

Overview of Rotorua District

The economic upturn in Rotorua continued during autumn and early winter. Infometrics' provisional estimate of GDP showed growth in Rotorua's economy of 3.0% over the June 2017 year, compared to 2.8% growth nationally. The 4.3% lift in traffic flows further highlights the additional activity occurring in the district. Most indicators of spending and investment are showing expansion, while elevated net migration is adding to population growth.

Despite the increase in economic activity, there has still been some upward movement in the number of people seeking Jobseeker Support. This indicator is at odds with rising activity in many sectors, suggesting that there could be a mismatch between skills demanded at present and what some people have to offer.

Although house price growth in Auckland has moderated, prices in provincial settings that were slower to get going in the first place, such as Rotorua, continue to climb more rapidly. House prices in Rotorua grew 18% over the June 2017 year. Despite this growth, new dwelling consents flattened off over the June year.

Fans arriving for the Lions vs Māori All Blacks match in Rotorua on June 17 capped off what had already been a stellar year for Rotorua's tourism sector. Visitor spending in Rotorua during June was \$51m, compared to \$45m in June 2016. This strong start to winter took spending over the June year to a record \$799m, compared with \$750m the previous year.

Activity in the forestry sector gained some traction in the first half of 2017, with production levels improving and earnings up. Forestry export prices have risen on the back of strong demand from China. Timber processors are also enjoying strengthening demand from high levels of homebuilding activity across New Zealand. Red stag has invested more than \$100m in Rotorua and recently opened a new mill that currently processes more than 550,000 cubic metres of timber per annum.

Infometrics' estimates show Rotorua's total dairy payout in the 2016/17 season was \$365m, up \$134m from the previous year. Although some of this additional money will go into debt repayment, there will be some scope for modest spending increases by dairy farmers. Moreover, Fonterra has recently increased its farmgate milk price forecast from \$6.50 to \$6.75/kgms for the 2017/18 season.

Indicator	Rotorua District	Bay of Plenty Region	New Zealand
<i>Annual average % change</i>			
Gross domestic product	↑ 3.0%	↑ 3.3%	↑ 2.8%
Traffic flow	↑ 4.3%	↑ 6.6%	↑ 3.3%
Residential consents	↓ -0.8%	↑ 7.1%	↑ 4.7%
Non-residential consents	↑ 13%	↑ 1.4%	↑ 1.6%
House prices*	↑ 18%	↑ 15%	↑ 6.7%
House sales	↓ -23%	↓ -25%	↓ -14%
Guest nights	↑ 5.3%	↑ 6.3%	↑ 3.7%
Retail trade	↑ 5.9%	↑ 6.6%	↑ 3.6%
Car registrations	↑ 8.0%	↑ 10%	↑ 9.5%
Commercial vehicle registrations	↑ 34%	↑ 23%	↑ 20%
Jobseeker Support recipients	↑ 2.2%	↓ -1.5%	↑ 1.2%
Tourism expenditure	↑ 6.6%	↑ 6.1%	↑ 5.9%
<i>Level</i>			
Unemployment rate	6.8%	5.9%	5.0%
International net migration	816	2,234	72,297

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

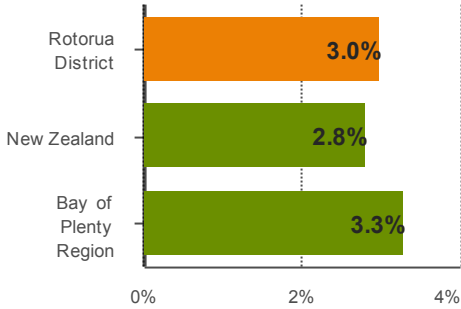
Overview of national economy

The ratio of New Zealand's export prices relative to the cost of imports is close to historic highs, thanks to soaring demand for many of the country's key export commodities and a butter boom. With service sector and construction activity also elevated, there remains significant momentum left in the New Zealand economy. But forecasts of interest rate increases have been pushed out as domestic inflation pressures aren't lifting as fast as had been anticipated and the high New Zealand dollar is subduing tradeables inflation.

Gross domestic product

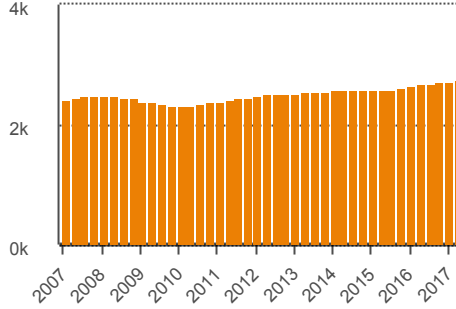
Gross domestic product growth

Annual average % change Jun 16 - Jun 17



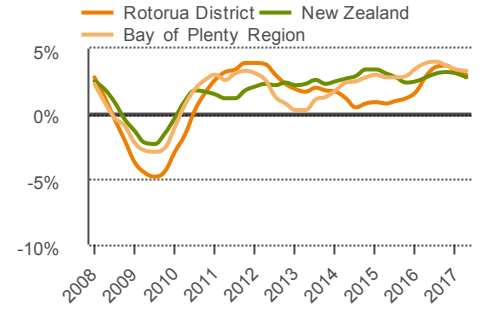
Gross domestic product (\$m)

Annual level, Rotorua District



Gross domestic product growth

Annual average % change



Highlights for Rotorua District

- GDP in Rotorua District was up 3.0% for the year to June 2017 compared to a year earlier. Growth was higher than in New Zealand (2.8%) and lower than in Bay of Plenty Region (3.3%).
- GDP was \$2,768 million in Rotorua District for the year to June 2017 (2010 prices).
- Annual GDP growth in Rotorua District peaked at 3.9% in the year to December 2011.

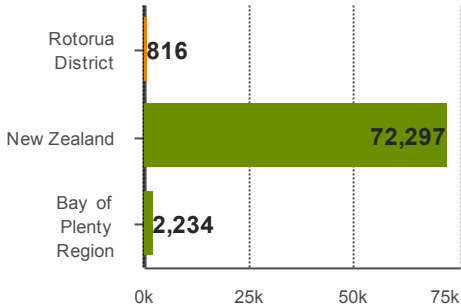
National overview

The New Zealand economy did not grow as fast as had been anticipated through the March quarter, as the construction and tourism sectors struggled to keep up their high paces of growth. Although some indicators have remained mixed in the June quarter, there are enough other reasons to be optimistic of stronger growth in the second half of the year. The recent rally in dairy prices, alongside strength in other commodity prices, has taken New Zealand's terms of trade to near record highs. Elevated net international migration continues to add to demand, at a time when business and consumer confidence has been rebounding.

International net migration

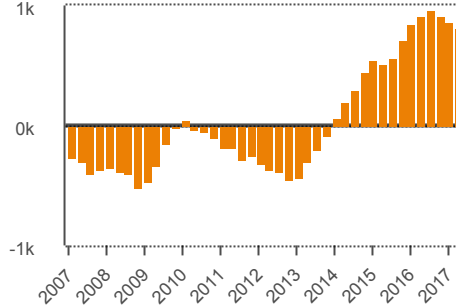
Net migration

Number of persons, year to June 2017



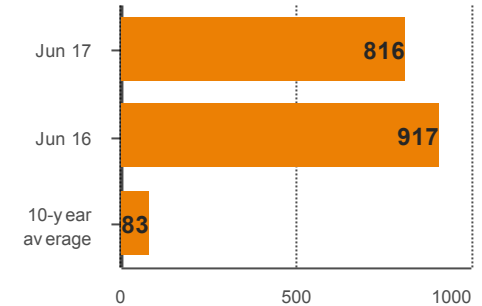
Net migration

Annual number of persons, Rotorua District



Net migration

Annual number of persons, Rotorua District



Highlights for Rotorua District

- Rotorua District experienced a permanent and long-term net migration gain of 816 persons in the year to June 2017. This compares with a gain of 917 a year ago, and a ten year average of 83 (gain).
- New Zealand's annual net migration increased to 72,297 from 69,087 a year ago.

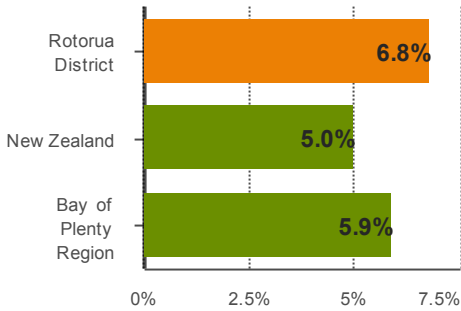
National overview

Annual net migration surged to 72,297 people in June, with arrivals up 11% from June a year earlier. There was also a 14% lift in departures over the same period, but this rise only partly offset the increase in arrivals. Key drivers of departures growth are foreign citizens leaving the country, while arrivals growth has been heavily influenced by strong increases in migrants on work visas. We expect net migration to hold at similarly high levels over the next nine months, with employment opportunities still good and other countries implementing more stringent border policies. The key risks to this forecast are political moves to severely clamp down on migrant arrivals.

Unemployment rate

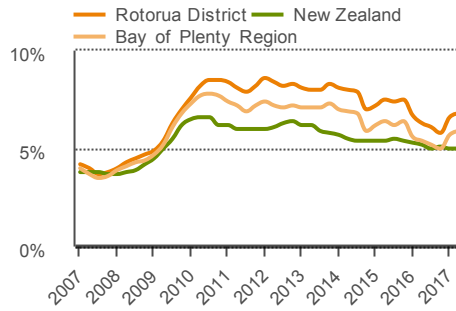
Unemployment rate

Average annual rate, year to June 2017



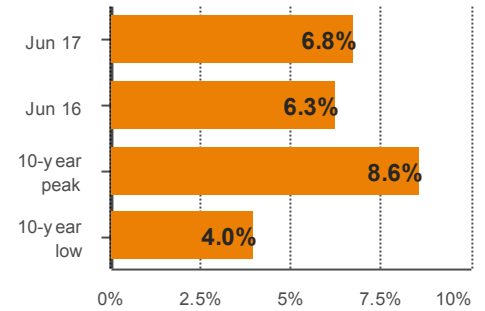
Unemployment rate

Average annual rate



Unemployment rate

Annual average, Rotorua District



Highlights for Rotorua District

- The annual average unemployment rate in Rotorua District was 6.8% in June 2017, up from 6.3% a year earlier.
- The unemployment rate in Rotorua District was higher than in New Zealand, where the unemployment rate averaged 5.0% over the year to June 2017.
- Over the last ten years the unemployment rate reached a peak of 8.6% in March 2012;

National overview

The unemployment rate fell slightly to 4.8% in the June quarter and averaged 5.0% across the June year. The drop in the unemployment rate in June was due to the participation rate retreating from its historical high of the previous two quarters, but at 70.0%, it is still the third-strongest rate on record. There was slight easing in employment growth, but this headline figure masked significant growth in selected industries. In the June quarter, the numbers of people employed in the construction sector, accommodation and food services, and professional, scientific and administrative support services were up by 12%, 11%, and 8.8%, respectively from a year earlier. Coupled with some signs of emerging wage pressure, these pockets of job growth indicate that there is still some momentum left in the labour market.

Traffic flow

Annual change in traffic flows

Annual average % change Jun 16 - Jun 17



Highlights for Rotorua District

- Traffic flows in Rotorua District increased by 4.3% over the year to June 2017. This compares with an increase of 3.3% in New Zealand.

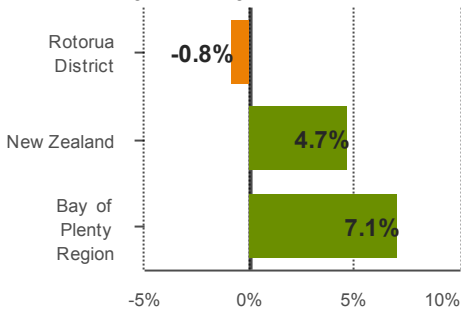
National overview

Traffic flows along the State Highway network climbed 3.3% over the March 2017 year. Growth in traffic flows remains particularly rapid in areas that have seen sharp population growth, as well as visitor hotspots in provincial settings. Traffic flows in the upper South Island continue to be disrupted by the closure of SH1, which has caused a sharp increase to vehicle movements in Tasman and Hurunui, while traffic flows in Kaikoura will not recover until the reopening of SH1 north. The sharp recovery in dairy prices, at a time when other commodity prices are elevated, could lead to an increase in growth in traffic activity in some provincial economies.

Residential consents

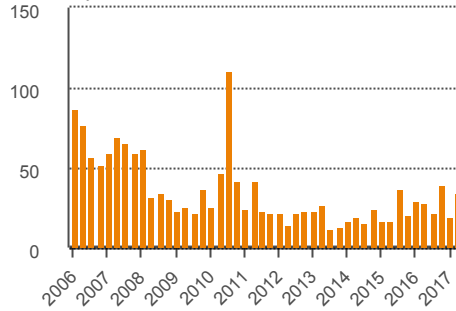
Growth in no. of new dwelling consents

Annual average % change Jun 16 - Jun 17



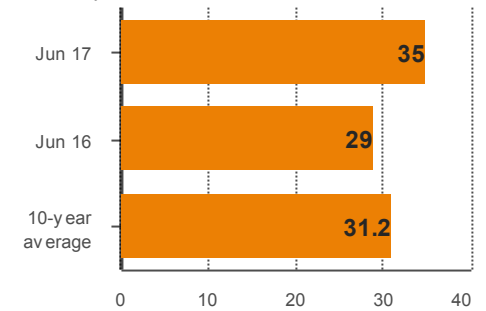
Residential consents

Quarterly number, Rotorua District



Number of new dwelling consents

Quarterly number, Rotorua District



Highlights for Rotorua District

- A total of 35 new residential building consents were issued in Rotorua District in the June 2017 quarter, compared with 29 in the same quarter last year.
- On an annual basis the number of consents in Rotorua District decreased by 0.8% compared with the same 12-month period a year ago. The number of consents in New Zealand increased by 4.7% over the same period.

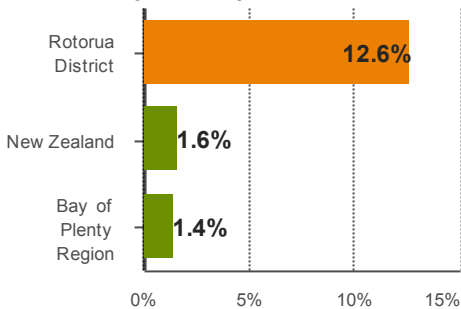
National overview

Growth in residential consents slowed through the middle of the year, with a seasonally adjusted 1.0% fall during the June month pulling growth over the June year to 4.7%, compared to 10% annual growth over the March year. Consent numbers in Canterbury continue to fall, while a softening of consents is also apparent in Auckland. There were still some regions which saw an increase in consents from June last year, notably Otago, Manawatu-Whanganui, Taranaki, and Hawke's Bay. Recent analysis by Auckland Council suggests that not all consents in Auckland are translating into dwellings, with only 6,260 new dwellings code of compliance certificates issued in 2016 compared to consents which ran at over 9,000pa in 2015 and 2016.

Non-residential consents

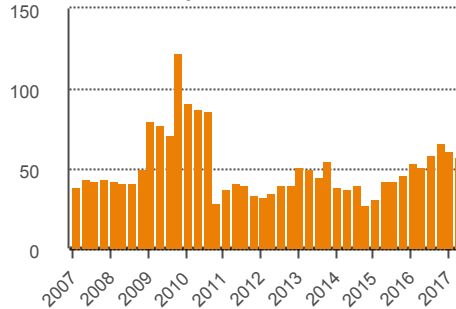
Growth in value of consents

Annual average % change Jun 16 - Jun 17



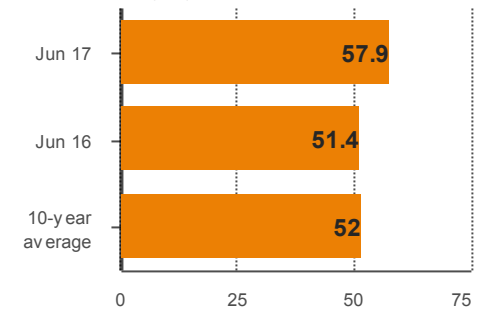
Non-residential consents, Rotorua District

\$m, annual running total, Rotorua District



Value of non-residential consents

Annual value (\$m), Rotorua District



Highlights for Rotorua District

- Non-residential building consents to the value of \$58 million were issued in Rotorua District during the year to June 2017.
- The value of consents increased by 13% over the year to June 2017. By comparison the value of consents in New Zealand increased by 1.6% over the same period.
- Over the last 10 years, consents in Rotorua District reached a peak of \$122 million in the year to December 2009.

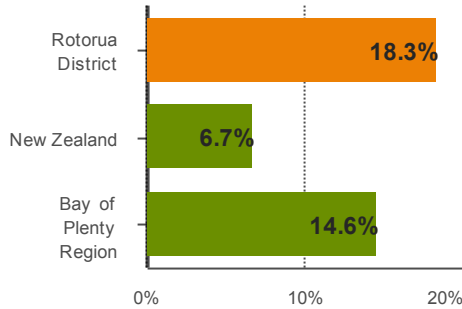
National overview

There was \$451m worth of non-residential consents issued in June, which represented only 60% of last year's exceptionally high result. But at \$6.2bn in the June year, the value of non-residential consents is still sitting just above our expectations. We expect to see further softening in the second half of this year, as capacity constraints in the construction sector limit the value of consents issued in Auckland, and building activity continues to soften in Christchurch. Looking a little further out, continued buoyancy in economic conditions will drive a rebound in non-residential consents growth from late 2018. Outside of Christchurch and Auckland, non-residential construction activity has continued to remain more upbeat.

House prices

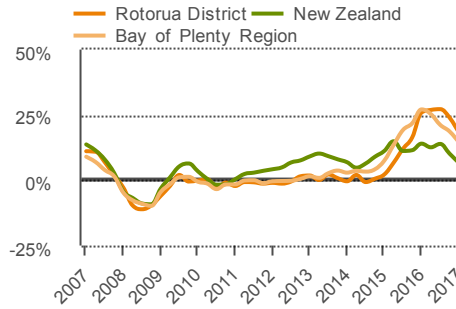
Annual change in house prices

Annual % change Jun 16 - Jun 17



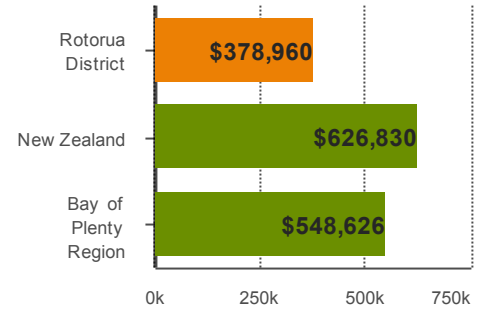
House price growth

Annual % change



Average current house value

Average for 12 months to Jun 2017



Highlights for Rotorua District

- The average current house value in Rotorua District was up 18% in June 2017 compared with a year earlier. Growth outperformed relative to New Zealand, where prices increased by 6.7%.
- The average current house value was \$378,960 in Rotorua District over the June 2017 year. This compares with \$626,830 in New Zealand.

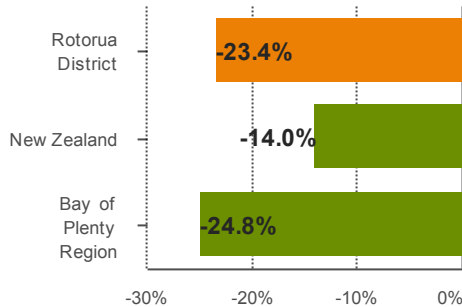
National overview

With house price inflation at only 6.7%pa in June, there has been a continued slowdown in momentum, consistent with the trend over the previous few quarters. However, prices have held up better than we expected given falling sales and weak construction activity. When we exclude Christchurch and Auckland, New Zealand house prices were still rising at double-digit rates of growth in June. Looking forward, we anticipate house price growth to continue to soften throughout the remainder of 2017, but as the effects of the LVR wane and the underlying drivers of growth remain in place (such as high net migration, and the improving labour market), there is a risk that prices bounce back in some places during 2018.

House sales

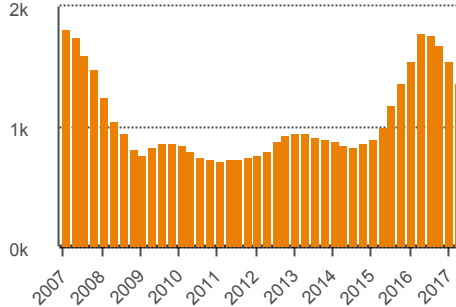
Annual change in house sales

Annual average % change Jun 16 - Jun 17



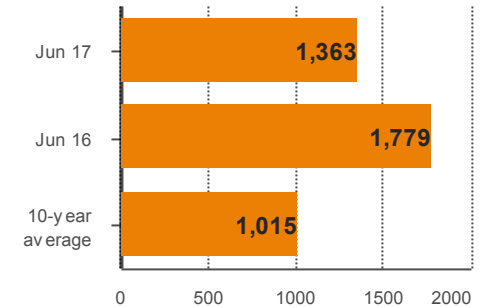
House sales

Annual number, Rotorua District



House sales

Annual number, Rotorua District



Highlights for Rotorua District

- House sales in Rotorua District in the year to June 2017 decreased by 23% compared with the previous year. Growth underperformed relative to New Zealand, where sales decreased by 14%.
- A total of 1,363 houses were sold in Rotorua District in the 12 months ended June 2017. This compares with the ten year average of 1,015.

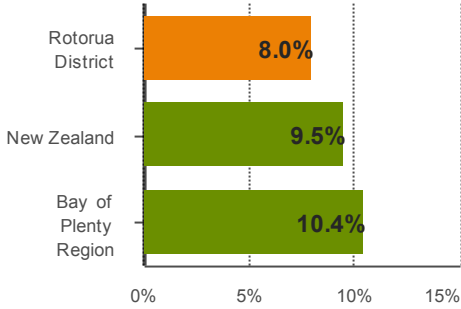
National overview

House sales fell 14% over the year to June, with Auckland continuing to be a key driver of this weakness. With house price inflation tapering off along with speculation that prices in Auckland could start to fall, the sense of buyer urgency has diminished. House sales are also declining in most other parts of the country, with the notable exception of the West Coast. Softer demand for housing is partly due to banks being choosier in their lending decisions. Although we do not expect sale volumes to recover significantly over the next 12-months, strong population growth will limit the extent of further declines.

Car registrations

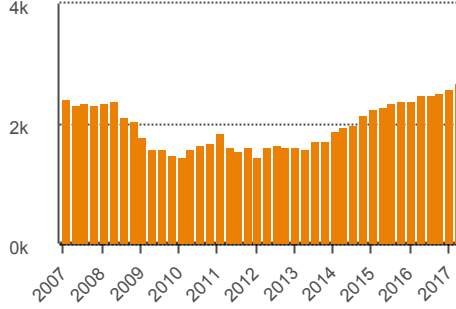
Car registrations

Annual average % change Jun 16 - Jun 17



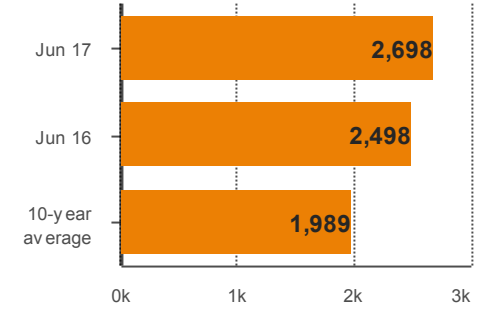
Car registrations

Annual number, Rotorua District



Car registrations

Annual number, Rotorua District



Highlights for Rotorua District

- The number of cars registered in Rotorua District increased by 8.0% in the year to June 2017 compared with the previous 12 months. Growth was lower than in New Zealand, where car sales increased by 9.5%.
- A total of 2,698 cars were registered in Rotorua District in the year to June 2017. This compares with the ten year average of 1,989.

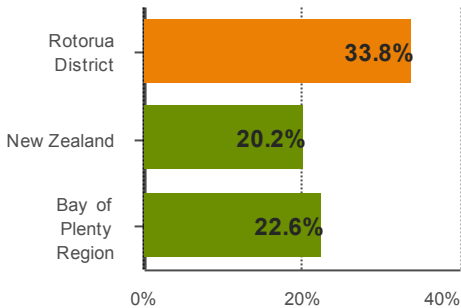
National overview

Car sales were up 9.5% over the June year, with sales of both new vehicles and used imports growing strongly. Electric vehicles boasted a 184% increase over the year to June, reaching a fleet count of 3,834. Over the past year, 81% of electric vehicle registrations were for passenger cars — one third of which were new vehicles, while two thirds were used. Used vehicles are making up an increasing share of electric vehicle registrations as more supply becomes available from Japan. Looking ahead, continued strong population growth is expected to keep pushing up overall demand for cars during the next year, with net migration holding at around current levels for the next twelve months.

Commercial vehicle registrations

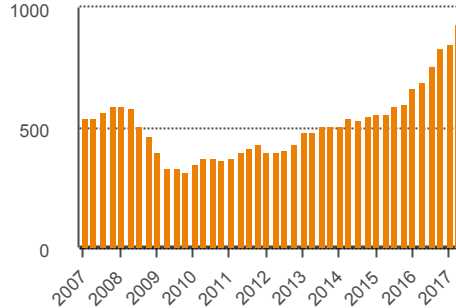
Commercial vehicle registrations

Annual average % change Jun 16 - Jun 17



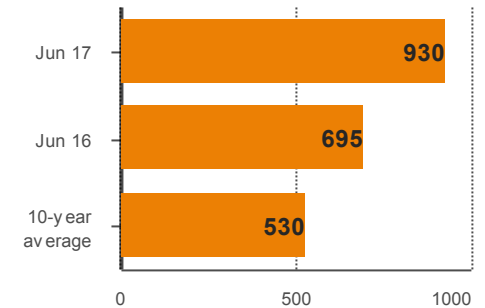
Commercial vehicle registrations

Annual number, Rotorua District



Commercial vehicle registrations

Annual number, Rotorua District



Highlights for Rotorua District

- The number of commercial vehicles registered in Rotorua District increased by 34% in the year to June 2017 compared with the previous 12 months. Growth was higher than in New Zealand, where commercial vehicle sales increased by 20%.
- A total of 930 commercial vehicles were registered in Rotorua District in the year to June 2017. This is higher than the ten year annual average of 530.

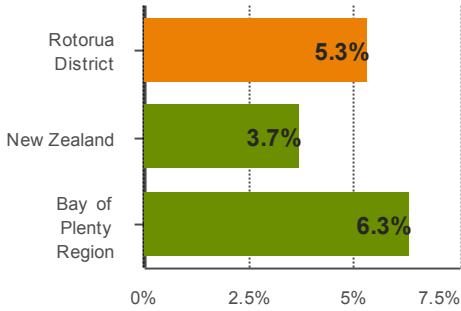
National overview

Commercial vehicle sales climbed 20% over the June year. Sales of light commercials, which includes utes, continue to lead the way, while heavy truck sales are growing strongly once more following their dairy-induced slowdown in 2015 and into 2016. For medium sized trucks (RUC type 2 with GVM >4,500kg), there has also been a strong increase in used vehicles in recent months, with sales in the June quarter up 33% from a year earlier. Over the period, increases in used medium truck sales were on par with increases in new medium trucks. Almost a decade on from changes to braking regulation it appears new medium truck sales are gradually losing their competitive edge on used vehicles in their weight class.

Guest nights

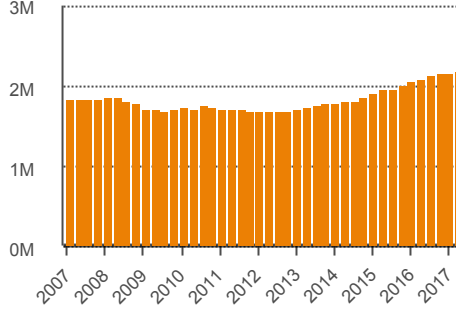
Guest nights

Annual average % change Jun 16 - Jun 17



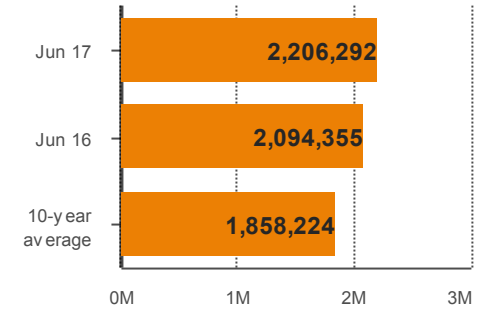
Guest nights

Annual number, Rotorua District



Guest nights

Annual number, Rotorua District



Highlights for Rotorua District

- Total guest nights in Rotorua District increased by 5.3% in the year to June 2017. This compares with an increase of 3.7% in New Zealand.
- Visitors stayed a total of 2,206,292 nights in Rotorua District during the year to June 2017, which was up from 2,094,355 a year ago.

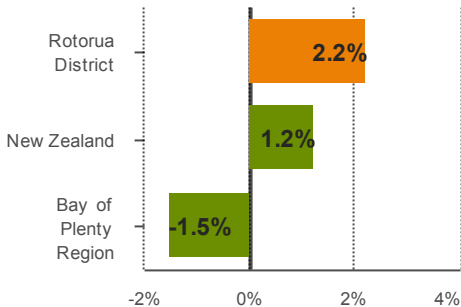
National overview

Guest nights over the June year climbed 3.7%, with guest nights by domestic visitors climbing 4.1%, while international visitor guest nights soared 8.4%. International visitor arrivals were up 17%pa in June, the second largest rise in 13 years. This surge in tourists was largely due to the Lions tour, which we estimate saw an influx of 16,000 additional British and Irish visitors. However, after we exclude those from Britain and Ireland, visitor arrivals rose by 9.8%pa, which is still considerable growth in an already booming industry. One detractor has been, Chinese arrivals in June fell by 4.5%pa, the fifth month of decline in the last year. New Zealand is now seen as an expensive destination relative to other premium holiday spots, and as many Chinese tourists travel in tour groups, which work off very tight margins, even small price hikes in accommodation are likely putting people off.

Jobseekers

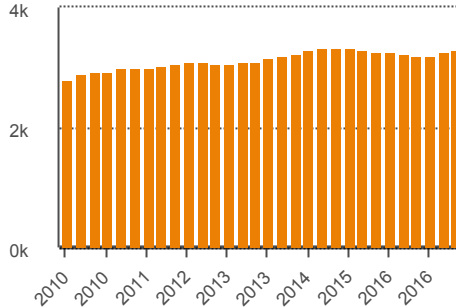
Annual change in Jobseekers

Annual average % change Jun 16 - Jun 17



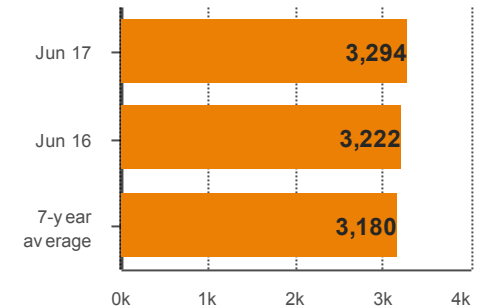
Jobseekers

Annual average, Rotorua District



Jobseekers

Annual average, Rotorua District



Highlights for Rotorua District

- Working age Jobseeker Support recipients in Rotorua District in the year to June 2017 increased by 2.2% compared with the previous year. Growth was higher relative to New Zealand, where the number of Jobseeker Support recipients increased by 1.2%.
- An average of 3,294 people were receiving a Jobseeker Support benefit in Rotorua District in the 12 months ended June 2017. This compares with an average of 3,180 since the start of the series in 2010.

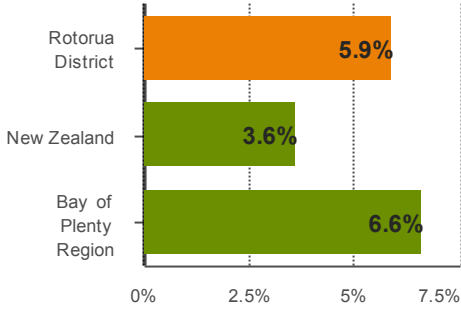
National overview

The number of Jobseeker Support recipients climbed 1.2% over the June 2017 year. The background to this uptick has been weaker employment growth, including a 0.1% (seasonally adjusted) fall in the June quarter, its weakest result in two years. However, the decline does not necessarily mean that employers are feeling more pessimistic about the year ahead. The fall in employment resulted from a decline in the number of part-time employees, but a 0.7% rise in full-time employment along with a drop in underemployment suggests that businesses are more confident about taking on staff on a full-time basis. It is also possible that part-timers are choosing to leave the labour force entirely, as reflected in the lower participation rate. Looking ahead, we expect employment growth to stabilise and for wages to grow at a sustainably faster pace.

Retail trade

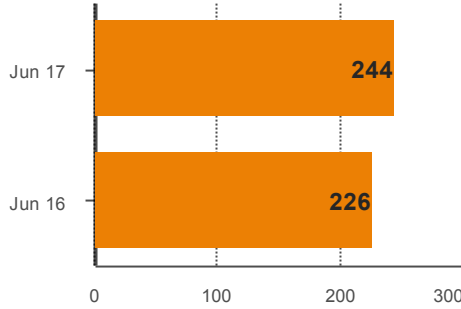
Growth in retail sales

Annual average % change Jun 16 - Jun 17



Retail sales

Quarterly value (\$m), Rotorua District



Highlights for Rotorua District

- Electronic card retail spending in Rotorua District, as measured by Marketview, increased by 5.9% over the year to June 2017 compared to the previous year. This compares with an increase of 3.6% in New Zealand.

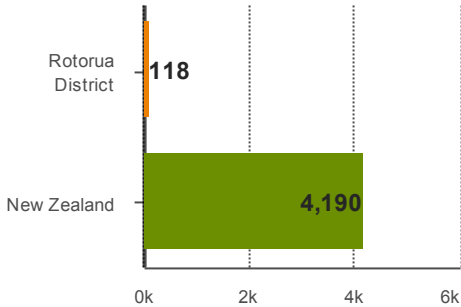
National overview

Data from Marketview showed that electronic card spending on retail purchases in the June quarter was up 5.2% from a year ago, taking spending over the June year to 3.6% above its 2016 level. Looking through Statistics New Zealand's Retail Trade Survey shows that a key factor behind the more rapid growth during the June quarter was a lift in tourist spending on food and accommodation during the quarter resulting from the influx of visitors for the Lions tour and the World Masters Games. Spending on vehicles, fuel, and housing-related DIY expenditure were also strong. If we remove the effects of these items, it appears that other parts of retail spending might have lost some steam in the June quarter and we can expect to see a slowdown in (previously rapid) household spending growth in upcoming GDP results.

Total dairy payout

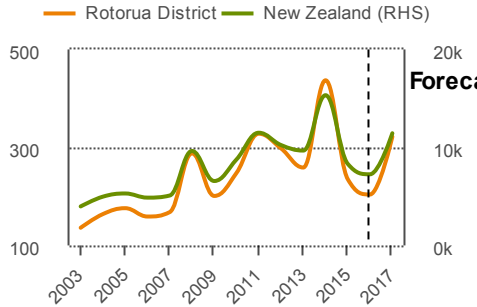
Total dairy payout

Change (\$m) between 2015/16 and 2016/17 season



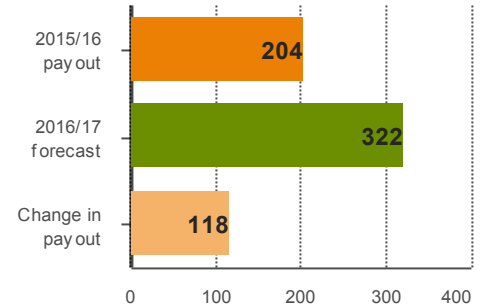
Total dairy payout

\$m each season, Rotorua District



Total dairy payout

\$m each season, Rotorua District



Highlights for Rotorua District

- Rotorua District's total dairy payout for the 2015/16 season is estimated to have been approximately \$204m.
- Rotorua District's dairy payout for the 2016/17 season is expected to be approximately \$322m, \$118m 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 \$7,261m in the 2015/16 season, and is expected to be \$4,190m higher in the 2016/17 season.

National overview

Most dairy farmers were above their breakeven point in the 2016/17 dairy season for the first time since the record 2013/14 season. With Fonterra paying a farmgate milk price of \$6.15/kgms, the dairy payout for the 2016/17 season was \$4.2bn above its 2015/16 level. Furthermore, the outlook for the 2017/18 season is healthy. Fonterra has recently raised their current season payout forecast to \$6.75/kgms. A payout of this level will give farmers sufficient room to make healthy inroads into debt that was run-up during poor seasons, as well as modestly lift on-farm spending following cutbacks over recent years.

Tourism Spending

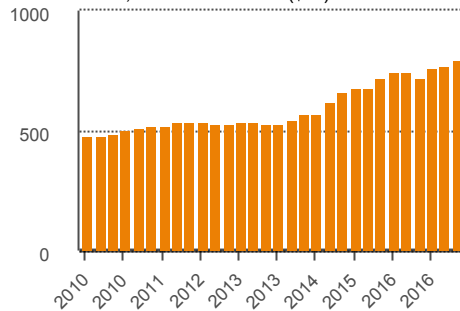
Tourism expenditure

Annual average % change Jun 16 - Jun 17



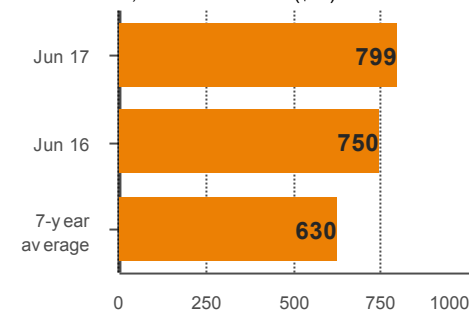
Tourism expenditure

Annual total, Rotorua District (\$m)



Tourism expenditure

Annual total, Rotorua District (\$m)



Highlights for Rotorua District

- Total tourism expenditure in Rotorua District increased by 6.6% in the year to June 2017. This compares with an increase of 5.9% in New Zealand.
- Total tourism expenditure was approximately \$799m in Rotorua District during the year to June 2017, which was up from \$750m a year ago.

National overview

Spending by domestic and international visitors in New Zealand climbed from \$25.3bn in the June 2016 year to \$26.8bn in the June 2017 year. Given the sharp growth in international visitor arrivals to New Zealand, it is no surprise that spending by international visitors was the key source of growth, rising from \$10.6bn to \$11.5bn. Domestic visitor spending increased from \$14.8bn to \$15.3bn over the same period. Visitors from Australia (\$2.8bn), China (\$1.7bn), and the USA (\$1.6bn) were the three main contributors to international visitor spending, with visitors from other parts of Asia, Europe and the UK all spending just over \$1bn each.

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.

Net migration

Net migration is the difference between the number of arrivals and departures of permanent and long-term migrants. Data is sourced from International Travel and Migration statistics from Statistics New Zealand.

Unemployment

Regional level unemployment rates are sourced from Statistics New Zealand's Household Labour Force Survey. Trends in the number of Jobseekers at TA level are used to break down regional unemployment rates to TA level. 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.

Retail Sales

The retail 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.

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)

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.