

Guide to the 2018 National Construction Pipeline Report

The National Construction Pipeline Report (6th edition) provides a projection of national building and construction activity for the next six years, ending 31 December 2023

The report includes national and regional breakdowns of actual and forecast residential building, non-residential building and infrastructure activity. It is based on building and construction forecasting by BRANZ, and Pacifecon NZ Ltd (Pacifecon) data on known non-residential building and infrastructure intentions.

The report provides awareness of the expected pipeline of building and construction work, to support:

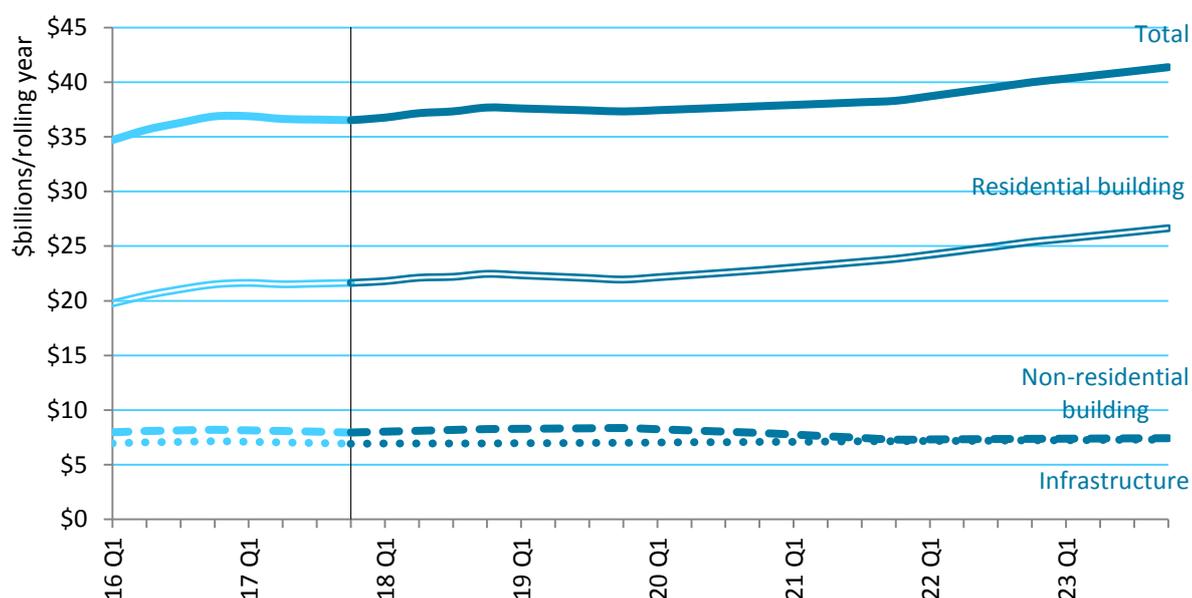
- planning by all sector participants
- scheduling of investment in skills and capital to meet the future needs of the sector
- coordination between construction procurers (particularly central and local government) that can lead to better scheduling of construction projects
- smoothing the boom-bust cycles that have negative impacts on productivity, innovation, employment, skills levels and quality in the construction sector.

The 2018 forecast indicates a smoothing of the boom bust cycle

The forecast is for strong long-term growth. For the first time in the history of this report the national forecast does not predict a construction peak during the forecast period. Instead the 2018 forecast is for consistent building and construction activity in the next few years with stronger growth expected toward the end of the forecast period.

- Total construction is expected to grow steadily to a forecast high of \$41.4b in 2023.
- Residential building value is expected to hold steady in the next few years before increasing to a forecast high at \$26.6b in 2023.
- Dwelling consents are expected to increase year-on-year to a forecast high at 43,100 in 2023.
- Non-residential building value is expected to peak at \$8.4b in 2019.
- Infrastructure is forecast to remain relatively unchanged, increasing marginally to \$7.3b in 2023.

Figure 2018 All construction nationally, by activity type



Source: BRANZ/Pacifecon

- The forecast indicates to the construction sector that it can have confidence in the expected demand for future building and construction work and can therefore invest effectively to scale up production (via technological development, skills and training, new efficiencies) to produce at high volumes in the future, rather than relying on 'quick-fix' methods of increasing capacity (bringing in skills from overseas, utilising spare capacity, borrowing resources from construction-related industries) to meet a short-term construction boom.
- The six year forecast for the regions are positive. Auckland, Waikato/Bay of Plenty and Wellington are expected to experience considerable growth of over 20% in total construction values between 2018–2023.

Residential buildings/dwellings

- Residential building value is forecast to drive the construction market over the next few years. Four of the five regions considered in this report are forecast to grow by over 20% from 2018–2020.
- The construction sector intends to respond to the strong demand for dwellings with national consent volumes expected to reach record highs every year from 2020. Auckland is also forecast to hit record highs from 2019.
- Multi-unit dwellings are forecast to increase considerably – growth rates in multi-unit dwellings are higher than detached for all regions (except Rest of New Zealand group), with particularly strong growth in multi-unit dwellings in Auckland and Wellington. Multi-unit growth in Auckland is occurring across a range of multi-unit housing types (ie apartments, townhouses, retirement units).
- Wellington is forecast to experience strong growth in residential building value and detached and multi-unit dwelling consents.

Non-residential buildings

- The non-residential building activity forecast over the next few years is positive, with national non-residential building value forecast to peak in 2019. Wellington and Rest of New Zealand group are forecast to peak in 2018, Auckland and New Zealand are expected to peak in 2019. Non-residential building activity in Auckland and the Waikato/Bay of Plenty are forecast to remain strong throughout the forecast period.
- Pacifecon's research data indicates that there are strong sector intentions to initiate a high value of non-residential building work over the short-to-medium term. The sector is communicating there are plenty of known non-residential building intentions.

Infrastructure

- Infrastructure spending is forecast to maintain current levels, increasing marginally by 6% from 2018 to 2023.
- Pacifecon's research data indicates that there are strong sector intentions to initiate a high value of infrastructure construction over the six year forecast. The sector is communicating there are plenty of known infrastructure intentions.

The 2018 report notes five key findings

- 1) Sustained growth is forecast for building and construction nationally - For the first time since the report was initiated in 2013 a peak in total construction value is not expected within the forecast period. Instead a more moderate sustained growth is forecast for the next six years.
- 2) National dwelling consents expected to exceed historic highs with 43,000 in 2023 - Over the next six years the number of dwelling units consented is forecast to increase by 39% to a forecast high of 43,000 dwelling units in 2023.
- 3) Multi-unit dwellings overtook detached house consents in Auckland in 2017 - In 2017 51% of dwellings consented in Auckland were multi-unit dwellings, the 2017 report did not expect more than 50% multi-unit consents to occur until 2022.
- 4) Non-residential building growth expected for Auckland, Waikato and Bay of Plenty – Non-residential building growth is expected in 2018 for Auckland and the Waikato/Bay of Plenty regions, with high activity levels expected to remain in these regions to 2023.
- 5) Wellington experienced the strongest total construction growth in 2017 - Other regions of New Zealand sustained or declined, but Wellington experienced strong construction value growth in 2017 (11%), formed by a combination of residential and non-residential building growth.

Comparison between the 2017 and 2018 reports

Overall – The New Zealand construction sector is possibly near capacity/currently restrained and needs time to gear up to deliver at higher volumes. Nationally total values are expected to be lower than previously forecast in the next few years and higher in the six year outlook. The higher and shorter peak that was forecast for 2020 will give way to more gradual sustained long term growth to 2023. In the next few years total construction values will be lower than forecast in 2017, however activity will surpass previously forecast levels near the end of the forecast period in 2023 and is expected to keep growing past the forecast period.

Residential value – The 2018 forecast growth in residential buildings will be more gradual than previously forecast in the next few years, but will increase strongly towards the end of the forecast period 2023. The 2017 forecasts had residential building activity peaking in 2020 and falling away after.

Residential Dwellings – Dwelling consent numbers are lower than initially forecast in the next two years, but will grow strongly from 2020, going past the 2017 report peak of 34,500 in 2020 and remaining well above this level to 2023.

Non-residential – A lower value peak than previously forecast is expected to occur in 2019. Non-residential in Auckland, Waikato and the Bay of Plenty remain strong to 2023. Pacifecon's research data suggests that there is a high value of known non-residential building work scheduled to be initiated over the next six years.

Infrastructure – Infrastructure activity is lower than previously forecast. The 2017 report forecast strong national growth, while the 2018 report forecasts infrastructure to remain relatively constant (increasing slightly over time). Pacifecon's research data suggests that there is a high value of infrastructure construction scheduled to be initiated over the next six years.

The 2017 report forecast

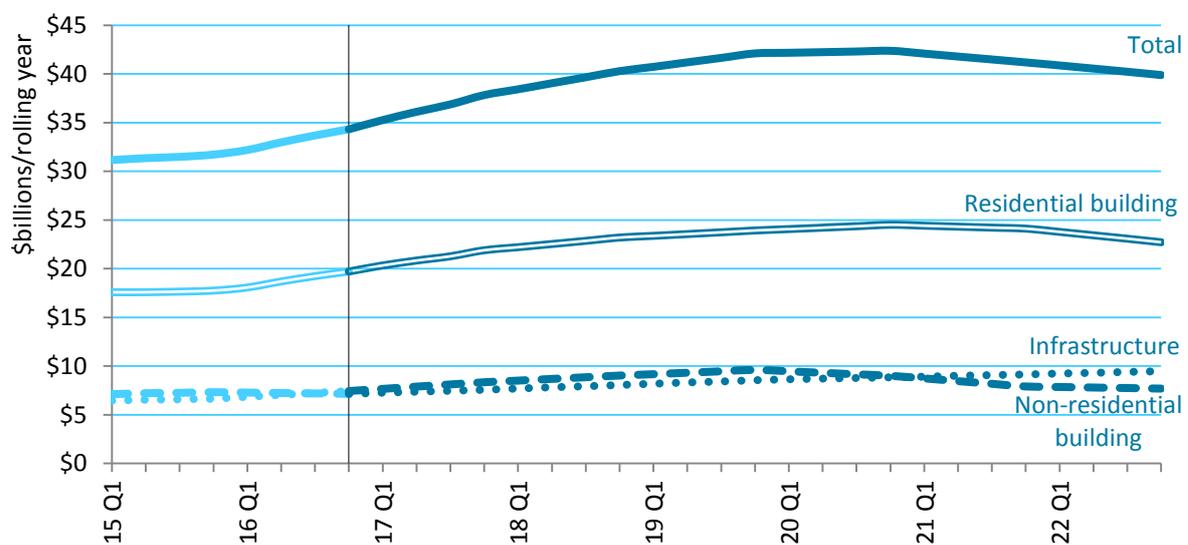
The 2017 report forecast strong building and construction growth from 2017 to a peak in 2020.

At a national level:

- total construction was expected to peak at \$42.4b in 2020
- residential building value to peak at \$24.5b in 2020
- dwelling consents to peak at 34,500 in 2019/20
- non-residential building value to peak at \$9.6b in 2019
- infrastructure to grow steadily over the forecast period to \$9.5b in 2022.

After the peaks building activity was forecast to decrease toward the end of the forecast in 2022.

Figure 2017-1 All construction nationally, by activity type (2017 forecast)



Source: BRANZ/Pacifecon

The 2017 report listed six key findings:

- 1) National building and construction forecasts show a higher peak with a longer duration than previously forecast - Total construction was forecast to peak at \$42b in 2020.
- 2) Dwelling unit consents are forecast to reach a new peak for the next five years - Dwelling units set to stay above 31,500 consents annually between 2017 and 2022. Peaking at 34,500 in 2019 and 2020.
- 3) Growth in non-residential building is forecast to continue for longer, and reach higher than previously forecast - Forecast to peak \$9.6b in 2019.
- 4) Auckland's growth is expected to be sustained for longer than other regions - Other regions peak in 2019/20 and begin to decline. Auckland set to maintain at peak levels until 2022.
- 5) Dwelling consents in the Rest of New Zealand group grew 27% in 2016 - This was driven by strong growth in 2016 in several of the largest Rest of New Zealand regions: Manawatu-Whanganui grew 49%, Northland 43%, Nelson 34%, Hawke's Bay 32% and Otago 29%.
- 6) House sizes have plateaued and decreased in some regions in the last decade - This was the 2017 reports feature item and was not repeated in 2018 report. The 2018 report feature item is on 'comparison of growth in Auckland by geographic area'.

Assumptions and methodology

The report methodology has remained fundamentally unchanged. BRANZ forecasts both the value of construction (residential, non-residential and infrastructure) and the number of dwelling unit consents using a combination of Statistics New Zealand data (Gross Fixed Capital Formation, Census, Population estimates, Household formation), economic indicators (ie Quarterly Employment Survey estimates of full-time equivalent employees in the construction industry) and industry testing.

A key change between the data used in the two reports has been the revision of Statistics New Zealand Household Formation Estimates. In the 2017 forecast, a housing shortage of approximately 30,000 was assumed to be remedied within five years. However, in 2018, the housing shortage is higher at 80,810, due to revisions to the population estimates made by Statistics New Zealand. It is therefore no longer feasible to assume the housing shortage will be remedied within five years, so BRANZ has removed the imposed time period to remedy the housing shortage. Instead BRANZ has implemented what it deems to be reasonable year-on-year consent growth. Factors such as labour, material, land and financing shortages all contribute to the forecasting considerations.

KiwiBuild

The BRANZ residential building and dwelling forecasting used in this report do not differentiate between KiwiBuild and non-KiwiBuild dwelling construction. The dwelling unit forecasts are based on Statistics New Zealand's December 2017 household formation data which provides estimates of the number of new dwellings required derived from population estimates. This information provides estimates of the number of new dwellings required to meet both expected population growth and to remedy already existing housing shortages.

KiwiBuild is expected to provide greater certainty of the forward pipeline of construction work and allow the sector greater ability to manage constraints and scale up to provide year-on-year increases in dwelling numbers into the future.