

Urban Design and Planning

What is this?

The arrangement, appearance and functionality of towns and cities has the potential to shape the way people live their lives. Urban design is concerned not just with appearances and built form but with the environmental, economic, social and cultural consequences of design. In particular the shaping and uses of urban public spaces and streets have the potential to impact the health and wellbeing of everyone. Urban planning is the technical process concerned with how land and infrastructure is developed and it encompasses urban design.

Why is it important?

Urban environments can influence, directly and indirectly, the health, sustainability and wellbeing of individuals and communities. For example, living in a neighbourhood with more green space, moderate housing density, walking and cycling routes, a mix of residential, commercial and recreational land uses, less air and noise pollution, and fewer alcohol and tobacco outlets is associated with lower levels of physical inactivity, obesity, high blood pressure and cholesterol, and alcohol and tobacco use among residents.² Good urban and environmental design can promote healthy behaviours and an active lifestyle, leading to improved health outcomes.

The Ministry for the Environment has recognised the importance of considering health impacts when planning urban areas in the design guide, *People, Spaces and Places* and the *New Zealand Urban Design Protocol.*^{3,4} Christchurch City Council has also produced *Health Promotion and Sustainability through Environmental Design (HPSTED)* and Christchurch Central Streets & Spaces Design Guide.^{5,6} However, these documents do not carry any statutory weight.

The Urban Design Protocol aims to make urban areas healthier environments for nature and people, which provide a variety of housing, work, and lifestyle options and are economically viable. It identifies seven essential design qualities:

- Context: Seeing that buildings, places and spaces are part of the whole town or city
- Character: Reflecting and enhancing the distinctive character, heritage and identity of our urban environment
- Choice: Ensuring diversity and choice for people
- Connections: Enhancing how different networks link together for people
- Creativity: Encouraging innovative and imaginative solutions
- Custodianship: Ensuring design is environmentally sustainable, safe and healthy
- Collaboration: Communicating and sharing knowledge across sectors, professions and with communities.

The Te Aranga Māori Cultural Landscape Strategy was developed by Māori design professionals to articulate Māori interests and design aspirations in the built environment. In Christchurch, the charitable trust, Matapopore is ensuring traditional values and designs are woven into urban design.

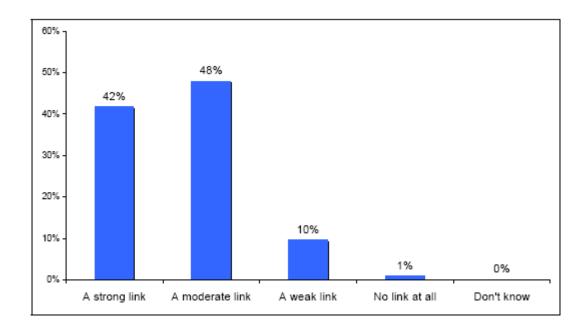


Data

In 2016, Community and Public Health produced a literature review of the links between the urban environment and non-communicable diseases (NCDs). In New Zealand, NCDs are the leading cause of health loss and contribute to significant inequities between Māori and non-Māori. The review concludes that urban environments are associated with NCD risk factors and health outcomes and discusses how changes to the urban environment can lead to population health improvements. This report also considers the impacts of urban interventions on health, and the relevance of these findings to New Zealand. The impacts of urban interventions on health, and the relevance of these findings to New Zealand.

Despite the link between the urban environment and NCDs, health and wellbeing are not always considered in land use decision making. The Ministry of Health's Public Health Advisory Committee (PHAC)¹¹ commissioned a survey of planners and urban designers to identify their views regarding the impacts of their work on health outcomes. The majority felt there was a moderate or strong link between urban planning and health outcomes (Figure 1).

Figure 1. Survey of urban planners and designers on the links between health outcomes and planning¹²



Approximately 95% of the planners also said that planners had a role to play in creating healthier, socially connected and physically active communities. However, when asked how often they considered health and wellbeing related issues in their daily work, 14% of respondents said always, 31% said frequently and 50% of respondents said occasionally. When asked about the extent to which they perceived health and wellbeing issues were considered relative to other areas (such as budget considerations) in final planning decisions, the majority (69%) said health and wellbeing considerations had a minor or no impact on the final design. 14



Impact on inequalities

The design and development of urban areas affect the choices people make about how they travel, and where they work, live and learn. A range of appropriate and affordable housing, social services, recreational centres and transport options (among other things) enable a diverse mix of people to call a town, city or village home.

In New Zealand, people living in socially deprived areas suffer a disproportionate burden of negative health impacts which may in part be due to urban design and the built environment. Neighbourhood socioeconomic deprivation is strongly associated with poorer health outcomes and reduced life expectancy. Factors such as the distribution of neighbourhood resources and exposure to stressors (such as traffic noise and air pollution) may contribute to these inequities. There are typically more alcohol, tobacco and fast food outlets in more disadvantaged areas. However these areas also have more health-promoting community resources (such as public open/green and recreational spaces, marae, health facilities, education providers and supermarkets). Yet, the quality and accessibility of the health-promoting resources in more disadvantaged areas, a factor not often studied, is an important consideration when looking at the influence of the local environment on health.¹⁵

The UK's Marmot report¹⁶ made three recommendations to ensure that the built environment promotes health and reduces inequalities for all local populations.

- 1. Prioritise policies and interventions that both reduce health inequalities and mitigate climate change by:
 - Improving active travel
 - Improving good quality open and green spaces
 - Improving the quality of food in local areas
 - Improving the energy efficiency of housing
- 2. Fully integrate the planning, transport, housing, environmental and health systems to address the social determinants of health in each locality
- 3. Support locally developed and evidence-based community regeneration programmes that:
 - Remove barriers to community participation and action
 - Reduce social isolation

Neighbourhoods that have well designed footpaths and roads with safe open green spaces nearby are important to provide people with the ability to enjoy physical activities without having to pay to go the gym. Community gardens encourage exercise and increase social connectedness, as well as providing access to fresh locally grown vegetables for those who may not be able to afford them.



Solutions

There is opportunity to modify the urban environment in various ways so that the environment can be more health promoting – either when upgrading existing areas or creating new spaces. Translating evidence into policy and practice is challenging and creating healthy urban environments requires the involvement of sectors beyond those responsible for health. Using Health Impact Assessment within a Health in All Policies approach can assist with creating healthy urban environments through integrated planning – i.e. utilising collaborative approaches across the public and private sectors, and at all levels of government.

While some professionals and members of the community have knowledge of the potential impact of the urban environment on health, there is still the need to increase awareness of planning decisions on health/wellbeing among professionals and communities. In particular there appears to be little training available on this issue. This issue has been compounded by the continual examination of resource planning legislation in New Zealand. The Productivity Commission's Better Urban Planning report noted that "some planners argue urban design is best suited to the public realm and that putting urban design controls into District Plans takes the concept too far". This was evident during the Christchurch Replacement District Plan process when the Christchurch City Council originally put in provisions for life-time design standards to ensure that new houses were built with accessibility in mind. These provisions were later removed.

The Christchurch City Council has created an urban design panel that provides free independent design reviews for large new developments. The Streets and Spaces Design Guide¹⁸ for urban regeneration in Christchurch won the 2016 award for "Strategic Planning and Guidance" from the New Zealand Planning Institute. This document was produced by the Christchurch City Council, CERA and the Matapopore Charitable Trust.

The application of health promoting urban design is particularly pertinent in the rebuild of Canterbury. There is still great opportunity to further upgrade and develop medium-density, mixed-use, mixed-income neighbourhoods that are attractive, safe and sociable to promote good health for all Cantabrians. The rebuild provides an opportunity to employ a universal design approach that would result in a city that is accessible and inclusive for people of all ages and abilities. ¹⁹ This reconstruction also provides an ideal space to use pilot projects to trial new urban interventions that are sensitive to local circumstances, and can be evaluated to further inform urban policy and planning in other parts of Aotearoa New Zealand.

Data limitations

Most studies exploring the relationship between urban characteristics and health use a cross-sectional design, which means that it is not possible to determine exactly which population or urban environment characteristics cause poor health. The extrapolation of findings from studies in other high-income countries to a New Zealand setting may be limited due to differences in urban environments. There is a lack of Christchurch-specific data on the extent to which the health and wellbeing of urban environments are considered in planning and design processes



Connections with other issues

Age and Dementia Friendly City, Social Connectedness, Active Transport, Public Transport, Activity Levels and Exercise, Arts and Culture, Heritage, Open and Green Spaces.

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¹ Ministry for the Environment. 2005. Urban Design Protocol. https://www.mfe.govt.nz/sites/default/files/urban-design-protocol-colour.pdf Accessed 21.09.2016

² Community and Public Health (2016) Associations between urban characteristics and non-communicable diseases http://www.cph.co.nz/wp-content/uploads/UrbanDesignLiteratureReview.pdf Accessed 24.01.2017

³ Ministry for the Environment, 2001. People, places, spaces: A design guide for urban New Zealandhttp://www.mfe.govt.nz/publications/rma/people-places-spaces-mar02 Accessed 21.09.2016

⁴ Ministry for the Environment, 2005. New Zealand urban design protocol. https://www.mfe.govt.nz/sites/default/files/urban-design-protocol-colour.pdf Accessed 21.09.2016

⁵ Christchurch City Council 2008. Health promotion and sustainability through environmental design https://ccc.govt.nz/assets/documents/the-rebuild/strategic-plans/hpsted.pdf Accessed 21.09.2016

⁶ Canterbury Earthquake Recovery Authority, Christchurch Central Development Unit, Christchurch City Council, & Te Runanga o Ngai Tahu. (2015). Christchurch Central streets & spaces design guide: strategic guidance. Christchurch, NZ: CERA

⁷Te Aranga Māori Cultural Landscape Strategy. 2008 http://www.tearanga.maori.nz/cms/resources/TeArangaStrategy28Apr08_lr.pdf Accessed 21.09.2016

8 http://www.matapopore.co.nz/

⁹ Ministry of Health. (2013). Health loss in New Zealand: a report from the New Zealand Burden of Diseases, Injuries and Risk Factors Study, 2006–2016. Wellington, NZ: Ministry of Health

¹⁰ Community and Public Health (2016) Associations between urban characteristics and non-communicable diseases http://www.cph.co.nz/wp-content/uploads/UrbanDesignLiteratureReview.pdf Accessed 24.01.2017

11 Public Health Advisory Committee. 2010. Urban Planners Knowledge of Health and Wellbeing Issues. Wellington: Public Health Advisory Committee.

https://www.mentalhealth.org.nz/assets/ResourceFinder/Healthy-places-healthy-lives-PHAC.pdf Accessed 21.9.16

12 Ibid

¹³ Ibid. pg 13

¹⁴ Ibid. pg.14

¹⁵ Community and Public Health (2016) Associations between urban characteristics and non-communicable diseases http://www.cph.co.nz/wp-content/uploads/UrbanDesignLiteratureReview.pdf Accessed 24.01.2017

¹⁶ The Marmot Review: implications for Spatial Planning

https://www.instituteofhealthequity.org/projects/nice-spatial-planning-and-health/nice-spatial-planning-and-health.pdf Accessed 21.09.2016

¹⁷ New Zealand Productivity Commission. 2016 Better Urban Planning Report pg. 308. http://www.productivity.govt.nz/sites/default/files/better-urban-planning-draft-report.pdf

¹⁸ Canterbury Earthquake Recovery Authority, Christchurch Central Development Unit, Christchurch City Council, & Te Runanga o Ngai Tahu. (2015). Christchurch Central streets & spaces design guide: strategic guidance. Christchurch, NZ: CERA.

http://resources.ccc.govt.nz/assets/the-rebuild/StreetsAndSpacesDesignGuideJune2015.pdf. Accessed 26.09.16

¹⁹ http://www.healthychristchurch.co.nz/priority-areas/urban-design

Read about the Te Pae Mahutonga Māori Health Model at http://www.hauora.co.nz/resources/tepaemahutongatxtvers.pdf

