

Assessing housing shortages in New Zealand

Before the COVID-19 pandemic, strong migration-led population growth boosted demand in New Zealand, including for housing. With housing construction slow to respond, the limited supply of new housing moving onto the market exacerbated the housing shortage.

We constructed a simple model to estimate housing shortages across New Zealand's regions. It builds on a similar approach used in our work for clients, and ANZ's recent analysis,¹ in which we break down the specific drivers of demand for and supply of new housing relative to a range of base years.

Our housing shortage model shows how changes in housing demand and supply have driven the shortage

We use Stats NZ's data of population estimates, dwelling counts and new dwellings consented to look at housing shortages for New Zealand overall and a selection of New Zealand regions more specifically.

A simple model for estimating housing shortages

The model consists of the following:

- Demand from population change each year, overlayed with the number of people per dwelling.
- Demand due to an assumption for depreciation of the existing housing stock (0.1 to 0.5 percent).
- Supply of new dwellings, which depends on the lag between dwelling consent issuance and completion (6–24 months), and non-completion rate (3 to 15 percent).²

We have estimated cumulative housing shortages for four different base years – 2001, 2006, 2010 and 2013 – where housing shortages are assumed to begin accumulating. The estimates presented here are from the model's medium scenario, which applies a set of conservative assumptions, including:

- An annual depreciation rate of 0.3 percent (0.4% for Auckland and Canterbury).
- A 12-month lag for dwelling completion – 18 months for Auckland, reflecting the greater amount of time taken to construct a dwelling in the region).
- A non-completion rate of 7 percent.

Housing shortages started to accumulate since 2001

Our estimates suggest housing shortages began to accumulate in New Zealand as early as 2001, which could have added to a shortfall of more than 80,000 over the years.

¹

<https://www.anz.co.nz/content/dam/anzconz/document/s/economics-and-market-research/2021/ANZ-PropertyFocus-20210525.pdf>

²

Based on Stats NZ's experimental building indicators <https://www.stats.govt.nz/experimental/experimental-building-indicators-march-2022-quarter/>

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The estimated shortfall would be around or above 70,000 if 2006 or 2010 is chosen as the base year (see Figure 1).

The housing shortfall in New Zealand has eased as population growth has slowed since the onset of the COVID-19 pandemic.

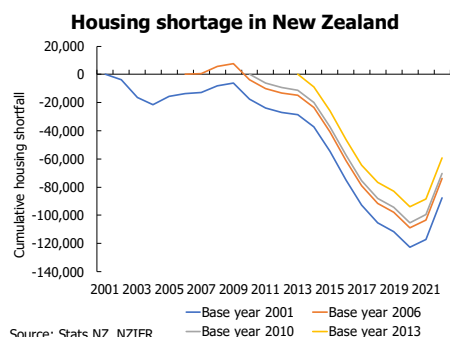
Auckland has the largest supply shortage of housing

We estimate the housing shortage to be most acute in Auckland relative to the other New Zealand regions (see Figure 2). This largely reflects the historically stronger population growth in Auckland. Also, the construction of new homes in Auckland tends to take longer to complete after dwelling consents are issued. It generally takes about two years to complete a residential project and for a Code Compliance Certificate (CCC) to be issued in Auckland, and some can take even longer.³

Easing in housing shortages after 2020

Although the number of dwellings consented has been trending upward since 2012, it is only in the recent two years that the housing shortage in New Zealand has started to ease. This is largely driven by the slowing population growth due to net migration loss since the start of the COVID-19 pandemic in early 2020.

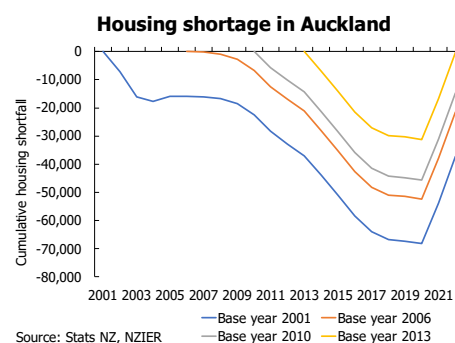
Figure 1 New Zealand's housing shortage has lessened since COVID



³ <https://www.interest.co.nz/property/117973/latest-code-compliance-figures-auckland-council-should-sound-warning-bell-builders>

The reduction in housing shortfall is most apparent in Auckland, as its population fell by 0.6 percent in 2021 and a further 0.5 percent in 2022. Wellington (Figure 6) and Waikato (Figure 4) are also experiencing some easing in their housing shortages due to slower population growth.

Figure 2 Auckland's housing shortage eases as its population declines since 2020



Rapid issuance of dwelling consents and policy incentives accelerate the supply of housing stock in Canterbury

Unlike other regions, Canterbury has built its way up to a housing surplus over the recent decade (see Figure 3). Since 2012, the region has consented more than 500 new dwellings for every 1,000 additional people to the region's population.⁴ The financing support from central government and changes to the local authority's planning laws during the post-earthquake Canterbury rebuild also helped accelerate the construction of new homes.

The below charts show our estimates for Canterbury, Waikato, Northland and Wellington.

⁴ <https://www.newshub.co.nz/home/new-zealand/2022/08/kiwibank-says-aotearoa-s-housing-shortage-has-shrunk-construction-industry-really-busy.html>



Figure 3 Canterbury building its way up to housing supply surplus

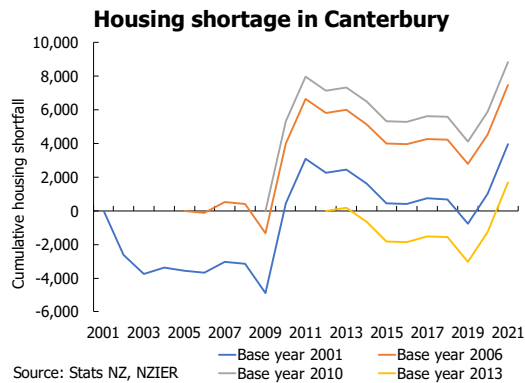


Figure 4 Housing supply in Waikato exceeded demand over the past two years

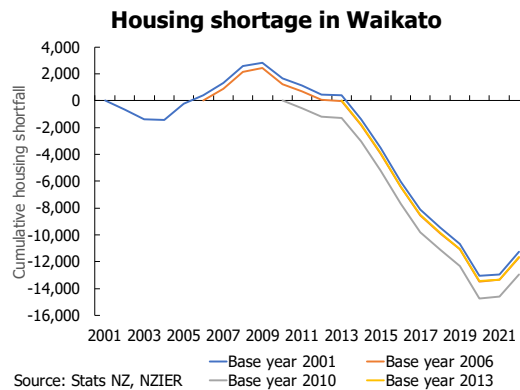


Figure 5 Northland's housing shortage accumulating at a slower pace since 2020

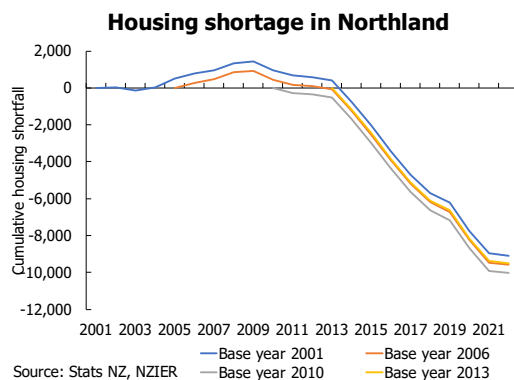
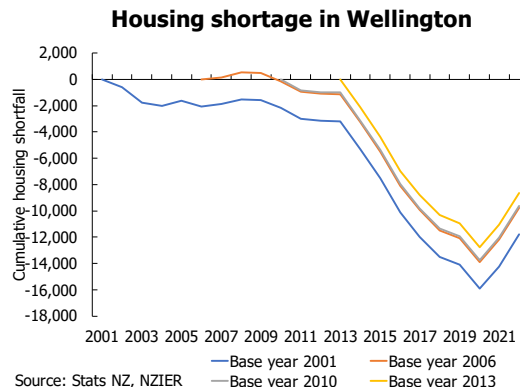


Figure 6 Housing shortages have eased in Wellington since COVID as population growth slows



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