EQUITABLE DENSITY

The place for lower income and disadvantaged households in a dense city

**Report 1
The Building Scale**

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SHELTER
NEW SOUTH WALES

Equitable Density: The place for lower income and disadvantaged households in a dense city: Report 1, The Building Scale

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INTRODUCTION

Higher density multi-unit residential developments, such as townhouses and apartment buildings (henceforth '**higher density housing**'), have become increasingly common feature of Australian cities. Across the country, 2016 marked the first time when construction began on more higher density housing than detached houses. New South Wales (NSW) already passed this milestone some years ago,[1] and over a quarter of Sydneysiders now live in higher density housing[2].

In the light of this shift, Shelter NSW engaged the City Futures Research Centre to identify the major challenges confronting lower income and vulnerable residents in higher density housing. Shelter NSW is concerned to explore and highlight how contemporary urbanisation processes disproportionately affect more vulnerable social groups. These reports provide a summary of the research evidence currently available to answer these questions, as well as an indication of the gaps in evidence.

The trend towards higher density housing can bring both benefits and challenges, which are quite different to those associated with low density, suburban development. These differences are apparent at various scales. In higher density buildings ('**the building scale**'), factors like proximity between residents, and the need to share responsibility for building upkeep, create a different living experience to that of detached housing. In areas with growing quantities of higher density housing ('**the neighbourhood scale**'), this densification can strain local services and reshape the area's socio-economic mix. And in cities that have embraced the 'compact city' model ('**the metropolitan scale**'), this policy objective puts pressure on governments to coordinate infrastructure planning and delivery, and to manage the social, economic and environmental effects of changing population patterns and urban form.

Many of these issues impact residents across the income spectrum, but different socio-economic groups have different resources available to respond to these

pressures. Because lower income and vulnerable residents generally have less choice and less influence than other socio-economic groups, they are disproportionately affected by the challenges of higher density living. However, much of the research evidence currently available on the challenges of higher density housing does not explicitly consider the impact on lower income and vulnerable residents in particular. Similarly, Australian governments have not adequately acknowledged and addressed the impact of higher density housing on lower income and vulnerable residents. For this reason, these reports focus on issues with high density living that are specific to, or exacerbated for, lower income and vulnerable households. Where necessary, we have extrapolated from the more general research evidence to consider the impacts for lower income and vulnerable residents in particular.

In preparing these reports, we have kept our definition of 'lower income' and 'vulnerable' as open as possible. However, as a rule of thumb we consider the following definitions to be useful:

- '**lower income households**' refers to households in the bottom two income quartiles (earning less than $649 per week in NSW); and

- '**vulnerable households**' refers to households experiencing various forms of socio-economic disadvantage (such as low education, high unemployment, low-skilled occupations, poor English proficiency and single parent households)[3], as well as people with physical or intellectual disabilities and victims of domestic violence.

To decide which issues should be covered in the reports, a workshop was held with key stakeholders from across the housing sector. This workshop identified the major issues facing lower income and vulnerable residents at the building, neighbourhood and metropolitan scales. These reports are written with these key issues in mind, while drawing upon the existing research evidence. While much of the report material focuses on the NSW policy context, many of the issues raised are equally relevant across Australia and around the world.

To begin, this report on the building scale considers the most important issues in both individual dwellings (e.g. apartments) and higher density buildings as a whole, and how these can influence the quality of life of lower income and vulnerable residents. It begins by introducing the different types of higher density

housing occupied by lower income and vulnerable groups in NSW, before examining the issues of building quality and social interaction. Next, Report Two focuses on the neighbourhood scale to explore the different issues faced by lower income and vulnerable households living in areas with significant amounts of higher density development. Finally, Report Three identifies the metropolitan-scale processes and policies associated with densification that have a disproportionate impact upon these groups.

Different types of higher density housing where lower income and vulnerable people live

KEY POINTS

Due to decades of under-investment in the public housing system, supply has decreased as a proportion of the demand, so that only those with the most extreme needs can access public housing.

The largest group of lower income residents living in higher density housing are private renters living in apartments. In NSW, approximately half of all strata properties are rented to private tenants. While resident owner occupiers have a say in how their buildings are managed and maintained, tenants do not.

After years of decline, there has recently been an increase in the number of boarding house rooms. However, new generation boarding houses are not necessarily affordable for lower income households. There are many residents living in informal boarding houses.

Higher density housing includes a broad range of housing that varies in terms of building type, as well as ownership and management structure.

Higher density building types in Sydney include:

- High-rise apartment buildings of 10 or more storeys
- Mid-rise apartment buildings of 4-9 storeys
- Low-rise apartment buildings of 3 or fewer storeys
- Townhouses

Higher density ownership and management

Distribution of Lower Income Households in Higher Density Housing,
Greater Sydney, 2016

■ Townhouse ■ Apartment 3 or fewer storeys ■ Apartment 4 or more storeys ■ Other apartment
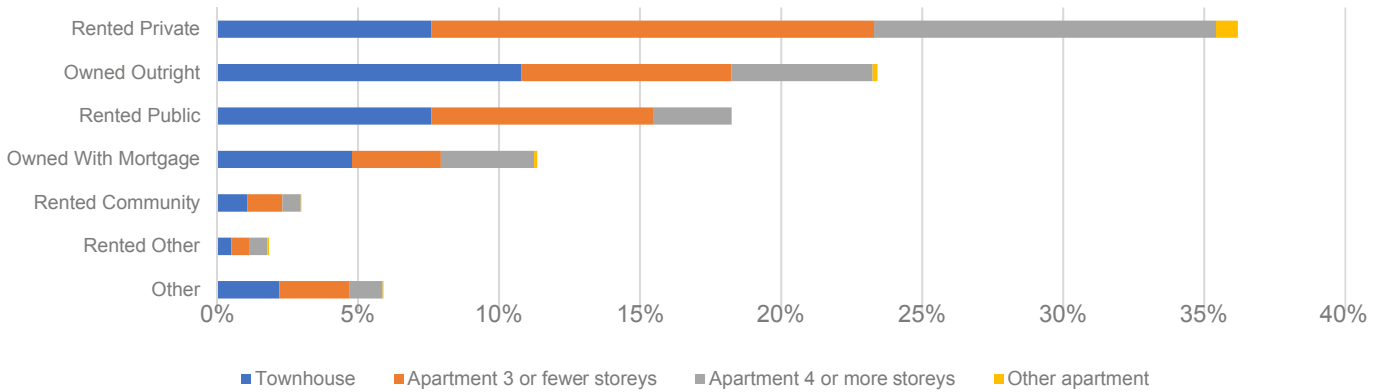
Source: ABS Census of Population and Housing 2016.
Notes: Lower income households includes household incomes of up to $649per week
Rented Private includes Rented: Real estate agent anda Rented: Person not in same household
Rented Public includes Rented: State or territory housing authority
Rented Community includes Rented: Housing co-operative, community or church group
Rented Other includes Rented other landlord type and Rented landlord type not stated
Other includes Other tenure type and Tenure type not stated.

structures in Sydney include:

• Strata title (private housing)
• Rental blocks (private housing)
• Public housing
• Community housing
• Boarding houses

Looking at all lower income households in Greater Sydney who live in higher density housing, there are three dominant groups:

1. Households in private rental housing (36%), most commonly within apartments.

2. Households who own their property outright (23%), most commonly in townhouses or low-rise apartment buildings. This group likely includes a significant proportion of retirees.

3. Households in public housing (18%), most commonly in townhouses and low-rise apartment buildings.

The balance is made up of people who own their property with a mortgage (11%), community housing residents (3%), and 'others' (8%).

Individual apartment buildings may be entirely residential or may incorporate a mix of commercial and residential uses (e.g. shops, offices). Sometimes these buildings are part of a wider residential development incorporating multiple buildings as well as businesses and services. This is becoming increasingly common in Sydney in large scale inner city urban renewal areas such as Pyrmont, Green Square and Ashmore Estate. In addition, public housing estate renewal developments in suburbs such as Riverwood and Bonnyrigg are replacing existing lower density housing with a mix of higher density social and private housing, as well as commercial premises. Both types of large-scale planned redevelopment have been taking place with the strong support of the NSW state government.

More recently, Sydney has also seen a move towards displacing lower income households already living in higher density housing to enable further redevelopment of private housing in high value areas, ostensibly as a means of releasing land value to reinvest into the social housing system. The recent eviction of public housing tenants from Millers Point and the Sirius Building are high profile examples,[4] as is the planned redevelopment of Redfern-Waterloo[5]. The implications of such redevelopments and their impacts on the displacement of lower income residents is **discussed further in Reports Two and Three**.

The experience of living in higher density housing will differ for lower income and vulnerable households depending on the type of building they live in as well as the way in which it is managed. A person living in a 10 storey private strata titled apartment building in an inner-city urban renewal area is likely to have a different experience to someone living in a suburban townhouse managed by a community housing provider. The diversity of experiences of living in higher density housing can make it difficult to generalise about the impact of this living arrangement on residents. However, there are three key ways in which living in higher density housing (irrespective of building or management type) impacts upon residents that are not experienced by residents of detached houses. These are:

1. People live in closer proximity, creating more potential for neighbours to annoy each other. There is also more potential for incidental social interaction, which may result in both benefits and problems.

2. People have to share services and spaces with their neighbours, from gardens, parking and laundries, to lifts, corridors and entryways.

3. Higher density housing necessitates some degree of cooperation between residents and owners, to manage and pay for the operation and upkeep of the building or development. At the same time, it also requires a reduction in the autonomy of residents to do as they wish in their own home.

In addition, in private higher density housing, where many lower income residents live, a large proportion is sold to investor owners and occupied by private renters. The nature of this market has an impact on the type of the multi-unit housing stock that is developed, reducing the diversity of apartment designs and sizes available[6]. Investor ownership also has an impact on the turnover of residents, with private renters moving more frequently[7], in some cases because of forced moves as properties are sold with vacant possession.

The different types of multi-unit housing where lower income and vulnerable people may live provide different opportunities and challenges for residents associated with their cost, the type and quality of the buildings, and the ways in which the properties are managed.

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Strata title (private housing)

The vast majority of higher density housing in Australia is built for the speculative sale of individual units. This type of development is usually known as 'private housing' or as '**strata title**' (henceforth
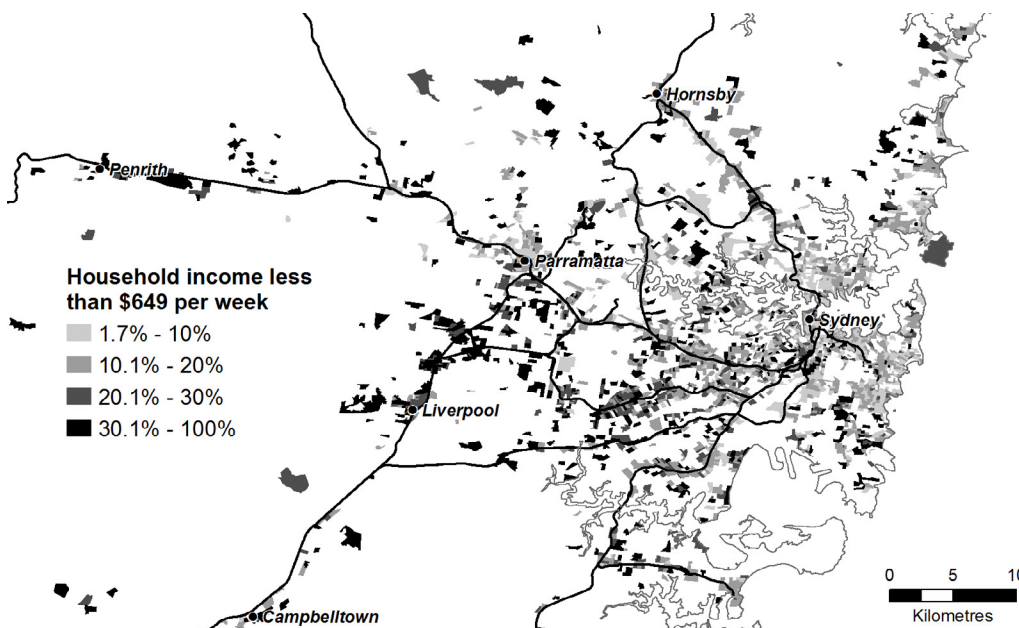
The geographical spread of lower income households in higher density housing.

Household income less than $649 per week
- 1.7% - 10%
- 10.1% - 20%
- 20.1% - 30%
- 30.1% - 100%

'strata'). Developers design apartment buildings to appeal to their target market, sell some units off-the-plan before constructing the building, and then sell the remaining units upon completion. Once the building is completed and the strata title registered, the owners of the individual apartments collectively form an 'owners corporation', which is responsible for building management and maintenance. At the beginning, when the developer still holds all or most of the units, the developer effectively operates as the owners corporation, but as units are sold, the developer's role decreases. Arguably, this development process has an impact on both the quality and design of the building, as there are few incentives for the developer to design a building to reduce ongoing maintenance or management costs[8]. In NSW, approximately half of all strata owners are investor owners, who do not live in the properties they own,[9] yet remain legally responsible for building management and maintenance . This means that strata properties provide housing for a combination of owner occupiers and private tenants, and are managed by a combination of owner occupiers and investor owners. While resident owner occupiers have a say in how their buildings are managed and maintained (provided they pay their levies on time[10]), tenants for the most part[i] do not[11].

There are five common ways in which lower income and vulnerable residents may live within strata:

1. as owner-occupiers (with or without a mortgage);

2. as tenants with tenancy agreements with their landlords (mostly private tenants, although a few public housing tenancies exist within strata in NSW);

3. as tenants with sub-lease agreements from the head tenant;

4. staying with friends or family, but not on the tenancy agreement;

5. living in an informal boarding house without a formal agreement.

There are many residents living in informal boarding houses, with a 2014 review by the Tenants Union of NSW identifying around 1,400 such arrangements advertised in Sydney each week[12].

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Rental blocks (private housing)

Some multi-unit housing in Australia is also provided privately but is not strata titled. A single landlord owns the whole building and rents out the units to tenants. In other countries, including across much of Europe and North America, this type of housing makes up a large proportion of the housing stock available to renters, but in Australia it is relatively uncommon[13].

Recently there has been some interest amongst developers in Australia in moving into the **build-to-rent** market[14]. There are many possible reasons for this, including a recognition that investment in rental housing tends to be counter-cyclical, with rental returns improving during economic downturns, and an increased interest amongst institutional investors (such as large scale superannuation funds) in residential housing investment as commercial property opportunities dry up. However, it is not yet clear whether this emerging market would provide housing affordable to lower income households.

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Public housing

Public housing is provided by the government for lower income and vulnerable people and includes both higher density housing and detached properties. Just over 36,500 households live in higher density public housing dwellings in Greater Sydney[15]. Rents are set as a proportion of income and eligibility is based on need. Public housing makes up a small proportion of the rental housing stock in Australia, but is an important source of housing for lower income and vulnerable people. Due to decades of under-investment in the public housing system, supply has decreased as a proportion of the demand so that only those with the most extreme needs can access public housing[16].

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i With the introduction of the NSW Strata Schemes Management Act 2015 (NSW), in buildings where more than 50% of the residents are tenants, tenants have a right to nominate a tenant representative to attend Strata Committee and Owners Corporations meetings (Sect. 33). While this is an important opportunity for tenants to be informed about what is happening in the building, and to inform the Strata Committee and Owners Corporation about their issues, as tenants are not entitled to vote on decisions of the committee they will continue to have little say in the management and maintenance of their buildings.

Community housing

Almost 6,000 households currently live in higher density properties in community housing in Greater Sydney[17]. That figure will rise substantially as the government's policy has been to wind back public housing while promoting the expansion of the **community housing** sector, and as public housing estate renewal programs are increasingly being delivered as higher density mixed tenure developments with public housing tenancies being passed to community housing providers. Some community housing is provided as subsidised social housing to the most vulnerable groups, similar to public housing with rents calculated as a percentage of residents' incomes. Some community housing is provided by **Aboriginal community housing** providers in a parallel system to mainstream community housing providers[18]. A small amount of community housing is provided as **affordable housing** to people in the workforce earning below a set income threshold, with rents charged as a proportion of market rents. This is made possible through government subsidies, government land provision, planning incentives and/or philanthropic sources. Community housing is provided in a mix of existing and purpose-built properties.

Boarding houses

There is a broad spectrum of **boarding houses** that let out rooms on a casual or short-term basis, including older properties that have been repurposed for this use, as well as purpose-built boarding houses. After years of decline, there has recently been an increase in the number of boarding house rooms provided[19].This reflects the limited housing choices available for lower income single people. A market in 'new generation' boarding houses with self-contained rooms is now also developing rapidly in Sydney with the support of State Planning Policy[20]. However, new generation boarding houses are not necessarily affordable for lower income households[21].

Major issues for lower income and vulnerable groups living in higher density housing

KEY POINTS

Building quality is a concern for many lower income and vulnerable households living in higher density housing. Concerns encompass design quality, construction quality and building maintenance.

Design quality: Lower income households experience noise problems more acutely.

The ability to light, heat and cool the home naturally is especially important for households who cannot afford additional electricity costs.

Lower income households are more likely to be living in relatively small spaces to save on housing costs, and may be living in overcrowded conditions.

In strata, both owners and tenants can struggle to get funding and permission to install home modifications in their homes.

Construction quality: Concerns about building defects affect the whole residential multi-unit housing industry, but lower income households are particularly negatively affected.

Building maintenance: The combination of complex buildings and complex governance structures and responsibilities can result in a lack of adequate maintenance, especially in buildings dominated by private renters. Maintenance is also an area of concern in public housing.

Two main themes arose during the workshop when considering issues at the building scale that can impact upon the quality of life of lower income and vulnerable people living in higher density housing. These can be broadly defined as building quality and neighbour relations.

Building Quality

There are two major questions relating to building quality that have a great impact on the experience of lower income and vulnerable residents in higher

density dwellings:

1. Is the building designed and constructed well?
2. How easy is it to maintain, who manages that maintenance and do they do so competently?

While these are concerns for all residents of higher density housing, people on lower incomes are more likely to be negatively influenced, because they cannot afford to move to better designed, constructed and managed properties.

Design quality

During the workshop design issues were raised as particularly important considerations for lower income and vulnerable groups. These were: privacy and noise disturbance; solar access and cross-ventilation; storage; shared facilities; security; facilities for children; and access for people with a physical disability.

Noise disturbances from internal (e.g. neighbours) or external (e.g. traffic) sources can have negative impacts on health, including exacerbating mental health problems and affecting the development of children[22]. Noise disturbance can increase general stress and discomfort, distraction, sleep disturbance, relational tensions between neighbours, and dissatisfaction with the dwelling[23]. Lower income households have been found to experience noise problems more acutely[24]. Many noise problems in apartment buildings have their origins in faulty design, including apartment size and orientation, construction materials used and internal furnishings (e.g. wooden floors). They can also have their roots in faulty installation, such as loose door or window seals[25].

Noise transmission between units also has an important influence on **feelings of privacy** between households, along with visual privacy. Privacy can also be compromised within the dwelling in cases where multiple family members are living in close proximity within the one unit, which is more likely amongst lower income groups responding to housing cost pressures. While lack of privacy due to overcrowding is not the direct result of the design of properties, design can play a mitigating role in improving internal privacy within an apartment[26].

Adequate **solar access and cross-ventilation** are desirable for any dwelling. However, the ability to light, heat and cool the home naturally is especially important for households who cannot afford additional electricity costs[27]. While apartment

design standards have improved in NSW since the introduction of SEPP65[28]–a state environmental planning policy outlining minimum design quality guidelines for apartments–many lower income and vulnerable tenants live in older buildings built prior to its introduction in 2002.

Storage is also very important for all residents of apartments. However, lower income households are more likely to be living in relatively small spaces to save on housing costs, and may be living in overcrowded conditions[29]. For families with children in particular, finding sufficient space to store household belongings, shoes, strollers, bikes and other large items can be difficult. If these are stored outside, such as on the balcony, in the corridor or the lobby of the building, this can lead to disputes with neighbours about the building's appearance, access and amenity.

The **design and provision of shared facilities** is also very important. The design of shared open spaces in particular must take into account different occupant needs. This can be difficult when occupants have diverse needs – for example when retired people, shift workers and families with young children are living together[30]. Where shared facilities are commercial businesses, such as cafes, lower income people can be excluded because of an inability to pay for services, **discussed further in Report Two**. It can also be difficult to take occupant needs into account when the profile of occupants changes over time. There is therefore a need for flexible and adaptive design of shared spaces, rather than designing with a particular demographic in mind[31].

Safety and security are also a concern for all residents of apartment buildings, but for some vulnerable groups take on a particular saliency. Personal safety is a particular concern for elderly residents and people with a history of domestic violence. It is important that residents can enter and move through the building safely. Building design can help or hinder this through the placement of corridors, lighting and allowances for passive surveillance[32]. However, where security systems are installed, while these may have a positive impact on the safety and sense of security of residents, they can also make access to the building difficult for emergency services (e.g. police, ambulance, fire) and support workers (e.g. community health care nurses).

Some groups of people are likely to be more severely affected by design shortcomings. An

important example is **families with children** living in apartments that are too small or do not meet their children's needs[33]. This is partly the result of planning and developer practices that have been 'child blind' when it comes to higher density housing development, but also because of the cost constraints of living in a larger property. We know in Sydney, for example, that lower income families with children constitute one of the largest sub-sectors of the private apartment market[34], mostly concentrated in the middle and outer western suburbs. Without adequate play spaces for children they may play in the common areas, leading to complaints and disputes about noise and disturbance and banning of children from areas of common property[35].

Another example of significant hardship experienced by vulnerable groups living in private apartments is that of **people with physical disabilities** who are unable to find appropriate living spaces either in new or established apartments. Particularly in strata, both owners and tenants can struggle to get funding and permission to install home modifications in their homes[36].

Construction quality

The quality of the buildings themselves can also have an impact on the lives of apartment residents. There are two major components to this – the quality of new construction, and the maintenance of existing buildings. The two are related, with poor-quality construction resulting in increased maintenance needs and costs later.

The quality of construction of apartment buildings in Australia has received significant attention in recent years, with concerns raised about the frequency and severity of **building defects** in the residential multi-unit market in particular[37], as well as the difficulties faced by subsequent owners in having defects rectified[38]. Concerns surround the quality of workmanship, management of the construction process, private certification, limited warranties and the often-prohibitive cost of legal action[39]. These problems have been formally recognised by the NSW State Government, reflected in a new Part (Part 11) being added to the Strata Schemes Management Act 2015 to deal with defective building work. This includes a requirement for developers to pay a two per cent building bond to the government before an occupation certificate can be issued, which can be used by the owners corporation to rectify defective building work[40].

Concerns about building defects affect the whole residential multi-unit housing industry, but lower income households are likely to be particularly negatively affected because:

- At the more affordable end of the housing market, there are more incentives to cut corners during construction, by rushing jobs or hiring cheaper but less experienced tradespeople. As a result, build quality can be compromised for cost savings.

- As a private tenant, negotiating the process of notifying defects and having them rectified is particularly difficult, as typically they must go through their real estate agent or landlord. Renters may instead choose to move out, or be stuck with unsatisfactory living conditions. Given that the most common type of defect in NSW apartments is water ingress, this can have serious health and wellbeing impacts[41].

- Where lower income residents are owners in their building the costs of fighting a defects claim and rectifying the defects may result in them losing their homes. It is uncommon for strata schemes to successfully get all defects rectified without additional costs to the owners, including the costs of expert reports, legal advice and the rectification works themselves.

Maintenance

The proper maintenance of any property is of central importance for the comfort and safety of its residents. People on lower incomes who are reliant on the private market for housing are likely to be over-represented in poorly maintained buildings, because these properties will be cheaper to rent. However, compared to a detached house, in higher density properties maintenance is complicated by two factors. The first is the **complexity of many properties**. While maintenance in a townhouse may be straightforward, high-rise buildings generally contain plant and equipment that can be complex and costly to maintain. In the case of public and community housing, building managers are employed to oversee maintenance and the major hindrance to proper maintenance is insufficient funding to undertake required works. In strata, however, it is uncommon for a building manager to be employed and strata managers do not typically have skills in building maintenance. This assumes a level of competency in facilities management that few volunteer committee members hold. As can be expected, the result of

this system is that often the required maintenance work is not carried out and work on private buildings is reactive rather than proactive. In buildings where owners have little extra capital, required works may be delayed indefinitely.

The second is the **complexity of the governance structures** determining responsibilities for maintenance in the majority of strata buildings that do not hire a building manager. The combination of complex buildings and complex governance structures and responsibilities can result in a lack of adequate maintenance. This is especially true when they are occupied by lower income renters who have no direct recourse to the strata committee, cannot afford to move, and fear retaliatory rent increases from their estate agents or landlords if they report maintenance issues[42].

Maintenance has also been identified as an area of concern in public housing[43]. This has much to do with the (un)availability of funding and the sector's unsustainable financing model as a result of the residualisation of public housing, where rents are insufficient to cover operating expenses[44]. Public housing financing and policy is **discussed further in Report Three**.

Neighbour Relations

KEY POINTS

For lower income and vulnerable people, there is potential for higher density living to both exacerbate neighbour disputes and tensions, and to facilitate the development of positive social interaction. In both cases, good building design and careful ongoing management is required to ensure the best outcomes are achieved.

Higher density multi-unit housing may result in better health outcomes because neighbourhoods are more walkable, but this type of housing has also been associated with poor health outcomes through conflict, stress and overcrowding.

Neighbour disputes are more common in areas with concentrations of lower income and vulnerable residents and in areas with higher concentrations of apartments. In private housing, formal mechanisms for dispute resolution are experienced as complex and slow and most disputes are resolved informally.

The provision of common spaces contributes to an improved sense of community in apartment buildings.

There are two main considerations in addressing neighbour relations in higher density housing:

1. How well are neighbour disputes are managed?
2. Are there possibilities for fostering positive social interaction between neighbours?

Neighbour disputes

Neighbour disputes can happen anywhere, but there is some evidence that disputes are more common in areas with concentrations of lower income and vulnerable residents and in areas with higher concentrations of apartments. A recent survey of residents in Brisbane found that two-thirds (64%) of 4000 respondents were bothered by their neighbours in some way, and that this increased under conditions of concentrated disadvantage, residential instability (related to a high proportion of renters), and residential density[45]. Neighbour disputes can have a significant impact on health and while higher density multi-unit housing may result in better health outcomes because neighbourhoods are more walkable, this type of housing has also been associated with poor health outcomes through conflict, stress and overcrowding[46].

Conflict between neighbours may arise in higher density housing due to different expectations of what is reasonable regarding issues such as noise levels[47], parking practices[48], or spending on maintenance and improvements[49]. Such disputes often reflect tensions between individual rights (as owners or tenants of a property) and collective rights (of all other residents of the building)[50]. A salient example is the introduction of by-laws to restrict smoking in strata[51]. Conflict between neighbours can also be motivated by personality clashes or more complex mental health considerations. In particular, as social mix and urban consolidation policies create more mixed tenure medium and high-rise estates, concerted consideration is needed as to how adequate support can be provided to people with high needs. The implications of social mix policies in a higher density housing context is **discussed in more depth in Report Two**.

In the case of a dispute, strata owners corporations and their committees, state housing authorities, social housing agencies, and professional private landlords who own entire apartment buildings are responsible for addressing disputes and enforcing rules governing resident behaviour. This can be difficult given the numerous stakeholders involved, which

might include public and private renters, resident owners, investor owners, building managers, strata managers, strata committee members, state housing authorities and community housing providers[52]. There is little available evidence on the effectiveness of formal legal remedies for dispute resolution in these instances, however research on strata in NSW has found formal mechanisms for dispute resolution are experienced as complex and slow and that most disputes are resolved informally[53].

An issue that has received a lot of attention of late in apartment buildings is short-term holiday letting. This is related to disputes in two key ways. First, it reflects the tension between individual rights (I can rent out my unit as I please) and collective responsibilities (I share this building and am responsible for the behaviour of the people I bring here). Second, it can be the cause of significant nuisance to residents in surrounding units when short-term holiday makers hold parties, make a mess of common areas or otherwise ignore house rules. The difficulties of regulating both the holidaymakers themselves and the owners renting to them are a cause of great concern across NSW[54]. There is also some evidence that this new market is having a negative impact on the affordability of private rental properties, especially in areas popular with tourists[55].

Fostering positive social interactions

Fostering positive neighbour relations and attachment to place can be more difficult where there is a high turnover of residents[56], such as in developments dominated by private tenants who tend to move more regularly, at least in part because of their limited security of occupancy[57]. In contemplating how to foster positive social interactions in higher density housing, there are two major considerations. The first is the **building design** and whether there are shared spaces that enable positive social interaction to occur. The second is the **activities** that are organised or otherwise spontaneously occur within the building and between the neighbouring residents. The two are related – it is difficult to organise activities if there is nowhere to run them, and conversely, common spaces can seem unappealing if under-utilised. There is evidence that the provision of common spaces contributes to an improved sense of community in apartment buildings. A cross-tenure study of inner-city high-rises in Sydney and Melbourne found that many of the residents who did not have access to outdoor areas to entertain thought this was a contributing factor to their building lacking a strong sense of connectedness. Meanwhile, in buildings where open spaces were provided, residents reported a stronger sense of community[58]. Especially for people living in small apartments with no entertaining spaces[59] or private open space[60], such shared spaces are very valuable.

Yet common spaces are only useful if they are used and this usually requires some type of activation. Direct assistance or advice about how to do this can be helpful and can help to foster a sense of community that can be particularly valuable support for lower income and vulnerable residents. Effective interventions may require a package of interventions and resources including information for residents, training and support for community leaders, and direct provision of social programs by local governments, community groups and housing providers. Such place-based community development programs may be incorporated as part of a package of interventions in urban renewal and public housing estate renewal programs, or implemented by local governments or community organisations in established neighbourhoods and neighbourhoods experiencing piecemeal urban change[61].

In many cases, however, people develop strong local social networks in higher density developments independent of any formal intervention or support from government or community organisations. It is important that these informal social supports are also recognised and celebrated, and in the case of the redevelopment of existing higher density areas, that strategies are put in place to identify, value and support the existing connections in an area that might be threatened by the displacement of residents and the redesign and reconstruction of the built environment.

CONCLUSION

As Australian cities continue to embrace densification policies, it is important to ensure that the implications are understood and addressed for residents across the socio-economic spectrum. Examining the impact of densification at different scales provides a useful structure for identifying and examining the complex range of issues this policy shift raises, particularly for lower income and vulnerable residents. At the building scale, this report has outlined:

• Lower income residents living in higher density housing are most likely to be living in private rental housing, followed by owner-occupied housing and then public and community housing.

• Building quality is a concern for many lower income and vulnerable households living in higher density housing. Concerns encompass design quality, construction quality and building maintenance.

• For lower income and vulnerable people living in higher density housing, there is potential for higher density living to both exacerbate neighbour disputes and tensions, and to facilitate the development of positive social interaction. In both cases, good building design and careful ongoing management is required to ensure the best outcomes are achieved.

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[61] Notable international examples include Toronto's 'Tower Renewal' program and Vancouver's 'Vertical Villages' initiative as part of the Building Resilient Neighbourhoods Project.