

A Toolkit for Co-Designing Streetscapes for A Cool Pedestrian Network in Melbourne, Australia

Project Context and Goal

Global temperatures are rising, and climate change is leading to an increase in extreme weather events such as heatwaves, droughts, floods, storms and fires (WMO, 2022). The increase in unusually hot days and heatwaves is also noticeable in Melbourne, Australia. By 2050, Melbourne is projected to have an annual average of 16 hot days with temperatures exceeding 35°C (DELWP, 2019). To explore how Melbourne can improve city resilience and protect its citizens from the heat, this graduation project explored how toolkitting can enable the engagement of different stakeholders in the planning of heatadapted public spaces and support them in sharing and gaining knowledge throughout the process.

Research

Street observations and interviews with pedestrians and the council helped to identify the opportunity to develop a cool pedestrian network through Melbourne. Research into the shortcomings of existing, often text-heavy cooling toolkits motivated the aim of creating an interactive and tangible toolkit. Literature research helped to identify suitable cooling interventions for Melbourne's climate, while insights from placemaking research inspired the inclusion of placemaking, wayfinding, and walkability aspects into the toolkit to address the overall pedestrian experience beyond just cooling.

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Project	A Toolkit for Co-Designing Streetscapes for A Cool Pedestrian Network in Melbourne, Australia	
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Study	MSc Integrated Product Design	

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Result

The result is an interactive and tangible toolkit that has been tested and refined through codesign workshops with citizens and the city council. The toolkit includes a series of codesign workshops in which the council, design practitioners and community members codesign streetscapes for a cool pedestrian network in Melbourne. It includes evidence-based, mixand-match cooling intervention assets but also experience assets that encourage participants to think beyond just cooling needs by considering the overall pedestrian experience within the streetscape including placemaking, wayfinding and walkability aspects.

> Co-Designing Streetscapes for a Cool Pedestrian Network

Workshop Activity Sheets

Chair: Dr. Carissa Champlin (TU Delft) Mentor: MSc. Laurens Kolks (TU Delft) 2nd Mentor: Dr. Olivier Cotsaftis (RMIT)



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