THE TREASURY
Kaitohutohu Kaupapa Rawa

Reference: 20170429

30 January 2018

[redacted]@parliament.govt.nz

Dear [redacted]

Thank you for your Official Information Act request, received on 11 December 2017. You requested the following:

"1. All documents regarding the estimated or forecast impact of the government's 'KiwiBuild' policy on the quantum of New Zealand's residential housing stock – since 1 October 2017.

2. The dates, attendees, and minutes of all meetings Treasury officials have had with the Minister of Housing & Urban Development – since 26 October 2017."

Information Being Released

Please find enclosed the following documents covering **Section 1** of your request:

Item	Date	Document Description	Decision
1.	9 November 2017	HYEFU 2017 panel slides	Release in part
2.	22 November 2017	Aide Memoire: Incorporation of KiwiBuild policy in residential investment forecast	Release in full

I have decided to release the relevant parts of the documents listed above, subject to information being withheld under one or more of the following sections of the Official Information Act, as applicable:

- staff direct telephone numbers, under section 9(2)(k) – to prevent the disclosure of official information for improper gain or improper advantage.

Context of document 1

Document 1 was prepared for an internal panel at the early stages of the Treasury forecast process. Feedback from that panel stressed the high degree of uncertainty and potential for government policies to have a greater impact alleviating constraints in

1 The Terrace
PO Box 3724
Wellington
New Zealand
tel. 64-4-472 2733
fax. 64-4-473 0982
www.treasury.govt.nz

the construction sector. This led to us taking a different approach to the inclusion of KiwiBuild in our final residential investment forecast.

Some information has been deleted as being out of scope of this request.

The following information is covered by **Section 2** of your request:

Date	Attendees	Minutes
31 October 2017	Information cannot be found	None
13 November 2017	Gabriel Makhlouf Fiona Ross Jon Grayson	None
15 November 2017	Information cannot be found	
16 November 2017	Tom Hall Corwin Wallens Liam Oldfield Peter Gardiner Bryan Chapple	None
29 November 2017	Tom Hall Jon Grayson Chris White Chris Parker Bevan Lye David Taylor Rob Addison Nick McNabb	None

Minutes for all of the above meetings and the list of attendees for the meetings held on 31 October 2017 and 15 November 2017 are being declined under section 18(e) - the document alleged to contain the information requested does not exist or cannot be found.

Please note that for the meeting held on the 29th of November 2017, Treasury is able to provide a list of invitees but is unable to confirm final attendees to the meeting.

Additionally, six meetings were attended by Treasury in conjunction with the Ministry of Social Development. The information regarding these meetings will be provided to you by MSD within their response referenced OIA//12/17-24209.

Please note that this letter (with your personal details removed) and enclosed documents may be published on the Treasury website.

This reply addresses the information you requested. You have the right to ask the Ombudsman to investigate and review my decision.

Yours sincerely

Peter Gardiner
Manager, Modelling and Research

Encl

Table of Contents

THE TREASURY
Kaitohutohu Kaupapa Rawa

Half Year Update Economic Forecasts

Forecasting Team

Budget Sensitive

9 November 2017

HYEFU forecasts

Deleted - Not Relevant to Request

Please note: Forecasts presented as "HYEFU" are an early cut with further testing required and therefore change likely prior to finalisation

Recent developments

Deleted - Not Relevant to Request [redacted]

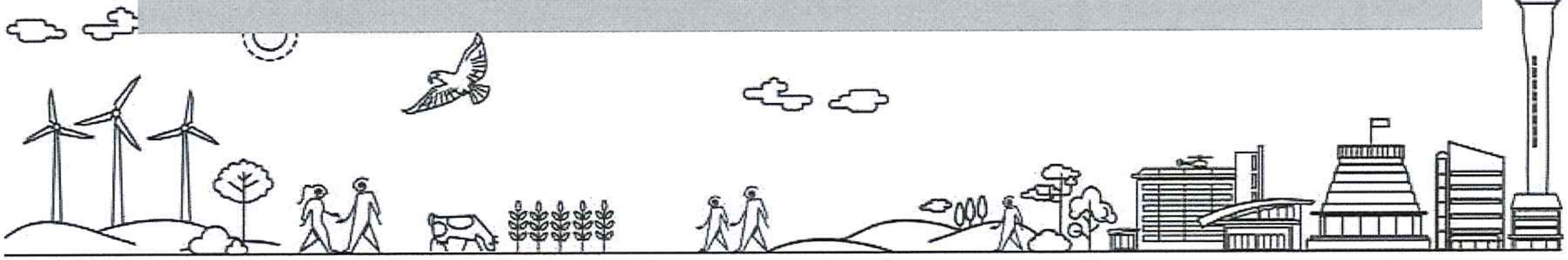
- Housing market has slowed, pickup in residential investment unlikely to show up until 2017q4 (at the earliest)

Deleted - Not Relevant to Request [redacted]

Deleted - Not Relevant to Request [redacted]

Businesses are saying…

- Deleted - Not Relevant to Request
- Construction strong but capacity constrained and some concern about profitability levels given stage of the cycle (ie some losing money in strong market)
- Deleted - Not Relevant to Request



Economic Outlook

- Deleted - Not Relevant to Request
- Deleted - Not Relevant to Request, as residential investment growth resumes after a temporary hiatus in 2017, with the steady ramp up in KiwiBuild providing further support, Deleted - Not Deleted - Not Relevant to Request
- Deleted - Not Relevant to Request Deleted - Not Relevant to Request Residential investment provides some offset in these later years as the KiwiBuild program continues to expand, Deleted - Deleted - Not Relevant to Request

- Deleted - Not Relevant to Request
-
-
-

Economic outlook cont'd

Deleted - Not Relevant to Request

Economic outlook cont'd

Deleted - Not Relevant to Request

Incorporating key policies

Deleted - Not Relevant to Request

Key areas where we have imposed explicit judgement relate to:

- The likely impact of KiwiBuild

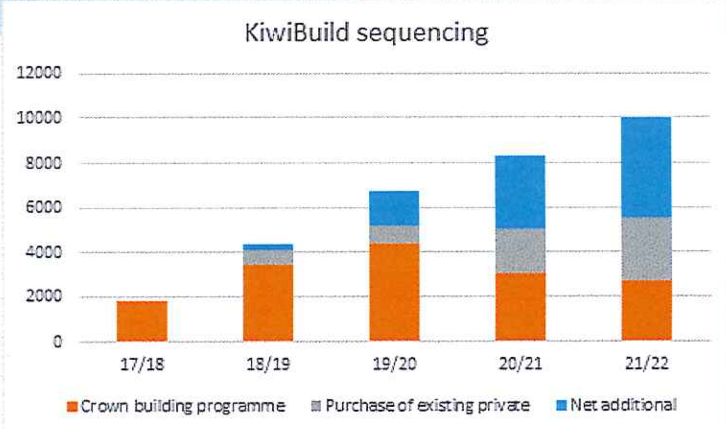
Deleted - Not Relevant to Request

Housing

Policy	Assumptions	Impact

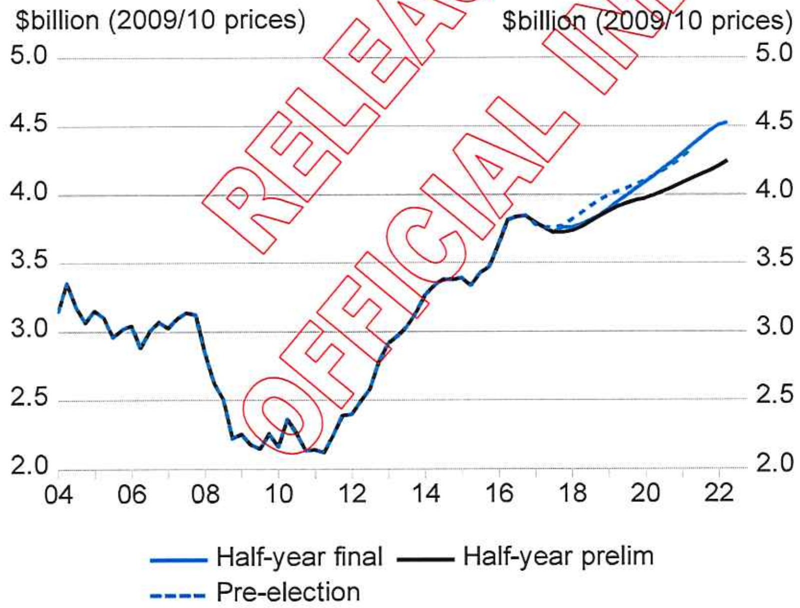
KiwiBuild
• Build 100,000 affordable homes over next 10 years
• Intended sale price of between \$500k and \$600k in Auckland, comprising 50% of KiwiBuild
• Ramp up to 10,000 over three years
	• Ramp up to construction of 10,000 houses in 2022, starting from 2018Q4/2019Q1 (slower than signalled by govt.). The net increase in 2022 will only be 4,500 for the following reasons:
	  • 2,700 were already factored in with crown building programme (expected to continue)
	  • 2,800 will be purchased from existing private sector development
	• The extent of crowding out is somewhat mitigated by other aspects of KiwiBuild, eg. Improved construction productivity (modular housing), construction targeted migration settings, and increased provision of infrastructure
	• Currently, real residential investment per consent is around \$500k, but we assume it to be \$250k per dwelling because of housing type that will be built (affordable)
	• For government to reach 100,000k homes most will have to occur in years 6-10
		• Cumulative KiwiBuild of 31,000 dwellings (net increase of 10,000)
		• Cumulative increase of \$2.5b in residential investment over forecast
		• By 2022 level of real res is 7.0% higher
		• Includes gross government building of \$7.8b
		• Deflator is largely unchanged

Risks and considerations
- Policies designed to address constraints are more effective.
- 'Off the plan' purchases increase residential investment because these developments would not otherwise have obtained financing
- Productivity improvements (eg modular) enable construction to accelerate earlier – especially if imported
- Migration falls and labour supply dries up
- Demand wanes and private development slows
- $2b initial capital injection is insufficient and high costs cause KiwiBuild to be scaled back

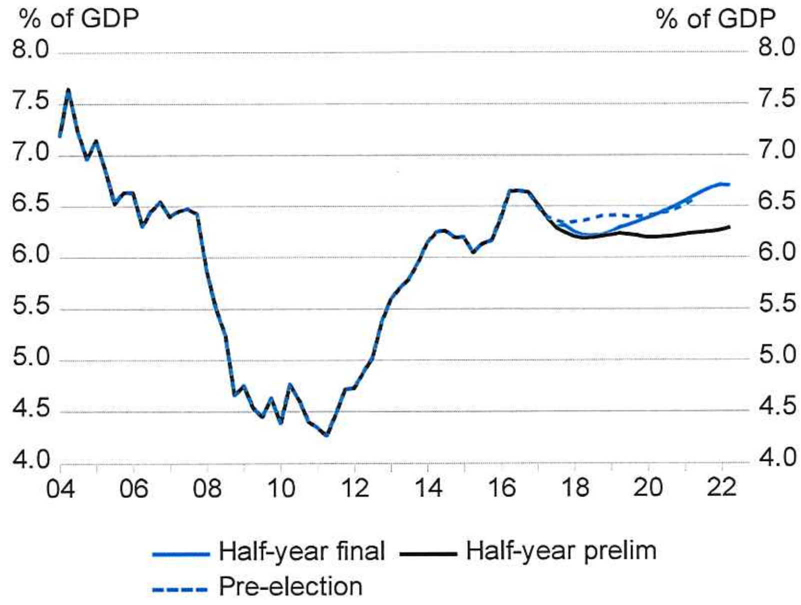


Housing

Residential investment (real)



Residential investment as share of GDP



Half-year preliminary forecasts were revised down from PREFU due to view that near-term weakness would be more persistent. The difference between half-year prelims and half-year finals is from KiwiBuild which returns residential investment to similar level as in PREFU.

Labour market

Deleted - Not Relevant to Request

Inflation

Deleted - Not Relevant to Request

Opportunity/need to assess trends

- While we have made some explicit judgments around the likely impact of policies it is important to acknowledge uncertainty
- There is the potential for a range of outcomes dependent on:
  - The final form of the policies
  - How well they are implemented
  - Economic conditions (including resource constraints)
  - The extent to which scale economies are realised
  - The efficient use and availability of funding
- Over time we will need to monitor trends in Deleted - Not Relevant to Request and building consents and activity (from KiwiBuild) to and assess whether progress is in line with our assumptions or whether we need to revise up or down key assumptions
- At present there is probably the need to balance Government ambition with potential challenges. The residential investment profile is 'cautiously optimistic' in that it requires a significant increase from current levels to slightly above the recent rebuild-induced peak. In the event that policy changes do not overcome current sector constraints then there is the risk that overall residential investment falls short of forecast. Conversely if policy is more effective in (rapidly) achieving production at scale it may be possible that residential investment exceeds previous peaks.

How we compare

Deleted - Not Relevant to Request

Towards finalisation

Deleted - Not Relevant to Request

Questions

Deleted - Not Relevant to Request

Government consumption and investment

Deleted - Not Relevant to Request

Capital allowances

Deleted - Not Relevant to Request

- See housing section for treatment of KiwiBuild
- Super Fund contributions do not effect the economic forecasts

THE TREASURY
Kaitohutohu Kaupapa Rawa

Reference: T2017/2566 File No. BM-3-6-2

Date: 22 November 2017

To: Minister of Finance (Hon Grant Robertson)
Minister of Housing and Urban Development (Hon Phil Twyford)

Deadline: 23 November 2017

Aide Memoire: Incorporation of KiwiBuild policy in residential investment forecast

Following your meeting with the Treasury and MBIE on 16 November, this note outlines the way the Treasury incorporated KiwiBuild into its residential investment forecast and how it compares to MBIE's indicative phasing of KiwiBuild in the briefing sent 1 November 2017 on capacity constraints.

We finalise our forecasts by the end of the day on Thursday 23 November.

Summary

The Treasury assumes that over the period 2018-2020, the government will invest $2 billion as part of the KiwiBuild programme. Consistent with your policy, capital will be recycled as dwellings are sold and the proceeds reinvested. We forecast that the level of nominal residential investment will be 10.0% higher by 2022 due to KiwiBuild, adding $5.4 billion cumulatively to residential investment. We do anticipate some lags in additional investment activity as a consequence of existing capacity constraints in the sector. We also expect future policy change to add capacity and alleviate constraints, speeding up investment activity later in the forecast period. The Treasury used the National Construction Pipeline Report 2017[1], and took advice on capacity constraints and indicative KiwiBuild phasing into account when deriving our residential investment forecasts. The Treasury's residential investment forecasts are cumulatively $1.1 billion (less than 1%) lower than a projection based on MBIE reports, largely owing to lags in construction activity due to capacity constraints, which the MBIE projection does not explicitly take into account.

The Treasury does two forecasts per year. We will update our forecast as policy details become clearer or as any indicators suggest constraints have changed.

[1] The National Construction Pipeline Report is commissioned by MBIE and jointly prepared by Pacifecon (NZ) Ltd (a building economics consultancy) and the Building Research Association of New Zealand (BRANZ). The 2017 report is the fifth edition, and provides a forward view on national construction activity for the six years ending on 31 December 2022.

Treasury forecast

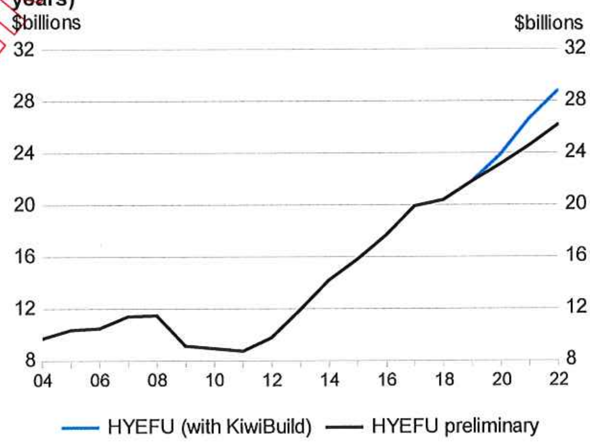
Treasury forecasts the real and nominal value of residential investment as an input to our tax and fiscal forecasts. The definition of residential investment used, as per the national accounts, includes both construction related to new dwellings, improvement of existing dwellings, and transfer costs associated with the sale of existing dwellings. Ultimately, we are trying to forecast the increase in new residential investment associated with the KiwiBuild Policy.

The Treasury does not explicitly forecast the number of new dwellings, reflecting how we use the forecasts for tax revenue forecasting. From a tax forecasting perspective, there is little difference between a $1 million investment that generates two dwellings or three, whereas such differences will obviously matter for the provision of affordable housing.

The Treasury's preliminary HYEFU forecast is a baseline for comparison because it did not include KiwiBuild in the residential investment forecast. In this forecast we assumed that there was strong underlying demand for new dwellings, but that capacity constraints limited the rate of growth in supply. We have downgraded our residential investment forecast over the past 12 months, with growing evidence that constraints have become more binding within the construction sector.

The Treasury's current HYEFU forecast incorporates the impact of KiwiBuild on aggregate residential investment. Our judgement is that the initial $2 billion of capital generates an additional 10% increase in the level of residential investment by 2022, and generates an additional $5.4 billion cumulatively over the forecast period (Figure 1).

Figure 1: Nominal residential investment (annual, June years)



The $5.4b is driven by consideration of two key areas: the extent to which the initial $2 billion can be reinvested (recycled), and the extent that supply can expand, to lead to a net increase in residential investment.

Extent to which the initial $2 billion can be reinvested (recycled)

- Phasing of KiwiBuild means that the $2 billion will be invested over three years, creating lags before it can be reinvested. By 2022 our forecast is for KiwiBuild to add over $2 billion additional residential investment per year.
- Time to prepare sites for construction, including provision of infrastructure, recognising this will not apply to all Kiwibuild developments.
- Time from consent to completion (currently estimated by Statistics NZ to be 10 months).

- The risk of delays in bringing on additional supply. The experience from the Christchurch rebuild suggests that initial estimates can often prove optimistic.

Extent that supply can expand

There are known capacity constraints in the construction sector, most notably in the form of labour shortages and tighter access to finance. There are a range of government policies designed to alleviate these constraints, which have been taken into account, including: construction work visas to increase labour supply; infrastructure funding; pre-fabricated/modular housing to increase productivity; encouraging competition, potentially through foreign construction firms; and buying off-plan to alleviate finance access issues.

The nature of the way a KiwiBuild development takes place will also affect whether it adds to supply (ie. a net addition to the total value of the housing stock rather than substituting other investment). For example, for houses bought off the plan: either they need to be from developments that would not have occurred without Government involvement; or the developer needs to reinvest the proceeds and complete an additional development within the original timeframe.

There is a degree of uncertainty about the future impacts of these policies, given existing information on what form they will take or when they will come into effect. In any event, it will take time to train new workers or alter immigration settings and recruit construction workers from overseas. We will update our forecasts as more certainty comes to hand.

Comparison against MBIE

The MBIE briefing sent 1 November 2017 on capacity constraints (ref: 0645 17-18) included a chart showing projected new dwellings. It used the National Construction Pipeline Report 2017 as a baseline for projected housing supply and included the indicative phasing of KiwiBuild dwellings. It considered how KiwiBuild would add to capacity constraints within the construction sector, but did not factor in the impact of these constraints in its KiwiBuild projections.

The MBIE pipeline report projects potential supply of new dwellings. In order to compare with the Treasury's residential investment forecast, we developed a scenario making the following assumptions:

- Re-baselined the pipeline report residential investment projection using June 2017 actuals,
- Projected the new baseline forward using the pipeline report annual growth rates, and
- The value of residential investment per KiwiBuild dwelling assumed to be 60% of the average, given the target for affordable homes.

IN-CONFIDENCE

Baseline forecast

Figure 2 shows the Treasury's preliminary HYEFU forecast against the pipeline projection before the inclusion of KiwiBuild.

- The near-term difference is because Treasury's forecast is more current, incorporating the latest data and indicators, whereas the latest data used in the pipeline report was 2016Q4. Recent indicators point to greater capacity constraints and a more persistent period of softer growth, with this showing up as falls in real residential investment in the last two quarters of GDP data.
- The medium term difference is because Treasury held the view that there was sufficient pent-up demand to sustain a longer period of growth in residential investment before reaching the peak of the cycle.
- Treasury's forecast is $3.1 billion higher cumulatively.

Figure 2: Nominal residential investment forecast pre-KiwiBuild (annual, June years)

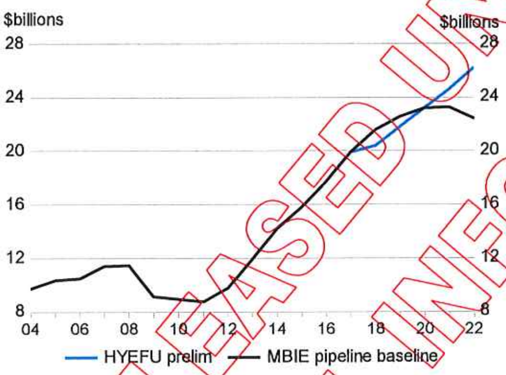
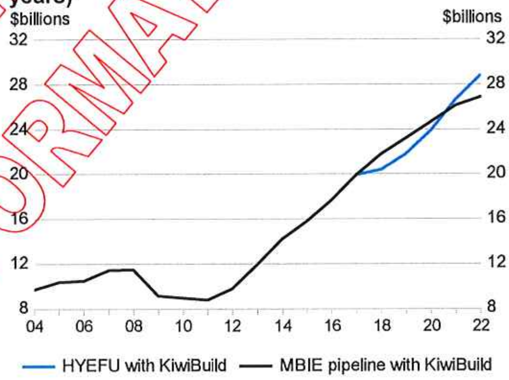


Figure 3: Nominal residential investment forecast including KiwiBuild (annual, June years)



Forecast – incorporating KiwiBuild

After including KiwiBuild, the cumulative net increase to the MBIE based projection is $9.6 billion, and is $5.4 billion for the Treasury's forecast. Because the Treasury's baseline forecast was $3.1 billion higher, the final difference is that the Treasury is $1.1 billion lower than the MBIE based projection ($122.7 billion cumulatively compared with $121.6 billion).

In its capacity briefing, MBIE expressed the possible change in housing supply by adding the indicative phasing of KiwiBuild to its base. The net increase in residential investment formed part of the modelling of forecast demand for construction-related occupations. MBIE has not quantified the likelihood of this phasing eventuating, given the projected shortfalls in construction related labour (and other capacity constraints), nor whether it would substitute any private building activity.

Our approach assumed that the initial $2 billion in Labour's fiscal plan would be reinvested over the forecast period to add $5.4 billion cumulatively in residential investment. MBIE's KiwiBuild phasing profile informed the timing of the increases to residential investment across the forecast period.

Table 1: Nominal residential investment forecast including KiwiBuild ($1000m, annual, June years)

	Actual	Forecast					
MBIE projection	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**Sum 2018-22**
Pipeline (MBIE baseline)	19,930	21,607	22,565	23,188	23,284	22,421	113,064
MBIE KiwiBuild additional	0	210	628	1,473	2,850	4,457	9,618
Pipeline with KiwiBuild	19,930	21,817	23,193	24,661	26,134	26,878	122,683
Treasury forecast							
HYEFU Preliminary	19,930	20,403	21,809	23,184	24,572	26,189	116,157
TSY Kiwibuild additional	0	8	24	720	2,069	2,620	5,441
HYEFU Final (with KiwiBuild)	19,930	20,411	21,832	23,904	26,642	28,809	121,599

Liam Oldfield, Analyst, Forecasting, s9(2)(k)
Peter Gardiner, Manager, Forecasting, s9(2)(k)