**RMIT**
UNIVERSITY

# Urban Futures

## Enabling Capability Platform

Contact us to partner for a better future

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# Making cities great places to live

Cities around the world are bulging with people and facing unprecedented challenges as a result.

These pressing problems are complex, important and happening right now. They include population growth; traffic congestion; climate change; rising greenhouse gas emissions, poor air quality, noise, and fossil fuel depletion; declining biodiversity; pressures on social, physical, digital and green infrastructure to meet population demands; declining housing affordability; food, energy and water insecurity; growing inequities and social exclusion; digital disruption impacting work, industry, and transport; and rising chronic disease.

In line with the UN Habitat's New Urban Agenda, integrated planning, governance and design solutions are needed across multiple sectors to address these and other implications of rapid population growth and urbanisation. RMIT's **Urban Futures Enabling Capability Platform** (ECP) draws together cross-disciplinary research expertise that responds to the major challenges confronting cities locally and globally.

Our Urban Futures ECP research affiliates are specialists in urban and regional planning, architecture, design, communication, environmental science and sustainability, global and social studies, ecology, civil engineering, construction, transport planning, spatial analysis and other complementary disciplines. These experts are passionate about working with RMIT's partners to transform urban planning policy and practice and achieve liveable cities that promote the health and wellbeing of residents.

## Research that delivers for our partners

RMIT's Urban Futures ECP serves as a streamlined, single point of contact within the University for research projects and partnerships involving city planning and design and the built environment.

This capability platform is actively enabling new research collaborations between RMIT and government policy-makers, non-government organisations, planning and design practitioners, and individual communities. It harnesses expertise across the entire University, including teaching and research academics, undergraduate and post-graduate students and alumni.

The Urban Futures ECP also works across our other seven Enabling Capability Platforms, supporting their research projects and drawing on their expertise to support cross-disciplinary city-shaping investigations.

Many of our research affiliates are collaborating at the global level. For example, RMIT hosts the United Nations Global Compact Cities Program and partners with its primary urban agency, UN Habitat.

A Sector Expert Research Advisory Group of leaders from government and other key sectors will help shape the future direction and priorities of this capability platform.

## How fast are the world's cities growing?

Over 50 per cent of the world's population now lives in cities and over the next 30 years that figure is predicted to increase to 70 per cent.

In Australia, our population is forecast to double by 2050, with most of that growth occurring in cities.

## What makes a liveable city?

Research indicates that liveable cities have healthier and happier residents.

A truly liveable city is one that:

> is safe, socially inclusive and cohesive

> is environmentally sustainable and biodiverse

> has affordable housing close to good public transport, walking and cycling infrastructure

> enables residents to live close to employment, education, public open space, local shops, health and community services

> has good leisure and cultural facilities, and

> has access to clean water, low carbon energy and healthy food.

# Our vision

Billie Giles-Corti, Director, RMIT Urban Futures ECP

RMIT and our external partners will work together to address the complex city planning, design and policy challenges facing metropolitan and regional cities across the globe.

Our multidisciplinary research capability will enable the public and private sectors to transform the way cities are planned, built and governed to achieve the UN Sustainable Development Goals (SDGs).

# Examples of Urban Futures ECP collaborative research projects

RMIT has vast potential to provide innovative research that delivers policy value to communities and government.
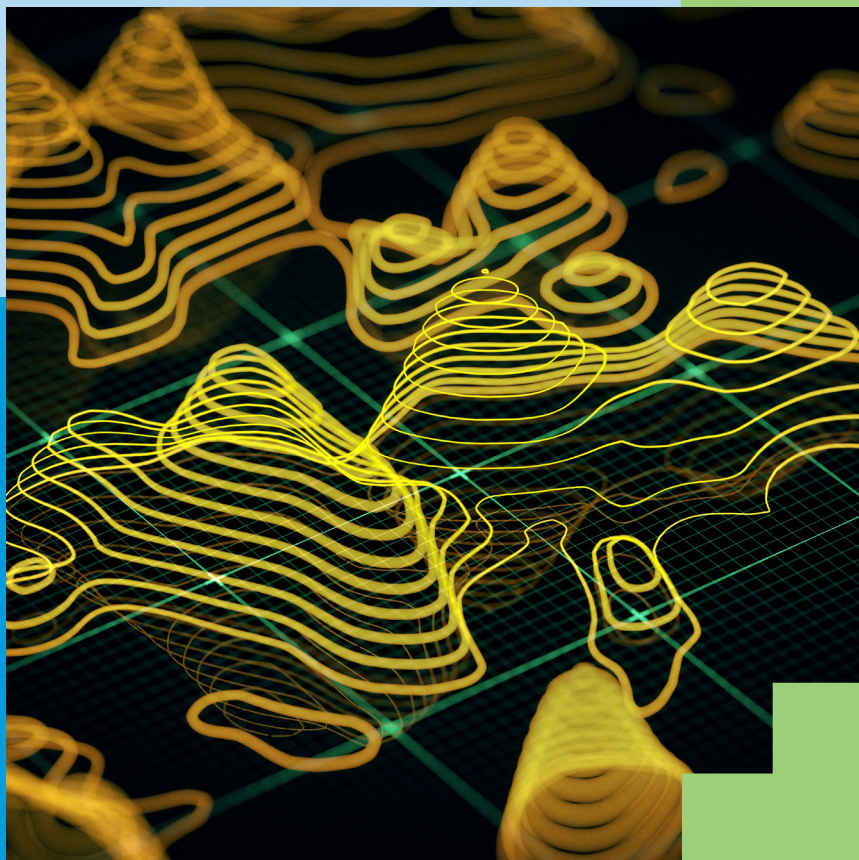
The Policy@RMIT initiative will enable the University to apply our cross-disciplinary research expertise to help resolve pressing policy challenges, particularly those requiring innovative design, planning, science and engineering solutions.

Policy@RMIT is being piloted in partnership with the Victorian government to deliver better sustainability and liveability outcomes for Victorian communities.

Over three years, the partnership is developing, trialling and evaluating a best-practice model for co-producing policy-oriented research undertaken between RMIT and Victorian policy agencies. The new model will enable us to deliver co-designed research that addresses many of our partner's most urgent and complex policy problems.

The development process is also expanding capabilities within the University's research community and within our partner's policy area in relation to collaborating to deliver research-policy impact.

This project is being funded by RMIT's ECP Opportunity Fund.

RMIT's unique and world-leading expertise in spatial science, analysis, computing and visualisation is being harnessed to establish a 'Spatial Capability Cluster @ RMIT'.

This new interdisciplinary community of practice creates a one-stop-shop of capabilities and networks for connecting spatial expertise at all levels and disciplines within the University. Our comprehensive spatial research capability ranges across science to social science, architecture to business, and the environment to artificial intelligence.

This opens up a rich area of cross-disciplinary expertise within the University to benefit our external research partnerships. In addition to supporting the work of the Urban Futures ECP, the cluster also assists other ECP research activities, particularly those undertaken by the Social Change, and Information and Systems (Engineering) ECPs.

This initiative is being funded by RMIT's ECP Capability Development Fund.

# Key capabilities

Hundreds of expert research affiliates in disciplines ranging from urban, global and social studies; architecture and design; property, construction and project management; media and communication; engineering and business.

## Internationally recognised areas of research excellence in:

> urban and regional planning
> architecture
> environmental science and management
> civil engineering and building
> design practice and management
> sociology and
> communication and media studies

## Additional cross-cutting research strengths in:

> spatial analysis and visualisation
> spatial computing and gaming
> transport
> green infrastructure
> low carbon energy
> climate change mitigation and adaption
> employment and economic development
> urban governance and social equity

## Research facilities and centres include:

> Centre for Urban Research
> The Centre for Design Practice Research (d__lab)
> Centre for Art, Society and Transformation
> Centre for Environmental Sustainability and Remediation
> Social and Global Studies Centre
> Centre for Communication, Politics and Culture
> The RMIT Design Hub
> Centre for People, Organisation and Work (CPOW)
> Water: Effective Technologies and Tools (WETT) Research Centre
> Centre for Game Design Research
> United Nations Global Compact – Cities Programme

## Close relationships with:

> local, state and federal governments
> United Nations (UN) Global Compact Cities Program and UN Habitat
> Australian APEC Study Centre
> World Economic Forum
> Practitioners, peak bodies, research institutions and networks in Australia, Asia and Europe

# Research and innovation priorities

## Urban transformation

Urban transformation for a liveable and sustainable future:  Given rapid population growth, and urbanisation disruptions how can metropolitan and regional cities be transformed to achieve the UN Sustainable Development Goals (SDGs)?

## Understanding and engaging communities

Understanding and engaging communities to shape city transformation: How could communities, business and industry be engaged to inform the city transformations for a more sustainable future?

## Anticipating and shaping infrastructure requirements

Anticipating and shaping infrastructure for rapidly changing metropolitan and regional cities: How can we ensure social, digital, green and physical infrastructure supports urban and regional communities?

## Ethical use of big data and technology

Ethical use of big data and technology to support urban decision-making and governance: How can interdisciplinary urban research use sensors, technology and citizen science to plan and monitor cities?

## Rethinking urban economics

Rethinking urban economics to achieve the UN SDGs: What new economic methods could be developed that value the costs, benefits and externalities of building sustainable liveable cities?

# Key application areas

> Urban planning and design
> Housing
> Transport
> Economic development and employment
> Resources (water and energy)
> Urban greening
> Infrastructure (social, digital, water and physical)
> Urban governance
> Climate change mitigation and adaptation

## Priority Industry Sectors

LOCAL, STATE AND FEDERAL GOVERNMENT

ENERGY

NON-GOVERNMENT ORGANISATIONS

URBAN AND TRANSPORT DESIGN

WATER AUTHORITIES

HOUSING AND PROPERTY DEVELOPMENT

HEALTH

URBAN ECONOMICS

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