raising of sea level during storms)** • Storm surges will become more frequent and increase in height. **Saltwater intrusion into coastal groundwater, and further upstream in rivers**
Oceanic changes	**Oceanic changes** • Acidification of the ocean • General temperature rise of sea water. • Marine heatwaves
Wind	**Extreme daily winds** • Winds are expected to increase in winter and decrease in summer

Primary production	**Changes to the climate in which we farm** • We will see increasing day and night-time temperatures, a longer duration of high temperature periods, and a reduction in the number of frosts. • There will be more frequent and longer periods without rain in summer. • There will be more frequent heavy rainfall events in winter • Evapotranspiration and plant uptake of water from soil will be acute in some areas.

Air quality

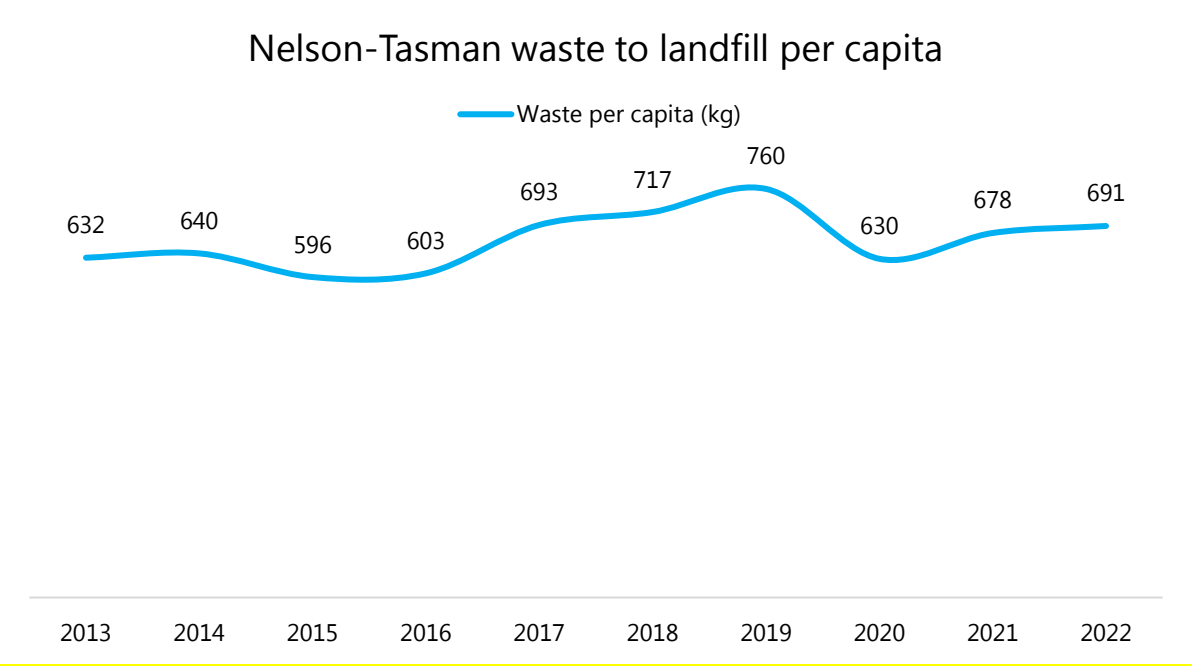
The main air quality issue in our District is smoke pollution from wood burning during the winter months. Wood burners used for home heating, outdoor fires associated with burning garden waste and land management practices all contribute to this air pollution. The calm, clear, cold winter days don't allow smoke to rise and disperse. Instead, the smoke sits low to the ground. Other sources of air pollution include motor vehicle emissions, secondary sulphate and marine aerosol (sea salt). Air pollution can cause significant adverse health and nuisance effects; this impacts vulnerable people (the young, old, and those with pre-existing medical conditions).

The Council undertakes continuous monitoring for particulate matter (PM) in the Richmond Airshed. The airshed currently does not meet the National Environmental Standards for Air Quality for PM10 and is 'polluted' under the standards. Since 2019, the Council has also undertaken a targeted winter monitoring programme in Motueka, Riwaka and Brooklyn to better understand if there are air quality issues in this area. Surveillance monitoring in other smaller townships is also underway, with monitoring completed in Brightwater and Wakefield in 2022.

The Council has tools in place via the TRMP to manage discharges to air, including specific rules for the Richmond Airshed. Over the last few years, MfE has been reviewing the Air Quality NES focusing on home heating and monitoring and management of PM2.5. This work has recently been delayed and is expected to be incorporated into wider RMA system reform work. Council will need to give effect to any new standards through the discharges to the air section of our resource management plan.

Waste management

The Ministry for the Environment (MfE) estimates that New Zealand generates 17.49 million tonnes of waste annually, of which 12.59 million tonnes are sent to landfills. Waste sent to Class 1 landfills (landfills that accept household waste) increased by 47% from 2009/2010 to 2018/2019 with per capita waste increasing from 580kg to 740kg per annum. There was a slight decrease in waste sent to landfill in 2019 and 2020, although the decrease in 2020 was likely due to COVID-19. [47]Longer-term trends suggest that we will continue to increase the amount of waste we generate per person.



Surveys show that construction and demolition waste is the largest source of waste to landfills, followed by potentially hazardous waste at 24% and organic waste at 15%.

MfE is undertaking significant waste management reforms and system-level change to reduce waste to landfill and encourage a low-emissions circular economy. The Government has produced a chapter of the Emissions Reduction Plan on waste and is developing a new national Waste Strategy and supporting legalisation to replace the Waste Minimisation and Litter Acts.

MfE is supporting projects that are increasing the recycling of materials through the Waste Minimisation Fund (WMF) and has invested $50 million in projects that find ways to use less plastic. The WMF is focussed on accelerating the transition to a low-emissions circular economy and can fund infrastructure and engable systems to reduce landfill emissions from organic waste, with specific support for local government. MfE has also increased and expanded the waste

[47] Source: Tasman District Council Annual Reports 2013-2022

disposal levy, phased out certain single-use plastics, and consulted on a national container return scheme as part of its Transforming Recycling Programme.

Tasman District Council co-owns the regional York Valley landfill with Nelson City Council, which is managed by the Nelson Tasman Regional Landfill Business Unit. The Councils have a Joint Waste Management and Minimisation Plan, which will be reviewed in 2023. The JWMMP aims to reduce the amount of waste by 10% per person and to reduce waste to class 1 landfill (excluding special waste) from 619kg to less than 557kg per person by 2030.

In 2021/22, the total amount of waste sent to the landfill was 81,292 tonnes. This compares to 78,069 tonnes in 2020/2021. Waste volumes are higher than expected and indicate we are not on track to meet our 10% target with our current approach. The impacts of the 2022 Nelson floods will affect the 2022/2023 results and likely increase waste to landfill.

Natural hazards

Tasman District is vulnerable to a range of coastal and land-based hazards. Exposure to these hazards will increase due to urbanisation and climate change. Our communities need to understand the consequences of these hazards, agree on what level of ongoing risk is acceptable, and plan for the impacts of the risks to their community.

Significant natural hazards include:

- Earthquakes - Each year, we have over 150 earthquakes that are large enough to be felt. Tasman is situated near several fault lines, including the Alpine Fault extending down the South Island's spine. Experts believe there is a 30% to 65% chance of a magnitude 8.0 earthquake on this fault in the next 50 years. Any earthquake has the potential to dramatically impact infrastructure and result in physical and mental health impacts.
- Floods - Floods are New Zealand's number one hazard in terms of frequency, losses and declared civil defence emergencies. Floods can cause injury and loss of life, damage to property and infrastructure, loss of stock, and contamination of water and land. Tasman has numerous rivers which, in flood, may cause significant damage.
- Tsunami - New Zealand's entire coast is at risk of a tsunami. A tsunami can violently flood coastlines, causing devastating property damage, injuries and loss of life. Tsunamis will most significantly impact low-lying areas. Increasing sea level rise will also increase the impact of a tsunami event.
- Slips and landslides– heavy rainfall can cause slips and landslides that affect infrastructure, block roads, and lead to property damage and loss of life in severe circumstances. More heavy rainfall due to climate change will increase the impact of slips and landslides.

The most significant challenge from natural hazards is that climate change will increase the risk of natural hazards such as flooding, coastal inundation, and tsunami. There will also be physical and mental health risks associated with all hazards – Christchurch's mental health rates since the 2011 earthquake continue to remain significantly above the national average. There is a high financial cost associated with mitigating and adapting to natural hazards, especially when the timing and magnitude of these hazards are unknown.

The Council needs to ensure we are promoting a shared understanding of the risks and costs associated with natural hazards.

National reform and legislative changes

There are three significant reforms and processes led by the Government that will have an impact on local government – Three Waters, Resource Management and the Future for Local Government. They collectively and individually represent the largest reforms to local government and local governance since the abolition of the provinces in 1877.

The reforms aim to achieve better outcomes for communities and the environment, efficiency improvements and give effect to the principles of Te Tiriti o Waitangi. However, the reforms are progressing on different timelines and add to an increasingly complex and uncertain operating environment for local government.

Government reforms have made planning for the future more challenging but this provides considerable opportunity to further the purposes of local government. The reforms will fundamentally change the system that local government operates within, including how decisions are made and by whom, what it delivers and how that happens, and who enables and delivers community wellbeing.

Three Waters reform

The Government has proposed new organisations to deliver water supply, wastewater and stormwater independent of local councils. A new water regulator, Taumata Arowai has also been established to govern the health of the drinking water being delivered. There will also be reforms to water delivery services. The Water Services Entities Act was passed in late 2022, establishing the new water entities. The Water Services Legislation Bill is currently being consulted on and will likely pass in 2023, and sets out the functions, powers, olbligations, and oversight arrangements of the entities. The Water Services Economic Effiency and Consumer Protection Bill is currently in select committee.

As this reform programme progresses, we will continue to monitor developments and assess the available information to determine how Tasman will be affected. The parliamentary opposition

has indicated it will repeal Three Waters reform if elected. With an election in 2023, we do not know how the reforms will change if there is a change in government.

This Council will need to facilitate the transfer of associated assets, staff and contracts to a new water entity. We will need to manage any impacts of the change for the rest of the Council's Community Infrastructure Group and ensure staff are supported through a challenging period of change management.

Resource management reform

After many years of incremental changes, the Government is undertaking a comprehensive reform of the resource management system. In February 2021, the Government announced it would repeal the Resource Management Act 1991 and replace it with three new pieces of legislation. The Natural and Built Environments and Strategic Planning Bills were introduced to the House in late 2022 and are currently at select commitee. The Government will likely introduce the Climate Change Adaptation Bill in 2023.

The scale of reform of the resource management system is substantial and will have significant impacts on Tasman District Council. The resource requirements and costs of transition cannot be underestimated, particularly as we move to a new system while fulfilling essential requirement under the current one.

The resource management system is already under significant strain and facing capacity issues. Mana whenua are also constrained in their capacity to fully participate in the current, let alone, future system. The success of the new system and the Council's role in it will largely depend on how we plan for, manage and resource the transition to and implementation of the new system.

The Council is currently working on a new resource management plan called Aorere ki uta, Aorere ki tai – Tasman Environmental Plan. We are actively assessing what new resource management legislation will mean for Tasman and will continue working with our communities through this project to better understand our district's key challenges and opportunities for managing our environment, providing for development, and building resilience.

Future for Local Government

The Government is undertaking a fundamental review of the purpose, function and operation of local government.

A Ministerial Inquiry was set up to identify how our system of local democracy needs to evolve over the next 30 years to improve the well-being of New Zealand communities and the environment, and actively embody the treaty partnership.

A draft report and recommendations for public consultation were released for public consultation in October 2022 and recommended significant changes to the roles and functions of local government. The final report will be presented to the Government by 30 April 2023.

The Council will need to contribute to this work, consider the findings of the review and then work with central government to implement any changes that emerge.

In the future, Government decisions may change the Council's role, functions and structure. This is an opportunity for the Council to help shape its future direction and its role in the community.