



> Alternative Solutions

Solving The Housing Supply Issue

### The Housing Affordability Crisis



The reality of owning a house has decreased for many Australian households due to declining affordability. This issue was exacerbated by the aftermath of the COVID-19 pandemic, which saw property prices rise to historical highs. With inflation having increased by 7.8% in the 12 months to December 2022<sup>1</sup>, continued interest rate hikes, and international migration returning, there is an increasing need to focus on future-proofing the Australian real estate market<sup>2</sup>.

A key element in addressing the housing crisis is the root of the issue: a housing undersupply. Serving as a conversation starter, the focus of this report is to look at alternative and innovative ways to increase housing supply by drawing from international case studies. This report also evaluates the potential of implementing each solution within the Australian context.



## Putting The Focus On Housing Supply

#### Overview

Dwelling approvals have declined by 21.8% since 2021<sup>3</sup>. This was mainly due to the end of HomeBuilder, exacerbated by rate hikes throughout 2022<sup>4</sup> and the current shortage of construction materials and labour. The Housing Industry Association (HIA) reports that one in five home building contracts are being cancelled per month, which is expected to continue affecting the supply pipeline<sup>5</sup>.

Five potential housing supply solutions are provided:

- Public Private Partnerships
- Modular Homes
- Build-to-Rent
- Asset Repurposing
- · Community-Based Land Initiatives

These were evaluated against five criteria to assess the suitability of each solution for the Australian market.

#### **Dwelling Approvals**



#### **Evaluation Criteria**



#### **Construction Supply**



Source: Australian Bureau of Statistics. © PRD 2023.



### Public Private Partnerships

A Public Private Partnership (PPP) refers to agreements (generally long-term) between a government body and a private partner (usually a private company or entity, however in recent times this can also involve a non-profit entity or a community organisation). A PPP enables the private partner/s to develop and fund services whilst utilising a public capital asset (for example government owned land or building), in which the end product is accessible by the general public. The advantage of a PPP is in sharing any associated risks<sup>6</sup> (for example, investment costs).

An example of a PPP can be found in Ireland's Social Housing Bundles project – a first for the nation. This project was initiated as part of the Federal Government's €300 million social housing budget to build 1500 housing units across multiple development sites. On completion it remains in ownership of the local governments. The first stage, Social Housing Bundle 1, consists of four key actors: Macquarie Capital (financier), John Sisk and Son (developer), Choice Housing (facilities management), and Oaklee Housing (tenancy management)<sup>7</sup>.

#### **Evaluation Table**

Criteria	Public Private Partnerships – Social Housing Bundle in Ireland
Purpose	<ul> <li>Targets low-income residents in need of social housing, with the units suitable for assisted living, senior citizens, singles, and families<sup>8</sup></li> </ul>
Impact	<ul> <li>Bundle 1 comprises of 6 sites with a total of 534 units - 50 units are allocated to senior citizens</li> <li>Bundle 2 has also been completed – comprising of 465 units across 8 sites</li> <li>Bundle 3 is currently underway for completion</li> </ul>
Investment Costs	<ul> <li>Total land size unknown. Estimated to be more than 5000sqm</li> <li>Construction cost – approx. €120 million (AUD\$185 million)</li> </ul>
Government or Regulatory Requirements	<ul> <li>Collaboration between government bodies, community organisations and private partners</li> <li>Adequate budget and/or incentives from the Government to attract private partners, i.e., tax incentives and/or subsidy for certain costs, land re-zoning assistance</li> <li>Financial security/risk – financial contracts must be agreed upon to mitigate risks</li> </ul>
Success Rate	<ul> <li>Similar projects include:</li> <li>Toronto, Canada – Richmond St Co-Op Housing<sup>9</sup> and the Regent Park Revitalisation<sup>10</sup></li> <li>Sydney, Australia – Bonnyrigg Housing Redevelopment<sup>11</sup></li> </ul>

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The PPP method is widely used to deliver multiple assets and infrastructures, such as hospitals, schools, roads, and many others. A PPP as an alternative housing solution within the Australian context is feasible as it tackles the issue of financial risk, normally more of a government-focused issue, and red-tape reduction, normally more of a private entity issue. However, a successful PPP will require the careful selection of key players, to ensure mutual benefit and the smooth development and operation of any resultant developments. This solution has the potential to ease the housing stress, but it will require active participation by the Government from all levels – Federal, State, and Council – to identify suitable sites in urban areas. It also requires an innovative approach to ensure that red-tape is minimised, delivery timelines are shortened, and the highest impact for the community is achieved.



### Modular Homes

Modular homes are transportable dwellings that are prefabricated (partially or entirely) off-site and delivered to the location to be assembled on-site. Also referred to as 'tiny houses', they can be customised to suit the occupant/s based on their needs and budget. The appeal of modular homes compared to traditional construction home-build includes lower construction cost, increased sustainability, and faster turnaround time, while still providing the benefits of a traditional home, like ownership, security and comfort<sup>12</sup>. Further, as it is not a traditional build, a modular home can be packed away for the land underneath to be re-purposed.

KODA by Kodasema<sup>13</sup> and HomeLife Pods<sup>14</sup> are two products that have the potential to increase housing supply. Created by an Estonian architectural firm, KODA homes were first implemented in 2017 in response to the United Kingdom's housing crisis. HomeLife Pods are an Australian-made, affordable alternative housing option that is easily transportable and offers many of the benefits of traditional homes.

#### **Evaluation Table**

Criteria	Modular Homes - KODA Homes	Modular Homes - HomeLife Pods		
Purpose	<ul> <li>Targets individuals, couples, and families seeking affordable housing</li> <li>Disability friendly configurations available, thus occupants can access relevant financial support</li> <li>Suits those on social housing waitlists or students/young professionals seeking temporary rentals</li> <li>Offers ease of transportability, flexibility of use, various configurations and sizes, and cost efficiency</li> <li>Can be customised to suit the needs of the occupant or community imprint</li> </ul>			
Impact	<ul> <li>Currently 100 units built in 9 countries; expansion plans underway for 25 countries</li> </ul>	Current statistics on stock levels is unknown		
Investment Costs	<ul> <li>Construction cost – starting from \$150,000 per unit, depending on customisation</li> <li>Total land size is dependant on the scale of development and choice of size</li> </ul>	<ul> <li>Total land size is dependant on the scale of development and choice of modular home size</li> <li>Construction cost – approximated to be under \$150,000 per home</li> </ul>		
Government or Regulatory Requirements	<ul> <li>Introduction of incentives – i.e., tax benefits, stamp duty exemptions, building standard exemptions</li> <li>Collaboration/partnership between manufacturers and the Government to tender mass production of modular homes with various configurations to house those in need</li> <li>Eligibility of modular homes to be categorised as auxiliary/secondary dwellings if required</li> <li>Potential community land leasing options – e.g., bulk purchase of modular homes for a multi-tenure housing estate as part of a joint venture between government and community organisations</li> </ul>			
Success Rate	<ul> <li>Implemented in Western Australia and South Australia<sup>15</sup>, UK, USA<sup>16</sup>, and Europe</li> </ul>	Implemented in all Australian states, Papua New Guinea, and the Solomon Islands		

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Although modular homes have been utilised as an alternative to the traditional home-build for some time across the world, its potential as an alternative housing solution is currently not being implemented at its highest and best use. For this to occur, joint ventures between multiple governments, manufacturers, contractors, and community housing organisations (potentially as a PPP) is needed. An innovative contract could be initiated through either the utilisation of vacant Government land or providing temporary housing for a key event (i.e Brisbane Olympics 2032) at the first instance and then re-purposing the land underneath upon completion of the event.



### Build-To-Rent

Build-to-rent (BTR) is a large-scale housing model consisting of purpose-built rental houses held and managed by a single ownership, typically by an institutional investor<sup>17</sup>. BTRs offer long-term viability for both the owner and occupants, due to their unique ownership structure. BTRs provide more stability compared to the traditional rental property, in which the renter's security is dependent on a private landlord. BTRs enable flexibility for the market they serve by offering housing at rental market value and/or subsidised rates, thus allowing for multiple tenure types. More often than not, BTRs incorporate in-house amenities, thus becoming a "one-stop-shop" for their residents.

An example of a BTR is the Cherry Park development in the United Kingdom. This project was the result of a partnership between QuadReal Property Group, Public Sector Pension Investment Board (PSP), and Unibail-Rodamco-Westfield (URW). The development served to ease the undersupply of housing in London, in addition to the strategic position of the site being adjacent to the Westfield shopping center owned by URW, which is aimed to increase the densification of highly connected retail destinations.<sup>18</sup>

### **Evaluation Table**

Criteria	Build-To-Rent – Cherry Park Development in London			
Purpose	<ul> <li>Targets families seeking affordable single-family homes</li> <li>Benefit of long-term viability due to being purpose-built for renting</li> </ul>			
Impact	1,200 new homes planned for the Cherry Park development			
Investment Costs	<ul> <li>Total land size = 87,440sqm gross internal floor area</li> <li>Construction cost = approx. €800 million (AUD\$1.2 billion)</li> </ul>			
Government or Regulatory Requirements	<ul> <li>Implementation of inclusionary zoning for BTR – not all current BTRs are affordable for lower-income households so regulations and/or subsidies must be introduced to allow for a portion of BTRs to meet the affordability of various income level households<sup>19</sup></li> <li>Potential implementation of a tier-system based on risk/return – i.e., A grade, B grade, etc</li> <li>Introduction of a legal definition of affordability – how is affordability calculated and how does this apply to housing supply?</li> <li>Minimum dwelling size requirements for individual units based on household size to mitigate overcrowding. This also allows multiple demographics to access BTRs.</li> </ul>			
Success Rate	<ul> <li>Victoria, Australia – Greystone Street project<sup>20</sup></li> <li>Sydney, Australia – LIV Mirvac<sup>21</sup></li> <li>UK – The Mercian<sup>22</sup></li> </ul>			

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While the Cherry Park development offers an alternative housing solution, the affordable component is subjective upon the demographics considered within the target group of occupants. Families come in various shapes and sizes and have differing definitions of affordable housing. BTRs in Australia must have a portion accessible to lower income households as per localised data and not just a set percentage below its market offering. This will maximise its impact on reducing the affordable housing shortage. BTRs must also incorporate a larger portion to various household sizes to allow for resident longevity as they move through different life cycles. This addresses rental housing security, which is crucial in the current undersupplied rental market.



### **Asset Repurposing**

Asset repurposing refers to changing the material use of existing assets to better suit the demand and ensure that the assets remain relevant to the local demographic. Due to the pandemic, the continued rise of flexible working conditions and online shopping were two key factors rendering many traditional office and retail buildings vacant – eventually leading to obsoletion<sup>23</sup>. Asset repurposing would see these vacant buildings being re-modelled or reconfigured into another asset class such as infrastructure (for example into a school or hospital) or into a type of accommodation (whether student accommodation, commercial hotels/motels, or units for the rental market).

There are many examples of asset repurposing projects being turned into affordable housing. These include Quayside Village in Canada, Savonnerie Haymans Public Housing in Brussels, Quinta Monroy Housing in Chile<sup>24</sup>, and the Elderberry Walk estate in the UK<sup>25</sup>. These projects are aimed at providing affordable housing to the most disadvantaged in an effort to ease the housing stress.

### **Evaluation Table**

Criteria	Asset Repurposing				
Purpose	Targeted towards individuals and families in need of social or affordable housing				
Impact	<ul> <li>Various configurations and sizes available ranging from studios, duplexes, lofts, and family-sized apartments/units</li> <li>Units can be customised for wheelchair/disability accessibility</li> <li>Multiple tenure types offered – traditional rentals, subsidised/affordable rentals, social housing, shared ownership, traditional ownership, etc</li> </ul>				
Investment Costs	<ul> <li>Total land size is dependant on the selected existing asset</li> <li>Construction costs will vary depending on the final outcome planned for the asset</li> </ul>				
Government or Regulatory Requirements	<ul> <li>Government incentives and/or subsidies to encourage repositioning commercial assets into affordable housing</li> <li>Re-zoning regulations to allow for change of material use to medium density housing</li> <li>Introduction of compliance criteria for 'ethical' rents – e.g., ratings based on a tier system</li> </ul>				
Success Rate	Quayside Village Total of 19 units, including 5 subsidised units Medium-rise building with wheelchair accessibility on a site of 1000sqm  • Savonnerie Haymans Public Housing  • Old soap factory repurposed into a 100% public housing scheme site of 1000sqm  • Quinta Monroy Housing  • 5000sqm of land repurposed into housing for the 100 families who had illegally occupied it before sizes available  • Comprises of 61 'ethically rented' homes, 77 affordable rental homes, and 23 homes sold conventionally				

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Changes within the commercial property sector in the Australia market puts asset repurposing in a unique position of being a highly effective tool. Asset repurposing can also apply to public infrastructure assets (i.e old government buildings and facilities) that are no longer in use. The advantage of asset repurposing is the ability to reuse the current structural framework (of the building), which can minimise costs and turn-around time. Asset repurposing can also minimise the time and effort needed to find urban land, which lends to its efficient delivery.



### Community-Based Land Initiatives

For the purpose of this report, we will refer to community-based land initiatives such as Urban Wealth Funds (UWF)<sup>26</sup>, Land Rent Schemes (LRS)<sup>27</sup>, and Community Land Trusts (CLT)<sup>28</sup>. These initiatives are similar in their objectives; the main goal is to provide affordable housing through the consolidated land assets owned by the Government and managed professionally for the betterment of the community.

### **Evaluation Table**

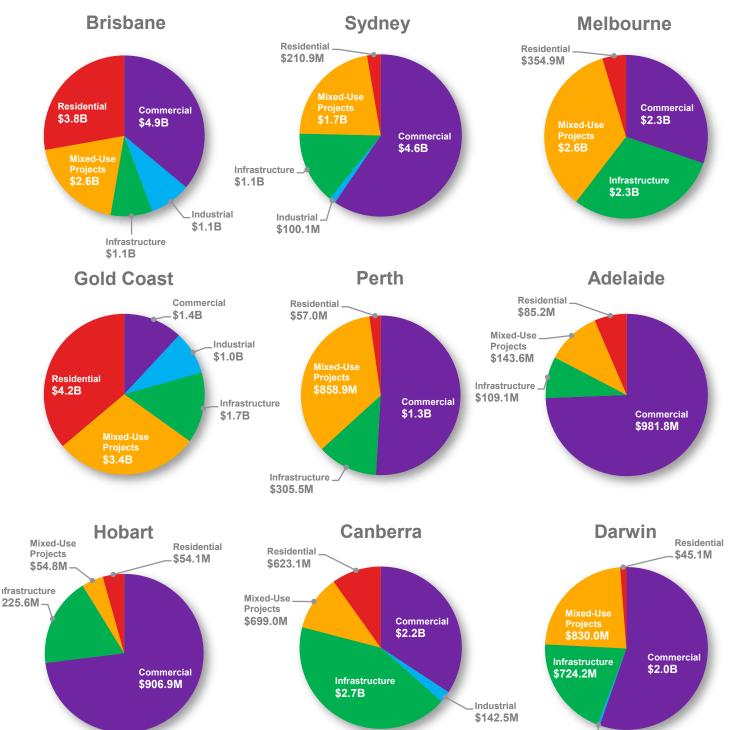
Criteria	Urban Wealth Funds	Land Rent Schemes	Community Land Trusts
Purpose	<ul> <li>Targets low-income individuals and families in need of affordable housing</li> <li>Consolidates public land assets under a unified professional management</li> <li>Utilises assets for the betterment of the community</li> </ul>	<ul> <li>Offers access to government-leased land at subsidised prices to build your own house</li> <li>Annual rent paid to occupy (% o land value)</li> <li>Supports the local community housing sector by giving exclusive right to participate in building on LRS lots</li> </ul>	and held in the interest of
Impact	<ul> <li>Revenue generated by the assets is reinvested in the community by increasing funding for affordable housing and vital infrastructure</li> </ul>	<ul> <li>1,000 households taking part in the ACT, Australia</li> <li>Enables permanent household occupation of leased land for life</li> </ul>	<ul><li>250+ CLTs currently</li><li>1,100 CLT homes</li></ul>
Investment Costs	Construction cost varies	Construction cost varies	Construction cost varies
Government or Regulatory Requirements	<ul> <li>Transparency of publicly owned assets</li> <li>Political independence</li> <li>Setting clear objectives</li> <li>Active ownership and management of asset</li> </ul>	<ul> <li>Scaling strategy for LRS depends on the availability of land in other states within Australia</li> <li>Local Government must be active in their participation</li> </ul>	<ul> <li>Establishment of regulations for the operation of CLTs in Australia</li> <li>CLT land acquisition/pooling and tilting</li> </ul>
Success Rate	<ul> <li>Hamburg, Germany<sup>29</sup></li> <li>Copenhagen, Denmark<sup>30</sup></li> <li>Singapore<sup>31</sup></li> </ul>	Canada	<ul> <li>Vancouver, Canada<sup>32</sup></li> <li>USA<sup>33</sup></li> <li>UK<sup>34</sup></li> </ul>

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Due to the structure of community-based land initiatives, their suitability as an alternative housing supply solution is reliant on the participation of the Government at all levels (Federal, State, and Council). There are already some initiatives in place relating to auditing available land, which is advantageous. The key is to unlock land, but in close consultation with targeted stakeholders. Each community-based land initiative example offers a distinct opportunity and more analysis is needed to determine the most suitable option for different local communities.

## What is Planned for 2023?





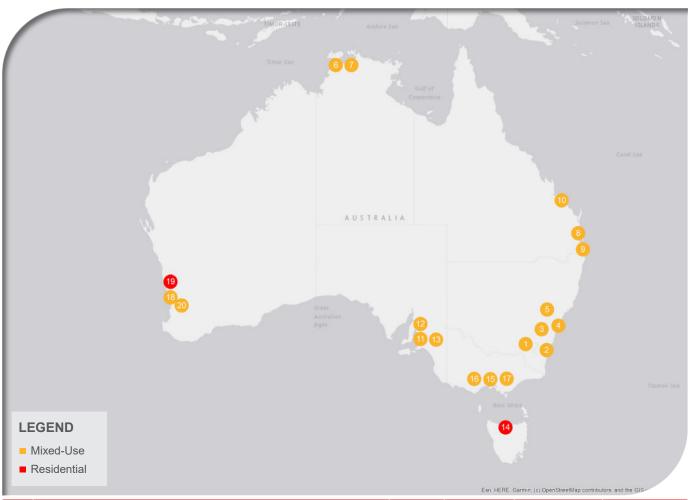
	Units/Apartments	Townhouses	Dwellings	Lots
QLD	32,891	4,680	4,278	43,261
NSW	48,451	2,147	5,449	34,559
VIC	20,230	3,421	3,823	13,972
WA	6,816	225	830	5,083
SA	1,747	365	2,520	4,641
TAS	1,216	379	324	2,589
ACT	2,676	495	699	1,026
NT	711	5	193	480

Industrial \$16.9M

Source: Cordell Connect. © PRD 2023.



# Top Residential Development Pipeline 2023



No.	Project	State	Туре	Estimated Value	Commence Date
1	Northbourne Avenue - Braddon Place (602 Units)	ACT	Mixed-use	\$158,182,000	06/10/2023
2	Dairy Road Fyshwick Redevelopment (1 Unit, 500 Dwellings)	ACT	Mixed-use	\$98,000,000	19/08/2023
3	Wilton North Precinct (5,500 Units)	NSW	Mixed-use	\$3,500,000,000	19/07/2023
4	Mitchell Rd & Ashmore St Residential Development - Park Sydney (1,400 Units)	NSW	Mixed-use	\$636,739,000	16/11/2023
5	Burwood Place (1,041)	NSW	Mixed-use	\$602,020,000	21/08/2023
6	Parklands Darwin (4 Dwellings, 101 Units)	NT	Mixed-use	\$800,000,000	17/07/2023
7	Lasseters Casino Redevelopment (235 Units)	NT	Mixed-use	\$90,000,000	14/07/2023
8	North Harbour Marina Precinct (600 Units, 2,000 Dwellings)	QLD	Mixed-use	\$2,740,000,000	16/10/2023
9	La Pelago - St Regis Gold Coast Resort - Aquia (889 Units)	QLD	Mixed-use	\$1,250,000,000	08/05/2023
10	Pacificus Tourism Project Hummock Hill Island (2,800 Units)	QLD	Mixed-use	\$1,000,000,000	17/12/2023
11	Former Brompton Gasworks Site Bowden Redevelopment Project (427 Units, 207 Townhouses, 200 Dwellings)	SA	Mixed-use	\$459,000,000	11/12/2023
12	Le Cornu Mixed Use Development (199 Units, 106 Townhouses)	SA	Mixed-use	\$250,000,000	20/11/2023
13	Cadbury Road Windermere Bay Precinct (316 Units, 315 Townhouses)	TAS	Mixed-use	\$200,000,000	06/11/2023
14	Devonport Showgrounds Residential Development (200 Lots)	TAS	Residential	\$75,000,000	24/07/2023
15	Melbourne Square /Hilton Hotel Mixed Use Development 1,677 Units)	VIC	Mixed-use	\$1,000,000,000	07/06/2023
16	West Melbourne Waterfront Development Plan (573 Units)	VIC	Mixed-use	\$600,000,000	06/06/2023
17	Alphington Paper Mill Site Mixed Use Residential Development (601 Units)	VIC	Mixed-use	\$500,000,000	29/05/2023
18	Ocean Reef Marina Mixed Use Development (840 Units, 840 Lots)	WA	Mixed-use	\$800,000,000	08/12/2023
19	C6 - South Perth (245 Units)	WA	Residential	\$350,000,000	18/09/2023
20	97-105 Stirling Highway Towers (368 Units)	WA	Mixed-use	\$320,000,000	07/08/2023

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<sup>1</sup>ABS. (2023). Consumer Price Index, Australia. Australian Bureau of Statistics. Retrieved on February 2, 2023, from <a href="https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/consumer-price-index-australia/latest-release">https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/consumer-price-index-australia/latest-release</a>

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<sup>8</sup>Department of Housing, Local Government and Heritage. (2019). *PPP contract award for 534 social housing units*. Government of Ireland. Retrieved January 30, 2023, from <a href="https://www.gov.ie/en/press-release/0f5c6b-ppp-contract-award-for-534-social-housing-units/">https://www.gov.ie/en/press-release/0f5c6b-ppp-contract-award-for-534-social-housing-units/</a>

<sup>9</sup>Claude, V. (2022). Alternative Housing Solutions. OCAD University. Retrieved January 25, 2023, from https://openresearch.ocadu.ca/id/eprint/3941/1/Claude Veronique 2022 MDes SFI MRP.1.pdf.

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<sup>11</sup>NSW Government. (2020). Bonnyrigg Modified Concept Plan 2020. NSW Department of Planning, Industry and Environment. Retrieved on January 31, 2023, from <a href="https://www.dpie.nsw.gov.au/">https://www.dpie.nsw.gov.au/</a> data/assets/pdf file/0019/339400/Bonnyrigg-Mod-Concept-Plan-Dec-2020-FAQs.pdf

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<sup>13</sup>Dezeen. (2017). *Kodasema launches tiny prefab home for £150k in UK*. Dezeen. Retrieved on January 27, 2023, from <a href="https://www.dezeen.com/2017/07/05/kodasema-koda-house-launches-tiny-25-square-metres-prefab-home-uk">https://www.dezeen.com/2017/07/05/kodasema-koda-house-launches-tiny-25-square-metres-prefab-home-uk</a>.

<sup>14</sup>HomeLife Pods. (n.d.) *Custom Designed Transportable Buildings Delivered & Installed*. HomeLife Pods. Retrieved on January 27, 2023, from <a href="https://www.homelifepods.com.au">https://www.homelifepods.com.au</a>.

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<sup>18</sup>Tabet, T. (2019). *New Westfield Owner Forges Forward with \$1.2bn Build to Rent Project.* The Urban Developer. Retrieved on January 25, 2023, from <a href="https://www.theurbandeveloper.com/articles/new-westfield-owner-forges-forward-with-12bn-build-to-rent-project">https://www.theurbandeveloper.com/articles/new-westfield-owner-forges-forward-with-12bn-build-to-rent-project</a>

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