

STUDENT RESEARCH

Promoting health and wellbeing through urban design

SYNOPSIS

This research project details the design process for an urban design proposal that prioritises health and wellbeing. Investigations consider regional, local, policy, and historical contexts, with detailed analyses undertaken at macro and micro-scales. Design interventions respond to the dynamic interrelationships across these scales to promote social, environmental and economic wellbeing. Green infrastructure is central to supporting thriving, active and well-connected communities. Key concepts were explored through case studies and a-contextual research to discern their impacts and incorporation. Green infrastructure strategies include increasing tree canopy, integrating new natural and designed open spaces, identifying green corridors to connect open spaces, and employing biodiversity-sensitive urban design principles.

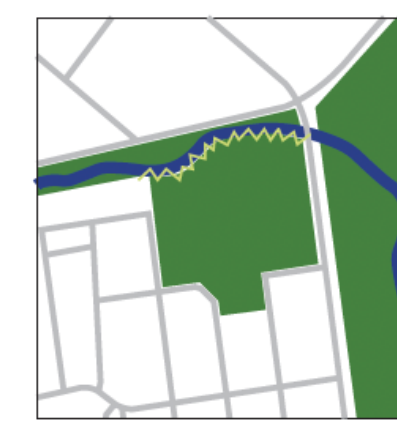


DESIGN PRINCIPLES

Prioritise active travel and connectivity



Connect the natural and built environments



Establish a cooler, greener and wilder precinct



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OBJECTIVE

To highlight the impact that environmental quality has on human health and demonstrate strategies that promote healthy active lifestyles, sustainable practices and improve the quality of the built environment.



METHODOLOGY

Evidence-based research across macro and micro-scales, GIS analysis of census data, case studies, a-contextual explorations, and iterative design, including an independent and expert peer review.



ESTIMATED RESEARCH LENGTH

Six months

REFERENCES

- Barton, H. (2015). Planning for Health and Well-Being: The Time for Action. In Barton, H., Thompson, S., Burgess, S. & Grant, M. (Ed.), *The Routledge Handbook of Planning for Health and Well-Being* (pp. 3-16). Routledge.
- Lemenih, M. and Techel, G. (2020). *Green Corridors Identification, Design and Preparation of Guidelines*. The World Bank.

BACKGROUND

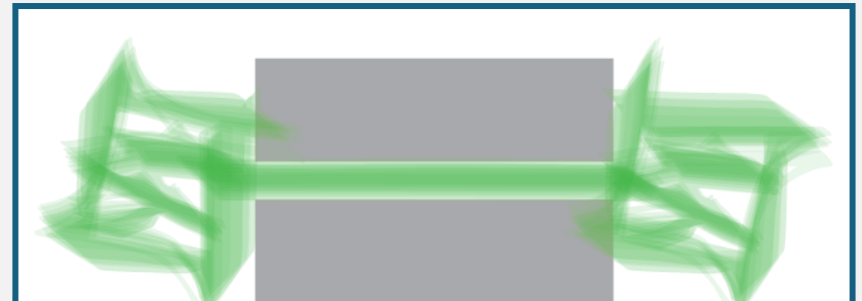
Contemporary urban planning emerged in the late nineteenth century to address the unsanitary, overcrowded and inhumane conditions of industrial cities. It was recognised then, and is even more so now, that environmental conditions and human health are intrinsically linked (Barton 2015, p. 3).

It is well-understood that regular physical activity and social interaction improve people's overall wellbeing, and that safe, comfortable and green neighbourhoods encourage people to be active and spend time with one another in the public domain.

This research reinforces the importance of placing people at the heart of the urban design process and how improving environmental quality can help alleviate the physical and psychological barriers to being active and social and unlock latent demand.

EXPECTED RESEARCH CONTRIBUTIONS

- Contribute to the evidence-base linking the quality of the built environment and human health.
- Demonstrate that green infrastructure is central to prioritising public health within the built environment.
- Promote and demonstrate the principles of green corridors.
- Promote the principles of biodiversity sensitive urban design within an inner urban context.
- Encourage built environment professionals to create sustainable neighbourhoods that promote health and wellbeing.



Principles of green corridors:

- link areas of significant biodiversity (anchor points) with each other
- have multiple functions, such as contribute to biodiversity conservation and other ecosystem services
- be linear or non-linear structures of up to an average 10km length and with variable width depending on the situation
- be within watershed zones.

(Lemenih and Techel 2020, p. 17)