

WHITE PAPER

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# Modern Methods of Construction.

A national assessment of construction innovation to **address Australia's housing shortage** and **growing demand**.



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## Executive summary.

Australia's housing affordability and supply challenges are being driven by persistent housing undersupply, increasing population growth, and changing household needs.

This whitepaper brings to light how Modern Methods of Construction (MMC) could offer practical opportunities to accelerate Australia's housing delivery through **faster build times, improved quality control, reduced waste, and greater construction efficiency.**

## Who this report is for.

- **Government and Policymakers:** Federal, state and local government decision-makers responsible for housing supply, planning, approvals and infrastructure.
- **Property Developers and Builders:** Residential developers, project builders, modular housing providers, and construction firms.
- **Institutional and Private Investors:** Build-to-Rent investors, affordable housing investors, land developers, and property funds.
- **Property Industry Professionals:** Real estate agents, franchise owners, valuers, consultants, planners, and industry bodies.
- **Home Buyers and Consumers:** Particularly first home buyers, younger Australians, downsizers, and people seeking affordable housing alternatives.

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# Housing Affordability in Australia.

**Australia's path to home ownership has continued to deteriorate in 2026.** As of August 2026, we have had three cash rate hikes, due to elevated inflationary pressures. The 4.35% cash rate is currently on hold, as the CPI (Consumer Price Index) in June was 3.8%, down from 4.6% in March 2026<sup>1</sup>.

Cash rate hikes and Federal Budget 2027 property tax investment landscape changes (negative gearing, CGT, SMSF) have also added strain to our property market.

While some markets have recorded a price softening or slower price growth, this is due to reduced borrowing capacity and lower consumer confidence, **not because of a meaningful expansion in housing supply.**

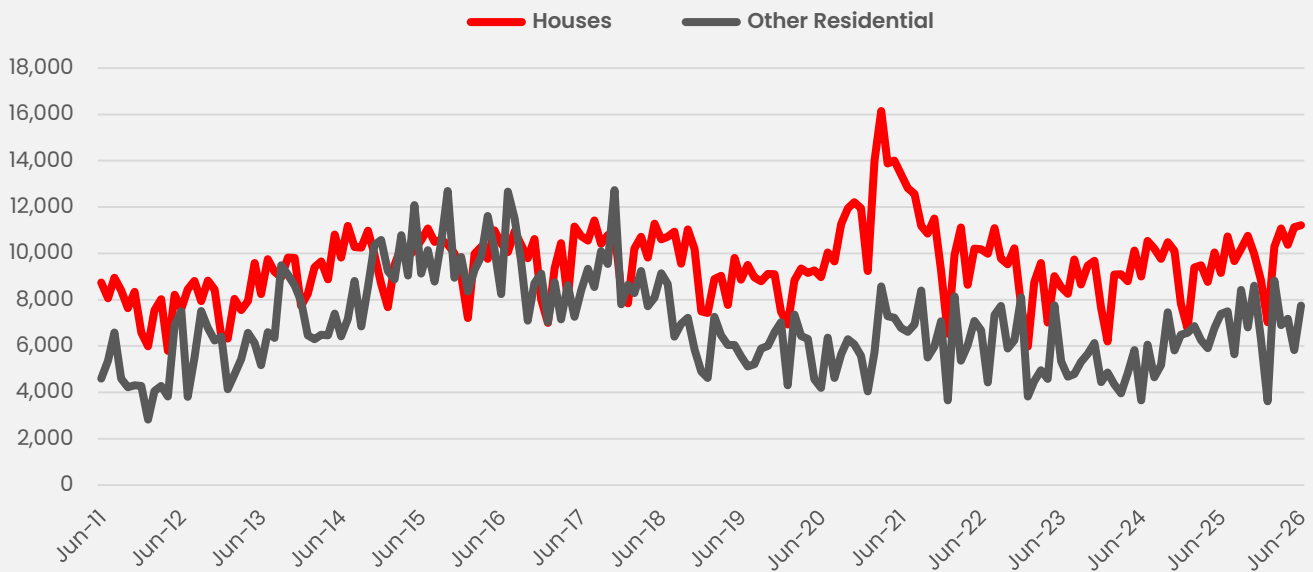
The Real Estate Institute of Australia confirmed that affordability has worsened, underscoring current conditions which are cyclical and unlikely to deliver sustained relief<sup>2</sup>. When monetary policy eases (i.e. cash rate cut) or economic conditions improve, demand-driven price pressures can reemerge, reinforcing that the **underlying structural issue of chronic undersupply remains unresolved.**

June 2026 data from the Australian Bureau of Statistics show an increase in the number of residential construction approvals, which puts us on the right path. However, this does not guarantee residential project completions and/or delays, and there is still a deep backlog of housing undersupply.

**Addressing this supply gap requires not only more housing, but faster and more efficient ways of delivering it.**

This report examines the **alternative and innovative approaches surrounding MMC to increase housing supply**, drawing on international case studies to assess their relevance to the Australian context.

## Australian Residential Construction Approvals.



Source: Australian Bureau Statistics. Prepared by PRD Research.



Housing approvals declined by 28.6% since a high in April 2021. **This is largely due to gaps between policy ambitions and reality** according to Master Builders<sup>3</sup>.

Approvals for non-house residential projects fell steadily from late 2017 to mid-2024. Housing approvals are currently seeing a slight recovery. However, supply approvals trended downwards from 2017 until 2024, creating an ingrained bottleneck. This has caused house prices to almost double since 2018.

In the Federal Budget 2026–2027 a \$2 billion investment in housing was announced to aid in lowering the costs of new housing<sup>34</sup>.

**However, as seen in Table 1 below, Australia did not build enough homes to meet demand.** It is not optional that the Housing Accord target of 1.2 million homes by 2030 is met<sup>34</sup>. Rather, it is essential to restore home affordability in this country.

**MMC and changing consumer attitudes present an opportunity** for the Australian housing market to course correct and allow new homebuyers to enter the market.

Table 1: Supply Shortfall<sup>33</sup>.

| State    | Annual Target | Dwellings Approved<br>in the 12 months to June 26 | Difference |
|----------|---------------|---------------------------------------------------|------------|
| NSW      | 74,863        | 52,487                                            | -22,376    |
| VIC      | 61,601        | 55,693                                            | -5,908     |
| QLD      | 49,291        | 48,584                                            | -707       |
| SA       | 16,571        | 15,243                                            | -1,328     |
| WA       | 26,164        | 25,629                                            | -535       |
| TAS      | 5,077         | 2,735                                             | -2,342     |
| NT       | 2,251         | 847                                               | -1,404     |
| ACT      | 4,183         | 4,031                                             | -152       |
| National | 240,000       | 205,249                                           | -37,751    |



# What are Modern Methods of Construction?

Modern Methods of Construction (MMC) are alternative construction solutions to traditional, labour-intensive building. They are modern construction solutions that lean toward advanced, factory-based and digitally enabled manufacturing<sup>9</sup>.

The aim of using these alternative building methods is to improve build quality, address labour shortages, and reduce both construction time and cost<sup>10</sup>.

**Table 2:** Types of MMC.

| MMC Type<br>(as referred to currently in the construction industry) | Description                                                                                                                                                                                                                                                                                                                                           | Benefits compared to traditional, labour-intensive building                                                               |
|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>Volumetric Modular Construction</b>                              | The process of manufacturing entire rooms of a building off-site in a factory (including finishes, wiring, and plumbing) and assembling them together onsite <sup>12</sup> . This is usually used in repetitive projects such as apartments, student housing, and hotels as they require similar design concepts with minimal changes <sup>12</sup> . | Faster delivery, cost reductions and improved quality control <sup>10</sup> .                                             |
| <b>Prefabricated Panelised Systems</b>                              | This method is used to manufacture 2D structural elements such as walls, floors, and ceiling panels in a factory which are then flat-packed and assembled on-site to form the building's foundational structure <sup>12</sup> . This is usually used in homes that have been customised or low-rise commercial buildings <sup>12</sup> .              | Faster delivery, reduced on-site labor requirements, improved safety and improved environment performance <sup>10</sup> . |
| <b>Precast Flat Panel Systems</b>                                   | These are large concrete, steel, timber or composite panels manufactured off-site and assembled onsite.                                                                                                                                                                                                                                               | Faster structural assembly, high quality and consistency, integrated insulation and openings <sup>17</sup> .              |
| <b>Additive Manufacturing (3D Printing)</b>                         | This method uses 3D printing technologies either onsite, if using fragile materials, or off-site to extrude concrete, polymers, or other materials to form complex walls, roofing, or even entire building structures <sup>13</sup> . This process is widely used, but mostly in hospitals, hotels, and apartments <sup>13</sup> .                    | Reduced labor reliance, high precision, and reduced material waster <sup>18</sup> .                                       |

## FAQs

### Why are MMC's becoming popular?

Although early forms of MMC were driven by post-war housing shortages, today's adoption is fuelled by affordability pressures and environmental considerations.

### Why are they called MMC's?

As the construction industry sought safer working conditions and more efficient, cost-effective processes, MMC has become an umbrella term for offsite manufacturing approaches that streamline project delivery<sup>11</sup>.

### Are MMC's being used more overseas?

Globally, there is increasing usage across multiple residential and general construction projects, with common methods including:

- Prefabrication
- Modular and volumetric construction
- Panelised systems
- Other offsite manufacturing techniques

**Table 3:** Supporters of MMC (not an extensive list).

| Category           | Name                                                                          | Why are they supporters of MMC?                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Consumers          | South Australian Public <sup>41</sup>                                         | 73% of South Australians support expanding the use of prefabricated homes.                                                                                                                                                                                                                                                                                                                                                                        |
| Builder            | Hutchie Group – Hutchie Modular <sup>37</sup>                                 | Hutchies have publicly stated the benefits of modular and prefabrication construction as quality, waste and onsite movement reductions, and cost savings. Hutchies Modular was established in 2007 with work done valued at approximately \$1 billion, 30,000 modules built, and 1,000,000 m <sup>2</sup> modular area created. This method has been applied across residential, mining, mixed-use, health, education, civil, and infrastructure. |
| Industry Bodies    | Australian Industry Group <sup>38</sup>                                       | <i>“Modern Methods of Construction represent a revolutionary shift in how we conceptualise, design and deliver buildings.”</i> AIG also discusses how MMC is becoming increasingly important to address efficiency and sustainability for housing and are <i>“offering solutions that are faster, more cost-effective and environmentally responsible.”</i>                                                                                       |
| State Government   | Queensland Government <sup>39</sup>                                           | MMC approaches streamline design and delivery by fast-tracking diligence and approvals, enacting controlled environments, cutting construction times while also co-timing construction with site preparations, reducing waste and downtime that is due to injuries and upskilling labour.                                                                                                                                                         |
| Federal Government | Ministers for the Department of Industry, Science and Resources <sup>40</sup> | The Albanese Government invested \$54 million into supporting State and Territory Governments who are building prefabricated and modular homes. Findings show that these type of homes can be built up to 50% quicker.                                                                                                                                                                                                                            |



# | A National Perspective.

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To date, several projects involving MMC have been proposed and actioned in Australia.



**Table 4:** Examples of National Projects Involving MMC.

|   | Examples                                                            | Product                                                                                                                                                                                                                                                                   | Result                                                                            |
|---|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 1 | The Woree Development, QLD <sup>19</sup>                            | This development is one of Queensland's largest social and affordable housing projects which used <b>volumetric modular and modular pods</b> . While most of the project was MMC, it still required foundations and slabs constructed with traditional methods.           | 490 Dwellings (245 social, 223 affordable & 22 specialist disability apartments). |
| 2 | Champion Lakes Developments, WA <sup>20</sup>                       | DevelopmentWA is utilising <b>prefabricated panelised construction</b> to rapidly deliver 81 social homes across 6 locations with 10 new homes already completed within 9 months of commencement. MMC methods are being partially used.                                   | 10 social homes.                                                                  |
| 3 | Remote Homes, NT <sup>21</sup>                                      | A <b>kit-of-parts modular housing</b> solution has been used in the Northern Territory specifically to decrease construction times and to keep up with the increase in demand for regional and remote housing.                                                            | n/a – process improvement.                                                        |
| 4 | Mahon Pool, Maroubra, NSW                                           | The development has been redesigned using both <b>structural and cosmetic precast elements</b> .                                                                                                                                                                          | n/a – infrastructure project.                                                     |
| 5 | La Trobe University Student Accom, VIC <sup>22</sup>                | The project was a <b>mass engineered timber construction</b> and included two new buildings that utilised <b>cross laminated timber</b> , which is the largest construction project of its kind in Victoria.                                                              | 624 Beds.                                                                         |
| 6 | South Australia Prefabricated Homes & Display Village <sup>41</sup> | South Australia's Housing Trust is leading the procurement of 120 <b>prefabricated homes</b> . Separately, a six-modular home display village will be constructed for inspection in both metro and regional locations to combat skepticism around quality and livability. | 120 Homes & 6 Display Homes                                                       |
| 7 | Homes Tasmania Social Housing <sup>36</sup>                         | Homes Tasmania uses <b>modular construction</b> to deliver standalone dwellings or multi-unit developments, backyard units for household members aged 15 to 25; for household members who are avoiding leaving home due to finances.                                      | >250 homes delivered with 200 in the pipeline                                     |

**Tiny homes and modular/prefabricate housing have emerged as a significantly effective methods of construction within the Australian context.**

Its effectiveness is due to being uniquely suited to the current monetary, fiscal, demographic and geographical conditions that are specific to our residential market. Being able to build modular/prefabricated housing up to 50% quicker than traditional methods is crucial in a market constrained by labour issues.

Their controlled manufacturing environments improve quality and reduce waste, aligning with Australia's net zero objectives. They offer fast, deployable timelines, as well as low impact dwellings suited to regional towns, infill sites and areas facing rental stress.

Additionally, tiny homes offer fast, deployable timelines, as well as low impact dwellings suited to regional towns, infill sites and areas facing rental stress.

## EFFECTIVE METHOD #1

## Modular/Pre-Fabricated Housing.

Modular and prefabricated homes are dwellings where major components or whole volumetric modules are manufactured off-site in a controlled factory setting and then transported to be fitted for final assembly<sup>27</sup>. This form of alternative housing is what is **broadly known as Modern Methods of Construction**. It involves two possible methods:

- Prefabrication involves flat pack systems and precast elements
- Modular construction is more three-dimensional with fully fitted modules that are joined together on site to make a completed building<sup>28</sup>.

These two approaches have been a global response to labour shortages, rising construction costs, and the need for faster delivery and pressures to meet ambitious housing targets.

Put plainly, these alternatives can improve housing supply and affordability through speed and cost efficiency:

- Homes can be constructed up to 50% faster than traditional site-built ones<sup>27</sup>. This is due to factory production being able to occur whilst site preparation takes place. It also reduces weather delays (where it applies).
- Can reduce cost of homes by up to 20% due to standardised production, reduced waste and more efficient labour<sup>27</sup>; as reported by the Australian Government Productivity Commission.

The USA and Europe are reaping significant benefits, with modular construction set to claim \$130 billion of the market by 2030 whilst delivering an annual cost saving of \$22 billion<sup>31</sup>.

An underappreciated, albeit long-term, benefit is that these homes can be designed for relocation or reuse, allowing them to be moved or reconfigured as needs change. Despite this, uptake of MMC remains relatively limited with **prefabricated housing accounting for less than 5% of new residential builds in Australia**<sup>30</sup>.

**Table 5:** Modular/Pre-Fabricated Housing Projects.

| Criteria                                    | East Village Knutsford<br>Fremantle, Western Australia                                                                                                                                                                                                                                                                                                                                                                                | 2032 Olympics Legacy Plans<br>41 George Street, Brisbane Student<br>Accommodation                                                                                                                                                                                                                             |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purpose                                     | To produce prefabricated modular construction that is low-carbon and high-performance homes with an expedited building time.                                                                                                                                                                                                                                                                                                          | Was for development to be completed eight months ahead of schedule using modular construction.                                                                                                                                                                                                                |
| Impact                                      | <ul style="list-style-type: none"> <li>• 62 homes.</li> <li>• Housing 200 residents.</li> <li>• Project generates 40% of its own power. through integrated solar and battery systems.</li> </ul>                                                                                                                                                                                                                                      | 1,182 student bedrooms.                                                                                                                                                                                                                                                                                       |
| Investment Costs                            | Not publicly available.                                                                                                                                                                                                                                                                                                                                                                                                               | \$500 million.                                                                                                                                                                                                                                                                                                |
| Government or<br>Regulatory<br>Requirements | <ul style="list-style-type: none"> <li>• Requirements must comply with the National Construction Code (NCC), even though the NCC is primarily structured around traditional on-site construction.</li> <li>• States are now fast-tracking prefabricated home approvals and developing national prefab certification systems.</li> <li>• Regulatory barriers are inconsistent with state-by-state building code variations.</li> </ul> | <ul style="list-style-type: none"> <li>• Again, must comply with the NCC even though the NCC is primarily structured around traditional on-site construction.</li> <li>• MMC requires additional compliance regarding fire rated joints, sprinkler integration, and smoke detection compatibility.</li> </ul> |

## EFFECTIVE METHOD #2

## Micro-Housing/Tiny Homes.

Tiny homes are compact dwellings typically under 50sqm, designed to maximise functionality and minimise cost. They have emerged globally as a response to rising housing prices, land scarcity and a growing interest in minimalist and sustainable living<sup>24</sup>.

Moreover, they provide necessary diversity in Australia's housing options, and a means of quickly expanding affordable housing supply<sup>38</sup>. Other benefits include:

- Significantly lower construction and purchase costs than traditional dwellings with an Australian-built tiny home costing between \$120,000 – \$200,000 fully furnished<sup>26</sup>. This addresses the affordability question and allows for a significantly more accessible entry point into the housing market for first home buyers.
- Being a compelling investment opportunity: a \$160,000 tiny home generating \$400–\$500 per week is a 11–13% rental yield compared to 3–5% from traditional rental properties<sup>26</sup>.
- Smaller footprint that allows a tiny home to be added to existing residential lots as a secondary dwelling, enabling faster, incremental increases in supply without having to rely on large-scale developments.

The rise of micro-housing and tiny homes as an alternative housing option has been driven in Australia largely by younger people who have been priced out of traditional homeownership, as well as households seeking lower-cost and lower-impact alternatives amid escalating mortgage stress and cost of living pressures<sup>25</sup>.

However, significant challenges limit the scalability of tiny homes, such as:

- **Regulatory barriers.** Some Australian councils remain cautious around secondary dwellings and whilst some councils have a more progressive approach, many councils are still “catching up”<sup>26</sup>.
- **Lifestyle.** Households take time to adjust. However, many prefer the smaller living space once acclimated<sup>26</sup>.
- **Finance.** Banks may treat tiny homes as nonstandard security, which can hinder financing. Obtaining a loan can require non-bank lenders, which would add around 1–2% to interest rates<sup>26</sup>. Fortunately, this is becoming less of an issue as this alternative housing option is becoming more common.

To overcome these challenges the Australian government must modernise planning schemes and create clear definitions for tiny homes establishing clear pathways for certification under the NNC, allowing councils to approve more tiny-home dwellings.

More broadly though, updating local laws is essential. Separating tiny homes on wheels from caravans would remove barriers further, legitimising tiny homes as an option in Australia.

**Table 6:** Tiny Home Housing Projects.

| Criteria                                     | The Tiny Homes Foundation Project<br>Gosford, NSW                                                                                                                                                                                                                                                                                                                                                                                          | ModnPods Fixed Tiny Homes<br>Gold Coast, QLD                                                                                                                                        |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                               | Transitional housing for the homeless. The project focuses particularly on providing crisis accommodation for women and young people.                                                                                                                                                                                                                                                                                                      | Suitable for private buyers, secondary dwellings, downsizing or Airbnb.                                                                                                             |
| <b>Impact</b>                                | 4 dwellings, at 14–18m <sup>2</sup> per dwelling.                                                                                                                                                                                                                                                                                                                                                                                          | Offers: Studio (14–20m <sup>2</sup> ), One bedroom (22–28m <sup>2</sup> ) and Two bedroom (32–38m <sup>2</sup> ).                                                                   |
| <b>Investment Costs</b>                      | <ul style="list-style-type: none"> <li>• Construction cost was approximately \$200K at around \$50K per dwelling.</li> <li>• Timeline from 2016 to 2018.</li> <li>• Land size ~ 500m<sup>2</sup> of Central Coast Council land.</li> </ul>                                                                                                                                                                                                 | n/a                                                                                                                                                                                 |
| <b>Government or Regulatory Requirements</b> | <ul style="list-style-type: none"> <li>• Legislation approval under Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2021.</li> <li>• Obtained full development approval as a Class 1A dwelling, meaning it met NCC requirements for permanent housing.</li> <li>• The first tiny homes project in Australia to be formally approved as permanent social housing.</li> </ul> | <ul style="list-style-type: none"> <li>• Most councils require Material Change of Use (MCU) or secondary dwelling approval.</li> <li>• Requires compliance with the NCC.</li> </ul> |

MMC have not only been proposed and actioned in Australia but also globally. On an international level, there are different approaches to construction and MMC has been increasingly visible in recent years. Below are some examples to indicate the implementation of MMC internationally.

**Table 7:** International Examples of MMC.

| Country                                                                                                    | Product                          | Project Examples                                                                                                                                                                                                                                                                                                                                                         | Benefits                                                                                                                                                                                                                                                                                                                                                                                                                               | Challenges                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Sweden</b><br>         | Prefabricated modular housing    | <p>BoKlok Housing, Sweden's MMC flagship, design affordable, energy-efficient homes using volumetric modular construction.</p> <p>Entire rooms or sections are prefabricated using this method.</p>                                                                                                                                                                      | <p>Homes can be installed in less than a week once onsite.</p> <p>The houses are designed to be achievable purchases for low to middle-income families.</p> <p>They are timber-based construction, which means low carbon footprint and energy-efficient insulation.</p>                                                                                                                                                               | <p>Local zoning laws can slow deployment. Modular homes can sometimes face stigma, despite their high quality.</p> <p>Also, finding suitable plots near urban centres remains difficult.</p>                                                                                                  |
| <b>Japan</b><br>         | Stacked boxed tiny homes         | <p>Unemori Architects produced several 26m<sup>2</sup> tiny homes, which created a vertical living space.</p>                                                                                                                                                                                                                                                            | <p>By stacking them, tiny homes maximise space in an overcrowded metropolis.</p> <p>They also help lower construction costs and energy consumption, minimise material use and reduce the project's carbon footprint.</p>                                                                                                                                                                                                               | <p>Building codes and zoning laws are limiting.</p> <p>Tiny homes require a lifestyle change, and the project is hard to replicate in suburbia.</p> <p>The market's perception labelled the homes as 'temporary' making it difficult for people to view tiny homes as a long-term option.</p> |
| <b>Saudi Arabia</b><br> | Katerra volumetric housing units | <p>NEOM Modular Housing creates housing units that are manufactured off-site and assembled onsite with robotics.</p> <p>Housing over 3,000 people, the workers completed the project in 10 days.</p>                                                                                                                                                                     | <p>These housing units reduced construction timelines, minimized onsite labour, reduced carbon footprint and reduced overall material waste.</p> <p>The reductions in turn, greatly improved working conditions.</p>                                                                                                                                                                                                                   | <p>MMC uptake across Saudi Arabia remains uneven. Aligning MMC with local building codes and standards remains challenging and there is a great need for more localised manufacturing and skilled labour.</p>                                                                                 |
| <b>China</b><br>        | Prefabricated Skyscraper         | <p>Broad Group's Modular Skyscraper project in Changsha started being built in 2015.</p> <p>Entire building modules were prefabricated in a factory.</p> <p>The materials were designed to be stacked and connected onsite like 'LEGO' blocks.</p> <p>The result is a 57-storey mixed-use tower creating office space, residential units, retail and leisure spaces.</p> | <p>The project's construction was completed in 19 working days with 90% of materials reused or recycled.</p> <p>The project included safety requirements such as energy-efficient HVAC systems and was certified with earthquake-resistance up to magnitude 9.</p> <p>The project was also made with fire-resistant materials and had a compartmentalised design which meant a significant reduction in labour and material waste.</p> | <p>Local building codes had to be adapted for modular high-rise construction.</p> <p>At the time, there was great scepticism about safety and durability of ultra-fast builds.</p> <p>Significantly, coordinating transport and assembly of thousands of modules also proved difficult.</p>   |

## What can we learn?

International cases can be applied in Australia, but only when adapted to local regulatory, economic and cultural conditions.

**Sweden's** BoKlok model demonstrates how standardised modular housing can deliver affordable, energy-efficient dwellings at scale. Further, it **reinforces timber-based MMC which aligns strongly with Australia's significant timber supply.**

**Japan's** micro-housing innovations show how compact modular units can maximise land efficiency in high-density cities, offering lower material use and reduced energy consumption. **This option applies well to Sydney in particular**, as the city is running out of space as it is locked by natural and designated barriers (Pacific Ocean, Blue Mountains and National Parks).

**Saudi Arabia's** NEOM worker accommodation illustrates the potential of industrialised, robotics-enabled volumetric construction. **This can be applied to the 2032 Brisbane Olympics**, as forecasts suggest Queensland will be short by over half the required workforce.

**China's** modular skyscraper projects, such as Broad Group's 57-storey tower built in 19 days, highlight the feasibility of high-rise modular systems for mixed-use urban development. Australia's Built-to-Rent and student housing sector is facing an undersupply<sup>35</sup>. This method **can assist with modular high-rises in high density areas near universities or the CBD.**

Traditionally, residential supply has been dominated by detached housing. Specifically, in Queensland, detached housing comprises 73% of residential stock compared to 32% in similar European markets. This fails to accommodate the increasingly diverse household structure, with single-person households now representing around 25% of all households nationally, projected to reach 28% by 2046<sup>15</sup>.

Moreover, population growth in the past 25 years has been significant. Queensland and Western Australia have seen the most significant growth (61.5% and 62.6% respectively), as they have been emerging capital cities for immigration and emigration, compared to Victoria and New South Wales (due to unaffordability of housing and cost of living).

Given this, the national housing market must shift to accommodate the higher populations and evolving consumer needs. This shift has begun with developers redirecting focus to units and apartments in the coming years.

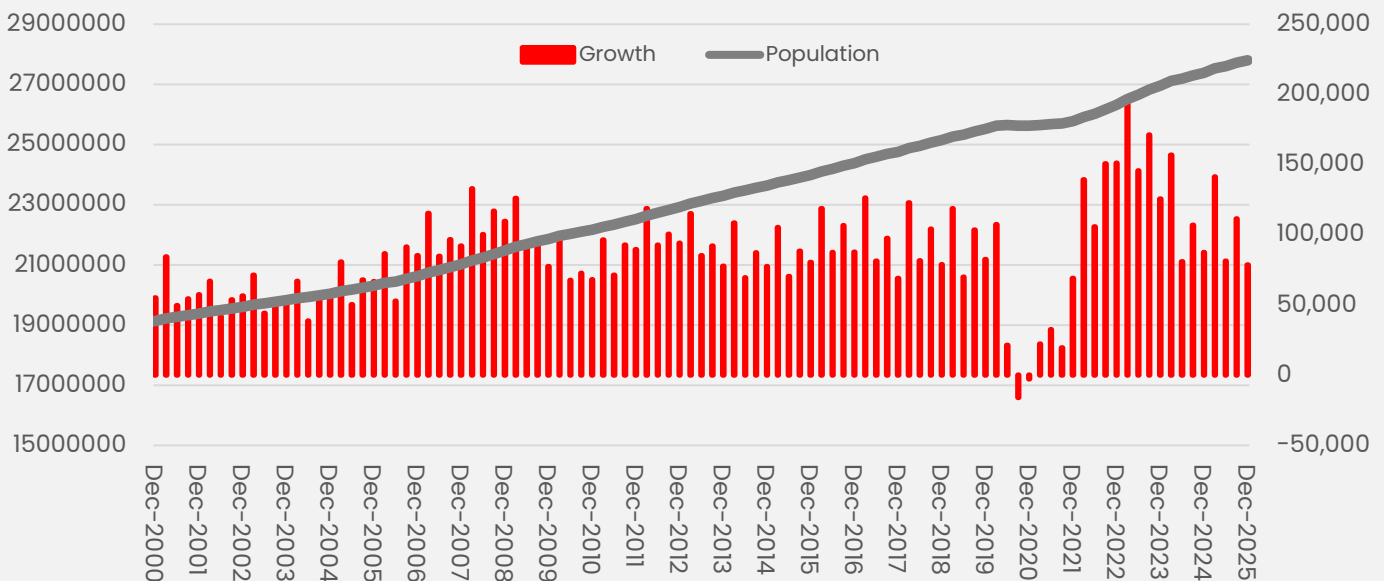
In response to these pressures, alternative delivery methods have been used with modular and off-site methods employed. Queensland's Q-Build is aiding in providing social housing and is partnering with the modular home industry to streamline construction processes<sup>4</sup>.

However, approvals are disjointed, and inconsistent factory certifications have limited the uptake. It's also important to note the sub-tropical climate as a factor.

International examples have largely been in Northern Hemisphere countries where there are fewer extreme weather conditions. As higher rainfall rates and a hotter climate accelerate building degradation and foundation issues, it creates a risk for lightweight formats<sup>5</sup>.

This can be overcome with modular housing designs adapted to align with local standards such as those in the Yarrabilba<sup>16</sup>. Alternatively, modular builds can minimize the construction delays of harsh weather conditions due to the ability to build off-site<sup>6</sup>.

## Australian Capital Cities Population Overtime.





## | Key Findings.

Australia's housing affordability crisis is fundamentally driven by long-term undersupply.

The Australian Bureau of Statistics shows housing approvals had three consecutive falls into May 2026<sup>42</sup>, however, there was a 7.2% increase in June 2026.

Further, the Reserve Bank of Australia's August 2026 Statement of Monetary Policy recorded a 3.5% increase in the level of private dwelling investment in the past 12 months, as of March quarter 2026. This applies for detached and higher density residential products, which will benefit all demand types.

Even with this improvement, the number of ready-to-sell stock hitting the market is still not enough; mainly due to a combination of:

- a) Long-term housing undersupply, wherein any slight improvements in the number of houses constructed is still not enough to override the current backlog.
- b) High construction costs and lengthy construction times; from early sketches (of the proposed housing stock) to the housing product being available to market.

Further, Australia's reliance on detached housing no longer aligns with demographic realities. Single-person households are projected to reach 28% by 2046, requiring more diverse, higher-density, and flexible housing formats<sup>15</sup>.

To address this, higher-density stock investment is on the rise, however, the location of these projects still tend to be limited to inner CBDs and/or metro areas.

A shift toward Modern Methods of Construction (MMC) presents a pathway to expanding supply at speed. MMC reduces reliance on on-site labour, construction timelines and costs, and enables factory-controlled quality.

**International markets demonstrate strong momentum, with modular construction set to reach \$130 billion globally by 2030 (\$22 billion annual savings). Australian uptake remains below 5% of new residential builds,** constrained by regulatory uncertainty, varying council requirements, and perceptions of lower resale value.

**Tiny homes** offer a fast and affordable option that aligns with changing consumer preferences, particularly among younger Australians. Tiny homes diversify housing stock and can be deployed quickly, but scalability challenges persist due to regulatory barriers, lifestyle constraints, and financing limitations.

**Modern Methods of Construction is not without its challenges. Modular homes can cost developers more, at approx. 20-30% extra margin, due to higher costs on import taxes and fees, transportation, permits and other paperwork, certification requirements, etc.** Because of this, many developers shy away from MMC.

Returning sustainability to Australia's housing market is a national effort and without boosting housing supply, this will lead to:

- **Reduced capital flow into new construction:** supply constraints can lead to viability problems for developers.<sup>46</sup>
- **Upward pressure on rents:** Reports indicate critically low trading stock pushing rents to record highs.<sup>46</sup>
- **Continued rapid price growth:** "The contradiction between record prices and historic supply failure is not paradoxical – it is the mechanism".<sup>43</sup>
- **Compounding shortages:** Every year that supply targets aren't met; they compound, multiplying the problem every year.<sup>46</sup>
- **Increased homelessness:** "More people experienced homelessness in areas which had a greater shortage of rental dwellings affordable for low-income households". These relationships have become stronger over time.<sup>44</sup>
- **Exacerbated intergenerational inequality:** Reduced access to homeownership means fewer Australians can benefit from the security, wealth accumulation, and tax benefits brought by ownership. As a result, the long-term wealth gains enjoyed by previous generations will be far less accessible to younger people.<sup>45</sup>

**There is approximately \$54 billion worth of residential projects set to commence in 2026. With less than 5% utilising MMC,** this suggests there is less than \$2.7 billion worth of MMC projects. To increase MMC use, Australia's governing bodies need to:

- **Compliance pathways:** standardise planning rules across states to reduce complexity.
- **Council requirements:** set statutory time limits for council approvals.
- **Deliver infrastructure that supports MMC:** increasing investment in enabling infrastructure (road, utilities and school).
- **Increase social and affordable housing:** housing must be directly built or funded for low-income households.
- **Increase labour force:** without a meaningful increase in labour, construction timelines will halt.

**Modern methods of construction now sit at the centre of Australia's pathway to delivering faster, high-quality and more resilient housing supply.** This is evident in both a national and international context. As government bodies, industry insiders, builders, and consumers continue to signal a growing support for the sector, modern methods of construction are poised for a shift, becoming mainstream construction methods.





## ABOUT

# PRD's Research Division.

PRD's property research division provides reliable and unbiased data, insights and consultancy to clients in both metropolitan and regional locations across Australia.

Our extensive research capabilities and specialised approach ensure our clients can make the most informed and financially sound decisions about residential and commercial properties.

### Knowledge.

Access to accurate and objective research is the foundation of all good property decisions. PRD shares on-the-ground experience and decades of knowledge to deliver innovative and effective solutions to our clients.

We take a holistic approach and focus on understanding new issues impacting the property industry, such as the environment and sustainability, the economy, demographic and psychographic shifts, and commercial and residential design, and forecast future implications around such issues based on historical data and facts.

### People.

Our in-house research team is skilled in deriving macro and micro quantitative information from multiple credible sources, so we can ensure we provide strategic advice and financially sound direction regarding property and market performance.

### Research Services.

Our research services span over every suburb, local government area, and state within Australia. We have the ability and systems to monitor market movements, demographic changes and property trends.

We use our knowledge of market sizes, price structure and buyer profiles to identify opportunities for clients and provide market knowledge that is unbiased, thorough and reliable.

### Our services include:

- Advisory & consultancy
- Market analysis including profiling & trends
- Primary qualitative & quantitative research
- Demographic & target market analysis
- Geographic information mapping
- Project analysis including product & pricing recommendations
- Rental & investment return analysis



## Get in touch.

[research@prd.com.au](mailto:research@prd.com.au) | [+61 7 3229 3344](tel:+61732293344)

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