

A Place for Tiny Houses

Exploring the possibilities **Tiny House Planning Resource for Australia 2017**



Qesc consulting

the TINY HOUSE^{co}

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because housing matters

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1 Purpose of this Resource

This Tiny House Planning Resource (the Resource) aims to assist planners, policy makers and the wider community to better understand the emerging Tiny House movement within Australia and sets out to explore the model's potential to contribute to greater choice in housing supply and diversity.

The current planning and building regulatory environment for Tiny House options is highly uncertain and varies significantly from locality to locality and state to state. This creates confusion for the market, consumers and regulators, and leads to ad hoc outcomes.

This Resource suggests ways that the housing model can promote good planning and construction outcomes (i.e. flexible, well-designed, affordable and safe) for the community. The Resource is intended to facilitate further thought and discussion on how an appropriate regulatory framework can be achieved.

1.1 Structure of this resource

An outline of the document follows:

- **Section 2** defines what a Tiny House is, briefly covers the history of the Tiny House movement and outlines the various housing issues where Tiny Houses could be part of the solution;
 - **Section 3** describes the current barriers that have prevented Tiny Houses from becoming a main stream housing type;
 - **Section 4** investigates the opportunities within the planning framework for incorporating changes that would broaden housing choices to include Tiny Houses;
 - **Section 5** identifies the technical considerations relevant to the construction of Tiny Houses;
- **Section 6** provides a summary of recommendations and offers further explorations into potential uses of Tiny Houses to address housing issues; and
 - **Section 7** highlights current initiatives around Australia which demonstrate the innovative potential of this housing model.

2 Background

The Tiny House movement is gaining momentum in Australia. Increasing levels of interest in Tiny Houses (also known as micro housing) indicates that there is a ready and growing market for housing models that are affordable, flexible and sustainable. In the United States (US), the popularity of Tiny Houses is large enough to create serial television shows such as Tiny House Nation, Tiny House Hunters and Tiny House, Big Living. An increase in Australian media coverage of Tiny House designs and innovations in recent years shows the topic is also trending closer to home. The list of 'real world' applications

demonstrates that the model in its various forms is attaining mainstream legitimacy.

2.1 What is a Tiny House?

There is no formal Tiny House definition; however the concept 'tiny' usually refers to dwellings that are 400 square feet (37.16 m^2) or less. (1)

A Tiny House is a structure that:

- Has the character and functionality of a permanent house;
- Is fixed to the land; and

- Has a similar scale to a large caravan or recreational vehicle (RV).

In comparison, a Tiny House on Wheels (THOW):

- Has the character and functionality of a permanent house;
- Is built on a trailer;
- Is not fixed to the land (mobile unit); and
- Is often compared to a large caravan or RV.



Tiny Houses are built to last, use traditional building techniques and materials and are aesthetically similar in character to traditional homes. (2)

Technological advances in systems such as solar power and composting toilets have allowed Tiny Houses to be designed as self-sufficient dwellings. Solar panels and mini-windmills, rain water tanks, and composting toilets mean that Tiny Houses can operate off-grid.

Because of their reduced size, Tiny Houses require thoughtful use of space. Innovative design elements include vertical space optimisation, dual purpose features, multi-functional furniture and smart technology. (2)

2.2 The Tiny House Movement

Tiny House movements are not new. Research reveals a semi-regular resurgence of the typology since the 1970s (refer Figure 1). Key drivers for Tiny House movements have varied from need (financial pressures, disaster relief) to ethical and sustainability reasons (reducing our footprint). (3)

In the 1940's, Jean Prouvé's progressive 64 m² prefabs were used to ease post-war housing shortages. In 2005, the Katrina Cottage (28.6 m²) was developed for post-disaster housing in the wake of Hurricane Katrina. (4)

Most recently the 'downsizing' aspect of the movement has been credited to architect, Sarah Susanka who published the number one bestseller, 'The Not So Big House' in 1998. Susanka's work sought to "reverse the long obesity trend in residential architecture by

arguing for the environmental benefits of small houses" (2).

Since the Global Financial Crisis of 2007/08, the Tiny House movement has attracted even more attention as a minimalist alternative lifestyle that is affordable and eco-friendly (2) (5) (6).

It could be argued that the current resurgence is a counterculture movement (2) (5). In the US the average size of new single family homes grew from 165 m² in 1978 to 247.3 m² in 2013, despite a decrease in the size of the average family. (2) Similarly, Australia is building on average some of the largest houses in the world, with the average size of a new free standing house now reaching almost 250 m² of floor space (refer Figure 2). (6) (7)

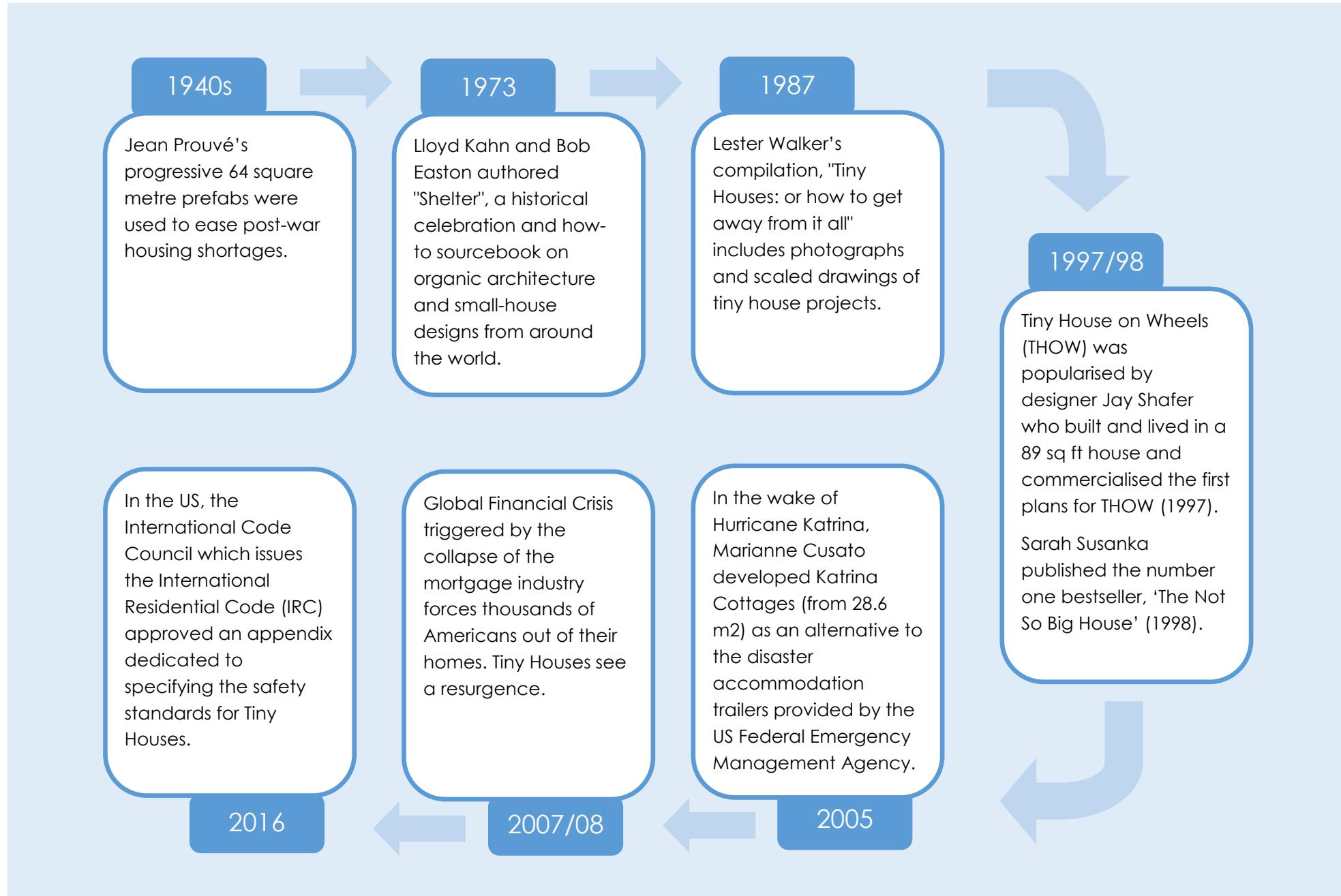


FIGURE 1 Short History of Tiny House Movement



FIGURE 2 House size and household size trends (data source: [Australian Institute of Family Studies](#))

2.3 Why Have a Tiny House?

Tiny Houses provide many benefits at the individual household level and at the wider community or societal level.

In Australia, recent research into Tiny Houses by Heather Shearer of Griffith University, found that "...Tiny Houses appeal strongly to a wide demographic, particularly to single-person or couple households. Economic and social factors were the major drivers of the interest in Tiny Houses" (refer Figure 3).

"Economic factors included affordability, the desire to own (detached) property without a high mortgage and to reduce expenses and debt. Social factors included a strong desire for 'freedom' and to live an environmentally sustainable lifestyle in 'a community'. In an interview for her research, Heather Shearer was informed by a lady in her sixties "I want to live in a community where I have my own space, but am surrounded by people who actually speak to me and share the big

In need of a streamline development process with reduced onsite disruption



alternative lifestyle/
environmentally conscious, sustainable



teenage children/growing family
- in lieu of house extension



can't afford a house but tired of
renting + lower living costs



people on the move or off-grid location



elderly person's granny flat or caregiver
onsite for person with disability



rural property supplement income
with rental/air bnb accommodation



temporary housing for
disaster relief



Potential Tiny House Dwellers

things (mowers, gardens, etc.). We need to strive for more affordable land usage and more community." (8)

Tiny Houses were also considered more aesthetically appealing and better designed than standard houses." (8)

Recent research in Melbourne found that the primary motivations for living in a Tiny House included: a social/political statement against current housing trends and house prices; affordability and freedom from mortgage finance; the ability to design and create; freedom to be mobile and the ability to recapture time through simplifying one's lifestyle. (9)

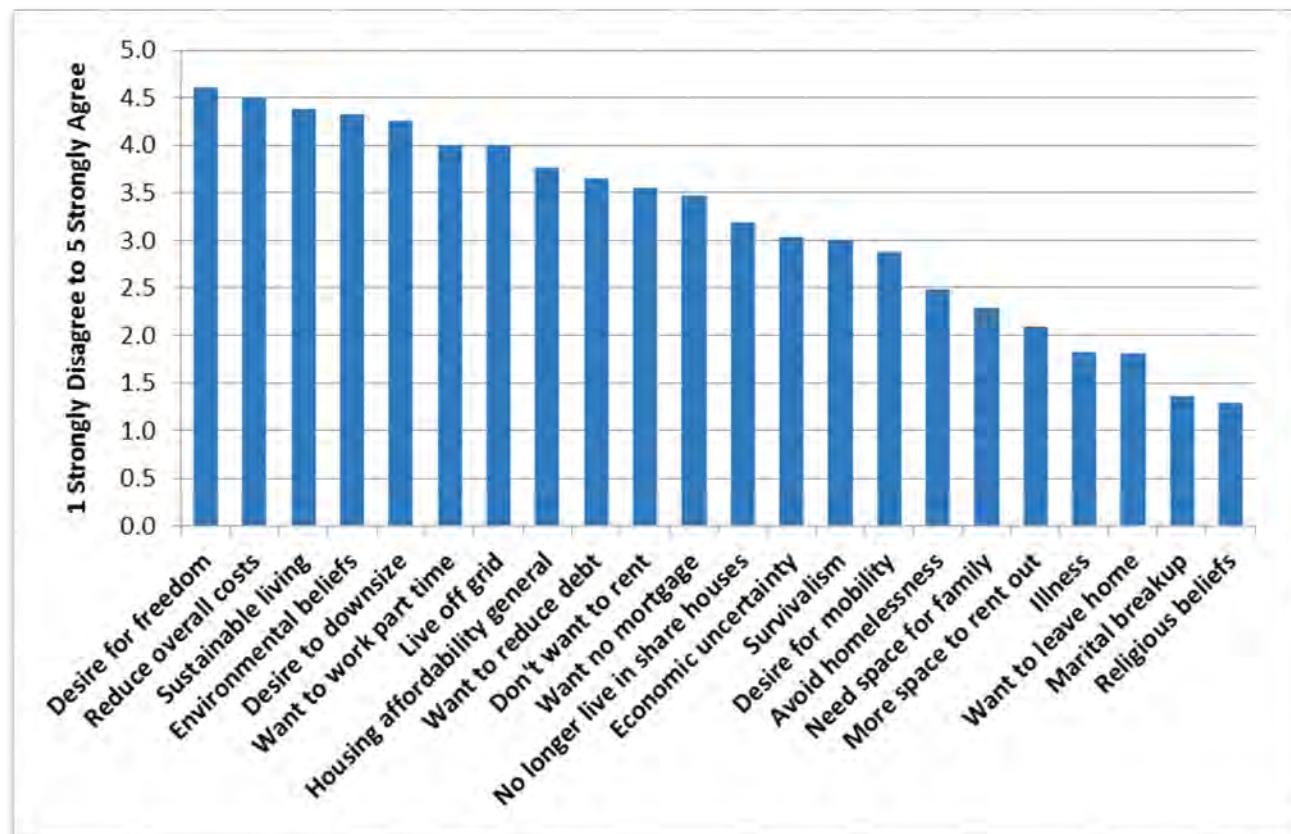


FIGURE 3 Drivers for Tiny House living (8)

Affordability

Housing affordability is a significant issue across Australia. According to the Australia Bureau of Statistics (ABS) data for mean dwelling price across all States and Territories for the December 2016 quarter, the price of residential dwellings in NSW was the highest (\$865,000), followed by Victoria (\$690,000). Though Queensland ranked fifth (\$492,000), it gained the highest percentage change in residential property prices (10.8%) off all states and territories between the December 2015 and 2016 quarters. (10)

Entry into the Australian property market is becoming more difficult. Figure 4 shows how household debt-to-income ratio has been increasing significantly in the last decade. Renting is often the only alternative especially if location is a constraint (refer Figure 5). There is also an increasing concern that a large number of soon to be retirees still have a mortgage debt which they will not be able to repay once on a reduced income (refer Figure 6). (11)

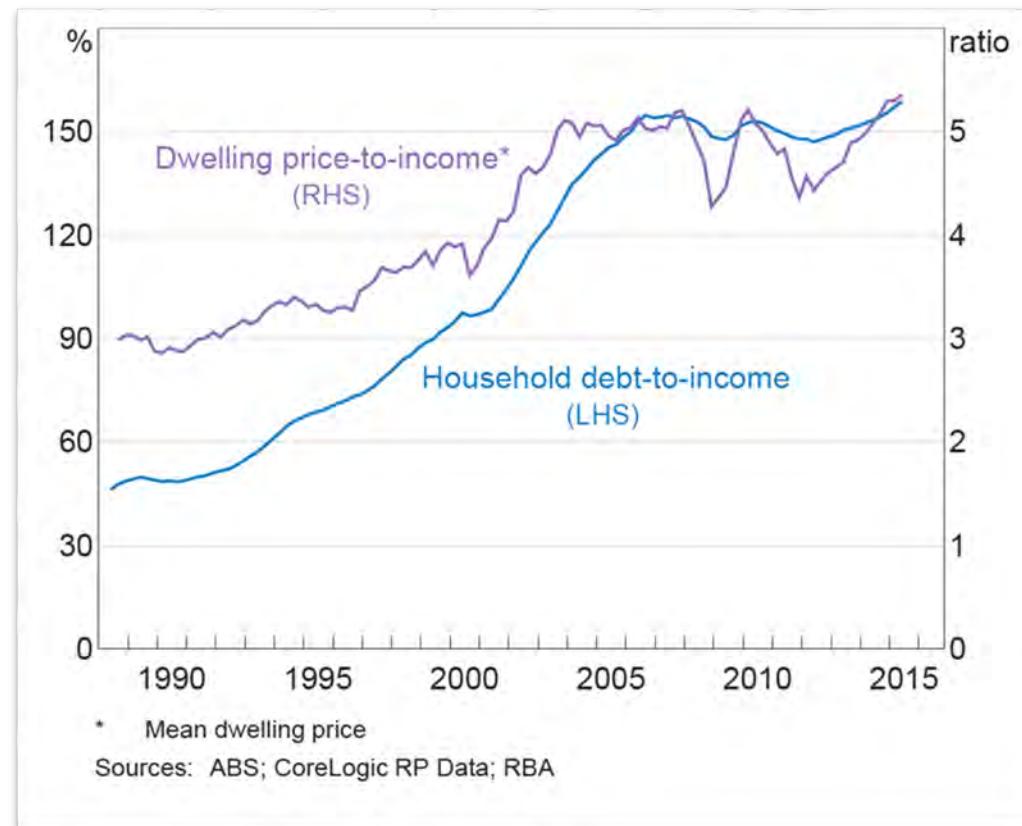


FIGURE 4 Debt- and Price- to-income Ratio (source: RBA Bulletin Sep 2015)

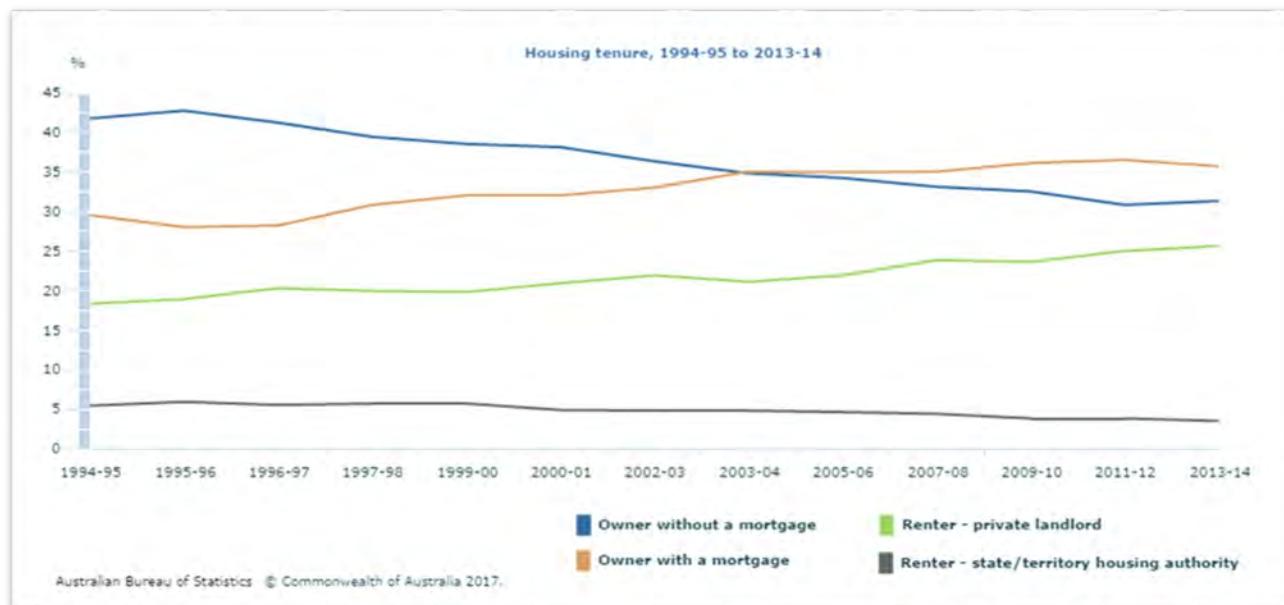


FIGURE 5 Housing tenure 1994-95 to 2013-14 (source: ABS 4130.0 - Housing Occupancy and Costs, 2013-14)

In comparison, most Tiny House manufacturers in Australia offer their product for under \$100,000. With the potential to offer less debt and financial risk, Tiny Houses can significantly contribute to relieving housing affordability pressures by providing a less expensive alternative to home ownership.

The low running costs associated with Tiny Houses (reduced heating/cooling, maintenance and repair) provide further cost-savings over the long term for a household (1).

Sustainability and Simplicity

Tiny Houses provide an option to increase development density in a sustainable and low impact manner. They can complement existing residential configurations by providing flexible and adaptive infill and design opportunities. A number of these opportunities are explored further in Section 4.

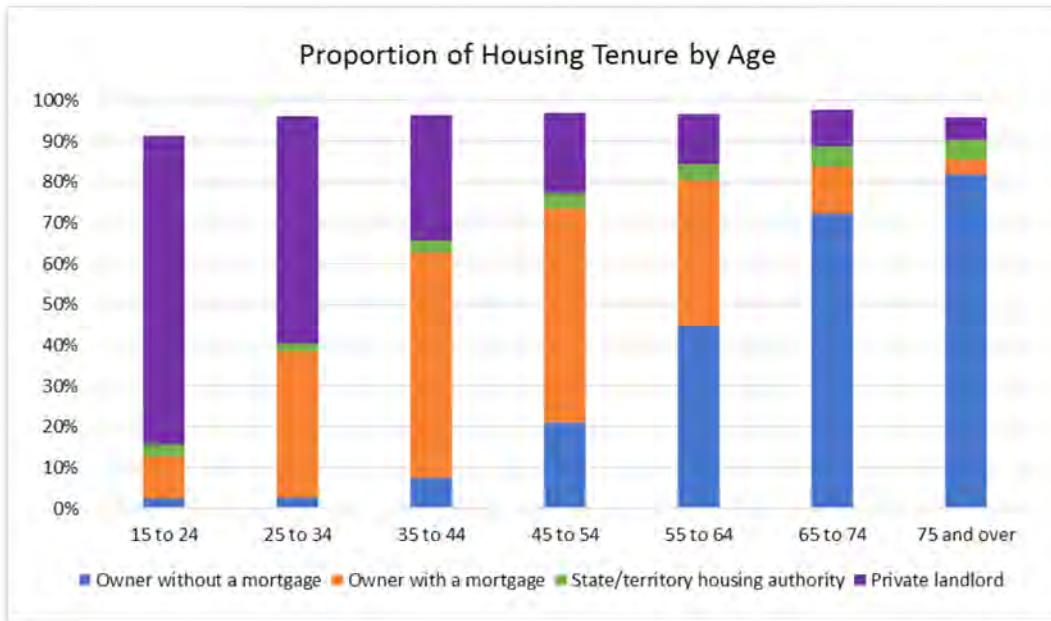


FIGURE 6 Housing tenure by age of reference person (source: ABS 4130.0 - Housing Occupancy and Costs, 2013-14)

The size of a Tiny House has inherent sustainability advantages: it can be built using green principles and requires fewer materials to construct. If built to operate off-grid, it requires less civil infrastructure.

Smaller internal spaces also make Tiny Houses attractive to those interested in minimalist living (reduced clutter, cleaning and maintenance).

Flexibility

If used as a secondary dwelling, Tiny Houses can be repurposed for different family generations (teenagers, grand-parents, etc.). If on wheels, the dwelling can be easily relocated wherever employment and education opportunities may lie.

THOW also allow for flexible ownership arrangements between the dwelling and the land as there is no requirement for the THOW to be annexed to the land it is parked on. This arrangement has considerable flow-on effects for affordability as it removes the cost burden of purchasing land.

3 Perceptions / Barriers

Given their rising popularity, why have Tiny Houses not become more prevalent and mainstream?

In a recent Griffith University study, Heather Shearer reports few have actually built a Tiny House in Australia. "This is likely due to economic, regulatory and social barriers, particularly high land prices and having 'nowhere to park it'" (refer to Figure 7). Other economic barriers found in the study included "insufficient cash, lack of mortgage finance, inability to insure mobile Tiny Houses and no potential capital gains. Regulatory issues included onerous planning schemes and building codes and transport restrictions for mobile Tiny Houses. Social issues included the unwillingness to relocate (generally away from urban areas with proximity to employment, social networks and services)." (8)

In Victoria, the primary challenges of Tiny House living were found to be the necessity for support networks when building a Tiny

House, difficulty in finding a place to build and live, the threat of neighbours informing the local authorities, design constraints and the initial funds required to buy resources and materials. Key policy barriers were found to be restrictive planning and local laws, building codes and road safety regulations, economic feasibility and the effect of Tiny Houses on neighbouring property values. (9)

Similarly to issues reported from the US, negative community perceptions of what it means to live in a tiny house, NIMBYism and concerns regarding transient populations also contribute to the social barriers. (12)

NIMBY is an acronym coined in the 1980s for 'not in my backyard'. Used to refer to a person who objects to the siting of something perceived as unpleasant or hazardous in their own neighbourhood, especially while raising no such objections to similar developments elsewhere.

Source: [English Oxford Living Dictionaries](#)

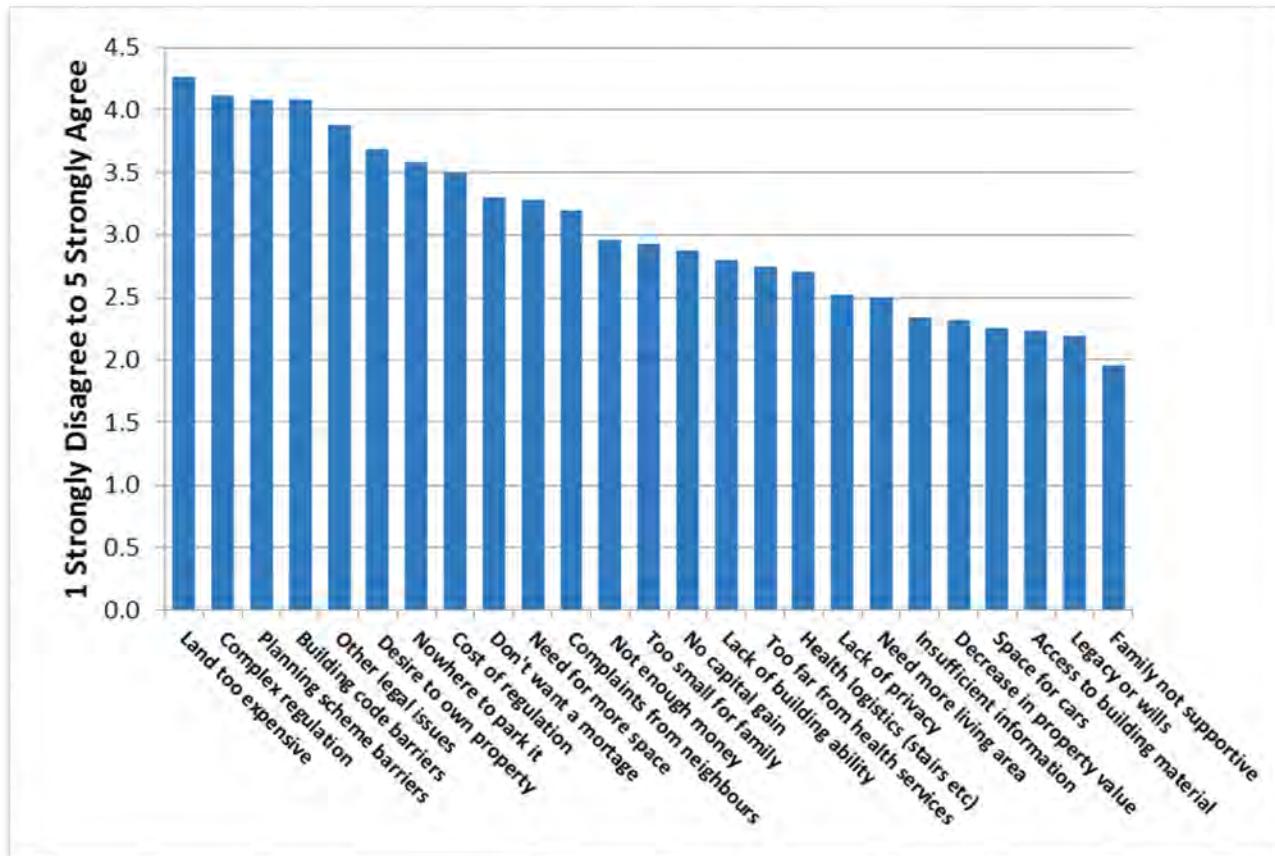


FIGURE 7 Barriers to Tiny House living (8)

3.1 Overcoming Barriers – the US Response

On many fronts, the US is leading the way in developing strategies in overcoming barriers to Tiny House living.

Recognising the growing trend of Tiny Houses, a number of US towns and cities have attempted to become 'Tiny House friendly' by easing or amending regulations in favour of Tiny Houses. Some examples include Portland (Oregon), Spur (Texas), Detroit (Michigan), Walsenburg (Colorado), Rockledge (Florida) and Fresno (California). (13)

"They see potential disadvantages outweighed by benefits like increasing housing stock, increasing affordable housing, facilitating intergenerational living, attracting new residents, increasing revenue, supporting vulnerable populations and generally providing residents with more

lifestyle freedom. Furthermore, they recognize that many tiny house residents are ignoring current regulations, taking their chances living illegally until forced to move". (14)

Legitimising the model through a formalised regulatory framework ensures development outcomes are safely and appropriately embedded within the broader planning strategy.

Communities with 'progressive' Tiny House regulations have sought to:

- Relax regulations such as minimum size requirements, setbacks and car parking requirements;
- Define THOW as secondary dwellings instead of RVs;
- Create specific zones for Tiny Houses or Tiny House communities; and
- Support social impact projects like Tiny House communities to provide affordable or transitional housing (14).

Much work has also been accomplished in legitimising construction and safety standards for Tiny Houses. In December, 2016 the International Code Council which issues the International Residential Code (IRC) (the American equivalent to the National Construction Code (NCC)) approved an appendix dedicated to specifying the safety standards for Tiny Houses, which are defined in the appendix as single dwelling units under 400 square feet excluding lofts. The appendix is expected to be issued in the 2018 release of the IRC. (15) (16)

The inclusion of this appendix will now allow building officials to grant a 'Certificate of Occupancy' to any Tiny House built to the standards outlined in the appendix, provided the municipality has adapted the 2018 IRC (Tiny House appendix included) as the code. (16)

4 Planning for Inclusion

In general, Tiny Houses are not currently acknowledged within the planning and development framework across Australia as a legitimate, long term or secure residential housing option. Notwithstanding, Tiny Houses provide a flexible housing option which meet many objectives of residential development. Where residential zones within planning schemes seek to support housing diversity and density, Tiny Houses can contribute to the current model of housing choice. Like many other forms and scale of residential housing, Tiny Houses are not appropriate in all instances however can be considered by state and local authorities as a unique and innovative way of meeting housing demand throughout Australian cities and regions.

Appropriate regulations are necessary to ensure that residential amenity, design, layout and infrastructure provision are planned for and considered, so that all members of the community have an understanding and expectation surrounding

the increased use of Tiny Houses within Australian communities.

Tiny Houses in all areas throughout Australia have to compete with other land uses and where Tiny Houses are not the highest and best use the commercial reality is that they will not be constructed. Tiny Houses, however, can in many instances form part of a broader land use strategy (structure planning and urban design) where they contribute to housing stock along with traditional housing stock.

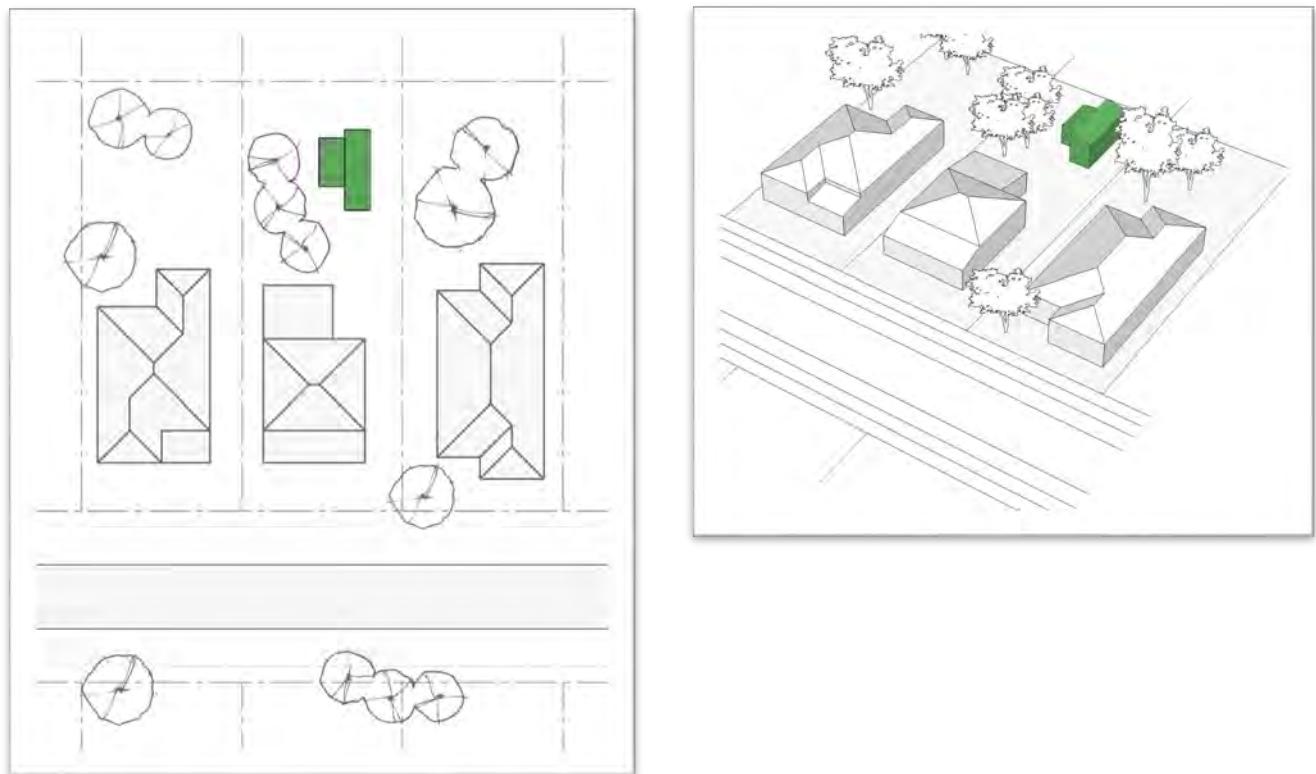
The development scenarios outlined below provide a basis for the introduction of Tiny Houses (fixed and on wheels) within appropriately zoned areas. A contextual analysis is provided on how planning schemes generally do or do not accommodate the scenarios at present. Queensland, New South Wales and Victoria have been selected as Australian states for this analysis.

Where the development scenario is not supported, further and more extensive planning and infrastructure analysis will need to be undertaken. This is not to say that the scenario is not a viable option.

4.1 The Granny Flat

The granny flat would be the traditional use of fixed Tiny Houses. However, most local authorities regulate secondary dwellings to be built for members of the same household as the primary dwelling. Whilst this serves the purpose of helping large families with housing their teenagers or elderly parents, it does not assist young couples in being able to find land space for their own independent dwelling.

Furthermore, families may consider a THOW a more attractive granny flat option as it would allow the occupants to reside in a home rather than a caravan, with the option to remove or sell the dwelling once it is no longer needed, thus restoring the lot to its original configuration with a single dwelling.



Land ownership and revenue model

The land owner purchases the Tiny House and sites it in the rear garden of an existing lot in accordance with the local planning scheme and local laws.

A family member or similar, as defined within the planning scheme, resides in the Tiny House.

In the case of a THOW scenario, the THOW is sold and relocated at the time when it is no longer required by the household.

Queensland

This development scenario is currently supported in Queensland for a fixed Tiny House.

A granny flat is considered a secondary dwelling within Queensland and falls within the definition of dwelling house for the purposes of planning schemes made under the current *Sustainable Planning Act 2009* (Qld) (and the current version of the Queensland Planning Provisions version 4.0). This will continue to apply under the new *Planning Act 2016* to be introduced on 3 July 2017.

Planning schemes include acceptable outcomes for secondary dwellings where generally development is:

- A specified maximum gross floor area;
- Located within a specified distance from the primary dwelling house;

- Occupied by 1 or more members of the same household as the dwelling house; and
- Connected to the same infrastructure network as the primary dwelling.

Gross floor areas, separation distances and setbacks differ between local authorities and by planning scheme zone within each local authority.

A Development Permit for Building Works would be required.

This development scenario for a THOW is currently uncertain in Queensland.

THOW generally can be considered a moveable dwelling where relevant local laws apply. Individual local authorities vary widely in how they regulate the practice of siting and residing in a moveable dwelling on residential land.

Recently, the Building and Development Dispute Resolution Committee, Appeal number: 39-16, determined a THOW was not

considered a fixed structure or fixed building and did not require a Development Permit for Building Works. This decision was made in relation to a residential property in Brisbane City Council.

Victoria

In Victoria, a granny flat is called a dependent person's unit and is defined as a "moveable building on the same lot as an existing dwelling and used to provide accommodation for a person dependent on a resident of the existing dwelling." (17). There are a number of restrictions that apply to a dependent person's unit and they cannot currently be rented out to the general public.

In order to obtain a planning permit for a dependent person's unit, the local authority must be satisfied that the proposed building satisfies the definition above and meets the below criteria (18):

- Is the building moveable from one place to another? If so, is it a structure other than a tent, caravan or vehicle which is designed to be moved from place to place on more than one occasion?

- Will the building be occupied by a dependent person? This may be a person who is incapacitated by medical, economic or social disadvantage and is therefore dependent on the person in the main dwelling for their accommodation.

Alternatively, one could construct a second dwelling on a lot. A planning permit is required to construct a second dwelling on one lot and this dwelling would need to comply with the provisions of Rescode under the Victorian Planning Scheme and also the Building Code. It may be difficult to obtain a planning and building permit for a Tiny House as these policies generally apply to regular sized dwellings.

New South Wales

Policies for granny flats are more supportive in NSW. In NSW, “a granny flat, or secondary dwelling, is self-contained accommodation within, attached or separate to an individual home”. (19) Under the *State Environmental Planning Policy (Affordable Rental Housing) 2009* (AHSEPP), secondary dwellings are permitted in residential zones only and can be rented out to the general public. (20)

A granny flat is defined as a self-contained dwelling which is:

- Established in conjunction with another dwelling (the principal dwelling);
- On the same lot of land as the principal dwelling (and not an individual lot in a strata plan or community title scheme); and
- May be within, attached to, or separate from the principal dwelling. (19)

The following rules apply under the AHSEPP:

- Only one primary dwelling and one secondary dwelling is allowed on one lot;
- The secondary dwelling has a maximum size of 60 m²;
- The secondary dwelling may be within, attached to or separate from the principal dwelling;
- The site that the granny flat is to be built upon must be a minimum of 450 m²; and
- Side and rear boundary setbacks apply. (20)

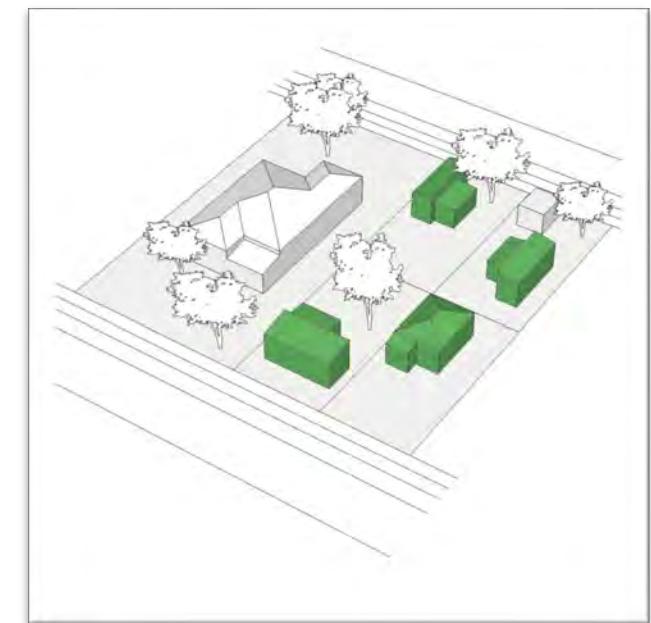
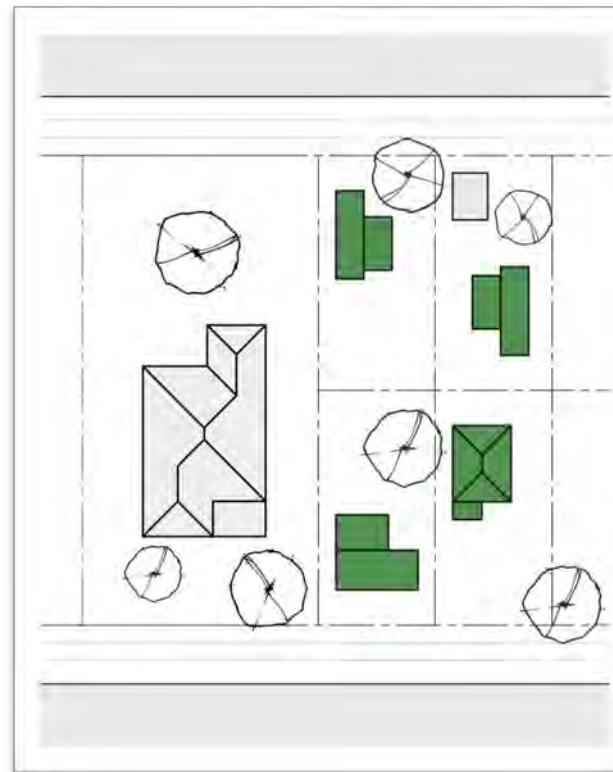
All relevant requirements within the Building Code of Australia (BCA) apply, however some granny flats may result in a change in building classification under the BCA (in this case, development consent would be required). (19)

4.2 Tiny Lots

The provision of very small lots for Tiny House owners to purchase and own. This type of land subdivision needs to be appropriate for the specific location and context of the area. Tiny lots would provide tenure and a more permanent financial model around housing affordability. For instance, where owners may not be able to afford more traditional sized lots, purchasing a tiny lot provides a framework for first home owners to acquire land and the ability to financially leverage from the asset.

Infrastructure planning would need to be investigated further as to the minimum planned density requirements for lots of this scale.

Design, layout, access and specific residential development guidelines would also need to be included within planning schemes which supported this development scenario.



Tiny Lots would be freehold lots, either titled within a Community Title Scheme or otherwise.

Land ownership and revenue model

The resident purchases a freehold Tiny Lot and locates a Tiny House upon the Tiny Lot.

A purchase price is paid upon sale of the Tiny Lot and if within a Community Title Scheme an annual Body Corporate fee is paid per annum to contribute to the maintenance and upkeep of the road reserve and open space (if included).

The resident owns the Tiny House.

The Tiny House could be rented.

Queensland

This development scenario is not currently supported in Queensland.

Residential lots need to be of a size and configuration which allows a dwelling house (whether attached or detached) to be constructed, which enables the lawful use of the land and ensures it is connected to urban infrastructure. Streetscape amenity, access, design and scale and bulk of the built form all need to be considered in designing and developing residential development, both infill development or greenfield development. Small residential lots can be delivered and each local authority provides guidelines as to the size and configuration and appropriateness of small lots. For example, in Brisbane City Council small infill lots of a minimum lot size of 300 m² can be created within 200 m walking distance of an appropriately sized centre.

A development scenario which could support the introduction of Tiny Lots is where freehold lots, between 50 m² - 150 m² are proposed within a Community Titles Scheme under the provisions of the *Body Corporate and Community Management Act 1997* (Qld). This scenario incorporates Tiny Lots whilst providing communal open space, communal areas and access and facilitates a higher level of residential amenity.

In considering the merits of this scenario, a range of residential amenity and design requirements would need to be considered from an urban design and infrastructure planning perspective.

Victoria

There is no minimum lot size in Victoria however as with Queensland, a residential lot needs to comply with the provisions of the planning scheme and will be assessed against streetscape amenity, access, design and scale and bulk of the built form and connection to urban infrastructure as mentioned above. In Victoria, a planning permit is required for a house on a lot less than 300 m² which can discourage small lot housing. (21) Small lots can be approved on the basis of its appropriateness for the site and the surrounding context.

The small lot housing code applies only with the Urban Growth Zone (outer metropolitan) of Victoria and allows dwellings to be constructed on lots less than 300 m² without a permit, provided they comply with a set of strict standards for building and design including setbacks, building height, provision of car spaces and private open space, overlooking, overshadowing, building articulation and fences. (21)

New South Wales

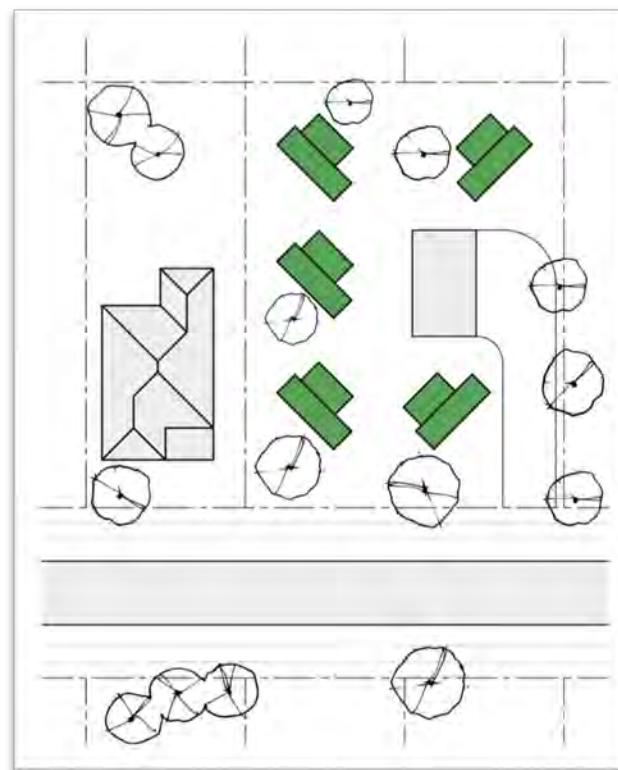
Local Environment Plans set out minimum lot sizes which can vary between 250 m² to 4 hectares (ha), depending on the zone. Minimum lot sizes vary between and within local authorities.

Lot sizes vary and are designed to ensure that the density is appropriate for the site constraints, development potential and infrastructure capacity of the land and to ensure that lots are of a sufficient size to accommodate development appropriate for that neighbourhood and area. (22)

As with Queensland, Tiny Houses on individual lots could be supported through Strata Titles under the *Strata Schemes Management Act 1996* (NSW) or Community Titles under the *Community Land Development Act 1989* (NSW). Community property, which is similar in concept to common property in a strata scheme, often includes recreational facilities such as a pool, gymnasium and BBQ areas, open park areas, infrastructure for services and access ways. (23)

4.3 Tiny Villages

The development of Tiny Villages which facilitate a small number of Tiny Houses (4 to 8) to be sited on the land in a similar development scenario as medium density developments.



Land ownership and revenue model

The resident purchases the fixed Tiny House which is titled under a Community Title Scheme and has rights over the land upon which their home is sited.

A purchase price is paid upon sale of the Tiny House and an annual Body Corporate fee is paid per annum to contribute to the maintenance and upkeep of the common facilities.

The Tiny House could be rented.

This scenario is not suited to THOW.

Queensland / Victoria / New South

Wales

This development scenario is not currently supported in Queensland, Victoria or New South Wales.

Tiny Villages would differ from Tiny Parks as the development would be titled under the *Body Corporate and Community Management Act 1999* (Qld), *Owners Corporation Act 2006* (Vic) or the *Strata Schemes Management Act 2015* (NSW) or *Community Land Management Act 1989* (NSW) in a similar manner to medium density developments. The resident would purchase a Tiny House and interest in the overall development.

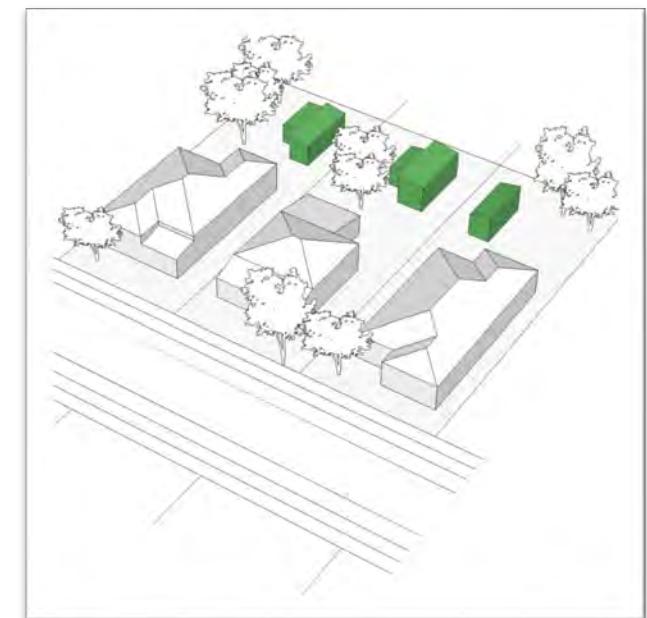
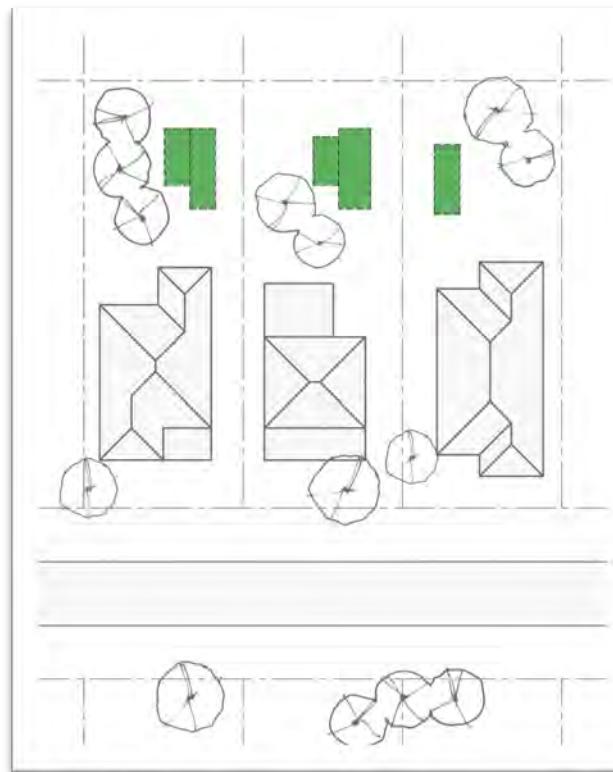
The planning scheme would need to include provisions for the appropriateness of the Tiny Villages, including design requirements to ensure residential amenity, layout, access and scale of the village is appropriate to the local area and existing infrastructure.

4.4 Tiny Backyard Leases

The mobility of THOW introduces a new dimension to the scenarios already described above.

The installation of THOW in residential backyards can provide a flexible temporary solution allowing THOW owners to reside in close proximity to employment opportunities, whilst the lot owners may be able to derive an income from leasing the land to the THOW occupants.

This type of arrangement could be used during times of boom in regional areas where the migration of a workforce is only temporary and tied to the longevity of the boom. Regional towns could accommodate the influx of residents without unduly burdening the housing market or overloading the existing infrastructure and causing unnecessary investments.



Land ownership and revenue model

THOW provide a temporary and relocatable housing solution providing affordable housing, often in well located areas or areas close to employment or centres where the siting of the THOW meets the requirements of the planning scheme and local laws.

The resident purchases the THOW but does not have any rights over the land upon which their home is sited, except under the terms of the lease.

Rent is paid by the Tiny House owner to the land owner. This rent can change over time.

The THOW can be relocated by the THOW owner when required. The lot is restored to its original configuration with a single dwelling upon relocation of the THOW.

Queensland

A THOW generally can be considered a moveable dwelling. The THOW would be

connected to infrastructure services from the primary dwelling.

Individual local authorities vary widely in how they regulate the practice of siting and residing in a moveable dwelling on residential land.

Recently, the Building and Development Dispute Resolution Committee, Appeal number: 39-16, determined a THOW was not considered a fixed structure or fixed building and did not require a Development Permit for Building Works. This decision was made in relation to a residential property in Brisbane City Council.

Victoria

Currently in Victoria, there is no provision for renting a THOW or a moveable dwelling in a backyard. It is possible to obtain a permit to live in a moveable dwelling on private property, however a number of local laws apply. These include that the moveable dwelling must be out of sight of the road and

that it must not be parked on the land for more than 28 days (however this time period can vary from 14 days to 2 months depending on the local authorities). Local authorities may also consider amenity impacts, waste disposal, and location of the movable dwelling and sanitation facilities when deciding whether to grant a permit.

New South Wales

Moveable dwellings on land outside of caravan parks are regulated under the Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005.

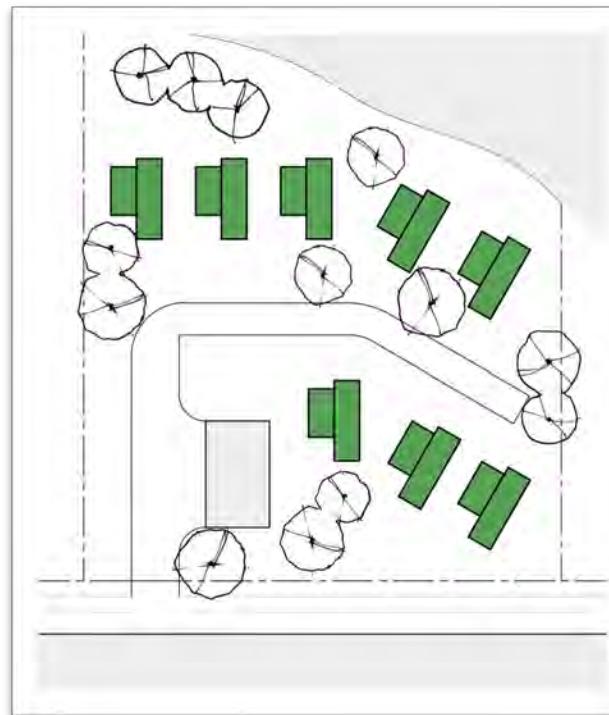
As with Queensland, individual local authorities vary widely in how they regulate the practice of siting and residing in a moveable dwelling on residential land.

4.5 Tiny House Parks

The provision of Tiny House Parks (similar to caravan parks) that would allow THOWs to be parked permanently or temporarily.

In the US, some RV parks will not allow THOW to come and park in their estate, even though THOW meet the classification of RVs. That limitation has been imposed due to the lack of regulated safety standards being enforced in the construction of a THOW. (2)

In Australia, many local authority-owned caravan parks have gone into disrepair or the age of the caravans providing permanent accommodation is well out of date. These caravan parks could readily be turned into Tiny House Parks, uplifting the amenity of the park, reviving the community spirit for the residents and providing affordable residential accommodation.



Land ownership and revenue model

The resident purchases the Tiny House but does not have any rights over the land upon which their home is sited, except under the terms of the site agreement and the relevant Act.

Rent is paid by the Tiny House owner to the Tiny House Park owner. This rent can change over time.

Queensland

Residential parks are regulated under the Manufactured Homes (Residential Parks) Act 2003 (Qld) and Manufactured Homes (Residential Parks) Regulation 2003. A residential park is a land lease community where the resident lives in a relocatable home, caravan or Tiny House and pays rent to the owner of the land or the owner of the home. In the majority of instances, the resident will own their home and pay a site fee for the use of the land. General facilities

include common areas, facilities and amenities for the personal use of the residents.

Similarly, Tiny House Parks would be regulated under the same (or similar) legislation, most likely to be located within zones for community facilities or special/specific purposes.

Victoria

Under current planning policy provisions, a Tiny House park would likely be classified as a caravan park. In Victoria, caravan parks are regulated under the Residential Tenancies Act 1997 (Vic) and the Residential Tenancies (Caravan Parks and Moveable Dwellings Regulations and Standards) Regulations 2010 (CPMDR).

Under the CPMDR, moveable dwellings installed in caravan parks are not subject to the same building regulations as permanent buildings, however they are still classified as Class 1 buildings and therefore must comply

with the standards of the BCA. (24) In caravan parks in Victoria, residents own their moveable dwelling and rent the underlying land in the park.

New South Wales

In NSW, residential parks are regulated under the Residential Parks Act 1998 (NSW). Residential parks are "a land lease community where the resident lives in a manufactured home or relocatable home and pays rent to the owner of the land or owner of the home. In the majority of cases the resident will own their home and pay a site fee for use of the site." (25)

5 Getting Technical—the Tiny House Way

Tiny Houses should be built to ensure they are safe, robust and provide healthy living environments. Specifically in the case of THOW it is recommended that construction should meet appropriate standards relevant to both their use on public roads as well as extended periods of occupancy.

5.1 THOW Industry Standards

Industry standards exist for caravans (RVMAP Accreditation) (26), mobile/temporary structures and manufactured homes; however there are fundamental differences in design, construction standards and intended use between these and THOW. Apart from the requirement to comply with the Vehicle Standards Bulletin 1 (VSB1) (refer Appendix A), there are currently no standards designed specifically for THOW.

5.2 Tiny House Friendly Building Regulations

Some sections of the BCA/NCC are not suitable for Tiny Houses and would require some relaxation to enable appropriate regulation under this instrument (Refer Appendix B.1).

In the US a precedent has been established with the inclusion of a Tiny House Appendix to the International Residential Code (IRC) 2018. The IRC provides a model building code that is adopted throughout the US. Portions of the IRC are adopted by the individual states according to their specific requirements and compatibility with existing codes (some states adopt the entire code; others adopt only those portions that are relevant).

The Appendix highlights parts of the existing IRC that are not compatible with the scale, proportion and intended use of Tiny Houses and proposes alternative parameters within which this type of dwelling might be built.

This precedent demonstrates the acceptance of Tiny Houses as a legitimate form of housing by US authorities after a rigorous process of examination.

5.3 Going Off-Grid

Going off-grid is an attractive and viable option for many Tiny House applications and can be achieved responsibly by ensuring existing standards for composting toilets, greywater treatment and rainwater harvesting and use are met (refer to Appendix B.2 for details).

5.4 Owner Builders

A significant proportion of interest and involvement in the construction of THOW comes from people without any formal construction training or qualifications – the Do-It-Yourself (DIY) cohort. Currently there is no requirement for DIY Tiny House builders to obtain an Owner Builder Permit and this lack of regulation can lead to reduced safety and amenity. To ensure quality control, the Owner Builder process and protocol could be suitably applied to THOW (refer Appendix C).

6 General Recommendations

6.1 Planning and Development

Tiny Houses are a form of temporary and long term housing. Tiny Houses can form part of the solution to ease housing stress and provide affordable housing options. Tiny Houses provide an innovative and sustainable alternative to traditional housing forms and contribute to housing diversity.

In all States, an opportunity exists to create a revised set of planning provisions to allow for smaller dwellings and urban infill in appropriate areas particularly in areas experiencing high levels of housing unaffordability, greenfield development and structure plan areas and in areas with high levels of public transport accessibility.

The proposed inclusion of Tiny House development provisions would provide a set of design standards specific to Tiny Houses and moveable dwellings (specifically THOW). These provisions would address amenity

issues through considerations of neighbourhood character, pattern of development, access, open space, setbacks, vegetation and car parking. A fit for purpose assessment criteria with specific design standards would create clarity in the Plan Making process and the Development Assessment process and allow greater certainty for Tiny Houses whether in backyards, on small lots or in Tiny Parks or Tiny Villages.

The inclusion of planning and development provisions for Tiny Houses also provides the opportunity for the community to review, comment and inform the scale and nature of this type of housing.

Where local authorities are considering planning provisions for Tiny Houses, the length of time for Tiny Houses to occupy any site (provided through either local laws or planning provisions) should be balanced with design and broader community and

economic outcomes.

Infrastructure network planning and demand analysis has not been undertaken for the purposes of this Resource. This would need to be done as part of more detailed costing feasibility for each development scenario.

6.2 Building and construction regulations

A tiny space is a challenging design environment. The current Australian building regulations do not cater for this type of housing however only minor relaxations would be required to allow Tiny House manufacturers to produce compliant dwellings. This would then lead to certainty for Tiny House purchasers and building certifiers.

6.3 Extending the Possibilities

Community Housing Providers

The scenarios discussed in the above chapters have been concerned with private home ownership however Tiny Houses may also have a significant part to play in the delivery of community or social housing.

Community housing providers are usually not-for-profit companies or associations established with the purpose of providing affordable and appropriate housing options to people on lower incomes experiencing some level of vulnerability. People are usually confined to low and fixed incomes through Government-provided social security provisions.

The scope for individuals to invest themselves in a Tiny House product is usually very limited. Opportunities for community housing providers to become involved in the provision of Tiny Houses are therefore worth

exploring. There is an opportunity to work on models for delivering Tiny House options that:

- Use land efficiently, improve the affordability of the land component and drive construction costs lower to improve the viability and sustainability of these options; and
- Use designs that promote the provision of support and that are a context for building stronger social networks and communities of belonging.

Community housing providers that also develop and construct housing options would be seeking to improve the efficiencies of land and construction costs to achieve a sound investment framework. Community housing providers are among other things, businesses that need to succeed in terms of financial sustainability as a basis for further investment in housing solutions. The costs of land and construction need to ultimately contribute to a sustainable financial model

that is built around rental income from residents and tenants, combined with capital growth.

There is an opportunity to engage community housing providers in developing models and scenarios for:

- Smaller lot development with housing geared to diverse household types such as families;
- Tiny and small house options that are fixed to land and that promote a supportive social environment for people who are vulnerable and excluded by the usual set up costs for private housing solutions; and
- Efficiencies in construction costs to achieve quality and affordability and within a framework that contributes to business sustainability as a basis for housing more people and responding to considerable demand for housing in Queensland.

Two pilot projects are provided in Section 7.2 which demonstrate the potential for Tiny Houses to contribute in this space.

Under-utilised land / flood prone land

The transportability of Tiny Houses and more particularly THOW, lends to their installation for a temporary period of time in places which could not support permanent use. Such places include underutilised land owned by governments (at local or state level) which has been set aside for purposes not related to future residential development. For example, land for future infrastructure provisions could readily serve as temporary sites for Tiny House developments. Even if those sites do not include services normally required for habitation, THOW can be designed to run off-grid and would not require connection to mains electricity, water or sewer. When the land is required to be returned to its originally intended purpose, the Tiny Houses can be easily

removed and relocated to another suitable site.

Similarly, land designated as flood prone, could support Tiny Houses for the same transportability reasons highlighted above.

Ageing in place

Ageing in place is now recognised as a preferred goal for elderly people and retirees. However, many residents struggle to maintain the family home and need assistance with cleaning and maintenance. Some homes (traditionally the post-war housing stock) require some form of modification (e.g. bathrooms, access) to account for the loss of mobility which can be costly to implement.

Installing a Tiny House in the backyard under a Granny Flat or Tiny Backyard Lease arrangement would alleviate the need for the elderly resident to move to a higher density aged care facility. The resident would move into the Tiny House and the

main dwelling could then be rented out. Alternatively, a carer could live in the Tiny House and provide constant on-site support to the elderly person.

7 Current Initiatives

7.1 Residential Subdivisions—Fremantle, WA

In September 2015, the City of Fremantle (WA) approved an initiative to revise a set of planning provisions for the development of smaller, diverse housing types to increase urban density. (27) The provisions allow a Design Advisory Committee to review all applications for development of a Tiny House and provide a mechanism to give applicants a choice of dwelling designs commissioned by the City (27). The amendment to the planning provisions allows dwellings that do not meet the minimum average site area requirements under the Residential Design Codes (27). Under these provisions there is no minimum number of secondary dwellings that can be developed on the lot. (28) The following planning provisions for small houses are currently in the revision phase but generally provide the following requirements (27):

The provisions apply in areas coded R35 (residential) where infill development of smaller dwellings could be compatible with the character and pattern of existing development;

- A maximum floor area of 120 m²;
- A minimum rear setback dimension of 5 metres;
- A maximum of 1 car bay shall be provided for each new dwelling;
- A minimum of 70% open space shall be provided over the entire development site; and
- Minimum of one tree, require to be retained or planted on the site.

7.2 Social and Affordable Housing Pilot Projects

Tiny Homes Foundation – Gosford, NSW

The Tiny Homes Foundation (THF) pilot program intends to serve as a prototype for a new and innovative way to address Australia's growing affordable housing crisis through the development of Tiny Home villages in partnership with state and local government. (29)

Under the arrangement Gosford City Council will lease two blocks of land to THF at no cost, for temporary housing options. The pilot project situated next to Gosford Hospital on the NSW Central Coast will consist of four tiny homes, a common lounge, laundry and workshop and community vegetable gardens. (30)

THF's model is based on a "housing-first"

solution supported by a network of training, employment and social support services. The pilot program will include a common space offering amenities and meeting facilities for the provision of welfare and education services. The project aims to work within a collaborative supported service model that seeks to address the needs of people experiencing and at risk of homelessness. (29)

The project claims to be low cost, replicable and features Australia's first 'equity participation scheme for tenants' whereby accommodation payments not applied to the cost and maintenance of the project will be available to THF tenants as needed for future housing related expenditure creating a pathway from homelessness to self-support. (29)



Gosford pilot project's tiny homes by NBRS Architecture

Launch Housing – Melbourne, VIC

Not-for-profit agency Launch Housing, a provider of housing and homelessness support services, has negotiated an arrangement with VicRoads, Victoria's State Department for road transport to place moveable dwellings on land reserved for a future road widening.

Under the arrangement, VicRoads will lease the land to Victoria's Department of Health and Human Services for five years at a nominal fee. The department will then sub-lease the land to Launch Housing. If VicRoads needs the land back, it will provide a 12-month vacancy notice.

The land is reserved for the widening of Ballarat Road, however it is expected that this will not occur for several years. Launch Housing is anticipating being able to locate 57 one-bedroom townhouses on nine parcels of land in Footscray and Maidstone. The homes are being constructed in a factory in Footscray.

The \$5 million project would be mostly funded by a \$4 million donation from businessmen and brothers Brad and Geoff Harris. Launch Housing will borrow the remaining money.



Launch Housing's portable unit designed by Schored Projects. Image: Schored Projects

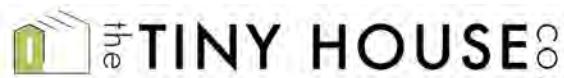
8 Acknowledgements

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Appendix A: Vehicle Standards Bulletin 1

THOWs with an Aggregate Trailer Mass (ATM) of up to 4.5 tonnes are currently required to comply with the Vehicle Standards Bulletin 1 (VSB1) for registration and safe towing on Australian roads. These standards outline the size, weight, auto electrics (lighting and braking) and other requirements for safe transport. (31)

Trailers with an ATM of over 4.5 tonnes must undergo the Federal Government's Road Vehicle Certification System (RVCS) which is administered by the Vehicle Safety Standards (VSS) at the Department of Infrastructure and Regional Development. (32) The vast majority of THOWs in Australia, however, are likely to be under 4.5 tonnes ATM as the requirements for those of a greater ATM are more extensive and the certification process more involved. This section will therefore focus only on the requirements of the VSB1.

Before a road trailer can be registered for the first time in Australia or used on a public road,

it must meet the requirements of the Motor Vehicle Standards Act 1989 (the Act). The Act applies to all new and used imported vehicles. (33)

A THOW should meet the VSB1 standards which specifically addresses trailers and the Act which covers Motor Vehicles more generally. The key reference document however is the VSB1 which outlines requirements for Vehicle Identification Numbers (VIN), registration, lighting, electrical wiring, braking, couplings, axles and suspension, general caravan requirements, importing trailers, dimensions, wheels and tyres, visibility and more.

Appendix B: Building Code of Australia / National Construction Code

B.1 Proposed Relaxations

The Building Code of Australia (BCA) Volumes 1 and 2 are part of the National Construction Code (NCC) series published by the Australian Building Codes Board (ABCB) and given legal effect through the *Building Act 1975* (Qld). (34) (35) The BCA/NCC is a uniform set of technical provisions for the design and construction of buildings and other structures throughout Australia.

The BCA/NCC is supported by a number of reference documents. These documents provide specific detail on how to comply with the BCA/NCC and include a number of Australian Standards. (36) Standards are documents setting out specifications, procedures and guidelines. For example, one of the more commonly referenced construction standards is the Australian Standard for Residential Timber Framed Construction (AS 1684). This four part standard is referenced in the BCA/NCC.

With consideration of the BCA/NCC the proposed relaxations are suggested:

Section 3.9.1.2 Stairway construction

Requirements: Parameters for stairway construction.

Proposed relaxation: That stairs in a Tiny House are not required to meet this standard.

Justification: Firstly, these requirements are not possible in a THOW due to the strict spatial restrictions applied by the VSB1 (Maximum height of 4.3 m from the road). Secondly, the scale and intended use of a mezzanine area is inherently restricted in a Tiny House. It is generally not possible to stand and move freely in this area. As a result risk is minimised as the area is either infrequently used or used only for limited and predictable purposes and usually only by the primary inhabitants who are familiar with the space.

Section 3.8.2 Room heights

Requirements: Ceiling heights are required by the BCA/NCC to be a minimum of 2.4 m for general habitable spaces and 2.1 m for bathrooms, laundries, kitchens, corridors and the like.

Proposed relaxation: Tiny Houses are not required to meet this standard for ceiling heights.

Justification: The great importance on the design of high yield spaces makes mezzanines a suitable and commonly used feature of Tiny Houses. Due to the restricted overall height of THOW (VSB1 compliance) and Tiny House dimensions in general, it is not possible to achieve two levels each with a ceiling height of 2.1 m.

B.2 Plumbing Additional Information

Composting toilets

According to Section FP1.1 Part F1 (Onsite wastewater management systems) of the National Construction Code (NCC) a composting toilet may be used if it meets the performance requirements of the section of the NCC and "according to the requirements and agreement of the authority having jurisdiction" (Section FP1.2 NCC). It must also comply with AS/NZS 1546.2 Part 2 (Waterless composting toilets).

Greywater treatment

Section FP1.4 of the NCC outlines the requirements for on-site storage, treatment, disposal or re-use of wastewater.

Rainwater harvesting and use

For non-drinking rainwater collection and use, the requirements of the appropriate section

of the NCC 2016 PCA V3 must be met (depending on the state in Australia) which references AS/NZS 3500.1. For drinking rainwater, the ABCB 'Rainwater Harvesting and Use' Research Report published in 2016 recommend a national approach and a non-mandatory handbook. As yet there is no national code to reference and the relevant state and territory legislation should be referenced.

Appendix C: Owner Builders

THOWs An owner builder permit will generally allow a person to carry out building work, including the construction of a new home and to act as head contractor. These permits are administered at a state level and there are variations between the states in the scope of work that a permit-holder is allowed to carry out. 'Occupational' work (such as plumbing, electrical, gas fitting and pest control) is generally prohibited and there are restrictions to the number of projects an owner builder can work on. In order to receive an owner builder permit the applicant must complete an owner builder course (or receive an exemption approval).

The fact that rules and obligations for owner builders vary between states presents a complication for the construction of THOWs by owner builders due to their transportable nature. A THOW built in a state with less stringent requirements and parked in a state with more stringent requirements may not satisfy local authorities.

The standardisation of the owner-builder permits across states would significantly improve on this situation and would align with a national construction code.