



MONASH
University

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ART
DESIGN &
ARCHITECTURE

R:ADAR

REVIEW: ART DESIGN & ARCHITECTURE RESEARCH ISSUE NUMBER 02 2021



THE CITIES ISSUE

Image:
Daniel von Sturmer,
Painted Light,
Geelong Arts Centre
Story page 6

We acknowledge
and pay respect
to the Traditional
Owners and Elders —
past, present and
emerging — of the
lands on which
Monash University
operates.

We acknowledge
Aboriginal connection
to material and
creative practice on
these lands for more
than 60,000 years.

**MADA
Research
Themes**



THIS ISSUE
**Reimagining
cities**

**Health
and human
experience**

**Expansive
visions and
technologies**

Welcome

This edition of R:ADAR celebrates how Monash Art, Design and Architecture (MADA) researchers are transforming cities, in all of their complexity. Working with diverse communities and cultures, and across constructed and ecological environments, our research not only helps us to live sustainably in cities, but to flourish within them.

Sophisticated understanding of the networks, systems and interactions that drive cities helps to propel us towards greater sustainability and equity. Our creative and critical practices are provocative and bold; they are catalysts for change in place. Whether through urban planning and policy, place-making and public art, housing and construction innovation, transport, exhibitions, or design for safety and inclusion, we work closely with stakeholders and partners to reimagine the needs, challenges and aspirations that enliven cities.

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SDG focus

11 SUSTAINABLE CITIES
AND COMMUNITIES



Adaptable Housing for People with Disability

There are 4.4 million people with disability in Australia, yet the availability of appropriate accessible housing remains a challenge.

Emerging from an Australian Research Council-funded linkage project with industry partner Housing Choices Australia, this completed design project in St Albans, Melbourne, rethinks design's contributions to assisted living environments, ageing in place, and the wider challenges of affordable suburban housing and densification.

Monash Urban Lab (page 7) worked alongside Housing Choices to research and design this low-rise, medium density, affordable apartment building which meets NDIS SDA* standards and demonstrates how both existing and new dwellings can be more creatively designed and modified to adapt to people's changing needs and circumstances.

*National Disability Insurance Scheme Specialist Disability Accommodation

Adaptable Housing for People with Disability in Australia:

Nigel Bertram,
Shane Murray and
Leon van Schaik,
with industry partner,
Housing Choices
Australia,
Michael Lennon
and James Henry.
In collaboration
with NMBW
Architecture Studio.



Researcher Profile

Jacqui Alexander



Jacqui Alexander's research investigates the potential of digital platform technologies to transform architectural practices and cities. Jacqui's recent projects, undertaken as part of her creative-practice PhD, focus on the architectural and social implications of Sharing Economy platforms. *Supershared*, in collaboration with Sibling, was an interactive loft space developed for the Occupied exhibition. By maximising the number and diversity of platforms on which the loft was listed, *Supershared* was host to a number of surprise interactions by guests who booked the space at the same time for different activities, generating moments of hybridity and collaboration. The project also used the technology as a tool to generate new kinds of intensities. Through speculative projects, Jacqui has applied this logic to urban settings to stimulate activity in suburbs in need of revitalisation, demonstrating how architects might expand their role from designers of objects to designers of outcomes and effects. In 2021, Jacqui's architecture and design-research practice Alexander & Sheridan Architecture received the AIA's Emerging Architects Prize (VIC).

Above:
Tenancy ≠ Title (2021)
Community Land Trust Housing
Jacqui Alexander with
Alexander & Sheridan Architecture



Research Lab Profile

Future Building Initiative (FBI)

The way we develop, design, produce, and operate buildings is undergoing radical change. The Future Building Initiative (FBI) sits at the forefront of this sector-wide innovation, working collaboratively with industry and academic partners on applied research and innovation considering how the design and production of buildings is changing. FBI is a cross-disciplinary collaboration in architecture and engineering that adopts a holistic perspective across the construction value chain. Its approach to research translation enables impactful outcomes across a wide range of areas concerning industrialisation and digital transformation: from prefabrication to the development of new design and communication tools; and from building performance modelling to the exploration of integrated digital platforms and the education of future building professionals.

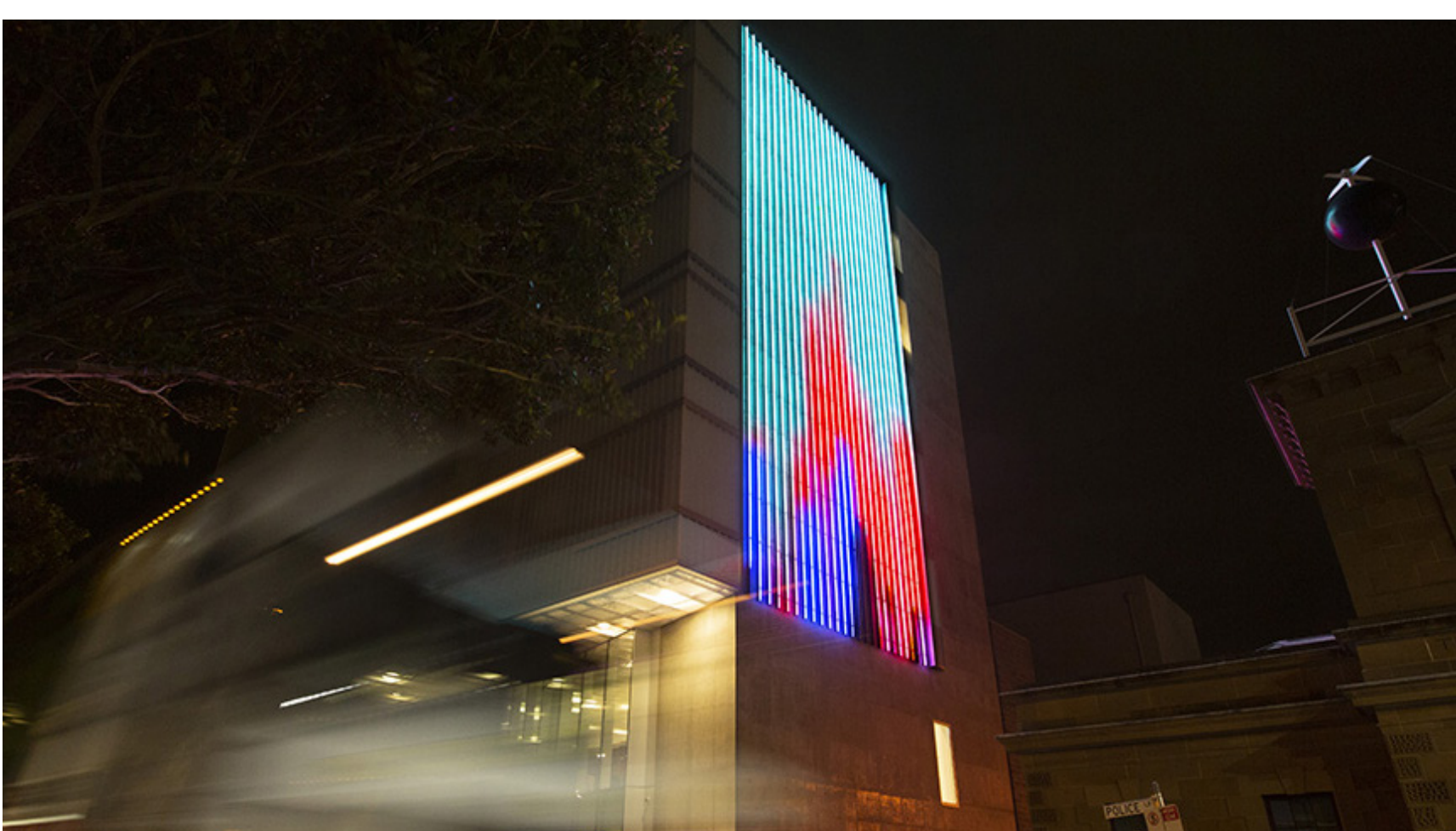
See also: 'Special Project: Building 4.0 CRC', page 8.



Research Lab Profile

Monash Art Projects (MAP)

Monash Art Projects (MAP) transforms how we think of art in the public sphere. Through a host of contexts and outcomes — some propositional, some temporary, some permanent — this collaborative studio critically and poetically reanimates how we regard and experience urban spaces. MAP includes a community of artists, design practitioners, architects and theorists who focus on critically informed creative activity at the highest level. Reflecting the diverse approaches found in contemporary visual culture and the built environment, MAP researchers work in partnership with government and industry partners on innovative projects that enliven urban spaces nationally and internationally.



Left (and cover):
Daniel von Sturmer,
Painted Light,
Geelong Arts Centre



Above:
Emily Floyd
OPEN SPACE!
Curtin Place, Sydney

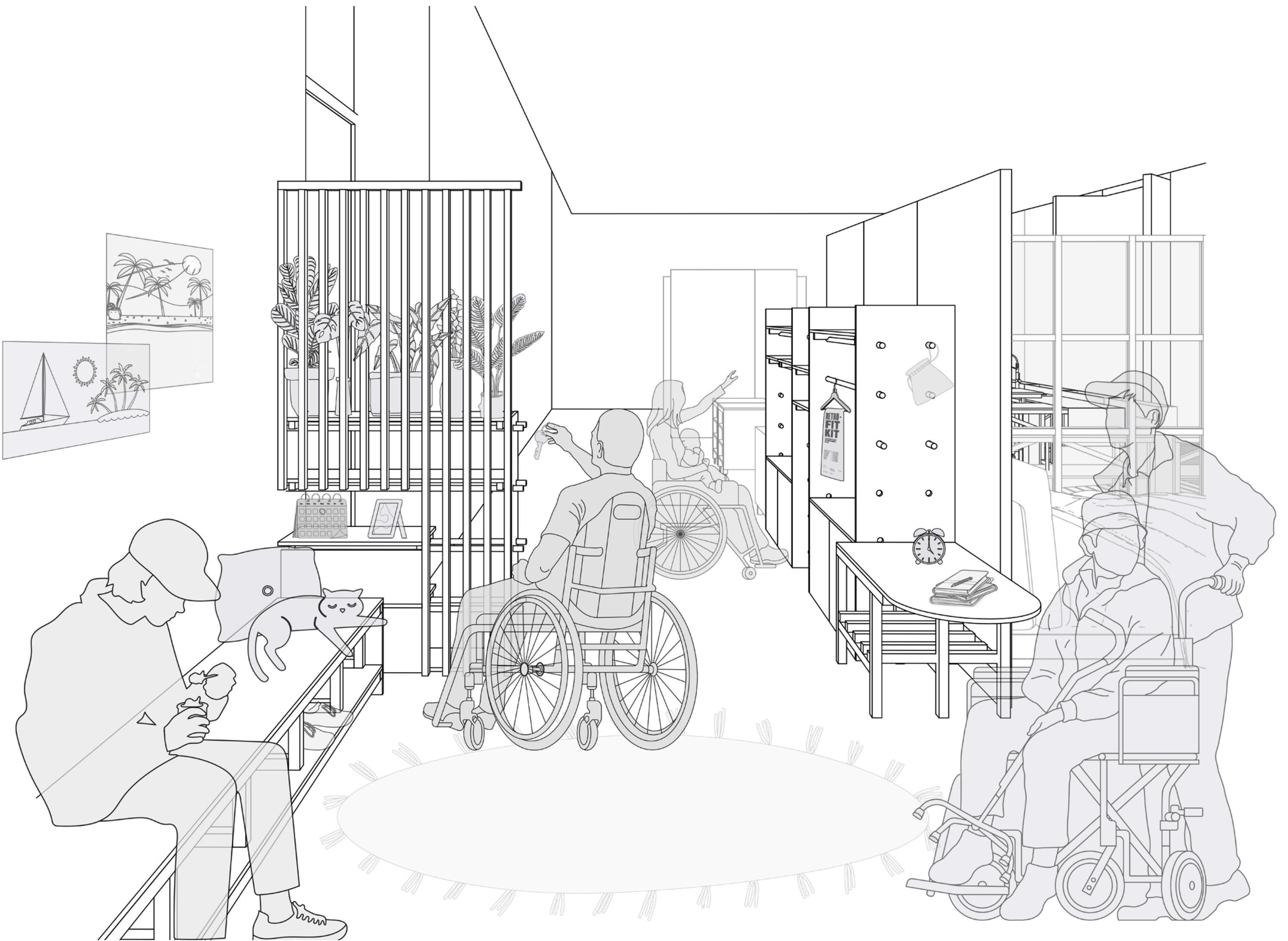


Research Lab Profile

Monash Urban Lab

Monash Urban Lab is focused on transitioning cities to sustainable and equitable environments. Our researchers develop solutions to core challenges facing cities and regions through a unique integration of practice-based design and urban planning research that combines multi-scalar architectural and urban design investigations with policy studies.

A current project, 'Better Life at Home', aims to find ways to increase the supply and quality of housing for Australians with a disability, many of whom live in housing that is not suited to their needs. Working in partnership with the Australian Human Rights Commission (AHRC) and Monash Future Building Initiative, Urban Lab researchers are designing principles, strategies and architectural components that can combine as a systematic tool kit for accessible conversion of common house types. These will be developed and tested through 'display home' prototyping with industry partners.



+ Above: Well designed and accessible points of entry and exit are fundamental to spatial flexibility, choice, sociability and security of a home. Image: *RetroFit Kit*. Accessible homes are better homes for all. *RetroFit Kit* is part of a research project that is a partnership between the Monash Urban Lab and the Australian Human Rights Commission Disability Discrimination Commissioner Ben Gauntlett.

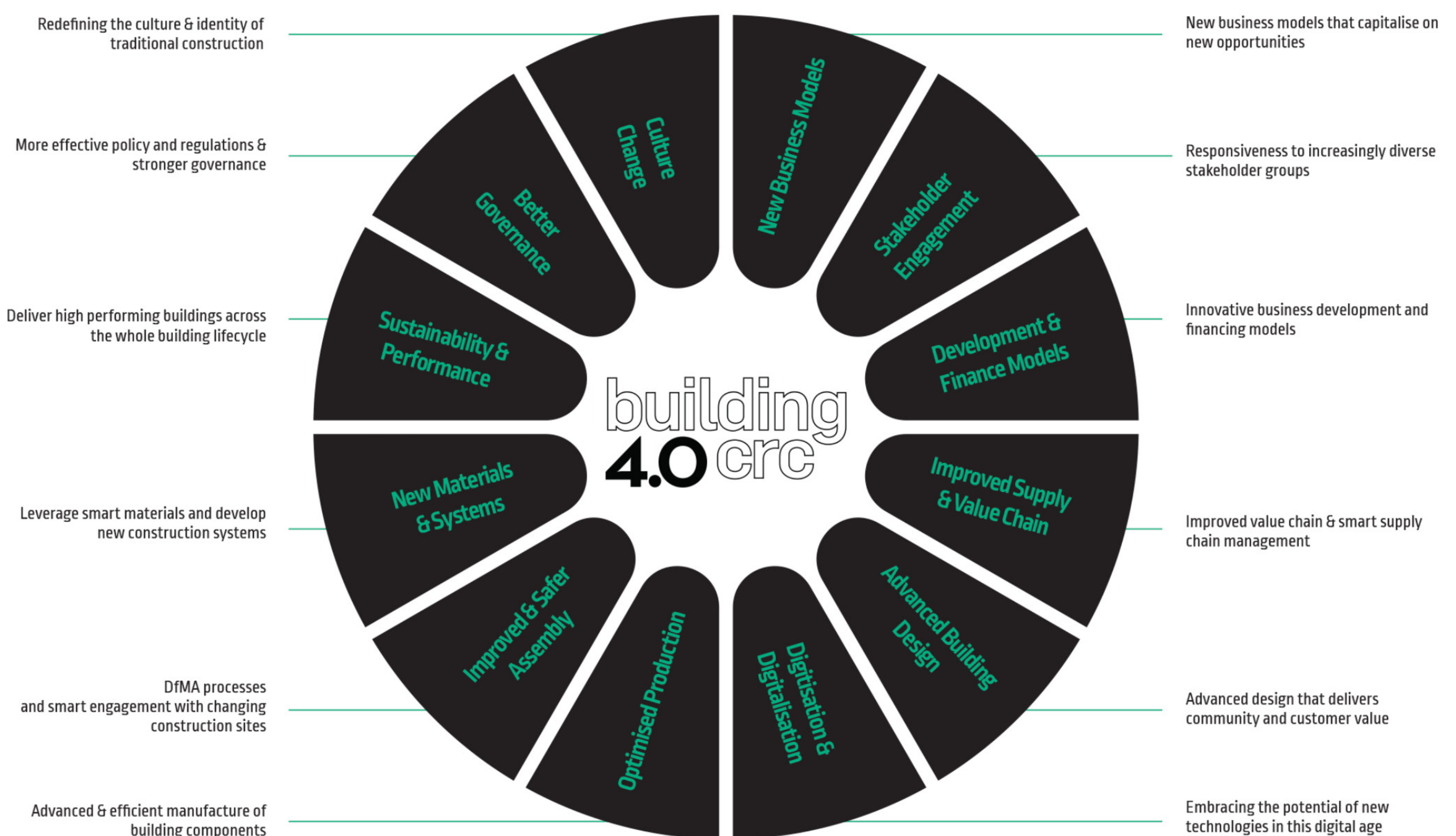
Special project

Building 4.0 CRC



Building 4.0 CRC is an industry-led research initiative co-funded by the Australian Government. Its mission is to develop and translate research outcomes from partner universities into tangible benefits for the building industry, and the broader Australian community. Monash University is a major research partner of the consortium, which seeks to deliver internationally competitive commercial, economic and sustainable outputs for industry partners – including Lendlease, BlueScope, Sumitomo Forestry, and uTecture – and improved environmental, health, safety and wellbeing outcomes for the community. Through leveraging the latest technologies and expert collaboration, Building 4.0 CRC aims to position Australia as a leader in the advanced manufacture of buildings, developing new industry-wide culture and the human capacity to lead the future industry.

Image: building4pointzero.org



Enabling a customer-centric and connected transformation of the building industry

SDG focus

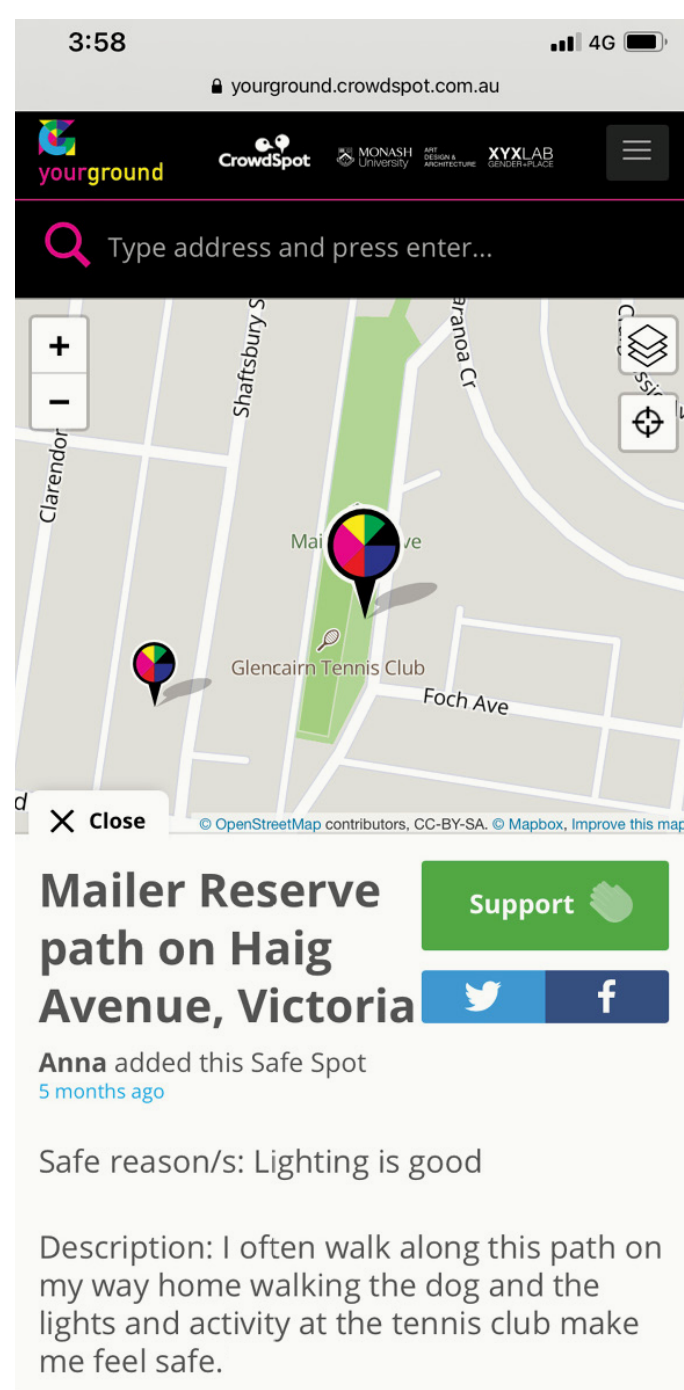


YourGround: Monash University XYX Lab and Crowdspot

YourGround was a collaboration between Monash University XYX Lab and CrowdSpot to crowdsource women and gender-diverse people's perceptions of safety when exercising and recreating for health and wellbeing in Victoria's open spaces.

YourGround uncovers the lived experiences of women and gender-diverse people to provide insights to those tasked with making decisions about our recreational spaces. The collaborative engagement model has significant benefits and cost savings. Local councils are able to benefit from the shared strategy and outreach of the project, as well as contrast and compare their dataset and with a consistent methodology.

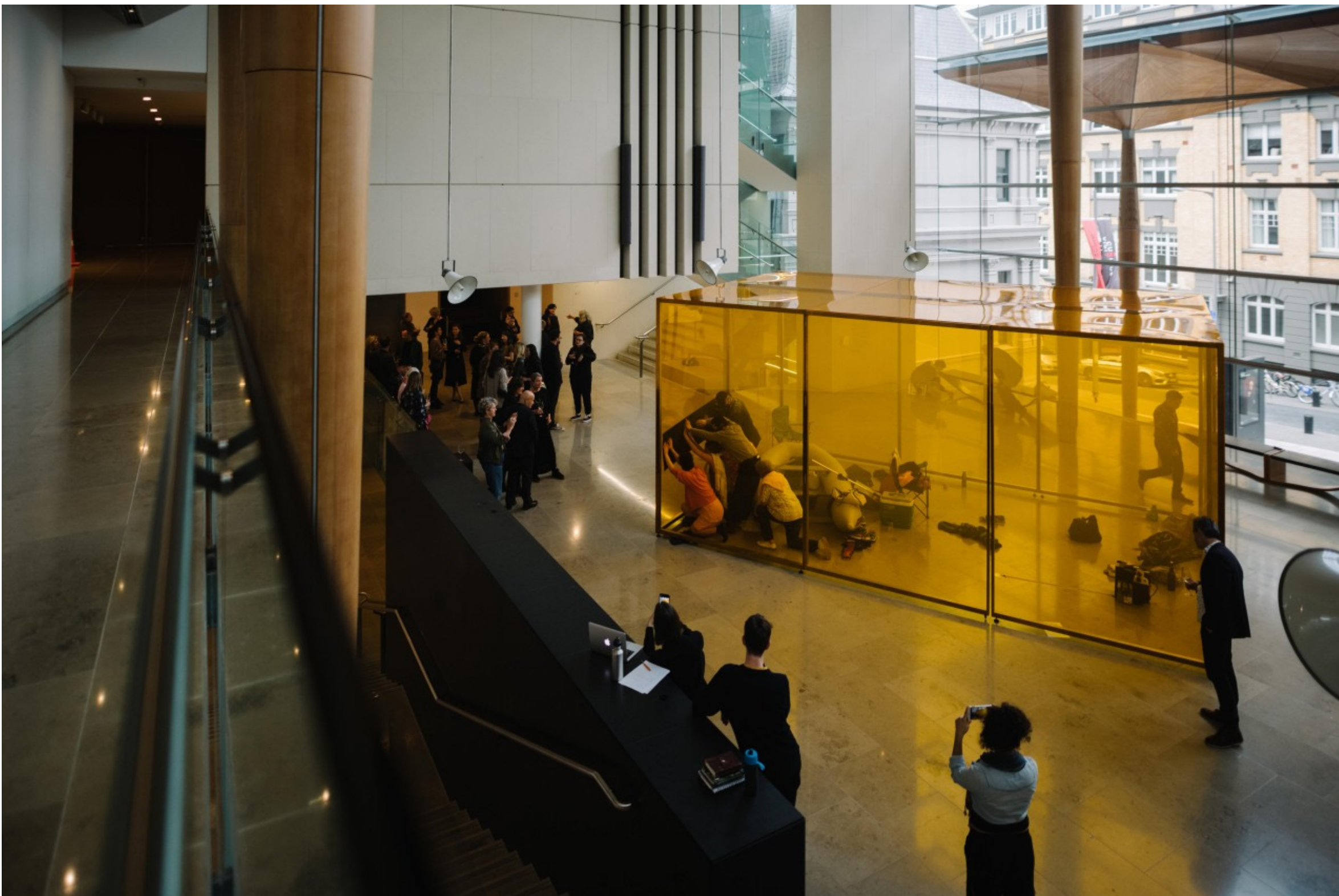
YourGround allows local governments and their communities to make well-informed decisions that will make recreation safer, more accessible, inclusive and equitable. The project represents a best-practice approach to advancing active communities and demonstrates how Victoria is leading the way for open space planning and providing equitable access for women and gender-diverse people.



Curation and collaboration

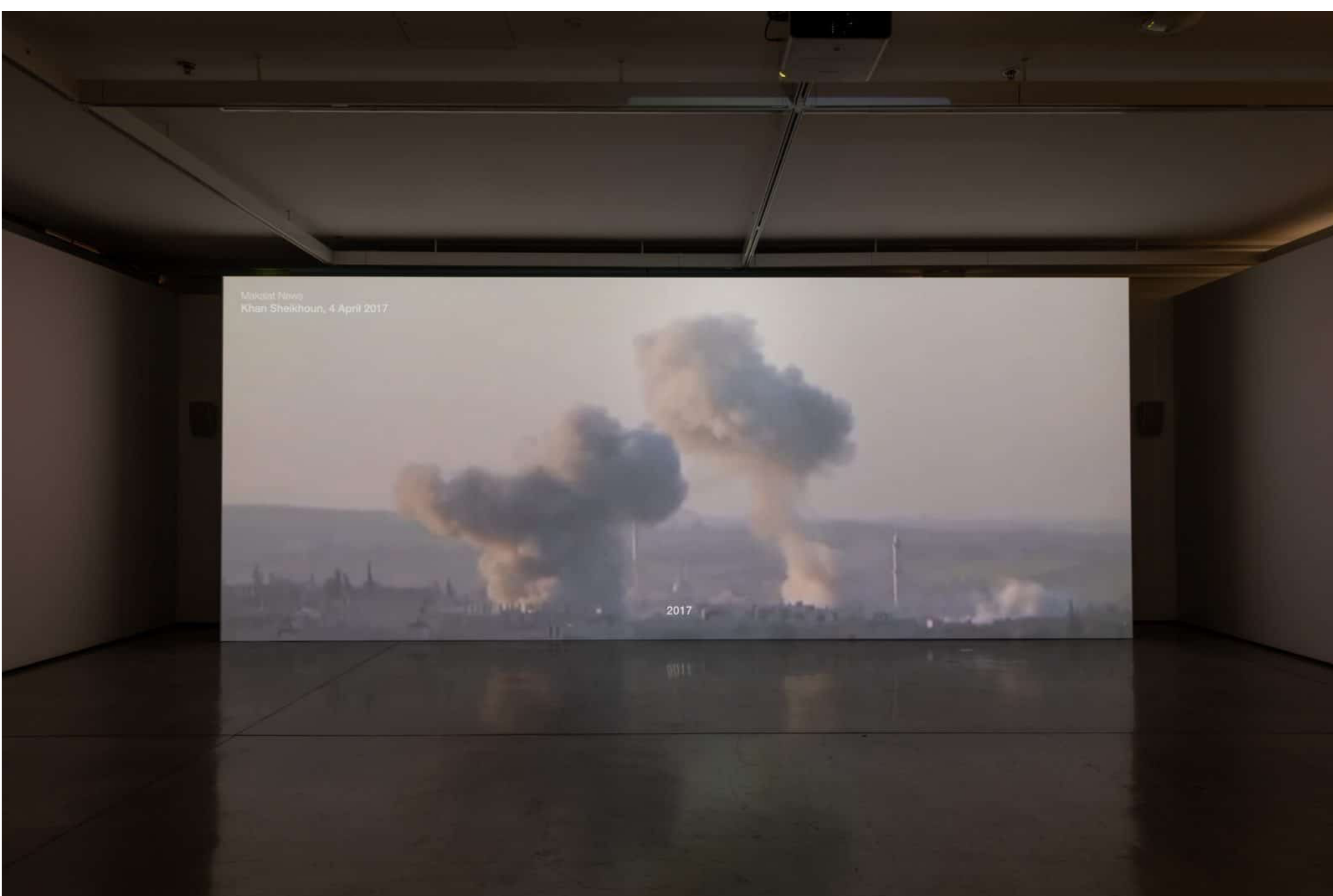
Take Hold of the Clouds

Take Hold of the Clouds is a cross-disciplinary collaboration with Open House Melbourne, a public architecture organisation empowering citizens to be active participants in the building of their city. Curated by Tara McDowell, *Take Hold of the Clouds* is an exhibition overlay onto the **2022 Open House Weekend** (July 30–31), which aims to catalyse a citywide conversation about the future of architecture, landscape and urban design and the most urgent issues facing the built environment. This project invites artists and architects to each respond to a building or public space included in the Open House Weekend program, with outcomes including 8–10 site-specific installations, a publication and website.



Left:
Alicia Frankovich,
AQI2020,
Auckland Art Gallery
Toi o Tāmaki, 2020.

Below:
Forensic Architecture,
Cloud Studies,
2019, video,
23:28 min

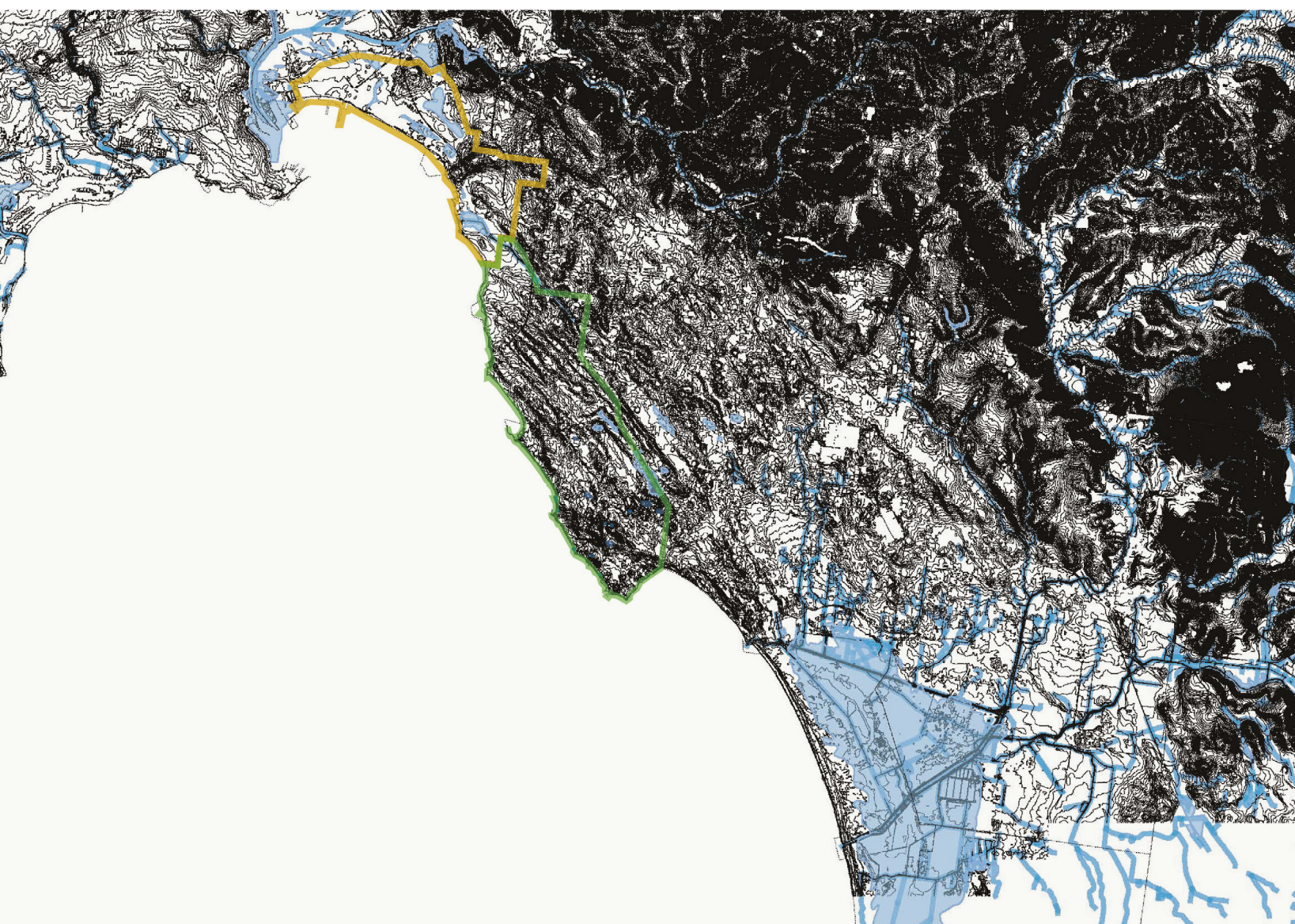


Special project

Repairing memory & place: An Indigenous-led approach to urban water design



This ARC Linkage Project marks an innovative integration of Indigenous ways of knowing with urban water design and management. MADA's Brian Martin, N'arweet Carolyn Briggs AM, Nigel Bertram, Laura Harper, and Catherine Murphy with Maria de Lourdes Melo Zurita from UNSW, form an interdisciplinary team of Indigenous creative practitioners, planners and architects working in collaboration with Shannon Faulkhead, Rhys Coleman, Boon Wurrung Foundation, Museums Victoria, Melbourne Urban Water Corporation, Bayside City Council and the City of Port Phillip. Together, the team is using On Country Learning and Indigenous design-led approaches to integrate formerly disparate knowledge systems, produce new tools for urban water management, and a framework for engaging Indigenous water-management expertise for a more sustainable water future.



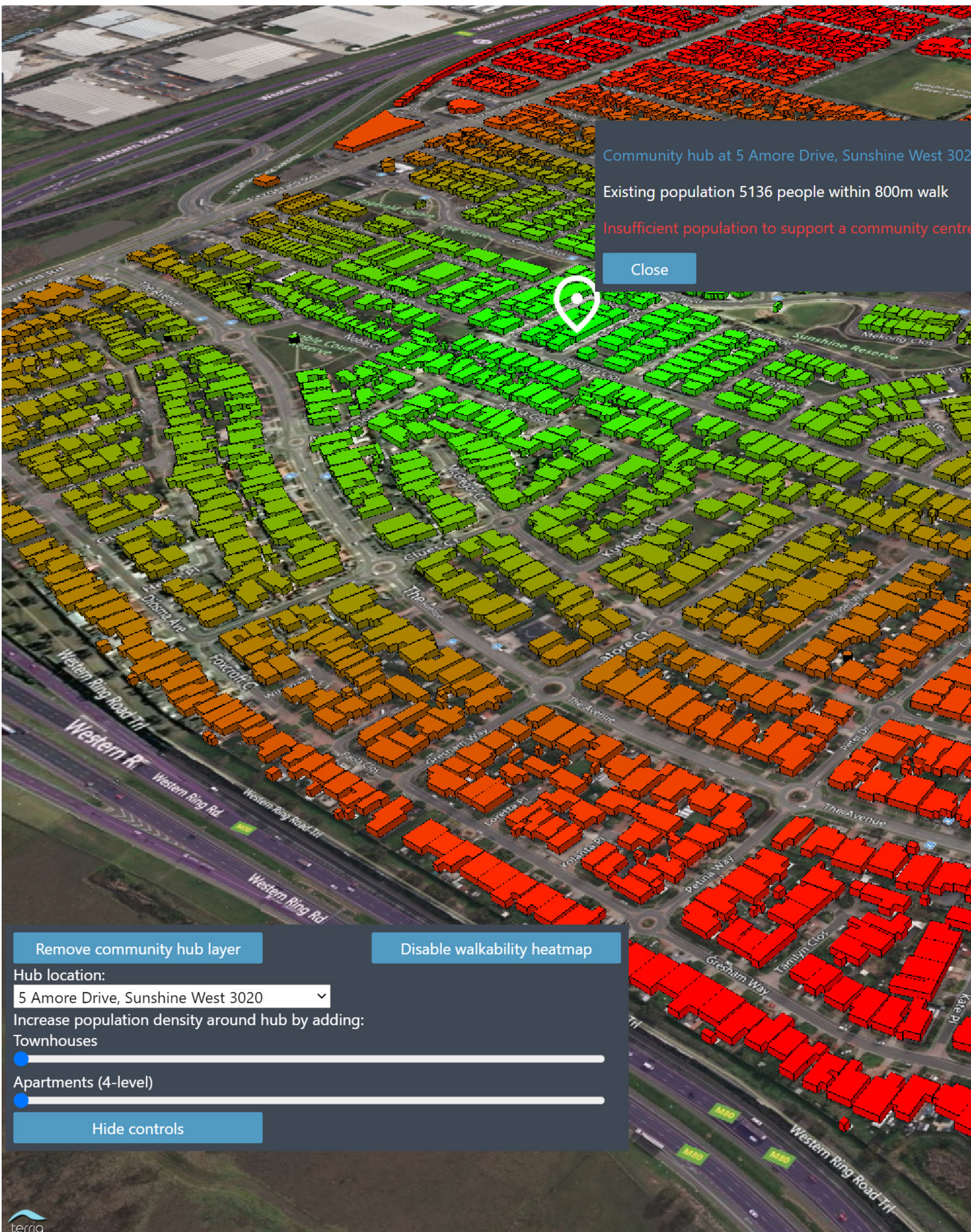
Top:
N'arweet Dr Carolyn Briggs AM
on Country with Ana Lara-Heys

Above:
The project sites

Research led teaching

iHUB

Researchers from the Monash Urban Lab are part of a team from five Australian universities working together on iHUB – a nationally networked digital infrastructure platform for built environment research, synthesis and engagement. Funded through the Australian Research Council’s Linkage Infrastructure, Equipment and Facilities (LIEF) scheme, iHUB supports collaboration among a wide range of city stakeholders in smarter urban planning and design. It is also being used for research-led teaching in architecture and planning – and underpinned the operations of the Architecture Research Seminar led by Tom Morgan, Catherine Murphy and Maryam Gusheh.



The Architecture Research Seminar ran as a scoping exercise; establishing regions, precincts, and clusters of properties that may serve as potential sites for adaptive retro-fitting. The students used existing public use datasets alongside proprietary datasets from the iHub to analyse key architectural and urban characteristics of all properties across a number of LGAs, and identify possible new clusters or types for redevelopment and retro-fitting investment.

Left: interactive exploration of population numbers and service provision in Melbourne through the iHUB model.



Postgraduate researchers

Simon McGlinn/ Fine Art Declan Martin/ Architecture Mitali Kedia/ Design



Simon McGlinn/ Fine Art

My project uses a series of spaces specific to the City of Melbourne as its research architecture. From the 1980s City Square to Enterprize Park and Crown Casino, this practice-led project considers art's and the city's relationship to serendipity.



Mitali Kedia/ Design

My project aims to develop and design a cycle-oriented urban environment, which looks into prioritising the aesthetic and experiential qualities within an urban space while accommodating the physical and functional facets like bicycle lanes, parking and other related amenities.



Declan Martin/ Architecture

Zoned out: The geography and resilience of cultural manufacturing in “post-industrial” Melbourne

Despite decades of urban restructuring, small manufacturing and cultural production has persisted in central industrial zones. My research examines how these enterprises have adapted to rapidly changing urban environments to inform a more progressive approach to urban and cultural policy.

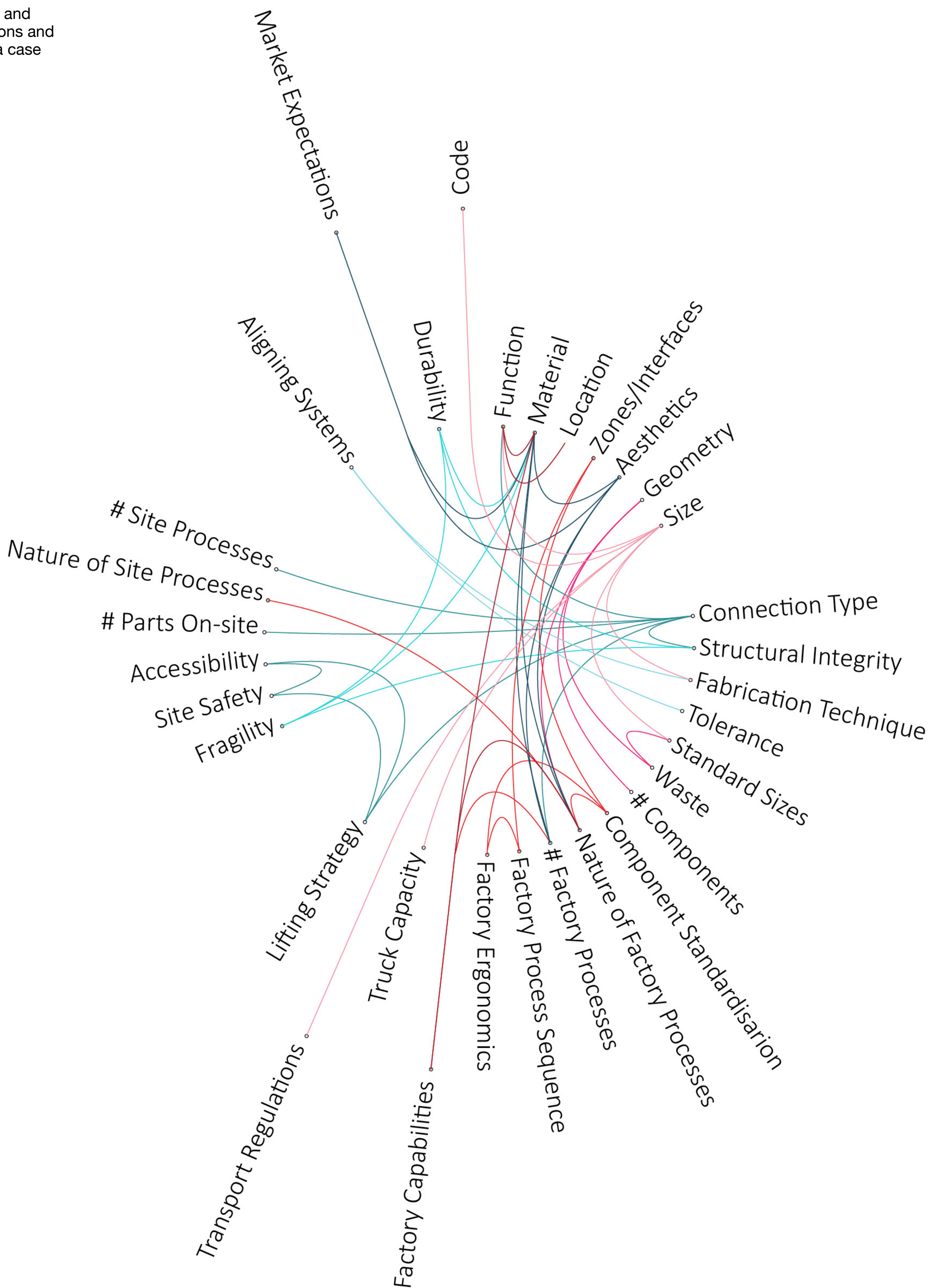
ECR Profile

Ivana Kuzmanovska



Ivana’s research explores the relationship between the design and production of buildings, with particular focus on how this relationship might be leveraged for improved product and process outcomes. The framework proposed in her recently completed doctoral thesis pulls together several important production factors to prompt holistic consideration of their interdependencies and impacts early in the design process. Doing so can lead to elegant design solutions which improve safety, efficiency, and cost, while reducing waste. Ivana was awarded the 2021 Mollie Holman Medal and her current research involves a number of different CRC-funded projects, all exploring what the future of the construction industry (its components, systems and processes) might look like. Her approach involves working closely with industry partners to investigate the nature of the design/production problem in practice, ensuring high engagement and research relevance.

Right: Mapping of key design and production considerations and their dependencies in a case study project.



International Impact

RISE (Revitalising Informal Settlement and their Environments)



Through contributions to the major interdisciplinary research program, Revitalising Informal Settlements and their Environments (RISE), MADA architecture researchers are working on a series of integrated urban design interventions for two pilot sites in the cities of Makassar (Indonesia) and Suva (Fiji). Their co-design process involves working in collaboration with communities, governments, local leaders and partner institutions to strengthen the whole-of-life water and sanitation cycle.

A series of PhD projects are integrated into the larger research project, with Dasha Spasojevic being its first PhD completion in architecture. Dasha's project operated at the intersection of informal settlements, water and sanitation management and meaningful participatory design. It was conceptualised as a cross-sectional case study, exploring how a decentralised, water sensitive infrastructure intervention has been designed in six informal settlements in Makassar.

Above:
A bathroom is a complex socio-technical entanglement.

After taking a shower, a young woman bathes her baby. In the morning, this is the place for washing dishes, fish and rice. The big earthen pot is for storing clean water that is used five times in a day for *wudhu* – ritual washing before prayer.

