

### Overview of Mackenzie District

Mackenzie District's economy has been performing strongly, with Infometrics' provisional estimates showing GDP growth of 3.5% in the year to September 2019, compared to 2.4% nationally.

Statistics New Zealand's annual estimates show Mackenzie's population grew by 2.6% in the year to June 2019, well ahead of the national rate of 1.6%. Unemployment in the district remains at a very low level – 0.9% in the year to September 2019, reflecting an extremely tight labour market. Jobseeker Support recipients have notched up following a national trend, which was driven by relaxation of rules around benefit sanctions and eligibility.

Mackenzie's house values held steady over the year to September 2019, following several years of very strong price growth. The average house in the district is worth \$535,400. The number of houses sold has eased by 6.8%, but remains high after several years of growth. This has spurred on the construction sector, with residential consents up 8.2% for the year, and over double the long-term average level. Non-residential consents have eased but the sector remains busy with previously consented projects.

Guest nights in the district have grown by 6.6% over the past year, a particularly strong result compared to national growth of 1.2%, as the tourism sector settles into a plateau level. Visitor expenditure was down slightly though.

Car registrations in the district were down by 10.3%, following a national trend, however commercial vehicle registrations jumped by 15.9%, ahead of a national decline of 1.6%. Traffic on state highways through the district continues to grow, at 2.3%, well ahead of the national average of 1.3%.

Upward revisions in dairy payouts point to an expected payout of \$7.05 per kg of milk solids in the 2019/20 season, leading to an additional \$4m payout for Mackenzie district farmers compared to last season. With uncertainty in the farming community around carbon and freshwater regulations, we expect much of the extra payout to go towards paying down debt, rather than flowing through to on-farm investment and rural suppliers.

Indicator	Mackenzie District	Canterbury Region	New Zealand
<i>Annual average % change</i>			
Gross domestic product	↑ 3.5%	↑ 1.9%	↑ 2.4%
Traffic flow	↑ 2.3%	↓ -0.8%	↑ 1.3%
Health Enrolments	↑ 5.3%	↑ 1.7%	↑ 2.0%
Consumer spending	↑ 7.6%	↑ 1.9%	↑ 3.4%
Residential consents	↑ 8.2%	↑ 12.2%	↑ 12.0%
Non-residential consents	↓ -22.7%	↑ 23.1%	↑ 12.7%
House prices*	↑ 0.2%	↑ 2.2%	↑ 1.9%
House sales	↓ -6.8%	↑ 3.3%	↓ -0.7%
Guest nights	↑ 6.6%	↑ 1.3%	↑ 1.2%
Tourism expenditure	↓ -1.7%	↑ 3.0%	↑ 3.1%
Car registrations	↓ -10.3%	↓ -11.1%	↓ -8.5%
Commercial vehicle registrations	↑ 15.9%	↓ -5.1%	↓ -1.6%
Jobseeker Support recipients	↑ 31.2%	↑ 15.4%	↑ 10.3%
<i>Level</i>			
Unemployment rate	0.9%	3.7%	4.2%

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

### Overview of national economy

Warning signs continue to appear for the direction of the New Zealand economy over the next few years, even as current activity remains solid. There is a growing divide between current activity and the outlook for the future, with global and domestic uncertainty at odds with current demand-led growth. There are both upside and downside risks to the future direction of travel, although on balance a deteriorating economic outlook is more likely. An expected pick-up in the housing market over 2020 has the potential to draw the economy out of the doldrums, but continued slower global economic growth, low domestic investment, and slowing spending growth could tip the economy in the other direction.

# Gross domestic product (provisional)

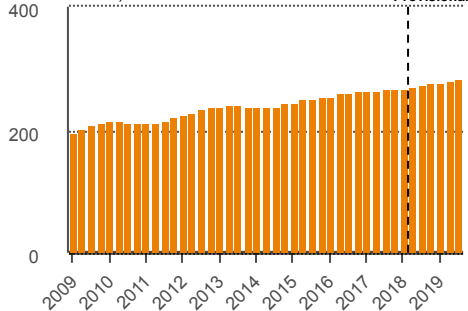
## Gross domestic product growth (provisional)

Annual average % change Sep 18 - Sep 19



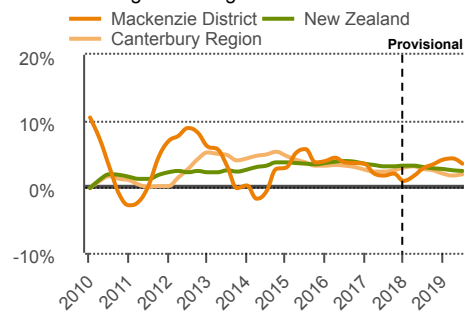
## Gross domestic product (provisional, \$m)

Annual level, Mackenzie District



## Gross domestic product growth (provisional)

Annual average % change



## Highlights for Mackenzie District

- GDP (provisional) in Mackenzie District was up 3.5% for the year to September 2019 compared to a year earlier. Growth was higher than in New Zealand (2.4%) and higher than in Canterbury Region (1.9%).
- GDP (provisional) was \$282 million in Mackenzie District for the year to September 2019 (2010 prices).
- Annual GDP growth in Mackenzie District peaked at 10.5% in the year to March 2010.

## National overview

The latest provisional estimates from Infometrics indicate economic growth continues to slow, with the economy expanding 2.4%pa over the 12 months to September 2019. Global growth expectations remain lower, particularly regarding China, other Asian economies, and Germany. No resolution has yet emerged in the US-China trade war, even as much bluster from other sides persists. Domestically, slowing private expenditure and falling business investment remains a drag on growth, and there are growing calls, and solidifying expectations, for increased government spending to be announced at the Half Year Economic and Fiscal Update (HYEFU) in December.

# Unemployment rate

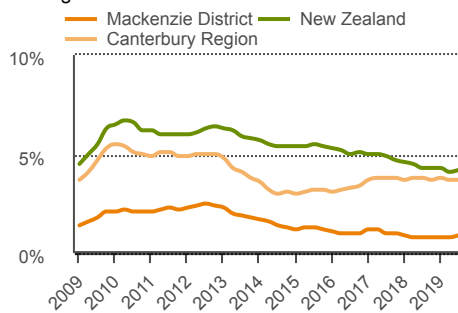
## Unemployment rate

Average annual rate, year to September 2019



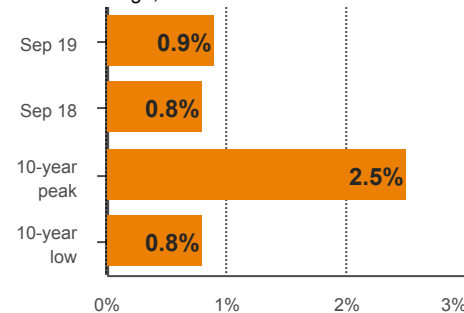
## Unemployment rate

Average annual rate



## Unemployment rate

Annual average, Mackenzie District



## Highlights for Mackenzie District

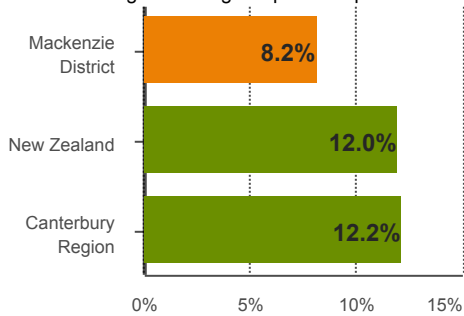
- The annual average unemployment rate in Mackenzie District was 0.9% in September 2019, up from 0.8% a year earlier.
- The unemployment rate in Mackenzie District was lower than in New Zealand, where the unemployment rate averaged 4.2% over the year to September 2019.
- Over the last ten years the unemployment rate reached a peak of 2.5% in September 2012;

## National overview

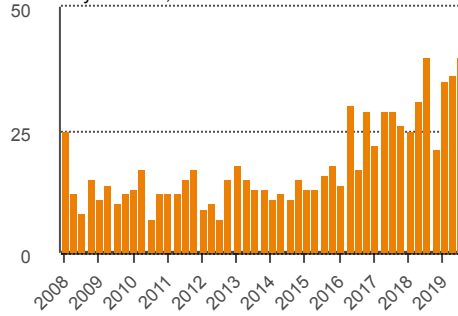
The unemployment rate rose in the September quarter, bringing the annual average rate up to 4.2%. We expect competition for workers to remain strong over the coming year. Employment growth was relatively subdued in the September quarter as a rise in full-time employment was mostly offset by a fall in part-time employment. Labour cost inflation rose 2.4%pa, the fastest growth rate since December 2011 as a tight labour market gives employees more bargaining power.

# Residential consents

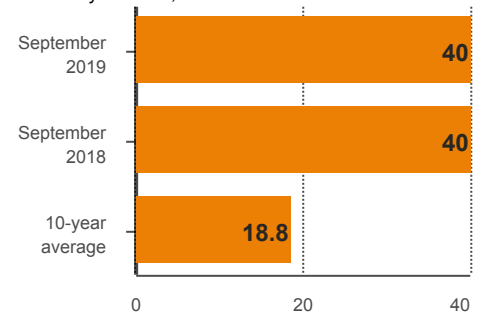
**Growth in no. of new dwelling consents**  
Annual average % change Sep 18 - Sep 19



**Residential consents**  
Quarterly number, Mackenzie District



**Number of new dwelling consents**  
Quarterly number, Mackenzie District



## Highlights for Mackenzie District

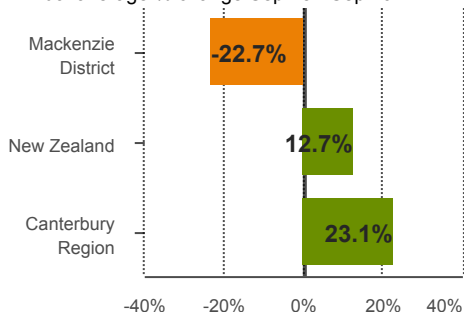
- A total of 40 new residential building consents were issued in Mackenzie District in the September 2019 quarter, compared with 40 in the same quarter last year.
- On an annual basis the number of consents in Mackenzie District increased by 8.2% compared with the same 12-month period a year ago. The number of consents in New Zealand increased by 12.0% over the same period.

## National overview

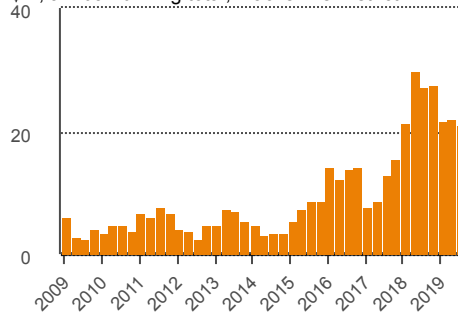
Dwelling consents continue to grow, up 5.9%pa over the September 2019 year, taking annual consents to above 36,400. Demand for additional housing stock remains strong, with an undercount of up to 30,000 homes around the country. At the same time, house prices look to be on the resurgence, with even Auckland prices looking set to rise again by the end of 2019. Denser housing options are driving the growth in residential consents, with medium-density townhouses up significantly on a year earlier.

# Non-residential consents

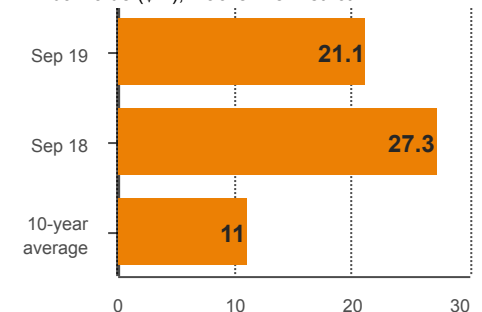
**Growth in value of consents**  
Annual average % change Sep 18 - Sep 19



**Non-residential consents, Mackenzie District**  
\$m, annual running total, Mackenzie District



**Value of non-residential consents**  
Annual value (\$m), Mackenzie District



## Highlights for Mackenzie District

- Non-residential building consents to the value of \$21 million were issued in Mackenzie District during the year to September 2019.
- The value of consents decreased by -22.7% over the year to September 2019. By comparison the value of consents in New Zealand increased by 12.7% over the same period.
- Over the last 10 years, consents in Mackenzie District reached a peak of \$30 million in the year to June 2018.

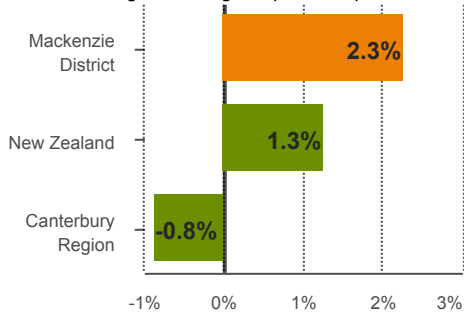
## National overview

Non-residential consent values rose 12.7%pa over the September 2019 year to nearly \$7.6b in expected work. Growth in public sector activity has headed higher in recent months even as private sector intentions plod along, as weak investment intentions undermine businesses' willingness to commit to new developments. Accommodation and social building projects have been key to the growth in construction over the last year, with both building types recording growth of over 50%pa. Capacity pressures continue to hamper expectations for turning non-residential consents into actual construction activity without higher prices or delays.

# Traffic flow

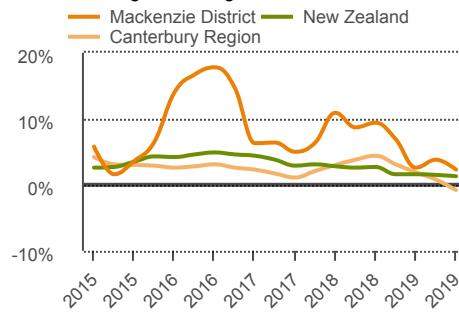
## Annual change in traffic flows

Annual average % change Sep 18 - Sep 19



## Traffic volume growth

Annual average % change



## Highlights for Mackenzie District

- Traffic flows in Mackenzie District increased by 2.3% over the year to September 2019. This compares with an increase of 1.3% in New Zealand.

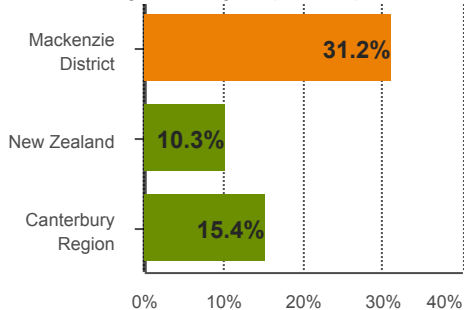
## National overview

Traffic growth continues to moderate, with the number of vehicles on the road rising 1.3%pa over the 12 months to September 2019. Traffic volumes growth has remained below 2% since the end of 2018, with a gradual decline in growth reflective of a long, slow, slowdown in the New Zealand economy. Fuel prices remain at elevated levels, similar to those seen in the June quarter, which has likely remained a restraint on increased vehicle activity. Traffic on the East Coast of the North Island continued to record solid growth in vehicle movements, while Auckland traffic flows increased to 1.0%pa.

# Jobseekers

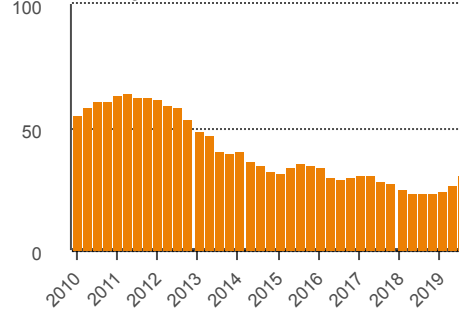
## Annual change in Jobseekers

Annual average % change Sep 18 - Sep 19



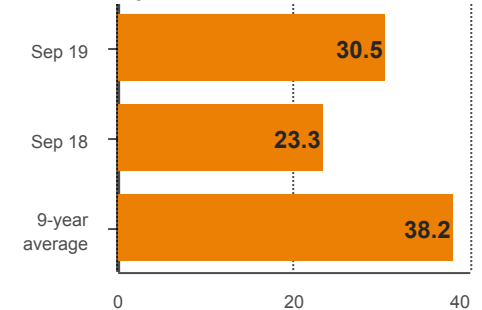
## Jobseekers

Annual average, Mackenzie District



## Jobseekers

Annual average, Mackenzie District



## Highlights for Mackenzie District

- Working age Jobseeker Support recipients in Mackenzie District in the year to September 2019 increased by 31.2% compared with the previous year. Growth was higher relative to New Zealand, where the number of Jobseeker Support recipients increased by 10.3%.
- An average of 31 people were receiving a Jobseeker Support benefit in Mackenzie District in the 12 months ended September 2019. This compares with an average of 38 since the start of the series in 2010.

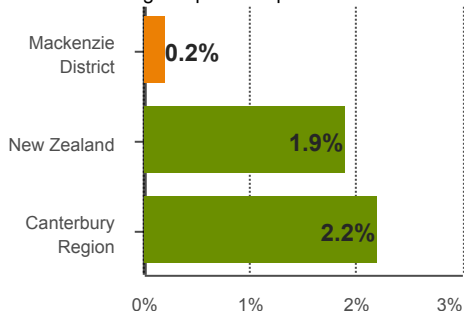
## National overview

Jobseeker Support recipient numbers continue to rise across New Zealand, with a rise of over 10% over the 12 months to September 2019. Jobseeker Support recipients now make up 4.8% of the working age population. Less rigorous welfare policies have contributed to the increase in Jobseeker Support recipient numbers. However, it is also becoming clear that part of the reason behind the rise in social assistance levels is a decline in the number of people actively engaging in the labour market. Over the year to September 2019, there was a 3.8%pa increase in the number of people not in the labour force, the fastest annual growth since 1989.

# House prices

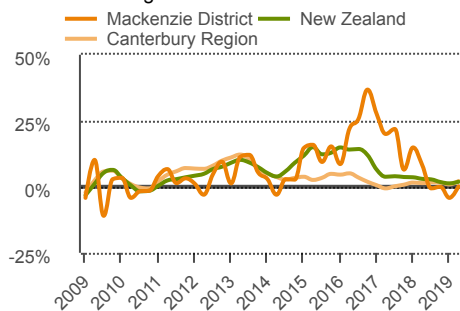
## Annual change in house prices

Annual % change Sep 18 - Sep 19



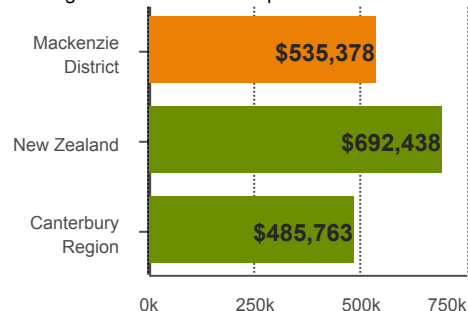
## House price growth

Annual % change



## Average current house value

Average for 12 months to Sep 2019



## Highlights for Mackenzie District

- The average current house value in Mackenzie District was up 0.2% in September 2019 compared with a year earlier. Growth underperformed relative to New Zealand, where prices increased by 1.9%.
- The average current house value was \$535,378 in Mackenzie District over the September 2019 year. This compares with \$692,438 in New Zealand.

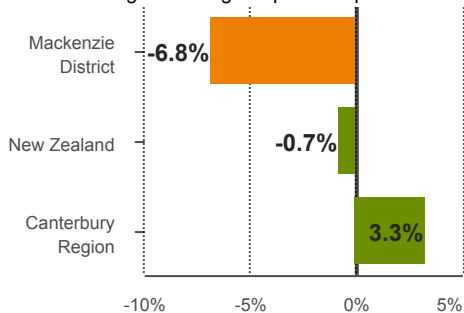
## National overview

A housing market revival appears to be on the cards in 2020, with subdued prices earlier in 2019 giving way to faster growth in recent months. Over the 12 months to September 2019, prices rose 1.9%pa. Even Auckland prices, which have been in decline in 2019, are showing signs of a possible recovery by the end of the year. We expect that lower interest rates over the last year, the scrapping of the capital gains tax proposal, and the loosening of loan to value ratio restrictions, with the potential for more to come, will see a boost to the housing market over 2020.

# House sales

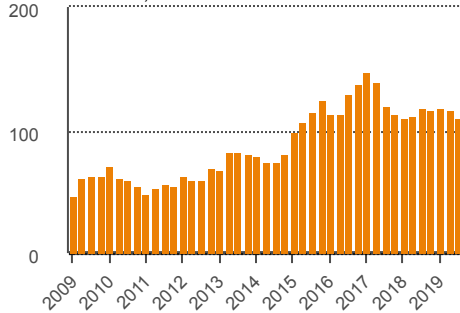
## Annual change in house sales

Annual average % change Sep 18 - Sep 19



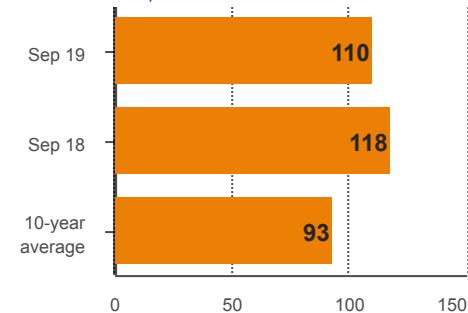
## House sales

Annual number, Mackenzie District



## House sales

Annual number, Mackenzie District



## Highlights for Mackenzie District

- House sales in Mackenzie District in the year to September 2019 decreased by 6.8% compared with the previous year. Growth underperformed relative to New Zealand, where sales decreased by 0.7%.
- A total of 110 houses were sold in Mackenzie District in the 12 months ended September 2019. This compares with the ten year average of 93.

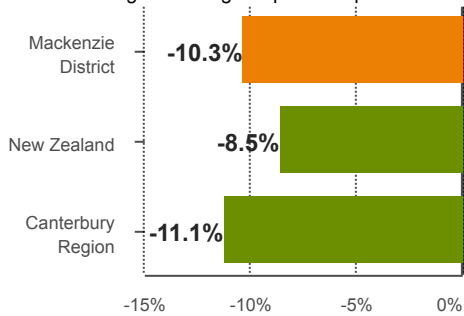
## National overview

Property sales across New Zealand continue to decline, down 0.7%pa nationally over the September 2019 year, but have improved over the last few months. Affordability pressures and a range of regulatory actions have scared off potential investors, with rental reforms (via the healthy homes standards and ringfencing of rental losses) combining with unaffordability issues to restrain purchasing activity by both owner-occupiers and investors. Inventory data from realestate.co.nz also shows available sales stocks remain low, but we expect sales to pick up in 2020 as more buyers are drawn into the market.

# Car registrations

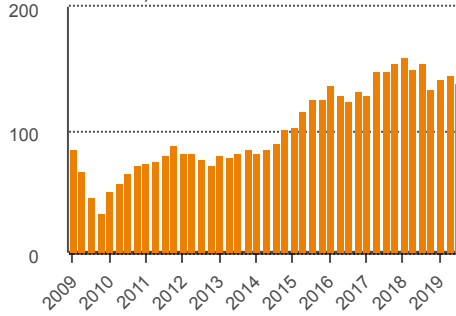
## Car registrations

Annual average % change Sep 18 - Sep 19



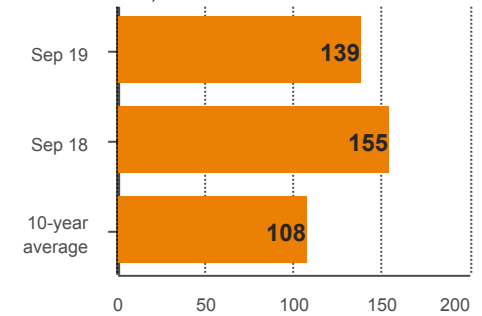
## Car registrations

Annual number, Mackenzie District



## Car registrations

Annual number, Mackenzie District



## Highlights for Mackenzie District

- The number of cars registered in Mackenzie District decreased by -10.3% in the year to September 2019 compared with the previous 12 months. Growth was lower than in New Zealand, where car sales decreased by -8.5%.
- A total of 139 cars were registered in Mackenzie District in the year to September 2019. This compares with the ten year average of 108.

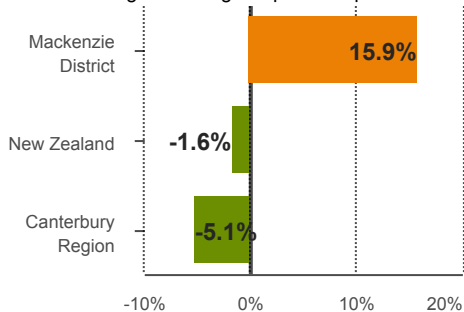
## National overview

The decline in car registrations continued in the year to September 2019, down 8.5%. Used car registrations, especially for large used cars, are falling faster than new car registrations. Below-average consumer confidence, subdued business confidence, and softening employment prospects reflect a slowing domestic economy in which consumers and businesses are increasingly cautious about making major purchases.

# Commercial vehicle registrations

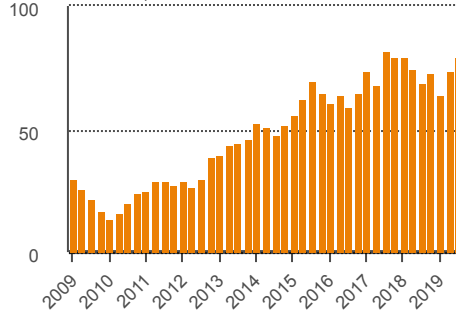
## Commercial vehicle registrations

Annual average % change Sep 18 - Sep 19



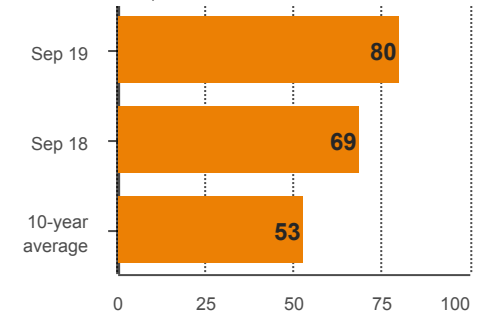
## Commercial vehicle registrations

Annual number, Mackenzie District



## Commercial vehicle registrations

Annual number, Mackenzie District



## Highlights for Mackenzie District

- The number of commercial vehicles registered in Mackenzie District increased by 15.9% in the year to September 2019 compared with the previous 12 months. Growth was higher than in New Zealand, where commercial vehicle sales decreased by -1.6%.
- A total of 80 commercial vehicles were registered in Mackenzie District in the year to September 2019. This is higher than the ten year annual average of 53.

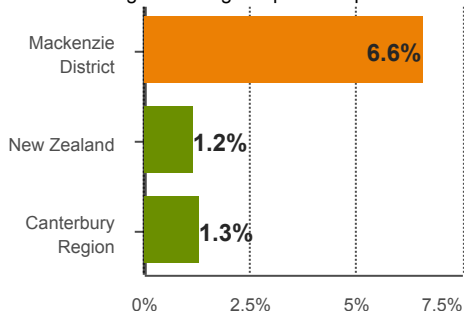
## National overview

Commercial vehicle registrations fell 1.6% in the year to September 2019 with rising medium commercial vehicle registrations being offset by falls in light and very heavy vehicles. Residential construction is maintaining demand for the movement of aggregates, timber and other construction products, and freight firms are benefitting from high commodity prices. But, concern about the domestic and global economic outlook is depleting business confidence and, with it, firms' willingness to invest in new vehicles.

# Guest nights

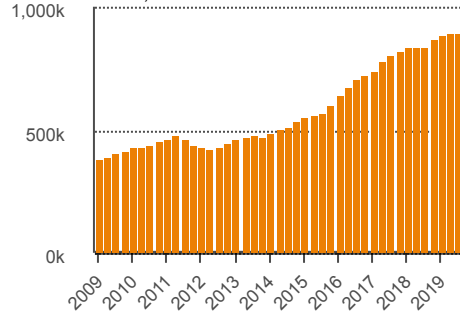
## Guest nights

Annual average % change Sep 18 - Sep 19



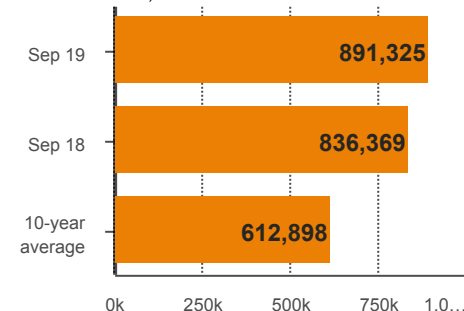
## Guest nights

Annual number, Mackenzie District



## Guest nights

Annual number, Mackenzie District



## Highlights for Mackenzie District

- Total guest nights in Mackenzie District increased by 6.6% in the year to September 2019. This compares with an increase of 1.2% in New Zealand.
- Visitors stayed a total of 891,325 nights in Mackenzie District during the year to September 2019, which was up from 836,369 a year ago.

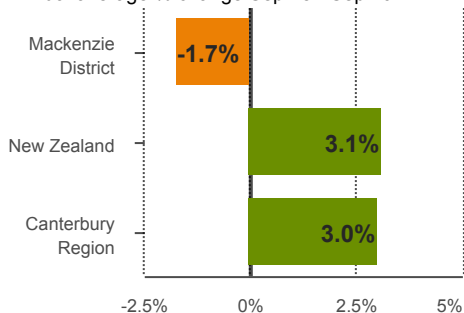
## National overview

Growth in guest nights slipped to 1.2% over the 12 months to September 2019. Domestic guest night growth remains strong at 4.0%. This growth is at odds with this year's weaker consumer confidence and consumer spending, and tepid domestic visitor spending growth, and suggests that Kiwis are still willing to go on vacation, albeit with tighter budgets. International guest nights fell for the third consecutive quarter, down 2.4% over the 12 months to September 2019. Falling Chinese tourist arrivals continue to be a drag on guest nights, with Chinese arrivals falling 8.8% in the 12 months to September 2019 – the highest fall since 2011. However, an overall rise in international tourist arrivals suggests that tourists from overseas are spending fewer nights per trip in New Zealand.

# Tourism Spending

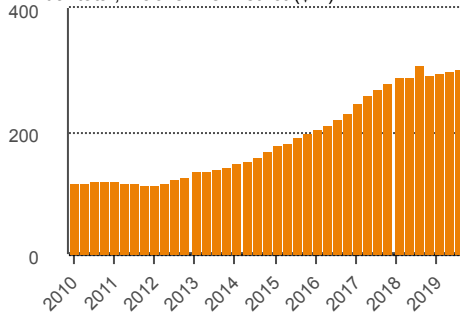
## Tourism expenditure

Annual average % change Sep 18 - Sep 19



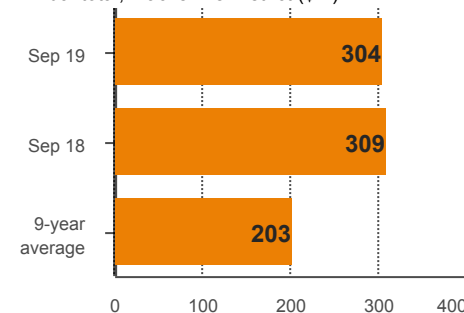
## Tourism expenditure

Annual total, Mackenzie District (\$m)



## Tourism expenditure

Annual total, Mackenzie District (\$m)



## Highlights for Mackenzie District

- Total tourism expenditure in Mackenzie District decreased by 1.7% in the year to September 2019. This compares with an increase of 3.1% in New Zealand.
- Total tourism expenditure was approximately \$304m in Mackenzie District during the year to September 2019, which was down from \$309m a year ago.

## National overview

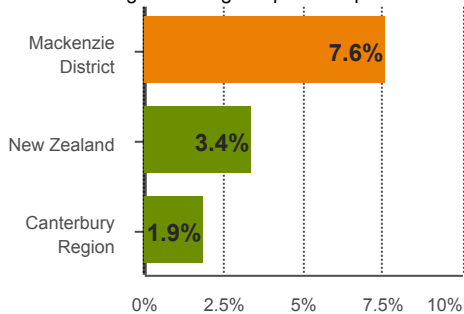
Visitor spending maintained its lacklustre performance rising 3.1% in the September 2019 year. Domestic visitor growth weakened to 1.3% in the September year, as subdued population growth and a slowing domestic economy put a dampener on consumer spending. International visitor spending rose 5.9% in the September 2019 year, with 5.9% growth in spending by Australian tourists (our biggest market) and a 17% rise in spending by tourists from the US offsetting a 2.2% fall in spending by Chinese tourists.



# Consumer Spending

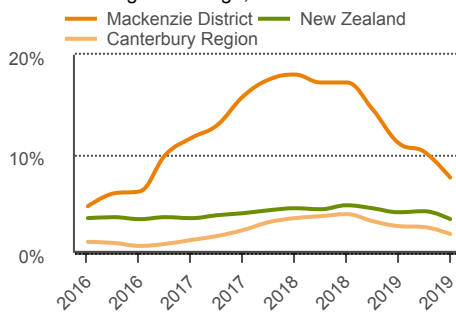
## Growth in consumer spending

Annual average % change Sep 18 - Sep 19



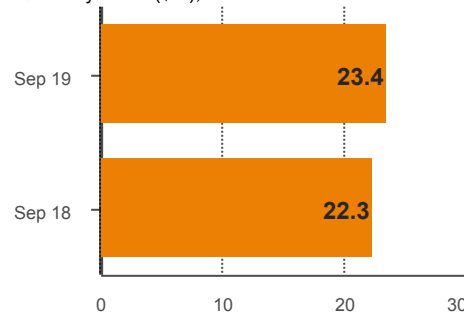
## Consumer spending (\$m)

Annual average % change, Mackenzie District



## Consumer spending

Quarterly value (\$m), Mackenzie District



## Highlights for Mackenzie District

- Electronic card consumer spending in Mackenzie District, as measured by Marketview, increased by 7.6% over the year to September 2019 compared to the previous year. This compares with an increase of 3.4% in New Zealand.

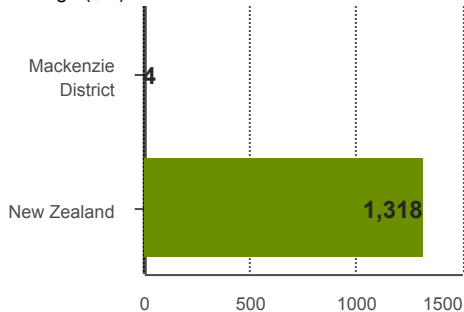
## National overview

Households continue to be optimistic about the economy, and are keeping their wallets open, with consumer spending rising 3.4%pa over the 12 months to September 2019. Wages continue to grow, up 2.4%pa in September, which is supporting household spending intentions. Consumer spending is growing at a slower pace than a year earlier, reflecting a more cautious outlook by households, but is still at a relatively high level. We expect consumer spending growth will continue to ease, dragging down our expectations for higher economic growth.

# Total dairy payout

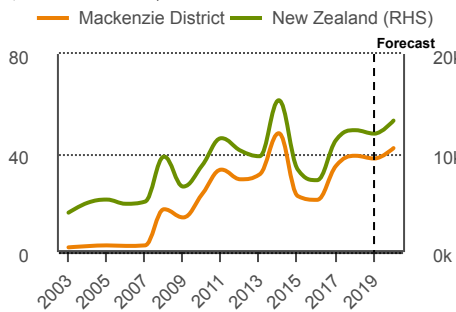
## Total dairy payout

Change (\$m) between 2018/19 and 2019/20 seasons



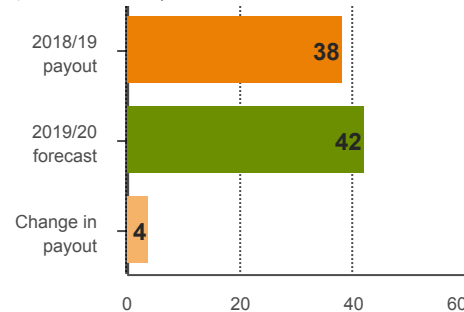
## Total dairy payout

\$m each season, Mackenzie District



## Total dairy payout

\$m each season, Mackenzie District



## Highlights for Mackenzie District

- Mackenzie District's total dairy payout for the 2018/19 season is estimated to have been approximately \$37.8m.
- Mackenzie District's dairy payout for the 2019/20 season is expected to be approximately \$42.0m, \$4.17m 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 \$11,961m in the 2018/19 season, and is expected to be \$1,318m higher in the 2019/20 season.

## National overview

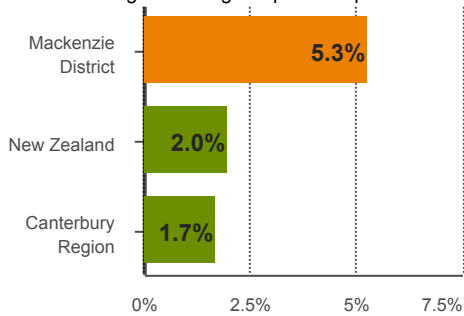
New Zealand's dairy sector outlook has improved significantly over the last month, with strong trade prices strengthening pay-out expectations for the 2019/20 season. Fonterra's recent milk pay-out revision to between \$6.55-\$7.55/kgms, with a midpoint of \$7.05, is in line with our own internal expectations for the milk price. This pay-out will put \$1.3b more into the economy over the next year. This higher pay-out will be welcome news to regional New Zealand after downbeat dairy news in recent months. Higher dairy prices have been driven by tightened milk supply, with milk volumes globally continuing to see only sluggish growth, and even New Zealand's production growth has slowed back to 1.2%pa in September.



# Health Enrolments

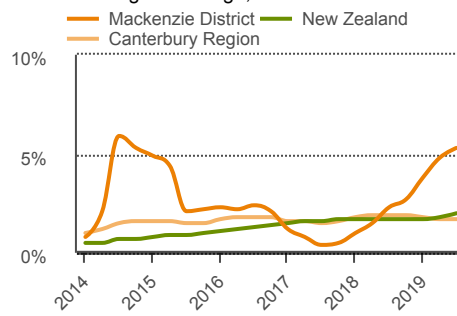
## Annual change in Health enrolments

Annual average % change Sep 18 - Sep 19



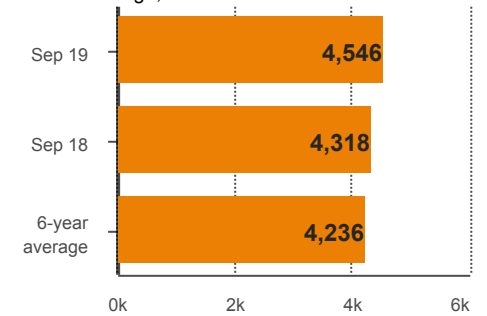
## Health enrolments

Annual average % change, Mackenzie District



## Health enrolments

Annual average, Mackenzie District



## Highlights for Mackenzie District

- The number of people enrolled with a primary health organisation in Mackenzie District in the year to September 2019 increased by 5.3% compared with the previous year. Growth was higher relative to New Zealand, where the number of enrolments increased by 2.0%.
- An average of 4,546 people were enrolled with primary healthcare providers in Mackenzie District in the 12 months ended September 2019. This compares with an average of 4,236 since the start of the series in 2013.

## National overview

The number of people enrolled at a primary health organisation continues to grow, with enrolments up 2.0%pa over the 12 months to September 2019. Health enrolment growth has sped up over the last year, with more than 100,000 more people enrolling over the period. Over the same period, the estimated national population grew by 1.7%pa according to Statistics NZ. Although not a perfect measure, health enrolments provide timely and understandable insights into changes in local populations.

# Technical notes

## 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) is broken down to TA level by applying TA shares to the national total. Each TA's share of industry output is based on earnings 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.

## Unemployment

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.

## 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.

## 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.

## Accommodation

The number of guest nights is sourced from Statistics New Zealand's Accommodation Survey. A guest night is equivalent to one guest spending one night at an establishment. For example, a motel with 15 guests spending two nights would report that they had provided 30 guest nights.

## Tourism Expenditure

Tourism expenditure data is sourced from the Ministry of Business, Innovation and Employment's (MBIE) Monthly Regional Tourism Estimates. These are estimated values for tourism spending that approximate values found in the International Visitor Survey (IVS) and Tourism Satellite Account (TSA), using modelling of a sample of electronic card spending throughout New Zealand from domestic and international accounts.

## 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 value (dollar value) are sourced from QVNZ. The levels quoted in the report are average current values over the past 12 months. An average current value is the average (mean) value of all developed residential properties in the area based on the latest house value index from QVNZ. It is not an average or median sales price, as both of those figures only measure what happens to have sold in the period. These average current values are affected by the underlying value of houses (including those not on the market) and are quality adjusted based on the growth in each house's price between sales.

## Building Consents

Building consents data are sourced from Statistics New Zealand. Non-residential consents include the value of both new buildings and alterations.

## 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.

## Dairy

Dairy data has been sourced from the "New Zealand Dairy Statistics", a publication co-owned by DairyNZ and LIC, as well as calculations made by Infometrics. The data accords to dairy seasons, which run from June to May. Total dairy payouts in each territorial authority have been calculated by Infometrics by utilising milk solids production in conjunction with Fonterra's farmgate milk price (excluding dividends) from the dairy season in question. For the current season, Infometrics calculates a payout forecast using our own expectation of the farmgate milk price and the assumption that milk solids production continues running at the same level from the previous season.

## Jobseekers Support

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)

## 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 enrollees 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 enrollees, resulting in the need to review our model.

## Earnings

The earnings data comes from the quarterly Linked Employer Employee Data (LEED) published by Statistics New Zealand. LEED publishes the mean earnings of full quarter jobs for each quarter. Full quarter jobs may include full time and part time jobs. Earnings include overtime and lump sum payments. We sum the mean earnings for the four quarters making up the year to arrive at an estimate of average annual earnings. Infometrics projects average annual earnings to the current quarter using growth rates in industry earnings measured in the Labour Cost Index.