

### Overview of Clutha District

Infometrics provisional GDP estimates indicate that the Clutha economy grew by a respectable 6.4% over the year to December 2021, ahead of the national rate of 5.5%. These figures are abnormally high as they are compared to 2020 which featured a hard initial hit from COVID-19.

Employment of Clutha residents grew 1.0% over the year to December 2021. Health enrolments indicate that the district's population grew by a modest 0.1% over the same period, so the relative strength in employment growth is indicative of a very tight labour market. This is further supported by a low 3.0% unemployment rate. The number of Jobseeker Support recipients has fallen back to levels last seen in 2019. Employment of Clutha residents has grown in nearly every industry, although manufacturing is a notable exception, falling 0.9%, which may reflect difficulty finding workers to fill jobs.

Consumer spending in Clutha grew 7.3% over the year to December 2021, ahead of the national rate of 5.0%. Underpinning this was very strong tourism electronic card spending growth, up 18.2% for the year to December 2021, driven by steady growth throughout the year. This blows away national tourism expenditure growth of 3.9%.

Non-residential consents are very strong in Clutha, with an \$8m consent for part of the new Balclutha Countdown supermarket. However, residential consents have weakened and are sitting in line with the district's long-term trend.

Clutha's housing market has grown in line with the national trend, with house values up 26.4%pa to \$403,900 in the December 2021 quarter, compared to \$714,900 in Dunedin.

Continued strength in global dairy prices mean Clutha farmers are expected to net \$68m more this dairy season, compared to 2020/21. Much of this is likely to go towards debt repayment or environmental upgrades, so any flow-on effect is likely to be limited.

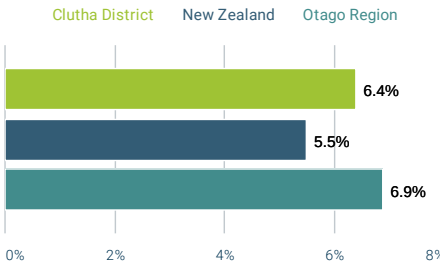
Indicator	Clutha District	Otago Region	New Zealand
<b>Annual Average % change</b>			
Gross domestic product (provisional)	6.4 % ▲	6.9 % ▲	5.5 % ▲
Traffic flow	7.7 % ▲	3.2 % ▲	3.5 % ▲
Consumer spending	7.3 % ▲	3.7 % ▲	5.0 % ▲
Employment (place of residence)	1.0 % ▲	0.1 % ▲	1.7 % ▲
Jobseeker Support recipients	-11.3 % ▼	-0.8 % ▼	1.9 % ▲
Tourism expenditure	18.2 % ▲	1.6 % ▲	3.9 % ▲
Health enrolments	0.1 % ▲	1.2 % ▲	0.9 % ▲
Residential consents	-2.5 % ▼	18.3 % ▲	24.0 % ▲
Non-residential consents	404.7 % ▲	7.1 % ▲	16.2 % ▲
House values *	26.4 % ▲	24.2 % ▲	27.3 % ▲
House sales	10.7 % ▲	4.2 % ▲	3.5 % ▲
Car registrations	10.6 % ▲	22.3 % ▲	20.2 % ▲
Commercial vehicle registrations	21.8 % ▲	30.3 % ▲	25.4 % ▲
<b>Level</b>			
Unemployment rate	3.0 %	3.3 %	3.8 %

\* Annual percentage change (latest quarter compared to a year earlier)

# Gross domestic product

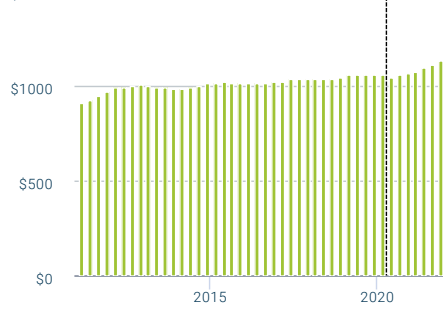
## Gross domestic product growth (provisional)

Annual average % change December 2020 - December 2021



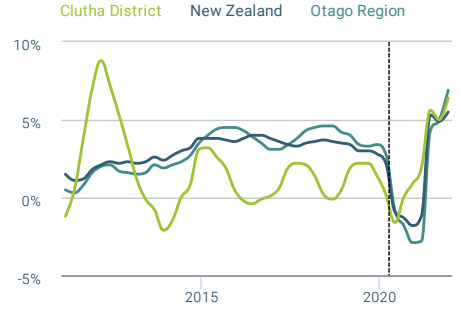
## Gross domestic product (\$m)

Annual level, Clutha District



## Gross domestic product growth

Annual average % change



## Highlights for Clutha District

- GDP in Clutha District was provisionally up 6.4% for the year to December 2021 compared to a year earlier. Growth was higher than in New Zealand (5.5%) and lower than in Otago Region (6.9%).
- Provisional GDP was \$1,138 million in Clutha District for the year to December 2021 (2021 prices).
- Annual GDP growth in Clutha District peaked at 8.8% in the year to March 2012.

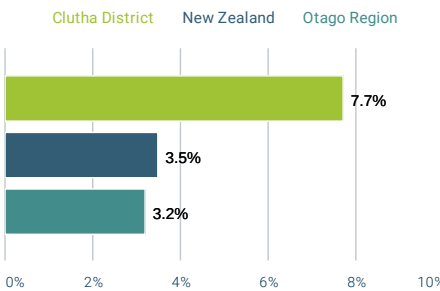
## National overview

The New Zealand economy saw a determined but short-lived rebound in economic activity in the December 2021 quarter, as restrictions were relaxed across the country over the course of the quarter. Provisional estimates from Infometrics show a 2.8% rise in economic activity, leaving annual activity over the 2021 calendar year sitting 5.5% above the 2020 total, and 3.6% above pre-pandemic levels. There was substantial regional variation, with a longer period of Alert Level and Traffic Light restrictions keeping upper North Island activity lower than last summer. Other areas saw a rush back to building, manufacturing, and primary sector activities in December, alongside strong summer holiday spending boosts in many areas. Expectations remain for the Omicron outbreak to disrupt this rebound and economic activity over the early stages of 2022.

# Traffic flow

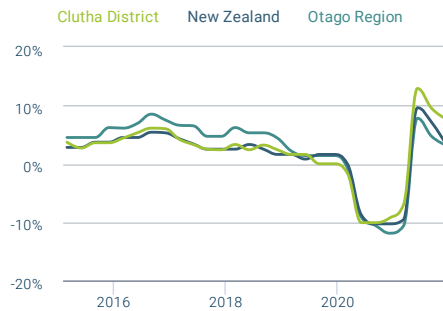
## Annual change in traffic flows

Annual average % change December 2020 - December 2021



## Traffic volume growth

Annual average % change



## Highlights for Clutha District

- Traffic flows in Clutha District increased by 7.7% over the year to December 2021. This compares with increases of 3.5% in New Zealand and 3.2% in Otago Region.

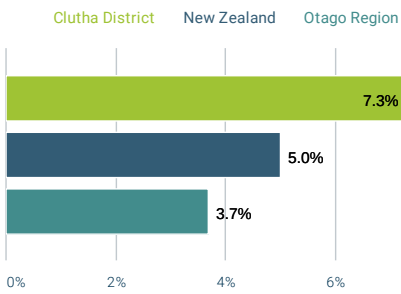
## National overview

Traffic activity remained subdued in the December 2021 quarter, driven by considerably lower movement in the upper North Island. Auckland's third of the national population weren't able to move outside the Super City boundaries for most of the quarter, with a 31%pa drop in traffic from a year earlier. Northland's traffic volumes were sitting nearly 40% below last summer's levels, due to the lack of Auckland traffic, and Red setting over the key summer period. Rising fuel prices over the December quarter will also have contributed to traffic activity, with a 30%pa increase in prices at the pump. A more expensive trip, combined with uncertainty over possible Covid restrictions over summer, appears to have kept New Zealanders home more throughout the December quarter.

# Consumer spending

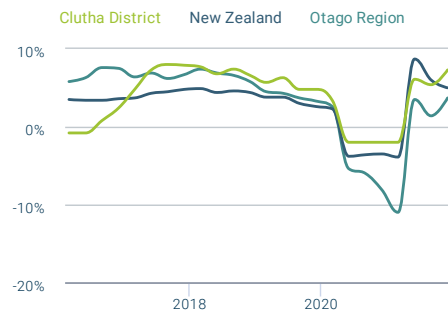
## Growth in consumer spending

Annual average % change December 2020 - December 2021



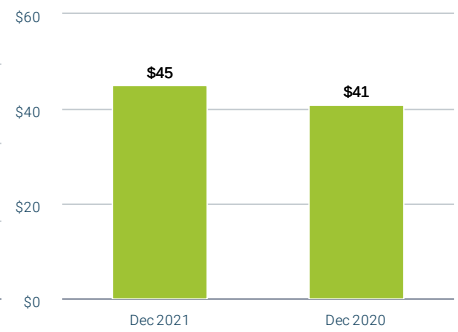
## Consumer spending

Annual average % change



## Consumer spending

Quarterly spending (\$m), Clutha District



## Highlights for Clutha District

- Electronic card consumer spending in Clutha District as measured by Marketview, increased by 7.3% over the year to December 2021 compared to the previous year. This compares with an increase of 5.0% in New Zealand and 3.7% in Otago Region.

## National overview

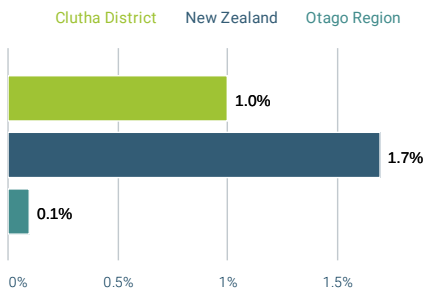
National spending activity was still slightly down on a year earlier, as the sustained lockdown restrictions in the upper North Island for part of the quarter limited activity. Marketview card spending data shows a 0.4%pa drop in national spending over the December quarter, representing a further \$68m drop in spending. However, excluding Auckland, spending rose 4.4% from a year earlier as the rebound in activity occurred and savings from the Delta lockdown were spent. Higher inflation means that underlying spending growth wasn't as impressive, with the consumers price index rising 5.9%pa in the December quarter as supply chain disruptions and a stretched economy hit household wallets.

Note that we have now switched our reporting basis to align with Marketview's Council Tool spending definitions, resulting in a revision in the consumer spending timeseries.

# Employment (place of residence)

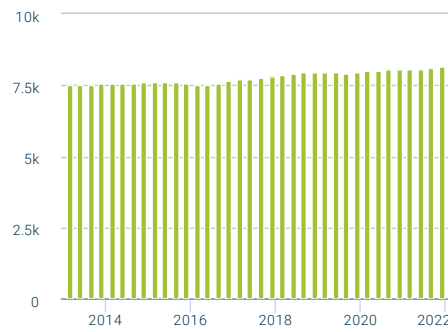
## Employment (place of residence) growth

Annual average % change December 2020 - December 2021



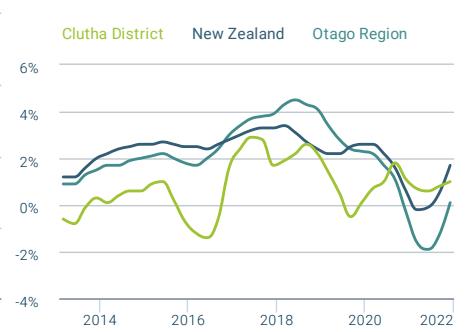
## Employment (place of residence)

Annual level, Clutha District



## Employment (place of residence) growth

Annual average % change



## Highlights for Clutha District

- Employment for residents living in Clutha District was up 1% for the year to December 2021 compared to a year earlier. Growth was higher than in Otago Region (0.1%) and lower than in New Zealand (1.7%).
- An average of 8,149 people living in Clutha District were employed in the year to December 2021.
- Annual employment growth for Clutha District residents peaked at 2.9% in the year to June 2017.

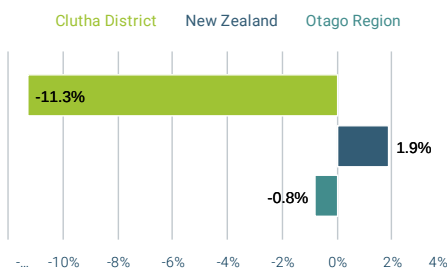
## National overview

Labour market pressures remain intense, with more people still getting into jobs. December quarter filled jobs are estimated to have risen 3.7%pa, with construction and professional service employment leading the way. However, jobs growth slowed or fell in tourism-related industries, and the primary sector remains smaller than usual due to the difficulty finding staff. Wage pressures are rising, with an average 7.2% increase in earnings per filled job in 2021. High inflation, higher levels of staff turnover, and continued economic demand are set to see workers demand higher wages in 2022, particularly with a further rise in the minimum wage to match inflation.

## Jobseeker Support recipients

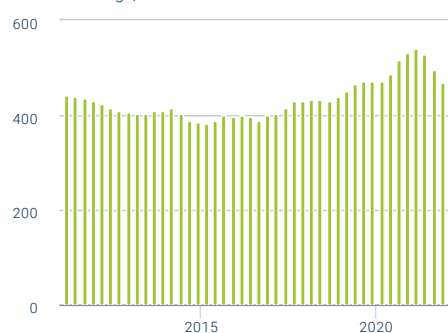
### Annual change in Jobseeker Support recipients

Annual average % change December 2020 - December 2021



### Jobseeker Support recipients

Annual average, Clutha District



### Jobseeker Support recipients

Annual average, Clutha District



## Highlights for Clutha District

- Jobseeker Support recipients in Clutha District in the year to December 2021 decreased by 11.3% compared with previous year. Growth was lower relative to Otago Region (-0.8%) and New Zealand (1.9%).
- An average of 470 people were receiving a Jobseeker Support benefit in Clutha District in the 12 months ended December 2021. This compares with an average of 434 since the start of the series in 2012.

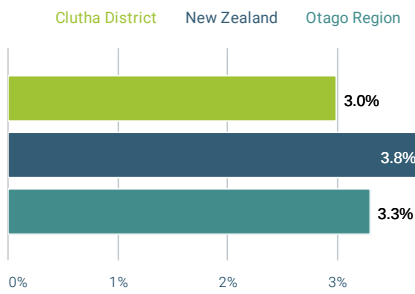
## National overview

Jobseeker Support recipient levels resumed their downward path in the December 2021 quarter, to sit nearly 12% below December 2020 levels. Around a fifth (18%) of the fall in Jobseekers is due to policy changes reclassifying some benefit recipients. On an annual average basis, Jobseeker figures are now just 1.9% higher than in the 2020 year. Jobseeker numbers remain around 40,000 (28%) higher than pre-pandemic levels, indicating that despite the tight labour market there remain some discouraged potential workers available. Additionally, there remain some with more complex support needs which need to be addressed to get them into sustainable employment.

# Unemployment rate

## Unemployment rate

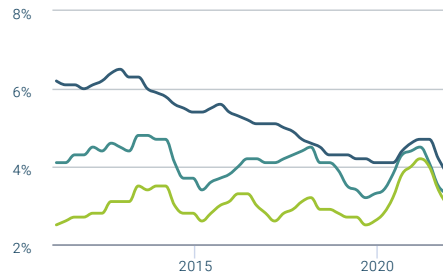
Annual average % change December 2020 - December 2021



## Unemployment rate

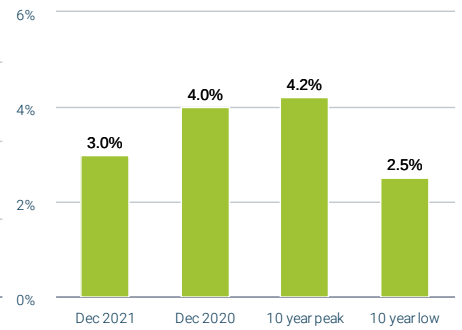
Annual average rate

Clutha District New Zealand Otago Region



## Unemployment rate

Annual average, Clutha District



## Highlights for Clutha District

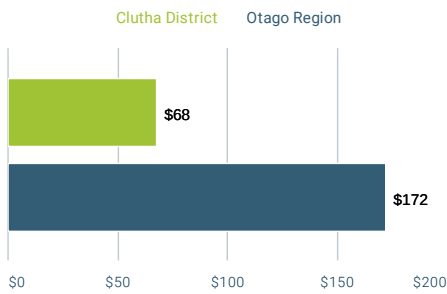
- The annual average unemployment rate in Clutha District was 3.0% in December 2021, down from 4% 12 months earlier.
- The unemployment rate in Clutha District was lower than in Otago Region (3.3%) and New Zealand (3.8%) in December 2021.
- Over the last ten years the unemployment rate in Clutha District reached a peak of 4.2% in March 2021.

## National overview

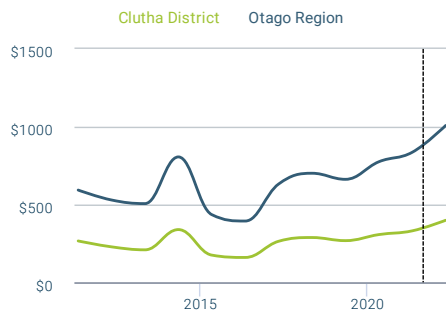
The labour market tightened even further in December 2021, with the unemployment rate hitting a new record low of 3.2%, just below our (and the market's) pick of 3.3%. The underutilisation rate was steady at 9.2%, as part-time employment growth (5.6%pa) outpaced full-time employment (3.2%pa). The labour market is at its tightest since the Household Labour Force Survey began in the mid-1980s, with employment struggling to grow in the face of worker shortages. The pressure across the labour market suggests that wage growth will have to pick up during 2022, as firms compete more for talent.

# Dairy payout

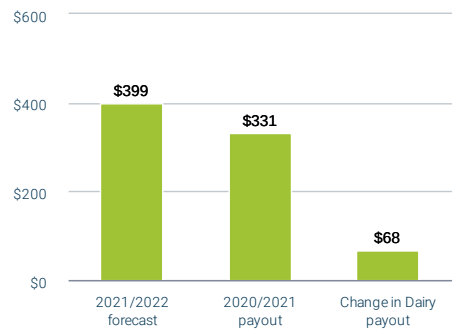
**Total dairy payout (provisional)**  
Change (\$m) between 2020/2021 and 2021/2022 seasons



**Total dairy payout**  
\$m each season, Clutha District



**Total dairy payout**  
\$m each season, Clutha District



## Highlights for Clutha District

- Clutha District total dairy payout for the 2020/2021 season is estimated to have been approximately \$307 million.
- Clutha District's dairy payout for the 2021/2022 season is expected to be approximately \$331 million, \$24 million higher than last season, assuming that production levels from last season are maintained.
- The total dairy payout for New Zealand is estimated to have been approximately \$13,537 million in the 2020/2021 season, and is expected to be \$1,147 million higher in the 2021/2022 season.
- The total dairy payout for Otago Region is estimated to have been approximately \$775 million in the 2020/2021 season, and is expected to be \$61 million higher in the 2021/2022 season.

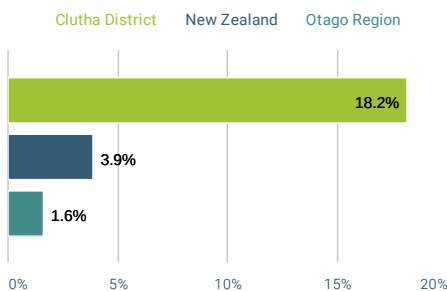
## National overview

Milk prices continue to rise aggressively as demand remains strong, but milk supplies shrink. Fonterra has further increased the farmgate milk price for the 2021/22 season to between \$8.90 and \$9.50, with a midpoint of \$9.20/kgms. The estimated pay-out has risen to \$17.6b, around \$2.2b higher than seen in the 2013/14 season. New Zealand milk volumes have been falling for five straight months now and are down 3.2%pa for the season to date. However, substantial cost rises will skim some of this cream off the top. Global feed prices were up 40%pa in 2021, and domestic fertilizer costs were up 58%pa rise in the December quarter. Our estimates suggest that the milk price could well rise further, towards the top end of the pay-out range.

# Tourism expenditure

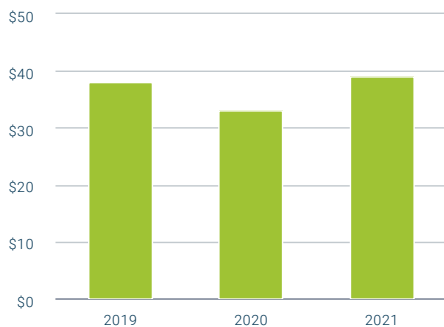
## Tourism expenditure

Annual average % change December 2020 - December 2021



## Tourism expenditure

Annual total, Clutha District (\$m)



## Highlights for Clutha District

- Total tourism expenditure in Clutha District increased by 18.2% in the year to December 2021. This compares with increases of 3.9% in New Zealand and 1.6% in Otago Region.
- Total tourism expenditure was approximately \$39 million in Clutha District during the year to December 2021, which was up from \$33 million a year ago.

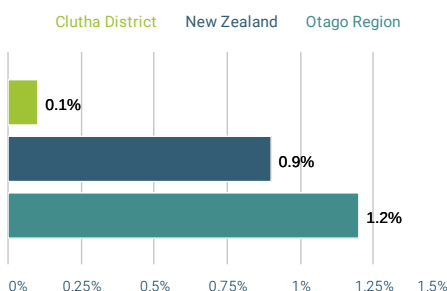
## National overview

Visitor spending over the 12 months to December 2021 slowed back further in the December 2021 quarter, up 3.9% from a year earlier. Tourism card spending growth has fallen from above 5%pa in June to 4.2% in the September quarter, and then fallen further as last summer's strong run is replaced with lower tourism spending since August 2021. Domestic tourism card spending was down 14%pa nationally over the December 2021 quarter, reinforcing the softer level of travel undertaken by Kiwis this summer. Activity in the lower South Island showed the strongest boost in the December quarter, alongside a sustained increase in the Wairarapa.

# Health enrolments

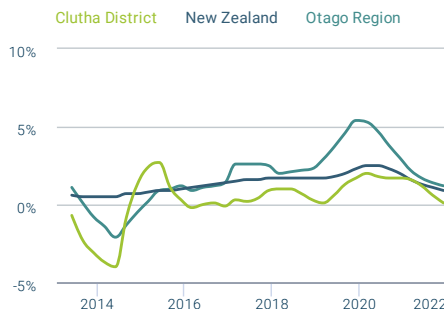
## Annual change in health enrolments

Annual average % change December 2020 - December 2021



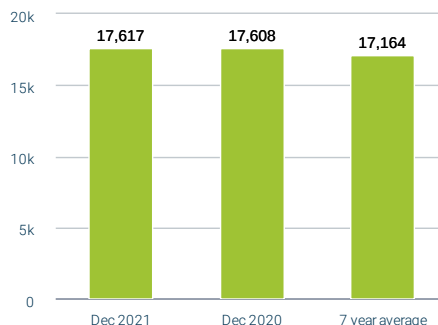
## Health enrolments

Annual average % change



## Health enrolments

Annual average, Clutha District



## Highlights for Clutha District

- The number of people enrolled with a primary health organisation in Clutha District in the year to December 2021 increased by 0.1% compared with previous year. Growth was lower relative to New Zealand (0.9%) and Otago Region (1.2%).
- An average of 17,617 people were enrolled with primary healthcare providers in Clutha District in the 12 months ended December 2021. This compares with an average of 17,116 since the start of the series in 2014.

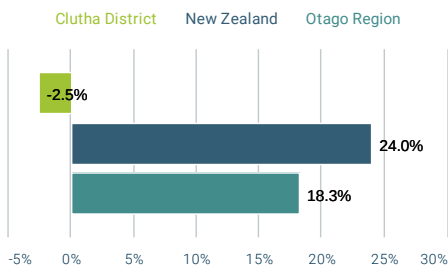
## National overview

Population growth remained low in the December quarter, as the population ages and the workforce remains limited. Health enrolments, which provide insight into local populations, rose 0.7%pa in the December quarter, the slowest rate in eight years. This low growth took annual average growth to below 1.0% for the first time since late 2015. Provisional net migration data shows a net loss of around 4,000 over the year to December 2021 – the first drain of talent in a decade. Some regional economies are showing slower or negative growth, as the labour market and regional migration becomes the driver of local population changes.

# Residential consents

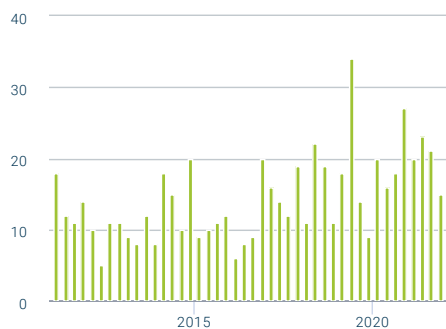
## Growth in number of new dwelling consents

Annual average % change December 2020 - December 2021



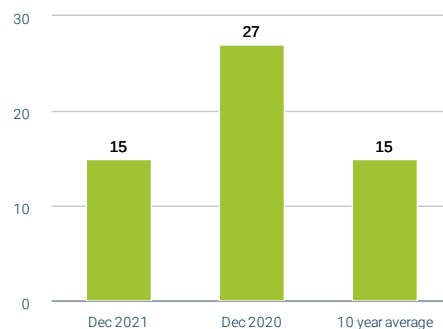
## Residential consents

Quarterly number, Clutha District



## Number of new dwelling consents

Quarterly number, Clutha District



## Highlights for Clutha District

- A total of 15 new residential building consents were issued in Clutha District in the December 2021 quarter, compared with 27 in the same quarter last year.
- On an annual basis the number of consents in Clutha District decreased by 2.5% compared with the same 12-month period a year ago. This compares with increases of 24.0% in New Zealand and 18.3% in Otago Region over the same period.

## National overview

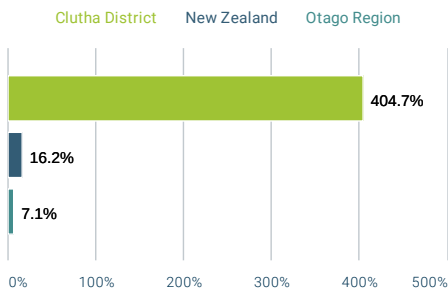
Residential consents have climbed even higher to 48,899 consents approved over the year to December 2021, sitting up 24% higher than throughout 2020. Townhouses remain the driving factor of growth, with 16,327 in 2021, up 41% compared to 2020. However, we are starting to see momentum wane, with quarterly growth in December sitting at 14%pa, compared to 30%pa in September. New Zealand has had an undersupply of housing for many years, and as a result house prices have been pushed incredibly high as supply has been unable to match strong demand. The record number of consents over the past year will help making some headway into alleviating some of the supply issues.



# Non-residential consents

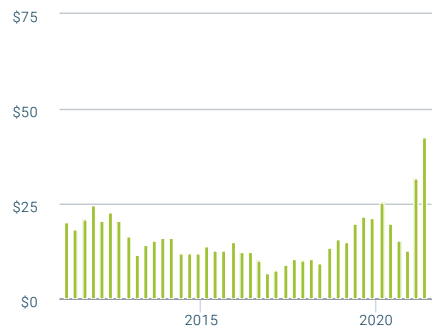
## Growth in value of consents

Annual average % change December 2020 - December 2021



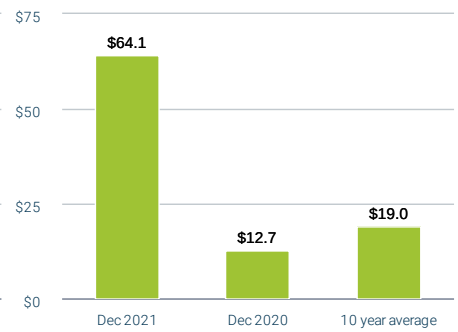
## Non-residential consents, Clutha District

\$m, annual running total, Clutha District



## Non-residential consents

Annual value (\$m), Clutha District



## Highlights for Clutha District

- Non-residential building consents to the value of \$64.1 million were issued in Clutha District during the year to December 2021.
- The value of consents increased by 404.7% over the year to December 2021. By comparison the value of consents increased by 16.2% in New Zealand and 7.1% in Otago Region over the same period.
- Over the last 10 years, consents in Clutha District reached a peak of \$64.1 million in the year to December 2021.

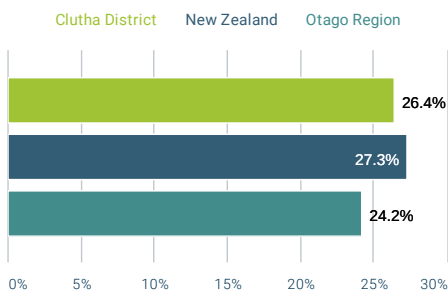
## National overview

The value of non-residential consents was \$8.2b in the year to December 2021, sitting 16% higher than in the 2020 year. Public consents drove growth over 2021, with the value of public consents sitting up 42%. Hospitals were responsible for a large share of this growth, with over a billion dollars of hospital consents approved in 2021. Factory and education consents were also strong, sitting up 63% and 22% respectively. Although non-residential consents were very strong over 2021, there was massive difference across building types, with those most impacted by COVID restrictions, such as accommodation, offices, and retail being notably weaker than others.

# House values

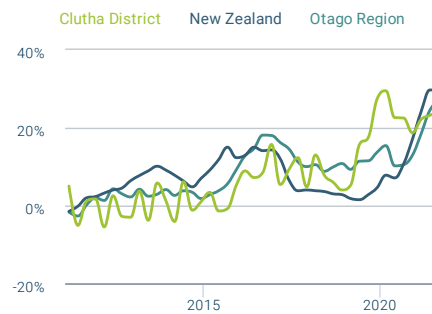
## Annual change in house value

Annual % change in house value December 2020 - December 2021



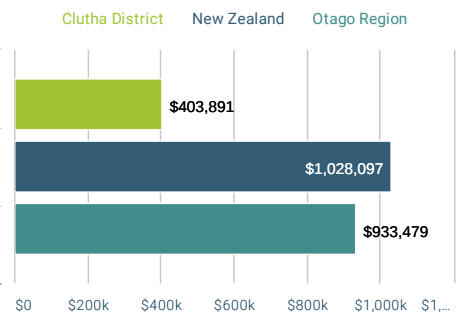
## House value growth

Annual % change



## Average current house value

Average house value in December 2021 quarter



## Highlights for Clutha District

- The average current house value in Clutha District was up 26.4% in December 2021 compared with a year earlier. Growth outperformed relative to Otago Region (24.2%) and underperformed relative to New Zealand (27.3%).
- The average current house value was \$403,891 in Clutha District in December 2021. This compares with \$933,479 in Otago Region and \$1,028,097 in New Zealand.

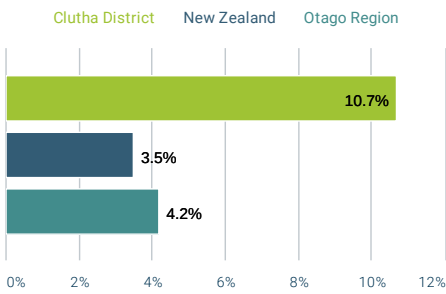
## National overview

House prices in New Zealand were sitting up 23%pa in December, with prices across the country reaching incredible highs over the year. Price growth across the country has been absurd over the past year, driven by incredibly low interest rates encouraging buyers into the market, and demand outstripping supply pushing prices up even further. It appeared as though there was no end in sight for house price growth, however the most recent months show the market has begun to turn a corner Annual price growth has started to flatten off from earlier highs, driven by new lending restrictions making it harder for buyers to access credit.

# House sales

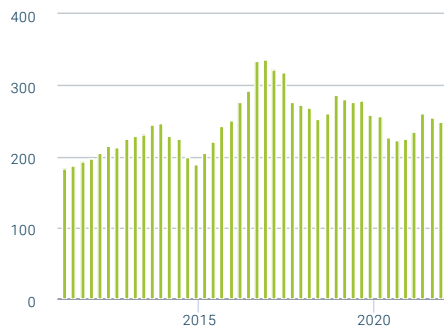
## Annual change in house sales

Annual average % change December 2020 - December 2021



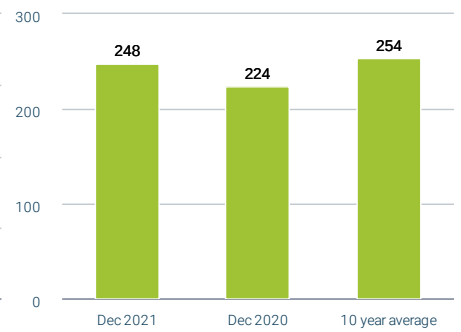
## House sales

Annual number, Clutha District



## House sales

Annual number, Clutha District



## Highlights for Clutha District

- House sales in Clutha District in the year to December 2021 increased by 10.7% compared with the previous year. Growth outperformed relative to Otago Region (4.2%) and New Zealand (3.5%).
- A total of 248 houses were sold in Clutha District in the 12 months ended December 2021. This compares with the ten year average of 254.

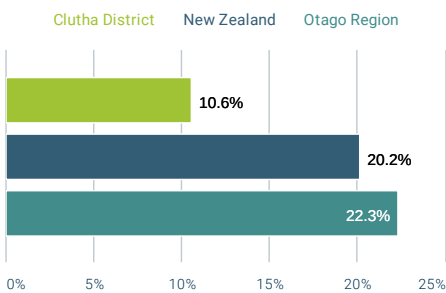
## National overview

House sales grew 3.5% over the year to December 2021. House sales have seen a dramatic slowdown in the second half of the year, after strong growth in the first half of 2021. The initial decline in sales was driven by a lack of available supply, with not enough houses being available on the market for buyers. However, particularly in recent months, new lending restrictions have made it harder for buyers to access credit and sales are continuing to drop despite listing numbers picking back up.

# Car registrations

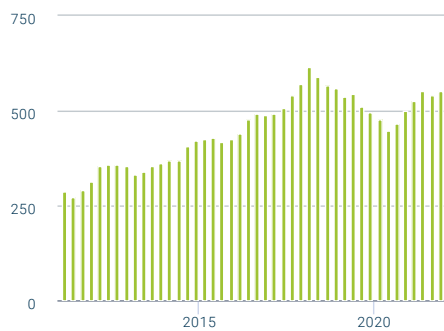
## Car registrations

Annual average % change December 2020 - December 2021



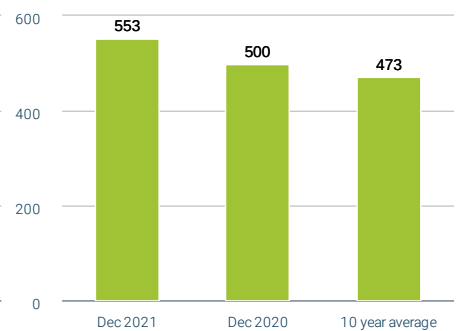
## Car registrations

Annual number, Clutha District



## Car registrations

Annual number, Clutha District



## Highlights for Clutha District

- The number of cars registered in Clutha District increased by 10.6% in the year to December 2021 compared with the previous 12 months. Growth was lower than in New Zealand (20.2%) and Otago Region (22.3%).
- A total of 553 cars were registered in Clutha District in the year to December 2021. This compares with the ten year average of 473.

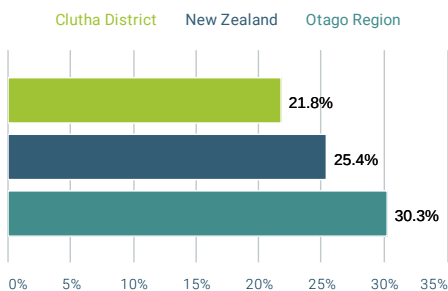
## National overview

New car registrations ended 2021 at a new annual record, with solid lift in the December month to see year-end growth sitting at 20%pa. Full-battery EV registrations rose 142% in 2021, accounting for 4.0% of total registrations – double their share in 2020. The new car market continues to go gangbusters, although used cars are still struggling, with less supply and sometimes eye-wateringly high prices. The 2022 year could see momentum in the car market shift back a gear, due to a range of factors. Interest rates are heading higher, and consumer confidence has weakened considerably, which is expected to limit household spending.

# Commercial vehicle registrations

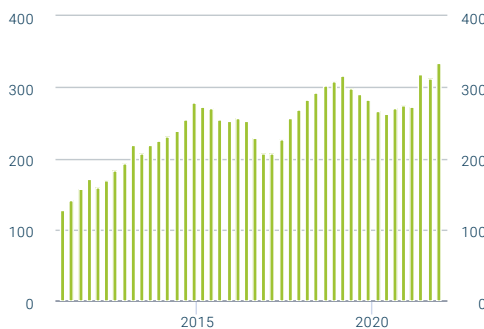
## Commercial vehicle registrations

Annual average % change December 2020 - December 2021



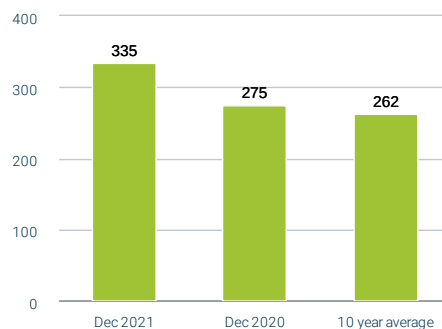
## Commercial vehicle registrations

Annual number, Clutha District



## Commercial vehicle registrations

Annual number, Clutha District



## Highlights for Clutha District

- The number of commercial vehicles registered in Clutha District increased by 21.8% in the year to December 2021 compared with the previous 12 months. Growth was lower than in New Zealand (25.4%) and Otago Region (30.3%).
- A total of 335 commercial vehicles were registered in Clutha District in the year to December 2021. This is higher than the ten year annual average of 262.

## National overview

Total new commercial registrations were up 34%pa in the December quarter, leaving commercial registrations in the 2021 year sitting 25% higher than 2020. There were nearly 51,000 new commercial vehicle registrations in 2021, the most we have on record since 1991. The bounce-back has been reflective of the boom in construction, high commodity prices, but also making up for the lack of activity in 2020. Early 2022 is expected to see this pickup in activity continue, particularly ahead of Clean Car Standard fees for higher-emitting vehicles (like some utes) entering in April 2022.

# Technical notes

## Building Consents

Building consents data is sourced from Statistics New Zealand. The number of residential consents issued for new dwellings is the measure for residential consents. For non-residential consents, the measure is the value of both new buildings and alterations.

## Consumer Spending

The consumer spending data is sourced from Marketview. It measures total electronic card spending using spending through the Paymark network and adding to it an estimate of non-Paymark network spending using the pattern of BNZ card holder spending at non-Paymark retailers. For further breakdown of the data by storetype and other variables contact Marketview.

## Employment (place of residence)

Employment data is based off a range of Stats NZ employment datasets, and represents the number of filled jobs, based on the area of residential address for the employee (rather than workplace address). This place of residence location means that the employment series reflects trends in employment of an area's residents, which may be different to trends in employment at businesses in an area, particularly when there are strong commuting flows. The most recent quarter is based off the average of Monthly Employment Indicator (MEI) filled jobs from Statistics New Zealand for the past three months, with previous quarters being backcasted using the percentage change in the quarterly Business Data Collection dataset published by Statistics New Zealand.

## Gross Domestic Product

Gross Domestic Product is estimated by Infometrics. A top-down approach breaks national industrial production (sourced from production based GDP measures published by Statistics New Zealand) to TA level by applying TA shares to the national total. Each TA's share of industry output is based on labour market data from LEED. GDP growth in recent quarters is based on a model which uses the various partial economic indicators presented in this report as inputs. Estimates of GDP for these most recent quarters are provisional until Infometrics updates its annual GDP series in the Regional Economic Profile at the beginning of each year. Gross domestic product is measured in 2021 dollar terms.

## Health Enrolments

Health enrolments are sourced from the Ministry of Health. They record the number of people in each area who are enrolled with a Primary Health Organisation (PHO). Enrolment is voluntary, but most New Zealanders enrol at a general practice for health reasons and for the benefits of enrolment, such as cheaper doctors' visits and reduced costs of prescription medicines. Changes to how the Ministry of Health recorded this data led to Infometrics revising our approach to health enrolment figures for the March 2019 Quarterly Economic Monitor onwards. Our new approach completely revises our timeseries of health enrolments, so care should be taken when comparing the March 2019 report with previously downloaded reports.

Previously, the data provided was only for those people whose addresses are able to be accurately recorded by the Ministry of Health. We have now switched to breaking down TA-level health enrolments based on trends in stated health enrolments by area, to ensure that the total number of enrolees published in the Monitor align with the national-level figures published by the Ministry of Health. A new system for classifying and recording health enrolment addresses from March 2019 onwards by the Ministry means significantly higher numbers of unallocated enrolees, resulting in the need to review our model.

## House Sales

The number of house sales is sourced from REINZ. The indicator measures the number of house sales at the point when the sale becomes unconditional. The unconditional date is the date when all the terms of an agreement have been satisfied and the sale and purchase can proceed to settlement.

## House Values

House values (dollar value) are sourced from CoreLogic. The levels quoted in the report are average values for the quarter.

## Jobseeker Support Recipients

In July 2013 the New Zealand's welfare system changed to better recognise and support people's work potential. As part of this the Jobseekers Support benefit was introduced. This benefit is for people who can usually look or prepare for work but also includes people who can only work part-time or can't work at the moment, for example, because they have a health condition, injury or disability.

Data presented for the September 2013 quarter onwards is provided by the Ministry of Social Development (MSD). Data prior to September 2013 are Infometrics estimates based on re-grouping pre-July 2013 benefit categories to be consistent with the post-July 2013 benefit categories. The pre-July 2013 benefit categories used to estimate the number of Jobseekers Support recipients are: Unemployment Benefit and Unemployment Benefit Hardship; Unemployment Benefit Training and Unemployment Benefit Hardship Training; Sickness Benefit and Sickness Benefit Hardship; Domestic Purposes Benefit - Sole Parent (if youngest child is 14 or over); Women Alone and Widow's Benefit (without children or with children 14 or over)

## Tourism Expenditure

New Tourism Electronic Card Transactions (TECTs) are an interim replacement for the Monthly Regional Tourism Estimates (MRTes). We have removed our previous timeseries of MRTes and published the three annual snapshots provided in the TECTs. The TECTs reflect the expenditure for all electronic card transactions (ECTs) in New Zealand related to tourism. Marketview use a base of spending on the Paymark network (approximately 70 per cent of total ECT spend) to scale up to total ECT spend.

## Traffic Flow

Traffic flow growth rates are calculated from the number of vehicles passing approximately 110 sites monitored by New Zealand Transport Agency. Each of the sites has been mapped to a territorial authority.

## Unemployment Rate

Regional level unemployment rates are sourced from Statistics New Zealand's Household Labour Force Survey. Trends in the number of Jobseekers are used to break down regional unemployment rates to TA levels. The TA level unemployment rates are benchmarked on census following the release of each census. To reduce volatility the unemployment rate is presented as an average for the last four quarters.

## Vehicle Sales

Car and commercial vehicle sales data are sourced from New Zealand Transport Authority. Sales are based on new registrations which include the first time registration of new vehicles and used vehicles imported from overseas.

## Weekly Rents

Rents (\$ per week) are sourced from monthly data provided by MBIE and averaged across each quarter or year using weighted geometric means. Rental data pertains to averages from data collected when bonds are lodged and does not control for specifications of the home (eg. size, number of bedrooms, age of home, etc).