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Out of the box: the hidden impacts of urban consolidation and apartment living on households with children, and future implications: a Sydney case study

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ABSTRACT

This article examines the impacts of urban consolidation and apartment living on households with children in the contexts of housing choice and affordability, liveability, and children's spontaneous outdoor play through a case study in the Lane Cove LGA, Sydney. It challenges ideals and planning presumptions built into urban consolidation, and the current approach to housing provision based on 'housing targets'. The analysis is primarily derived from comparative qualitative resident interviews, supplemented by fieldwork and policy analysis. Findings suggest that urban consolidation in its current form effectively works against households with children directly and indirectly, with various flow-on effects. It is suggested a reframing is required, particularly in the context of housing diversity, in order to significantly improve outcomes for this household type.

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missing middle

Introduction

This article is about an anomaly, an anomalous situation or state of affairs. It is about something that should not be there, but is there; something that amounts to an unintended deviation from the rules even as it derives from those rules; something that has arisen from within planning policy as an unplanned-for consequence of planning: households with children living in apartments. According to Australian 'city shapers' (Raynor, Mayere, and Mathews 2018) they should not be there; the discourse of apartment advertising suggests the target markets include almost all household types except those with children; and it is necessary to search far and wide to find an Australian planning policy which is willing to entertain the prospect of households with children living in apartments. Yet in 2021, 20%, or 1 in 5 apartment dwellers in Australia comprised families with children¹ (Australian Bureau of Statistics 2021). In 2021, family with children households made up almost 43% of all family household types² living in apartments in Australia (ABS 2021).

This article examines the lived experiences of households with children living in private apartments and compares these experiences with those of households living in townhouses and detached dwellings. In parallel, it offers a critical analysis of the urban consolidation policies which underwrite those experiences through a 'planning lens'. The overarching argument is that existing approaches to housing provision

leave many households with little choice but to live in apartments, especially in high-amenity locations, whilst also paying scant regard to the needs of those households. There is no suggestion here that there is anything 'wrong' with children living in higher-density dwellings; the point is more that planning policies would do well to acknowledge that current trends amount to something of a mini-revolution in expectations about what it means to raise children in Australian suburbia, and to explore ways of easing any accompanying stresses, particularly through addressing the 'missing middle'.

In what follows, this article first canvasses the minimal Australian-based literature on high-density living and households with children, before moving on to examine associated issues through a case study in the Lane Cove local government area (LGA) on Sydney's Lower North Shore. Lane Cove is an affluent and green LGA, with generous amounts of open space, highly regarded schools, and offering a convenient lifestyle in close proximity to amenity, services and the city. A significant number of apartment blocks have been developed in Lane Cove over recent years, most comprising 1 and 2-bedroom units along main roads. The median household income is \$2801 per week, compared to \$2077 per week in Greater Sydney (ABS 2021). In short, this is a *prima facie* 'family friendly' area representing a particular 'class' of families of high socio-economic status. Yet the article reveals that significant challenges exist, and apartment

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living is not the preferred choice of housing – without moving much further away, it remains for many, the only viable option.

Drawing on semi-structured, in-depth comparative interviews with 14 local parents, the article explores the experiences of households with children living in private high-density dwellings, as compared with the experiences of households with children living in lower-density dwellings. The paper focuses on the intersection of urban consolidation policies with the lived experiences of families with children. As such, interview questions sought to understand not only the lived experiences of households with children across different dwelling types in the contexts of children's spontaneous play opportunities and constraints, liveability, and health and well-being, but also the challenges faced around housing choice and affordability in Lane Cove and in Sydney more broadly. The article concludes by considering how urban consolidation might be reframed to achieve better outcomes for households with children in the contexts of housing choice, liveability (especially for women), and children's spontaneous outdoor play.

Urban consolidation and households with children

In post-WWII Australia, children were placed at the heart of town planning agendas; however, emphasis on children's needs has diminished since the 1980s, amid widespread adoption of compact city strategies (Woolcock, Gleeson, and Randolph 2010). This may be partly linked to the associated neoliberal planning framework, which prioritises economic imperatives over social imperatives (Woolcock, Gleeson, and Randolph 2010); it is also at least implicitly connected to initiatives such as transit-oriented development (TOD) and the Commonwealth's Smart Cities Plan which aspires to a 30-minute city through increasing densities close to public transport nodes such as train stations, along main roads and around local centres – sites that are not always child friendly.

In Sydney, the operationalisation of compact city policies is overseen by the Greater Cities Commission (GCC), a state-level body responsible for coordinating and aligning the planning that will shape the future of Greater Sydney (GCC 2022). The GCC provides 'housing targets' via District Plans, which are used by councils in the formulation and preparation of local housing strategies. The implementation of urban consolidation policies at the local level is influenced by numerous key actors with varying degrees of power including, *inter alia*, political influences, councils, developers, and the community.

Needless to say, these policies are not developed in a vacuum, with Troy et al. (2020, 19) suggesting that: 'In

the context of the Australian city, market-led neoliberal logic has often found a particularly willing partner in contemporary strategic planning efforts'. Strategic planning policy goals frequently work in concert with market-led forces, with planning supporting and facilitating private-sector development, reinforcing neoliberal planning agendas (Troy et al. 2020; Nethercote and Horne 2016). Further, investor demand has largely driven market preferences and reinforced the financial viability of high-density development for developers in 'hotspot' areas with good public transport and high amenity (Troy et al. 2020). In highlighting the 'missing middle', Troy et al. (2020) highlight that reliance on market forces alone is inadequate to deliver the housing that is desired or needed.

Overarching policy directions, coupled with market forces and strategic planning efforts, have resulted in primarily high-density 1-and 2-bedroom apartments being constructed along main transit corridors in Sydney. The past decade has seen a significant increase in households with children³ living in those apartments, including a 51% increase between 2011 and 2021. In 2021, family with children households made up 48% of all family household types⁴ living in apartments in Greater Sydney, representing 25% (1 in 4) of all apartment dwellers in Greater Sydney (ABS 2021). Factors influencing this trend include declining housing affordability, more women in the workforce, and the attractions of living in close proximity to employment in central, high-amenity locations (Andrews and Warner 2020). Kerr, Klocker, and Gibson (2021) also cite perceived locational benefits as being associated with apartment living, such as proximity to employment, schools, services, and lifestyle factors, which can be sought by families with children where a detached dwelling is unaffordable in the same location. Karsten (2022) notes that locational preferences are closely tied to working parenthood where both parents work, signifying the changing roles of women in society.

In parallel, growth in high-density housing has significantly outpaced growth in medium-density housing in Sydney, and the average floor area of new apartments in Australia decreased by 17.5% between 2003 and 2018, from 131 m² to 108 m² (ABS 2018). In NSW, efforts to diversify higher-density offerings through the State Government's Low Rise Housing Diversity Code – also termed the 'missing middle' – have met widespread resistance in the Sydney region; 24 Councils applied for deferment of the Code (UDIA 2020), citing concerns about impacts on local neighbourhood character (Ryan and Selmon 2019). In response to the Code, some councils have introduced additional controls around height and minimum lot size in low-density residential zones to effectively prohibit multi-dwelling housing and make subdivisions difficult to achieve. The end result is an increasing polarisation in Sydney's housing supply,

biased towards apartments or detached dwellings, with little in between.

Despite these trends, the narrative driving the apartment market revolves around young professionals and empty nesters (Reid, Lloyd, and O'Brien 2017), and planning policy has long presumed, implicitly or explicitly, that households with children will not occupy apartments. Raynor, Mayere, and Mathews (2018) found that 'city shapers', including planners and developers, did not view high-density housing as appropriate for families with children; apartments were perceived as a luxury item catering for an elite, childless sub-class or as an investment product. Providing apartments with childless consumers in mind aligns neatly with neoliberal agendas for urban economic growth, competition and commodification (Raynor, Mayere, and Mathews 2018; Nethercote and Horne 2016). Further, it is in the financial interests of developers to provide as many dwellings as site and zoning controls permit. As Troy et al. (2020) observe, apartments are being built in locations where financial returns are greatest for developers, reinforced by the market and investor demand.

Existing research around children and high-density living has generally taken a health perspective. Research suggests a decline in the mental and physical health of children over the past decade, associated with children living in apartments in Australian cities (Krysiak 2018). This is attributed to more sedentary lifestyles and less independent mobility; heightened parental anxiety around risk taking and street safety; an increase in screen time; fewer opportunities for outdoor play and reduced access to nature (Krysiak 2018; Cunningham 2002). Giles-Corti, Ryan, and Foster (2012) suggest that TOD is not favourable to children's health due to long-term noise and pollution exposure, which has been linked to increased psychological distress and asthma in children. Andrews and Warner (2020) found that a significant proportion of time was spent outside the dwelling by families living in apartments, and accessibility to natural open spaces was considered imperative, with common areas often perceived by parents to be unsuitable as play areas. Reid, Lloyd, and O'Brien (2017) note some key issues for this household type including lack of accessible natural play spaces for children living in apartments, strata rules which discriminate against women and children, and social isolation and disconnection brought about by high-density environments. A Melbourne study by Fincher (2004) found that apartment building design had detrimental effects on liveability for women with young children, due to a lack of opportunities for social interaction and a lack of accessible green space.

Research by Kerr, Klocker, and Gibson (2021) has explored the influences of cultural norms on shaping experiences of families with children living in apartments in the Sydney context, illuminating the

emotional perspectives of participants and various adaptation techniques. Research by Nethercote et al. (2016) has explored the intimate and material geographies of vertical families in the Melbourne context, with a focus on the dynamics of everyday life in a high-rise apartment. Nethercote et al. (2016, 593) conclude that: 'Vertical living involves processes of adaptation, contestation and appropriation as changing familial needs, norms and desires are reconciled within the socio-material constraints and affordances of high-rise homes'. In the international context, Karsten (2022) has explored high-rise family living focussing on large western-industrialised cities, which reveals the abovementioned issues are not unique to the Australian context, though some cities have proactively addressed child-friendliness in high-density through policy, such as Toronto and Vancouver. Karsten (2022) observes the negative discourse around families with children in high-rise persists, and apartments are marketed as luxurious commodities.

Research has also explored how high-density living can be improved for children when planning for high-density development. The City of Parramatta in Sydney has commissioned studies around the health impacts of high-density living on children, with a view to better accommodating their needs in future developments. Research has also focussed around improving outcomes for children at the apartment, building and precinct scales in the Melbourne context (Whitzman 2015); and in the context of children's play opportunities and independent mobility (Krysiak 2018). Internationally, the City of Vancouver adopted the *High Density Housing for Families with Children Guidelines* in 1982 (Heenan 2017), while Toronto (City of Toronto 2020) has developed *Growing Up: Planning for Children in New Vertical Communities*, which outlines ways of integrating the needs of families with children living in high-density environments. While this increasing awareness of the need to plan for children in high-density neighbourhoods at the local level is a necessary and positive step, it attempts to superimpose or retrofit a 'solution' over the top of existing policy.

Case study and methodology

The Lane Cove LGA, located approximately 9 km north of Sydney's CBD, exemplifies many of the issues discussed in the previous section (see Figure 1). In 2021, 63.7% of dwellings were medium or high density compared to 46% in Greater Sydney; 36.1% of dwellings were separate houses compared to 53.4% in Greater Sydney (idProfile 2021). Between 2016 and 2021, the number of high-density dwellings increased by 2000 (building on a 2249 increase between 2011 and 2015), while the number of medium-density dwellings declined (idProfile 2021). During this period,

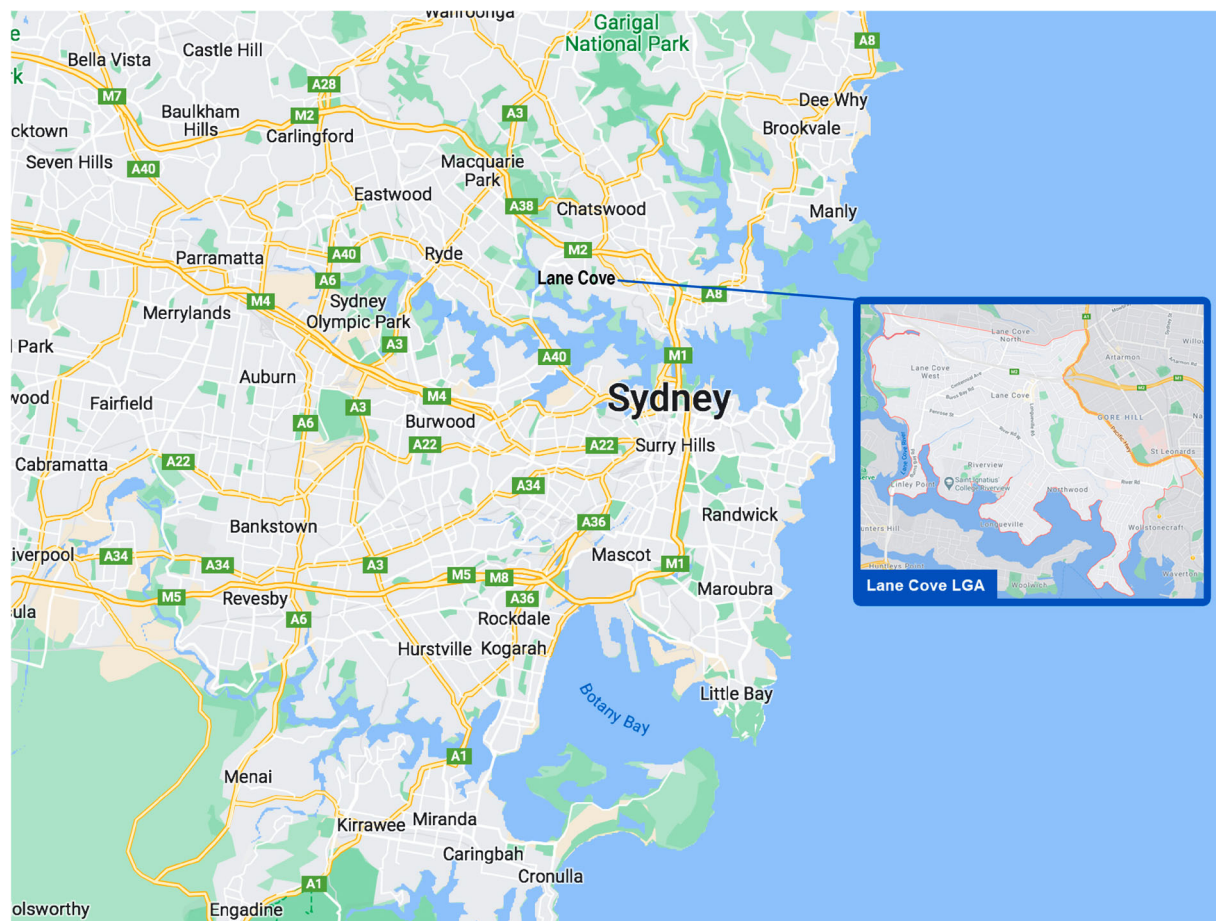


Figure 1. Sydney Metropolitan Area (main) and Lane Cove LGA (inset).

dwelling with 1 or 2 bedrooms in Lane Cove increased the most, accompanied by minimal growth in 3-bedroom dwellings (idProfile 2021). High-density development is projected to dominate the dwelling mix in Lane Cove to 2026, with negligible growth in medium-density development (HillPDA Consulting 2021). Couples with children and single-parent families with children combined made up 40% of all households in Lane Cove in 2021, and 27% of all apartment dwellers in Lane Cove (ABS 2021). Between 2011 and 2021, there was an increase of 1184 households with children living in apartments in Lane Cove, which equates to an increase of 98.9% (ABS 2021). By comparison, over the same period, there was an 84% increase in couple

only households living in apartments in Lane Cove (ABS 2021). In 2021, family with children households comprised almost 47% of all family household types⁵ living in apartments in the Lane Cove LGA (ABS 2021).

The housing target set by the GCC for Lane Cove was 1900 dwellings between 2016 and 2021, and 4900–5400 dwellings between 2016 and 2026. The five-year housing target has been met and it is predicted the ten-year target will be exceeded through planned high-density growth in the Mowbray and St Leonards South precincts (Lane Cove Council 2020; HillPDA Consulting 2021). Housing targets in affluent North Shore LGAs in Sydney are generally lower than those in less affluent west and south-west districts;

Table 1. Net and site dwelling density – defined high-density study areas (*estimations only).

Defined high-density study area	*Land area	*Number of dwellings (total)	*Net dwelling density (per ha)
Pacific Hwy, Mafeking Ave, Gatacre Ave	2 ha	242 dwellings	121 dwellings
Mowbray Rd, Gordon Crescent, Girraween Ave, Centennial Ave	7 ha	1138 dwellings	162.5 dwellings
Birdwood Ave, Finlayson Ave, Burns Bay Rd, Coxs Lane	5 ha	363 dwellings	73 dwellings
Proposed St Leonards South precinct (Lane Cove LGA)	11 ha (defined land area for uplift)	2000 dwellings proposed	181.8 dwellings (approximate)
Site address	*Lot area	*Number of dwellings (total)	*Site dwelling density (per ha)
390–398 Pacific Highway, Lane Cove	0.27 ha	70 dwellings	259 dwellings
50 Gordon Crescent, Lane Cove North	.32 ha	71 dwellings	221 dwellings
3–9 Finlayson Street, Lane Cove	.3 ha	57 dwellings	190 dwellings

NIMBYism plays a role through community resistance to new development (Taylor and Gladstone 2018). Even so, Lane Cove's dwelling targets are currently being met and exceeded, and it is evident these targets are primarily being achieved through the construction of high-density dwellings. Lane Cove Council has effectively prohibited multi-dwelling housing across its R2 Low Density zone by restricting height controls to 5 m and requiring a minimum lot size of 750 m² for dual occupancy (attached) and 900 m² for dual occupancy (detached) – the average lot size in Lane Cove ranges from 500 m² to over 700 m².

Newer apartment developments are achieving significant densities by Australian standards, as illustrated by the selected examples in Table 1. These densities are being achieved, in part, through high site coverage, entailing that little is provided in the way of outdoor common areas; this may be contrasted with older-style apartment blocks which typically incorporate more generous, grassed common areas at ground level. Reflecting TOD principles, most of the newer apartments are clustered along main roads with heavy traffic flows such as Pacific Highway, Mowbray Road and Longueville Road, and around the local centre (see Figure 2). In general, there are accessible parks and playgrounds within walking distance of most apartment blocks.

To better understand the experiences of households with children living in Lane Cove, semi-structured, in-

depth interviews were conducted with 14 local parents following ethics approval. Table 2 provides a profile of the interviewees' gender, dwelling type, previous dwelling type if applicable, tenure, number of children, and children's ages. To enable comparisons between dwelling types, 6 interviewees lived in an apartment; 3 interviewees lived in a townhouse; and 5 interviewees lived in a detached house (some had lived in multiple dwelling types and were able to provide comparisons). Interviews were conducted until thematic saturation was achieved. Unsurprisingly, most participants were female (since women are typically the primary caregivers for younger children); the age of interviewees' children ranged from 2 to 12.

Interview questions differed slightly according to dwelling type, although common themes were applied to all, including children's play opportunities and constraints; the 'liveability' of different dwelling types for households with children; perceptions around housing mix, choice, supply and affordability in Lane Cove and in Sydney; negative or positive impacts on mental and physical health for parents and children in different dwelling types; and involving children in consultation processes regarding how their local neighbourhoods are shaped. For apartment participants, a scalar approach was applied, where questions were asked at the level of the neighbourhood (open space access and play opportunities/constraints); the building (play



Figure 2. Apartments situated along the Pacific Highway in Lane Cove.

Table 2. Interviewee profiles.

Interviewee gender	Current dwelling type	Current tenure status	Previous dwelling type lived in with children	Number of children	Children's ages
Female	Apartment	Owner	–	2	2 and 5
Female	Apartment	Renting	–	2	1 and 3
Female	Apartment	Renting	–	2	10 and 12
Female	Apartment	Renting	–	2	2 and 6
Female	Apartment	Owner	–	1	3
Female	Apartment	Undisclosed	–	2	6 and 9
Female	Townhouse	Renting	Apartment	2	3 and 6
Male	Townhouse	Owner	Apartment	2	8 and 11
Female	Townhouse	Undisclosed	Apartment	1	2
Female	Detached House	Renting	–	3	Young children
Female	Detached House	Owner	–	3	2, 5 and 9
Female	Detached House	Renting	Apartment and Townhouse	2	9 and 11
Female	Detached House	Owner	–	2	2 and 4
Female	Detached House	Undisclosed	Apartment	2	Young children

opportunities/constraints in and around the apartment block including common areas and frequency of use); and the dwelling (suitability of the apartment for a family). For townhouse and detached dwelling participants, similar questions were asked at the scales of the neighbourhood and dwelling (relating to spontaneous outdoor play). Interviewees who had experienced living in more than one dwelling type with children were asked to provide comparisons, particularly in the contexts of spontaneous outdoor play opportunities and constraints. Interviews were recorded with consent, transcribed and subjected to content and discourse analysis; quotes included in this paper are representative of common themes which emerged.

Findings

Reasons for living in Lane Cove

Amongst interviewees, key reasons for living in Lane Cove included the convenience of living in close proximity to employment, preferred schools, amenities and public transport. Interviewees were also drawn to the lifestyle and sense of community Lane Cove offered. Walkable access to open space was crucial:

It's that trade-off between, you know, being close to facilities and services and things like that and the further out you go, I guess the more space you can get ... so it's about weighing up the trade-offs. (Apartment participant, owner)

My husband works in North Sydney so being near some public transport is good, but the main thing would be the school. (Apartment participant, renter)

I would say the main reason, community ... but also existing friends and not wanting to move away from people you've made good friends with. (Townhouse participant, renter)

The reason why we came here was because there were parks that we could actually walk to. (Apartment participant, renter)

Nonetheless, living in Lane Cove comes at a cost: the median house price is \$3 m; the median 2-bedroom unit price is \$876,000; and the median 3-bedroom unit price is \$1.6 m; townhouses typically start from \$2 m (Domain 2022). Comparatively, the average rent for a 2-bedroom apartment in Lane Cove is \$567 per week and \$989 per week for a 3 bedroom house (realestate.com.au 2023). As previously noted, the median household income in Lane Cove is \$2801 per week (ABS 2021). Recently developed townhouses are marketed as luxury items: 'Where luxury meets lifestyle', begins one advert, 'Introducing Bridge & Grace, an exclusive collection of five luxury residences in the heart of Lane Cove' (Domain 2022). Similarly, apartments are often marketed as luxury items (see Figure 3). The stated market in advertisements for new apartments seems to include everyone but families with children:

Exquisitely private and finished to a standard rarely seen, this is undoubtedly the epitome of high-end urban luxury ... Perfectly placed for busy professionals, downsizers and investors alike to enjoy express buses into the city and easy access into Chatswood and Macquarie Business Park. (Domain 2022)

Housing affordability

For many participants, the choice to live in Lane Cove left them with little choice but to live in an apartment, with only dim prospects of subsequently making 'the jump' to a townhouse or detached dwelling without moving much further away:

I do speak to my friends who live in townhouses or apartments and we all wish we could have a house, basically for the yard. But the affordability is really the big issue and that's both renting vs buying. I mean it's nearly impossible. I think Sydney in general is the same sort of thing. (Townhouse participant, renter)

I know families who cannot, us included, afford to buy here or even rent here for the future. Just for what we can afford and where we want to live, there's



Figure 3. A boutique apartment block under construction in Lane Cove advertised as ‘Lush, Luxurious Living’.

no way we can even afford Berowra. We’d have to go to the country in order to have a townhouse or a small house. So you don’t get much for your money in Sydney any more. (Detached dwelling participant, renter)

We were in our apartment with our two [children] for nine years before we were able to make the jump. And it was only because a townhouse came up in our price range ... normally even a townhouse now is getting to an average of 2 million which is unaffordable for a lot of people. Certainly, I think the jump from an apartment to a townhouse is quite a large jump ... going from a townhouse to a house is even harder because the average price of those has just sky-rocketed. (Townhouse participant, owner)

Issues of housing affordability were seen to be compounded by a polarised housing stock, dominated by apartments and detached dwellings, with few townhouses available; the latter were perceived and described by many as a ‘happy medium’:

I find that Lane Cove is very either apartment or bigger family homes ... there doesn’t seem to be much in that 3-bedroom kind of size range ... or even just in general. (Apartment participant, undisclosed tenure)

In this area, there’s very few [townhouses]. So when you come across one, you have to pounce on it. So yeah, I live in a block where we’ve got 12 townhouses, and they are so tightly held. The people who were renting here before us, they were here for 20 years and every friend I have over, says, ‘Oh my gosh can you tell me when one of these becomes available because this would be perfect for us’. And they’re

friends with young kids just like us. And we haven’t been able to find anything like this anywhere else. So I think townhouses are a really nice happy medium between an apartment and a house. (Townhouse participant, renter)

Children’s play opportunities – apartment participants

Apartment dwellers felt strongly that there were limited play options for their children within their apartment complexes and immediate surrounds, with constraints stemming from: the size and siting of common areas (including absence of sightlines from apartments); distance from the ground (for upper-level apartments); proximity to main roads; on-site vehicular movements; and small apartment sizes and layouts. Requirements for constant supervision of children’s play was bemoaned by all:

I would love to just be able to open the doors and let my kids go in the garden. It’s the one thing that I really feel is very lacking in our situation ... just being able to open the doors and say, ‘There you go! Go outside, go jump on the trampoline’. I physically have to take them to a park or something and then I’m supervising that all the time. (Apartment participant, renter)

We’re on the top floor and my daughter will run out onto the balcony and say, ‘Mummy, look! There’s a bird over there, I want to go look at it’, and if

you're in a house you can just run outside ... whereas here, she's got to get dressed up and, you know, be taken down to see the bird, which will be gone by the time she gets there. (Apartment participant, owner)

Basement and above-ground car parks were identified as unlikely playgrounds with the caveat, again, that close supervision is required, particularly for younger children:

We don't really have any purpose-built space. There's only the garage downstairs that has to be closely supervised because there's cars ... you can ride your bikes around ... it's not huge ... but there's not really any other space on our actual property that we can play. (Apartment participant, renter)

Computers and television screens were described as providing a substitute for outdoor play and a respite for parents needing to work from home or similar:

I think because of the lack of space we do get on each other's nerves ... they do get a bit cabin-feverish. And then, because the outdoors is not an option, we do turn to screens to resolve that. So there's definitely more screen time. I know that if I had a garden and a trampoline or water outside, he would happily be out there doing that instead. (Apartment participant, renter)

As a result of these constraints, interviewees living in apartments reported spending the majority of their time outside the apartment at parks and playgrounds with their young children, particularly mothers with active, energetic boys, which they felt placed them under daily pressure and resulted in heavier use of childcare by some:

We did put our son into childcare earlier than what we would have originally imagined ... just because to keep him occupied in the apartment became really hard so I was always out of the home ... I'd have to always be outside. I knew at least then he would have the constant sort of activities and the outside opportunities because they have quite a big outdoor area. (Apartment participant, renter)

Children's play opportunities – townhouses and detached dwellings

By contrast, constraints to spontaneous and independent outdoor play were greatly reduced for those in townhouse complexes, and eliminated altogether for those living in detached dwellings; concomitant pressure to supervise children was also perceived as minimal:

Yes, I suppose a big part of it is the supervision part of it. We have more space ... sort of more liveable space ... and we were able to put a trampoline in, so that's another thing they can go out and do on their own ... whereas previously [in an apartment] we didn't really have anything for them to play on. Also, if we're talking not just necessarily our back yard, we

can quite happily let them go out and play within the complex independently because it's all enclosed and we don't feel like we have to supervise them overly closely. (Townhouse participant, renter)

They can cycle, they can play on the trampoline, they can play tip, yeah there's a lot more in terms of space. So much more beneficial. And also, they're safe and secure. There's fences on either side and I don't have to worry about their safety. And they're visible from my back living area as well. (Detached house participant, renter)

Interviewees living in townhouses and detached dwellings were also much less reliant on public parks and playgrounds for their children's play than apartment dwellers:

During the week we don't take them anywhere else but home for play. Most afternoons, they'll come home and they'll play either in the back yard or in the common area. And if we're talking weekends, I'd say probably 75% at home play and 25% going to a park or somewhere else for play. (Townhouse participant, renter)

We use parks and playgrounds probably once a month. (Detached house participant, renter)

Street play opportunities

Many interviewees perceived opportunities for street play in Lane Cove to be lacking or limited, particularly those living in apartments where apartment blocks were situated along a main road; however, poor street play perceptions were not entirely restricted to apartment dwellers:

We live on Mowbray Road which is quite a busy road, so we've got like a basement car parking, which is sometimes good for riding bikes and things, but it's not ideal. So the whole idea of riding bikes and things in the street we definitely miss out on that. (Apartment participant, renter)

Street ... no, which is disappointing. On our street it's a busy street so we can't even put our kids outside on the footpath to ride their bikes. We have to pack up the bikes and go somewhere if they're going to ride their bikes. (Detached house participant, renter)

Health and wellbeing – comparisons

When asked about the effects of apartment living on health and wellbeing, apartment dwellers described their living arrangements as 'restricted' and 'intense' with accompanying negative mental health impacts on both themselves and their children:

I think of when I grew up, you could go out and explore and not have your mum and dad say, 'Don't touch that ... don't do this'. Being so restricted ... I think it's impacting the mental health of children and adults as they grow up because you live in such

a restricted environment you become this sort of shell of yourself. (Apartment participant, owner)

I think it's more intense when you're in an apartment with kids... and it sort of is crystalised when you think about the rainy-day experience. (Apartment participant, owner)

COVID-19 lockdowns intensified existing challenges for parents with children living in apartments, especially when parks, playgrounds and common areas were closed:

Especially during Covid, in terms of mental health, lockdown made it incredibly difficult because we were stuck at home and we couldn't access parks and they closed the common areas in the block where we stay so that meant we were really stuck in the apartment and it was really difficult. (Apartment participant, renter)

I didn't know if I could manage and stay sane [during lockdown] ... if I pulled him out of day care and I had ... a new-born and a little active toddler in a 2-bedroom space where we couldn't go out ... so I ended up packing up and going down to my mum's house which is freestanding, lots of space, back yard ... because that was a better trade-off than staying here. (Apartment participant, owner)

Comparatively, living in a dwelling with access to a private outdoor space was perceived to be significantly better for the health and wellbeing of both parents and children:

I think massively for both [benefits for parents and children]. In terms of the kids being able to engage in their own free play in nature and in a safe space. They can dig in our garden and do whatever they want. We've got some play equipment so they can do physical challenges and risk-taking fairly independently. And also for me, for my health and wellbeing, I can say it's ok if we're going to spend the whole day here because we can do some time inside, we can do some time outside. (Detached house participant, renter)

Consultation with children

Interviewees were generally supportive of consultation with primary school aged children around how their local neighbourhood environments are shaped, especially in regard to park and playground design, but questioned how much younger children would contribute:

I think so, definitely. Particularly in that primary to upper-primary group. From that level up. (Detached house participant, renter)

I've seen a number of new parks for example that have been built, and clearly this park was designed by people who don't have children ... so probably I'd say from 5, but anything below that I don't think that they would contribute that much. (Townhouse participant, renter)

Discussion

The urban consolidation model and households with children

While there are multiple dimensions to issues raised through the case study, [Figure 4](#) attempts to capture three of the most salient – policy, spatial and built-form dimensions – along with flow-on effects for families with children. Each dimension is underwritten by an image or ideal(ised) model of urban consolidation – a set of assumptions – which combine to marginalise children, both figuratively and literally (basement carparks as play areas).

Policy dimensions

In relation to policy dimensions, housing targets are a key lever in the NSW Government's urban consolidation armoury, yet they amount to a coarse measure, more concerned with the basic quantum of supply than the qualitative diversity of housing needs in different communities. There is growing evidence to suggest these targets are predominantly being met in Sydney through high-density development; in Lane Cove, targets are currently being exceeded, largely through supply of 1-and 2-bedroom apartments. This is reinforced by the reciprocally reinforcing relationship between market-led forces shaping housing trends (developers seeking the most profitable returns), and strategic planning efforts to implement consolidation policies underpinned by neoliberalism (Troy et al. 2020). In parallel, efforts to increase various medium-density typologies through the State Government's *Low Rise Housing Diversity Code* have been stymied at the local level through changes to Lane Cove's R2 Low Density Residential Zone: restrictions on height and lot size effectively preclude these typologies. The end result is an increasingly polarised housing stock – detached dwellings and high-rise apartments – where affordability constraints entail that, for many households with children, there is only one viable option: apartment living. Despite this, the presence of households with children in apartments figures only dimly, if at all, in Australian government policies, and is conspicuously absent in the marketing of new developments. This is consistent with the observations of Reid, Lloyd, and O'Brien (2017) and Karsten (2022) around the narratives shaping these markets, and the findings of Raynor, Mayere, and Mathews (2018) that 'city shapers' perceive apartments as luxury items, inappropriate for families with children. Sparsely supplied townhouses are also marketed as luxury items.

Built-form dimensions

In relation to built-form dimensions, the significant net dwelling densities being achieved in new

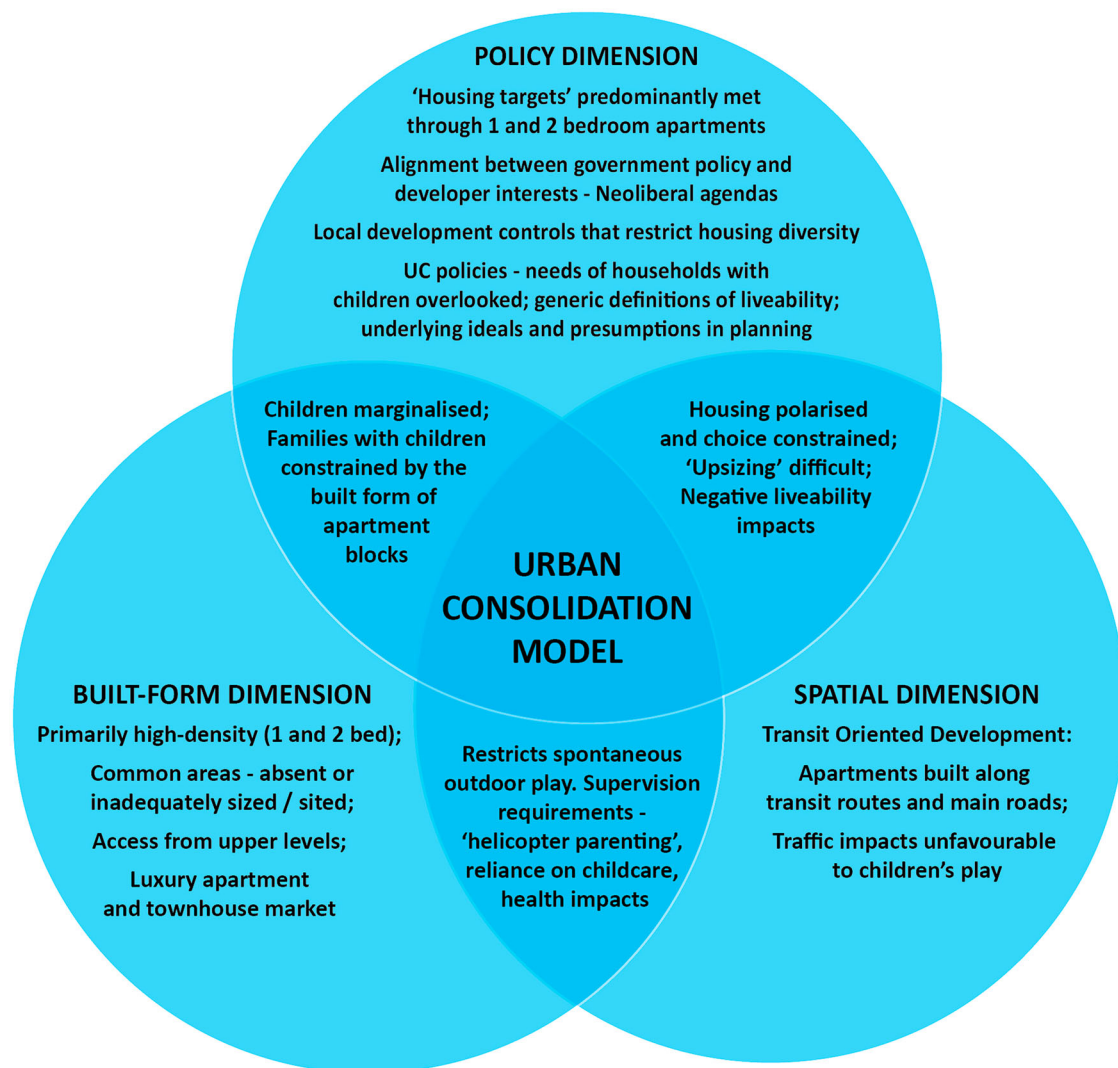


Figure 4. Dimensions of the urban consolidation model and associated impacts on families with children.

apartment blocks in the case study area (well in excess of 60 dwellings per hectare in buildings generally under ten storeys) suggest that apartment sizes are relatively small. The tendency to build close to site boundaries maximises yield at the expense of common outdoor areas at ground level; interviewees reported that children's spontaneous outdoor play is negatively impacted by inadequately sized and sited common areas, or the absence of common areas altogether. Karsten (2022) observed that children's play is commonly inhibited by inadequate play areas in high-rise developments more broadly in western-industrialised cities. Living on upper levels was also identified as a constraint to spontaneous outdoor play, where children cannot simply run outside and explore, suppressing their natural curiosity. Supervision pressures resulting from constraints to outdoor play was a common theme in the interviews. The requirement to continuously supervise children outdoors, particularly where apartments did not overlook common areas or where carparking areas become makeshift play areas, was associated with reduced liveability for women. All of this contrasts starkly with the experiences of

interviewees living in dwellings with private outdoor space at ground level, such as townhouses or detached dwellings.

Spatial dimensions

In relation to spatial dimensions, TOD approaches to urban consolidation are inclined to situate apartments on main roads and thoroughfares, precisely where parents might most fear for the safety and wellbeing of their children; interviewees suggested that apartment blocks on main roads diminish opportunities for their children's independent street play. The relative abundance of recreational spaces in Lane Cove – a crucial outlet for households living in apartments with children – does not necessarily increase the independence of children (or provide relief for parents) since their travel still needs to be supervised. Spatial dimensions, coupled to built-form dimensions, entail that children's outdoor play becomes highly scheduled and supervised, with few opportunities for casual, spontaneous, independent outdoor activity. Female interviewees reported spending large portions of

their days outside their apartments to overcome internal space constraints and meet their child's play needs, reinforcing findings by Andrews and Warner (2020) that apartment dwellers with children spent most of their time outside, and relied heavily on parks. A number of apartment dwellers advised they were using childcare and day care, where it was not otherwise required, as a substitute for private outdoor space.

Flow-on effects to other societal concerns

This research reveals that the lived experience of interviewees living in apartments with children – especially from the perspective of women – is stressful on multiple levels and suggests an experience that is at odds with the 'liveability' of high-density living as frequently promoted through policy. Negative effects of apartment living with young children (which largely stem from the barrier to spontaneous outdoor play and associated supervision requirements), flow through to affect many other current key societal concerns including mental health, the childcare shortage crisis (parents renting out play spaces for their children where supervision pressures in an apartment complex are too great), helicopter parenting (resulting from the need to constantly supervise), and screen time in children. In a sense, urban consolidation could be considered to be socially exclusionary from the perspectives of parents (especially women) and children.

Housing affordability, locational desires and 'trade-offs'

Lane Cove has a higher-than-average Socio-Economic Index (Noone 2017) and is therefore considered to represent a specific 'class' of people. Despite this, and despite the comparatively high amenity of Lane Cove, challenges still exist. Interviewees exhibited an ambivalent attitude towards housing affordability, shaped by the conflict between their desires to live in Lane Cove, and the reality of the housing market and highly polarised housing stock. In one sense, it was recognised the supply of apartments in Lane Cove enabled them to live in the area; in another there was a sense of resignation to the 'trade-off' required to live in Lane Cove, where townhouses and detached homes are beyond reach. Through interviews, it was found that lifestyle aspirations and connection to place play an important role in locational preferences. This is consistent with the findings of Andrews and Warner (2020) and Kerr, Klocker, and Gibson (2021). Karsten (2022) also observed that 'working parenthood' played a significant role in locational preference, illustrating the changing roles of women. There is a keen awareness that townhouses

are far and few between, expensive, and difficult to find, in Lane Cove and in Sydney more broadly. The area is desirable, attractive and green, but housing choice is restricted, as is perceived to be the case in Sydney more broadly. Interviewees claimed they would have to move much further away to live in a small house or a townhouse. Rather than functioning as a stepping-stone to upsizing to the next housing typology, there is a sense of becoming 'stuck' in an apartment.

Recommendations for planning policy

A significant increase in park-oriented, medium-sized dwellings with private outdoor space at ground level is recommended to provide more liveable housing options for families with children, and to potentially facilitate the transition between dwelling types. Housing supply should not be merely reduced to 'housing targets'; a more sensitive and fine-tuned measure is required. Introducing a percentage breakdown of the mix of dwelling types to be provided by councils is suggested, linked to the housing mix required to support socially diverse communities. Development controls at the local level should be revised to flexibly enable townhouse developments and subdivisions in existing low-density residential zones. Further, a minimum percentage of larger 3-bedroom apartments should be included in new high-density developments, at lower levels, for ease of access to the outdoors and which overlook on-site outdoor play spaces. Toronto's *Growing Up: Planning for Children in New Vertical Communities* (City of Toronto 2020) provides comprehensive design guidelines at the neighbourhood, building, and apartment scales to improve liveability and social inclusion for children. The City of Vancouver has developed similar guidelines. A further recommendation is to include children in consultation processes around how their local neighbourhood environments are shaped. While addressing the needs of families with children in high-density development is important, it should be emphasised that addressing the 'missing middle' is paramount in increasing liveability for this household type. Rather than papering over or retrofitting a 'solution' over the top of existing policy, the underlying policy itself should be reframed, and associated priorities shifted to recognise the importance of achieving a socially inclusive and liveable housing mix.

Conclusion

This research suggests urban consolidation policy is underpinned by a suite of 'rules' which work against households with children in the contexts of housing choice and affordability, liveability, and children's spontaneous outdoor play. 'Housing targets' channel

housing provision into predominantly 1-and 2-bedroom apartments resulting in a highly polarised housing stock, and housing diversity is being stifled at the local level. The ever-expanding gap in the Sydney housing market is currently being driven by an acceleration in transit-oriented high-density development in pursuit of meeting economic objectives, housing targets, and achieving the 30-minute city ideal, justified through the lens of sustainability and liveability. A significant increase in park-oriented, medium-density housing such as townhouses and semi-detached dwellings with private outdoor space at ground level, with flexibility in integrating these housing typologies into existing low-density residential zones, is recommended to improve outcomes in the above contexts. Comprehensive policies that address the needs of families with children in the context of higher density development are urgently needed across state and local levels. Urban consolidation policy needs to be reframed by planners and policy makers in order to achieve more socially sustainable outcomes.

Notes

1. Includes couple family with children and one parent families with children.
2. Family household types excludes group households, lone person households and other households.
3. Includes couple family with children and one parent families with children.
4. Family household types excludes group households, lone person households and other households.
5. Family household types excludes group households, lone person households and other households.

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