

NDIA SDA Pricing Review 2022-23

Technical Report - Vacancy Rates

Reliance Restricted

29 March 2023 | Final Report

Ernst & Young
121 Marcus Clarke Street
Canberra ACT 2600
Australia
GPO Box 281 Canberra
ACT 2600

Tel: +61 2 6267 3888
Fax: + 61 2 6246 1500
Ey.com/au

Notice

Ernst & Young (“EY”) was engaged on the instructions of National Disability Insurance Agency (“NDIA”) to assist in undertaking technical research and analysis to support the Specialist Disability Accommodation (“SDA”) Pricing Review (“Project”), in accordance with the contract dated 26 September 2022.

The results of Ernst & Young’s work, including the assumptions and qualifications made in preparing the report, are set out in Ernst & Young’s report dated 29 March 2023 (“Report”). The Report should be read in its entirety including this notice, the applicable scope of the work and any limitations. A reference to the Report includes any part of the Report. No further work has been undertaken by Ernst & Young since the date of the Report to update it.

Ernst & Young has prepared the Report for the benefit of the Client and has considered only the interests of the Client. Ernst & Young has not been engaged to act, and has not acted, as advisor to any other party. Accordingly, Ernst & Young makes no representations as to the appropriateness, accuracy or completeness of the Report for any other party’s purposes.

Our work commenced on 24 October 2022 and was completed on 10 March 2023. No further work has been undertaken by EY since the date of the Report to update it, and EY has no responsibility to update the Report to take account of events or circumstances arising after that date. Therefore, our Report does not take account of events or circumstances arising after 10 March 2023.

No reliance may be placed upon the Report or any of its contents by any party other than the Client (“Third Parties”). Any Third Party receiving a copy of the Report must make and rely on their own enquiries in relation to the issues to which the Report relates, the contents of the Report and all matters arising from or relating to or in any way connected with the Report or its contents.

Ernst & Young disclaims all responsibility to any Third Parties for any loss or liability that the Third Parties may suffer or incur arising from or relating to or in any way connected with the contents of the Report, the provision of the Report to the Third Parties or the reliance upon the Report by the Third Parties.

No claim or demand or any actions or proceedings may be brought against Ernst & Young arising from or connected with the contents of the Report or the provision of the Report to the Third Parties. Ernst & Young will be released and forever discharged from any such claims, demands, actions or proceedings.

In preparing this Report Ernst & Young has considered and relied upon information from a range of sources believed to be reliable and accurate. We have not been informed that any information supplied to it, or obtained from public sources, was false or that any material information has been withheld from it. Neither Ernst & Young nor any member or employee thereof undertakes responsibility in any way whatsoever to any person in respect of errors in this Report arising from incorrect information provided to EY.

Ernst & Young does not imply and it should not be construed that it has verified any of the information provided to it, or that its enquiries could have identified any matter that a more extensive examination might disclose.

The work performed as part of our scope considers information provided to us, and a number of combinations of input assumptions relating to future conditions, which may not necessarily represent actual or most likely future conditions. Additionally, modelling work performed as part of our scope inherently requires assumptions about future behaviours and market interactions, which may result in forecasts that deviate from future conditions. There will usually be differences between estimated and actual results, because events and circumstances frequently do not occur as expected, and those differences may be material. We take no responsibility that the projected outcomes will be achieved, if any.

We highlight that our analysis and Report do not constitute investment advice or a recommendation to you on a future course of action. We provide no assurance that the scenarios we have modelled will be accepted by any relevant authority or third party.

Our conclusions are based, in part, on the assumptions stated and on information from both publicly available information and other sources used during the course of the engagement. The modelled outcomes are contingent on the collection of assumptions as agreed with NDIA and no consideration of other market events, announcements or other changing circumstances are reflected in this Report. Neither Ernst & Young nor any member or employee thereof undertakes responsibility in any way whatsoever to any person in respect of errors in this Report arising from incorrect information provided by the NDIA or other information sources used.

The analysis and Report do not constitute a recommendation on a future course of action.

Ernst & Young have consented to the Report being published electronically on the Client's website for informational purposes only. Ernst & Young have not consented to distribution or disclosure beyond this. The material contained in the Report, including the Ernst & Young logo, is copyright. The copyright in the material contained in the Report itself, excluding Ernst & Young logo, vests in the Client. The Report, including the Ernst & Young logo, cannot be altered without prior written permission from Ernst & Young.

Ernst & Young's liability is limited by a scheme approved under Professional Standards Legislation.

Table of contents

Executive Summary	Introduction	Definitions	Background
1	2	3	4
Page 5	Page 8	Page 11	Page 13
Evidence	Conclusions	Glossary	
5	6	7	
Page 15	Page 28	Page 33	

1

Executive Summary

Purpose and Findings

Purpose

Ernst & Young (“EY”) has been engaged by the National Disability Insurance Agency (“NDIA”) to assist in undertaking technical research and analysis to support the Specialist Disability Accommodation (“SDA”) Pricing Review. This report will examine vacancy rates as a key input to assist the NDIA in developing new SDA benchmark prices. Further information on the SDA Pricing Review can be found on the NDIS website ([NDIS website](#)).

Vacancy Rate Findings

- ▶ Vacancy rates for SDA were identified to comprise of both initial and stabilised vacancy as outlined below:
 - ▶ Initial vacancy reflects the average expected initial vacancy, that an owner/investor will experience to secure SDA tenants within a New Build SDA dwelling amortised over a 20-year investment horizon.
 - ▶ Stabilised vacancy reflects the expected vacancy that an owner/investor will experience annually over a 20-year investment horizon.
- ▶ The SDA Pricing Model (“historic Model”) used by NDIA allows for an annual Stabilised vacancy allowance to inform the calculation of SDA price. The historic model has no current allowance for the initial leasing-up of New Build SDA. New Build SDA developments can take 6 to 12 months to become fully occupied (Initial Vacancy period).
- ▶ Initial vacancy is considered to be the riskiest period for investors and financiers as they carry the full project cost with no income. Many investors mitigate vacancy risk through flexible SDA design and over-specification of dwellings to suit multiple SDA categories.
- ▶ Initial vacancy periods will likely reduce over time as the market becomes more coordinated and investors transition to a demand-led development approach
- ▶ There is limited stabilised vacancy data for New Build SDA given the market is still forming. Stabilised vacancy levels observed through benchmarking across Existing SDA upon enrolment into the scheme were between 6.00% to 8.00%. This benchmark is considered a reasonable indicator of stabilised vacancy, adjusting for participant choice and fewer participants per dwelling.
- ▶ Vacancy rates are reported to have increased across Existing SDA as participants transition out of older accommodation into New Build SDA. This was a contemplated trend by NDIA and is expected to continue commensurate with the availability of New Build SDA.

Vacancy Rate Assumptions

Based on market research, it is recommended the vacancy rate assumption used by NDIA includes an allowance for Initial vacancy given 'New Build' SDA can take 6 to 12 months to secure participants, reflecting a range of 2.5% to 5.0% of vacancy (considering the 20 year investment horizon).

The vacancy rate assumptions have been applied on a Building Typology basis as there is limited market data to indicate vacancy rate variances between design categories and geographic locations.

A summary of the recommended vacancy rate assumptions based on our market research and analysis is provided in Table 1. A detailed breakdown of the recommended vacancy rate assumptions and its basis has been provided within *Section 7 – Findings*.

Apartments and Villa/Duplex/Townhouse (one bedroom)

A vacancy rate of **7.75%** is recommended for the **Apartment** and Villa/Duplex/Townhouse (one bedroom) building typologies, reflecting the mid-point of an assessed range incorporating both Initial and Stabilised vacancy. The recommended vacancy rate input considers a lower level of difficulty associated with matching suitable residents.

Group Homes

A vacancy rate of **13.0%** is recommended for Group Homes reflecting the mid-point of an assessed range incorporating both Initial and Stabilised vacancy. The recommended vacancy rate input considers the likelihood of higher vacancies due to frictional differences occurring given a larger number of residents living together.

Villa/Duplex/Townhouse and House (more than one bedroom)

Based on the abovementioned parameters (7.75% to 13.0%), a vacancy rate range for Villa/Duplex/Townhouse and House building typologies is recommended between 9.75% to 11.25% based on a sliding scale and with consideration to the number of participants within the building type.

Table 1: Recommended Vacancy Rate by Build Type

Building Type	SDA Bedrooms	Total Vacancy [Low]	Total Vacancy [High]	Vacancy Rate Input
Apartment	1	5.50%	10.00%	7.75%
Apartment	2	5.50%	10.00%	7.75%
Apartment	3	5.50%	10.00%	7.75%
Villa*	1	5.50%	10.00%	7.75%
Villa*	2	7.50%	12.00%	9.75%
Villa*	3	9.00%	13.50%	11.25%
House	2	7.50%	12.00%	9.75%
House	3	9.00%	13.50%	11.25%
Group Home	4	11.00%	15.00%	13.00%
Group Home	5	11.00%	15.00%	13.00%

Source: EY Analysis

*Villa / Duplex / Townhouse

2

Introduction

Background, Scope and Limitations

Background

EY has been engaged by the NDIA to assist in undertaking technical research and analysis to support the SDA Pricing Review. This report will examine vacancy rates as a key input to assist the NDIA in developing new SDA benchmark prices.

Vacancy rates form a key assumption within the SDA Pricing Model used by the NDIA in determining SDA funding by the NDIA for New Build and existing stock properties. The assumption incorporates an allowance within the model to factor in the stabilised vacancy that an SDA owner/investor may experience annually as a result of SDA participant turnover.

Scope

This report presents the findings from research and analysis on estimated national benchmark vacancy rates for SDA in response to the below report scope provided by the NDIA.

1. Estimate the vacancy rates that efficient SDA providers can expect to encounter, including the extent to which these rates vary by Building Type and Size, Design Category and Region.

Limitations

Based on the scope of work and the information available to us we have performed a like-for-like comparison. To enable this, certain assumptions have also been made. This Report is limited in time and scope, other more detailed reviews or investigations may identify additional issues or considerations than this Report has noted. The results of this work are limited by the availability and quality of data. The results of this work and procedures performed do not constitute an audit, a review or other form of assurance in accordance with any generally accepted auditing, review or other assurance standards, and accordingly EY does not express any form of assurance.

Our findings are based, in part, on the assumptions stated and on information from both publicly available information and other sources used during the course of the engagement. The modelled outcomes (where applicable) are contingent on the assumptions as agreed with the NDIA and no consideration of other market events, announcements or other changing circumstances are reflected in this Report. Neither Ernst & Young nor any member or employee thereof undertakes responsibility in any way whatsoever to any person in respect of errors in this Report arising from incorrect information provided by the NDIA and other information sources used.

The approach to undertaking the Vacancy Rate research methodology is detailed below.

1. Understanding of historic Assumptions

- Identified historic assumptions utilised within the historic Model used by NDIA regarding the application of various vacancy rates based on building type, design category and region.

2. Collecting and Processing Data

Key data points were collected from the following sources:

- Requested vacancy data from the Office of the Scheme Actuary with regard to Defence Housing, Public/Social Housing and State Governments.
- Researched vacancy rates across broadly comparable and established accommodation sectors, including Aged Care, Purpose-Built Student Accommodation (PBSA) and Build-to-Rent (BtR).
- Web-based searches of CoreLogic and SQM Research with regard to standard residential vacancy rates by building type (where available).

3. Analysis of Data and Key Findings

- Provided an overview of the historic methodology used by NDIA and the application of the assumptions within the existing SDA Pricing Model used by NDIA.

- Analysed vacancy rates from broadly comparable and established accommodation sectors (social housing, PBSA, BtR, Aged Care and standard residential) and known SDA portfolios. Consolidated data into relevant categories to develop estimate benchmarks for SDA properties across building type, design category and region where applicable.
- Provided an overview of the historic methodology used by NDIA and the application of the assumptions within the existing SDA Pricing Model used by NDIA.
- Analysed vacancy rates from broadly comparable and established accommodation sectors (social housing, PBSA, BtR, Aged Care and standard residential) and known SDA portfolios. Consolidated data into relevant categories to develop estimate benchmarks for SDA properties across building type, design category and region where applicable.
- Considered suitability of the historic assumptions/approach:
 - Reconciled historic vacancy assumption methodology across build type and design category;
 - Considered historic vacancy assumptions used by NDIA against current market research and feedback; and
 - Considered whether there is a more suitable alternative methodology/approach and the associated impact (if applicable).

3

Definitions

Vacancy Rate Definitions

Total Vacancy within SDA was identified to comprise of both Initial and Stabilised vacancy as defined below:

- ▶ Initial vacancy reflects the average expected initial vacancy, based on current market research, that an owner/investor will experience to secure SDA tenants within a New Build SDA dwelling.
- ▶ Stabilised vacancy reflects the expected vacancy that an owner/investor will experience annually over a 20-year investment horizon in line with the historic Model's assumption used by the NDIA.

Essentially, Initial vacancy reflects the period where an SDA investor is seeking to secure a participant for a 'New Build' SDA dwelling. Initial vacancy is considered to be the riskiest period for investors and financiers as they carry the full project cost with no income. Initial vacancy periods will likely reduce over time as the market becomes more coordinated and investors transition to a demand-led development approach.

Stabilised vacancy reflects the annual vacancy an SDA investor will experience as the result of a participant departure/turnover event. Refer to *Section 7 – Findings* for a Stabilised Vacancy worked example.

In order to adequately account for the differences between both initial and stabilised vacancy, the vacancy inputs and findings in this report are presented on a blended basis over a 20-year investment horizon.

4

Background

Historic Methodology and Assumptions

The SDA Pricing Model developed by NDIA incorporates a stabilised vacancy rate allowance within the historic Model used by NDIA to factor in the expected vacancy that an owner/investor may experience on an annual basis as a result of SDA participant turnover.

The vacancy rate assumption is applied over an entire dwelling rather than a single bedroom within a dwelling. Furthermore, the vacancy rate allowance is applied on an annual basis throughout the 20-year investment horizon.

Historic Vacancy Rate Assumptions

Table 2 outlines the vacancy rate assumptions adopted within the historic Model by the NDIA.

Table 2: Historic Vacancy Rate Assumptions

Building Type	Bedrooms	Vacancy Rate
Apartment	1	3.0%
Apartment	2	3.0%
Apartment	3	3.0%
Villa / Duplex / Townhouse	1	3.0%
Villa / Duplex / Townhouse	2	5.0%
Villa / Duplex / Townhouse	3	7.5%
House	2	5.0%
House	3	7.5%
Group Home	4	8.5%
Group Home	5	10.0%

Source: Historic Model, 2016

Historic Vacancy Methodology

The historic vacancy rate assumptions used by NDIA were informed based on consideration of the following key data sources identified by the NDIA:

- ▶ Defence housing vacancy rates reported at less than 2%;
- ▶ Public housing vacancy rates reported at circa 3%; and
- ▶ State Government feedback regarding shared supported accommodation reported at circa 3%.

With consideration to the abovementioned vacancy rates, the following rationale was adopted by the NDIA historically:

- ▶ A vacancy rate of 3% was adopted for Apartments and Villa/Duplex/Townhouse (one bedroom);
- ▶ A vacancy rate of 10% was adopted for five resident Group Homes on the assumption of higher 'frictional' vacancies between the larger number of residents. Furthermore, the assumption was based on adequate supply becoming available over time, with residents having a higher level of choice with alternative SDA accommodation.
- ▶ Rates of 5%, 7.5% and 8.5% were adopted for Duplexes, Townhouses, Houses and Group Homes with two to four residents based on a sliding scale between the two extremes (3% and 10%).

5 Evidence

Initial Vacancy Analysis

Initial vacancy reflects the average expected initial vacancy, that an owner/investor will experience to secure SDA tenants.

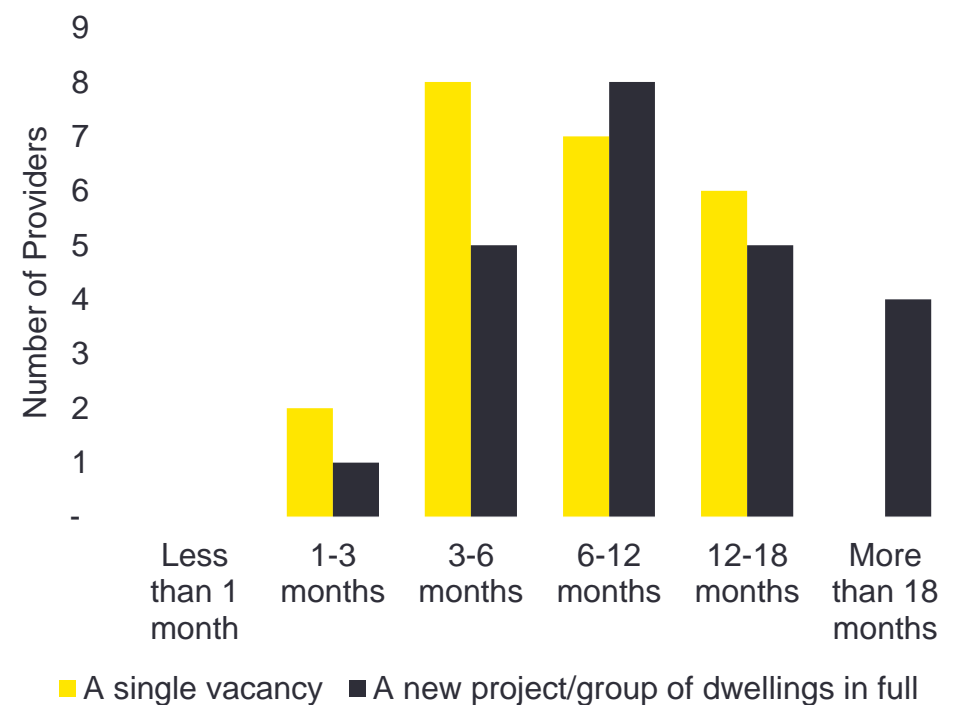
Initial vacancy data from the SDA Provider Experience Survey 2022, undertaken by Summer Foundation and Housing Hub, has been analysed to identify initial vacancy periods within the SDA market. The survey interviewed 28 providers of SDA housing.

Out of the 1,281 New Build SDA places that respondents had enrolled with the NDIA, almost a quarter (22.1%; 283 places) were reported to be vacant.

Figure 1 shows the average time taken to fill a single vacancy (from the time of tenant moving out to when a new tenant moves in) and the average time taken to fully lease a new project/group of dwellings (from time of advertising to all dwellings being filled). The most common time length to lease a single vacancy was 3-6 months. In comparison, the most common time length to lease a new project/group of dwellings in full was 6-12 months.

Almost half of the respondents (48.2%) reported that it took more than six months to fill a single vacancy, and most respondents (63.0%) reported it took more than six months to fully lease a new project/group of dwellings.

Figure 1: Average Time Taken to Lease SDA Properties



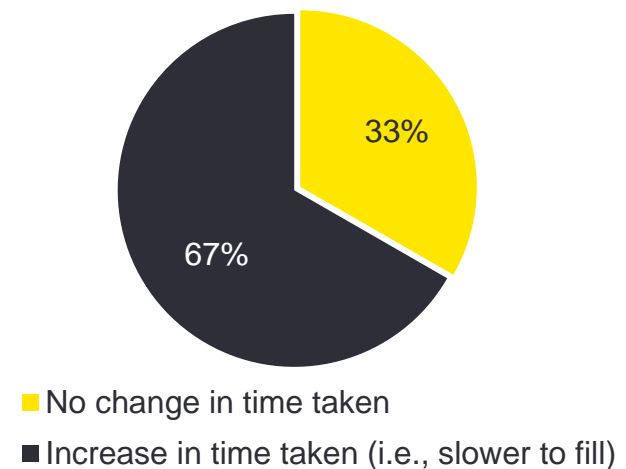
Source: SDA Provider Experience Survey, 2022

Nine respondents reported the time it took to fill single vacancies and the time it took to fully lease a new project/group of dwellings in both the *2021 and 2022 SDA Provider Experience Surveys*. The changes that these respondents have experienced since the prior year are presented in Figure 2.

Respondents typically found difficulties associated with finding tenants with the right level of SDA in their NDIA plan to be the most challenging aspect of identifying tenants (63.0%) followed by assessing the SDA eligibility of potential tenants (25.9%).

Furthermore, respondents typically found the time the NDIA takes to make SDA decisions to be the most challenging aspect of filling vacancies (77.8%) followed by the time the NDIA takes to make support decisions (66.7%).

Figure 2: Changes In The Time Taken To Lease SDA Properties Between 2021 and 2022



Source: SDA Provider Experience Survey, 2022

Stabilised Vacancy

Stabilised vacancy reflects the expected vacancy that an owner/investor will experience annually. There is limited stabilised vacancy data for New Build SDA given the market is still forming. Accordingly, market research has been undertaken for the SDA sector in addition to broadly comparable accommodation sectors such as Aged Care, Purpose Built Student Accommodation, Build to Rent, Social Housing and the general residential market.

Stabilised vacancy levels observed across Existing SDA upon enrolment into the scheme were between 6.00% to 8.00%. This benchmark is considered a reasonable indicator of stabilised vacancy, adjusting for participant choice and fewer participants per dwelling.

We have analysed a sample of valuation reports for SDA assets undertaken by tier-one valuation firms. The assumptions adopted by the valuers were based on stabilised vacancy in an established market and were undertaken for the purpose of supporting investment and lending decisions. The vacancy rate assumptions determined by the valuers highlighted vacancy in a stabilised market without regard to vacancy during the initial vacancy period. Given the sensitive information contained within the valuation reports, asset names have been kept confidential. The sample included ten SDA assets situated in Brisbane, Sydney, Perth and Melbourne.

The analysed sample is provided in Table 3 below. Stabilised vacancy rate assumptions ranged between 3.00% to 8.00% across the sample. SDA is still maturing as a market, and new assets are experiencing letting-up periods before stabilised vacancy rates are achieved.

Table 3: SDA Stabilised Vacancy Rates

	Asset 1 - BRIS	Asset 2 - SYD	Asset 3 - BRIS	Asset 4 - SYD	Asset 5 - PER	Asset 6 - PER	Asset 7 - PER	Asset 8 - PER	Asset 9 – PER	Asset 10 - MEL
Build Date	2019	2020	2020	2021	2020	2020	2021	2021	2023 (estimated)	2020
Dwelling Type	10 x 1 bed Apartments	1 x 3 bedroom House	1 x 3 bedroom House	5 x 1 bedroom Villas	1 x 4 bedroom Group Home	1 x 4 bedroom Group Home	Duplex 2 x 2 bed Group Home	10 x 1 bedroom Apartments	1 x 2 & 1 x 1 bedroom Villas	1 x 4 bedroom Group Home
SDA Design Standard	HPS x 9 FA x 1	HPS	HPS	HPS	HPS	HPS	HPS	HPS x 7 FA x 3	HPS	HPS
Stabilised Vacancy Rate	3.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	8.00%	5.00%	5.00%
Letting-up Assumption	3 months	4 months	3 months	5 months	6 months	6 months	6 months	10 months	6 months	N/A

Source: EY Research

Aged Care Stabilised Vacancy

Analysis of public Aged Care providers indicates average vacancy across their portfolio's between 8.4% (Estia) to 10.2% (Regis), with industry survey comparisons of 8.6% (Stewart Brown). Despite providing a more institutionalised style of accommodation, the Aged Care sector provides a similar operational care model to SDA.

Additional research has been undertaken to identify stabilised vacancy assumptions adopted within external valuations. Stabilised vacancy has been informed based on historical occupancy within each asset. Given the sensitive information contained within the valuation reports, we have kept the asset names confidential. The assets are located in Melbourne, Perth, Sydney and Brisbane, as summarised in Table 4.

Based on our research, stabilised vacancy assumptions for Aged Care Facilities range between 2.20% and 12.00%. Notably, the older stock (1970s) reflects a higher range of 10.00% to 12.00%, with the newer stock reflecting 2.20% to 5.00%.

Residential Aged Care vacancy across the sector has been trending upwards from FY15 to FY22. This is partly due to new competition in the form of at-home care packages, loss of consumer confidence associated with COVID-19 as patients are considered vulnerable persons and the Royal Commission into Aged Care Quality and Safety.

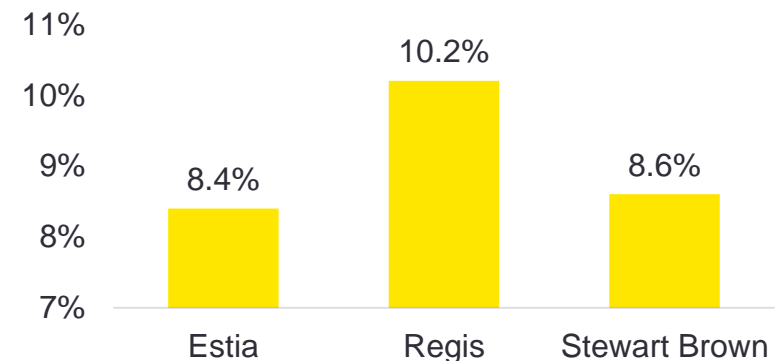
Future occupancy rates will reflect the interaction of several factors. Long-term demographic projections indicate that the demand for residential Aged Care will continue growing as the number of senior Australians increases over time. Equally, with the removal of supply-side restrictions through the Aged Care Approvals Round, occupancy at the sector level will likely be more responsive to residents' demands and providers' investments in supply.

Table 4: Aged Care Vacancy Rate Research

	MEL Assets	PER Assets	SYD Assets	BRIS Assets
Dwelling Type	ACF	ACF	ACF	ACF
Build Date	1979 – 2015	1997 – 2009	2000 – 2019	2017
Number of Beds	82 – 146	68 – 110	74 – 99	128
Vacancy Rate	3.00% - 12.00%	2.20% - 5.10%	2.50% - 5.00%	5.00%

Source: EY Research

Figure 3: Average Vacancy



Source: Investor Presentations and Stewart Brown H1-2022

Purpose Built Student Accommodation (PBSA) Stabilised Vacancy

PBSA comprises housing that has been purpose-built for tertiary students to live and study in. As a broadly comparable accommodation sector, we have researched stabilised vacancy rates reflected within the PSBA asset class. PBSA assets typically comprise mid to high-rise developments comprising apartment-style accommodation ranging from one to three bedrooms with shared facilities.

We have analysed a sample of valuation reports for PBSA assets undertaken by tier-one valuation firms. Given the sensitive information contained within the valuation reports, we have kept the asset names confidential and disclosed the cities in which the assets are located. The sample included ten PBSA assets in Brisbane, Sydney and Melbourne.

We note that the PBSA asset class was particularly sensitive to the effects of COVID-19 due to the market demographic predominantly comprising overseas students. During the peak of COVID-19, many international governments were calling on overseas students to return home, resulting in artificially inflated market vacancy rates. The vacancy rate range of 3.0% to 5.0% reflects stabilised/ongoing vacancy anticipated within typical market conditions similar to pre-pandemic levels. Newly constructed PBSA assets can typically take up to four years of operation before achieving a stabilised occupancy level.

Table 5 provides a summary of the PBSA research sample. Our research indicates typical stabilised vacancy rate assumptions adopted within the PSBA valuations range between 3.00% and 5.00%.

Table 5: PBSA Stabilised Vacancy Rates

	Asset 1 – BRIS	Asset 2 – BRIS	Asset 3 – BRIS	Asset 4 – SYD	Asset 5 – BRIS	Asset 6 – SYD	Asset 7 – BRIS	Asset 8 – SYD	Asset 9 – MEL	Asset 10 – MEL
Stabilised Vacancy Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	3.00%	3.27%
Build Date	2017	2019	N/A	2018	2018	2015	N/A	2022	2018	2021
Total Beds	753	901	742	635	798	271	454	435	284	941

Source: EY Research

Build-to-Rent (BtR) Stabilised Vacancy

Build-to-Rent (BtR) Stabilised Vacancy

BtR is an emerging housing sector in Australia whereby a developer/investor will build and retain a development for the purpose of renting the residential dwellings to the market as opposed to the traditional Build-to-Sell model.

The BtR sector typically comprises medium-rise to high-rise apartments accommodating one to four bedrooms. Developments contain shared amenities and can incorporate retail/office tenancies within the development.

Given that the BtR sector is a broadly comparable and emerging accommodation sector, we have analysed a sample of valuation reports for BtR assets undertaken by tier-one valuation firms. Given the sensitive information contained within the valuation reports, we have kept the asset names confidential and disclosed the cities the assets are located within. We have considered a sample of eight BtR asset valuations across Sydney, Brisbane, Melbourne and Perth and analysed their stabilised vacancy rates.

Demand for BtR accommodation remains relatively unproven in Australia due to a lack of existing operating assets. There have not been any transactional sales of BtR accommodation on a going concern basis. The valuations analysed have made assumptions that a likely notional purchaser would reasonably make when considering BtR investments compared to alternative income-producing specialised assets where transactional evidence is more available.

Table 6 provides a summary of the BtR research sample. Our research indicates that stabilised vacancy rate assumptions adopted within valuations typically range between 2.00% and 3.00%, which is more reflective of the standard residential market.

Table 6: Build-to-Rent Stabilised Vacancy Rates

	Asset 1 – SYD	Asset 2 – BRIS	Asset 3 – PER	Asset 4 – MEL	Asset 5 – MEL	Asset 6 – MEL	Asset 7 – BRIS	Asset 8 – PER
Stabilised Vacancy Rate	3.00%	3.00%	2.50%	2.00%	2.00%	2.00%	2.00%	2.50%
Build Date	2023 (est)	2018	2022	2021	2025 (est)	2022	2024 (est)	2019
Number of Units	234	1,252	80	403	498	490	396	93

Source: EY Research

Social Housing Stabilised Vacancy

We have analysed data as outlined below from the *Productivity Commission Report on Government Services 2021*, which identifies historical occupancy rates of social housing assets between 2011 and 2020.

Public Housing

- ▶ Public housing mostly comprised of the following dwelling types; separate house (37%), flat, unit or apartment (35%) or semi-detached, townhouse, etc. (27%).
- ▶ Public housing dwellings were most likely to be 3-bedroom dwellings (36% or 107,500 dwellings), followed by 2-bedroom dwellings (31% or 93,800).
- ▶ Over the 10-year period, the average vacancy for public housing was 2.5% nationally, with the highest vacancy in South Australia at 4.5% and the lowest in New South Wales at 1.4%. This is due, in part, to a sizeable transfer of public housing stock to community housing assets in New South Wales and South Australia in 2018.

State Owned and Managed Indigenous Housing (SOMIH)

- ▶ The majority of SOMIH dwellings comprised of the following; separate house (82%) and semi-detached, townhouse etc. (14%).
- ▶ The majority of SOMIH dwellings were 3-bedroom dwellings (59% or 8,600 dwellings), with very few 1-bedroom dwellings (2%).
- ▶ Over the 10-year period, the average vacancy for SOMIH was 3.5% nationally, with the highest vacancy in South Australia and Northern Territory at 4.7% and the lowest in Tasmania at 1.4%. This is due, in part, to around 5,000 social housing dwellings in the Northern Territory being transferred to SOMIH and a large number of dwellings being transferred away from SOMIH in South Australia.

Community Housing

- ▶ The majority of community housing dwellings comprised of the following; flat, unit or apartment (51%), and separate house (30%).
- ▶ Community housing dwellings were most commonly 2-bedroom (35% or 35,700) or 1-bedroom (33% or 33,500) dwellings.
- ▶ Over the 5-year period, the average vacancy for community housing was 4.9% nationally, with the highest vacancy in the Australian Capital Territory at 15.6% and the lowest in the Northern Territory at 1.2%. Results may be skewed, in part, due to the relatively low dataset available in the Australian Capital Territory (970 CH dwellings in 2021) and assumptions that dwellings allocated to a community housing organisation are occupied in the Northern Territory.

Indigenous Community Housing

- ▶ Data for Indigenous community housing dwelling types were not available.
- ▶ Around half of the Indigenous community housing dwellings were 3-bedroom dwellings (49% or 6,500), and a further 24% (or 3,200) were 4-bedroom dwellings. Similar to SOMIH, few were 1-bedroom dwellings (3%).
- ▶ Over the 5-year period, the average vacancy for Indigenous community housing was 6.6% nationally, with the highest vacancy in South Australia at 11.8% and the lowest in Tasmania at 1.8%. This is due, in part, to differences in the emphasis each State and Territory Government places on objectives for providing social housing. As a result, eligibility criteria and factors affecting wait lists vary by State jurisdiction, influencing vacancy rates.

Table 7 provides a summary of the average proportion of social housing assets which are unoccupied.

Table 7: Average Proportion of Dwellings Unoccupied – Social Housing Assets¹

State	Public Housing	SOMIH ¹	Community Housing ²	Indigenous Community Housing ²
NSW	1.4%	2.5%	3.8%	4.3%
VIC	2.8%	n/a	7.5%	3.8%
QLD	1.8%	3.2%	4.3%	5.5%
WA	3.9%	n/a	7.4%	10.6%
SA	4.5%	4.7%	3.6%	11.8%
TAS	2.0%	1.7%	4.6%	1.8%
ACT	2.8%	n/a	15.6%	n/a
NT	4.4%	4.7%	1.2%	n/a
National	2.5%	3.5%	4.9%	6.6%

Source: Productivity Commission Report on Government Services 2021

¹ State Owned and Managed Indigenous Housing.

² Data is only available over the five year period 2016-2020.

Residential Stabilised Vacancy

We have analysed data from CoreLogic market reports and SQM research to evaluate vacancy rates within the broader residential market.

As shown in Figure 4, vacancy rates have decreased across all states and dwelling types, except Canberra housing between October 2022 and October 2021. Vacancy rates in October 2022 for units range between 0.3% in Adelaide and 1.3% in Canberra and Darwin, whereas vacancy rates for houses range between 0.3% in Adelaide and 1.5% in Sydney. The National vacancy rates were 1.1% for houses and units.

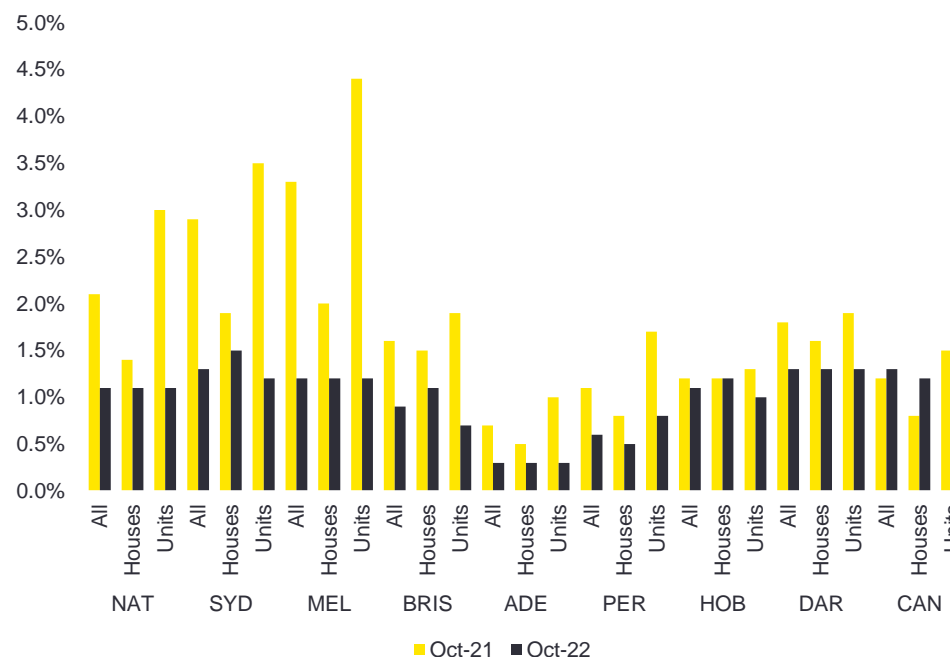
Table 8 provides the five year average vacancy rate for the general residential market for all capital cities.

Table 8: 5-Year Average Residential Vacancy Rate

	SYD	MEL	BRIS	ADE	PER	HOB	DAR	CAN	NAT
Vacancy rate	2.8%	2.7%	2.4%	1.2%	2.7%	0.6%	2.5%	1.0%	2.2%

Source: SQM Research, 2017-2022

Figure 4: National Vacancy Rate - By Dwelling Type



Source: CoreLogic Quarterly Rental Review Quarter 3, 2022

Stabilised Vacancy Research Summary

The analysed sample of valuations undertaken in 2022 of SDA assets included 10 SDA assets across High Physical Support and Fully Accessible Design Categories and includes Apartments, Villas, Houses and Group Homes across Brisbane, Sydney, Perth & Melbourne. The stabilised vacancy assumptions ranged between 3.00% to 10.00%, with valuers most commonly adopting 5.00%.

Purpose Built Student Accommodation and Build-to-Rent asset classes are broadly comparable to Apartment style stock ranging between one-to-three-bedrooms. The analysed sample of valuations undertaken in 2022 indicated stabilised vacancy rate assumptions ranging between 2.0% and 5.0%. While we note that PBSA market vacancy rates were significantly affected by COVID-19 as lockdowns restricted overseas student migration, the assumptions surrounding vacancy rates within the valuation reports are considered reflective of stabilised rates anticipated within typical market conditions similar to pre-pandemic levels.

For Aged Care Facilities, valuers undertaking valuations in 2022 for the analysed sample adopted stabilised vacancy rate assumptions based on historical occupancy levels within each asset. Stabilised vacancy assumptions ranged between 2.20% and 12.00%. Notably, the older stock (1970s) reflected a higher range of 10.00% to 12.00%, with the newer stock reflecting 2.20% to 5.00%.

Analysis of public Aged Care providers in 2022 indicated average vacancy across their portfolio's between 8.4% (Estia) to 10.2% (Regis), with industry survey comparisons of 8.6% (Stewart Brown). Despite providing a more institutionalised style of accommodation, the Aged Care sector provides a similar operational care model to SDA albeit typically influenced by policy decisions which cause them to be higher.

We have relied upon the Productivity Commission's report on Government Housing to identify historical vacancy rates of social housing assets. These assets cover a broad range of dwelling types and bedroom sizes. Nationally, vacancy rates across each social housing asset class have increased over time, considered reflective of the aging condition of these assets. Our research indicated national vacancy rates adopted within the social housing market range between 2.50% and 6.60%.

As at the end of 2022, broader residential vacancy rates are at a 5-year low, reflecting the national rental shortage. Whilst this may be the case for the broader market, the SDA market is a smaller market segment with complex factors affecting supply and demand. As such, vacancy rates are typically higher in SDA assets compared to the broader residential market. The research indicated National vacancy rates were 1.1% for houses and units.

Table 9 provides a summary of the stabilised vacancy rates across the various asset classes that have formed part of the research sample.

Table 9 provides a summary of the stabilised vacancy rates across the various asset classes that have formed part of the research sample.

Table 9: Stabilised Vacancy Research Summary

Build Type	Historic Model Vacancy Assumption	SDA	Aged Care Facilities	Broader Residential	Social/Community Housing	PBSA	Build-to-Rent
Apartment	3.00%					3.00% - 5.00%	2.00% - 3.00%
Villa / Duplex / Townhouse	3.00% - 7.50%	3.00% - 10.00%	2.20% - 12.00%				
House	5.00% - 7.50%			1.10% - 2.20%	2.50% - 6.60%		
Group Home	8.50% - 10.00%						

Source: EY analysis of valuation reports

Mortality Rate Analysis

Mortality rates are considered to contribute to stabilised vacancy being higher within SDA in comparison to other asset classes.

We have analysed data from the *Mortality Patterns Among People Using Disability Support Services Technical Report*, which explores mortality patterns among people who accessed disability support services from 1 July 2013 to 30 June 2018.

Based on the findings of the abovementioned report, people with disability had a mortality rate **4.7** times as high as the rate for the general population (before 65 years of age).

Furthermore, mortality rates for people with disability receiving residential and other accommodation support were 2,762 deaths per 100,000 people or **2.76%**.

Table 10: Residential & Other Accommodation Support - Rates of Mortality for people aged under 65

Age	Deaths %	Deaths	Mortality rate (100,000 person)
<20	5.0%	153	1,102.3
20–34	13.3%	404	1,284.2
35–49	27.1%	825	2,557.0
50–64	54.6%	1,659	5,309.6
Total		3,041	2,762.0

Source: AIHW; Mortality Patterns Among People Using Disability Support Services – 1 July 2013 to June 2018.

6 Findings

Vacancy Rate Assumption Key Findings

The historic Model's vacancy assumptions (3.0% to 10.0%) used by NDIA were informed by State Government, social and defence housing vacancy benchmarks, between 2.0% to 3.0%. Furthermore stabilised vacancy across existing SDA (government owned disability housing) upon enrolment into the scheme was understood to have been between 6.00% to 8.00%. Existing SDA stock was comprised of larger 'Group Homes', therefore, the benchmarks were adjusted to reflect the complexity of matching tenants within larger homes.

Based on market research, it is recommended the vacancy rate assumption is increased from the rates used by NDIA in the historic model to reflect both initial and stabilised vacancy. Research indicated 'New Build' SDA can take 6 to 12 months to secure participants, reflecting a range of 2.5% to 5.0% of vacancy (considering the 20 year investment horizon).

There is limited data available to accurately inform stabilised vacancy across Building Type, Design Category and location of New Build SDA. Vacancy data should exclude the impact of any oversupply and undersupply in the market. On this basis, the benchmark associated with Existing SDA at enrolment is considered a strong indicator for stabilised occupancy (6.00% to 8.00%).

Apartments and Villa/Duplex/Townhouse (one bedroom)

A vacancy rate of **7.75%** is recommended for the Apartment and Villa/Duplex/Townhouse (one bedroom) building typologies, reflecting the mid-point of an assessed range incorporating both Initial and Stabilised vacancy. The recommended vacancy rate input considers a lower level of difficulty associated with matching suitable residents.

Group Homes

A vacancy rate of **13.0%** is recommended for Group Homes reflecting the mid-point of an assessed range incorporating both Initial and Stabilised vacancy. The recommended vacancy rate input considers the likelihood of higher vacancies due to frictional differences occurring given a larger number of residents living together.

Villa/Duplex/Townhouse and House (more than one bedroom)

Based on the abovementioned research parameters (7.75% to 13.0%), a vacancy rate range for Villa/Duplex/Townhouse and House building typologies is recommended between 9.75% to 11.25% based on a sliding scale and with consideration to the number of participants within the building type.

A summary of the vacancy rate assumptions is provided overleaf.

Table 11 provides a summary of the vacancy rate research ranges informed by our market research. It is recommended the mid-point of the assessed Total Vacancy Rate range is adopted based on both the Stabilised and Initial vacancy rate assumptions outlined below.

Table 11: Vacancy Rate Historic and Updated Recommended Assumptions

Building Type	SDA Bedrooms	'Stabilised Vacancy' Allowance [Low]	'Stabilised Vacancy' Allowance [High]	'Initial Vacancy' Allowance [Low]	'Initial Vacancy' Allowance [High]	Total Vacancy [Low]	Total Vacancy [High]	Recommended Vacancy Rate Input [Mid-Point]
Apartment	1	3.00%	5.00%	2.50%	5.00%	5.50%	10.00%	7.75%
Apartment	2	3.00%	5.00%	2.50%	5.00%	5.50%	10.00%	7.75%
Apartment	3	3.00%	5.00%	2.50%	5.00%	5.50%	10.00%	7.75%
Villa / Duplex / Townhouse	1	3.00%	5.00%	2.50%	5.00%	5.50%	10.00%	7.75%
Villa / Duplex / Townhouse	2	5.00%	7.00%	2.50%	5.00%	7.50%	12.00%	9.75%
Villa / Duplex / Townhouse	3	6.50%	8.50%	2.50%	5.00%	9.00%	13.50%	11.25%
House	2	5.00%	7.00%	2.50%	5.00%	7.50%	12.00%	9.75%
House	3	6.50%	8.50%	2.50%	5.00%	9.00%	13.50%	11.25%
Group Home	4	8.50%	10.00%	2.50%	5.00%	11.00%	15.00%	13.00%
Group Home	5	8.50%	10.00%	2.50%	5.00%	11.00%	15.00%	13.00%

Source: SDA Pricing Model / EY Research and Analysis

Stabilised Vacancy – Worked Example

We have provided a worked example in Table 12 to demonstrate how the stabilised vacancy assumption is reflected over the 20 year investment horizon.

Stabilised Vacancy – Group Accommodation (5 bed)

As outlined on the prior page, the stabilised vacancy assumption for Group Accommodation (5 bed) ranges between 8.5% to 10.0% p.a. The worked example assumes a stabilised vacancy assumption of 10.0% p.a. When analysed over the 20 year investment horizon, the stabilised vacancy assumption reflects a total of 2 years of vacancy and therefore total occupancy of 18 years. For the purpose of this example, we have assumed an average length of stay (“ALOS”) of 6 years which reflects 3 turnover events over the 20 year period. On this basis, the stabilised vacancy assumption reflects a indicative letting up period of 8 months per turnover event.

Initial Vacancy Assumption

The Initial vacancy allowance range of 2.50% to 5.00% outlined with Table 11 on the prior page reflects an initial letting up allowance of 6 to 12 months amortised over the 20 year investment horizon.

Table 12: Stabilised Vacancy – Group Accommodation (5 bed)

Item	Assumption
Building Type	Group Accommodation (5 bed)
Stabilised Vacancy Assumption	10% p.a. (high end of the range)
Total Stabilised Vacancy Allowances (20 years)	2 Years
Total Occupancy after Stabilised Vacancy Allowance (20 years)	18 Years
Indicative Average Length of Stay assuming 3 Turnover Events	6 Years
Indicative Letting Up Allowance per Turnover Event	8 Months

Source: EY Research and Analysis

Key Considerations

-
- ▶ Stabilised vacancy research has been based on stabilised vacancy levels observed across Existing SDA upon enrolment into the scheme in addition to market research of established benchmarks from similar accommodation asset classes such as: Aged Care, Retirement Villages, Residential and Public/Community/Indigenous housing, Purpose Built Student Accommodation and Build-to-Rent accommodation. The stabilised vacancy assumption within the SDA pricing model is predicated on 'the expected vacancy that an owner/investor will experience on an annual basis over a 20-year investment horizon'.
 - ▶ The initial leasing up period is taking longer than initially anticipated by investors, and the historic Model used by NDIA does not factor in any initial vacancy allowance when setting the SDA price.
 - ▶ The Initial Vacancy period is expected to reduce as the system becomes more co-ordinated and investors transition to a more demand-led development approach; however, consideration should be given to this cost by NDIA when setting the SDA price. This can be achieved via an 'Initial Vacancy' allowance in addition to the 'Stabilised Vacancy' input in the model.
 - ▶ We consider an initial vacancy period of between 6 to 12 months to be reasonable for the market in its current form. This should be reviewed by the NDIA as the market and system become more co-ordinated over the medium term. Initial Vacancy allowance is expected to be consistent across Building Types and Design Categories.
 - ▶ Additional consideration may also be given to Regional or 'Thin' markets; however, initial vacancy risk could be mitigated through early collaboration with participants consistent with other market areas.

7

Glossary

Annexure A: Glossary

Term	Meaning
BtR	Build-to-Rent housing.
Building Type	The Design Category as per the SDA Framework - Apartment, Duplex/Villa/Townhouse, House or Group Home.
Apartment	Self-contained units that are part of a larger residential building.
Duplex, Villa, Townhouse	Separate but semi-attached properties within a single land title or strata titled area. This also includes stand-alone villas or granny-flats.
House	Detached low-rise buildings with garden or courtyard areas with fewer than 4 bedrooms.
Group Home	Houses that have 4 or 5 bedrooms.
Design Category	The Design Category as per the SDA Framework - Basic, Improved Liveability, Fully Accessible, Robust or High Physical Support.
Basic	Housing without specialised design features but with other important SDA characteristics (e.g. location, privacy, shared supports).
Improved Liveability (IL)	Housing that has been designed to improve 'Liveability' by incorporating a reasonable level of physical access and enhanced provision for people with sensory, intellectual or cognitive impairment.
Fully Accessible (FA)	Housing that has been designed to incorporate a high level of physical access provision for people with significant physical impairment.
Robust	Housing that has been designed to incorporate a high level of physical access provision and be very resilient, reducing the likelihood of reactive maintenance and reducing the risk to the participant and the community.
High Physical Support (HPS)	Housing that has been designed to incorporate a high level of physical access provision for people with significant physical impairment and requiring very high levels of support.

Term	Meaning
Enrolled Dwelling	A dwelling enrolled under section 26 of the <i>NDIS (Specialist Disability Accommodation) Rules 2020</i> to provide SDA.
NDIA	National Disability Insurance Agency.
NDIS	National Disability Insurance Scheme.
PBSA	Purpose Built Student Accommodation housing.
SDA	Specialist Disability Accommodation.
SDA Type	The SDA type under the SDA Framework - Existing, Legacy, New Build or New Build (refurbished).
New Build	An SDA dwelling that was built (has a certificate of occupancy dated) after 1 April 2016 and meets all of the requirements under the SDA Rules and NDIS Price Guide.
Existing	Dwellings built before 1 April 2016 that were used as disability related supported accommodation under a previous State, Territory or Commonwealth scheme. Existing dwellings must substantially comply with the requirements of a new build, and must meet the maximum resident requirement (5 residents or less).
Legacy	Existing dwellings that do not meet the maximum resident requirement of 5 residents or less. Over time, the NDIA will stop making SDA payments towards Legacy dwellings.
New Build (refurbished)	A dwelling that was built before 1 April 2016 but has been significantly refurbished since and now meets all of the requirements for a new build in the SDA Rules and NDIS Price Guide. In order to qualify for as a New Build (refurbished) providers must spend a minimum amount. These minimum amounts are specified per dwelling type in the SDA Price Guide.
Historic Model	2016 SDA Pricing Model developed by NDIA.

EY | Building a better working world

EY exists to build a better working world, helping create long-term value for clients, people and society and build trust in the capital markets.

Enabled by data and technology, diverse EY teams in over 150 countries provide trust through assurance and help clients grow, transform and operate.

Working across assurance, consulting, law, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via ey.com/privacy. EY member firms do not practice law where prohibited by local laws. For more information about our organization, please visit ey.com.

© 2023 Ernst & Young, Australia.
All Rights Reserved.

Liability limited by a scheme approved under Professional Standards Legislation.



In line with EY's commitment to minimize its impact on the environment, we recommend that this document is printed on paper with a high recycled content.

Ernst & Young is a registered trademark

ey.com

