

WILL NSW MEET ITS HOUSING TARGET?

Predicting Construction with
Development Applications

Peter Tulip





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The author thanks staff at DPHI and NSW Treasury for helpful discussions.



Analysis Paper 112

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1. Introduction

The NSW government has been reforming the planning system to boost housing supply and affordability. To assess the impact of these reforms, it has been common to look at ABS data on building approvals. This paper uses new data on Development Applications (DAs), which provide an earlier indicator of construction activity. Before a building approval is issued, a DA needs to be lodged and then approved. The NSW Department of Planning, Housing and Infrastructure (DPHI) has recently started publishing counts of these DA lodgements and approvals.

Timeliness is important because of long lags in the building process. Ultimately, we care about housing supply and affordability. However, it takes many years for these to be affected by decisions on building. So if policy does not have the desired effects, prompt corrections are not possible. Moreover, it is difficult to tie incentives to outcomes. However, although timeliness

is desirable, it comes with a cost: early measures are imperfectly correlated with ultimate objectives. The further upstream the indicator, the weaker its relationship to downstream outcomes.

This paper uses the DA data to predict building approvals and completions. We already knew NSW was falling short of its housing target in the early part of the Housing Accord that aimed to have states build 1.2 million new homes over five years from mid-2024. The DA data allow that assessment to be extended forward to cover most of the relevant horizon. This strengthens the argument that further action is needed to meet the target. Moreover, the DA data provide an earlier identification of councils that are lagging behind their targets, with the worst offenders being Hunters Hill, Sydney, Hornsby, Georges River, Newcastle and Penrith. Remedial action could be taken against these councils.

2. Data

Spreadsheets showing DA lodgements and approvals by local council from July 2021 to February 2026 can be found [on the CIS website](#). DPHI have been publishing this data at their [Housing Supply dashboard](#), though not in a form that is convenient for statistical analysis.

Chart 1 shows 3 month moving averages of seasonally adjusted data.¹ The original data for building approvals is published by the ABS and is very widely used. The series for development approvals and lodgements are new. Appendix C gives data definitions.

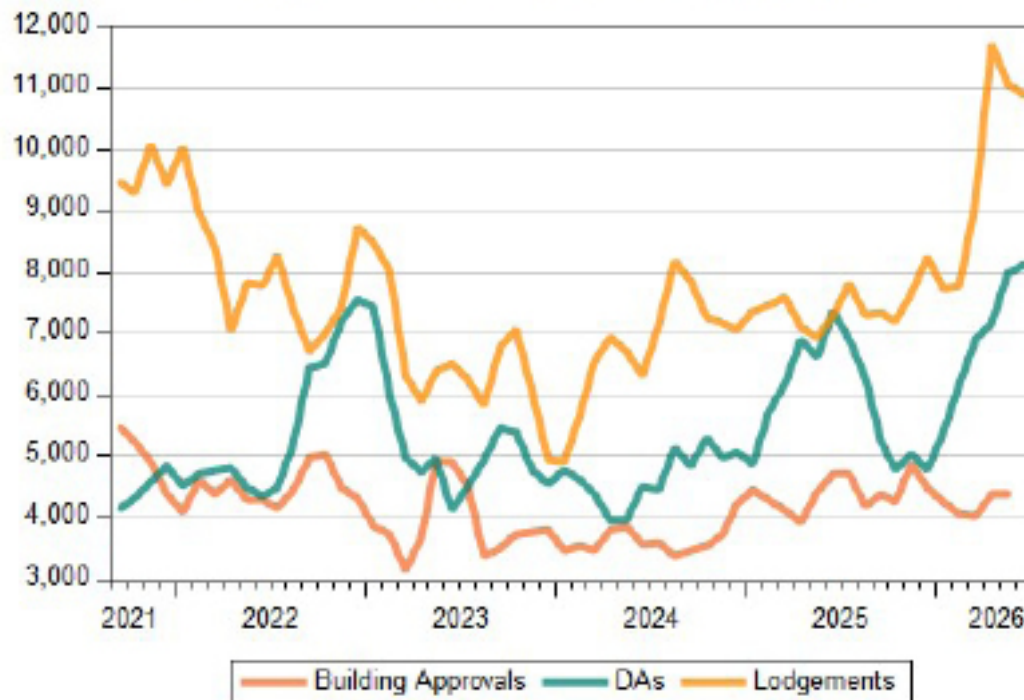
Over the period shown in Chart 1, development approvals, measured by dwellings, have averaged 76% of lodgements 10 months earlier. Building approvals have averaged 79% of development approvals 6 months earlier. I discuss those lags below. From 1984 to 2025 (a longer period for which data are available) gross completions averaged 91% of building approvals.² Compounding those steps, 55% of lodgements and 72% of development approvals result in building completions.

¹ I deseasonalise by regressing the log deviation from a Hodrick-Prescott trend on monthly dummies. These regressions have an R^2 of 0.46 for building approvals, 0.66 for development approvals, and 0.32 for lodgements. For development approvals and lodgements I use the residuals from these regressions. For building approvals I use the ABS seasonally adjusted series. Development approvals and building approvals are 3.7 and 1.5 times respectively as great in December as in January, on average.

² Completions and building approvals averaged 3,587 and 3,932 a month respectively. In comparison, ABS "[Abandonment rates for new dwellings](#)" average 3.6 per cent for new dwellings in NSW from 2008-09 to 2024-25, a period in which completions were 90% of building approvals. I am not able to explain the discrepancy. Ryan Fox of DPHI estimates a completion rate of 95% for detached houses and 89% for higher density.

1. NSW Building Approvals, DAs and Lodgements.

Moving 3-month average, seasonally adjusted



Approval rates reported elsewhere are often higher. For example, [DPHI's 2024-25 Annual Report](#) notes that:

"Sydney district and regional planning panels determined 361 regionally significant development applications. There was a 91.9% rate of approval, inclusive of 25,780 dwellings, representing 23% of all dwellings approved across NSW."

Approval rates like these are measured as a share of applications, whereas my estimates are a share of dwellings. Because small developments are more frequently approved, approval rates of dwellings are lower.

The relationships between these series are often misinterpreted in policy arguments. For example, [Nicole Gurran](#), Professor of planning at the University of Sydney, claims:

But contrary to popular perception, the evidence suggests that planning permission isn't the problem. In NSW, for example, more than 90 per cent of multi-unit development

applications are approved and decisions are issued within about three months. ([Gurran, 2023](#))

The severity of planning restrictions cannot be inferred from approval rates. Applications are only lodged when there is a substantial chance of success. When permission will clearly be denied, applying is pointless. Clear restrictions reduce lodgements rather than the approval rate. A council with a 100% approval rate can still encourage more lodgements by allowing more housing.

The gap between development approvals and construction shows that planning rejections are not the *only* obstacle to building; developers will have other reasons for not proceeding, such as access to finance. However, that does not mean that planning is unimportant. Past experience suggests that if 100 dwellings have development applications approved, 79 dwellings will soon get a building approval and 72 dwellings will be completed. Variations between local government areas, discussed in Section 4, point to a similar rule of thumb.

The NSW government has recently announced a series of reforms aimed at boosting housing construction, summarised in Appendix A. As shown in Chart 1, these policies are yet to be reflected in a discernible increase in building approvals, raising concerns that the reforms are not working. However, those concerns are premature. It took 1 to 3 years for major rezonings in Auckland ([Greenaway-McGrevy, 2026](#)), New York ([Rollet, 2025](#)) and Sao Paulo ([Anagol et al; 2023](#)) to show up in building commencements, after which

improvements in supply and affordability were gradual, albeit large. Wiebe ([2026](#)) shows relevant charts.

Although building approvals have been relatively flat, Chart 1 also shows that lodgements and development approvals have been rising steeply. If dwellings flow through the approval pipeline as they have in the recent past, then building approvals and construction will soon rise also. This provides a simple early indication that the policy reforms are boosting activity.

3. But are they boosting activity enough?

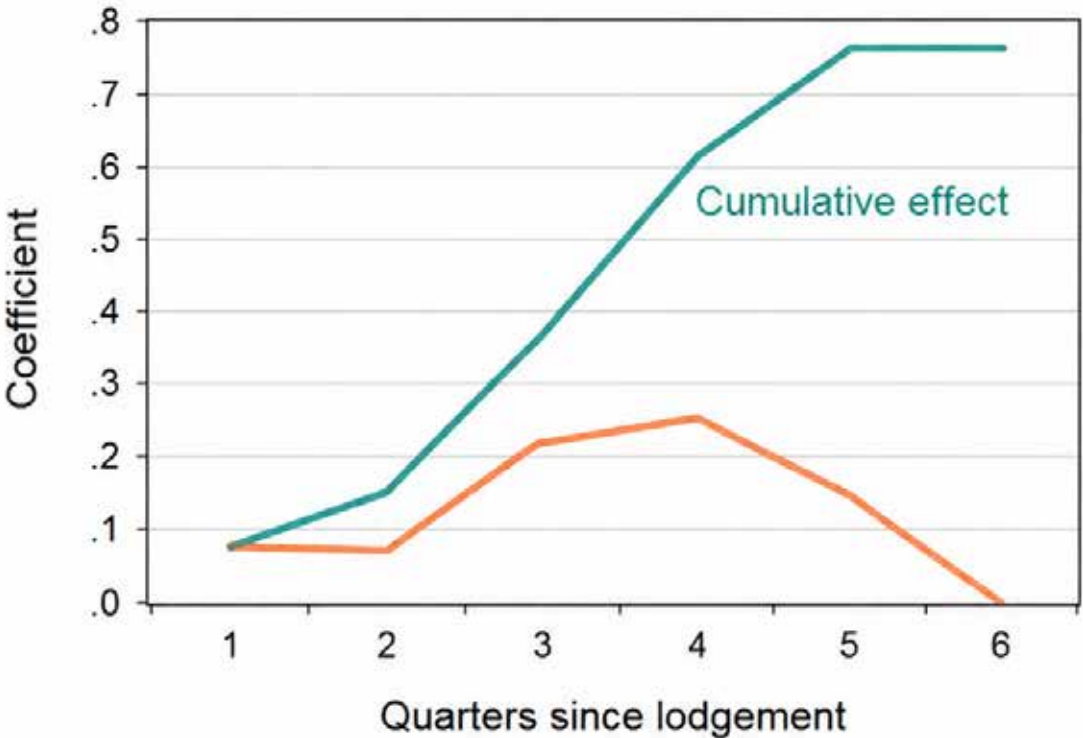
To be more precise, we can use data on lodgements to predict development approvals and use data and predictions for development approvals to predict building approvals. Data at a state level, as graphed in Chart 1, does not provide enough variation to do this precisely – a 4-month lag is not discernibly different to a 24-month lag. However, the variation between 128 councils

permits powerful statistical inference.

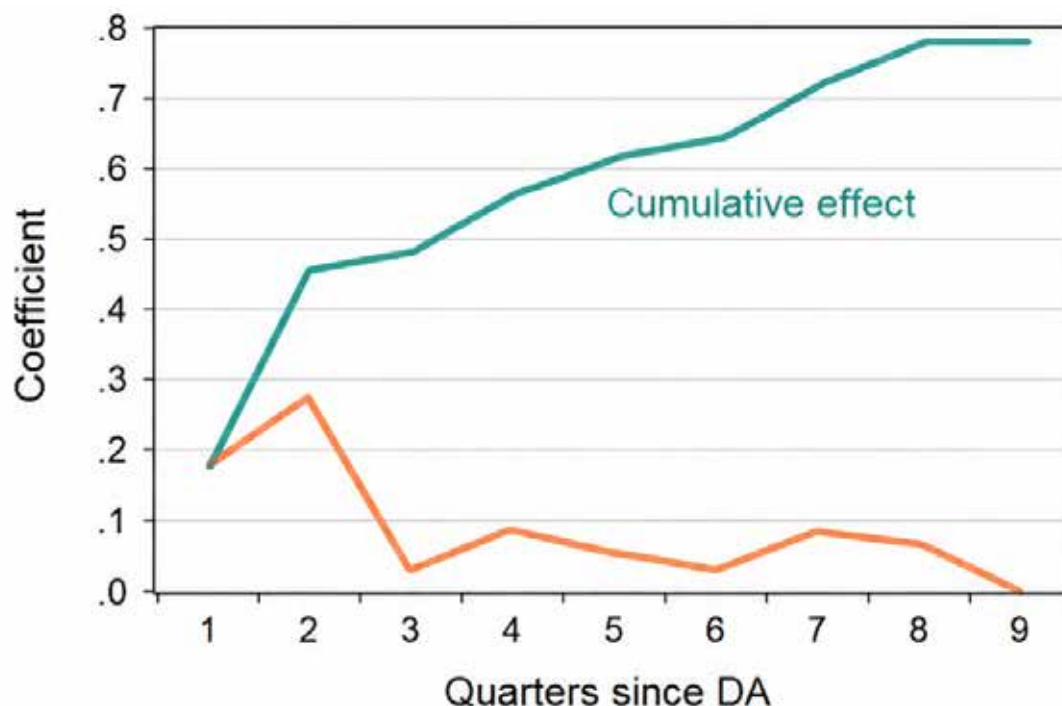
Econometric details are in Appendix D. In brief, 76% of lodgements are estimated to flow into development approvals, with a median lag of 10 months. 79% of development approvals flow into building approvals, with a median lag of 6 months. Chart 2 shows estimated lags.

2. ESTIMATED LAGS

2A. Effect of lodgements on Development Approvals



2B. Effect of DAs on Building Approvals



In comparison, NSW's [Council league tables](#) show an average development application assessment time of 85 days (for NSW in 2025-26), a much shorter lag than shown in Chart 2A. Because large projects take longer to assess than small projects,³ weighting by dwellings, as in Chart 2, implies longer lags.

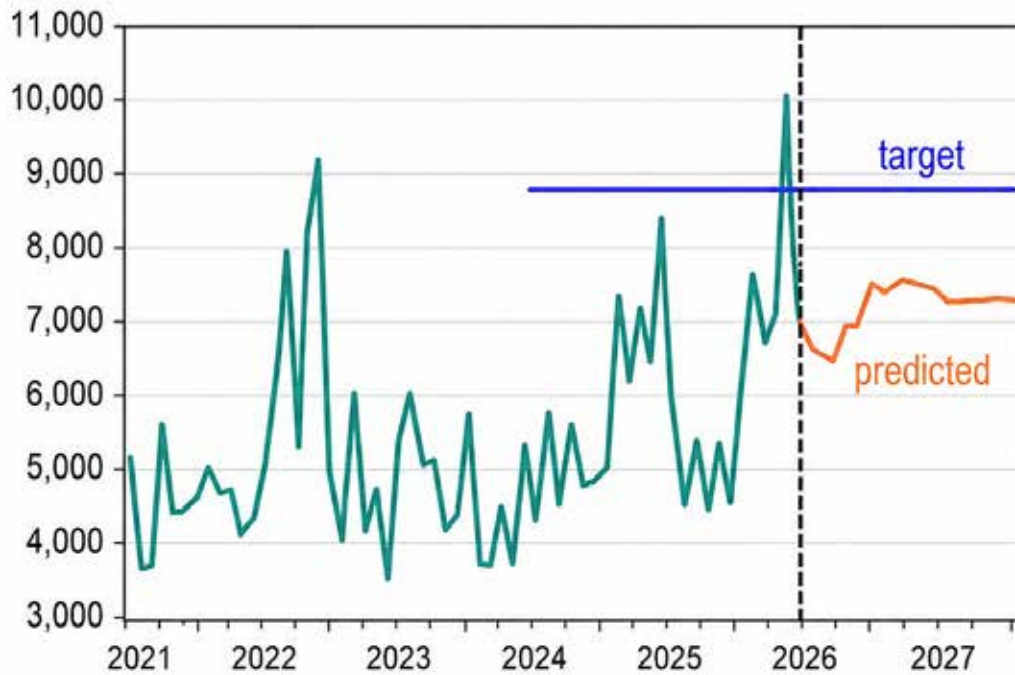
lodgements points to a substantial increase in construction. Chart 3B is probably the most important result in this paper. If one thought that lodgements were likely to increase (for example, because of the number of State Significant Developments in the pipeline, Appendix B) the outlook would be stronger still.

To forecast, I assume lodgements remain at their average level of the past 6 months, an approach that balances simplicity, persistence and volatility, but assumes no further policy effect. On that basis, development and building approvals are expected to be strong. Development approvals are projected to average around 7,000 dwellings a month over the next year (Chart 3A), well above their average of the past few years. Whereas building approvals had been averaging a little above 4,000 a month for the past two years, they jump above 5,000 and continue rising (Chart 3B). In essence, the recent strength in development applications and

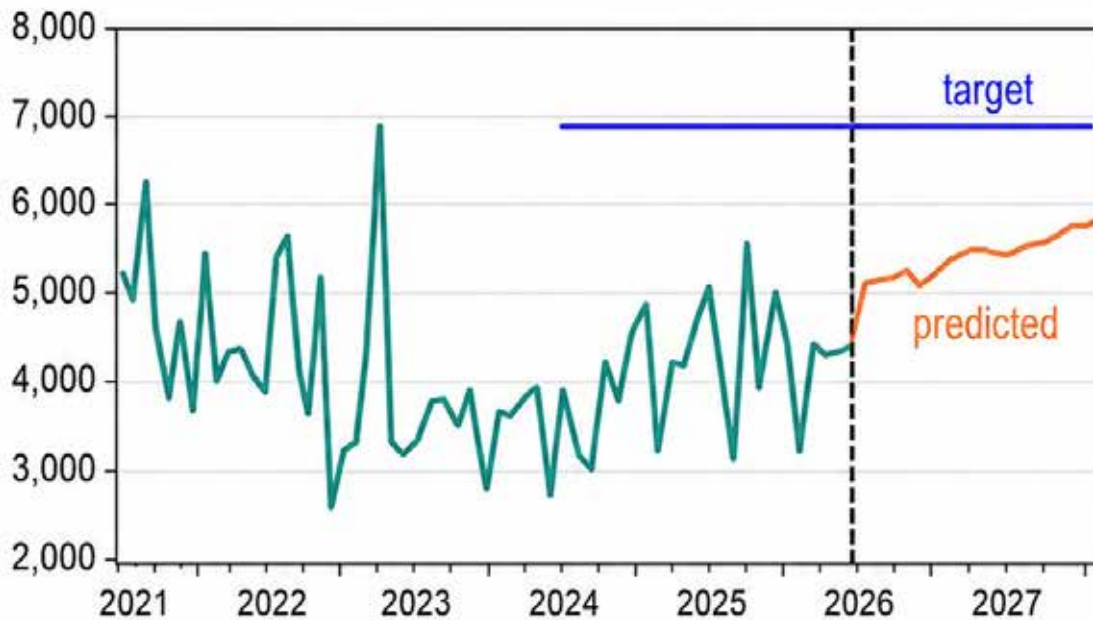
³ [Coates, Maloney and Bowes](#) (2025, figure 2.6) estimate that single dwellings take an average of about 3 to 5 months to assess while large projects of over 20 dwellings take almost a year. Other differences include median versus mean, assessment time versus approval time, and my estimates being just residential, whereas the league table includes all development applications.

3: FORECASTS

3A: Development Approvals – Actual and Predicted, seasonally adjusted



3B: Building Approvals – Actual and Predicted, seasonally adjusted



To attain the NSW government’s target of 377,000 dwellings over 5 years, development approvals and building approvals would need to average 8,800 and 6,900 a month respectively, allowing for historical completion rates but not adjusting for time already taken. As shown in Chart 3, they are well short of that. Moreover, given what we know about lodgements and development approvals, they will remain

well short of that for some time. More needs to be done to attain the target.

The equations estimated in Appendix D can be approximated by simple forecasting rules. Development approvals can be predicted as 0.76 times a 5-quarter moving average of lodgements. Building approvals can be predicted as 0.79 times an 8-quarter moving average of development approvals.

4. Progress towards targets

These series provide a timely indicator of whether building construction has been on track to meet housing targets. For example, as shown in Table 1, under the period of the Housing Accord (July 2024 through May 2026) about 97,000 dwellings have building approvals in NSW. Using a historical completion rate of 91%, that would translate into about 88,200 completions.

NSW’s housing target is 377,000 homes by 2029, which implies 144,500 homes by May 2026. So building approval data imply the state is on track to meet 61% of its target.

Using historical completion ratios, the same approach suggests that development approvals and lodgements are on track to meet 72% and 71% of the target respectively, using data through June 2026.

Table 1: Building indicators relative to housing target: NSW
July 2024 – latest data

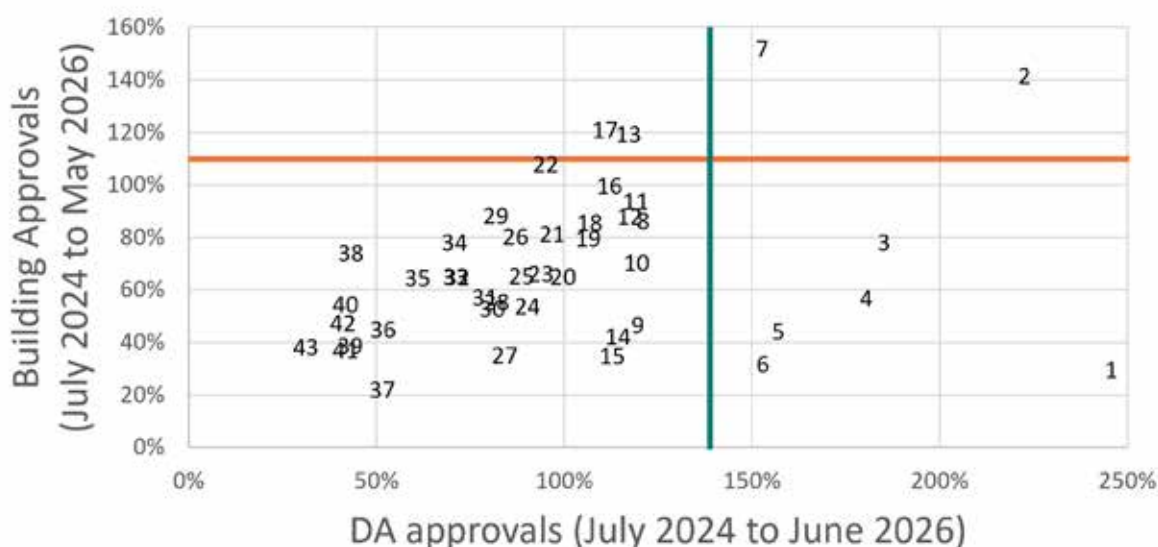
	Building approvals	Development approvals	Lodgements
Latest data	May 2026	June 2026	June 2026
Target (377k) pro-rata	144,500	150,800	150,800
July 2024 – latest	96,915	150,384	196,801
Completion rate	91%	72%	53%
Expected completions	88,193	108,111	107,525
Share of target	61%	72%	71%

Building approvals have been used to assess the extent to which councils are meeting their targets. However, some councils, like [Willoughby](#), object that they have approved large numbers of development applications which are yet to show up in the building approval data. Moreover, councils argue that building approvals are not under their direct control. The decisions they make are development approvals so that represents a more relevant metric for evaluating their behaviour.

The left side of Table 2 shows development approvals for each local government area, ranked in terms of approvals as a share their target, for the period July 2024 to June 2026. The worst performing councils are Hunters Hill, which has only approved 31% of its pro-rata target, the City of Sydney (41%), Hornsby (42%), Georges River (42%), Newcastle (43%) and Penrith (43%). For comparison, the right side of the table shows building approvals for the period July 2024 to June 2026. On that

Table 2: Development and Building Approvals; July 2024-mid2026						
	Development Approvals			Building approvals		
Council	Rank	Number to June 2026	Ratio to target	Number to May 2026	Ratio to target	rank
Hunters Hill	43	50	31%	59	38%	37
Sydney	42	3,110	41%	3,435	47%	31
Hornsby	41	920	42%	784	37%	38
Georges River	40	1,054	42%	1,320	55%	28
Newcastle	39	1,911	43%	1,658	39%	36
Penrith	38	1,452	43%	2,389	74%	17
Strathfield	37	722	52%	298	22%	43
Woollahra	36	394	52%	329	45%	33
Mosman	35	122	61%	124	65%	24
Lake Macquarie	34	2,267	71%	2,403	78%	15
Kiama	33	256	71%	225	65%	22
Central Coast	32	2,688	71%	2,341	65%	23
Blacktown	31	6,758	79%	4,696	57%	25
Canterbury-Bankstown	30	4,689	81%	2,940	53%	30
Wollondilly	29	1,801	82%	1,866	89%	8
Bayside	28	3,315	82%	2,150	56%	27
Ku-ring-gai	27	2,560	84%	1,026	35%	39
Shoalhaven	26	1,707	87%	1,510	80%	13
Cumberland	25	4,328	89%	3,064	66%	20
Inner West	24	2,816	90%	1,616	54%	29
Campbelltown	23	3,943	94%	2,671	66%	19
Cessnock	22	1,484	95%	1,614	108%	5
Camden	21	3,951	97%	3,188	82%	12
Liverpool	20	6,663	100%	4,178	65%	21
Fairfield	19	2,512	106%	1,803	80%	14
Wollongong	18	3,931	107%	3,029	86%	11
Maitland	17	2,351	111%	2,464	121%	3
Blue Mountains	16	269	112%	230	100%	6
Waverley	15	1,083	113%	323	35%	40
Lane Cove	14	1,555	114%	552	42%	35
Port Stephens	13	984	117%	962	120%	4
Shellharbour	12	1,786	118%	1,286	88%	9
Burwood	11	1,572	119%	1,189	94%	7
The Hills	10	11,116	119%	6,283	70%	18
Northern Beaches	9	2,824	120%	1,058	47%	32
Sutherland	8	2,907	121%	1,988	86%	10
Hawkesbury	7	794	153%	758	152%	1
North Sydney	6	3,610	153%	724	32%	41
Randwick	5	2,513	157%	680	44%	34
Ryde	4	8,377	181%	2,540	57%	26
Parramatta	3	14,442	185%	5,850	78%	16
Canada Bay	2	4,453	223%	2,719	142%	2
Willoughby	1	3,341	246%	389	30%	42

4: Building and Development Approvals – % of target



Numbers are the rank of the council by development approvals as a share of target, as shown in Table 2. So 43 is Hunters Hill and 1 is Willoughby.

measure, the worst performing councils are Strathfield, where building approvals are only 22% of the target, Willoughby (30%), North Sydney (41%), Waverley (40%), Kur-ring-gai (35%) and Hornsby (38%).

There is room for debate as to which measure represents the more serious problem. However, poor performers on one measure also tend to perform poorly on the other, so the distinction may not be important. This is shown in Chart 4, which shows building and development approvals as a share of the pro-rata target, for those 43 councils with targets. As in the table, building approval data is to May 2026; development approvals are to June 2026; targets are adjusted accordingly.

The orange horizontal line reflects that building approvals typically need to average 110% of the target, given that only 91% are usually completed. Councils above this line have building approvals running above target. The green vertical line reflects that development approvals typically need to

average 139% of the target, given that only 72% are usually completed. Councils to the right of this line have development approvals running above target. Canada Bay (#2) and Hawkesbury (#7) are the only councils to be meeting both tests.

The Canadian province of [British Columbia](#) has a version of table 2 referred to as “the naughty list”. Being near the top of the list invites escalating intervention from the provincial government, beginning with naming and shaming, then increased reporting requirements, then appointment of an inspector/advisor, then overriding of planning controls.

NSW undertakes some of these steps for councils that are slow to process development applications. However, it is the level of approvals, not their speed, that determines housing affordability. Data such as that shown in Table 2 should be published on NSW’s [council league table](#).

NSW needs to consider what further

remedial steps to take for councils on its naughty list. Having a target means little if it is not enforced. The NSW Opposition has called for “clear sanctions” ([NSW Legislative Council, 2024, Dissenting Report](#)), though has not specified what these might be.

Remedial action taken now would not result

in extra completions for several years – possibly outside the Accord horizon. But if we don’t plan for events in the more distant future, long-term problems get worse. This reinforces the need for carrots and sticks to be tied to early upstream indicators.

5. Further work

There are many ways this work could be extended and refined. Here are a few.

We have potential leading information on lodgements in the number of State Significant Developments with SEARS issued. I discuss in Appendix B.

I model the ratios of upstream to downstream measures of construction as constant in the long run. In practice, they move with interest rates, construction costs, the composition and location of construction, and other factors.

A project that was marginally feasible when lodged will have its financing pulled

if economic conditions deteriorate during assessment. A more complicated analysis could quantify those effects, though this would require different data.

The long delay between lodging a development application and beginning construction is a prominent public concern. If efforts to speed things up succeed, my estimated lags would need to be shortened.

National housing targets require a large increase in housing construction in the next few years. If that happens, it would be informative about the lags from upstream to downstream measures and an interesting test of my model.

Appendix A: Major NSW Housing policies

Date	Name and Link	Description
May 2024	Targets	housing targets were announced for 43 local councils
July 2024	LMR Stage 1	Dual occupancies and semi-detached homes allowed on nearly all residential land
January 2025	Housing Delivery Authority	Large projects can be declared State Significant Developments, with faster assessment.
February 2025	LMR Stage 2	Low and mid-rise housing allowed near 171 town centres and stations
Over 2025	Transport-Oriented Development	9-storey housing was permitted within 400m of 37 train stations
July 2025	pattern book	a fast complying-development pathway for standardised low-rise designs.
November 2025	Planning Act reform	Planning legislation was amended to streamline approval process
From 2024	State-led rezoning	Woollahra, Burwood North, Bays West, many more.

Appendix B: The Housing Delivery Authority

The Housing Delivery Authority (HDA) is sometimes described as the “flagship reform” of the NSW government. The [Urban Taskforce](#) says “The HDA remains the most significant pro-housing reform to have been implemented in NSW for more than twenty

years.” The number of HDA applications in the pipeline is large and growing, with the potential to substantially change the construction outlook. Table 4 gives some details.

Table 4: State Significant Developments as of 7 July 2026.

Stage	Number	Dwellings
State Significant Developments (SSDs) declared on HDA recommendation	484	150,000
Projects with SEARs issued **	184	
Applications lodged	88	28,500
Development Approvals	14	2,500

Source: [DPHI](#)

** Note: the count of SEARS is as of [10 April](#) (when 348 SSDs had been declared). All other counts are as of 7 July 2026

SSDs are large, complicated proposals for which lags are longer than other developments. Once an SSD is declared, the applicant has 9 months to request SEARs — which, broadly speaking, determines what expert consultancy reports are required. Once SEARs are issued, the applicant has nine months to lodge a development application, called an Environmental Impact Statement (EIS). DPHI then have 275 days to approve or reject.

The proportion of SSD declarations that have led to lodgements (19%) and development approvals (2%) so far is very low. However, given the long lags and how recently most SSDs were declared, the lodgement rate and approval rate might be expected to increase substantially over the next few months. That could be quantified by looking at the timelines of early declarations.

Appendix C: Data definitions

The ABS series on building approvals largely represents construction certificates that builders obtain before beginning construction.

Development applications are formal submissions lodged through DPHI’s Planning Portal. In addition to standard DAs, they include State Significant Development applications and complying development certificates. Housing Delivery Authority declarations are classified as lodgements once an Environmental Impact Statement (EIS) is lodged (stage 6 of [this process](#)). Application modifications are not counted as lodgements.

Boarding houses, student co-living and many retirement homes are classified as rooms within one dwelling, not as separate dwellings. The criterion for a dwelling, as used by the ABS, is a separate kitchen and bathroom. Further details are at the DPHI league table [website](#).

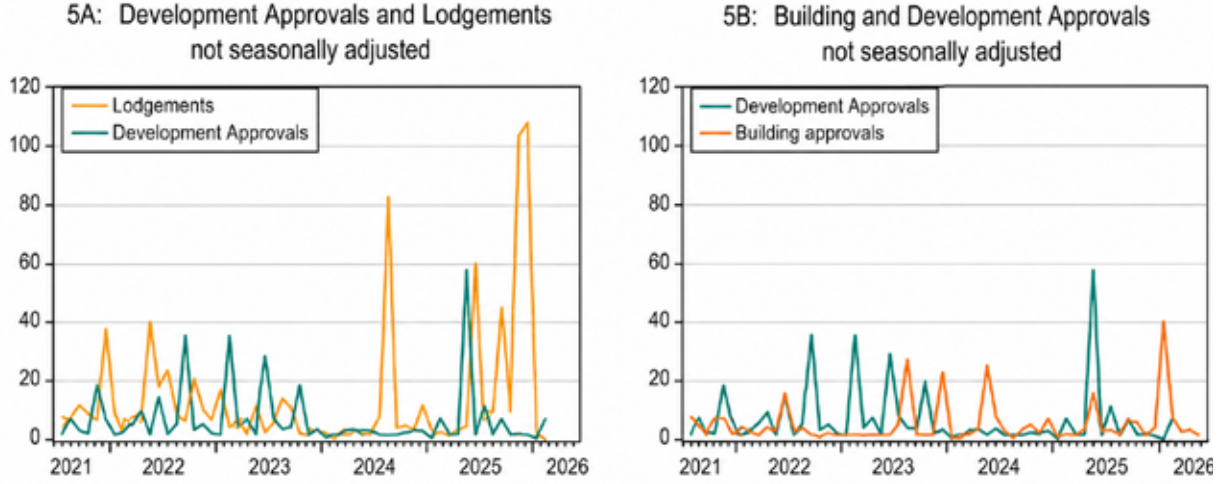
Housing targets are widely interpreted to mean gross completions, however I am not aware of a document by the Commonwealth government that explicitly says that. In principle a more relevant target would be net completions or, better still, net bedrooms.

Appendix D: Econometrics

As background, Chart 5 shows some illustrative raw data. Specifically, lodgements, development approvals and building approvals for Hunters Hill, the smallest council in the Sydney metropolitan area. At this relatively granular level, the data are lumpy and noisy, with little, if any, persistence or contemporaneous

correlation. They resemble a Poisson process. Somewhat harder to see is that most, but not all, lodgements flow into development approvals (left panel) and development approvals flow into building approvals (right panel); both with long distributed lags.

5. Hunters Hill



The equation for development approvals, quantifies the relationship in Chart 5A for all 128 councils:

$$(1) \quad DA_{it} = \sum_{k=1}^{15} \beta_k \text{Lodgement}_{it-k} + \sum_{j=1}^{12} \theta_j \text{Month}_j \text{HPDA}_{it}$$

Where the number of dwellings in development approvals in council i in month t is a function of the past 15 months of lodgements and monthly dummies. Coefficients on lodgements are constrained to sum to 0.76, the full sample ratio of development approvals to

lodgements, allowing for the median lag. Coefficients on monthly dummies are constrained to sum to zero. Monthly dummies are multiples of the Hodrick-Prescott trend.

The equation for building approvals has the same structure:

$$(2) \quad BA_{it} = \sum_{k=1}^{24} \gamma_k DA_{it-k} + \sum_{j=1}^{12} \theta_j \text{Month}_j \text{HPBA}_{it}$$

Where, in the same fashion as above, the number of dwellings in building approvals in council i in month t is a function of the past 24 months of development approvals and monthly dummies. Like in equation (1), coefficients on development approvals are constrained to sum to 0.79, the full sample ratio, allowing for the median lag. Coefficients on monthly dummies are constrained to sum to zero.

The equations do not include an intercept. If there are no lodgements, there would be no approvals. The

specification is linear, not logarithmic, because I have many zero observations and big councils should get proportionally greater weight than small councils.

I constrain coefficients across councils to be the same. That is not because lags or approval rates are the same, which they are not, but because I am interested in average State-wide effects. I constrain coefficients on nearby lags to be similar, so lag coefficients can be interpreted as quarterly, which is a convenient but realistic simplification.

This paper argues that newly published NSW Development Application (DA) data provide an earlier indicator of future housing construction than traditional building approval statistics.

Recent development approvals and lodgements have been high, indicating that construction in NSW is likely to increase substantially. However, the projected increase remains well below what is needed to achieve the NSW government's housing target of 377,000 dwellings by 2029.

The paper also identifies local governments that are falling furthest behind their housing targets in terms of development approvals. Enforcement of targets will involve remedial action against the laggard councils. We can start with naming and shaming.



About the Author

Peter Tulip is Chief Economist at the Centre for Independent Studies. He previously worked in the Research Department of the Reserve Bank of Australia and before that at the Federal Reserve Board of Governors. His recent research focuses on housing and monetary policy.

Related Works

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Peter Tulip. *Housing Affordability and Supply Restrictions*. CIS Policy Paper 55. February 2024

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