

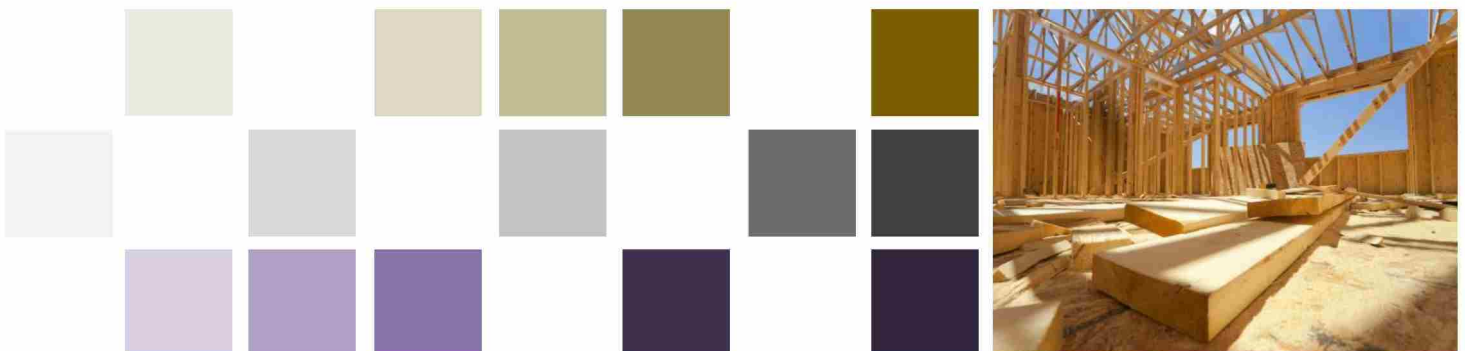
# New Zealand Residential Building Consents, 2021 to 2025

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Report prepared for Chorus

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## Executive summary

1. In its draft decision on Chorus' price-quality path from 1 January 2022, the Commerce Commission (Commission) reduced the expenditure allowance Chorus had proposed for meeting the cost of new connections. The Commission made this change because the Ministry of Business, Innovation and Employment (MBIE) had, in December 2020, revised down its forecast of new dwelling consents, a key input into Chorus' forecasts for new connections.
2. MBIE had forecast an average of 37,800 new consents a year from 2021 in its 2019 report; this average fell to 25,000 per annum in its 2020 report.
3. This report examines the forces driving new residential construction and the information available on those metrics, including information that was not available to MBIE when it revised its forecasts late last year.
4. MBIE prepared its 2020 report during a period of high uncertainty. It appears the authors of the December 2020 report held a particularly pessimistic outlook. The forecasts assumed GDP would decline 4 per cent in 2020 and the Reserve Bank would find it necessary to cut the Official Cash Rate to -0.5 per cent by mid 2021. The sharp decline in economic activity assumed by MBIE did not occur, and is now not expected to occur. The outlook is for economic conditions supportive of new builds over the forecast period. Hence, "the substantial drop-off in consenting numbers" in 2021 and 2022 forecast by MBIE in December 2020 is also unlikely to occur.
5. We show that an insufficient number of houses have been built since 2013 to meet population growth. As a result, there is a significant deficit in the stock of housing. Current forecasts are for continued population growth and therefore continued growth in the demand for housing, albeit at a slower rate of growth than in the past decade. If population growth is less than forecast, the construction activity freed up would be available to reduce the deficit in the stock of housing, rather than lead to a reduction in new builds.
6. We prepare a forecast of new dwelling consents, taking in what is now known about the impact of COVID-19 on economic activity, as well as our estimates of the short-fall in housing stock. We forecast new consents in 2021 to be maintained at about 40,000 (there were 42,848 consents for new dwellings in the 12 months to April 2021), with annual totals reducing slowly over the forecast period as population growth slows and new builds reduce the deficit in housing.
7. In short, our estimate is close to the 2019 MBIE estimate, before MBIE adjusted its projections for an economic slump that was not as severe as predicted by MBIE. Our view of the forces driving new residential construction and the information available on those metrics does not support the justification advanced by the Commission for reducing Chorus' expenditure for expected new connections.



## Introduction

8. In its draft decision on Chorus' price-quality path from 1 January 2022, the Commerce Commission (Commission) reduced the expenditure allowance Chorus had proposed for meeting the cost of new connections (Commerce Commission, 2021, pp. 87 - 89).<sup>1</sup> The Commission made this change because the Ministry of Business, Innovation and Employment (MBIE) had revised down its forecast of new dwelling consents, a key input into Chorus' forecasts for new connections (Commerce Commission, 2021, para. 4.77). In making this adjustment, the Commission noted MBIE's caveat that there was considerable uncertainty associated with its revised forecasts as the impact of COVID-19 on construction drivers remained unclear at the time MBIE completed its report.
9. This report looks at the MBIE December 2020 forecast (Ministry of Business, Innovation and Employment, 2020) —the forecast relied upon by the Commission in reducing Chorus' proposed expenditure for new connections. We examine the forces driving new residential construction and the information available on those metrics, including information that was not available to MBIE when it revised its forecasts late last year. From this review of available data, we prepare an updated forecast of new dwelling consents.
10. Our report unfolds in five sections as follows:
  - Section two reviews the changes in MBIE's forecasts relied upon by the Commission
  - Section three reviews the drivers of demand for new dwellings
  - Section four reviews whether economic conditions are likely to remain supportive to meeting the demand for new dwellings
  - Section five considers the impact of changes in Government policy settings
  - Section six brings the analysis together to project new dwelling consents to 2025.

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<sup>1</sup> The Commission is also proposing reductions for network capacity capex and network maintenance opex based on the MBIE forecasts for new dwelling consents.

## **MBIE's forecast of new dwelling consents**

### **The Commission's review of Chorus' new connection forecasts**

11. Chorus' expenditure proposal for the first regulatory period (2022 to 2024) of its fibre access services included projections for expenditure as a result of expected new connections (Chorus, 2020, pp. 33 - 45). A key input into these forecasts of new connections are the forecasts of new dwelling consents prepared by MBIE in its National Construction Pipeline Report (Ministry of Business, Innovation and Employment, 2019). Chorus scales these forecasts of new dwelling consents to allow for projects that do not proceed, and for the proportion of new builds it expects to win as customers (Chorus, 2020, p. 35).
12. In December 2020, MBIE published an updated the National Construction Pipeline Report (Ministry of Business, Innovation and Employment, 2020). The Commission observed that MBIE had lowered its forecast of new dwelling consents in its 2020 report by 28.4 per cent relative to its 2019 report. The Commerce Commission concluded that Chorus' new connections forecasts, and hence proposed expenditure, were overstated and reduced Chorus' baseline connection capex by \$21.8 million, base network capacity capex by \$4.2 million and maintenance opex by \$1.5 million (Commerce Commission, 2021, para. 4.80).

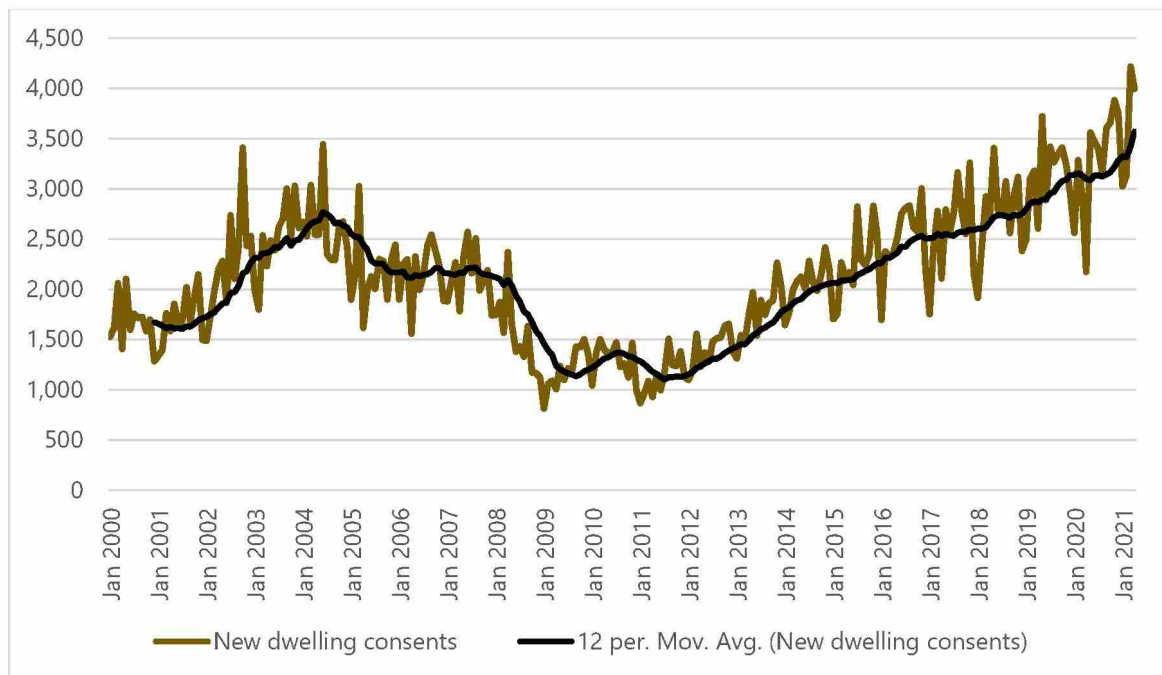
### **New dwelling consents**

13. Statistics New Zealand defines dwellings as:

Self-contained permanent residences. Examples include houses, apartments, townhouses, granny flats, and licence-to-occupy retirement village units (Statistics New Zealand, Kāhore he rā).
14. Building consents are required for any new building work to ensure compliance with the Building Act (2004). Consents for new dwelling are measured by Statistics New Zealand. As shown in Figure 1, the number of consents for new dwellings has been on a rising trend for a decade, and are currently at record highs (Statistics New Zealand, 2021).



Figure 1 New dwellings consented, by month, January 2000-April 2021



## MBIE forecasts of new dwelling consents

15. In its 2019 report, MBIE forecast new dwelling consents to remain above the levels experienced in 2019, and to rise to 38,000 per year over its forecast period. However, in its 2020 report, MBIE revised its forecast down, significantly. Table 1 shows the number of consents MBIE forecast in its 2019 report (column second from the left). The number of consents MBIE now forecasts for 2020 to 2025 are shown in the third column from the left. The values for new building consents reported by Statistics New Zealand are shown in the right hand column of Table 1, (Statistics New Zealand, 2021).

Table 1: Forecast and actual consents, 2020 to 2025

| Year | MBIE 2019 forecasts <sup>2</sup> | MBIE 2020 forecasts <sup>3</sup> | Actual new dwelling consents <sup>4</sup> |
|------|----------------------------------|----------------------------------|---|
| 2019 | 36,000                           |                                  | 37,627                                    |
| 2020 | 37,000                           | 36,000                           | 39,420                                    |
| 2021 | 37,500                           | 28,000                           | 14,366 (4 months Jan to Apr)              |

<sup>2</sup> Ministry of Business, Innovation and Employment, 2019, table 7.6.1, page 52.

<sup>3</sup> Ministry of Business, Innovation and Employment, 2020, table 8.6.1, page 57.

<sup>4</sup> Stats NZ <https://www.stats.govt.nz/information-releases/building-consents-issued-april-2021>.

|      |        |        |  |
|------|--------|--------|--|
| 2022 | 38,000 | 22,000 |  |
| 2023 | 38,000 | 23,000 |  |
| 2024 | 38,000 | 26,000 |  |
| 2025 |        | 26,000 |  |

Source: MBIE National Construction Pipeline Reports 2019, 2020; Statistics New Zealand

16. As is evident from Table 1, MBIE under-forecast consent numbers in 2019 (in its 2019 report) and in 2020 (in both its 2019 and 2020 reports). Of perhaps greater significance, the number of new dwelling consents issued for the 2021 year to date, at 14,366, are tracking well above what would be expected from MBIE’s forecasts. Although monthly consent figures are volatile, due to variations in consents issued for multi-dwelling units (such as apartments), the number of consents issued in the first 4 months of 2021 is in excess of that seen over the same period in 2019 and 2020, suggesting a full-year figure in excess of 40,000 could be possible.
17. To meet MBIE’s forecast, the number of new consents issued each month would need to halve over the remaining months of this year, from the current average monthly rate of 3,591,<sup>5</sup> to 1,704;<sup>6</sup> a level not seen since the aftermath of the Global Financial Crisis as shown in Figure 1 above. This consequence, of predicted levels over the remainder of 2021 needing to fall to levels of the Global Financial Crisis for MBIE’s forecast to be valid, was not anticipated by MBIE. It stated that while it expected new dwelling consents to drop off due to the worsening economic conditions due to the COVID-19 pandemic, it was not forecasting new dwelling consents to drop to the same levels as were seen during the Global Financial Crisis (Ministry of Business, Innovation and Employment, 2020, p. 3).
18. Hence, it would appear that MBIE’s December 2020 forecasts have materially underestimated the number of new dwelling consents that will be issued in 2021. In turn, this divergence from expectation so early in the forecast period, raises questions about the quality of the information available to MBIE when it prepared its forecast and/or the possibility of a structural flaw in its model.
19. MBIE caution that an important aspect of its 2020 report is the significant uncertainty presented by the COVID-19 pandemic. It observes that the severity of the pandemic on construction activity would be impacted by several factors that sit outside the current modelling (Ministry of Business, Innovation and Employment, 2020, p. 1).
20. MBIE provide further information on several assumptions adopted in developing their forecasts (Ministry of Business, Innovation and Employment, 2020, p. 51), noting that its forecasts were completed on 24 September 2020. The key variables used in the forecast (related to new dwelling consents) were:

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<sup>5</sup> 14,366 / 4 = 3,591

<sup>6</sup> (28,000 – 14,366)/8 = 1,704

- GDP growth was forecast to fall by about -4% for the year ending December 2020., and then rise sharply by 6.5% for the year ending March 2022, before returning to the long-run average growth rate by mid-2023.
  - The Official Cash Rate was forecast to be cut to -0.5% by mid-2021, and maintained at that rate for just over a year, before incrementally increasing over the forecast period.
  - Net migration was forecast at close to 0 for “the next couple of years”, before increasing to about 40,000 for the year ending 2024.
21. In the following sections, we examine the forces driving new residential construction and the information available on those metrics including the changes in the forecasts of these variables since MBIE prepared its 2020 report.

## Demand for new dwellings

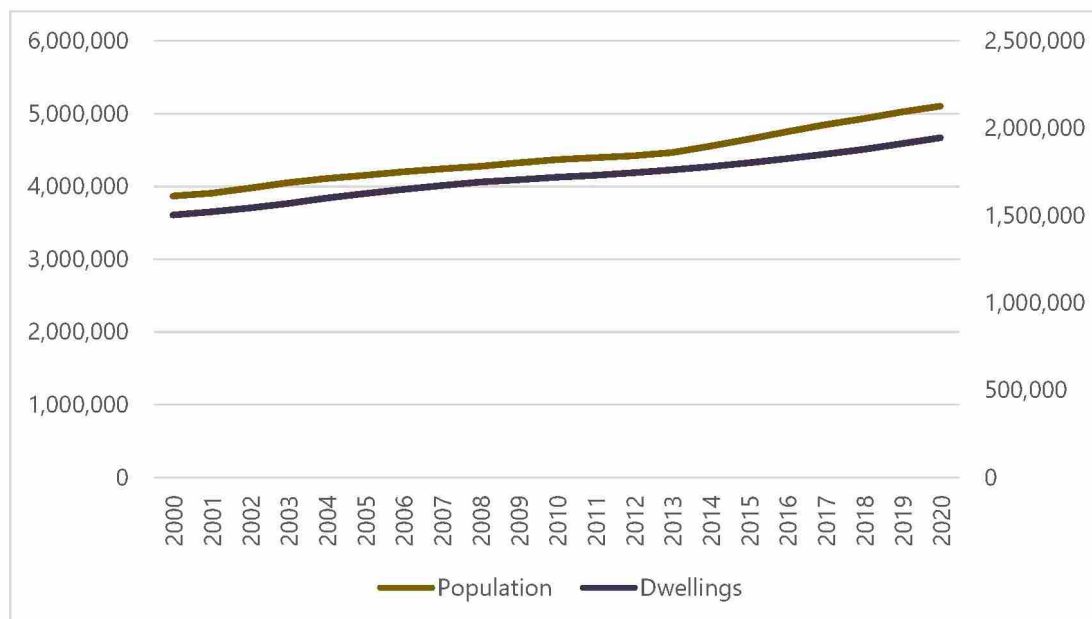
### A derived demand

22. The number of new consents for residential dwellings are monitored and counted because the number of consents is a proxy, or indicator, of the number of new residential dwellings that will be built. The number of new residential dwellings people want to build derives from the demand for housing.

### Changes in population

23. The demand for housing in New Zealand is ultimately driven by the number of people in New Zealand—people need somewhere to live.
24. New Zealand’s population increased significantly in the period 2000 to 2020, an increase of 32 per cent (to 5.104 million people, up from 3.869 million) (Statistics New Zealand, 2021). The number of dwellings in New Zealand also increased over the same period, though not to the same extent, by 29 per cent (to 1.946 million, up from 1.503 million) (Statistics New Zealand, 2021). The trends in population and dwellings are shown in Figure 2. The divergence in growth between population and dwellings is especially noticeable in the period since 2013. This suggests there has been a developing shortfall in houses.

Figure 2: New Zealand population and dwelling numbers, 2000 to 2020 (year-end)



Source: Statistics New Zealand, estimated resident population and estimated private dwellings

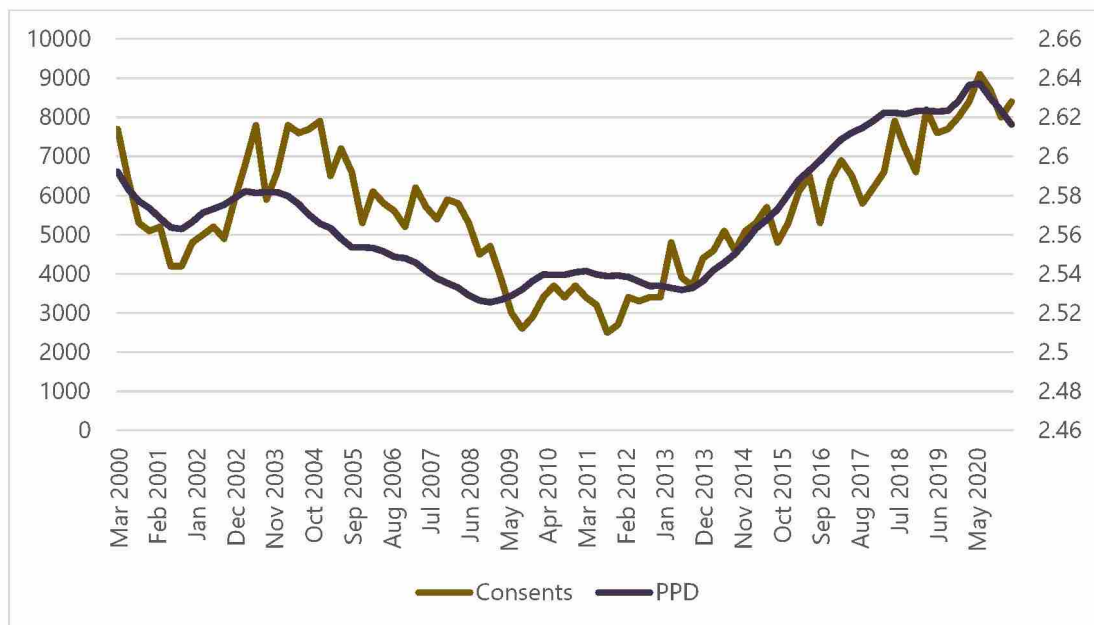
### A shortfall of housing

25. As New Zealand’s population has increased faster than the addition in the number of dwellings since 2013, the number of people per dwelling (PPD) has increased. The number of PPD is

calculated as the total population of New Zealand divided by the total number of dwellings. Changes in the number of PPD are an indication of whether the observed change in the supply of housing is sufficient to meet the change in demand for housing.

26. Figure 3 shows the change in total number of dwellings and PPD for New Zealand, with the number of housing shown on the left axis and the PPD shown on the right. The number of PPD tends to lead the change in dwellings by a few quarters, suggesting that the supply of housing responds to changes in demand; that is, when there is a shortage in houses, more are built.
27. However, since midway through 2013, the number of PPD has been steadily increasing, even with the increase in the number of dwellings. Therefore, although housing supply has increased, it has not increased quickly enough to offset the increase in demand for housing. In the most recent quarters, the number of PPD has dipped; however, it remains only slightly below the highs seen in the previous twenty years.

Figure 3: Annual change in the number of dwellings, and the average total number of people per dwelling, quarters from 2000 to 2020



Source: Statistics New Zealand, estimated private dwellings and Sapere calculations

28. The increase in the value of PPD since 2010 indicates there have been insufficient houses built to accommodate the increase in population. This shortfall in the stock of housing can be estimated by comparing the change in the number of dwellings against the increase in population divided by a base value of PPD. Table 2 below indicates a calculated shortage in the stock of housing, taking 2013 (a PPD of 2.54)<sup>7</sup> as the base year where there is no housing shortage. This approach follows the MBIE assumption that there was zero unsatisfied housing demand at the 2013 census (Ministry of Business, Innovation and Employment, 2020, p. 51).

<sup>7</sup> 2013 year end population of 4,467,600 divided by 2013 year end dwellings of 1,761,400 (Quarter 4).

Table 2: Estimated national housing shortage, 2013 to 2020

| Year | Annual population change | Implied dwellings required | Actual dwelling change | Annual shortfall | Cumulative shortfall |
|------|--------------------------|----------------------------|------------------------|------------------|----------------------|
| 2013 | 46,900                   | 18,491                     | 16,800                 | 0                | 0                    |
| 2014 | 84,700                   | 33,394                     | 19,400                 | 13,994           | 14,034               |
| 2015 | 97,700                   | 38,519                     | 21,100                 | 17,419           | 31,453               |
| 2016 | 104,400                  | 41,161                     | 24,300                 | 16,861           | 48,314               |
| 2017 | 93,500                   | 36,863                     | 25,400                 | 11,463           | 59,777               |
| 2018 | 83,400                   | 32,881                     | 28,300                 | 4,581            | 64,359               |
| 2019 | 92,400                   | 36,430                     | 31,500                 | 4,930            | 69,288               |
| 2020 | 80,500                   | 31,738                     | 34,200                 | - 2,462          | 66,826               |

Source: Statistics New Zealand estimated resident population and estimated private dwellings, Sapere calculations

29. Hence, a shortfall in house building began in 2013 and ran through to 2020. There has been a small correction recently, primarily as the number of houses being built increasing coinciding with a lower rate of population growth as a result of the closed borders from COVID-19. However, the shortfall in the stock of housing remains significant.

## **New construction will need to meet the shortfall in housing stock plus new demand**

30. Resolving the shortfall in the stock of housing will require greater construction than that required by population growth. The current shortfall of nearly 67,000 dwellings at the end of 2020 will require sustained excess construction. The current shortfall represents nearly two years of construction (based on 2020 dwelling change of 34,200).
31. Table 2 shows construction of 2,462 dwellings in excess of the population increase in 2020. More recent quarterly data has shown increased levels of excess construction:
- Q3 2020, 5,309 excess dwellings constructed
  - Q4 2020, 4,609 excess dwellings constructed
  - Q1 2021, 5,246 excess dwellings constructed
32. A significant driver of the increase in excess construction, relative to population growth, has been the lower rate of population growth due to reduced immigration as borders were closed to combat COVID-19. The excess construction is based on total dwelling construction of 34,200

in 2020. Assuming total dwelling construction remains stable, it is unlikely that this rate of excess construction would be maintained once net migration resumes as predicted.<sup>8</sup>

## **New Zealand’s population is forecast to continue to grow, but at a slower rate**

33. A critical driver of future demand for dwellings is the change in New Zealand’s population. Statistics New Zealand released a projection of New Zealand’s population from 2020 to 2073 in December 2020 (Statistics New Zealand, 2020). The projected population included estimates for 2021, 2022, 2023 and 2028, as well as a breakdown of the population change between natural increase (births less deaths) and net migration (immigration less emigration). Table 3 below details Statistics New Zealand’s median projections.

Table 3: Forecast changes in New Zealand population, 2021 to 2028 (June years)

| <b>Year</b>            | <b>Population</b> | <b>Change in population</b> | <b>Natural increase in population</b> | <b>Net migration increase in population</b> |
|------------------------|-------------------|-----------------------------|---------------------------------------|---|
| 2020                   | 5,094,000         |                             |                                       |   |
| 2021                   | 5,129,000         | 35,000                      | 25,000                                | 10,000                                      |
| 2022                   | 5,173,000         | 45,000                      | 25,000                                | 20,000                                      |
| 2023                   | 5,222,000         | 49,000                      | 24,000                                | 25,000                                      |
| 2024<br>(interpolated) | 5,269,600         | 48,400                      | 23,400                                | 25,000                                      |
| 2025<br>(interpolated) | 5,317,200         | 47,800                      | 22,800                                | 25,000                                      |
| 2026<br>(interpolated) | 5,364,800         | 47,200                      | 22,200                                | 25,000                                      |
| 2027<br>(interpolated) | 5,412,400         | 46,600                      | 21,600                                | 25,000                                      |
| 2028                   | 5,460,000         | 46,000                      | 21,000                                | 25,000                                      |

Source: Statistics New Zealand, Summary of New Zealand population projections, December 2020

<sup>8</sup> Noting that consent issuance is rising, implying there may be some degree of total construction upside.

34. Hence, Statistics New Zealand expect the population to continue to grow, but at a slower rate than experienced over the past decade. Table 1 shows that almost half of the forecast increase in population projected by Statistics New Zealand results from net immigration. Should international borders remain closed to migration, either due to delays in New Zealand's vaccination programme or continued severe COVID-19 rates overseas, then the increase in population forecast from net migration may be overstated, at least in the near term.
35. Additionally, after the publication of the Statistics New Zealand forecasts for New Zealand's population, the New Zealand Government noted its intention to change immigration policy (Minister of Immigration, 2021). Although detailed proposals were not confirmed, the Minister explained his intent that:
- When our borders fully open again, we can't afford to simply turn on the tap to the previous immigration settings.
36. We therefore consider that the median case for population presented by Statistics New Zealand contains risks to the downside, both from continued restrictions from the COVID-19 pandemic and potential changes to immigration settings.
37. The impact of lower population growth is that there would be larger scope for house construction that would offset the existing housing shortage. For example, assuming a construction capacity of 34,200 per annum (latest 12 months of construction data), and housing demand from population increase of 20,000, construction would be available to offset the housing shortage of 14,200 dwellings. Lower population increases would increase the offset to housing shortages by an equivalent factor. Hence, lower immigration and therefore lower population growth is unlikely to materially impact on the number of new dwellings required over the forecast period.

## **Need for new houses will continue over forecast period**

38. In summary, an insufficient number of houses have been built since 2013 to meet population growth. There is therefore a significant deficit in the stock of housing. Current forecasts are for continued population growth, further supporting the demand for housing. If population growth is less than forecast, the construction activity freed up would be available to reduce the deficit in the stock of housing, rather than lead to a reduction in new builds.
39. The following section considers whether economic settings are conducive to supporting the required increase in new dwellings.



## Economic conditions are forecast to continue to support new builds

### Resourcing new dwellings

40. The preceding section identified a shortfall in the existing housing stock, and the need for additional homes to house a growing population. Meeting this demand for housing will require a commitment of significant resources. In general, a society can be expected to divert resources to meet the demand for new houses when:
- GDP is growing, as GDP growth is a proxy for an increase in wealth and hence an increase in the resources available to a community that could be allocated to housing.
  - Interest rates are low, as low interest rates reduce the financing costs for new builds.
  - Prices of existing houses increase, as rising house prices increase the attractiveness of building a new house (relative to say modifying an existing house to accommodate more people) and the margins available to house developers and/or owners of developable land increase.

## GDP growth is forecast to be stronger than assumed by MBIE in December 2020

41. MBIE noted in their 2020 report<sup>9</sup> their assumptions for GDP growth:

GDP growth is forecast to fall by about -4% for the year ending December 2020. This is then forecast to rise sharply by 6.5% for the year ending March 2022, before returning to the long-run average growth rate by mid-2023

42. MBIE's assumptions are not specific, therefore we use The Treasury's GDP forecast in the Pre-election Economic and Fiscal Update (The Treasury, 2020) in September 2020 as an indication of the basis for MBIE's GDP forecast. Table 4 shows a comparison between The Treasury's GDP forecasts in the Pre-election Economic and Fiscal Update (The Treasury, 2020) in September 2020 and the Budget Economic and Fiscal Update (The Treasury, 2021) in May 2021 as a more recent forecast for New Zealand GDP growth.
43. Significantly, the September 2020 forecast predicted a worse economic outlook for New Zealand than what occurred in 2020 and what is now forecast to happen.

Table 4: Forecast GDP growth rates, 2020 to 2025

| June year | Economic and Fiscal Update, Sept 2020 | Economic and Fiscal Update, May 2021 |
|-----------|---------------------------------------|--------------------------------------|
|           |                                       |                                      |

<sup>9</sup> Ministry of Business, Innovation and Employment, page 51

|      |       |       |
|------|-------|-------|
| 2020 | -3.1% | -1.7% |
| 2021 | -0.5% | 2.9%  |
| 2022 | 3.6%  | 3.2%  |
| 2023 | 3.9%  | 4.4%  |
| 2024 | 4.1%  | 3.3%  |
| 2025 | -     | 2.9%  |

Source: The Treasury Economic and Fiscal Updates, September 2020 and May 2021

44. It appears MBIE had a more pessimistic outlook than The Treasury, as it assumed GDP would decline 4% in 2020, and a bounceback would not occur until 2022 (Ministry of Business, Innovation and Employment, 2020, p. 51). The sharp decline in economic activity assumed by MBIE did not occur, and is now not expected to occur. The actual decline in GDP for the year to 2020 was -2.9%<sup>10</sup> against MBIE's forecast of -4%, and the current forecast from Treasury in Table 4 for 2021 of 2.9%<sup>11</sup> is greater than Treasury's forecast of a -0.5% decline in GDP.
45. Hence, "the substantial drop-off in consenting numbers" in 2021 forecast by MBIE in December 2020 (Ministry of Business, Innovation and Employment, 2020, p. 3) is also unlikely to occur.

## Interest rates have been at historic lows

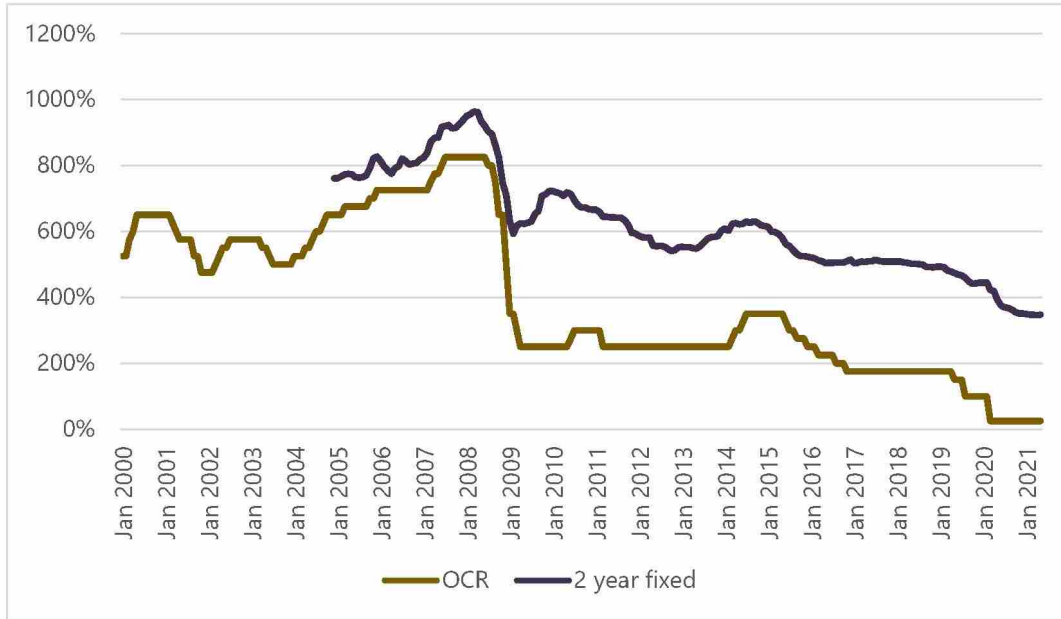
46. Mortgage interest rates are influenced by the Official Cash Rate (OCR), which is set by the Reserve Bank.<sup>12</sup> Figure 4 indicates the path of the Official Cash Rate (OCR) and mortgage rates from 2000 to 2020. The OCR is the main determinant of a bank's lending cost, though there is some influence from international lending markets. Due to the forecast (and eventuated) recessionary pressures of COVID-19, the Reserve Bank enacted expansionary monetary policy to stimulate the economy, decreasing the OCR and consequently mortgage rates.

<sup>10</sup> Statistics New Zealand, retrieved from <https://www.stats.govt.nz/information-releases/gross-domestic-product-december-2020-quarter>

<sup>11</sup> The Treasury forecast includes actual GDP figures for the six months to December 2020. After the Treasury forecast, Statistics New Zealand released the March 2021 GDP figures which showed quarter on quarter growth of 1.6% (March 2021 to December 2021). Retrieved from <https://www.stats.govt.nz/information-releases/gross-domestic-product-march-2021-quarter>

<sup>12</sup> Reserve Bank of New Zealand <https://www.rbnz.govt.nz/monetary-policy/about-monetary-policy/what-is-the-official-cash-rate>

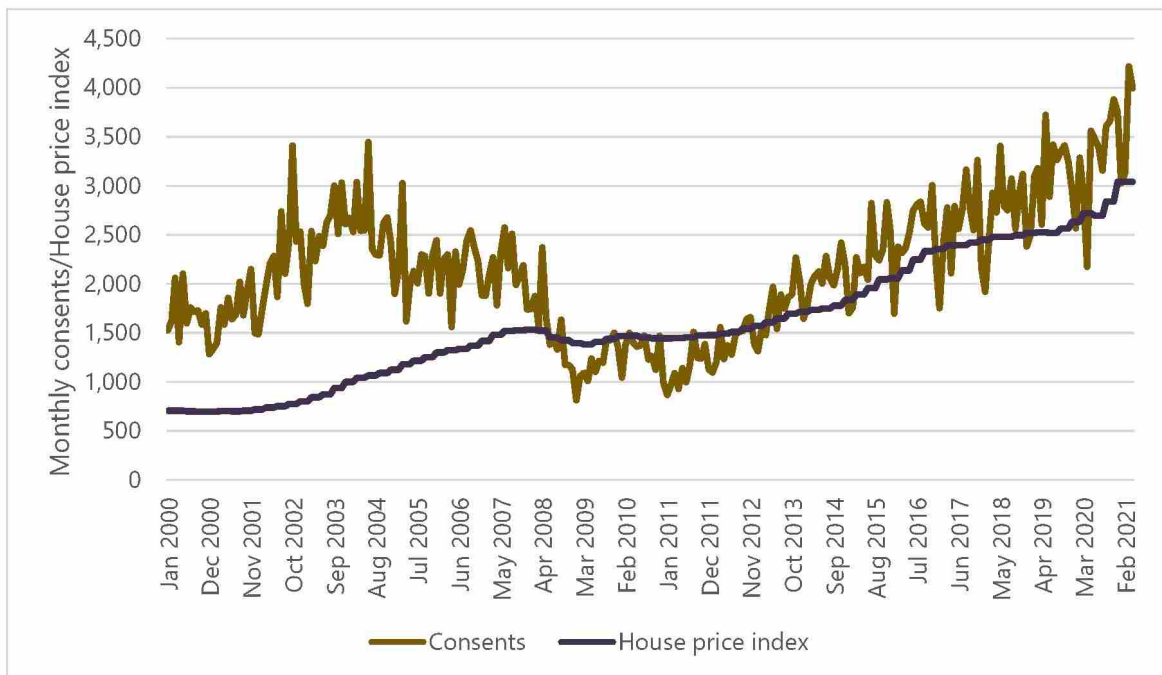
Figure 4: Official cash rate and two-year mortgage rates, 2000 to 2020



Source: Reserve Bank of New Zealand, OCR series, 2-year fixed rate series (available from 2004)

47. As mortgage rates hit historical lows, the cost of servicing a mortgage also reduced, increasing the affordability of mortgages for all prospective purchasers. Demand for property increased, contributing to rising New Zealand house prices since 2010. Consents have increased in response. Figure 5 shows this relationship.

Figure 5: House price index and monthly consents, 2000 to 2020



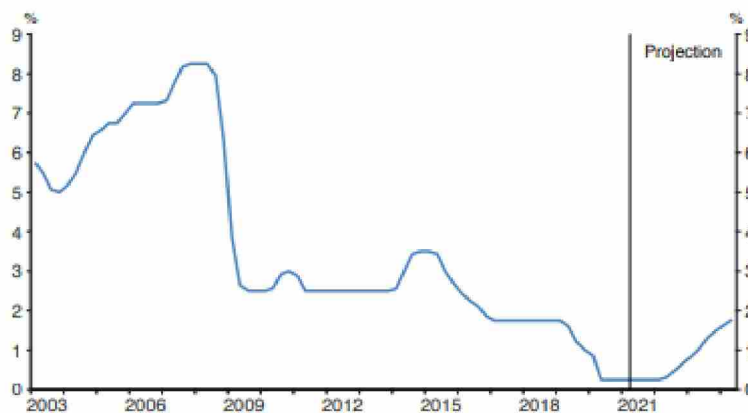
Source: Reserve Bank of New Zealand house price index, Statistics New Zealand new dwelling consents

48. The future path of interest rates is uncertain. The Reserve Bank, at the May Monetary Policy Statement (Reserve Bank of New Zealand, 2021), provided an indication of its current view of the future movements in the OCR. The current view is represented in Figure 6, and the Reserve Bank notes that the projection is subject to current forecasts of economic activity. Increases in the OCR are predicted to occur from mid-2022, slowly increasing to approximately 1.75 per cent by the beginning of 2025. The predicted increase in OCR would also be expected to translate to increases in mortgage rates. This forecast is significantly more optimistic than MBIE noted in its 2020 Construction Pipeline report;<sup>13</sup> MBIE's assumptions for the OCR were:

The Official Cash Rate is forecast to be cut further to -0.5% by mid-2021. This rate is forecast to be maintained for just over a year, before incrementally increasing throughout the forecast period.

49. The Reserve Bank did not find it necessary to cut the OCR to -0.5% by mid-2021. The OCR remained at 0.25% throughout the first half of 2021, and is now forecast to increase in 2022. (Reserve Bank of New Zealand, 2021).

Figure 6: Reserve Bank OCR interest rate, 2003 to 2025



Source: Reserve Bank of New Zealand, Monetary Policy Statement, May 2021 p. 17

50. The Reserve Bank does not believe that the (modest by historical standards) increases in OCR will have a negative impact on house prices. In the May Monetary Policy Statement, the Reserve Bank predicts house price inflation to be 2.6 per cent in 2023, which would contribute to continued strength in consent issuance.

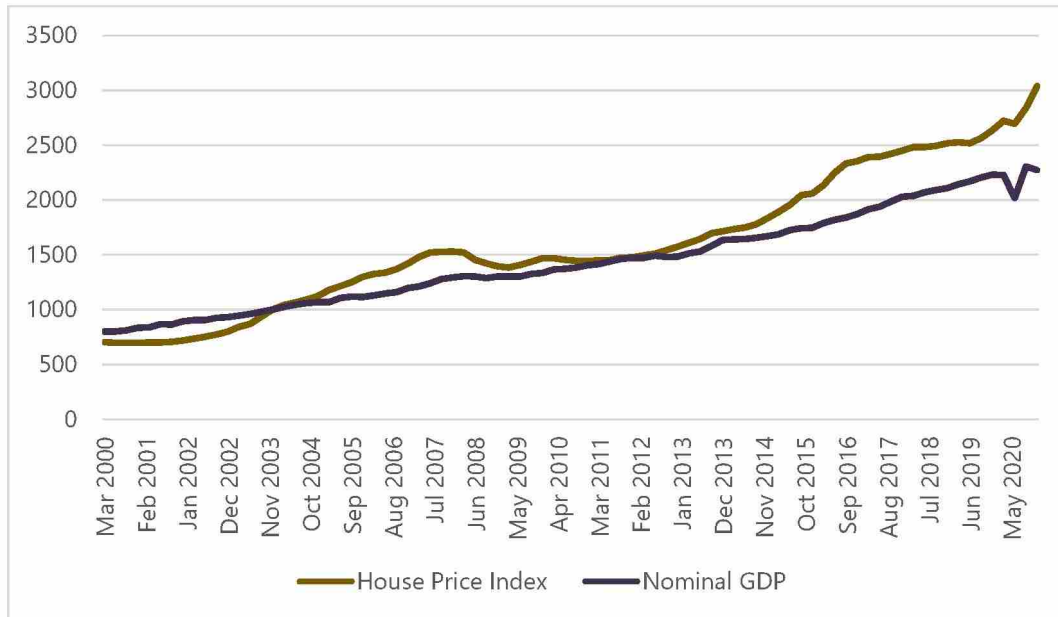
## GDP growth is correlated with house prices

51. Historically, growth in the New Zealand economy has been broadly associated with increases in New Zealand house prices. Figure 7 illustrates this relationship. Specifically, periods of flat or falling house prices have been associated with periods of lower economic activity, such as following the 1987 share market crash, or the global financial crisis from 2008. The exceptional

<sup>13</sup> Ministry of Business, Innovation and Employment, page 51

GDP decline in 2020, as a result of the response to the COVID-19 pandemic, did not result in a corresponding decline in house prices as it was offset by the substantial decline in interest rates.

Figure 7: Nominal GDP index and house price index, 2000 to 2020, Index = 1000 Dec 2003



Source: Reserve Bank of New Zealand, Nominal expenditure based GDP and Corelogic house price index

## Net migration is likely to be higher than forecast by MBIE

52. MBIE noted in their 2020 Construction Pipeline report<sup>14</sup> their assumptions for net migration:

Net migration is forecast to sit close to 0 for the next couple of years, before increasing to about 40,000 for the year ending 2024.

53. This forecast is not broken down into specific years, however we interpret MBIE to have expected zero net migration for the years 2021 and 2022, then rising to 20,000 in 2023, and 40,000 in 2024 and 2025. This is a total of 100,000 net migration in the period of 2021 to 2025. The more recent forecast by Statistics New Zealand (Table 3) has a slightly higher increase of net migration of 105,000 over the forecast period, but 30,000 more in 2021 and 2022. The expected increase in migration suggests greater demand for housing as well as greater levels of economic activity.<sup>15</sup>

<sup>14</sup> Ministry of Business, Innovation and Employment, page 51

<sup>15</sup> As discussed above (paragraph 36), we consider that there is downside risk attached to the median case for population presented by Statistics New Zealand due to the possibility of continued restrictions from the COVID-19 pandemic and potential changes to immigration settings.

## **Economic conditions remain supportive of new builds over the forecast period**

54. In summary, GDP growth is stronger than predicted at the time MBIE prepared its 2020 report. Interest rates are expected to remain low relative to historical levels, though are forecast to increase slightly relative to recent rates, and net migration is expected to be higher than MBIE forecast. As a result of these factors, and the shortfall in the existing stock of housing along, we would not expect house prices to fall. Thus, economic conditions remain supportive of new builds over the forecast period.

# Government housing policy is expected to support housing supply

## Recent policy changes

55. The Government announced in March 2021, a series of policy changes to housing.<sup>16</sup> There were six areas where the Government announced changes:
- \$3.8 billion housing acceleration fund
  - First Home Grants and Loans
  - Bright-line test
  - Interest deductibility
  - Kāinga Ora borrowing
  - Apprenticeship Boost.
56. We summarise each policy change and provide our perspective on the impact of the policy on housing supply and demand. Overall, the Government's housing announcement will have a small but positive impact on the supply side of the housing market. There will be impacts on the investor sector, with a likely change in the type of houses demanded by investors towards new builds and away from existing homes.

## Impact of policy changes on the long-term drivers of the housing market

### \$3.8 billion housing acceleration fund

57. The cost of land and infrastructure is a significant cost in housing development. Deloitte Access Economics (Deloitte Access Economics, 2018) estimated that land and infrastructure can range from between 15 per cent and 35 per cent for housing developments in New Zealand. Statistics New Zealand reported that \$16.5 billion of residential housing consents were issued in 2020 (Statistics New Zealand, 2021). Using a mid-point of the Deloitte study (25 per cent) implies a \$4 billion cost of land and infrastructure annually.
58. The housing acceleration fund aims to increase the supply of houses (particularly affordable houses). There are two specific areas where the fund aims to increase housing delivery:
- an Infrastructure Fund to unlock private sector-led and Government-led developments
  - additional funding for the Land for Housing Programme to accelerate development of vacant or underutilised Crown-owned land.

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<sup>16</sup> Ministry of Housing and Urban Development, retrieved from <https://www.beehive.govt.nz/release/govt-housing-package-backs-first-home-buyers>

59. An initial announcement has been made regarding the first tranche of funding from the housing acceleration fund, a \$1 billion Infrastructure Acceleration Fund.<sup>17</sup> This fund, announced June 2021, anticipates allocating its full funding in 2022. Assuming a similar speed of spend for the remaining \$2.8 billion of the housing acceleration fund would be spent over three years, for example, 2022 to 2025.
60. Spread over a four-year period, the full fund equates to about 25 per cent of annual land and infrastructure costs for housing. Therefore, it is likely that the housing acceleration fund will make a significant contribution to easing the supply constraints around land and infrastructure for new builds.

## **First Home Grants and Loans**

61. First Home Grants and Loans are policy measures primarily targeted at first home buyers. The policy changes announced in March increased the price cap for both new and existing properties and increased the level of income an applicant can earn to access the grant or loan. These changes will provide support to first home buyer demand. This policy is primarily a demand-side initiative and will not directly increase housing supply.

## **Bright-line test**

62. The 'bright-line test' refers to an income tax rule in which those who buy and subsequently sell property are required to pay tax on any positive change in value. The bright-line test does not apply to the family home. The policy changes will extend the bright-line test to 10 years for existing houses; new builds will be kept at the current five years.
63. The extension of the bright-line test from five years to 10 years will have a small, positive impact on supply of new houses. The differential treatment of new builds from existing homes for the purposes of the bright-line test will lead to different behaviour and incentives between new builds and existing homes. For investors with a shorter investment timeframe (less than 10 years), their incentives will be weighted towards purchasing a new-build property over an existing home, all other factors being equal. Therefore, the relative prices from investor demand will increase new build prices in relation to existing homes, with an expectation that supply of new houses will increase to meet this demand.

## **Interest deductibility**

64. The Government will remove the ability to offset interest costs against revenue for loans on residential property investments. Any properties acquired after 27 March 2021 will have no deductibility allowed, and existing properties will have full deductibility progressively removed over four years. However, investors will continue to be able to deduct interest costs on new builds.

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<sup>17</sup> <https://www.hud.govt.nz/urban-development/the-housing-acceleration-fund/infrastructure-acceleration-fund/>



65. Differential treatment of interest deductibility for investors between existing houses and new builds will alter the attractiveness of each type of property. New builds will be more attractive to investors than existing houses, due to the ability to deduct interest costs from new builds. The impact of this will be the price of new builds will increase relative to existing homes, again leading to an expectation that supply of new houses will increase to meet this demand.

### **Kāinga Ora borrowing increase**

66. Kāinga Ora is the Government's housing and urban development delivery arm, focusing on public housing provision and urban development. Kāinga Ora is being supported to borrow \$2 billion extra to begin an acquisition programme to increase land purchases for housing developments. An increase in its borrowing capacity will increase its demand for development land, positively impacting on the supply of new houses.

### **Apprenticeship boost**

67. Apprenticeship Boost is a subsidy that employers can get for apprentices who are in their first two years of training. The Government has extended the Apprenticeship Boost initiative for another four months, so it runs until August 2022. The Government stated that the extension could benefit another 5,000 apprentices. This increase is small and would be spread over several years to reflect the three-to four-year length of a building apprenticeship. Overall, the impact on available construction workers is likely to be minimal. The impact on housing supply would also be minimal, though positive for the supply of new homes.

## Higher consent levels are supported by fundamental factors

68. The growing New Zealand population, both from natural increase and increases from net migration, creates an ongoing demand for new dwellings. Added to this is the shortage of houses following a decade of slower dwelling increases compared to population growth. These two factors create a baseline for dwelling demand.
69. Contributing to the demand for houses are supportive economic factors. GDP growth and low interest rates have contributed to an increase in house price levels over the past decade. Forecasts suggest that GDP growth will continue and interest rates will remain low, however not as low as in the last year. These factors will continue to support house price levels and hence continued supply of houses to meet the increased prices.
70. The MBIE forecasts were undertaken at a time of uncertainty, especially for GDP. With more certainty, an alternative scenario for new dwelling consents is presented. The method used to derive the consent estimates is as follows:
- Housing consents over the five year period 2021 to 2025 is defined as the number of dwellings required to eliminate the housing shortage existing at the start of 2021 (66,826 from Table 2) plus the number of dwellings required to match the median population increase produced by Statistics New Zealand (Statistics New Zealand, 2020) as detailed in Figure 2.
  - The implied dwellings from population increase is defined as the population increase divided by a base person per dwelling figure (2.54 PPD, base year of 2013).
  - Annual consents – the actual number of consents required to construct the estimated demand for dwellings will be higher than the number of dwellings. Statistics New Zealand notes<sup>18</sup> a weighting factor is required to reconcile from consents issued to dwelling increase. The weighting factor accounts for demolitions, new dwellings not counted in Building Consents Issued (e.g. temporary dwellings), and cancelled dwelling consents. Statistics New Zealand currently estimates the weighting factor at 91 per cent, where dwellings are 91 per cent of consents. This weighting factor is then applied to the total demand to give the consent demand.
71. The estimated dwelling consents per year is displayed in Table 5 and the method for estimating the consents is detailed below:
- 2021. Statistics New Zealand have published consent figures for January to April 2021. This is 14,366 consents. The remaining eight months (May to December 2021) are estimated as eight times the average monthly consents over the two years 2019 and 2020 (3,210 per month). This gives an annual consent figure of 40,048. The 40,048 consents are assumed to translate to 36,444 dwellings based on the Statistics New Zealand factor noted in the

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<sup>18</sup> Statistics New Zealand, retrieved from <https://www.stats.govt.nz/information-releases/dwelling-and-household-estimates-september-2019-quarter>

previous paragraph. The 36,444 new dwellings are distributed to 13,799 to meet the population increase<sup>19</sup> and 22,645 to reduce the housing shortfall.

- 2022. Consent activity is assumed to maintain at recent historic rates, being the average of 2019 and 2020, 38,524. These consents will translate to 35,056 dwellings, 17,742 for housing the increase in population<sup>20</sup> and 17,315 to reduce the housing shortfall.
- 2023 to 2025. By 2023 the majority of the dwelling shortfall will have been met from excess construction in 2021 and 2022. It is assumed that over the three year period 2023 to 2025, the remaining housing shortfall (26,867) is cleared in equal amounts in each year (8,956 per year). This extra construction is added to the construction assumed to be required to meet the increase in population in each year. The estimated dwellings are then uplifted by the dwelling to consent factor noted by Statistics New Zealand.

Table 5: Estimated annual consents, 2021 to 2025

| <b>Year</b> | <b>Increase in pop.</b> | <b>Dwellings to meet pop. increase</b> | <b>Dwellings to reduce housing shortage</b> | <b>Housing Shortage</b> | <b>Total Dwelling Supply</b> | <b>Total Consents</b> | <b>2020 MBIE Forecast</b> |
|-------------|-------------------------|--|---|-------------------------|------------------------------|-----------------------|---------------------------|
| 2021        | 35,000                  | 13,799                                 | 22,645                                      | 44,181                  | 36,444                       | 40,048                | 28,000                    |
| 2022        | 45,000                  | 17,742                                 | 17,315                                      | 26,867                  | 35,056                       | 38,524                | 22,000                    |
| 2023        | 49,000                  | 19,319                                 | 8,956                                       | 17,911                  | 28,274                       | 31,071                | 23,000                    |
| 2024        | 48,400                  | 19,082                                 | 8,956                                       | 8,956                   | 28,038                       | 30,811                | 26,000                    |
| 2025        | 47,800                  | 18,846                                 | 8,956                                       | 0                       | 27,801                       | 30,551                | 26,000                    |

Source: Statistics New Zealand population projections, Sapere calculations

72. The MBIE 2020 forecast is significantly lower than those we estimate. Our estimate is close to the 2019 MBIE estimate (see Table 1 above), before MBIE adjusted its projections for an economic slump that did not occur.
73. In comparison to the 2019 MBIE estimate, our estimates do include a lower prediction for population increase, due to lower net migration than likely assumed in 2019.<sup>21</sup>
74. Our estimates for new dwelling consents are also broadly in line with recent history. For example, in the 12-month period to April, Statistics New Zealand reports consents issued in each year as:
- 42,848 (12 months to April 2021)

<sup>19</sup> 35,000 increase in population divided by 2.54

<sup>20</sup> 45,000 increase in population divided by 2.54

<sup>21</sup> Current Statistics New Zealand assumptions for net migration 2021 to 2025 was 105,000 (refer Table 3). The Treasury in December 2019 estimated net migration for 2021 to 2025 to be 191,200 (The Treasury, 2019)

- 37,186 (12 months to April 2020)
  - 34,392 (12 months to April 2019).
75. The 12 months to April 2021 included the national COVID-19 lockdowns and the closure of the border. This time period also observed significant increases in house prices in the second six months of the period, though it is likely this had a minimal impact as a consent issuance is the end of a significant period of preparation. The rapid increases in house prices may present further positive reinforcement for consent issuance; however, this has not been included.

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## About Sapere

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