

Theme: Structure

Keywords: compact cities; density; housing affordability; co-housing; population growth; community

Regenerating the Suburbs: A model for Compact, Resilient Cities

Abstract: Australia's major cities face a number of growing challenges, such as accommodating population growth while containing urban sprawl, catering for an ageing population and keeping housing affordable. Cities must reduce their ecological footprint to remain liveable, resilient and economically competitive. Yet accommodating increased densities in urban areas is a fraught issue that often sees planners, developers and local communities in conflict. Meanwhile, housing affordability is in crisis, fuelled by an inadequate supply of housing close to jobs and a taxation system that favours investors. The Reserve Bank has suggested "the answer.. lies in more innovative and flexible use of the land that we have so that the marginal cost of adding more stock of dwellings is lower." This paper explores a model for compact urban living that helps to address a range of these challenges. It's a mainstream, small-scale adaptation of the 'co-housing' concept: single-dwelling suburban blocks are adapted to accommodate 2 or 3 smaller dwellings with some shared spaces, reducing the overall physical and environmental footprint per household. Households are likely to come together through their own social networks. This is just one solution in a broader suite of necessary planning approaches, but is affordable, in step with changing household structures and social trends, and may hold a key to 'humanising' density increases in urban/ suburban areas. It may also help to enable an informal 'sharing economy' that could reduce living costs and improve economic resilience. Despite the potential, this model is not well enabled via current regulatory systems. This paper explores the opportunities and barriers, with a focus on the NSW planning system, and recommends greater flexibility in some key planning instruments.

1.Suburban transformation via small-scale co-housing

The model this paper explores is a mainstream, small-scale adaptation of cohousing principles. Cohousing is a model that combines the autonomy of private dwellings with the advantages of community living. Cohousing developments contain a mix of private, semi-private and communal space. Whilst cohousing has arguably been around for a very long time, it came to prominence as a movement in Northern Europe in the 1960s, with the goals of improving social relationships, increasing the sense of community and improving the lives of working parents and children. By the mid 1990s 5% of the Danish population lived in cohousing (Meltzer, 2001). In Australia, cohousing is still a fringe movement, typically consisting of purpose-built 'intentional communities' or eco-villages with 12 or more housing units, and often in rural settings or on the urban fringes.

However, it is evident that cohousing principles are starting to be applied in more mainstream, urban settings and at different scales. Local examples include a 'crowd sourced' platform in Melbourne that brings together 'niches' of like-minded people to develop custom-designed apartment complexes, the 'Urban Coup' project for 30 households close to the Melbourne CBD and Landcorp's 'Gen Y' house in Perth that accommodates three young households in the same footprint as one single family house via a mix of private and shared space.

The small-scale co-housing this paper explores does not require large parcels of land or complex governance structures and may have potential for broader mainstream appeal than larger 'traditional' cohousing projects. Suitable urban and suburban sites are much easier to come by at this scale, and set-up and management is likely to be much easier, particularly when participating households come together organically through their own social networks.

1.1 The small scale cohousing model

In this model, single-dwelling suburban blocks are adapted to accommodate two or three smaller dwellings with some shared spaces, reducing the overall physical and environmental footprint per household. The concept is that two or three households can be accommodated within a similar physical footprint to that of a typical, albeit large, single family house.

Given the semi-shared nature of this housing, households are likely to come together through their own social networks. They could be friends struggling to afford a first home, intergenerational families or downsizers wanting to unlock equity for their retirement and live close to friends or family. These groups are typically under-catered for in the existing housing stock (see Section 2.3).

2. Why cohousing could be in the 'zeitgeist' for Australian cities

Smaller homes and more collaborative lifestyles are part of the zeitgeist – perhaps not for everyone, but for a significant portion of the Australian population. This is partly, but certainly not only, because housing is increasingly unaffordable. The composition of Australian households is changing: our population is ageing and the proportion of single person households is growing (ABS, 2015). Social isolation is increasingly prevalent, particularly amongst young adults and the elderly. One study found loneliness to be twice as bad for older people's health as obesity and almost as great a cause of death as poverty (Cacioppo, 2008).

As the 'loneliness epidemic' grows, so does appreciation for community; we are finding that "the age of the individual is being quietly supplanted by a re-emerging collectivism" (Gleeson, 2008). Lifestyles are changing and there are signs, such as the rise of the 'sharing economy', of new, more collaborative paradigms for urban living. For these reasons, housing models that support a sense of community and reduce social isolation are becoming increasingly relevant.

Whatever the scale of development, cohousing has potential to reduce housing costs, improve economic resilience and create a stronger sense of community. It could also contribute to more compact, ecologically sustainable cities. The arguments for small scale cohousing's relevance to Australian cities are explored in more detail below.

2.1 Accommodating housing demand within a compact city

To remain liveable, resilient and economically competitive into the future, Australian cities are challenged to limit their physical and ecological footprints. Yet as the population grows, accommodating increased densities in urban areas is a fraught issue that often sees planners, developers and local communities in conflict. Small scale cohousing could be a key to 'humanising' urban consolidation if it increases suburban densities in a way that is modest and incremental. However it is not a 'silver bullet', but rather a strategy that needs to be implemented in tandem with appropriate apartment development in suburban locations.

The Australian population is growing, with the majority of the growth projected to occur in urban areas. At the same time, households are becoming smaller and changing in structure, further exacerbating demand for housing. Metropolitan planning authorities recognise the critical need to increase housing supply and to provide affordable options that suit the diverse and changing needs of Australian households.

Australia's population will continue to grow, with the ABS's medium projection estimating a population of just over 30 million by 2031. The majority of this population growth is expected to occur in Australia's capital cities. Between 2012 and 2031, Sydney's population is projected to grow by 33%, and Melbourne's by 41%. Of the changes projected to occur in Australia's population, the most significant are to the age structure of the population. Over the next 40 years, the proportion of the population aged over 65 is predicted to more than double (Commonwealth of Australia, 2015).

The number of Australians per household has declined over time due to changes in household demographics, exacerbated by the ageing population. Between 1976 and 2012 the average household size decreased from 3.1 to 2.6 people per household (ABS, 2013). Along with population growth, declining household size is putting pressure on housing supply. And yet, despite declining occupancy numbers, the average size of new homes in Australia is amongst the largest in the world.

The average size of a new home increased from 162m² in 1984 to 228m² in 2003 (ABS, 2005). In a 2012 survey, over three quarters of homes had more bedrooms than were needed to accommodate the occupants according to the standards (ABS, 2013).

Various responses to these issues have been identified. For example, the Plan for Growing Sydney sets a target to provide 664,000 additional dwellings by 2031 and includes a vision for "a city of housing choice with homes that meet our needs and lifestyles". Supply of new housing will occur primarily via urban renewal in or near centres on the public transport network, and new land releases in greenfield growth areas. This follows the typical pattern of housing growth found within Australian cities: low density growth on the urban fringe and high density growth in and immediately around city centres and along major transport corridors, particularly public transport routes (Commonwealth of Australia, 2015).

Reliance on low density growth on the urban fringe is problematic, because these areas are often poorly resourced in terms of accessible jobs, transport, education, facilities and services. Research has indicated these areas can easily become clusters of social disadvantage (Commonwealth of Australia, 2015).

It has been argued that the potential for medium density regeneration of 'greyfields' suburbs - established inner and middle ring suburbs that are physically, technologically and environmentally failing and represent undercapitalised real estate assets (Newton, 2010) - is significant and yet not well recognised by policy-makers. This may be due to the greater complexity associated with densification in these suburbs – unlike greenfields or brownfields sites, greyfields sites are characterised by small parcels of land with many different owners. One suggested model is the strategic consolidation of suburban land parcels to deliver medium density apartment housing. Using a coordinated precinct-scale approach to redevelopment of selected residential allotments, improvements to yield, amenity, infrastructure, housing diversity and affordability can be delivered at precinct scale. This has been examined for contiguous (Murray et al., 2011) and non-contiguous sites (Newton et al., 2011), and could be implemented via the mechanism of neighbourhood development corporations (Newton & Glackin, 2015). One study applied this approach to the redevelopment of non-contiguous clusters of suburban public housing (Murray et al., 2015).

This paper explores an additional option for the mix, one that could enable modest yet relatively widespread density increases in existing city suburbs. This option is seen as a complement to, not a replacement for, appropriate apartment development in these suburbs. With well designed local planning controls and guidelines, small-scale cohousing could be guided by the kind of strategic precinct-scale approach that is outlined above. This would ensure better outcomes compared to an ad-hoc implementation approach.

2.2 Impact on housing affordability and economic resilience

Australian cities, Sydney in particular, are in the grip of a housing affordability crisis. Over the last decade in Australia, house prices have grown by 147% while income has grown by 57%. (Phillips, 2011). Across Australia, one in every nine households is experiencing housing stress, with private renter households most affected. About two thirds of Australian households experiencing housing stress reside in capital cities, principally Sydney and Melbourne. An estimated 21.2% and 17.6% of households are experiencing housing stress in Sydney and Melbourne (Rahman & Harding, 2014). In NSW, Sydney housing costs were 71% higher than the rest of the state. (ABS, 2013).

Whilst many factors influence housing affordability, a fundamental factor is the mismatch between housing supply and demand. The Reserve Bank Governor believes the bank's influence is limited and "the answer... lies in more innovative and flexible use of the land that we have so that the marginal cost of adding more stock of dwellings is lower" (Hutchens & Mason, 2015). In cities like Sydney and Melbourne, the shortfall in housing stock is particularly prevalent for semi-detached and apartment dwellings.

As a significant proportion of the cost of urban housing is the land, cohousing has potential to make acquiring or renting a home cheaper. Whilst media and political debate tends to focus on the cost of buying a home, the life cycle costs of living in that home over time receive less attention. Both are critical to housing affordability. On top of the potential for lower mortgage debt and rent, cohousing enables sharing of utility bills, cars and household goods, as well as trading of services like babysitting and support for the elderly. This last point is particularly significant: as households collaborate to share resources (including skills and capabilities) an [informal sharing economy](#) grows. This has real potential to improve prosperity and economic resilience (Harvey, 2013) and improve social connection.

2.3 Housing that suits the changing needs of Australians

The composition of Australian households is changing, and there is a need for a diversity of housing options that mirror this change. Our population is ageing and single person households are the fastest growing household group (increasing by around 50% between 2011-31). By 2031 lone person households are expected to make up over a quarter of all Australian households (ABS, 2015).

Other household groups that are projected to grow at a faster rate between 2011-31 include couples without children (48.3%) and single parents (44.4%). Over the same timeframe, households comprising couples with children (the 'nuclear family that housing stock in Australia has traditionally catered for) are projected to grow by a much lower rate (26.5%). The picture is similar for Sydney, as illustrated in the diagram below.

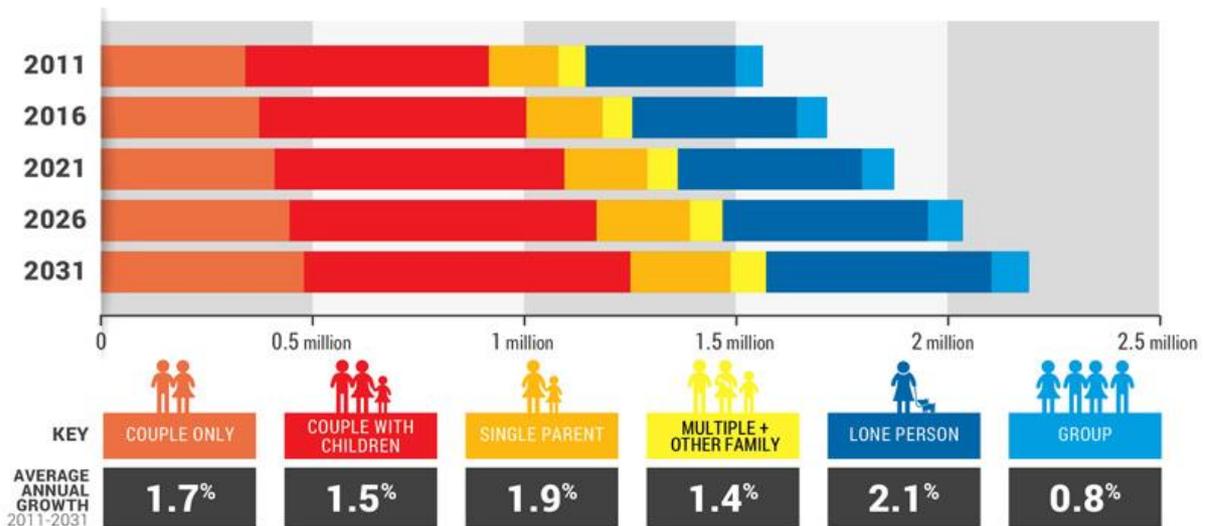


Figure 1: Projected Household Structure 2011-2031 (Source: Plan for Growing Sydney)

The projected composition of the *additional* Australian households that will exist by 2031 is 30% lone person households, 32% couples without children, 20.5% couples with children and 12.5% single parent households (ABS, 2015). This calls for a diversity of housing options. In NSW, the Plan for Growing Sydney includes a vision for housing diversity to match the changing needs of the population. The plan recognises there is a particular shortfall of semi-detached housing and apartments relative to current and projected demand (NSW Government, 2015).

A survey of Sydney and Melbourne households by the Grattan Institute in 2011 found that the housing people would chose represents a much more varied mix that what is currently available. Whilst around 59% of Australia’s housing stock is detached (Commonwealth of Australia, 2015), the survey found that “Contrary to myth and assumption, Australians do not all want to live in detached houses. Many want to live in a semi-detached home or apartment in locations that are close to family and friends, or to shops” (Kelly et al., 2011). There has been a recent shift towards the construction of semi-detached and apartment dwellings in Sydney and Melbourne, however, with over a century of construction focused primarily on detached housing, increasing the diversity of housing on offer must be a longer term strategy (Commonwealth of Australia, 2015).

Given all of this, housing models that allow for more efficient utilisation of suburban sites, such as small scale cohousing, could reduce the burden on new housing supply and better match the changing needs of Australia’s households. A key question yet to be explored is the extent to which the Australian population is open to small scale cohousing, and who the early adopter groups might be. The following section explores some of the groups that may benefit and why.

3. Which groups may particularly benefit from cohousing?

This section explores some of the key demographic groups that may be interested in small scale cohousing and why.

3.1 The Elderly

Within a generation, the proportion of Australians aged 65 and over is projected to increase from 14.2% to 20%, and the proportion of Australians aged 85 and over will double from 1.8% to 3.6%. (ABS, 2013). Many of these Australians will be living alone and potentially at risk of social isolation.

Appropriate housing is crucial to wellbeing and quality of life, reducing demand on health services and facilitating social participation. Older people generally have a strong desire to live independently in the community and to retain their personal autonomy for as long as possible (Commonwealth of Australia, 2015). Housing affordability and the risk of homelessness is a growing concern for older people, particularly for women, who are likely to live longer and have less superannuation. As time goes on, older people will increasingly feel the financial burden of a widening retirement savings gap and escalating healthcare expenditure (Hajkowicz et al., 2012).

Small scale cohousing could offer elderly Australians financial and social support and the ability to 'age in place' in their existing community, whether it is with family members in a multigenerational setting or with peers. The latter option could allow for the cost of in-home care to be shared amongst several individuals, providing an alternative to retirement home living.

3.2 Generation Y

Whilst this group desires home ownership, many remain renters and face financial challenges. In Australia half still live in the parental home and 75% are in debt (McCrinkle, 2009). Generation Y is projected to be the first generation to be less wealthy than their parents, largely as a result of missing out on the housing boom that benefited previous generations. Growth in housing costs has fast outstripped wage growth, with the typical house price now at around 9 times the median household income. The result is that an increasing proportion of Generation Y will have great difficulties getting onto the property ladder (Daley et al., 2014).

This is a generation that favours a location based on lifestyle rather than dwelling type and tends to value walkable, mixed-use neighbourhoods. Generation Y are already active participants in the sharing economy and open to innovations such as cohousing, coworking and micro apartments (SOUP, 2015). The winning entry of a recent design competition for a 'Gen Y House' was a small scale cohousing development that was strata titled into private and shared spaces (Landcorp, 2014). For Generation Y, 'friends are the new family' (McCrinkle, 2009). Groups of friends struggling to afford a home could band together to create a development on a single block, or individuals could consider building on the site of their parents' homes.

3.3 Downsizers and Retirees

Healthier, wealthier and more active than previous generations, the first members of the baby boomer generation have recently turned 65. They will form Australia's largest ever generation of retirees and are strongly likely to demand better retirement housing solutions than have been available to their predecessors. Between 2006 and 2011, an estimated 9 per cent of all Australians aged 50 and over had downsized to a home with fewer bedrooms. Motivations for downsizing were mostly matters of choice, with financial difficulty figuring in relatively few cases. The most common circumstances contributing to downsizing were lifestyle preference, inability to maintain the existing home and garden, children leaving home and retirement. The majority of downsizers moved within the same suburb or region as their original home. Whilst downsizers wanted smaller homes, they still wanted sufficient space including a home office or study, a guest bedroom or space for hobbies. (Judd et al, 2010) However, the high demand for smaller homes, particularly in NSW, means many older Australians don't end up with a significant financial benefit after downsizing (Judd et al, 2014).

Small scale cohousing could provide an alternative option for retirees and downsizers, one which allows them to share spaces like a home office, guest accommodation, or space for hobbies or fitness equipment. Cohousing developments could be groups of friends who enjoy the social support, or downsizers/ retirees could choose to accommodate their children in a multi generational living situation. It could be a way for these groups to remain in the family home and unlock some equity by selling off a portion to friends or children. Issues to be aware of include the impact of capital gain on pension eligibility and the costs of other transaction fees/taxes that may be involved.

3.4 Single parents and single-child families

Single parent families are a fast-growing demographic, one that is prone to considerable housing stress. They are more likely to be renting (63%) than to own their home (37%) and they are also a group likely to be renting through a state or territory housing authority (ABS, 2013). They are the household group most likely to report low life satisfaction (four times more likely than couples with children) (ABS, 2015). Small scale cohousing could be an attractive model for single parents, whether it is housing alongside other single parents, extended family members or any variety of household groupings that are part of their social network. It provides potential to reduce life cycle housing costs, enjoy the company of other adults, and share child-minding responsibilities with other parents in the group. Interestingly, cohousing in Northern Europe was generated partly from a desire to improve the lives of children and working parents (Jackson, 2007). Single child families could also benefit from this model, regardless of whether they live with one or both parents. As family size decreases, cohousing could be a relevant way to offer single children a way to 'grow up' with other children in their home, similar to a sibling experience.

3.5 Multi-generational families

In 2006, almost 1 in 5 Australians lived in a household made up of two or more generations of related adults. In metropolitan Sydney, almost one quarter of all households were multi-generational and the proportion of non-dependent offspring living with parents or grandparents was 19%. Much of Sydney's recent growth in multigenerational households has been in the outer suburbs. A similar situation is seen in other Australian capital cities (Liu & Easthope, 2012). The question of whether this is due to preference or economic constraint is not clear. Whilst living in a multi-generational household is seen as traditional practice for some immigrant groups, people born in Australia made up the vast majority (73%) of multi-generational households. Adult children returning after a relationship breakdown and grandparents looking after grandchildren while parents work were all reasons households expanded to become multi-generational (Judd et al, 2010). There has also been an increase in the proportion of young adults continuing to live with parents, including those who want to stay and those who want to move but are unable to for financial reasons (Liu & Easthope, 2012).

Cohousing could make multigenerational living more comfortable, because it is specifically designed to accommodate groups who want a balance of privacy and interaction.

4. Implementing small scale cohousing: challenges and opportunities

This paper has set out a range of arguments for why small scale cohousing might be part of the emerging 'zeitgeist' and gain traction with the Australian population. This begs the question, if it's such a good idea, why isn't it widespread already?

Firstly, there's the perception that it's an 'alternative' model for living. Whilst cohousing principles are starting to be applied in different ways in Australia, there are few mainstream urban precedents for small scale cohousing apart from duplexes and granny flats, which are only allowed in some jurisdictions and under particular conditions. With the development of more appealing precedents, this perception could change.

Secondly, and more significantly, there are complexities and uncertainties in terms of planning approvals and the financial and legal implications of converting a single home to two or three homes. This paper focuses primarily on challenges and opportunities within the planning system, however first it touches on some of the key financial, legal and governance questions.

4.1 Financial and legal challenges and opportunities

One obvious route to converting a single home to multiple homes is via subdivision and strata titling. The downside is that subdivision can inflate property prices, potentially cancelling out or diminishing the desired affordability gains (good for the landowner, but not for housing affordability in general). Inflation of land prices and some perverse development outcomes were seen in NSW when legislation was changed to allow dual occupancy units on separate titles, prompting a move to change the legislation back. Dual occupancy units are now on a single title and one must be owner-occupied.

Subdivision is also unlikely to be allowed under planning legislation, with the exception of large sites (which may be more appropriate for medium-density apartment development in that case).

Company title, considered outdated since the introduction of strata title in the 1960's, is an interesting alternative. With company title, a development remains on a single title and owners purchase shares, which provides them with exclusive ownership of a unit and shared ownership of common property. One of company title's perceived flaws, that it can be geared so approval from all owners is required to sell or lease an apartment, could actually be appropriate in this context. Creating small scale cohousing on a single title will be generally much simpler from a planning perspective (no subdivision required), particularly if the development fits within existing floor space and site coverage controls.

With company title, the loan to valuation ratio banks provide can often be lower than for strata title, however this has been overcome in past cases by drafting the company title memorandum of association to mirror the strata title act. However lending for cohousing may be complicated, with each owner having to guarantee the others in order to get a loan (for example, in the case of a group of young friends wanting to band together to buy a site).

The tax implications also need further exploration. Downsizers wanting to develop their own home into small scale cohousing and sell of portions to friends or children will need to be aware of the impact of the capital gain on pension eligibility and other personal finance matters. Whether this 'stacks up'

compared to selling up and buying a smaller property needs to be further explored, in terms of the transaction costs of converting the property to cohousing, selling off portions, and potentially later selling their own portion. Retaining full ownership and renting out portions may be an alternative.

4.2 Governance, resale, tenure and other practicalities

One key question is the impact of choosy households making spaces difficult to fill down the track, and how to accommodate changing occupants over time who might come in different household 'configurations' to the original set-up. There are big questions about resale value too, given that a given unit in a cohousing development may appeal to a smaller pool of people compared to a typical home or apartment. There is certainly the risk that small scale cohousing could build 'redundancy' into housing stock by making spaces harder to fill. Perhaps cohousing developments on a site would be best sold as one block. The quality and flexibility of the design plays a key role here, and the extent to which cohousing can be flexibly designed to accommodate changing needs (and changing household configurations) over time, and to provide occupants with the choice of high levels of privacy as well as the ability to interact if they choose. This provides an interesting and complex, yet not insurmountable, design challenge for architects.

4.3 Planning challenges

Though many metropolitan strategies recognise the importance of a compact city, small-scale cohousing is not specifically enabled via the planning system, though the "granny flat" legislation that exists in some States is a start. In NSW, this is the Affordable Rental Housing State Environmental Planning Policy (SEPP).

The very creativity and flexibility that gives small scale cohousing its appeal makes it challenging to regulate. There are a number of potential 'perverse outcomes' – inflation of land costs (see previous section) leading to overdevelopment, and the negative impacts of increased site utilisation on local amenity, such as extra cars on the street or less green space.

However, it is possible to manage these impacts via careful thinking on the part of regulators about what makes a site suitable for cohousing in terms of its location and site characteristics. For example, sites should be well connected to local facilities and public transport. It's also possible to put strategies in place that encourage reduction of car ownership via car sharing. A key principle of small scale cohousing is reducing the physical (and ecological) footprint per household, meaning that 2 or 3 households should be able to be accommodated in a similar physical footprint to that allowed by planning controls for a single family home.

Case studies, both from a previous study (Day, 2011) and conducted in 2015 for this paper, indicate that this is generally achievable for a range of typical Sydney sites. On a range of inner and middle ring suburban sites, cohousing designs for 2 or sometimes even 3 households could typically be accommodated within the floor space ratio (FSR), height and landscape area controls permissible for a single family house.

Working within or close to existing controls is likely to be the best approach, as it reduces compliance issues and also works as a measure to prevent 'oversized' cohousing that fails to deliver the desired sustainability and space-efficiency outcomes. Because some spaces are being shared, more functionality and more people can be accommodated in roughly the same floor area as a large single family home. However this obviously depends on the number of households to be accommodated. As a reference point, a study that explored adapting suburban sites for apartment development found that the key barriers related to inflexible controls for setbacks, building envelope and overlooking (Murray et al., 2011). To optimise cohousing designs and allow the best configurations, some level of flexibility in the controls is ideal, for example, a focus on performance-based rather than prescriptive measures. An increase in permissible floor space area may also be warranted in some cases. Corner sites are likely to be easier to develop than sites with one street frontage.

The key barrier illustrated by the case studies was that dual occupancy was only allowed in some cases, and often constrained by the requirements of the Affordable Rental Housing SEPP. The SEPP only allows secondary dwellings on sites of 450m² or more, and the secondary dwelling must be a maximum of 60m². It is not sufficiently flexible to accommodate the more varied household groupings that small scale cohousing might entail. Triple occupancy was not allowed in any of the cases.

As the case studies were all on relatively small sites (ranging from 270m² - 580m²), subdivision was not permitted. This is probably fine in the sense that subdivision could lead to unintended consequences (e.g. inflation of land costs) and the potential impacts need further investigation. Keeping the homes on a single title, but with the opportunity for shared ownership (e.g. via company

title) is probably ideal given small scale cohousing's objective of making housing more affordable, and encouraging a more cooperative approach.

To enable small scale cohousing, the planning system will need to provide certainty about what's allowed and what isn't. Consider a group of young friends buying a site or existing home to develop as small scale cohousing. Before they make the purchase, they will want to be sure that a suitable cohousing development is permissible on the site. Whilst less of a 'deal breaker', the implications for National Construction Code requirements will also need to be understood, as building two or more separate dwellings may attract extra requirements (for example, if separate units are built one above the other, this changes the dwelling class and therefore the conditions that apply).

At the metropolitan scale, questions to be explored include the applicability of this model to inner, middle and outer ring suburbs, and the particular attributes of a location that will make cohousing a good option. Planners would need to consider a context-based development hierarchy for the suburbs; if sites are suitable for medium-density (e.g. apartment) development, then that should be the highest priority use. Small scale cohousing would be next in the hierarchy, as this form of housing delivers lower densities than apartments, but still enables better utilisation of space compared to single dwellings, by enabling an increase in the number of occupants per site.

5. Conclusions

From a planning perspective, the Affordable Rental Housing SEPP could be revisited, to consider enabling dual occupancy on smaller sites and catering for more flexible household configurations (i.e. not limited to the configuration of one large dwelling and one small secondary dwelling). This SEPP is often referred to as the 'granny flat' SEPP, because it is geared to a very specific configuration. Whilst demographic change indicates this is a relevant form of development, it is not the only relevant form. Furthermore, the possibility of triple occupancy should also be explored.

Whilst cohousing designs can generally comply with existing FSR, height and landscape controls for a single dwelling, some level of flexibility in development controls is advisable, particularly for designs that accommodate three (or potentially more, where warranted) households. This might entail a small increase in FSR, and/or a relaxing of setbacks in favour of a performance based approach. However, efficient use of space (including sharing of some space) is a key principle for small scale cohousing, so significant concessions should not be necessary in most cases. Assessing proposals on a performance basis and with respect to their particular context will be key. Having said this, for a strategic and coordinated approach to implementing small-scale cohousing, planning authorities will ultimately need to develop specialised controls and guidelines for small-scale cohousing that are informed by a precinct-scale assessment of needs.

More exploration of property title options and their implications is warranted, so that cohousing occupants have the choice of owning their share. This is perhaps best done via company title, though further investigation is required.

So more generally, what would it take to enable co-housing as an option for Australians? A good start would be a conversation between the stakeholders with influence - planners, banks, housing designers and property experts - to explore pros and cons and the best way forward.

With more precedents – good examples of what co-housing looks like and feels like to live in - and better information and resources for the public about how to make it work, we could see a significant improvement in the diversity and affordability of housing options in Australian cities.

Co-housing will not be for everybody, but even if it has traction with 10% of the urban population, that represents a significant force for change in our cities. It offers a way to live more affordably, leverage the benefits of the informal sharing economy and reinvigorate a sense of community. Plus it helps to keep cities compact, liveable and resilient into the future. There are a number of issues to be teased out, but surely it is worth the conversation.

References

- Australian Bureau of Statistics (2013) 4130.0 - *Housing Occupancy and Costs, 2011-12*
- Australian Bureau of Statistics (2005) 1301.0 - *Year Book Australia, 2005*
- Australian Bureau of Statistics (2015) 3236.0 - *Household and Family Projections, Australia, 2011 to 2036*
- Australian Bureau of Statistics (2013) 3222.0 - *Population Projections, Australia, 2012 (base) to 2101*
- Australian Bureau of Statistics (2015) 4159.0 - *General Social Survey: Summary Results, Australia, 2014*
- Cacioppo, J. (2008) *Loneliness: human nature and the need for social connection*, W. W. Norton.
- Daley, J., Wood, D., Weidmann, B. and Harrison, C., (2014) *The Wealth of Generations*, Grattan Institute
- Day, T (2011) *Suburban Adaptation: an investigation into the potential of adapting existing dwellings to improve affordability, increase occupancy rates and address the needs of the new demographic*. Report for the Architects Registration Board
- Department of Infrastructure and Regional Development (2015) *State of Australian Cities 2014-2015*, Commonwealth of Australia
- Gleeson, B. (2008) *Waking from the Dream*, Griffith Review Edition 20: Cities on the Edge, ABC Books (accessed at: <https://griffithreview.com/articles/waking-from-the-dream/>)
- Hajkowicz, S., Cook, H. & Littleboy, A (2012) *Our Future World: Global Megatrends that will change the way we live*, CSIRO Futures
- Harvey, J. (2013) Informal economies offer new insight into prosperity, *The Conversation* (accessed at: <https://theconversation.com/informal-economies-offer-new-insight-into-prosperity-18217>)
- Hutchens, G. & Mason, M. (2015) *RBA waves red flag over 'very concerning' Sydney property market*, Business Day, Sydney Morning Herald (accessed at: <http://www.smh.com.au/business/rba-waves-red-flag-over-very-concerning-sydney-property-market-20150213-13eakh.html#ixzz3hR1UaGRN>)
- Jackson, H. (2007) *Children and Cohousing: The birth of an international social movement*, Permaculture Magazine (52), pp 27-29
- Judd, B. et al. (2010) *Dwelling, land and neighbourhood use by older home owners*. AHURI Final Report No. 144. Melbourne: Australian Housing and Urban Research Institute, UNSW-UWS Research Centre.
- Judd, B., Liu, E., Easthope, H., Davy, L. and Bridge, C. (2014) *Downsizing amongst older Australians*, AHURI Final Report No.214. Melbourne: Australian Housing and Urban Research Institute.
- Kelly, J.F., Weidmann, B., and Walsh, M., (2011) *The Housing We'd Choose*, Grattan Institute, Melbourne.
- Landcorp (2014) *Gen Y Demonstration Housing Competition*, accessed at: <http://www.landcorp.com.au/Residential/Gen-Y-Demonstration-Housing-Competition1/>
- Liu E. and Easthope H. (2012) *Multi-generation households in Australian cities*, AHURI Final Report No.181. Melbourne: Australian Housing and Urban Research Institute.
- McCrinkle, M. (2009) *The ABC of XZY: Understanding the global generations*, UNSW press
- Meltzer, G. (2001) *Co-Housing Bringing Communalism to the World?* International Communal Studies

Association, Communal Living on the Threshold of a New Millennium: Lessons and Perspectives, Proceedings of the 7th International Communal Studies Conference, pp. 25–27.

Murray, S., Bertram, N., Ramirez-Lovering, D., Khor, L. and Meyer, B. (2011) *Infill Opportunities: Design Research Report*, Prepared for the Office of the Victorian Government Architect.

Murray, S., Bertram, N., Khor, L., Rowe, D., Meyer, B., Murphy, C. Newton, P., Glackin, S., Alves, T. and McGauran, R. (2015) *Processes for developing affordable and sustainable medium density housing models for greyfield precincts*, AHURI Final Report No.236. Melbourne: Australian Housing and Urban Research Institute.

Newton, P. (2010) *Beyond greenfields and brownfields: the challenge of regenerating Australia's greyfield suburbs*, Built Environment, vol.36, no.1, pp.81–104.

Newton, P., Murray, S., Wakefield, R. Murphy, C., Khor., L and Morgan, T. (2011) *Towards a new development model for housing regeneration in greyfield residential precincts*, AHURI Final Report No.171. Melbourne: Australian Housing and Urban Research Institute

Newton, P & and Glackin, S. (2015) *Regenerating Cities: Creating the Opportunity for Greyfield Precinct Infill Development*, book chapter yet to be published

NSW Department of Planning and Environment (2014) *Plan for Growing Sydney*, NSW Government

Phillips, B. (2011) *The Great Australian Dream - Just a Dream?: Housing affordability trends for Australia and our largest 25 cities*, AMP.NATSEM Income and Wealth Report, Issue 29, July 2011

Platform for Strategic Open Urbanism (2015) *Innovation Lab on Housing Affordability*, (video accessed at: <http://souplabs.org>)

Rahman, A. & Harding, A. (2014) *Spatial analysis of housing stress estimation in Australia with statistical validation*, National Centre for Social and Economic Modelling, Australasian Journal of Regional Studies", pp. 452-486