



# Design for Wellbeing

How we design for and measure wellbeing in the built environment.

2023

**Georgina Blix**

# Contents



The Byera Hadley Travelling Scholarship Journal Series is a library of research compiled by architects, students and graduates since 1951, and made possible by the generous gift of Sydney Architect and educator, Byera Hadley (1872-1937). Byera Hadley was a distinguished educator and NSW architect.

As Lecturer-in-Charge of the architecture course at Sydney Technical College, Hadley built “one of the finest schools of architecture in the Empire” and is credited with gaining Royal Institute of British Architects (RIBA) recognition of the course, which gave post-1923 graduates exemption from the RIBA examinations.

As an architect in private practice, Hadley drew from a wide range of revival styles in his designs for significant urban and suburban commissions, which included two town halls, several multi-storey city warehouses, numerous suburban churches and Sydney University’s original Wesley College and chapel.

Hadley’s “greatest contribution to NSW architecture remains his insistence on the importance of travel in Australian architectural training.” In 1928 and 1929, Hadley sponsored two £25 scholarships through the Board of Architects of NSW. The success of these must have provided the catalyst for his 1937 bequest.

The Byera Hadley Travelling Scholarships have been awarded since 1951 as a result of the Trust established by the Byera Hadley estate. The list of scholarship recipients over the years includes many architects who have contributed enormously to the profession and the broader community.

The Scholarships are awarded annually and administered by the NSW Architects Registration Board (the ‘NSW ARB’), in close collaboration with Perpetual as trustee.

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Georgina Blix was awarded the Byera Hadley Travelling Scholarship in 2023.  
Cover image: Little Island, New York  
Photo by: Georgina Blix

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London Southbank Centre, You Belong Here Public Art programme inspired by artist Tavares Strachan

## Introduction

This research is focused on how housing and our neighbourhoods impact personal and community wellbeing. It looks at mixed use areas of a thriving community where housing, business and community spaces bring together a wide range of ages, backgrounds and strengths. It aims to understand what is considered when we design for wellbeing at this scale, and how are countries across the world measuring wellbeing.

This report is pitched as a practical guide to start considering wellbeing in architecture. It has been written for anyone who is part of creating the built environment. Developer, planner, council, architect, researcher or member of the public; we all have a role to play in considering wellbeing of our community.

Typing 'wellbeing+ architecture' into Google can be a daunting task revealing a murky world of spas and lip service. This guide will help to make wellbeing in architecture more accessible, and more grounded in evidence and data. I also hope this work helps to break down the silos of thinking and research to help create fluid intelligence, and more systems based connections in this area of work. It will provide insight into the spectrum of research available, the current wellbeing regulatory context and help to identify some of the missing holes in our knowledge.

Wellbeing is a complex construct, unique to every person and collective. Whilst I would love to provide one definitive and simple framework that could apply to every situation, this research scholarship has shown me that may not be possible or even desirable. Instead, this research will provide practical insight on the best design processes that support wellbeing. It will provide inspirational case studies on projects that have focused on wellbeing and propose a more wholistic design framework for clients and architects to apply to their projects. This work will contribute to a rich ecosystem of research in this area, help us to avoid wellbeing washing and hopefully inspire even greater sharing of information across the world to tackle our common housing challenges.

Now is the time to jump on board, and find ways to contribute to create communities that positively impact wellbeing. Everyone has a part to play.

I am immensely grateful to the Board of Architects for the opportunity to travel across the world building a rich and supportive network of designers, thinkers and researchers working in this area. Through this research, I was struck by how many people working on this topic were genuinely passionate about making a better world by having a go, thinking with empathy and connecting to others. It is not every day that you are given the chance to delve into your passion area, find your tribe and feel excited to share your research. Byera has given me this chance, and I am so grateful.

Georgina Blix

# Executive Summary

Have you ever described your precinct or development as thriving or vibrant? What do you mean by that? How do you define it, and what evidence do you have that things are working well in your community, and that design has played a part?

Where and how we live touches on some of society's biggest wellbeing challenges; loneliness, sense of belonging and connection to community. The OECD makes a compelling argument for the role of housing in wellbeing stating: "Housing provides space for socialising, studying, caring and working... Where people live has a foundational role in their quality of life, impacting the availability of jobs, health and education services, through to access to clean air, green space and recreational facilities."<sup>1</sup> Many cities like Sydney, Vancouver or London are facing a housing crisis including issues of housing insecurity, challenges with affordability, poor quality housing, and a chronic lack of social housing.<sup>2</sup>

It is also clear that the urban neighbourhoods that exist around housing have a clear role to play in wellbeing. Most of the community scaled wellbeing frameworks examined explore the relationship between walkability, neighbourhood trust and connection, access to open space, sense of safety and levels of community spirit or democratic participation. As we increase density, design plays a more important role in combating the perceived or actual sense of social disconnect, anxiety and lack of social trust. Social researcher Dr Hugh Mackay makes the case that the community scale is most important for overall wellbeing stating "We are suffering an epidemic of anxiety. Humans are social animals, we belong together and we need communities and neighbourhoods to nurture us. Our mental health depends upon being part of an engaged local neighbourhood. When that is not happening, it's inevitable that we pay a high mental and emotional price."<sup>3</sup>

The field of wellbeing research is relatively new in Australia and world wide. In July 2023, Australia released the federal governments first national wellbeing framework, one of a number of governments world-wide

responding to international calls to measure our progress in terms of wellbeing, not just GDP. In architecture, now more than ever is the time to engage with this topic and actively engage with world leading research and measures for wellbeing. With data, we can make informed decisions and help to advocate for the real social impact of our work. Design can contribute to the solutions.

Design for wellbeing as outlined in this research is both a process, and a design outcome. Our understanding of the design factors that influence wellbeing have come so much further than just universal design, daylight and nature. As Dr Kelly Watson notes, wellbeing outcomes in the built environment are more than health, comfort and happiness<sup>4</sup>. There is a need to look beyond our industry to draw from the latest in sociology, psychology and social sciences to find more robust definitions of wellbeing.

For the purpose of this research 26 interviews were conducted with a wide range of people across 10 cities in 6 different countries. Interviews were conducted with architects, academics, social value practitioners, and businesses focused on wellbeing definitions or measures. The industry around this topic, whilst fairly young is an interesting mix of everyone from neuroscientists to government policy makers to medical researchers. It is an exciting cross disciplinary research area focused on finding an evidence based correlation between the impact of the built environment and the design of housing on health and wellbeing for individuals and communities.

As we continue to design more housing, now is the time to consider best practice research into wellbeing. Every development has the opportunity to act as an intervention that can change a community. We invite everyone involved in design for our communities to consider how the development process, design priorities and the final social value outcomes of a project can champion the latest wellbeing science.

# Common Stories

The Community      The Architect      The Developer      Government      Researchers



## When design for wellbeing is working...

<p>"This new building is different. I know my neighbours now. I feel connected to this community."</p>	<p>"I know my work can have a positive impact. It's empowering and meaningful."</p>	<p>"Development is more than numbers, its about a legacy."</p>	<p>"Wellbeing brings us together for a common goal. I can make policy to support that."</p>	<p>"Clients are interested in the evidence and data we can create. The demand is there."</p>
The Community	The Architect	The Developer	Government	Researchers

## When design for wellbeing is not working...

<p>"Didn't I just give feedback for that development down the road? No one is listening."</p>	<p>"I'm engaged years before there is anyone moving in. Who do I consult for wellbeing priorities?"</p>	<p>"I'm happy to challenge the status quo but I need the evidence to know this actually will impact wellbeing."</p>	<p>"These silos of funding under health, education and development make it impossible to impact wellbeing."</p>	<p>"No one is willing to pay for the research. But we need to start somewhere."</p>
The Community	The Architect	The Developer	Government	Researchers

Image Credit: Studio Alternativi

# How this research can help you



- **Developers and housing providers** can use this research to understand the impact of their developments in terms of wellbeing, the legislative context, and the risks associated with poor execution and wellbeing washing. It will also provide some insight to role wellbeing will play in procurement assessment, finance options and design priorities in the future.
- **Clients** can learn how to communicate their wellbeing priorities through their decision chain to ensure key wellbeing priorities are protected by everyone through the life of the building from designer to facilities manager and the cleaning staff.
- **Local government** can use this research to understand international examples of how planning policy can influence and incentivise wellbeing in housing.
- **Architects** can use this research to understand a more robust wellbeing framework, and advocate for design processes that support wellbeing. It can inspire your design teams to set a wellbeing vision, consult with the public, and consider ways to create evidence for the design elements that actual work.
- **Researchers** can use this resource to advocate for more funding of their work, understand the gaps in current research and inspire more collaborations between social value researchers, bioethicists, architects and their clients to truly measure the impact of development.
- **Architectural Schools** can use this research to advocate for forming long term relationships with the faculties of social impact, positive psychology and health medicine.
- **The public** can use this research to understand how they can set their own wellbeing priorities, and to provide meaningful feedback to any development that will actually impact their wellbeing.

# About the author & acknowledgements

Georgina Blix is the Director of Blix Architecture, a studio created in 2021 to focus on design for wellbeing. This architectural practice focuses on the design for wellbeing across urban design, affordable housing, education and mixed use developments. With a background in positive psychology, this practice aims to cross pollinate between the fields of psychology and architecture.

I am passionate about grounding practice in academic research, but also using architecture to test and experiment ideas in the real world. There are many terms for this type of work and research. Some of the best terms found in this research include: Pracademic (which for me means a practising architect with an academic research background), a pollinator, bridge builder, boundary spanner, mobiliser or translator.



In writing about this topic I acknowledge my own limited experience with homelessness and trauma. I rely on the expertise of others, in-depth interviews and academic research to broaden my understanding. This research also has an acknowledged bias towards developed, English-dominated, first-world cities like Sydney, New York or Manchester.

This scholarship has connected me with a generous, talented and passionate group of architects, practitioners and researchers world wide. Thank you so much for those who generously shared their passion for wellbeing, and helped me to explore their cities. Special thank you to the following people (in order of the travel itinerary), and those who helped to review the final document:

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Manchester	Dr. Kelly Watson - HACT Urban Solutions
Review Role	Elke Jacobsen, Gemma Sedgwick, Christina Hague

Commercial Drive, Vancouver

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# What is 'wellbeing' in the built environment?

Topics:

- Definitions of wellbeing
- A framework for wellbeing research
- People in this field
- Wellbeing washing
- Social value verse wellbeing

# Wellbeing is...

The social value of architecture is in fostering 🤝😊 emotions, whether through connections with 🌱🏡👨👩👧👦 or offering opportunities for an 🧑🏫🧑🏭🧑🚒 lifestyle and in providing the 🧠 to pursue autonomy.

The Happy Homes Toolkit by Pollard Thomas Edwards

## Wellbeing is a construct.

**Wellbeing is a construct made up of individual and measurable elements that allow a single person or a community to flourish.<sup>5</sup>**

The study of wellbeing, often referred to as positive psychology, is not just the study of being 'happy' but is about turning our minds to understand what is happening when things are going well. When communities flourish, what is happening? What political or policy context enables communities to do well?

Wellbeing is importantly more than the absence of 'ill health'. Whilst ensuring a building doesn't have mould is vital for health, it may not be enough for us to work and live at our best, for us to flourish. This research will consider both the positive and negative impacts of development on both mental and physical wellbeing for the individual and the community.



Manchester Kampus Development by HBD and Capital and Centric, designed by Mecanoo

## Wellbeing is influenced by where we live.

**Understanding the influence of the built environment on wellbeing is complex web of psychology, behaviours, place, context and the environment. Its a lens to help us assess design and its positive or negative impact on wellbeing.**

To date, wellbeing in architecture has been focused on buildings like hospitals with a specific health mandate, or workplaces where we spend a significant part of our lives.

For this research, the focus is on housing and communities. Whilst workplaces often bring together people of a similar education or professional interest, housing and the wider community can bring together a broader cross section of society. As we live in more dense and mixed-use communities, how can we bring everyone along in a positive society? Or as David Baker Architects ask "How can this building anchor, repair, or support this neighbourhood?"<sup>7</sup>

Whilst personal health outcomes can be influenced by everything from DNA to culture, the built environment does have a role to play and early research is suggesting that the neighbourhood can "have the potential to increase social interaction, the integration of diverse people, social support, civic pride, social resilience, and social and political involvement."<sup>8</sup> And the benefits are not just to individuals, but also for stronger communities

that can be resilient against man made or natural disasters.<sup>9</sup> Design for wellbeing in housing places 'human dignity at the center of design'<sup>10</sup> and understands that how we 'live in relationship to people and place shapes the broader character, health, and resilience of a city.'<sup>11</sup>

With a focus on equity and diversity this research includes not only traditional market models of housing, but also housing for vulnerable or disadvantaged communities. Designing to support flourishing communities in these typologies has both unique design requirements but also some useful lessons for all.

Finally as well as housing, this research will also look at the collective spaces that bring people together in the public realm. No single building can provide all of our wellbeing needs, but the complex ways we bring people together in 'third spaces'<sup>12</sup> such as public squares, parks, streets, and community facilities has a good chance.

“Our increased understanding of the built environment’s effect on human health and well-being engenders an obligation for architects, developers, bioethicists, and community officials to act intentionally when creating the spaces in which we work, live, and play.”<sup>6</sup>

# Design for wellbeing is not...

It is not about wellness.

**In our industry of built spaces, design for wellbeing is not interested in 'wellness'.**

This concept, separate to the science of wellbeing is usually related to health retreats or spas. Whilst restoration is one part of wellbeing, it's commercialisation under 'wellness' doesn't equitably apply to large parts of society. Wellbeing is more complex than the individualistic benefits of a massage or yoga session. Whilst individual wellbeing, often improved through interventions like meditation are important, there is a growing acceptance that our focus for wellbeing needs to have a larger impact at the community and society scale.

It is not a tick-a-box exercise.

**Wellbeing is too complex to be a tick-a-box exercise that allows us to provide one answer to help all projects.**

Wellbeing is inherent subjective and unique to each individual and community. Diversity and inclusion underpin our complex, multicultural societies. Whilst we may learn what works in one community, there is no guarantee that solution will work with a different age group, nationality or political context. Research into wellbeing will continue to gain more evidence and data for what works. In the meantime we can prioritise design practices that reduce reliance on assumptions, and instead uses data and consultation to be contextual and responsive to place.

It is not only about nature and daylight.

**This research should help our industry to move further than the wellbeing benefits of nature and daylight in our buildings.**

The ways we can support individual and community wellbeing through design is rich and complex. We hope this work inspires a wide range of design ideas, ways to engage with the community and ways to measure wellbeing.

It does not add more cost.

**Design for wellbeing does not mean adding cost. In many cases this research reveals the design decision require thought, not money.**

In some cases improved wellbeing outcomes can offer significant cost savings through either reduced health costs, improved efficiencies in health care (see the NORC research project) or the provision of social value.

This research is not able to cover all topics.

This research focuses on how design of the built environment relates to physical and mental wellbeing of communities. Under the limitations of this particular research grant funding and time this focus on wellbeing has not been able to extend to many important areas of research like modern slavery, third world poverty and serious mental illness like depression and anxiety. Furthermore this research grant has been limited to English speaking countries, generally all considered well-developed and affluent. Whilst it includes some Indigenous frameworks, it also lacks further research in this area. We recognise this bias and hope to extend this research further in the future.

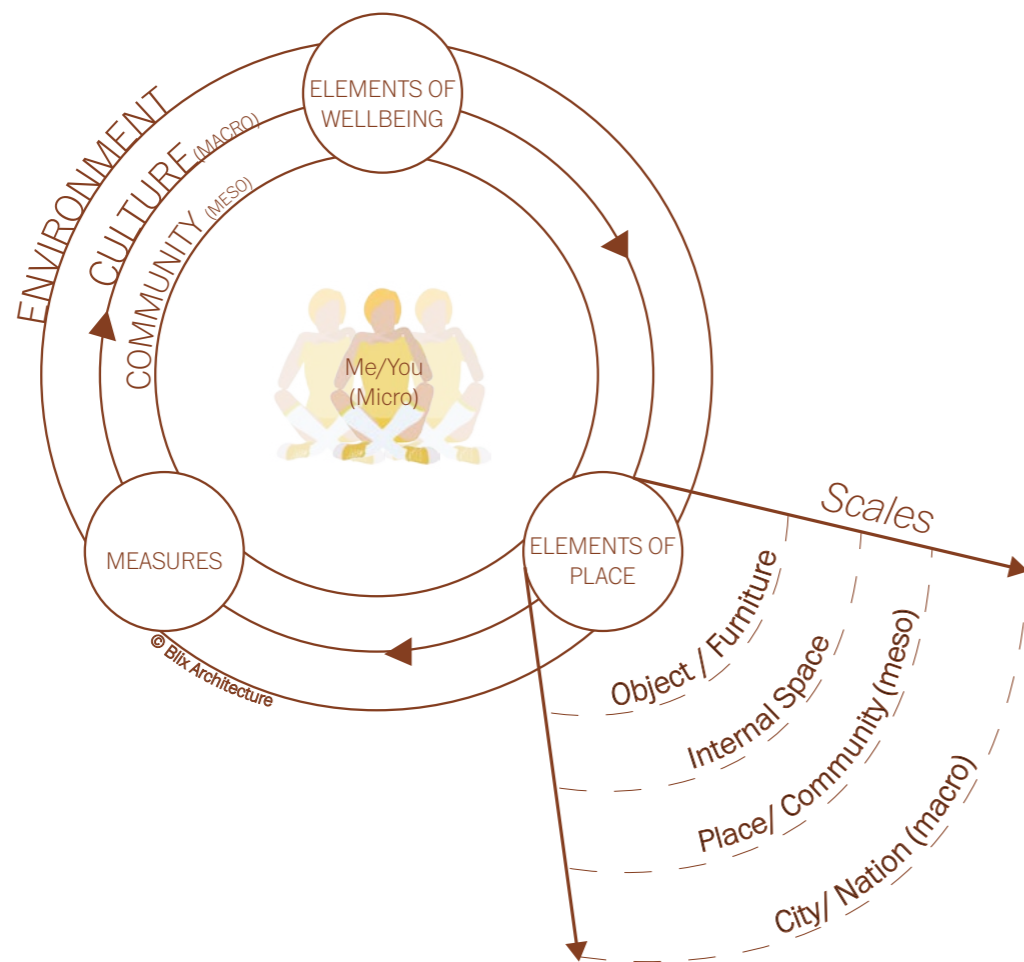
This research is in no way medical advice. We are all constantly moving along on a spectrum of wellbeing from ill health to flourishing. If anything in this research causes concerns or you would like some support please reach out to your mental health provider, or [Beyond Blue](#).



Toronto Humber Bay Arch Bridge

# Understanding wellbeing research

Research into wellbeing and its correlation to the built environment can be understood as a study into the elements of wellbeing, the elements of a place, and the measures that indicate place is influencing wellbeing. All of these elements are influenced by the context in which we live and design.



(Diagram adapted from Bronfenbrenner's Ecological Systems Theory.)



Wellbeing is inherently subjective. Western value systems may be focused on the individual, but increasingly we are studying the collective neighbourhood. For Indigenous cultures this key focus may be more oriented to the family, wider community or the wellbeing of the environment as the centre of all health.



**Element of Wellbeing** are the components that contribute to personal or community wellbeing. Examples include: relationships or sense of safety. Design can influence these elements creating an emotional, behavioural or physical response.



"Place is space that holds meaning"<sup>13</sup>. Meaning in a place can be acquired through experience, time and design. Study in this area is interested in the design elements of place that influence liveability, or impact feelings of wellbeing. These can be found at every scale of design from the furniture to the design of a city. The larger the scale, the more systems and networks can influence both design and wellbeing. The OECD calls out that the quality of the built environment is largely determined by place-specific assets, and that disparities in local areas wellbeing can in turn impact national wellbeing-outcomes<sup>14</sup>. For example, "in the UK, stark inequalities in life expectancies between neighbourhoods highlight just how much place matters, with strong evidence showing that the poorer the area, the poorer the long-term health outcomes."<sup>15</sup>



**Measures** that can articulate a change in wellbeing include data such as:

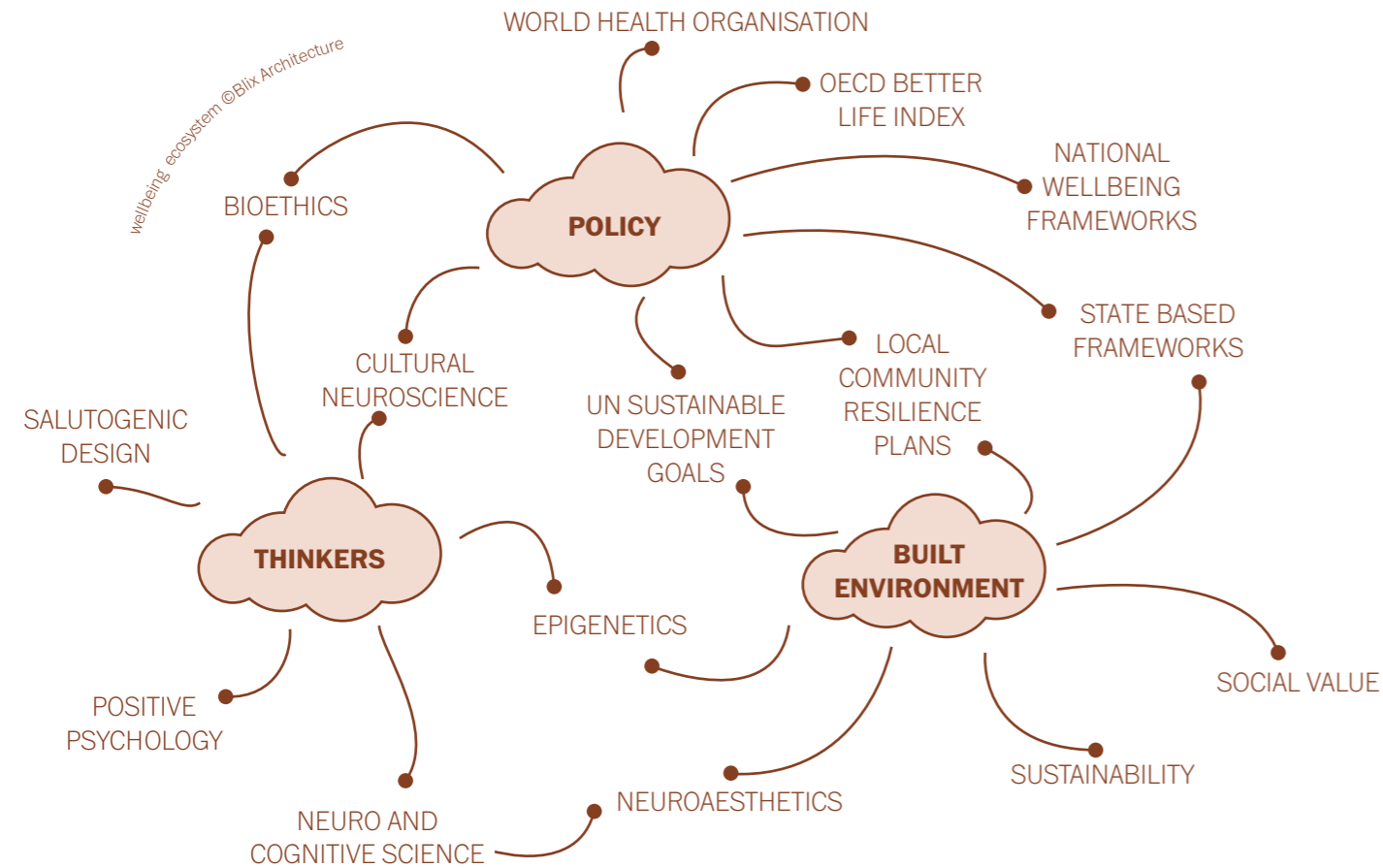
- Objective Data (Physical heart rate)
- Subjective Data (Self reported subjective responses).

Measures provide us with evidence for our design decisions. However rather than leading the design process, they should help us to find evidence for the changes in wellbeing that were intentionally targeted. The challenge is in finding and isolating the correlation between the change in wellbeing, and the design elements that contributed to that change. Dr Jamie Anderson believes that it's on researchers to provide stronger evidence for what works. Most often, studies of the built environment are 'post occupancy evaluation' snapshots; think data like, "These people walking in the park say they are happy." He argues that it's paramount to move beyond that and find stronger ways to demonstrate causality, providing enough evidence to make statements like, "These people are happy *because* they are walking in the park."<sup>16</sup>



All of these factors are influenced by **context (macrosystem)** including the unique group or network of people, cultural values and the environment.

# The ecosystem of people in this field...



This research has revealed a rich ecosystem of researchers, thinkers and participants involved in design for wellbeing. Often bridging from other fields of expertise, these areas of research are increasingly looking at the built environment. **Some of these fields include:**

**Cultural Neuroscience** - the study on how culture shapes the brain.

**Salutogenic Design** - evidence based design strategies that promote health outcomes, traditionally applied to healthcare design but now referred to more broadly in architecture.

**Positive Psychology** - the study of human flourishing and wellbeing.

**Epigenetics** - the study of how environments influence our genes and how genes are expressed, particularly when we are young.<sup>17</sup>

**Bioethics** - the multi-disciplinary study of, and response, to the moral and ethical questions that arise in medical development.<sup>18</sup> Important as we start to consider the ethics of wellbeing in design and policy.

**Neuroaesthetics** - the interdisciplinary study that combined neuroscience, psychology and the arts (like architecture) to understand how art, beauty or specific architectural features affect people.<sup>19</sup>

**Cognitive Science** - the study of the mind, intelligence, including perception, problem solving and emotional experience.<sup>20</sup>

# Wellbeing washing



**Like any industry starting to consider wellbeing there are inherent risks we need to consider. Wellbeing research is fluid and moving fast. Underlying ethics and values need to be protected. That includes values for democracy, diversity, accuracy and leadership.**

Similar to 'greenwashing', wellbeing washing relates to companies that report on wellbeing without meaningful policies, culture or practices to support their claims. "This is a growing concern akin to 'greenwashing,' where organisations make deceptive claims about their social impact, thereby eroding public trust."<sup>21</sup> For design projects we are increasingly seeing developers claim benefits of improved walkability, sustainability and social connection, but often there is little evidence to validate these claims. "...Built space interventions that claim to improve social connection and health should be based on evidence that they do so."<sup>22</sup> In the UK where social value reporting is further developed, there is more scrutiny now on 'value washing', in particular 'holding organisations to account at the completion of projects.'<sup>23</sup>

Part of the challenge is to not rely on measures that have little relationship to actual impact. For example the money spent on a project, or anticipated wellbeing 'value' may not relate to the actual reality once the project is built. Good post occupancy data is needed to create accurate impact measures.

Other concerns include over claiming on potential wellbeing value, inaccurate calculations, or lack of transparency in measures or financial proxies that only professional consultants can understand that make accountability difficult.

Rainbow Park, Vancouver designed by DIALOG



Innsbruck, Austria

## Social value verse wellbeing

“Are we focusing too much on measuring social value, rather than creating lasting change?”<sup>24</sup>

A common question through these interviews has been to understand if there is a difference between the term 'social value' and 'wellbeing'. According to Flora Samuel, there is. And the main difference comes down to how wellbeing is measured. Under the UK Government, Flora argues 'social value' has focused on the monetised translation of positive impacts. Money being the language of decision making in politics, business and budgets.

Dr Kelly Watson notes one of the challenges of this focus is the reliance on experts to make the assessment and translation, particularly for social return on investment. In addition there is the use of hidden calculations or proxies, and a methodology rarely agreed upon between experts. Flora Samuel made the point this narrow application of 'social value', usually only measured at the beginning of the project as a forecasting tool is open to skewing measures to suit private interests, and a lack of genuine connection to community through the collection of data or measures. As discussed in this report, there is a lack of post occupancy evaluation data to see if these estimates are accurate or delivered.

So whilst the translation of wellbeing to monetary value is useful in some contexts, it is not always ethical or wanted in some communities. Whilst perhaps not the intention of this term, 'social value' is usually associated with money and not the wholistic topic of wellbeing.

It is also important to consider that when we discuss wellbeing or social value, it is more than the positive impact generated through the process of construction. Social value in the construction phase for example may include: youth employment, indigenous employment, supply chains, environmental impacts or construction

methodologies<sup>25</sup>. Whilst they are part of the wellbeing outcomes, social impact or wellbeing measurement will also be interested in the people who live in the development and their health and wellbeing, including sense of community, belonging, loneliness, health outcomes and place attachment. These factors will be influenced for decades after the building is finished.

So if you are involved with 'social value' make sure your definition is broad enough to consider all aspects of wellbeing, at all stages of the built form, and can consider techniques to measure wellbeing beyond just an economic translation.

See **Key Definitions** for more on social value.

2

# Frameworks, policies and research



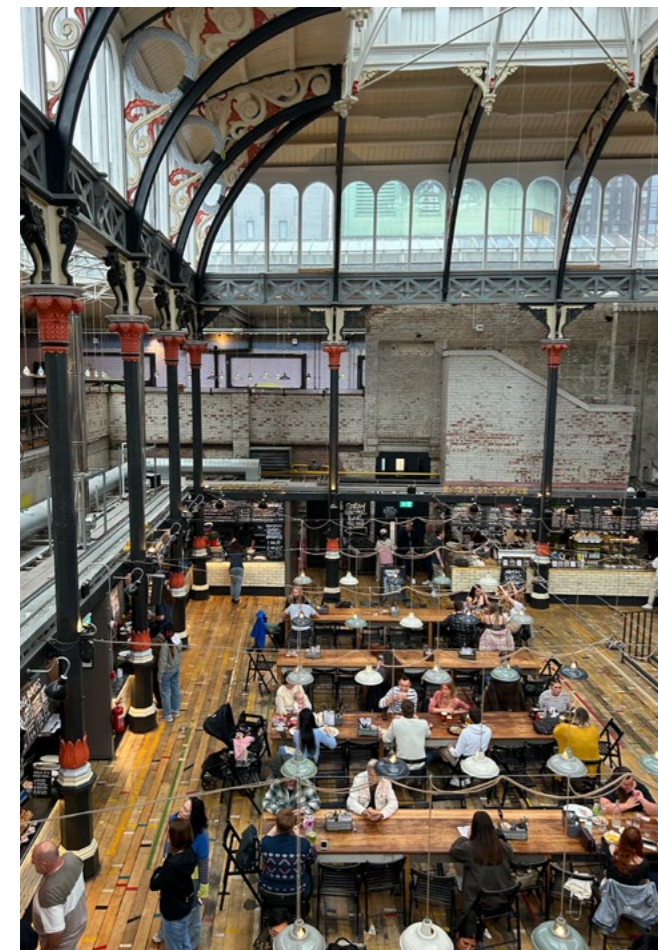
388 Fulton, San Francisco by  
David Baker Architects

## Topics:

- Equity, diversity, affordability
- Elements of wellbeing
- Wellbeing frameworks
- Research project examples
- Planning policy examples
- Rating tools
- Australian policy context
- How wellbeing relates to Better Placed

# Principles Founding Dimensions Themes

**Underlying any wellbeing framework is a key assumption that wellbeing should be for everyone. Many of the government wellbeing frameworks including the draft NSW State Wellbeing Budget considers the founding principles of equity, diversity and affordability. Other frameworks like the Australian National 'Measuring What Matters' Framework include the cross cutting dimensions of inclusion, fairness and equity.**



Mackie Mayor Food Hall, Manchester

## Equity:

**Equity is the concept that all members of society should have equal access to community resources, opportunities and wellbeing.<sup>27</sup>**

The risk with considering wellbeing as a whole community is that we can mask differences in outcomes for different groups in society.<sup>28</sup> “It is well known that certain groups, or people who live in certain locations, tend to be marginalised and vulnerable, or worse off, in society generally.”<sup>29</sup>

Most Government frameworks for measuring wellbeing will consider equity by ensuring it is possible to break down data to consider vulnerable groups and specific areas.

*“Where equity thrives, so does social cohesion, resilience and respect.”<sup>26</sup>*

## Diversity:

Diversity encompasses dimensions of race, ethnicity, gender, sexual orientation, socio-economic status, work experience, educational background, marital or parental status, income, age, physical abilities, geographical location, religious beliefs, political beliefs or other ideologies.<sup>30</sup>

When put into practice it does include ‘active identification and removal of the barriers and creation of entry points’ for a wide range of people’s experiences, opinions, abilities, backgrounds and expertise is included in the process.<sup>31</sup> In architectural terms that may include removal of the subtle barriers that welcome different people into a building, or design concepts that consider a wide range of lived experience.

It will also include consideration universal design or inclusive design principles that promote the creation of spaces that are safe, comfortable, accessible and dignified for a wide range of disabilities. More recently this concept has broadened from physical disability to neurodiversity and gender equity. The base tenant is that there is a dignified personal choice to best meet a wide range of individual needs.

*“Research shows that diversity leads to greater problem solving and creativity—we are better when we are diverse.”<sup>32</sup>*

## Affordability:

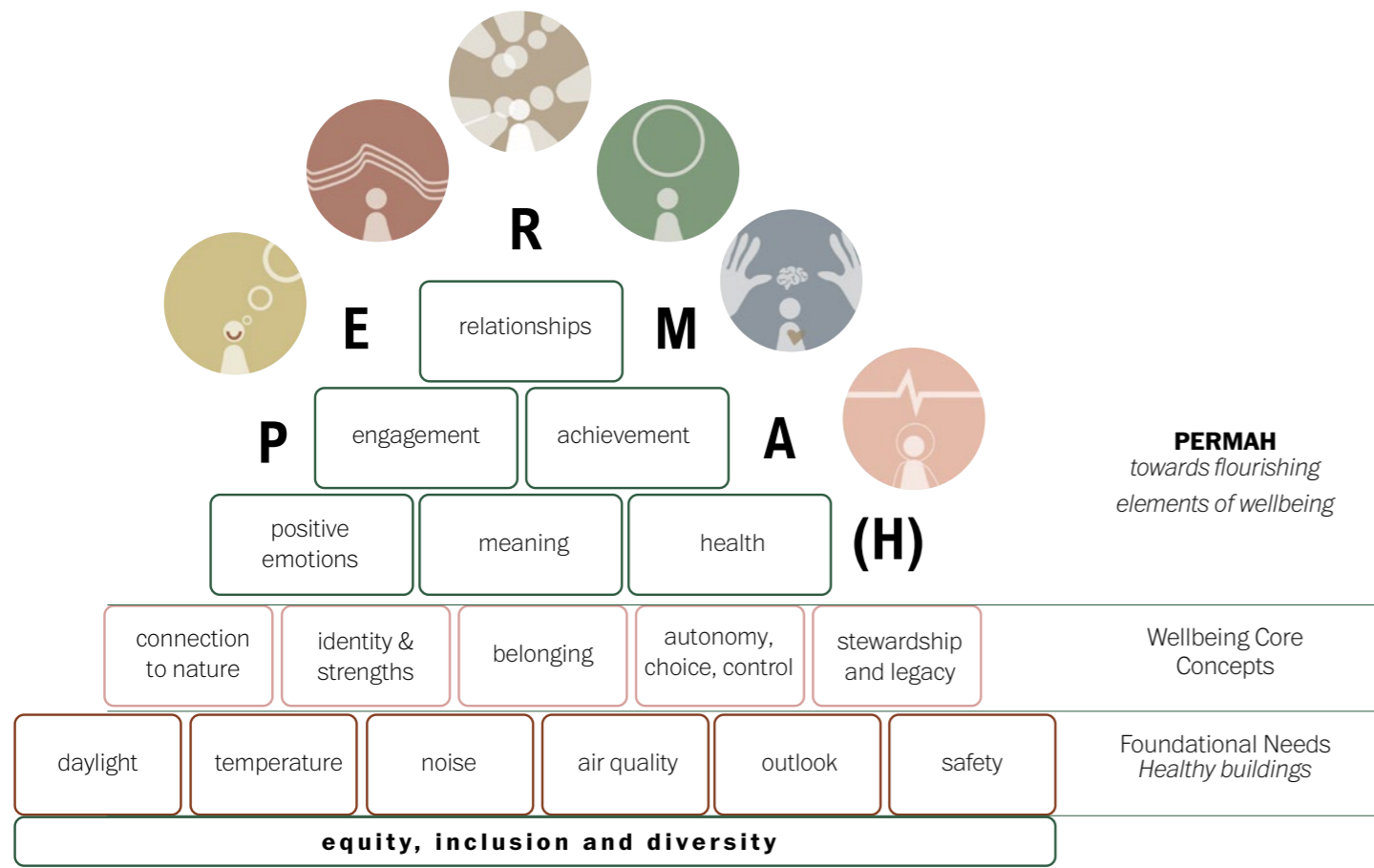
A common theme through this research, particularly in housing, was that of affordability. Wellbeing for an individual is impacted by economic stress, housing unaffordability and the rising cost of living which was being experienced by most of the first world cities visited such as Sydney, Auckland, New York, London, Vancouver and Toronto. Financial stress can reduce choices and time. Time for healthy living choices like nutrition and exercise, to meet neighbours, to engage in activities that create social cohesion and restoration in our daily lives. Happy Cities for example states their research “...begins from the premise that affordable, secure housing choices are a crucial foundation for social wellbeing.”<sup>33</sup> They make the point that “...**secure, affordable, and stable tenure in a safe home is an essential foundation for wellbeing.** Without a home that meets these core needs, it is much harder for people to nurture supportive relationships with neighbours and build a sense of belonging in a community.”<sup>34</sup>

Any one of these themes on equity, diversity and affordability is a deep well of research for wellbeing. Some of the most interesting examples for housing and the public realm include:

- In New Zealand Dr. Karamia Müller of Māpihi - Māori and Pacific Housing Research Centre was examining a broad range of factors that influence wellbeing outcomes in housing for Māori and Pacific Islanders. Topics include transport equity, view equity (the ideas that views of mountains are cultural important but often unaffordable for these communities), housing affordability and intergenerational design in housing.
- The Just City Index<sup>35</sup> looks specifically at what would happen if we put the values of equality, inclusion or equity first. Their work includes values and indicators for how the city, neighbourhood or public realm can design and plan with urban justice at its core.

# The elements of wellbeing

The following graphic is a working framework on the elements that can influence wellbeing (created with a conceptual focus on design of the built environment). These elements can apply to an individual or a group of people.



Wellbeing Design Framework®

© Blix Architecture

Me: "Is design for wellbeing just common sense?"

Flora: "Sure, but common sense has gone out the window..."<sup>36</sup>

This framework is designed like a building with a bedrock of minimum needs and multiple levels of wellbeing elements that can be influenced by design and architecture.

- The bedrock of this diagram is equity, inclusion and diversity.
- The foundation of any building is a healthy internal environment.
- Above that foundation we have core wellbeing concepts that will enhance the wellbeing of the greatest number of people. Many of these elements from positive psychology are core human needs that should be addressed in any space.
- At the top we have the PERMA(H) framework of elements developed by Martin Seligman<sup>37</sup>. These elements according to Seligman are the key measurable elements of wellbeing.

Despite the fact wellbeing is highly subjective and contextual, there are universal elements of wellbeing that apply to the common human experience. How these elements are prioritised or realised in a design will vary greatly.

Whilst these terms may seem as vague, this is intentional. Other international wellbeing frameworks (see the following pages) provide a list of questions rather than answers, again recognising that there is no tick-a-box list of design features for wellbeing. Natasha's Place Quality Index aims to act as "springboards for cross-industry discussion rather than offering design as the single solution to multi-faceted and deeply complex

problems."<sup>38</sup>

Even creating this framework has seen my practice and research buy into our current industry obsession with definitions and measures for wellbeing. It was a sobering realisation from this research tour that perhaps this focus offers little value. In Canada, the US and the UK multiple people interviewed echoed the same sentiment that one singularly agreed definition and measure of wellbeing (or diagram) is not possible or even desirable. It is too complex and contextual.

So I suggest that whilst this graphic could be useful to start a conversation, it is also limited. Flora Samuel points out that classification is both ethical and political, temporal, a power construct that needs constant review.<sup>39</sup>

At a minimum this framework helps our industry to understand that wellbeing is more than providing air and light. We invite you to continue to challenge and review this framework. In the meantime use it to inspire great conversation with your community and the people on your next project.

The following pages will examine how other countries have sought to define and classify research on wellbeing in the built environment.

# 3 insights into wellbeing frameworks

**Wellbeing frameworks have been created across the world to help define wellbeing, and outline the wellbeing considerations for housing and community design. They have been created for all different scales, from assessing the internal performance of a room, to an understanding of what works at the neighbourhood or national scale. The following key insights are drawn from the many international examples.**

## 1. The definition of wellbeing changes depending on the scale of the framework.

Most frameworks drew on literature from science, psychology and other wellbeing research to identify a range of elements that influence wellbeing and could be considered for the design process and outcomes.

The elements used or the hierarchy of elements often shifted when considering the particular needs of a community or group of people. For example the Māpihi framework for Māori culture places family and community at the heart of wellbeing (not the individual). In that context, elements of land, affordability and improved housing quality are all focused on stronger family and community outcomes.

It is also important to note different frameworks have been created for all different scales of influence. Wellbeing frameworks at a national level will look at factors like economics and employment, which whilst part of the picture, may not be relevant for a single building.

## 2. Most of these frameworks focus on a design process that supports wellbeing.

Due to the subjective nature of wellbeing, many frameworks such as the Dialog Community Wellbeing Framework or Natasha Reid's Place Index were created as set of provocations and open ended questions to start a rich discussion. They ask community, rather than assume community priorities. And they do this in a language that is understandable to the broader public.

With this focus on consultation, the frameworks create a design **process** that supports wellbeing. Community engagement, participation, ability to influence their community (agency and voice) combined with tools for ongoing maintenance for high quality spaces often had just as much impact as the design itself.

Many frameworks then outlined a process to measure these impacts through surveys, interviews or mapping techniques. Finally some frameworks take the step to outline social value with monetary metrics.

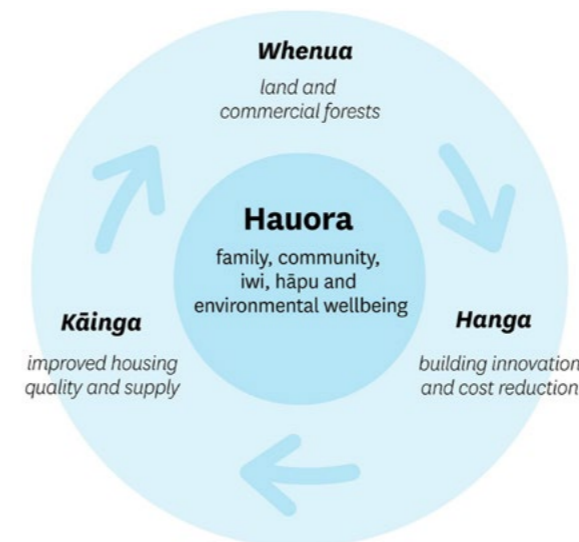
## 3. These frameworks rarely provided design guidelines for wellbeing.

This means most frameworks did not prescribe the look or feel of a design to 'ensure' wellbeing outcomes or provide design standards. All of them avoided design for wellbeing as a 'tick-a-box' exercise. This is for good reasons. For one, it is clear that wellbeing is highly subjective to a community, context and culture. What works in one place will not universally work in another. Furthermore, as DIALOG<sup>40</sup> identified, design cannot guarantee an outcome. This determinism where an architect states "I provided a community room, therefore community will form" can be derailed by so many factors such as programming, perceived sense of agency over the space, relevance to the community, or maintenance.

The next few pages outline some key international examples of wellbeing frameworks.

# Wellbeing framework examples

Scale: Cultural Group



## Māpihi – the Māori and Pacific Housing Research Centre, Auckland, New Zealand

**Interviewed:** Dr. Karamia Müller, Co-Director

**Intended Use by:** Anyone interested in providing or understanding Māori and Pacific whānau housing.

Indigenous concepts of wellbeing differ from Western perspectives. This framework places the community at the heart of Māori and Pacific whānau healthy, sustainable and affordable housing. Dr. Karamia Müller provided an insightful interview. She outlined one example where she asked a developer how they considered multi-generational design. The developer replied that his project was 'not affordable housing.' This western perspective demonstrates the underlying assumption that culturally sensitive design is considered only relevant to affordable housing. Multi-generational living is in reality, a key factor in many cultures, and an important aspect of community wellbeing, diversity and inclusion. Multi-generational design also improves the ability to stay in an apartment or house for longer as life circumstances change (family growing, visiting relatives or aging in place), strengthening social connections and community trust over a longer period of time.

Scale: Neighbourhood



## Quality of Life Framework, London, UK

**Intended Use by:** Developers, Designers, Policy Makers, Researchers, Communities

The Quality of Life Foundation is a UK charity "committed to improving people's quality of life by changing the way the housing industry and government acquires, plans, designs, builds and manages homes and neighbourhoods"<sup>41</sup>. They provide research and best practice guides including a 'Quality of Life Framework' which provides an evidence based framework for housing and the neighbourhood with 6 key themes (see above). It is a useful tool for architects but also for communities to help define their own definitions of wellbeing.

In May 2022 they also issued the findings of their preliminary research on these themes<sup>42</sup>. This evidence helps build the link between housing, the neighbourhood and wellbeing outcomes.



# Research project examples

Scale: Building

## Happy Cities and Hey Neighbour Collective - Vancouver, 2024

**Interviewed:** Madeleine Hebert and Michelle Hoar

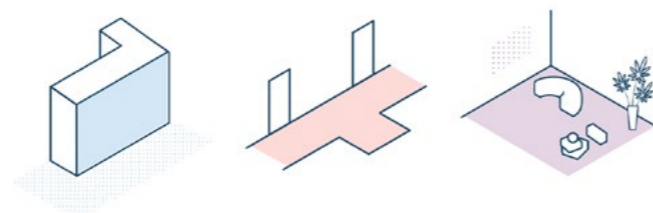
Happy Cities and Hey Neighbour Collective along with SFU have been part of a three year 'Building Social Connection'<sup>47</sup> project in 2023/24, working with planners from five municipalities and one First Nation to create research and design policies to support social wellbeing in multi-unit housing. It is an amazingly robust and thorough research project linking policy, evidence, community feedback and design guidelines.

The newly released toolkit "seeks to rebuild social connection back into our lives through the design of the homes we live in, with a focus on multi-unit housing."<sup>48</sup> They make the point that whilst many policies require communal space, there is very little design guidance on what actually promotes social connection or creating welcoming spaces. The result is often spaces that lack comfort, functionality or flexibility meaning they are rarely achieving their intent.

Because residents, property managers, landlords, and local governments all have a role to play in fostering socially connected multi-unit housing communities, Hey Neighbour Collective has also created guides for how each of these players can support creating these types of communities.<sup>49</sup>

In New South Wales, Australia the Apartment Design Guide (ADG)<sup>50</sup> is a unique policy providing mandatory design guidance on multi-residential buildings, including minimum area requirements for social spaces like communal outdoor open space. This design toolbox goes further to include clear guidance on how indoor or outdoor amenities could be used (shared laundries, music rooms, bookable guest suites, co-working spaces, bookable meeting rooms, tool libraries, pet areas and sport equipment storage), where they should be located, and how to design it in a way that invites people to use and activate it. They are developing a more robust set of design criteria that can make these spaces more successful.

The result was a set of 10 evidence-based principles for boosting social wellbeing in multi-family housing:



Social building edges	P. 30	Social circulation	P. 38	Social amenities	P. 48
Transition zones	P. 32	Lobbies	P. 40	Indoor amenities	P. 50
Building entrances	P. 34	Corridors	P. 42	Outdoor amenities	P. 54
Publicly accessible spaces	P. 36	Nooks	P. 44	Bicycle spaces	P. 58
		Stairs	P. 46		

# Wellbeing planning policy example

Scale: Building

## Active Design Guidelines, City North Vancouver - 2015<sup>51</sup>

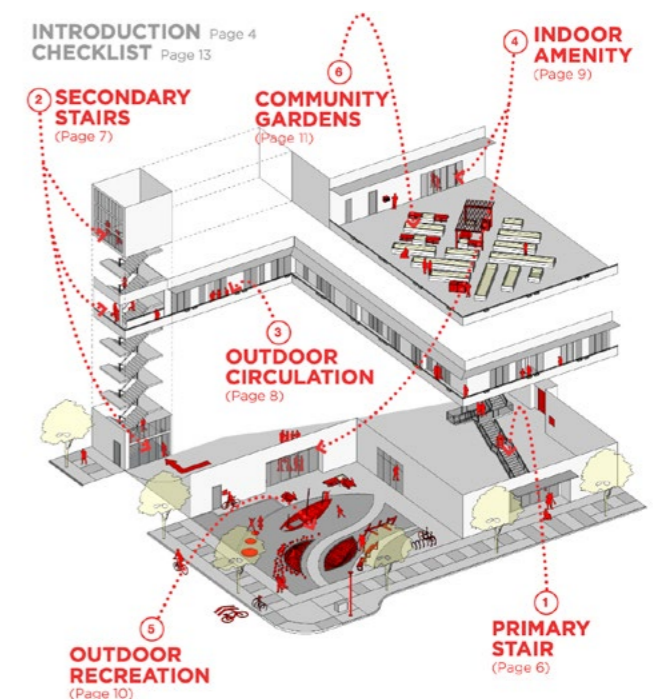
A number of groups in Vancouver and New York referenced local examples of active design guides as the precursor for further wellbeing policies.

These guidelines are generally council endorsed guidelines, with the objective to support daily physical activity and social interaction in buildings, particularly in high density buildings. In the case of North Vancouver, "the Active Design Guidelines are used in the review of all rezoning applications for new developments with greater than 10 residential units and/or greater than 1,000 m<sup>2</sup> of commercial, industrial or institutional floor area and are intended to be consulted early in the design development process."<sup>52</sup>

Interestingly the design guide provides developers with incentives such as GFA exclusions for key design features that support active use or social connection, such as staircases designed in a way that are accessible, visible from the entry with signage to encourage use, and glazing at each level. These incentives were aimed to help ensure these spaces for social connection didn't increase the cost of housing.

In 2024, Happy Cities, Hey Neighbour Collective and Simon Fraser University assessed the impact of these guidelines on the 14 buildings.<sup>53</sup> They reported generally positive feedback from developers, architects and residents with key findings such as:

- Innovative built projects
- Praise for the flexibility of the design approaches
- Praise from developers for the incentives
- And overall residents reported an appreciation of the shared, communal spaces provided they were "designed to be comfortable, convenient, and easily accessible."<sup>54</sup>



Driftwood Village by Cornerstone Architecture

# Wellbeing rating tools

Accreditation or rating tools are valuable for creating third party, independent measures for wellbeing, and creating a more wholistic framework for developers and clients to understand wellbeing. Their leadership has helped to galvanise design for wellbeing as a credible industry particularly in the design of workplaces.

## Name: Fitwell<sup>55</sup>

**Interviewed:** Zachary Flora

**Scale:** Real estate owners or companies with a portfolio of buildings

**Intended Use by:** Designers and clients

Fitwell was originally born out of academic research with the U.S. Centers for Disease Control (CDC). With this background, many of the 40 available design strategies are focused on active movement (walking, cycle, public transport), healthy food options, internal environmental performance, emergency preparedness and overall tenant satisfaction.

This tool provides design guidance through 40 different strategies that clients can pick between to gain a unique score card for either existing or new buildings. The goal is to consider built form improvements over time, so that wellbeing design considerations feels achievable as a journey.

This 'pick your own adventure' system can be more flexible, responsive to community feedback, and allows people to find solutions that would work in their context and budget. Zachary Flora, like Flora Samuel felt design for wellbeing is not just common sense, and rather it required a dedicated focus on people and their experience of space. Just providing space for wellbeing is not enough. For example use of a stairwell for active movement can be radically reduced by poor cleaning or the sense that it was a poor second choice.

He noted that external accreditation often holds value for the community, who appreciate the third part accreditation for the process.

There are ten concepts in WELL v2:



## Name: WELL Building Standard<sup>56</sup>

**Interviewed:** Whitney Gray, Matthew Maycock, Minjia Yang

**Scale:** Building or company portfolio of buildings

**Intended Use by:** Designers and clients

The International WELL Building Institute (IWBI) has created a WELL Building Standard (WELL) that aims to help buildings and organisations consider intentional spaces for health and wellbeing. Created mainly for the workplace, there is again a key focus on internal environmental performance. WELL @ scale will help companies with large portfolios of buildings to consider wellbeing and alignment with company wide ESD strategies. Alignment to larger government policies like the UN SDGs will also be a key focus moving forward.

It is worth noting that whilst WELL provides the accreditation process, independent assessors (trained in the tool) to do the assessments. This is another way to avoid wellbeing washing. For this reason, IWBI are not able to collect and collate data for broader industry findings, however they also noted this is something that might make participants reluctant to take part in the surveys. They also noted, often companies were reluctant to share correlating wellbeing data like productivity or absenteeism data or to ask more sensitive questions like those regarding staff loneliness. So whilst having health insurance tied to the employer has allowed for a rich workplace tool in wellbeing to develop in the US, it is also limited by this context.

Whitney Gray made the observation that in broader architectural industry the real challenge now is not to create one off research case studies, but how to make wellbeing scalable or replicable. How can we harness digital tools like GIS to spatially analyse the building and its context in terms of health and wellbeing? In reality companies, particularly with large building portfolios need a tool that is accessible and replicable.



Society, Barbirolli Square, Manchester

# Wellbeing policy in Australia for housing

The following page provides a high level overview of the different government policies regarding wellbeing.

## International

International frameworks such as the OECD 'Measuring Wellbeing beyond the GDP'<sup>57</sup> and the UN Sustainable Development Goals (SDG)<sup>58</sup> have firmly placed measurement of wellbeing part of the political landscape. This includes UN SDGs for 'Good Health and Well-being' as well as 'Sustainable Cities and Communities'. Not to mention a number of environmental climate focused goals and one for gender equity, all of which has a place in the built environment.

International frameworks like these have a role in setting a high level agenda and areas of focus for government reporting. This has led to the development of national wellbeing frameworks, and budgets to help track progress with 'quality, accessible, timely and disaggregate data'<sup>59</sup>. Some clients and companies will want to align their activities to the UN sustainable development goals.

The OECD review of the built environment specifically calls out the domains of housing, transport, urban design/landuse and technical infrastructure.<sup>60</sup> Often these larger frameworks have a critical role in articulating the lack of equity and affordability in the built environment and the impact of that deprivation on wellbeing. For example it outlines the importance of access to public transport, the role of water and sewerage, and the basic requirements of affordable, uncrowded housing.



## National

National governments have since started to consider the OECD and UN requirements by creating national wellbeing frameworks that measure progress on wellbeing along with GDP. New Zealand was first in 2019, and since then countries such as Scotland, Wales, Finland and Iceland have already begun to move wellbeing to the centre of their policy-making.

Australia released its first National Wellbeing Framework, 'Measuring What Matters'<sup>61</sup> in 2023. The policy is intended to inform government decision making including policy development and evaluation. As creators of the built environment, we expect to start to see this framework influence the types of projects government invests in, and the evaluation of their value and success. This first attempt to define a flourishing community can also provide built environment creators with insights to what makes a better place. Key areas include sense of belonging, safety, social connections, and creative and cultural engagement.

At a national level, Wales is of particular interest, where not only have they created indicators to measure progress, but have also enshrined the work in legislation creating the Well-being of Future Generations (Wales) Act 2015 which requires Welsh ministers to set national indicators to assess progress towards achieving the 7 wellbeing goals.<sup>62</sup> That in turn helps to fund projects like Flora Samuel's work on the Isle of Anglesey<sup>63</sup>, which is working out how to operationalise and measure wellbeing at the place scale.

It is also interesting in Australia to have the National WHS Legislation - Psychosocial hazards legislation which requires business to consider safe work places from risks including psychosocial hazards. This places mental and physical wellbeing at the core of safe business, including the design of workplaces. We are one of the only countries in the world to have legislation such as this.

## State

Zooming in - State Governments in Australia have started to consider how their own wellbeing frameworks can inform treasury spending and prioritise projects. Definitions of wellbeing can vary at this level based on the community consultation process. For example the ACT wellbeing framework<sup>64</sup> includes the aspect of 'time' (time for quality of life, work/life balance, unpaid care or time commuting). This is not in the NSW draft framework, released in 2024.

Ideally these frameworks are able to spatially map their wellbeing indicators to understand areas of inequity. Key areas for the built environment, similar to the national framework include:

- People being supported to make the best decision for the health and able to lead active lifestyles.
- Vocational education delivers the skills that people and business needs.
- Safe communities.
- Communities that are prepared for and resilient to disasters and emergencies.
- Creative and cultural sectors are sustainable and growing.
- Communities are diverse, engaged and cohesive.
- People, businesses and communities are connected through safe and reliable public transport with access to digital services.
- A secure and sustainable transition to a circular economy and Net zero.
- Natural resources are used productively and sustainably.
- The environment and our heritage is protected, enhanced and enjoyed.
- Communities and businesses reduce emissions and adapt to the impacts of climate change.

## Local

At a local level there are a number of interesting plans working at the community scale that may consider more localised issues for wellbeing including:

- Flood and disaster resilience plans
- Local and affordable health food options (production and supply)
- Community engagement plans for community participation and agency
- Local heritage and community identity including contribution to cultural events

Ideally data collected at the local government level is more granular, and specific to the demographic and locality.



City of Sydney Community Wellbeing Indicators 2024

# How does wellbeing relate to the GANSW 'Better Placed' Policy?



**Good design is described by Better Placed<sup>65</sup> as both a process and an outcome. It is the same for wellbeing. And good design has an impact on wellbeing.**

The NSW Government Architect's Better Placed document makes a case for how good design is related to 'appealing, liveable and successful' places for our communities. It highlights the connection between health and the built environment and the role of places in not only addressing chronic health concerns, but also creating flourishing, safe, comfortable and vibrant places for people

Each of the Better Placed objectives can relate to distinct bodies of research into wellbeing.

There are some new areas of wellbeing research we could consider feeding back into Better Places objectives including:

- A stronger emphasis on connection to nature and its positive impact on health and wellbeing.
- Experiences of flow or engagement in the built environment.
- A stronger focus on the direct health impacts from connected, active, nutritious places.
- Inclusion of spaces that celebrate achievement, volunteering, all ages education, and play. This will link more strongly to the new national wellbeing framework.
- The role of places that support: creativity, humour, joy, curiosity, gratitude, hope and spirituality in forming flourishing communities.
- A stronger focus on the practices of consultation and co-design which are vital for autonomy, democratic participation and community wellbeing.
- A stronger look at what diversity means in design including topics like inter-generational design, cultural design and neurodiversity.

Seven distinct objectives have been created to define the key considerations in the design of the built environment. Achieving these objectives will ensure our cities and towns, our public realm, our landscapes, our buildings and our public domain will be healthy, responsive, integrated, equitable, and resilient.

OBJECTIVE 1.	OBJECTIVE 2.	OBJECTIVE 3.	OBJECTIVE 4.	OBJECTIVE 5.	OBJECTIVE 6.	OBJECTIVE 7.
<b>Better fit</b> contextual, local and of its place	<b>Better performance</b> sustainable, adaptable and durable	<b>Better for community</b> inclusive, connected and diverse	<b>Better for people</b> safe, comfortable and liveable	<b>Better working</b> functional, efficient and fit for purpose	<b>Better value</b> creating and adding value	<b>Better look and feel</b> engaging, inviting and attractive
Good design in the built environment is informed by and derived from its location, context and social setting. It is place-based and relevant to and resonant with local character, heritage and communal aspirations. It also contributes to evolving and future character and setting.	Environmental sustainability and responsiveness is essential to meet the highest performance standards for living and working. Sustainability is no longer an optional extra, but a fundamental aspect of functional, whole of life design.	The design of the built environment must seek to address growing economic and social disparity and inequity, by creating inclusive, welcoming and equitable environments. Incorporating diverse uses, housing types and economic frameworks will support engaging places and resilient communities.	The built environment must be designed for people with a focus on safety, comfort and the basic requirement of using public space. The many aspects of human comfort which affect the usability of a place must be addressed to support good places for people.	Having a considered, tailored response to the program or requirements of a building or place, allows for efficiency and usability with the potential to adapt to change. Buildings and spaces which work well for their proposed use will remain valuable and well-utilised.	Good design generates ongoing value for people and communities and minimises costs over time. Creating shared value of place in the built environment raises standards and quality of life for users, as well as adding return on investment for industry.	The built environment should be welcoming and aesthetically pleasing, encouraging communities to use and enjoy local places. The feel of a place, and how we use and relate to our environments is dependent upon the aesthetic quality of our places, spaces and buildings. The visual environment should contribute to its surroundings and promote positive engagement.
<ul style="list-style-type: none"> <li>• Belonging.</li> <li>• Place attachment.</li> <li>• Sense of ownership.</li> <li>• Expressions of place and culture.</li> <li>• Connection to nature.</li> </ul>	<ul style="list-style-type: none"> <li>• The interrelated nature of human wellbeing and sustainability.</li> <li>• The sense of meaning derived from sustainability goals.</li> </ul>	<ul style="list-style-type: none"> <li>• Design for inclusivity, connection and diversity for all people.</li> <li>• Inter-generational design.</li> <li>• Equity and affordability.</li> </ul>	<ul style="list-style-type: none"> <li>• Safety for all.</li> <li>• Perceptions of comfort.</li> <li>• Internal environmental performance.</li> <li>• Inclusive design for all people particularly in public spaces.</li> </ul>	<ul style="list-style-type: none"> <li>• The role of autonomy and control in public spaces and internal environments.</li> </ul>	<ul style="list-style-type: none"> <li>• How we measure social value over time.</li> </ul>	<ul style="list-style-type: none"> <li>• Positive emotional responses to places.</li> <li>• The role of quality and maintenance and its impact on wellbeing.</li> </ul>

## Key areas of wellbeing research

3

# Housing design for wellbeing

Five88, San Francisco by David Baker Architects

## Topics:

- Loneliness
- Designing housing for connection
- Case studies: Co-housing
  - The Porch
  - Social Spaces
  - Entrances
- Social and affordable housing
- Design for trauma
- Case study: Homeless Housing

# Case study: Belonging and the rise of loneliness

In 2023 the US Surgeon General identified social isolation and loneliness as "profound threats to our health and well-being..."<sup>66</sup> The health risks of loneliness, both physical and mental, exceed obesity and are comparable to those of smoking.<sup>67</sup> And the challenge is extensive. Pre-covid approximately half of U.S. adults reported experiencing measurable levels of loneliness.<sup>68</sup> This is felt more acutely for teenagers and older adults. Of the older generation, women are more lonely. "Older women are more likely than older men to live alone, and 40% of those who live alone are lonely."<sup>69</sup> The statistics in Australia are similar, prompting the New South Wales (NSW) government in Australia to open a parliamentary inquiry in August 2024 to "examine the extent of loneliness and social isolation in NSW, including how it is measured and opportunities for improved data capture."<sup>70</sup>

So what can we do? Housing and the design of our neighbourhoods has a critical role to play. The NSW Wellbeing Budget Foundation Paper recognises that the quality of our social connections and natural environment strongly influence our propensity for loneliness.<sup>71</sup> "As well as places to connect with our close friends and family, we need urban environments that foster a greater number of 'weak ties', people you see regularly and trust enough to say hello to. Places that help people connect on a daily basis with their neighbours and colleagues or the local shopkeeper, café owner or concierge are an effective way to increase meaningful relationships."<sup>72</sup>

A key area of focus is the value of social connection through our neighbours. 'Our neighbours are our closest source of social support and connection.'<sup>73</sup> Neighbours are the first to greet you on your morning walk or to be there in a crisis such as a fire, extreme weather or illness. Over time, this can develop in to social drinks, sharing meals or sharing childcare.<sup>74</sup> These types of interaction contribute to a sense of belonging and can be factors for building resilience when things go wrong. These interactions are also often multi-generational and more diverse than perhaps a workplace may be (where you meet people with similar education and interests).

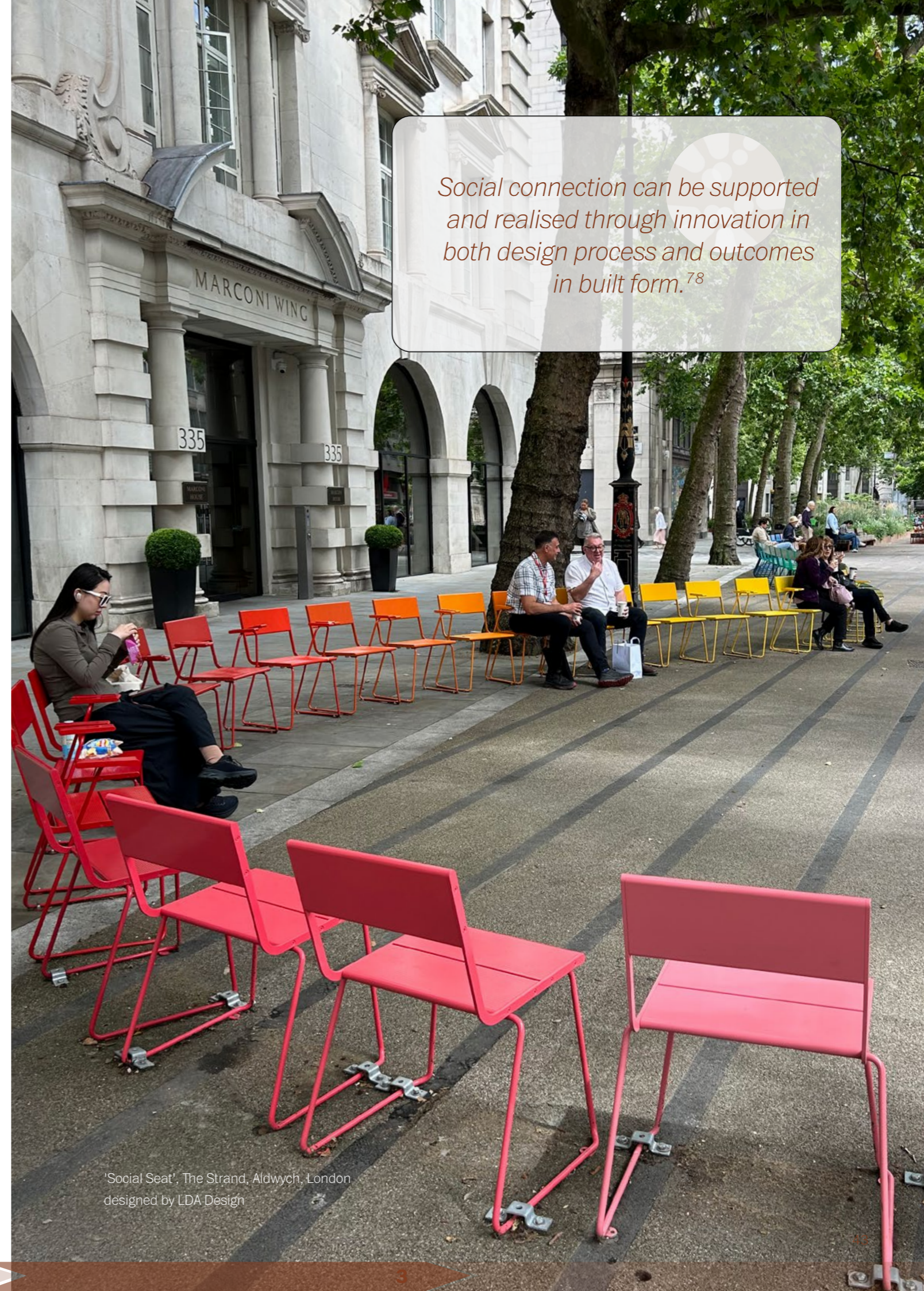
Knowing your neighbours to reduce loneliness also takes time. For this reason, research in housing on 'ageing in place', intergenerational design that adapts to changing family sizes and security of tenure all become critical. Our Australian segregated housing models where adult seniors over 65 years old live in often isolated communities is also contributing to the challenge. "By fostering environments where multiple generations live in close proximity and share common spaces, these housing models encourage the exchange of skills, knowledge, and experiences, benefiting both the young and the old."<sup>75</sup>

What types of interactions do we suggest with neighbours? Happy Cities asked people about the "types of activities they participate in together with neighbours. The majority (70%) indicated that they have conversations with neighbours. The next most commonly selected responses were taking care of neighbours' pets or plants (22%), sharing food or meals (15%), and sharing household items (11%). Another 20% indicated that they do not participate in any activities with neighbours; however, in open-ended responses, 54% wrote that they are interested in interacting more with neighbours."<sup>76</sup>

Corey Keyes, a key sociologist in the field of positive psychology has made the point that this focus on loneliness could be construed as another 'wack-a-mole' government focus<sup>77</sup>. So it should be noted that design for loneliness is only part of the picture. Studying loneliness alone, again a negative state, will not be enough to understand the how to lift society from depression, to languishing, to flourishing.

But it is a start!

*Social connection can be supported and realised through innovation in both design process and outcomes in built form.<sup>78</sup>*



'Social Seat', The Strand, Aldwych, London designed by LDA Design

# Designing housing for connection

**The spaces most commonly associated with strong social connection include parks and green spaces, community facilities, cafes and housing.<sup>79</sup> But even these typologies need quality, human-focused design to promote high levels of use.**

Happy Cities from Vancouver would say that these spaces need to be well located, designed to be a 'social icebreaker' for social interaction, regularly activated, inclusive for everyone, be able to change with the community needs and invite people in with carefully designed transitions.<sup>80</sup>

In housing there are a number of innovative models being researched with an intentional focus on social connection. There are also a number of design guides focused on the elements of housing design that can influence social connection. Beyond the design, management and maintenance is critical to protect spaces that are easily accessible to all, and well maintained. It will also be critical to ensure planning and design policies such as fire codes start to consider the impact they have on innovative solutions. For example, personalised entry ways with pot or door mats which create a sense of individuality can be prohibited by fire codes.<sup>81</sup>

Some of the innovative housing models that focus on social inclusion include:

- "Cohousing, defined as a small intentional community of private homes clustered around a shared space. It is a purpose-built option that brings community into the home."<sup>82</sup>
- Home Share - Intergenerational share home options that may bring older adults who want to age-in-place together with students together such as 'Canada Homeshare.'
- NORCS - "Enhanced NORCs are an innovative resident-coordinated housing model. These are generally apartment buildings with 30% or more older adults where programming has been brought in to engage residents."<sup>83</sup> See page 31 for more information on this project.



# Common Stories

## Status Quo...

"We included a flexible (empty) community room for neighbours to socialise and a playground for children. These are the vital social space for social cohesion. No we haven't been back to see if anyone uses it." Architect

The building manager took over and put a lock on the community room to protect the chairs.

The playground swings haven't been fixed in years and there are no seats for parents.

Management and maintenance have serious ongoing roles for the success of social spaces in a housing development. It takes an ongoing role for the community and management to protect the social values of a development.

PNG People Credit: Studio Alternativ

## Something better...

"We co-designed (with residents) an ecosystem of spaces for neighbours to interact. Some spaces are small, some large, and if any single one fails, there are options. We are measuring the success of each space over time." Architect

Stair cases are moved external with seating areas for neighbourly chats.

The childcare has a playground opened to community after hours.

Communal areas include small shared balconies near the lifts for 6-8 apartments to take over.

The community room is open to all residents with a swipe pass and co located with a shared laundry, outdoor drying lines and community garden beds.

The open space has an all ages ninja course for balance and exercise and there is a biannual residents competition.

# Case study: Co-housing Vancouver Design for Connection

THEMES:

- relationships
- health
- connection to nature
- identity & strengths
- autonomy, choice, control
- stewardship and legacy



MA+HG Architects in Vancouver are an architectural practice focused on “design solutions that explore alternative ways of home ownership and dwelling”<sup>84</sup> including, co-designed, co-housing, micro-apartments and multi-family residential buildings. They provided a tour of Tomo House<sup>85</sup> on Main, a ‘co-housing lite’ project in Vancouver developed by Tomo Spaces with Lanefab and Happy Cities. This three storey ‘missing middle’ project was not necessarily affordable but represented a new more connected way of mutually supportive living between neighbours who choose to live there. It included interesting inter-generational design options like a separate studio apartment that could internally connect to a 2 bed apartment, perfect for teenagers or grandparents.

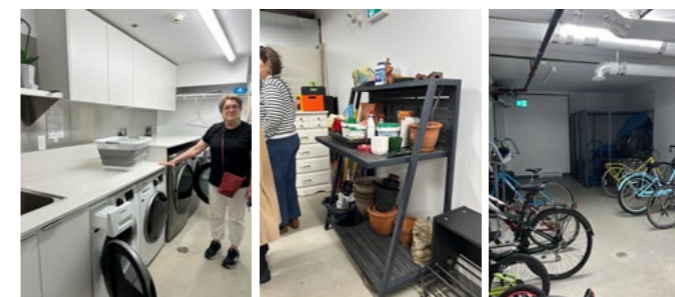
The project was co-designed by owners utilising the design guidance of Happy Cities that included research such as ‘Overall, our research finds that 12 units is an effective size for fostering social connections and a sense of community in cohousing.’<sup>86</sup> The project has been studied by Happy Cities with a post occupancy study that included interviews, surveys, and on-site observations with residents before move in and approximately three and six months after. Key wellbeing findings included:



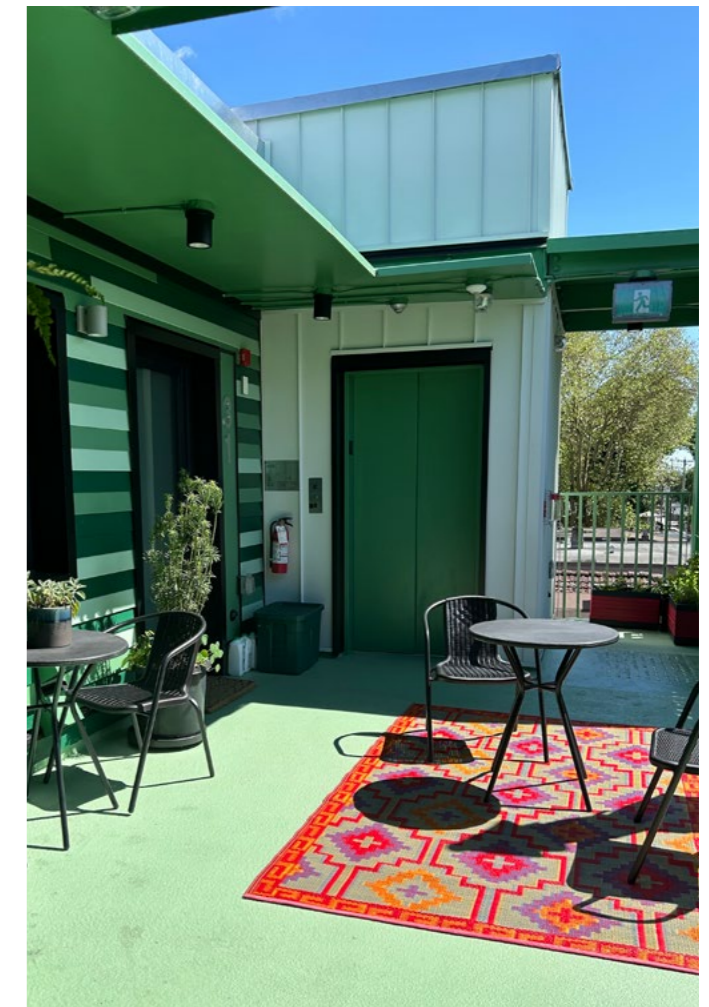
**Policy idea:** Municipalities can offer density bonuses or floor area exclusions for widened, social and active walkways or circulation spaces, such as the City of North Vancouver has done with its Active Design Guidelines.



The development includes 12 units, a communal kitchen/ living/dining room known as "Common House", street stoops, and oversized exterior walkways (1.67m wide) for informal neighbourhood interactions and personal touches. The basement included bicycle parking, shared laundry and a shared tool/work space.



An interesting apartment layout option to support inter generational living.



# Case study DBA: The Porch

THEMES: relationships, identity & strengths, autonomy, choice, control



Credit: DBA

Many of the David Baker Architect projects championed the porch or stoop in their multi-residential projects. “Porch culture, (and) stoops create opportunities for brief, incidental social encounters. In doing so, they extend residents’ sense of ownership and care out toward the surrounding neighbourhood.”<sup>87</sup> They also offer moments to express personal identity back into the community and provide a subtle demarcation of the transition from communal to private space.

David Baker Architects have created the resource ‘9 Ways to make housing for people’<sup>88</sup> which includes a highly practical and visual diary of their projects. It explores how they have considered wellbeing and social connection across their vast catalogue of social and affordable housing projects. I was fortunate to visit 11 of their projects in San Francisco.



Credit: Mariko Reed

# Case study DBA: Social spaces

THEMES: relationships, meaning, achievement, positive emotions

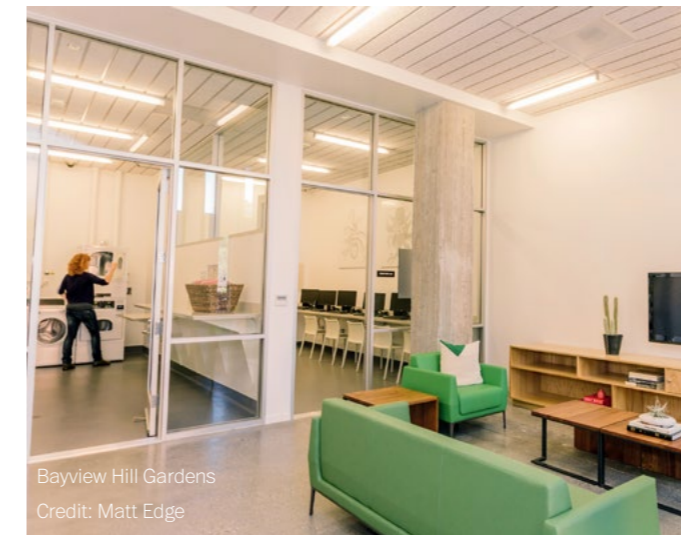
*“Things like views, gathering places, and garden spaces aren’t luxuries—they’re the basics on which real communities depend.”<sup>89</sup>*



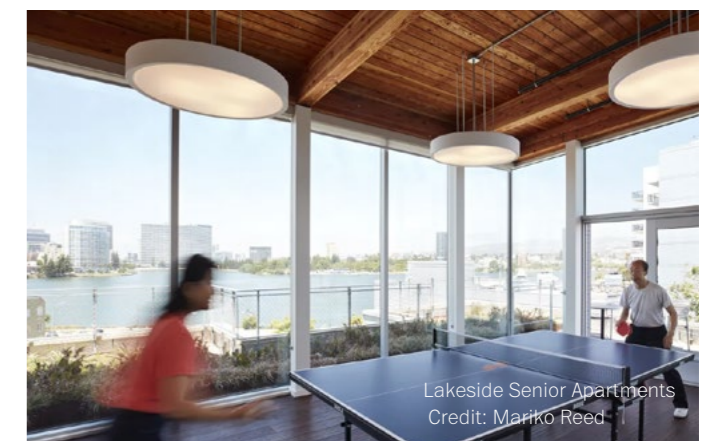
855 Brannan, San Francisco by David Baker Architects where the gym overlooks a unique communal forest courtyard



Bayview Hill Gardens  
Credit: Bruce Damonte



Bayview Hill Gardens  
Credit: Matt Edge



Lakeside Senior Apartments  
Credit: Mariko Reed

DBA has used their post occupancy surveys to understand the success of the social spaces in their residential projects. One key insight they provided is that they often found community rooms with a door were locked by building management in order to control and protect the space or furniture. This removed the sense of community ownership on the space, and reduced informal use of the space. DBA instead started to design community ‘nooks’ connected to the main entrance, but unable to be fully locked. This experience was also echoed by Happy Cities and Hey Neighbour Collective. Community spaces can be connected to outdoor courtyards, or overlooked by internal gyms offering a sense of passive surveillance.

Co locating or clustering a few community spaces can help to activate and encourage more informal social connections.

In Bayview Hill Gardens they co located a communal or shared laundry space with computer room/sharework space and residents lounge to ensure there was a range of activations.

# Case Study DBA: Entrances

THEMES:

autonomy,  
choice, control

safety

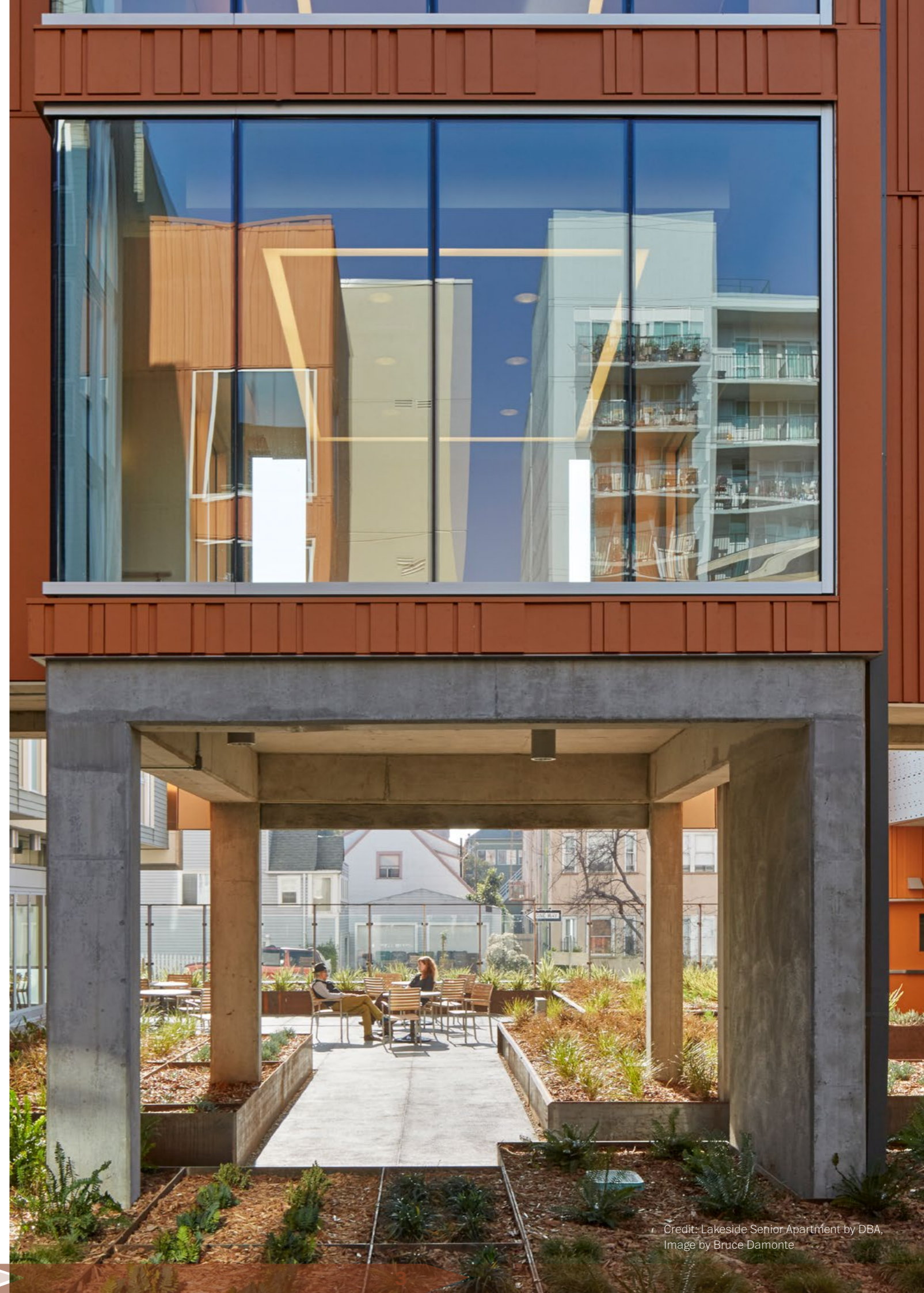
connection to  
nature

Each of the projects visited showed a sensitive and unique entry for each building. I particularly appreciated the transparent security screens that created a transition from the street to communal open space before the front door. DBA noted that from post occupancy evaluation, residents appreciated highly visible security measures such as the heavy security gate which helped them feel safe. This is carefully complemented with high levels of transparency and clear site lines that made approach and entry feel very safe.

*"A gracious and inviting front door sets an expectation for inclusiveness and encourages people to treat the building and its residents with respect."<sup>90</sup>*



855 Brannan, San Francisco  
by David Baker Architects



Credit: Lakeside Senior Apartment by DBA,  
Image by Bruce Damonte

# Affordable and Social Housing

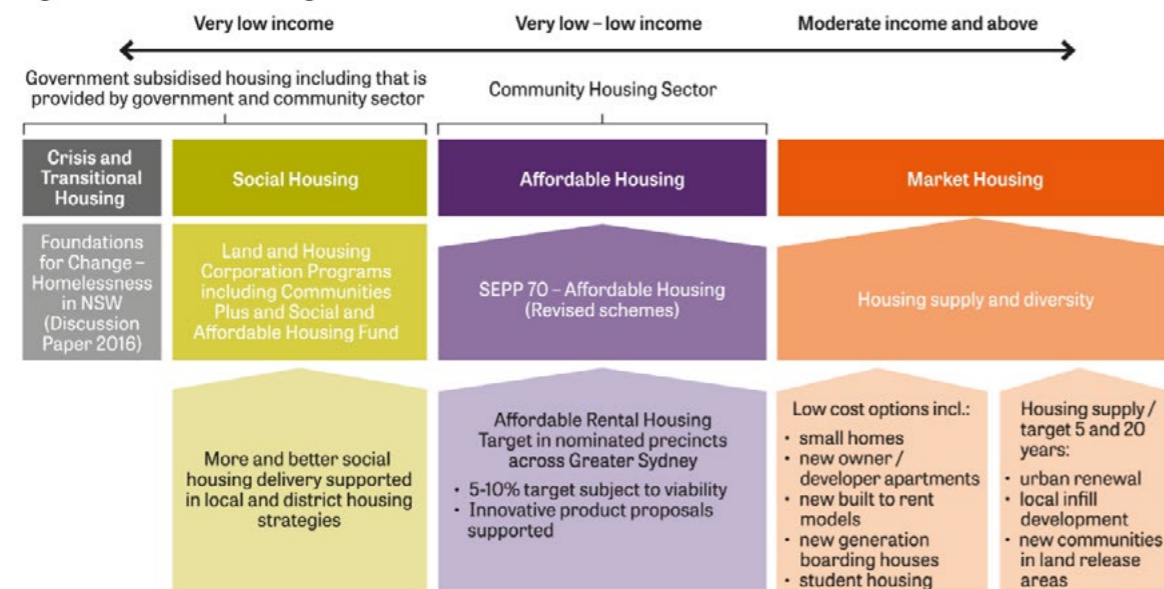
**Across the cities of Sydney, Auckland, Vancouver, Toronto, London, Manchester and New York, affordable housing was a commonly discussed theme.** In places like Vancouver, a wide range of policies were being implemented to address overall affordability including wide scale up zoning to increase housing supply (hopefully), policy to reduce vacant homes, incentives to creating secondary dwellings (eg basement or backyard units) and reduction of short term holiday rentals<sup>91</sup>.

Whilst all housing is still grappling with loneliness and sense of connection, social and affordable housing generally needs to address many more complex physical and mental health challenges including experiences of trauma, Post Traumatic Stress Disorder (PTSD), addiction, violence, disability or age related challenges<sup>92</sup>. In NSW in 2022 the siloed departments of Health and Department of Communities and Justice made an agreement to work together more closely understand the interrelated nature of housing and wellbeing particularly in the areas of social housing and homelessness.<sup>93</sup> Some of the key priorities

include adopting a trauma-informed approach, placing the person at the centre of services and including people with lived experience in the consultation process.

Finding ways to support basic needs of safety, autonomy and control whilst also elevating a sense of hope, connection and optimism will be a common housing challenge across the world. Projects in Australia like those by [Nightingale](#) have demonstrated a commitment to environmentally and socially sustainable, high quality affordable housing. It was inspiring to see many other exceptional international projects in San Francisco and Denver.

Figure 3.1: Affordable Housing Continuum in the NSW Context



Source: Greater Sydney Regional Plan, Greater Sydney Commission (Figure 19, page 69), 2018

# Trauma Informed Design: Shopworks Architecture, Denver

Shopworks Architecture in Denver work on a wide range of housing projects including homeless and crisis housing, social housing, tiny home villages and affordable housing. With a 'do no harm' philosophy, they have developed a design language and guidelines for trauma-informed housing, and also conducted post occupancy evaluations of their projects. They have created open source and free guidelines for both the design process and the design elements that create safe, inclusive and trauma-informed spaces that calm the neuro responses and create positive experiences.<sup>95</sup>

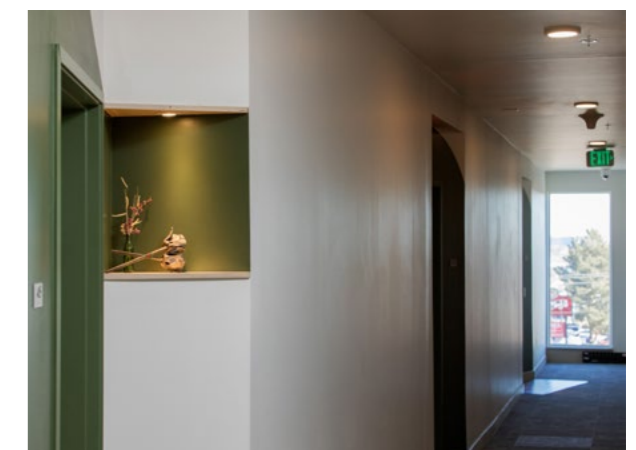
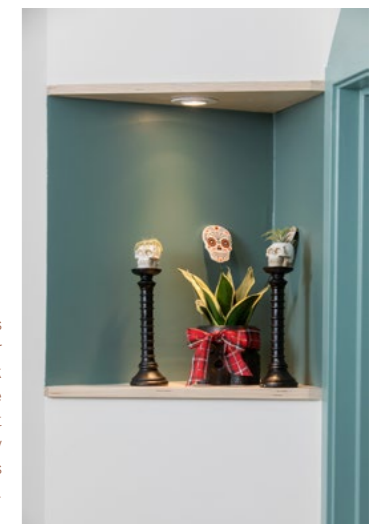
With their extensive experience and portfolio of built projects, Shopworks Architecture demonstrate the iterative value of creating a design approach, testing the built form and assessing the outcomes since 2017. Their Trauma-Informed Design (TID) approach has now been adopted as a requirement in the planning approval process for social and affordable housing in Denver. They are also conducting a 3 year research project with both TID and non TID housing projects (a control group) to assess the wellbeing outcomes utilising 144 deep surveys.

Trauma-informed care, which originated in the health care industry recognises the physical and mental health impacts of trauma. Trauma-informed design aims to promote wellbeing and healing with spaces that support safety, love and belonging, identity, self esteem and self actualisation<sup>96</sup>. In the future Shopworks Architecture would like to see a shift away from trauma-informed design to 'dignified design', where the focus moves from the trauma to a more positively framed dignity mindset.

The following pages outline some of their built projects and how elements of wellbeing are considered at every scale of the project.

*"The difference between trauma informed design and good design is a process and a measured outcome."*<sup>94</sup>

Valor on Fax by Shopworks Architecture in Denver explores how to break up corridors to create personalised entrances that express a sense of identity and pride, which also helps with wayfinding.



## Concept 1: Control

With resident experiences of trauma and PTSD, providing a sense of control in crisis, transitional, social and affordable housing can be valuable, if not critical.

### Example:

Shopworks recognised that clothing was a highly valued possession for their residents. In their project lves (under construction at the time), they designed an over-sized laundry room that allows people to wait in the common lounge with clear site lines to their possessions whilst they were being washed. The oversized tilt up door and additional exits ensured everyone could see multiple exits, feel safe, and be able to choose their proximity to other people in the naturally lit, generously sized space.



1.

## Concept 2: Safety

Feeling safe as people enter new housing or unknown spaces is critical to reduce the trauma or fear response. Safety is also critical for staff. There is a constant design tension in some housing typologies between clear sight lines, creating safe boundaries and allowing people to access staff without feeling surveyed.

### Example:

In the project Urban Peak, a youth homeless housing project in Denver (under construction at the time), Shopworks explored a number of different doors to the staff offices that would encourage open conversation but also create a sense of safety and respect for staff. Their experiments landed on a barn style door with a top and bottom section, that created strong sight lines, but also a subtle demarcation for private staff space.



2.

## Concept 3: Connection

In transitional and crisis housing, a sense of connection and community can support a sense of reduce loneliness and isolation. Shared and communal spaces can create a sense of community pride and empathy for others.

### Example:

In the project Warren Residences (affordable, supportive housing for those who have experienced homelessness) was an adaptive re-use of a church property. They provided a communal kitchen and dining space. One small observation for the design team was the importance of designing a good bin spaces, one that sensitively understands the daily politics of this area.



3.

## Case study: Youth Homeless Housing

[Urban Peak](#), designed by Shopworks Architecture, is the only non-profit organization in Denver that provides a full convergence of services for youth experiencing homelessness. The 136-bed youth campus affectionately called "The Mothership", is for youth ages 12 through 24 who are experiencing homelessness<sup>97</sup>.

Still under construction when we visited, it was a powerful physical representation of Shopworks Architecture's thoughtful and nuanced approach to trauma-informed design. The project was designed with the concept of 'neighbourhoods', each of which had its own kitchen, living room and shared spaces that could change to suit the needs of residents. "The idea is to group together youth with similar life experiences into one neighbourhood, allowing them to connect with and support peers who are likely to be going through similar things."<sup>98</sup> For example these groups may include pregnant and parenting youth, youth in recovery (substance abuse), newcomers or those who have exited foster care.



Key plan:

From the smallest of details like the barn style office door, to master planning of 'neighbourhoods' and the provision of music and arts spaces, this project demonstrates how overlapping TID at all scales creates a rich and powerful experience of dignified housing.

Each neighbourhood had its own living room.



Paired rooms included dedicated study areas and individual kitchenette for a sense of autonomy and retreat.

4

# A design process that supports wellbeing



## Topics:

- The design process
- Measuring wellbeing
- Pre and post occupancy evaluation
- Mapping wellbeing
- An ideal development model
- Where is the industry heading?



## Wellbeing in the design process

**Architecture has the unique ability to change a place. It can be a catalyst to repair a community, to knit together a neighbourhood or instil a sense of pride in a place<sup>100</sup>.**

Research from across the globe has universally made the point that in order to benefit from feelings of inclusion, autonomy and sense of belonging, the community needs to be part of the design process. Telling the community what they need, assuming their values or excluding them from the design and management of a place does not support wellbeing.

“Individuals must be able to contribute to an initiative on belonging. This means they must have ways to express agency without elevating one person’s needs above the needs of the collective.”<sup>101</sup>

The Quality of Life Foundation evidence review<sup>102</sup> makes a compelling argument on the importance of a sense of control for personal wellbeing, and the need for more consultation and inclusion in the decision making process. In particular, this feedback needs to be allowed to change over time. As neighbours change, so too will the community priorities for wellbeing.

So what is best practice in the design process to support wellbeing? Dr Kelly Watson believes “open source community shared data is best practice.”<sup>103</sup> For others it may include a university level research partnership.

Regardless of the many ways you can consult, co-design and engage with a community, we will need incentives and policy to promote best practice. This includes incentives for housing providers to invest the time and funds in this process to do it well.<sup>104</sup> We also ideally need some policy that helps to standardise some wellbeing measures to make data comparable between developments. And we need the insurance process to change<sup>105</sup> to allow mistakes to be identified without liability, or to allocate it properly when something isn't working.

### Minimum process - Consult

Consultation can ensure that wellbeing decisions are based on data that is democratically collected. A well documented consultation process can ensure decisions are made by a diverse group of inputs, rather than from the top down, and ensures that community inputs are accurately represented.

### Better process - Co-Design

Even better than consulting and then using experts to translate this feedback into design, is a co-design process. In this option community sees their values and ideas embedded into the project through an iterative design process. It can instil a sense of pride and optimism, and ensure the design outcomes accurately incorporate community sentiment. Creating a feedback loop with the communities that assist in design research is critical to create those benefits of agency and sense of belonging. Without it you can erode community trust, create ‘feedback fatigue’ or create the sense of authority controlling the results.

### Best practice - Engage

Engagement can be an ongoing process throughout the life cycle of a building from design to decades later. It suggests a longer term investment and dedication to reflecting the values of the community. This could include the use of artists and poets to bring the consultation process alive and be more engaging to the public<sup>106</sup>. Or an ongoing post occupancy survey that accurately measures the role a building is playing in community wellbeing over time, and allows the design to change and adapt over time.

# Measuring wellbeing: Data and Challenges



## A common theme in discussions across the globe is how we can measure wellbeing.

Understandably, there is a need to create evidence for the design ideas that have measurable, and ideally long-term impact on community health and wellbeing. Data creates a common dialogue for community and clients, and eventually a way to move the industry forward with interventions that actually work.

Evidence-based design, however, is often difficult to realize.<sup>107</sup> And data is not as easy as one may think to collect in ethical, inclusive and accurate ways. Some of the best practice considerations as we aim to measure wellbeing are outlined below.

### Subjective data is useful.

Wellbeing, even collected by subjective data measures can be highly accurate, and valuable. Whilst we ideally have a mixture of subjective and objective data, the OECD makes the point “Subjective well-being measures are, however, unique in that they provide a relatively robust empirical source of information on what affects how people feel about their lives, which is an important component of overall well-being. By examining the level of subjective well-being actually achieved as a result of different decisions or approaches, policy-makers and individuals can better understand what matters to people on an empirical (rather than anecdotal) level.”<sup>108</sup> Flora Samuel made the point that new technology is constantly being developed to make the collection and collation of quantitative and qualitative data more time and cost efficient.

Examples of objective wellbeing measures that can influence wellbeing may include data on internal environmental conditions, energy production/use, transport useable, walkability, participation numbers in community events or recorded levels of volunteering. Set your wellbeing vision and find the measures that could evidence your approach.

## Collect data that actually measures wellbeing.

With a strong history of measuring what is going wrong in community (deaths, disease, ill health), we often don't have the existing measures or census data needed to measure wellbeing.

Even national and state based wellbeing frameworks have fallen prey to shoehorning data that already exists into wellbeing frameworks. Take for example the draft NSW Wellbeing Budget that measures social connection with the metric of "road toll deaths". It is an example of making existing data sets 'fit' into categories, but not actually creating the necessary data to fit a true definition of wellbeing. A community is most definitely impacted negatively by a road accident death, but a community is not 'flourishing' with strong connections just because no one had died by car accident. A better process would be to define the types of social connection that are important to a community and measure them - such as levels of trust in neighbours or institutions, levels of friendship/marriage/partnerships, participation in social groups like sporting activities or levels of volunteering. All of these activities build social cohesion and connection.

When collecting wellbeing data, we need to ensure we measure both positive and negative effects to avoid 'digital misery', a side effect when we only measure and map when things are going wrong.<sup>109</sup>

### Collect data more often and map it.

The data we do have, is often collected infrequently. For example the OECD notes “Subjective measures of housing distress are also available, but they are not collected on a regular basis.”<sup>110</sup> Census data can be used to create baseline assumptions for wellbeing. However often this data is collected infrequently, and without being mapped, it is hard to break this data down to the community level that may relate to a masterplan, building or neighbourhood.

*“Understanding and improving well-being requires a sound evidence base that can inform policymakers and citizens alike where, when, and for whom life is getting better.”*

## Data can create invisible people.

Dr Antonella delle Fave makes the argument that data can often create 'invisible people'<sup>111</sup>, be it by creating online wellbeing surveys that exclude older people without computer access, or even the research focus on data collection on people who are either languishing or flourishing, with very little time spent on the vast majority that sit somewhere in between. This will be a key consideration for future inclusive wellbeing measures.

## Data should help us decided what can have the best impact.

The exciting future of data informed design will help us to decide which design decisions will have the greatest impact on wellbeing. For example when planning a community, would a park or access to a natural bush walk impact wellbeing more? If the data shows a park with planned activities will have more impact is that because of positive sense of belonging, physical activity, or reduction in loneliness? What design elements help each of these elements and reduces barriers to participation, and feels more safe and inclusive to more diverse people. As these answers start to roll in, we need this data to be shared to help future projects.

## Who should ask for wellbeing data?

Given the sensitive nature of wellbeing, some organisations such as WELL noted they can be limited by their client's willingness under privacy or data protocols to collect and share data. Staff have reported personal anxiety on answering wellbeing questions from their place of employment, never sure the data will remain anonymous.

Architects are not trained in statistics, survey design, bioethics or health data. Measuring their own projects also has the potential for conflict of interest. Combined with rarely being paid for this service, it may not be best practice for architects to assess wellbeing outcomes in

their projects. Rather, we could consider health clinicians who are “uniquely positioned to collect data and ask questions in support of effective partnerships that address the root causes of poor health.”<sup>112</sup> Clinicians however are rarely engaged in architectural projects at this point in time.

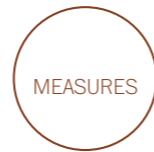
## Someone has to pay.

As clients, governments and designers agree wellbeing is important, someone has to pay for the time to engage the community and measure the results. To often it falls on the architects as the end of the project when fees have run out. According to QOLF review, POE's should be costed into the project from the beginning, not seen as a bolt-on at the end, and should be the responsibility of agencies that are in charge of the long term social and environmental sustainability (such as housing authorities, local authorities and public land owners.)<sup>113</sup>





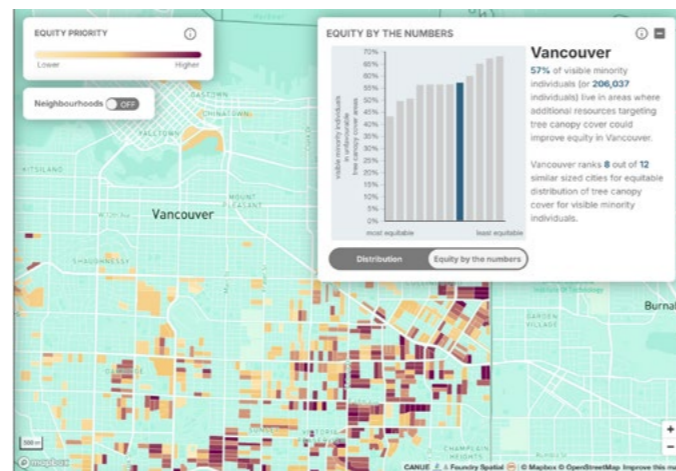
# Mapping Wellbeing



**The role of mapping as a tool for collecting community feedback on wellbeing is an exciting area of development being explored in a number of countries.**

Mapping allows for community data on wellbeing to be spatially connected to place. Spatial inequalities can be understood, and in a number of cases, different layers of data can be overlaid to understand the correlation between different factors such as income levels and sense of loneliness. It is visual, democratic, and can be owned and altered by the public.

Flora Samuel believes "that monetisation will be disrupted by the development of intelligent maps that chart change in real time. The ultimate aim is to have a planning system based on value expressed spatially in real time." She believes mapping provides a more nuanced understanding and observation of what is happening for wellbeing.



## 1. Healthy Plan - Equity mapping Canada

Healthy Plan is a mapping tool from the Canadian Urban Environmental Health Research Consortium (CANUE) who are studying the 'multiple environmental factors linked to a wide range of health outcomes.'<sup>119</sup>

"HealthyPlan.City highlights priorities for improving equity, health and well-being for all by showing where vulnerable populations experience lower than average levels of beneficial environmental conditions."<sup>120</sup> It uses Canadian Census data combined with built environment datasets to focus on 129 cities across Canada. Built environment data includes data such as average summer temperature (heat island affect), tree canopy cover, flood susceptibility, transit locations, educational facilities, healthy food outlets, parks and recreation facilities and air and noise pollution. The census data overlays include low-income individuals, vulnerable age groups like children and older adults, one person households, and newly arrived immigrants. In particular they are looking to identify areas where these vulnerable communities correlate with more risks from the built environment. It is a free, open-access, University of Toronto based initiative, helping urban planners, public health professionals and policy makers to target spending in and improvements whilst having good data and baselines to underpin these decisions.

*"I believe that monetisation will be disrupted by the development of intelligent maps that chart change in real time. The ultimate aim is to have a planning system based on value expressed spatially in real time."<sup>118</sup>*



Public Map Platform, Rural Roaming Room, Lle Llais

## 2. Public Map Platform lead by Professor Flora Samuel, Cambridge University

The Public Map Platform (PMP)<sup>121</sup> is a 2 year pilot, open source, public mapping tool created to help local authorities and their communities understand 'place' and how to make these places better for people. The project has been based in the Isle of Anglesey in response to the Welsh Government's Future Generations Act, which uniquely is one of the only countries to create a legally binding Act with funding to focus on wellbeing.

The PMP concept has been created to fix a broken system where community feel unheard, and planning decisions are based on hidden data that often 'fails to capture the true essence of social value'<sup>122</sup>. Flora Samuel made the point that a number of local government areas in the UK were buying private datasets on wellbeing, a

practice that runs the risk of being influenced by private interests, and lacking transparency to the public. The result is a lack of trust in the place-based decision system.

The approach for PMP is to create a community generated data and map source. Poets or 'bards' have been utilised to encourage artistic responses to help draw out subjective feelings of wellbeing. The community are also acting as social scientists, help to create environmental maps on topics such as air quality, biodiversity and water quality. This data will then be collated with census including economic data. Its an example of both the data collection and the resulting maps being used to improve community wellbeing.

# An ideal development model for wellbeing

**Everyone has a role to play in improving community wellbeing. On this page we take a look at a theoretical, "ideal" development model that incorporates wellbeing at all levels based on the many discussions conducted in this research.**

The best outcomes for wellbeing will come about through innovative partnership and collaborations. Design for wellbeing could be considered like a 'bridging' field of research that reaches between many different industries from architects to planners, sociologist, neuroscientists, ethicists, politicians, artists and medical professionals. To find the evidence link between design and health outcomes, the right partnerships will be needed at all levels. Similarly development is also a team sport that occurs over long periods of time. It involves government, the community, designers and builders. The ideal 'design for wellbeing' projects will need all players involved.

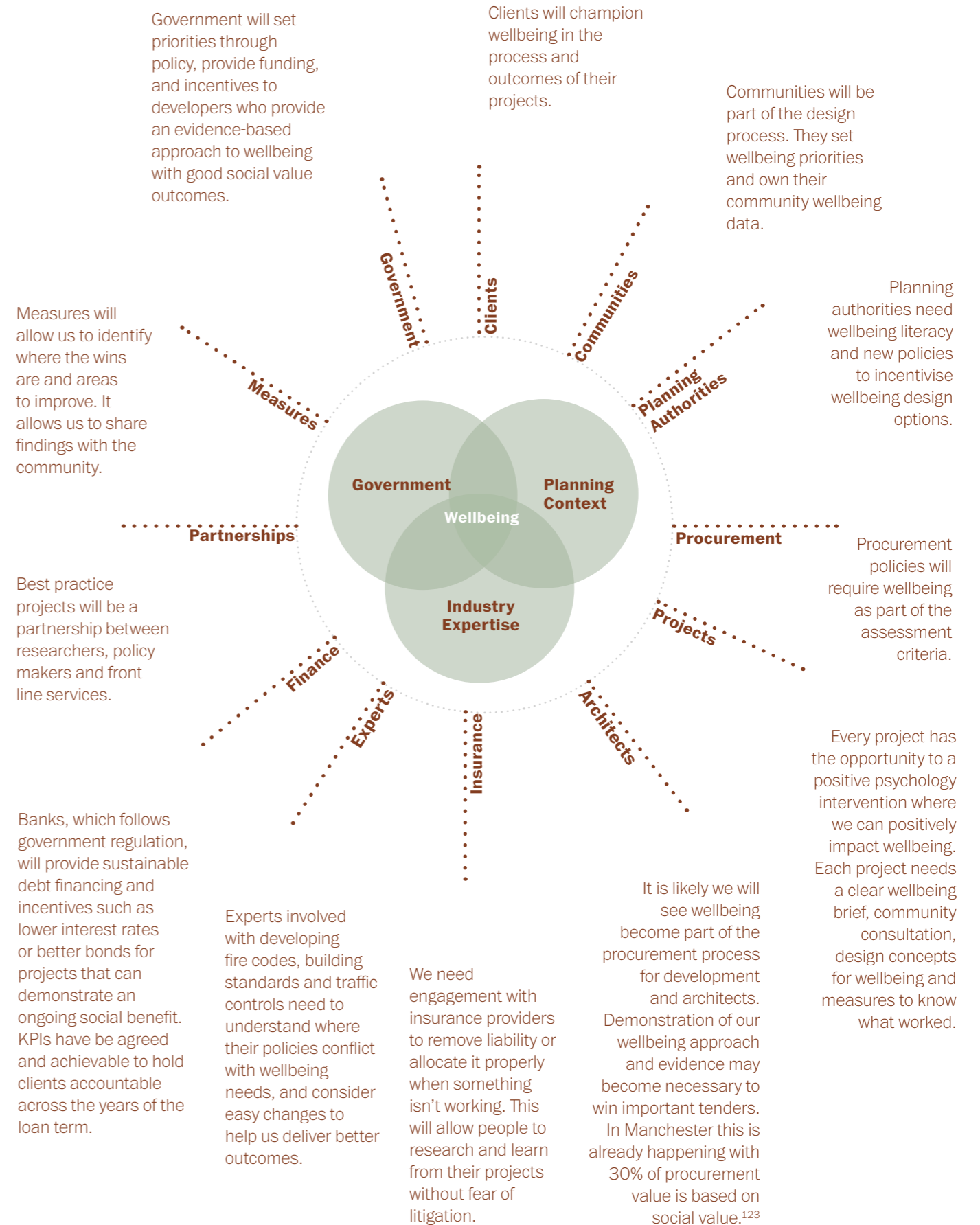
This diagram is a provocation to consider your role in the development process, and how small changes could have a big impact!

In Australia at this point we are only at the early days of wellbeing policy and green financing. The iterative design loops of experimentation and measured wellbeing outcomes are only just starting to feed into the design process.

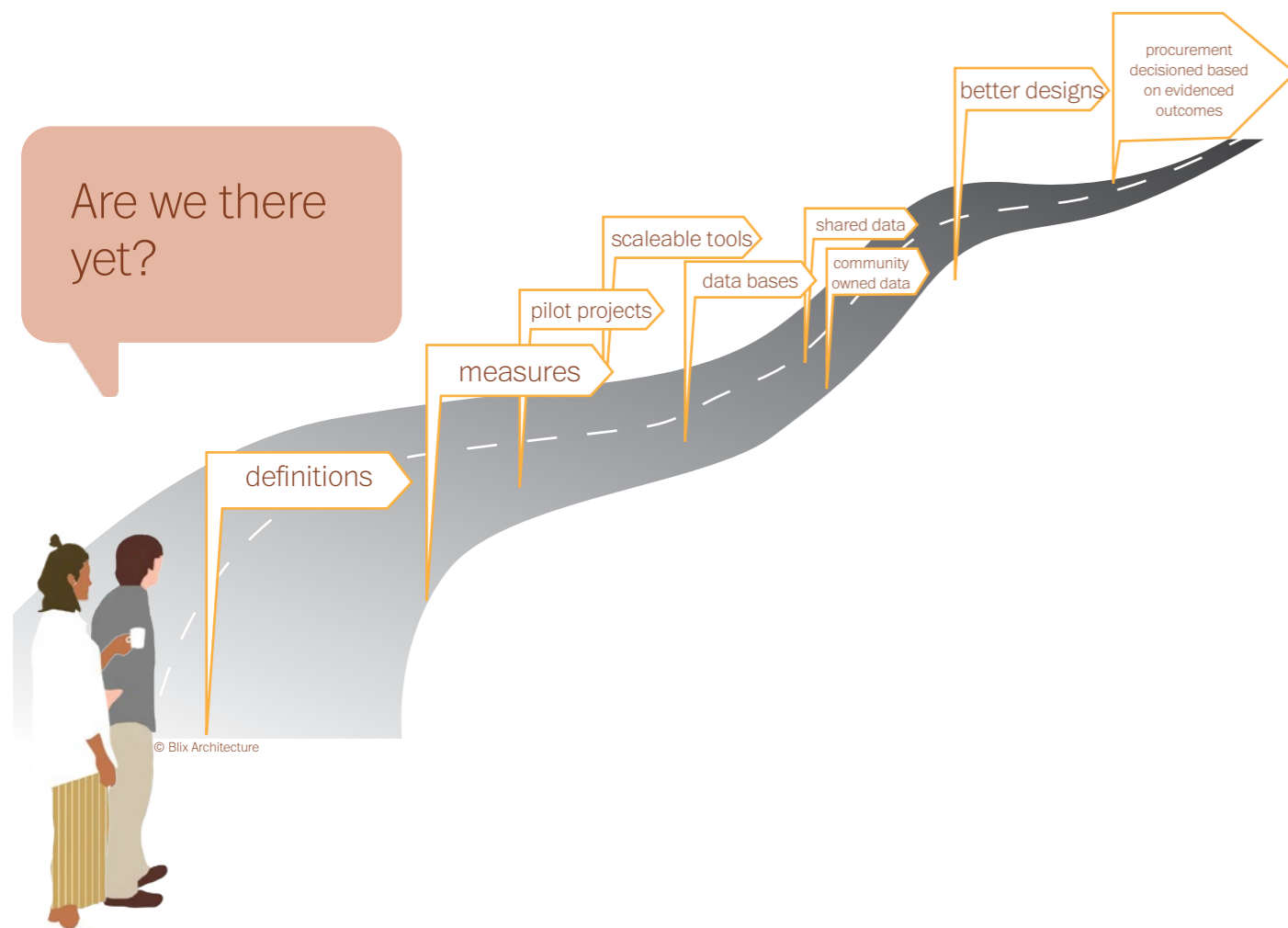
An iterative research loop between government, policy, clients and projects will help to:

- Inform new government policies and minimum standards.
- Improve the measures used for project financing.
- Improve rating and accreditation systems that provide industry recognition for exemplary projects.
- Demonstrate to the public measurable benefits from community participation and well designed development.
- Help architects and clients to understand what works.

*What can you do to influence wellbeing?  
Start small, think big.*



# Where is the industry heading?



## New ways of working may be required to create the real cross disciplinary collaboration needed for designing the built environment to support health and wellbeing outcomes.

Development and planning takes years, not to mention significant funding. We need to leverage every project to start creating a patchwork on knowledge on what works for wellbeing.

Some fun thought bubbles include:

- Imagine a social and physical health research team is allocated to each major government project like an airport or Olympic village with the focus to assist design teams with the latest research and to measure project impact. How are we going to help future Olympic projects and airports to know their design interventions improve health and wellbeing? Is that the real legacy? How will we know what to tweak and improve over time in these significant projects without the evidence and data?
- What if every project was required to do a post occupancy study? We could come up with some standardized measures, and leave room for the unique measures needed for the specific project or community. "Factors closely linked with health outcomes should be included in publicly published post occupancy studies."<sup>124</sup>
- We need pilot projects with the guts to measure and share their data. Ideally a mixed use precinct with multiple uses so many different interventions and typologies can be studied. Early adopters should be rewarded (GFA incentive?). It will takes years to develop good data sets. "If developers use validated instruments to collect data, communities could benefit from truly efficacious interventions backed by defensible data. And developers would benefit from offering a new value proposition: community amenities shown to be of actual benefit, which are more likely to win approval from stakeholders interested in public health and well-being."<sup>125</sup>

- What if every planning proposal needed to consider health and wellbeing impacts backed by evidence from validated studies? Where the evidence doesn't exist for new ideas, we support new research based on that development as a case study.
- What if leading developers or housing providers who contribute to externally validated wellbeing research are rewarded with planning incentives such as bonuses for future projects, GFA incentives or concessions on height restrictions?
- What if we had a coordinated industry wide research advisory group that could help clients and designers to know what 'holes' are needed for further research.
- What if local governments have a strong understanding of the social and physical spaces they need to support their community's wellbeing? A new role for community bioethicists trained in ethics, public health, and urban planning could lead this work<sup>126</sup>.
- What if community consultation is done before the project even starts. The community can provide a shopping list of wellbeing infrastructure for developers to consider, with items that are more meaningful than traffic light upgrades or new roads. Consultation would continue through the design stages to make one of these identified needs become a reality.

Each of these ideas can help to move our industry closer to a strong ecosystem of design and research to improve wellbeing.



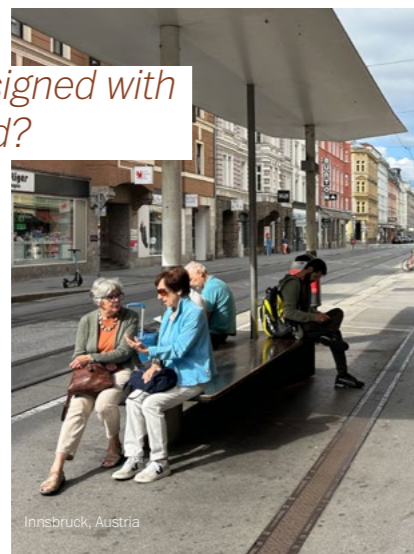
# Conclusion

Design for wellbeing is such a vast and challenging topic. With no easy answers, it will be an interesting journey to see how to apply this research in a scaleable way that has meaningful impact. This topic requires dedicated focus and research from many people. Like 'sustainability' it will be a critical element for design of buildings and housing in the future. However to have impact, it needs investment. It needs funding, research and commitment from Government to make social value a tangible and key focus for any development.

It is also exciting. The lens of health and wellbeing will manifest uniquely in each and every city, the solutions and design ideas endless. But it is also a lens that once seen through, will be difficult to ignore.

I hope this research will be inspiring, practical and useful as a launching point for the beginner or expert. Again, thank you to the talented and dedicated experts across the globe who generously shared their hopes and vision for this topic. I look forward to exploring this topic through practice and further research with other passionate designers, clients and researchers from across the globe for many years to come.

*Which one is designed with wellbeing in mind?*



Innsbruck, Austria



Sydney, Australia

Thank you...



# Key Definitions

## **Cohousing**

"Cohousing, defined as a small intentional community of private homes clustered around a shared space. It is a purpose-built option that brings community into the home."<sup>127</sup>

## **Gender diverse people**

"Gender diverse refers to people who identify with a gender or genders outside of the binary of female and male."<sup>128</sup>

## **Loneliness and Social Isolation:**

"Loneliness is essentially the perception of social isolation whereas social isolation is the absence of regular human interaction in one's life."<sup>129</sup>

## **Neurodiversity**

"Neurodiversity is an umbrella term to position neurodevelopmental differences, such as Attention-Deficit/Hyperactive Disorder (ADHD), Autism Spectrum Disorder, Tourette's syndrome, and Dyslexia, as natural variations in human neurology rather than deficits to be fixed. The neurodivergent community (individuals with neurotypes that differ from the neuromajority) have launched a worldwide movement promoting inclusion for all neurotypes in society and a shift away from the medical model of research to a more inclusive strengths-based approach."<sup>130</sup> "It is not about one condition, difficulty or difference."<sup>131</sup>

## **Social Housing And Affordable Housing**

In New South Wales Australia, affordable housing is generally rental housing provided for very low to moderate income households where rent is generally considered affordable at around 30% of a gross household income<sup>132</sup>. The provision of affordable housing can be funded by planning incentives such as floor space incentives. And it is generally discounted to 20-25% below market rent in a similar neighbourhood. In the UK, "affordable housing" is 20% below market rate<sup>133</sup>.

This is different to social housing which is "government subsidised, long-term, rental housing for people on very low incomes with a housing need."<sup>134</sup>

## **Social Value:**

See the [GBCA/Hassell paper](#) that explores this definition in depth and offers the working definition "Social value is the net positive change in social, environmental and economic wellbeing of those directly and indirectly

impacted by an initiative, project, or organisation. In the built environment, social value is created when local needs are understood, the people most impacted are authentically engaged and where buildings, places, and infrastructure improve present and future communities' quality of life, wellbeing and social cohesion."<sup>135</sup>

## **Trauma informed design**

"Trauma-informed design is a framework combining trauma-informed care with the design process."<sup>136</sup> It can be applied to the design of spaces at every scale from the neighbourhood to the home. " The goal is to create physical spaces that promote safety, well-being, and healing. This requires realizing how the physical environment affects identity, worth, and dignity, and how it promotes empowerment."<sup>137</sup>

## **Universal Design**

Centre for Universal Design Australia defines universal design as "a design thinking process that promotes human rights and embraces the concept of inclusion for all. A universal design approach considers the diverse needs and abilities of people throughout the design process."<sup>138</sup> It is not the same as accessibility and has moved beyond physical access to "incorporate all marginalised groups and address sensory, cognitive, social and cultural aspects of everyday life."<sup>139</sup> As a design process it includes "co-design, human-centred design, and user-centred design."<sup>140</sup> Shopworks Architecture identified that universal design is essential in creating safe, comfortable, accessible and dignified spaces. It is particularly vital in housing, where design can celebrate personal choice.

## **Wellbeing**

"A measure of a person's quality of life, that is connected to their sense of happiness, relationships, emotional resilience, life satisfaction and realisation of their personal potential. Health, employment, financial resources, standard of living and sense of community are all contributing factors to wellbeing."<sup>141</sup>

## **Women**

"This research recognises that women are not a homogenous group... Women represent enormous diversity in their cultural background, socio-economic status, where they live, their sexuality, gender, abilities, and age."<sup>142</sup>



39th Avenue Greenway, Denver, designed by DHM Design

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