

Value of Building Work Put in Place: June 2013 quarter

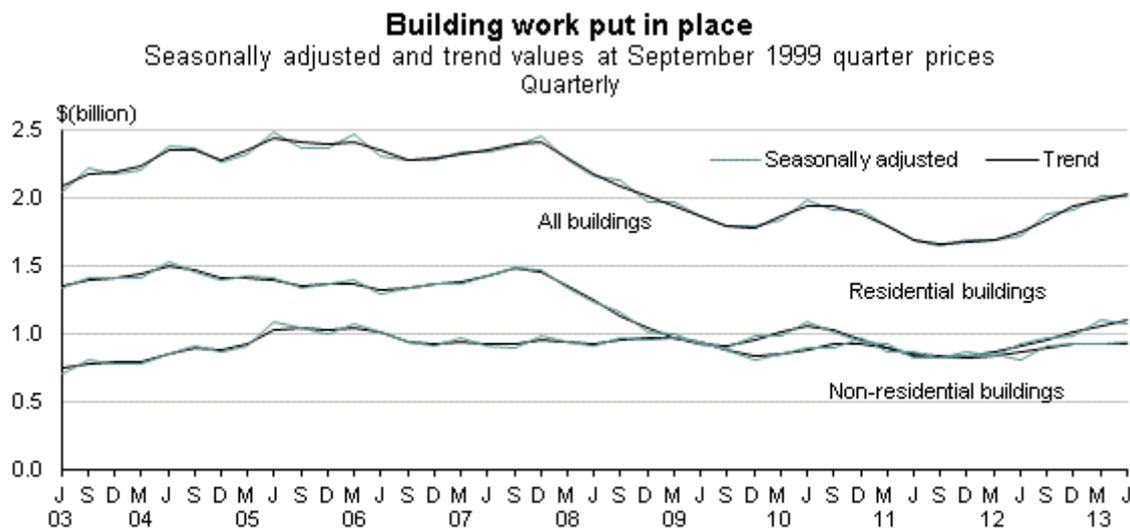
Embargoed until 10:45am – 04 September 2013

Key facts

For the June 2013 quarter, after price changes and seasonal variations are removed:

- Residential building activity fell 1.8 percent.
- Non-residential building activity rose 1.4 percent.
- All building activity fell 0.4 percent.

The trend for overall building activity has grown 23 percent over the seven quarters since September 2011. The level of the trend is now 4.5 percent higher than the most recent high point in September 2010, but still 17 percent lower than the peak eight years ago in the June 2005 quarter.



Source: Statistics New Zealand

In current prices:

- The seasonally adjusted value of all building activity in Canterbury fell 10 percent in the June 2013 quarter. This followed an 18 percent increase in the March 2013 quarter.
- The trend for the value of all building activity in Canterbury has more than doubled in the two years since June 2011. Across the rest of New Zealand, excluding Canterbury, the trend for the value of all building activity has grown 15 percent over the same period.

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Government Statistician

4 September 2013
ISSN 1178-0371

Commentary

- Building activity has eased but trend still growing
- Residential building activity eases
- Small lift in non-residential building activity
- Dip in Canterbury building activity following strong growth last quarter

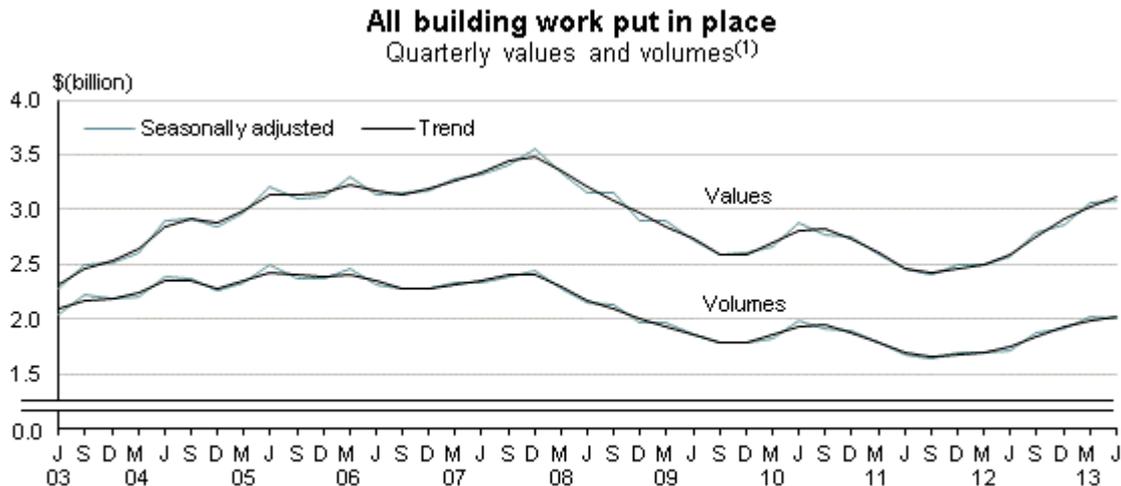
All figures refer to seasonally adjusted volumes (values with price changes and seasonal variations removed) unless otherwise specified.

Building activity has eased but trend still growing

Volume

Building activity eased 0.4 percent in the June 2013 quarter, following a 5.4 percent increase in the March 2013 quarter.

However, the trend for overall building activity still grew in the June 2013 quarter, the seventh consecutive quarter of growth. The level of the trend is now 23 percent higher than at the most recent low point in September 2011, but still 17 percent lower than the peak eight years ago in the June 2005 quarter.



1. Volumes are calculated as values at September 1999 quarter prices.

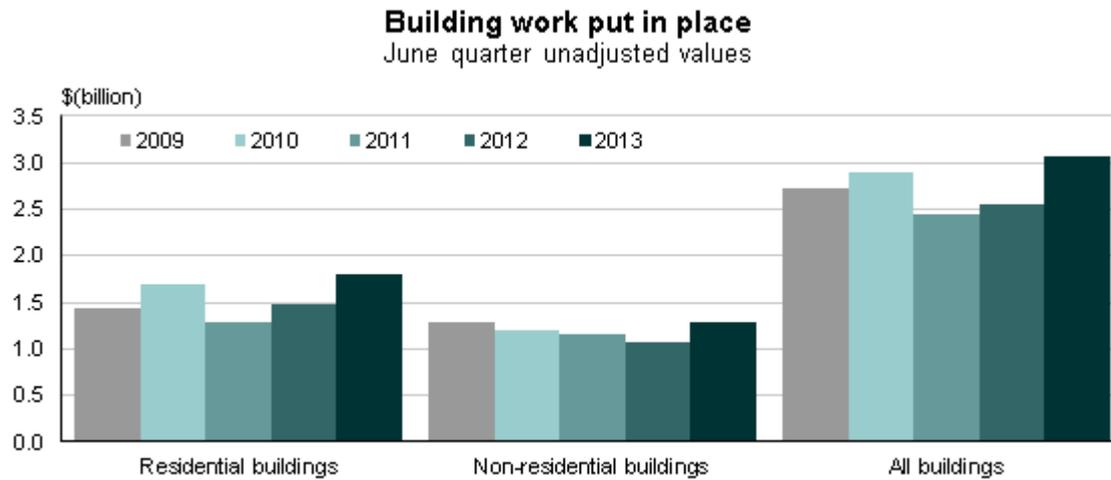
Source: Statistics New Zealand

Value

In current prices, the seasonally adjusted value of all building work increased 0.4 percent in the June 2013 quarter, following a 6.8 percent increase in the March 2013 quarter. In the June 2013 quarter, the value of non-residential building work increased 2.0 percent, up from a 0.3 percent fall last quarter. The value of residential work fell 0.7 percent this quarter, following 12 percent growth in the March 2013 quarter.

Building activity in the Canterbury region fell 10 percent in the June 2013 quarter, following an 18 percent increase in the March 2013 quarter. Non-residential work in Canterbury fell 17 percent and residential work dropped by 5.0 percent.

Across the rest of New Zealand, excluding Canterbury, non-residential building activity increased 8.7 percent and residential building activity by 0.5 percent.



Source: Statistics New Zealand

In the June 2013 quarter, the unadjusted value of all building activity was \$3,070 million, up \$512 million (20 percent) from the June 2012 quarter. Residential building work increased by \$314 million (21 percent) and non-residential work by \$197 million (18 percent).

The value of consents for all buildings (unadjusted) increased 28 percent in the June 2013 quarter, compared with the June 2012 quarter. And the trend for the value of consents for all buildings has been growing continuously for two years. Building consents are often used as an early indicator of building activity.

Building Consents Issued: July 2013 has the most recent information.

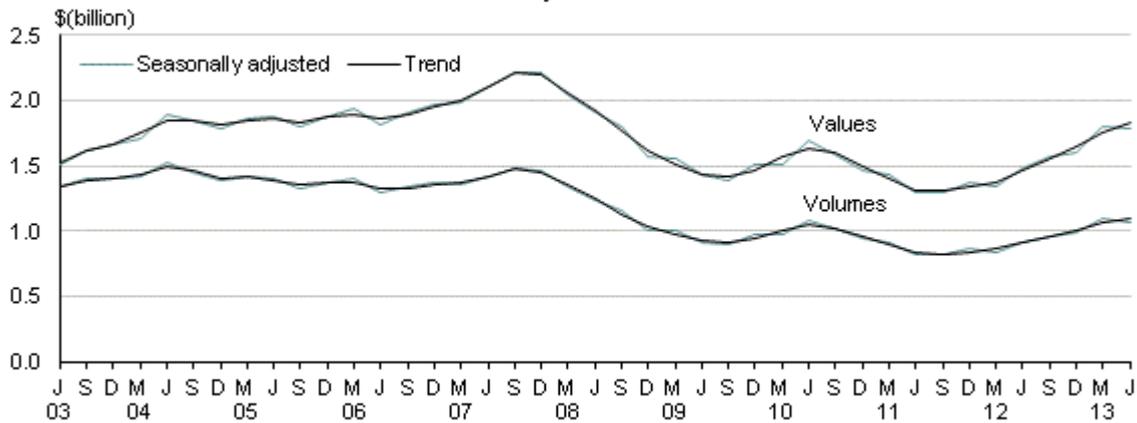
Residential building activity eases

Volume

A small fall of 1.8 percent in the volume of residential building activity was measured in the June 2013 quarter, following an 11 percent increase in the previous quarter. This fall is the first since the March 2012 quarter. Prices for residential buildings increased by 1.4 percent during the June 2013 quarter, as measured by the Capital Goods Price Index.

Residential building work put in place

Quarterly values and volumes⁽¹⁾



1. Volumes are calculated as values at September 1999 quarter prices.

Source: Statistics New Zealand

The trend for residential building activity has been growing since September 2011, increasing by 33 percent over the seven quarters to June 2013. Trend figures may be revised when future quarters are compiled.

Value

The seasonally adjusted value of residential building work, in current prices, fell 0.7 percent in the June 2013 quarter, following a 12 percent rise in the previous quarter.

Small lift in non-residential building activity

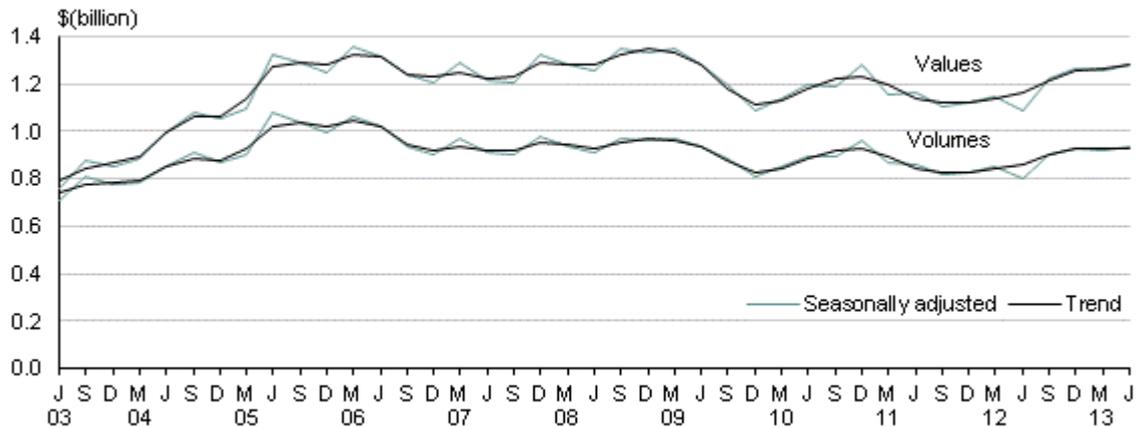
Volume

The volume of non-residential building activity increased 1.4 percent in the June 2013 quarter, following a small (0.7 percent) fall in the March 2013 quarter. Prices for non-residential building work increased by 0.5 percent in the June 2013 quarter, as measured by the Capital Goods Price Index.

The trend for the volume of non-residential building work has grown for six consecutive quarters, and is now 12 percent higher than in the December 2011 quarter.

Non-residential building work put in place

Quarterly values and volumes⁽¹⁾



1. Volumes are calculated as values at September 1999 quarter prices.

Source: Statistics New Zealand

Value

The seasonally adjusted value of non-residential building activity increased 2.0 percent in the June 2013 quarter, recovering from a 0.3 percent fall in the March 2013 quarter.

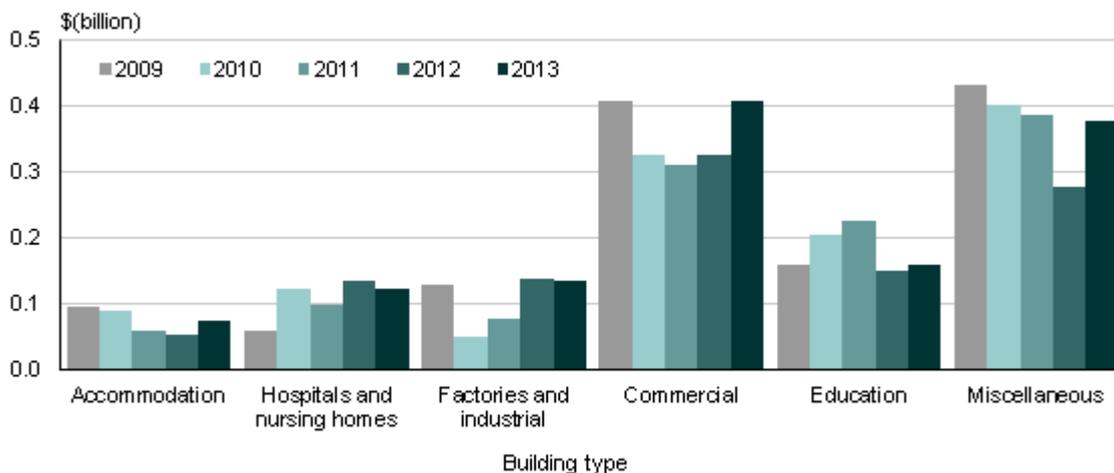
The unadjusted value of non-residential building work in this quarter was \$1,276 million, up \$197 million (18 percent) from the June 2012 quarter.

The largest contributors to the unadjusted value in the June 2013 quarter were:

- commercial buildings – \$407 million
- miscellaneous buildings – \$375 million
- education buildings – \$159 million.

Non-residential building work put in place

By building type
June quarter unadjusted values



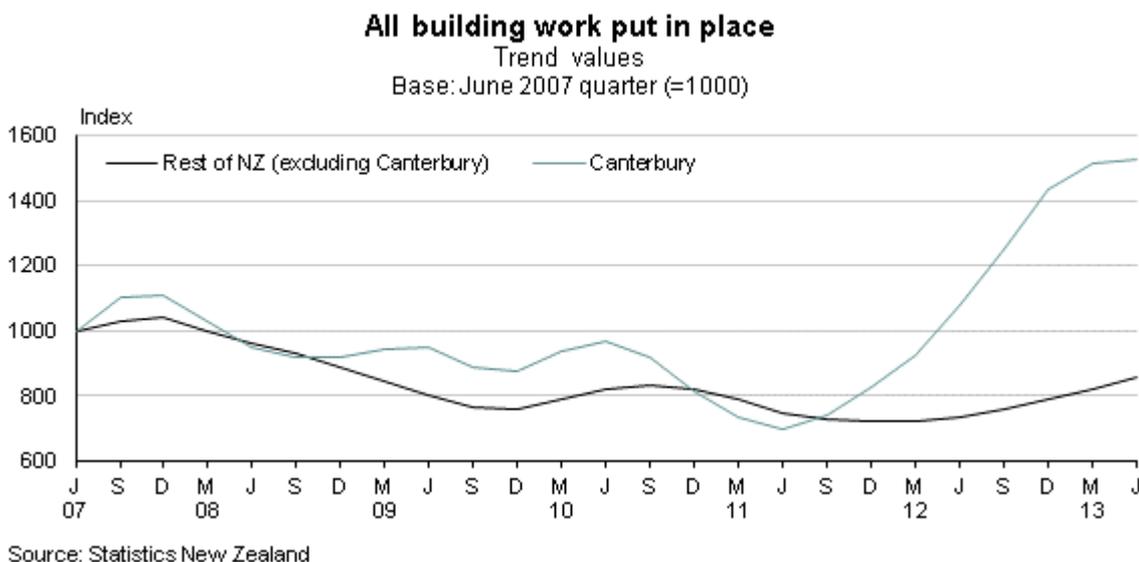
Source: Statistics New Zealand

Dip in Canterbury building activity following strong growth last quarter

Building activity fell in Canterbury in the June 2013 quarter, particularly for non-residential work. The latest movements follow significant increases in the March 2013 quarter, when the value of all building activity in Canterbury grew 18 percent.

In current prices, the seasonally adjusted changes for Canterbury were:

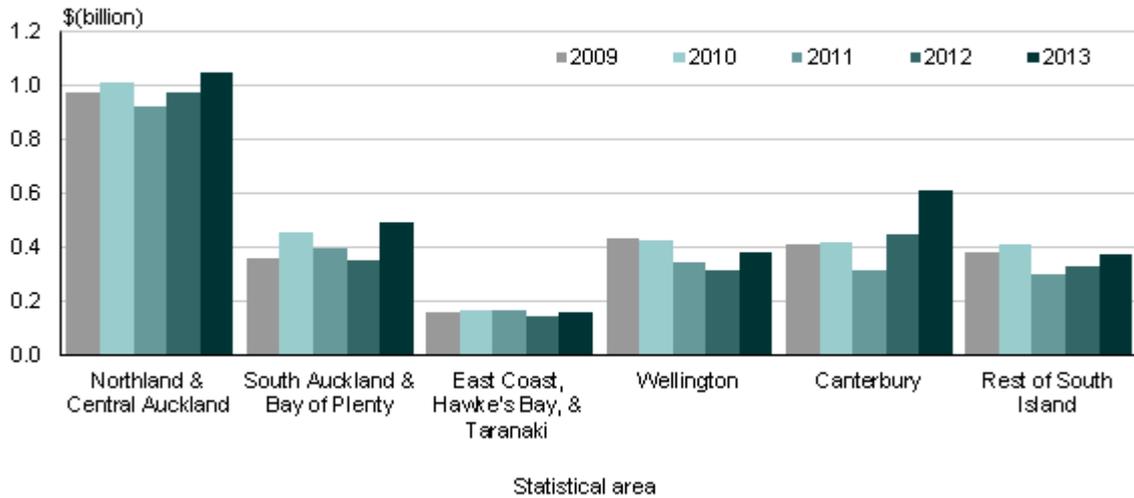
- Non-residential building activity – down 17 percent (compared with an 8.7 percent rise in the rest of the country).
- Residential building activity – down 5.0 percent (compared with a 0.5 percent rise in the rest of the country).
- All building activity – down 10 percent (compared with a 4.1 percent rise in the rest of the country).



While building activity in Canterbury is down this quarter, the trend for building activity in current prices has been positive for two years. The current level of the trend is more than double that of the most recent low point in June 2011. Across the rest of New Zealand, excluding Canterbury, the trend for the value of all building activity, in current prices, has grown 15 percent over the same period.

The survey is designed for accuracy at the national level, meaning that indicators of regional building activity may be less reliable. The sample error for the June 2013 quarter is 3.0 percent at the national level for all building activity, while for Canterbury it is 9.0 percent.

All building work put in place
By statistical area
June quarter unadjusted values



Source: Statistics New Zealand

Earthquake-related building consents in Canterbury totalled \$155 million in the June 2013 quarter, up from \$147 million in the March 2013 quarter. The latest value includes \$67 million for non-residential building consents, and \$88 million for residential building consents. The residential consents include 166 new dwellings, compared with 173 in the previous quarter.

Building consents are often used as an early indicator of building activity. *Building Consents Issued: August 2013* will be published on 30 September 2013.

Value of Building Work Put in Place data is obtained mostly from a postal survey of builders, owners, and others who have been granted building consents. For further information, see the 'Definitions' section.

For more detailed data on the value of building work put in place, see the Excel tables in the 'Downloads' box.

Definitions

About the value of building work put in place

These quarterly releases provide estimates of the value and volume of work put in place on construction jobs in New Zealand. The value of building work includes residential building work and non-residential building work, which are summed to give all building work. Non-building construction work, such as roads and bridges, is excluded.

The value of building work put in place measures activity in the construction sector, and complements building consents issued information (which represents the intention to build).

More definitions

Accommodation buildings: includes hostels, boarding houses, prisons, workers' quarters, hotels, motels, and motor camp buildings.

Commercial buildings: includes shops, restaurants, taverns, offices, and administration buildings.

Miscellaneous buildings: includes social, cultural, religious, recreational, storage, and farm buildings.

New buildings: includes conversions. For example, if a hotel is converted to apartments, the value of work is classified to new dwellings. Values for new building work may sometimes include the cost of demolishing or removing the previous buildings.

New dwellings: includes houses, flats, and apartments.

Non-residential buildings: includes work on new buildings, plus alterations and additions to existing buildings. There are six categories:

- accommodation buildings
- hospitals and nursing homes
- factories and industrial buildings
- commercial buildings
- education buildings
- miscellaneous buildings.

Out-buildings: includes garages, glasshouses, and sheds on residential sections.

Residential buildings: includes new dwellings and domestic outbuildings, plus alterations and additions to existing buildings.

Values: dollar values for building work put in place. Calculated at current prices.

Volumes: values with price changes removed. Calculated at September 1999 quarter prices.

Related links

Upcoming releases

Value of Building Work Put in Place: September 2013 quarter will be released on 4 December 2013.

[Subscribe to information releases](#), including this one, by completing the online subscription form.

[The release calendar](#) lists all our upcoming releases by date of release.

Past releases

[Value of Building Work Put in Place](#) has links to past releases.

Related movements

Related movements for the June 2013 quarter compared with the March 2013 quarter were as follows:

Capital goods price index

In the June 2013 quarter:

- residential building construction prices rose 1.4 percent
- non-residential building construction prices rose 0.5 percent.

Quarterly Employment Survey

In the June 2013 quarter:

- the number of full-time equivalent employees (FTEs) in the construction industry rose 5.2 percent
- the number of paid hours in the construction industry fell 2.4 percent.

Building consents issued

Consent figures measure the intention to build. In the June 2013 quarter:

- the number of new dwellings consented rose 16 percent (seasonally adjusted)
- the value of consents for residential buildings increased 11 percent
- the value of consents for non-residential buildings increased 15 percent.

International travel and migration

In the June 2013 quarter, seasonally adjusted figures showed a net gain of 5,610 migrants.

National population estimates

The estimated resident population increased by 0.2 percent in the June 2013 quarter.

To view national population estimates for the June 2013 quarter, select the following categories from the [Infoshare](#) homepage:

Subject category: **Population**
Group: **Population Estimates**

Residential mortgage yields

Mortgage yields are available from www.rbnz.govt.nz, or select the following categories from the [Infoshare](#) homepage:

Subject category: **Industry Sectors**
Group: **Building Activity Survey (BAS)**
Interest rates

Production

The volume of ready-mixed concrete produced increased 3.2 percent in the June 2013 quarter.

To view the production series, select the following categories from the [Infoshare](#) homepage:

Subject category: **Industry Sectors**
Group: **Secondary production**
Ready mixed concrete by region

Data quality

Period-specific information

This section contains information about data that has changed since the previous release.

- [Sample errors](#)
- [Non-sample errors](#)
- [Non-response imputation](#)
- [Low-value consents](#)

General information

This section contains information about data that does not change between releases.

- [Data source](#)
- [Survey design](#)
- [Consistency with other periods](#)
- [Interpreting the data](#)
- [Comparison with building consent statistics](#)
- [More information](#)

Period-specific information

Sample errors

Estimates for the value of building work put in place are derived mainly from a sample survey and are therefore subject to sample errors.

Sample errors for the June 2013 quarter	
	Percentage of total value of work put in place
Residential buildings	3.8
Non-residential buildings	4.8
All buildings	3.0

Sample errors quantify the variability that occurs by chance because a sample rather than an entire population is surveyed. The sample errors above indicate that there is a 95 percent probability that the true value of work put in place this quarter is the published estimate, within plus or minus the sample error.

Non-sample errors

These errors are variable across quarters and cannot be quantified. They can occur when data on building consent and survey forms is incomplete or incorrect or when it is incorrectly delivered, interpreted, or classified. Editing procedures aim to minimise their impact.

Non-response imputation

For building projects where no survey response is received, Statistics NZ imputes values for work put in place, based on responses for comparable projects.

Non-response values imputed for the June 2013 quarter			
	Imputed value \$(million)	Percentage of category value	Percentage of all buildings value
Residential buildings	277	15.4	9.0
Non-residential buildings	100	7.8	3.3
All buildings	377	12.3	12.3

Low-value consents

These are residential building consents valued from \$5,000 up to \$45,000, and non-residential building consents valued from \$5,000 up to \$80,000. For these consents, it is assumed that:

- the consent value represents the value of work put in place
- consented work will be done during the month following issuing of the consent.

Low-value jobs are therefore valued directly from consents (after a one-month lag), rather than by postal survey. The following table shows the values included for the June 2013 quarter.

Low-value consents included for the June 2013 quarter			
	Low-value consents \$(million)	Percentage of category value	Percentage of all buildings value
Residential buildings	73	4.1	2.4
Non-residential buildings	51	4.0	8.3
All buildings	125	4.1	4.1

General information

Data source

Values for building work put in place are obtained each quarter by a postal survey of builders or consent applicants. The survey is based on building consents data and is called the Quarterly Building Activity Survey (QBAS).

Survey design

Building consents are grouped each month into four value ranges for residential buildings, and four value ranges for non-residential buildings, as follows:

- Highest-value range – for all residential or non-residential consents, builders or consent applicants are surveyed to obtain quarterly values for building work put in place.
- Second- and third-value ranges – a sample of builders or consent applicants is surveyed and the quarterly values collected are rated up, to represent both surveyed and non-surveyed building work.
- Lowest value range – the consent values are used to represent the quarterly value of building work put in place.

Surveyed building jobs that are not completed at the end of the quarter are surveyed again in following quarters until the work is finished.

The rating up of sampled values and calculation of sampling error are complex and depend on factors that differ for each value range and month of selection. For further information, contact

info@stats.govt.nz or Statistical Methods, Statistics New Zealand, Private Bag 4741, Christchurch.

Consistency with other periods

Year	Change in coverage
1989	From September 1989, building work is excluded if its consent value is below \$5,000. This excluded work is estimated as being less than 1 percent of published values.
1993	From January 1993, the building consents system replaced the less extensive building permits system. This may have affected the consistency of the time series to some extent.
1996	From the September 1996 quarter, consent values for multi-purpose buildings are coded to one or more of the most appropriate building types. Multi-purpose buildings were previously added to miscellaneous buildings.

Interpreting the data

Constant price series (volumes)

Current values include both a quantity and price component, whereas constant price series (volumes) have had the effect of price changes removed. Removal of price change (deflation) leaves just the volume (or quantity) component, enabling comparisons across different time periods without the distortion caused by price inflation (or deflation).

Quarterly values for residential building work and non-residential building work are separately deflated by the residential buildings and non-residential buildings sub-indexes from the capital goods price index. The deflated quarterly values are expressed at a constant pricing level, using September 1999 quarter prices. Deflated values for all building activity are calculated as the sum of the deflated values for residential and non-residential building activity.

Price deflation is done before seasonal adjustment and estimation of trend values.

Seasonally adjusted series

Seasonal adjustment removes the estimated impact of regular seasonal events, such as summer holidays and pre-Christmas purchasing, from statistical series. This makes figures for adjacent periods more comparable.

The seasonally adjusted series are recalculated quarterly when each new quarter's data becomes available. Figures are therefore subject to revision, with the largest changes normally occurring in the latest quarters.

The X-12-ARIMA seasonal adjustment program, developed at the U.S. Census Bureau, is used to produce the seasonally adjusted and trend estimates.

[Seasonal adjustment in Statistics New Zealand](#) has more information.

Trend series

Trend calculation removes the estimated impact of regular seasonal events and irregular short-term variation from statistical series. This reveals turning points and the underlying direction of movement over time.

The trend series are recalculated quarterly when each new quarter's data becomes available. Figures are therefore subject to revision, with the largest changes normally occurring in the latest quarters. Revisions can be large if values are initially treated as outliers but are later found to be part of the underlying trend.

The X-12-ARIMA seasonal adjustment program is used to produce the seasonally adjusted and trend estimates. Irregular short-term variation is removed by smoothing the seasonally adjusted series using optimal weighted moving averages.

Comparison with building consent statistics

Building consent statistics provide an indication of upcoming building activity, but comparisons may be affected by variable timing and valuation differences, particularly following the Canterbury earthquakes.

More information

[View more information about building work put in place](#)

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Tables

The following tables are available in Excel format from the 'Downloads' box. If you have problems viewing the files, see [opening files and PDFs](#).

1. Value of building work put in place, unadjusted values
2. Value of building work put in place, seasonally adjusted and trend values
3. Value of building work put in place, volumes (constant price values) at September 1999 quarter prices
4. Related series

Access more data on Infoshare

Infoshare allows you to organise data in the way that best meets your needs. You can view the resulting tables onscreen or download them.

Use Infoshare

For this release, select the following categories from the Infoshare homepage:

Subject category: **Industry Sectors**

Group: **Building Activity Survey - BAS**