# Building by numbers

Data that's up-to-date, verified, connected and easy to interpret fuels better decision making, which drives better outcomes for stakeholders. That simple principle lies behind Build Insights, a new online tool developed by BRANZ that tracks key trends and health signals in our building and construction sector.

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**Locating, accessing and making sense of data from across Aotearoa New Zealand's complex building and construction sector has long been notoriously difficult. Planners, policy makers, regulators, developers, financers, product manufacturers and homebuyers looking for evidence to support critical decisions often faced a minefield of fragmented information – some of it current and reliable, much of it not.**

'Our sector partners told us how hard it was trying to identify emerging opportunities and challenges in the building system, track the impact of changes and understand how different parts of the system interact with each other,' says Matthew Curtis, a senior economist at BRANZ.

'There was a clear call for data and other research outcomes to be packaged in a way that enables different audiences to easily find, digest and use the information they need.'

BRANZ recognised it was uniquely positioned to heed that call. In 2019, it began an ambitious project working with multiple sector stakeholders to understand what data was being produced and by whom, how the data was being stored and used, how it overlapped and interacted, what was missing and how it might be packaged to present a more meaningful overview of the state of the sector.

The end result – Build Insights – was launched by BRANZ in May this year. Build Insights is a free online tool that helps stakeholders 'connect the dots' and recognise the trends, possibilities and potential challenges emerging in the sector.



*Build Insights helps connect the dots on trends in the sector.*

## Single source of truth

Build Insights brings together data and analysis from government and private sector organisations across the country, including Ministry of Housing and Urban Development, Stats NZ, Ministry of Education, Ministry of Business, Innovation and Employment, CoreLogic, Land Information New Zealand, Pacifecon, Ministry for the Environment, Real Estate Institute of New Zealand, EBOSS, Electricity Authority and University of Auckland.

Census, consenting and house price data is included, while BRANZ data – collected over many years using world-class scientific practices and facilities – underpins about 50% of the tool's insights.

'Each dataset paints its own picture, but brought together, they form a clearer and wider view of our current building system,' says Matthew.

'Build Insights creates a trusted single source of truth, offering nationwide insights, statistics, research findings and historical indices. We've developed it to support best practice and decision making across the industry.'

Among the insights the tool provides are:
- housing demand
- forecast pipeline of construction work
- land availability and section prices
- consenting timeframes
- builder and trade performance
- workforce trends
- housing conditions and energy consumption. ▶▶



## How it works

Build Insights presents information in dashboard style. Insights are organised into seven key domains accessed via tabs on the dashboard.

**Demand** includes information on:
- changes in rent
- changes in house price affordability
- population growth by region relative to growth in available housing
- forecasted dwelling unit consents
- the pipeline of work in construction.

**Plan** includes information on:
- availability of land for housing
- median section prices
- changes in the number of resource consents processed.

**Design** includes information on:
- time spent in BCA consenting, including time when 'the clock is stopped'
- input by homeowners into new house designs
- industry sentiment about demand.

**Build** includes information on:
- client satisfaction
- tradesperson call-backs
- build timeframes.

**Operate** includes information on:
- alteration and addition consents
- house condition and levels of maintenance
- energy consumption
- water usage.

**System impact** includes information on:
- waste in demolition and construction and other environmental impacts
- construction industry profitability
- construction industry productivity
- total income per employee.

**System resilience** includes information on:
- ratios for residential construction businesses
- return on equity for residential construction
- industry spend on research and development
- percentage of projects using BIM
- difficulty in recruiting new staff
- participation in construction training and tertiary education
- construction businesses starting and ceasing operations by year.

Under each domain, information is presented as a series of at-a-glance statistics and interactive graphs.

The ability to compare data between the seven domains is planned for a future version of the tool.

## Who it's for

Build Insights serves a broad range of stakeholder needs.

### Industry professionals

Build Insights provides information on construction pipelines and regional demand to help forecast and estimate projects and workload. Planning is supported by insights on land availability and consenting timeframes and approvals. Data on workforce trends, resilience of building companies, customer satisfaction and defects in workmanship is also available.

### Government

Government officials can use Build Insights data to inform policy and ensure ministers have accurate, relevant and current information to support decisions. Local authorities can use the data to understand regional differences and identify key issues affecting their jurisdictions.

### Researchers

Build Insights collates data from reliable sources – enabling researchers to gauge the need for new study projects, build support for research and funding applications and assess long-term environmental and social-impact trends in the sector.

### Homeowners

Build Insights allows homeowners to research the most attractive places to live based on a range of factors such as house prices, land availability and the construction pipeline (showing where housing is due to be built). Homeowners can assess how long it is likely to take to build or remodel a home based on factors such as supply chain and consenting timeframes.

## Continued development

'For the first time, different players in the sector have access to data and analysis that's connected, consistent and trustworthy that they can use to support a wide range of important decisions,' says Matthew.

'BRANZ will continue to develop Build Insights by adding data sources and new ways of rendering and comparing information to make sure it meets the evolving needs of the sector.' ◂

FOR MORE ▸

Visit Build Insights ▸

## Build Insights – a foundation for solutions

Insight

**175,000** new **houses** could be needed in Aotearoa New Zealand by 2030.

Insight

It costs on average **over $200,000 more** to **build a new house** than to buy an existing one.

**Potential solutions**

- **Designing for new ways of living** such as multi-generational or multi-family homes.
- **Changing perceptions** around simpler, smaller, lower-cost homes.
- **Promoting whole-of-life cost savings** in new builds.
- **Working with the finance sector** to understand the long-term value of new builds.