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Inclusive and collective urban home spaces: The future of housing in Aotearoa New Zealand

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Introduction

The world is urbanising rapidly; how this is done impacts significantly on the wellbeing of people, their families and communities – as well as on the wellbeing of the land they call home. Definitions of home are complex and contested (Brickell, 2012). The ways in which people understand and experience home are "both lived and imagined" (Phillips, 2009, 23); and are influenced by cultural, social and political contexts. Furthermore, understandings and experiences of home extend beyond the individual dwelling into "everyday experiences at the local scale", so the "notion of home space" can be used "to embrace the idea of both housing and the neighbourhood" or area (ibid). To understand home as extending into a neighbourhood or area underscores the importance of our collective environments and how urbanisation occurs (Boulton et al., 2022). Urban development must not only address capacity issues and environmental challenges, but it must also be meaningful and effective in how it responds to diverse cultural and contextual sensitivities at scale. New dwellings, neighbourhoods and connecting transport infrastructure must support the creation of home spaces in which individuals, their families and communities can flourish and where they can become willing, long-term stewards.

This paper focuses on housing and urban development in the context of Aotearoa New Zealand (Aotearoa). Although geographically isolated in the South Pacific and relatively small in terms of its population, Aotearoa is grappling with significant challenges not unlike those faced by other countries as it grows and develops (Howden-Chapman et al., 2017). Housing has become increasingly unaffordable and the historical dominance of low-density, single-family dwellings is failing to meet the diverse housing needs and aspirations of its population (Howden--Chapman et al., 2010; Witten et al., 2011; Early et al., 2015). There is increasing demand for a mix of high-quality medium density options for purchase and for renting (Opit et al., 2020; Page, 2017), including "collectively-oriented interventions" (Lawson-Te Aho et al., 2019, 2) and shared, multi-generational or socially-based tenure options. This demand extends to the realm of transport; collectively-oriented housing needs to be supported by collectively-oriented mobility so that the costs and benefits of different modes can be shared. Ideally, urban form should facilitate equitable access to viable, sustainable travel options, including public and active modes (Boulton et al., 2022). As part of its shift into a new era of building dwellings, neighbourhoods and connecting transport infrastructure, Aotearoa is also grappling with its colonial history and how to ensure that ingrained impediments within the foundations of legal and planning systems are addressed. Regrettably, European colonisation has had a substantial and largely negative impact on the indigenous people of Aotearoa, Māori, including their rights to home and their ability to exercise tino rangatiratanga - sovereignty and self-determination (Lawson-Te Aho et al., 2019; Amore et al., 2021).

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In this paper we respond to recent articulations of, and responses to, the growing housing and urban development challenges in Aotearoa particularly the newly released Government Policy Statement on Housing and Urban Development or GPS-HUD (HUD, 2021a). Our supportive critique of how these challenges are being addressed draws from relevant work already undertaken or underway by the authorship team, including from three government-funded multi-year and multi-scale community-based research programmes. The New Zealand Centre for Sustainable Cities is an inter-disciplinary research centre at the University of Otago, Wellington, dedicated to providing the research base for innovative solutions to the economic, social, environmental and cultural development of our urban centres. The Centre is currently undertaking a five-year research programme that examines and compares seven public housing organisations' arrangements for how they design and deliver housing and urban regeneration projects, with the aim of understanding how to optimise tenant and community wellbeing by providing effective and environmentally sustainable public housing. Similarly, Te Hotonga Hapori (Connecting Communities) is an Auckland-based five-year research programme investigating large scale, multi-billion-dollar urban redevelopment projects, with the aim of providing essential information to developers and policymakers to improve liveability, social cohesion and place-based identity through urban redevelopment. Building Better Homes, Towns and Cities (BBHTC) National Science Challenge has a mission to help transform dwellings and places where people live into homes and communities that are hospitable, productive, and protective. The BBHTC National Science Challenge team is embarking on a Kaupapa Māori (by Māori, with Māori, for Māori) and action-research programme called Huritanga mo te mauri-ora: regenerative system change for holistic urban wellbeing in an era of ecological emergency which focuses on developing tools, tactics and pilot projects that enhance holistic urban social, cultural and ecological wellbeing.

In the following sections we introduce Aotearoa to international readers, highlighting key similarities and differences between urban planning activity in Aotearoa versus comparable English-speaking countries: Australia, Canada, the United States of America (USA) and the United Kingdom (UK). Next, we review the current ambition of Aotearoa's sixth Labour Government to achieve "wellbeing through housing" (HUD, 2021a, 5), with a particular focus through the Crown company Kainga Ora - Homes and Communities on shifting the emphasis from stand-alone houses to more inclusive, collective and urban notions of home spaces, including housing models like co-housing, papakāinga and other shared, multi-generational or socially-based tenure options. Through such efforts, we propose that urban development will become more effective with regard to the creation of home spaces that respond to culturally diverse aspirations, support wellbeing and inspire environmental stewardship. Included are two illustrative vignettes highlighting Aotearoa developments that help to articulate key points and ground the arguments we put forward in empirical learnings. We conclude the paper with next steps for research, policy and practice in Aotearoa, and with some guidance on how the paper's arguments and findings or insights could be of value in other international contexts.

Context: Aotearoa New Zealand

The legislative statutes and practices related to conventional urban planning and housing in settler-colonial societies (like Aotearoa, Australia, Canada, and the USA) have failed to provide for the diversity of interests and needs in their heterogeneous communities, and for indigenous nations in particular (Barry and Thompson-Fawcett, 2020).

There are ingrained impediments within the profoundly colonial foundations of legal and planning systems in such countries. Behind these foundations was the desire on the part of early European settlers to formalise a sense of belonging in a new homeland. That resulted in the subjugation of indigenous legal traditions and principles, and the establishing of enduring Western structures that still undermine and eliminate indigeneity and diversity from the urban environment (Livesey, 2017; Kitson et al., 2022).

Upon arrival, British settlers in Aotearoa in the 19th and early 20th centuries commonly planned settlements using ideas such as grids, plans based on the Union Jack and garden cities adopted without appropriate adaptation. Over time, increased attention was given to planning to alleviate social problems such as 'urban slums', with statutory planning now almost 100 years old. The Town-Planning Act, 1926, designed to create the orderly arrangement of urban space, required local government to prepare town plans, and was based on the British planning model. The trajectory of planning's origins in the country were similar to the settler-colonial experience elsewhere.

Subsequent planning legislation has become more tailored to the local situation (especially via the Resource Management Act, 1991 (RMA) and the Local Government Act, 2002), but it is only relatively recently that attention has been paid to exploring the possibilities of other ways of co-existing, co-governing, and co-planning for the built environment and social and cultural wellbeing in that space (Thompson-Fawcett et al., 2018). Most significant in bringing about this shift have been concerted efforts to better honour The Treaty of Waitangi (the founding agreement between the Crown and Māori tribal chiefs). There is now a more positive trajectory towards decolonisation of the planning sphere in Aotearoa in order to fulfil Treaty obligations. Planning-related legislation and practice is also better at enabling innovation in collaborative endeavours in urban planning and housing – although without guarantee (Thompson-Fawcett et al., 2022; Tribunal, 2014).

In September 2021 and in response to growing housing and urban development challenges facing Aotearoa, the sixth Labour Government released a Government Policy Statement on Housing and Urban Development (GPS-HUD). The GPS-HUD stated that "the homes and communities we live in are the foundation of our wellbeing" and that "a focus on housing is a priority". Minister of Finance (Hon Grant Robertson) and Minister of Housing (Hon Dr Megan Woods) introduced the GPS-HUD as "a strategy and direction to align the work" across Aotearoa's housing and urban development system (HUD, 2021a, 3). The authors of this paper responded to a call for organisations and individuals across the country to input into development of the GPS-HUD's vision, outcomes and focus areas. While supportive of the Government's ambition to be transformative by envisioning a future in which "everyone in Aotearoa New Zealand lives in a home, and within a community, that meets their needs and aspirations" (HUD, 2021a, 5), we argued in our submission that something more ambitious was needed if Aotearoa's future is genuinely to be transformed beyond the conventional. In our view the GPS-HUD should have committed to increasing the supply and diversity of high-quality medium-density housing models - particularly shared, multi-generational or socially-based tenure

¹ For more information about the Public Housing & Urban Regeneration Research Programme, see the NZ Centre for Sustainable Cities website: https://www.sustainablecities.org.nz/our-research/current-research/public-housing-urban-regeneration-programme

² For the purposes of this paper, 'The Treaty' is intended to encompass both the English language version and the Te Reo Māori version of The Treaty of Waitangi. Te Tiriti o Waitangi is usually used to refer specifically to the Te Reo Māori version. In international law, the Te Reo Māori version has legal precedence, whereas in domestic law, both versions are to be considered. The crucial difference between the two texts is that in the Māori language version, tino rangatiratanga (or, sovereignty of iwi and hapū Māori) was recognised, whereas in the English text, sovereignty was granted to the Crown. For further information, see the Waitangi Tribunal's 2014 report on Stage 1 of the Te Paparahi o Te Raki Inquiry (Tribunal 2014), and He Puapua: Report of the Working Group on a plan to realise the UN Declaration on the rights of Indigenous Peoples in Aotearoa/New Zealand (Charters et al., 2019).

options, with priority consideration given to those developed by and for Māori, the indigenous people of Aotearoa New Zealand. Such a shift requires the Government and other actors in the system to transform conventional approaches to implement, at scale, urban development that reflects unique cultural values and prioritises inclusivity and self-determination across diversifying housing needs.

Current ambition: wellbeing through housing

Aotearoa's housing and urban development patterns to date have echoed those of other settler-colonial societies, particularly those of Australia and the USA. Where growth has occurred in the post-WWII era - largely in northern cities, such as Auckland, Hamilton and Tauranga this growth has tended toward suburban sprawl (Buckenberger, 2012). However, driven by the current shortage of affordable housing, rapidly rising land and house prices, pressure on infrastructure, declining availability of developable land, and the necessity outlined in Aotearoa's "Zero Carbon" Act 2019 to reduce the country's carbon emissions by 2030, there is an urgent need to prioritise more sustainable, compact development models. Buildings and transport together make up half of Aotearoa's carbon consumption (Grant et al., 2021; Page, 2017). International research shows that in cities where housing density is higher, houses use less domestic energy (Cretzig et al., 2015). Research also shows that significant carbon reductions alongside health benefits can be achieved through active travel (walking and cycling) instead of reliance on private vehicles (Chapman et al., 2018). With the growing awareness of need for carbon neutrality, and in light of a housing shortage and high costs of living, the patterns and preferences of residential density and locations are changing rapidly in Aotearoa. Nonetheless, residents, developers, planners and local and central governments have a variety of views on these trends, so the shift towards more complex, sustainable cities is often a complicated, contested and uneven process.

Not only is Aotearoa grappling with environmental and economic challenges, but it is also experiencing a population growing in both numbers and diversity, with increasingly various aspirations and needs. Furthermore, and as touched on in the previous section, the Crown is legally bound to Māori by The Treaty of Waitangi. Signed in 1840, The Treaty has not always been interpreted or used equitably; but its enduring commitments have increasingly taken centre stage since the 1960s and 1970s; when international decolonisation efforts, the Civil Rights Movement in the USA, and the United Nation's human rights endeavours began to shift attitudes in Aotearoa (Orange, 2015):

[The Treaty] established certain rights and obligations, and undoubtedly raised the expectations among Māori of what the new 'colonial' and 'national' regime would mean and how it would operate. But New Zealand's colonial operating system ultimately arose in isolation... Only in the modern context has it become a recognised reference point for specific rights. The 'shared governance', for example, took literally over 150 years to find meaningful expression.

(Rigby, 2019, 68)

While it "is silent on housing", The Treaty nonetheless underpins Aotearoa's "democratic commitment to universal welfare" and the need to address the systemic inequity to "all forms of housing" that Māori face (Rigby, 2019, 67-70). Furthermore, Article Two of the Treaty requires "that Māori are able to exercise tino rangatiratanga... being in control of individual and collective destiny" (Came et al., 2018, 35): an important commitment with regard to health and wellbeing, and also with regard to housing and the environment (as exemplified in the recent papakāinga development – Kāinga Tuatahi – see Table 2, (Figs. 4 and 5).

All New Zealanders need to be in control of their own destiny through equitable access to a diversity of housing types and locations in which to create their homes; travel to and from work and education; and be part of thriving, connected and inclusive place-based communities. Research indicates that there can be important wellbeing and sustainability benefits associated with compact, walkable development providing high-quality medium density options – oriented around public transport – in-between low density single-family detached houses and high-density inner-city apartments (Howden-Chapman et al., 2017; Kearns et al., 2017). Aotearoa urbanites increasingly prefer living in more compact cities that reduce travel times to work, school and amenities and encourage active travel – such as walking, cycling and using public transport – which also keep housing and transport more affordable (Howden-Chapman et al., 2017). Throughout the country, demand for medium-density housing is strong and increasing (Opit et al., 2020; Page, 2017; Bryson and Allen, 2017). Further, demand for multi-generational housing and shared or socially-based tenure options is growing (Waa et al., 2017).

In response to these challenges and evolving housing needs, the Government has established a vision for the future in which "everyone in Aotearoa New Zealand lives in a home, and within a community, that meets their needs and aspirations" (HUD, 2021a, 5), with a key outcome being "wellbeing through housing", articulated in more detail as the following:

Everyone lives in a home, whether rented or owned, that is stable and affordable. The quality, accessibility, size, and features of our homes support people and families to live healthy, successful lives.

(HUD, 2021a, 5)

The Government has also recently introduced a Bill for more housing supply in main urban areas, which proposes amendments to the RMA. This Bill consists of an Intensification Streamlined Planning Process (ISPP) to help local councils implement government-mandated intensification policies quicker, as well as Medium Density Residential Standards (MDRS) which allow the development of up to three homes of up to three storeys on most sites without the need for resource consent (an energy-intensive process assessing developments against the RMA that has previously inhibited intensification). Such endeavours are of course complex and contested. Alongside frameworks, streamlined processes and intensification standards, on-going attention and resources must be given to respond to ever-diversifying cultural and contextual sensitivities. Achieving wellbeing through housing is complex and cannot be isolated from the need to support tino rangatiratanga or selfdetermination when it comes to securing inclusive, collective, urban home spaces - including the quality and accessibility of a dwelling's surrounding neighbourhood and any local communities that may or may not form in relation to that neighbourhood (Mouratidis, 2018; Leyden et al., 2011; Olin and Thompson-Fawcett, 2021).

If abided by, the Government's above-stated vision could go some way toward supporting self-determination, and particularly for Māori exercising tino rangatiratanga with regard to housing and the environment. The Māori and Iwi Housing Innovation – Framework for Action (MAIHI) and MAIHI Ka Ora – the National Māori Housing Strategy directly relate to the articles of Te Tiriti; they provide a stronger basis than previous efforts for supporting and enabling tino rangatiratanga. As the GPS-HUS is intended to be implemented alongside MAIHI Ka Ora, this is a promising beginning to delivery of policy that enables rangatiratanga Māori (HUD, 2020; HUD, 2021b; Kake, 2021).

It is essential that when discussing the impact of housing on well-being, due consideration is given to what wellbeing means to different people and cultural groups, such as migrants from the Pacific, who also favour housing that supports multi-generational families. In Aotearoa, priority consideration should be given to Māori. The prevailing model of wellbeing presented by the Government is the Treasury's Living Standards Framework (LSF), first released in 2018 (The Treasury NZ, 2021). The LSF is broadly based on the OECD Better Life wellbeing framework, and presents a model for viewing and comparing various factors related to people's choices and opportunities to live the lives they value —

including health, education and income. The 12 initial domains were civic engagement and governance, cultural identity, environment, health, housing, income and consumption, jobs and earnings, knowledge and skills, time use, safety and security, social connections, and subjective wellbeing (ibid.).

One of the acknowledged limitations of the 2018 LSF was that it was largely individualistic and non-geographic in nature. While individual wellbeing domains will contain elements that resonate with many Māori, traditional Māori conceptualisations of hauora and oranga (holistic health, wellbeing and life) are grounded in the collective and in the wider environment (McIntosh et al., 2021; Sutherland and Adams, 2019). Indeed, most indigenous models of wellbeing consider aspects that extend beyond personal wellbeing, such as spiritualism, environmental wellbeing, and cultural wellbeing (Panelli and Tipa, 2007; Ryks et al., 2019). Notions of individual wellbeing may therefore not capture the full meaning of wellbeing for many Maori, or indeed for others within Aotearoa's diverse population. Further complexity is introduced when one considers that Māori are not a homogeneous group, and they should not be treated as homogeneous within the urban context (Ryks et al., 2016). For example, Auckland Council recognises 19 tribal authorities as representing Mana Whenua (Māori tribal groups) interests in Tāmaki Makaurau (Auckland). There is likely no one model of wellbeing that applies to all Māori, nor to any other cultural group.

There have been some attempts to define and measure collective wellbeing in Aotearoa. In Te Kupenga – Tatauranga Aotearoa Statistics New Zealand's survey of Māori wellbeing (Stats NZ 2018) – key statistics are provided on four areas of Māori cultural wellbeing: wairuatanga (spirituality), tikanga (Māori customs and practices), te reo Māori (the Māori language), and whanaungatanga (social connectedness). Te Kupenga's content recognises practices and wellbeing outcomes that are specific to Māori culture, such as the knowledge and use of the Māori language, connection to marae (the open area in front of the wharenui or communal house, where formal greetings and discussions take place) and tūrangawaewae (place where one has rights of residence and belonging through kinship and genealogy), and whānau (family and extended family) wellbeing. Te Kupenga provides a picture of the social, cultural, and economic wellbeing of Māori in Aotearoa, including information from a Māori cultural perspective.

In response to these issues, the LSF was revised in October 2021 to update the framing of the 12 wellbeing domains, and to incorporate key elements of te ao Māori (the Māori worldview), Pacific Peoples perspectives, and child wellbeing (The Treasury NZ, 2021). This includes aspects of collective and environmental wellbeing, and moves the LSF away from a solely individualistic approach. The purpose of these developments was to ensure the LSF is relevant and responsive to broader concepts of wellbeing held by many Maori and Pacific Peoples, but it is important to note that they do not replace in-depth frameworks, such as the He Ara Waiora model and the Whanau Ora framework. He Ara Waiora was initially developed in 2018 with the Tax Working Group of Treasury and presents a holistic, inter-generational approach to wellbeing. Whānau Ora is a framework based on the principles of The Treaty, centring Māori whānau in a holistic Kaupapa Māori wellbeing approach that links across a range of services and empowers Māori-led providers. Launched by the Government in 2010, Whānau Ora is aimed at reducing inequities in wellbeing for Māori, grounded in te ao Māori (Dormer 2014; Kara et al., 2011; Lawson-Te Aho et al., 2019). These and related endeavours involve processes of engaging with and empowering iwi and Māori across Aotearoa.³ When wellbeing frameworks are derived from mātauranga Māori (Māori knowledge) and take a tikanga-based (cultural practices) approach, their relevance can extend to lifting the inter-generational and collective wellbeing of all New Zealanders

(McMeeking et al., 2019). For example: What are the living standards that New Zealanders value? Are they the same for everyone? How well equipped is the public service to understand what living standards mean to a wide range of New Zealanders? How might equitable access to certain living standards be ensured, for example through implementation of MAIHI Ka Ora? Might we be able to learn and apply lessons from cultures other than the dominant one? A wide scope of issues needs to be considered when formulating housing and urban development policy and practice that effectively contributes to Māori and other cultural groups' wellbeing. If housing policy and practice continue to be calibrated on individual models of wellbeing, Aotearoa may miss the opportunity to enhance wellbeing for Māori and the diversifying range of its inhabitants; and potentially even cause harm to aspects of wellbeing that have been overlooked. Resolving the current lack of clarity around what domains of wellbeing are impacted by housing, and which of these domains are most meaningful to Maori and others from different backgrounds, should be a key priority.

Inclusive and collective urban home spaces

Inclusive home spaces

Supporting and enabling a thriving future for all New Zealanders requires an inclusive and critical approach to 'home' that incorporates understanding of culturally and geographically situated notions of home or home spaces and neighbourhoods, with particular attention given to enhancing wellbeing for Māori and for a diversifying population. This requires thinking outside of conventional models of urban development to better acknowledge unique values and facilitate different housing and tenure options that support equitable access to good-quality housing. A recent development at the Waimahia Inlet in Tāmaki Makaurau (Auckland) highlights what can be achieved through innovation in collaborative endeavours in urban planning and housing (Table 1, (Figs. 1–3).

Collective, connecting home spaces

There is a growing body of evidence showing that collaborative, socially-based or multi-generational typologies – such as co-housing and papakāinga – confer positive health and wellbeing benefits as they support social connectivity (Carrere et al., 2020; Khatibi, 2021). In addition to providing social potential for individuals, collaborative housing models may also be valuable tools for neighbourhood regeneration as they support wider community connection and activation (Fromm, 2012).

In terms of human emotional wellbeing, quality social relationships are understood to be fundamental to thriving. Social isolation and loneliness is a significant public health factor associated with risk for psychological and physical wellbeing (Holt-Lunstad, 2017). Studies show high levels of loneliness globally with the current Covid-19 pandemic and lockdowns further amplifying this effect (Wu, 2020). Loneliness is also highly detrimental to physical health, increasing the risk of raised blood pressure, obesity, and reduced immunity (Cacioppo et al., 2015). The health effects of social isolation can be indexed against other known risk factors - loneliness has an effect equivalent to heavy smoking (up to 15 cigarettes a day), physical inactivity or obesity (Holt-Lunstad et al., 2010). Social network sizes are decreasing, while the number of single occupancy homes are higher than ever (Holt--Lunstad, 2017). Physical isolation – living alone, working alone – can amplify loneliness and coincident physical ill-health effects (Heu et al., 2020).

Yet the conventional built form of contemporary cities, neighbour-hoods and housing models in Aotearoa has emphasised individuated housing types, stand-alone homes for nuclear families, or individual private apartments. Such housing types prioritise private space with minimal communal or shared space and thus reduce opportunities for

 $^{^3}$ Other frameworks also exist that account for wellbeing from a te ao Māori perspective, e.g. Te Whare Tapa Whā, Te Wheke, Te Pae Mahutonga and The Māori Report 2020.

Table 1The Waimahia Inlet development.

The Waimahia Inlet development, completed in 2018, was a response to an undersupply of affordable housing in Tāmaki Makaurau (Auckland) and diminishing opportunities for home ownership, particularly for Māori and Pacific households. Māori home ownership rates had dropped by 31.7% and Pacific rates by 37.8% between 1991 and 2013 compared to a less than 10% decline amonast European ethnic groups (Stats NZ 2016). The 295 dwelling, mixed-tenure complex was built by Tāmaki Makaurau Community Housing, a consortium of Māori organisations and community housing providers. The consortium's goal was to provide affordable, good-quality housing, primarily for lower income Māori and Pacific families. On completion, 70% of homes were assisted homeownership (shared-equity and rent-to-buy) or retained by the community housing providers as affordable rentals. Private ownership made up the other 30%. Of all households 50% were Māori and 15% Pacific. The project was enabled by an agreement between Crown and Ngā Mana Whenua o Tāmaki Makaurau (the Tāmaki Collective, a consortium partner). The site was purchased under the terms of the agreement which guaranteed the Collective the right of first refusal on Crown land intended for sale. The Crown also provided financial input in the form of a \$29 million grant which gave the consortium working capital to begin the development (Witten et

The development is a mix of duplexes, detached homes on small sites and small apartments blocks. The developer had an explicit goal to foster a supportive community and prioritised shared community spaces over private outdoor space. Pocket parks and playgrounds, walkways and native planting, and shared community and day care centres were included in the development to encourage interaction between neighbours. Sustainability features were incorporated into the street and housing designs and the developments' stormwater system. While walkability within the development is good the overall sustainability of the development from a transport perspective is limited by its location on the urban periphery where public transport services are infrequent

The development has fostered a strong sense of community amongst residents (Witten et al. 2020). It has also successfully fostered home ownership for Māori and Pacific households. However, given the rapid rise in house prices since the houses were completed, participants in shared equity schemes have been financially advantaged over those in rent-to-buy schemes.



Figure 1: Waimahia Inlet – aerial photo. The development runs off Weymouth Road, South Auckland and fans out on both sides of Kaimoana Street bordering an estuary of the Manukau Harbour.



Figure 2: Street frontages of the Waimahia Inlet development (photo by Karen Witten)



Figure 3: Common green space and play equipment in the Waimahia Inlet development (photo by Karen Witten)

public or neighbourly exchange. In contrast, co-housing, collective or collaborative housing models are designed with a specific goal to enable community connection through a range of different physical and social mechanisms. This is not to say that everything within a collaborative housing model must be communal or shared:

[A] lesson that emerges from community-oriented housing models in countries such as Denmark and Sweden... is that privacy and private spaces are also important to wellbeing, and need to be safeguarded. The two are not mutually exclusive so long as an appropriate balance can be struck.

(Berghan, 2020, 142)

Nevertheless, social connection is also shown to be a key determinant of wellbeing in urban environments (Leyden et al., 2011; Kelly et al., 2012). At the scale of housing developments, social connection can be supported through the design of movement patterns and spatial

relationships to increase social interfacing – for example through shared pathways in terrace housing, or shared entry lobbies in medium-density housing. Shared common spaces such as communal dining rooms, laundries or outdoor areas – when provided alongside sufficient private spaces – increase the potential for social interaction and connection (Carrere et al., 2020; Khatibi, 2021; Glass, 2013).

The neighbourhood – as the site of one's home – has a key role in establishing a sense of connection as social interactions tend to be denser proximate to home (Kelly et al., 2012; Helliwell and Wang, 2011). At a neighbourhood level, collective housing models can enable higher density developments – individual home units can be reduced in size due to the spatial affordances of communal utilities such as shared eating spaces, laundries, outdoor areas. Denser neighbourhoods that also support walking can enhance social connection and formation of social networks (Van den Berg et al., 2017).

Māori collective housing models can also help to build and facilitate cultural connection. Papakāinga that are located on ancestral land can

Table 2Kāinga Tuatahi papakāinga development.

Kāinga Tuatahi is a 30-home papakāinga located in Tāmaki Makaurau (Auckland). Developed by (and for) the Ngāti Whātua Ōrākei hapū, the papakāinga is the first stage in a long-term vision of reestablishing a vibrant hapū community in Ōrākei.

Construction the papakāinga was completed in 2016 and comprises three standalone homes alongside 27 terraced houses clustered in small groups. The homes range in size from two to five bedrooms and are connected by shared lanes, māra (communal gardens) and play areas for tamariki (children). The layout of the homes and shared spaces was designed to support social interactions and provide the infrastructure to easily enact kaitiakitanga and whanaungatanga among residents.

Homes were only available to hapū members to buy, and mortgages were financed by the hapū (communities) themselves. While individual whānau (extended families) own their own homes, the land is retained in collective hapū ownership with whānau holding long-term leases for the land on which their homes sit.



Figure 4: Käinga Tuatahi – aerial photo (shown in colour). Located in Ōrākei, Auckland, the development is divided by Kupe Street down the centre, with the East Block (12 units) on the right of Kupe Street, and the West Block (18 units) on the left.



Figure 5: Kāinga Tuatahi (East Block) – communal playground and māra kai, with a bridge over the stormwater swale in the foreground; demonstrating a shared economy amongst twelve households.

help whānau connect (and reconnect) with the wider cultural landscape simply by being on the whenua (land) of their ancestors, by walking the same paths as their ancestors, or by having visible sightlines to important landmarks such as maunga (mountains) (Berghan, 2020). Notwithstanding, Māori residents of papakāinga who are not on their own ancestral land can still benefit from living collectively amongst other Māori where they can hear and speak te reo (language), as well as share knowledge and practices. Embedding collectively-minded housing and urban design strategies provides the physical infrastructure to enable those cultural connections and interactions to take place with ease. A recent papakāinga development – Kāinga Tuatahi – Tāmaki Makaurau (Auckland) illustrates a staged approach to achieving co-benefits through a Māori collective housing endeavour Table 2, (Figs. 4 and 5).

Collectively-oriented collaborative housing such as papakainga and co-housing is strongly associated with access to social support and a sense of community, an important scaffold to wellbeing (Markle et al., 2015; Tchoukaleyska, 2011). A range of studies show that such housing models offer diverse wellbeing benefits (Carrere et al., 2020). Public health and urban regeneration perspectives hold that collaborative, multi-generational and socially-based typologies are powerful tools to enhance wellbeing through housing (Lubik and Kosatsky, 2019). Despite compelling evidence for the benefits associated with papakāinga and other collective housing models, a range of barriers stand in the way of their establishment across Aotearoa. Such barriers exist across multiple domains and can include legal issues with land tenure, outdated or homogenous district plans and associated lengthy resource consenting processes, and risk-averse financial institutions that prefer to back 'normal' commercial developments. Yet these and other barriers need not be so prevalent or insurmountable:

[I]t is entirely possible for local governments to identify the barriers to hapū [clans or descent groups] and iwi sustainable development, and to act to reduce or eliminate them – for instance, by ensuring that planning rules treat kāinga or cluster housing as 'normal'...

(Stuart, 2010, 105)

At a national level, the Government is beginning to signal support for papakāinga and other collective housing models through the GPS-HUD and other policy initiatives, and through Kāinga Ora – Homes and Communities, so that enabling pathways can be better supported and facilitated at the local level. Normalising collective models at a government level can spur positive change and minimise barriers, leaving Māori and non-Māori collectives to worry about the things that are important (e.g., not battling regulations and so on).

Moving in and around urban home spaces

Alongside the built environment, how we move around is increasingly recognised as a contributor to wellbeing. For example, urban form that clusters housing around schools can support active transport (walking and cycling for transport) with its associated health and social benefits. A recent study of schools in Dunedin, Aotearoa found that adolescents who enrolled in the closest school had three times higher rates of walking as part of their journey to school, five times higher rates of only walking or cycling, and lower rates of reliance on motorised transport (Mandic et al., 2017). Those living within walking distance of their school, less than 2.25 km, accumulated an additional 11.5 daily minutes of physical activity, and those who lived within cycling distance, up to 4 km away, accumulated 5.5 min of additional physical activity daily (Keall et al., 2020). The sprawling urban form of some Aotearoa cities is a likely contributor to low rates of walking and cycling compared to cities where public transport networks support a more compact urban form (Shaw et al., 2018).

As well as their dwellings and immediate neighbourhoods, people are exposed to multiple environments near and far; in their everyday

lives (Poom et al., 2021) and over the course of their life (Douma et al., 2021). For Māori, 'home' incorporates multiple scales and spaces:

The multi-faceted nature of home, particularly for urban Māori, can be expressed in the phrase 'kāinga tahi, kāinga rua' (literally, first home, second home). This phrase recognises that for some Māori, they have multiple homes. Their current residence (kāinga rua, often in a city or urban area) may be away from their ancestral whenua or homeplace (kāinga tahi).

(Berghan, 2021, 6)

Having transport options that allow Māori to 'return to home' or to 'kāinga tahi' is seen as an important way of reinforcing through physical presence the spiritual ties to land, nature, and people (Boulton et al., 2022; Berghan, 2021). For 'home' to contribute to wellbeing, therefore, our thinking about home spaces will need to incorporate inclusive, sustainable transport that facilitates mobility across these multiple scales and spaces without leading to transport disadvantage.

A collectively-oriented mobility approach encourages us to think about how the costs and benefits of car travel can be shared to enable journeys that are not viable in other modes. Urban form ideally should facilitate viable options for travel so that people can match the mode of travel with the scales and purposes of journeys (Boulton et al., 2022). When people do not have access to modes that allow them to travel where and when they need to, or use of those modes are onerous, transport limits the capacity of people and communities to be well. For example, travel to distant marae to 'return to home' (Boulton et al., 2022; Berghan, 2021) requires a car when they are not served by public transport. If vehicle purchase and maintenance costs are prohibitive, participation in marae life is restricted to those who can afford it or those who make sacrifices in other areas of life.

Getting to non-local places can become more significant for well-being as seasons change. Inclusive transport should support travel beyond the neighbourhood (for example) to forage in native forests and waterways, take holidays, and participate in celebrations as ways of growing and maintaining connections with nature, people, and traditions. Such geographical life-spaces (Douma et al., 2021) can also expand and contract over the life-course. Youth typically transition outside of the home and neighbourhood as they participate in education and the workforce if they have the mobility means (Raerino et al., 2013; Hawley et al., 2020). As we age, geographical life-spaces constrained by disability (for example) can lead to poorer wellbeing if needs cannot be met in other ways (Douma et al., 2021). Our current research seeks to understand how collectively-oriented housing needs to be supported by collectively-oriented mobility so that the costs and benefits of different modes can be shared.

We can also think about how mobility can offer ways of connecting through collectively-oriented housing. Gatrell (2013) proposed the concept of therapeutic mobilities – that the act of moving in and through spaces as a therapeutic environment. Mobility can promote wellbeing through whanaungatanga, or connection with others, through the act of travelling together (Haerewa et al., 2018); because of who we travel with and for (Raerino et al., 2013; Jones et al., 2020; Rau and Sattlegger, 2017); and how we shape norms about what 'good' mobility looks like (Hawley et al., 2020; Fitt, 2018). Mobility using active modes is also recognised as a way of connecting with the environment. Streets can be 'Third Places', where moving along familiar streets and public places with good quality environments can foster a sense of belonging and wellbeing (Ivory et al., 2015). Walking and cycling can help connect people with the land and express kaitiakitanga (guardianship) for the environment (Jones et al., 2020).

How we choose to urbanise impacts measurably on the wellbeing of people, their families and communities, and on the land they call home. Remembering that how people define home is complex and contested (Brickell, 2012), and that home spaces extend beyond individuals and individual dwellings into the surrounding family or community and

neighbourhood or area (Phillips, 2009), it is essential that inclusive, collective, urban approaches lead the housing and development future of Aotearoa. Comprehensive planning and design of housing, urban form and transport in our neighbourhoods allow us to move along together comfortably and safely as well as to be together; with others and with nature. Processes that explore inclusive ways of co-existing, co-governing, and co-planning so the built environment supports social and cultural wellbeing will help shift Aotearoa towards a more complex, sustainable urban future with a thriving diversity of home spaces.

Conclusion

This paper has reviewed, assembled and interpreted relevant research for the purpose of highlighting wellbeing benefits that could arise in Aotearoa through efforts to enable the creation of inclusive, collective, urban home spaces. The authors challenge readers to entertain out-of-conventional housing approaches for the future of Aotearoa as it grows and develops. To achieve its transformational goal of "wellbeing through housing" (HUD, 2021a), the Government must sustain and build on its current efforts to shift away from the stand-alone house to more inclusive, collectively-oriented, medium-density urban housing models: co-housing, papakāinga, and other shared, multi-generational or socially-based tenure options. To better implement, at scale, urban development that reflects diverse cultural values and meets different housing and tenure needs, particularly those of Māori and Pacific, this shift needs to happen in an inclusive, equitable and self-determined way.

Internationally, the legislative statutes and practices related to urban planning and housing in comparable settler-colonial societies could take heed of the shift underway in Aotearoa to better provide for the diversity of interests and needs of heterogeneous populations, and of indigenous populations especially. On-going public recognition and reparation of ingrained impediments and systemic inequities reverberating from such countries' colonial foundations is required in order for a sense of belonging and home to be accessible to their full range of citizens and residents. Planning-related legislation and practice needs to be better enabling of innovative, collaborative endeavours in urban planning and housing. For example, the Government's attempt to define and measure collective wellbeing through Te Kupenga (Stats NZ, 2018) and revise its approach to the LSF (The Treasury NZ, 2021) helps to shift the country including its liveability, housing and urban development targets – away from a solely individualistic approach. New frameworks, streamlined processes and intensification standards are also underway to enable a more urban future for Aotearoa, yet the success of these endeavours will depend on whether or not they are interwoven with effective methods to realise built environments that are responsive to cultural and contextual sensitivities. Equitable policies and processes need to support the creation of high-quality home spaces that people, their families and communities can flourish in and become willing, long-term stewards of both in Aotearoa and abroad. This includes ensuring that individual dwellings are designed in coordination with their surroundings and that occupants have equitable access to sustainable, active and public transport modes, and community infrastructure - such as shared gardens or outdoor play areas - as well as daily services and amenities required to support individual and community wellbeing in a neighbourhood environment.

Immediate research priorities are to continue to explore how well-being can best be supported by housing and urban development, with a particular focus on understanding and supporting Māori wellbeing through high-quality housing design processes that enable the exercise of tino rangatiratanga, support the establishment of papakāinga or cluster housing, and lead to equitable outcomes. Evaluation of the proposed and newly introduced changes to Aotearoa's planning settings is also required to establish the impacts of intensification and different medium-density or collectively-oriented designs on individual, whānau, community, social and environmental wellbeing; which can provide

innovative examples for indigenous populations in other countries. Such evaluation will be critical to ensure that changes being made now will have the desired effect of embedding wellbeing outcomes in any approach to altering or intensifying the neighbourhoods and areas that an increasing, diversifying number of people call home.

Declaration of Competing Interest

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