STATE OF AUSTRALASIAN CITIES
CONFERENCE 2025

9–12 December Brisbane, Queensland

Absolute Events & Marketing

EXCEEDING EXPECTATIONS

Australasian Cities Research Network

Contents

TUESDAY 9 DECEMBER
SOAC CONFERENCE (DAY 0)

3.30pm - 6.00pm	**Registration Desk Open (SOAC Conference)**			
4.00pm - 5.00pm	**Field Trip 1**	**Field Trip 2**	**Field Trip 3**	**Field Trip 4**
	Transport Innovation in Cities: the Brisbane Metro and CityCat passenger ferry systems 3.30pm - 5.00pm	Discovering Brisbane's music scene: a tour of Fortitude Valley music precinct	Urban Sketching 3.30pm - 5.00pm	South Bank Parklands
5.30pm - 6.30pm	**Welcome Reception**			
	Rooftop Terrace, Level 6, P Block, QUT Gardens Point Campus			
	END OF DAY			

WEDNESDAY 10 DECEMBER
SOAC CONFERENCE (DAY 1)

8.00am - 4.30pm	**Registration Desk Open**
8.30am - 10.30am	**Plenary 1**
	Chair: Mirko Guaralda **Room: P421**
8.30am	Plenary Room Doors Open
8.45am - 8.55am	**Welcome to Country**
	Tribal Experiences representing the Turrbal and Yuggera-Yugambeh peoples
	Conference Opening
9.00am - 9.10am	**The Right Honourable, the Lord Mayor of Brisbane, Councillor Adrian Schrinner**
	Welcome to Brisbane City
9.10am - 9.20am	**Prof Gene Moyle,** Pro Vice-Chancellor (Academic Programs and Partnerships), Queensland University of Technology
	Welcome to Queensland University of Technology
9.20am - 9.30am	**A/Prof Crystal Legacy & Prof Kristian Ruming**, Co-Chairs, Australasian Cities Research Network
	ACRN Welcome
9.30am - 10.30am	**First Nations Panel: Reframing Planning Through Indigenous Knowledge and Practice**
	Chair: Dr Craig Cowled, Senior Lecturer, Faculty of Engineering, School of Civil & Environmental Engineering, Queensland University of Technology
	Owen Café, Principal Landscape Architect, Blaklash
	Greg Kitson, Griffith University
	Alayna Rā, Indigenous Design Director, WSP
	Charmaine 'Ilaiū Talei, Director of Fofonga and Senior Lecturer, Waipapa Taumata Rau	The University of Auckland
10.30am - 11.00am	**Morning Tea**

11.00am - 12.30pm	Parallel Session 1								
	1A: City Economics and Development	1B: City Governance and Structure	1C: City Health and Liveability	1D: City Housing and Inclusion	1E: City Movement and Infrastructure	1F: City Nature and Environment	1G: City Cultures and Identity	1H: City Design and Morphology	1I: Reckoning with Settler Colonial Cities
	Economies of Change	Integrated Planning Practices	Health and Equity	Housing for All	Active Mobility Networks	Environmental Planning Futures	Place, Memory, Meaning	Typologies in Transition	Unsettling Planning
Room	P504	P514	P512	P421	P506a	P506	P413a	P505	P413
Chair	Mark Limb	Iain White	Joanne Choueiri	Andrew Leach	Linda Carroli	Alessio Russo	Tony Matthews	Debra Cushing	Charmaine 'Ilaiū Talei
11.00am - 11.15am	Shaping tomorrow's regions: A systematic review of industry 4.0's role in regional development	Embedded scales, disciplines, and public policy	Empowering policymakers through automated scorecards using data from the Australian Urban Observatory (AUO)	Well located housing: Is it time to revisit transit activated corridors?	When bike lanes are not enough: A low stress approach to cycling network improvements	The role of urban climate knowledge in planning: an international study of built environment education	Cultural dispositions shaping city futures in Australia	Densifying within existing urban morphology: Houses in the city and apartments in the suburbs?	Unsettling the story: Indigenous perspectives on mis- and disinformation in urban planning and design
	Soroush Khalili University of Auckland	*Stephen Dovers* Fenner School, ANU	*Ori Gudes* RMIT University	*Giles Thomson* Curtin University	*Melissa Smith* University of Waikato	*Olivia Herrmann* University of the Sunshine Coast	*Robert Lundberg* Futures Hub, Monash University	*Rachel Gallagher* The University of Queensland	*James Berghan* Te Wānanga O Aotearoa
11.15am - 11.30am	Town centres in new suburbs – How can planning achieve better outcomes?	Integrative planning in practice: The THIS framework in Indonesia's development planning system	Assessing greenfield developments against 20-Minute City targets	Designing disability-inclusive, affordable, and sustainable homes in Australia: A path to a net zero future	Mapping the cycling landscape in Brisbane: A baseline study of infrastructure and use patterns	Championing planetary health education in an anxious age	Let's plan the future, not the past	Borders or boundaries: A typomorphology of river edges	The tensions and incommensurabilities between participatory and decolonial approaches to planning
	Annette Kroen RMIT University	*Mochamad Nurhestitunggal* Griffith University	*Xiao Ma* The University of Melbourne	*Jeeva Sajan* Western Sydney University	*Niloofar Dehghani Samani* Griffith University	*Susan Thompson* University of New South Wales	*Alejandro Cohn* Queensland University of Technology	*Ruoxin Liu* The University of Melbourne	*Janice Barry* University of Waterloo
11.30am - 11.45am	Olympic Shames: Host city planning for housing and homelessness. Lessons from Paris for Brisbane 2032	From vacancy to vitality: Participatory reuse of regional buildings for housing and civic renewal	Environmental Racialisation and its influences on health and wellbeing among migrant communities in Auckland	A new build-to-rent-to-own model for 'generation rent'	Pathways for cargobike logistics in Australian cities: Global lessons, local solutions for implementation and scaling	Collaboration and systems thinking in governance frameworks for managing water in a changing climate	Building Identity: Designing for connection, culture and community impact	How cul-de-sacs have shaped Australian subdivisions	Rangatiratanga: Reimagining the notion of home for Māori single mothers in settler-colonial cities
	Lyndall Bryant Queensland University of Technology	*Ammon Beyerle* Here Studio	*Andrea Edwards* University of Auckland	*Caitlin McGee* Institute for Sustainable Futures, University of Technology Sydney	*Courtney Babb* Curtin University	*Jenelle Bartlett* Griffith University	*Michael Bailey* Open Architecture Studio	*Alice Vialard* The University Of Sydney	*Shelley Hoani* Te Wānanga o Aotearoa
11.45am - 12.00pm	A national analysis of planning for self-storage across Australia	Scale of PeriUrban Growth Challenges	Public parks on private land: Enabling healthy urban regeneration in Green Square, Sydney	Breaking down barriers: Enabling cross-jurisdictional housing innovation transfer	The National Cycling Data and Analytics Platform: Transforming cycleway planning through integrated data and analytics	A comparison of state Coastal Management Programs in Australia	Impact of Culture on Women's Access to Urban Transportation: Insights from Dhaka	Understanding the impacts of consolidation on the urban forest and implications for effective policy response	Restoring Indigenous People and nature to the city through ecological restoration
	Umberto Baresi Queensland University of Technology	*David Bailey* Adelaide Plains Council	*Katherine Sundermann* Monash University	*Laura Goh* UNSW Sydney	*Scott Lieske* The University of Queensland	*Aysin Dedekorkut-Howes* Griffith University	*Md Amjad Hossain Reyad* The University of Queensland	*Joe Hurley* RMIT University	*Erana Walker* University of Waikato
12.00pm - 12.15pm	Household housing change under social and economic restructuring – insights from the longitudinal micro data	Building capability for transition governance: A living lab approach to net zero precincts	**Q&A**	Housing vulnerable households in Australia	**Q&A**	Dealing with uncertainty in flood risk management and land use planning decisions: Insights from Aotearoa-NZ	**Q&A**	Conundrums in land use and transport integration policies in the transformation of Australian cities	**Q&A**
	Tiebei Li RMIT University	*Darren Sharp* Monash Sustainable Development Institute		*Carl Germanos* Western Sydney University		*Silvia Serrao-Neumann* University of Waikato		**Ian Woodcock**, *University of Sydney* & **Jan Scheurer**, *RMIT University* & **Hulya Gilbert**, *The University of New South Wales*	
12.15pm - 12.30pm	Q&A IN EACH TRACK								
12.30pm - 1.30pm	Lunch								

SOAC CONFERENCE (DAY 1) - CONTINUED

1.30pm - 3.00pm — Parallel Session 2

	2A: City Economics and Development	2B: City Governance and Structure	2C: City Housing and Inclusion (Panel)	2D: City Housing and Inclusion	2E: City Movement and Infrastructure	2F: City Nature and Environment	2G: City Cultures and Identity	2H: City Design and Morphology	2I: City Cultures and Identity
	Economies in Transition	Planning Legacy	Panel	Affordability and Resilience	Shifting Urban Mobility	Cultivating Climate Resilience	Emotive Urban Design	City-Scale Transformations	SIG
Room	P504	P514	P512	P421	P506a	P506	P413a	P505	P413
Chair	Lijun Summerhayes	Mark Limb	Sebastien Darchen	Linda Carroli	Anthony Kimpton	Tony Matthews	Alejandro Cohn	Mirko Guaralda	Stephanie Wyeth
1.30pm - 1.45pm	Investment for disaster resilience, acquiring systemic approach for Australian cities	Managing municipal waste beyond the city: leveraging sustainability outcomes in multilevel governance systems *Amelia Leavesley* Melbourne Centre For Cities, The University of Melbourne	State-led regeneration: are we creating liveable neighbourhoods? *Sebastien Darchen The University of Queensland* *Kathrine Sundermann* Monash University	Climate Interior Design: Transitions for flood impacted homes *Sophie Barfod* Vuilleumier Griffith University	Unpacking the gridlock: Expert insights on phase-context dynamics of land use and transport integration barriers *Rafsana Hossain* Monash University	Why your canopy target will fail unless you have a 'tree survival budget' *Thami* Croeser *RMIT University*	Lines of return: Using poetry to explore Māori relationships with the built environment *Dr James Berghan & Marama Salsano Te Wānanga O Aotearoa*	Participatory urban design with teens: bridging practice, place, and inclusion *Deidre Rour University of Sydney*	Designing Futures with Love Workshop: Testing Urban Design Principles for the Olympic City *Stephanie Wyeth The University of Queensland* *Dr Kali Marnane Urbis / The University of Queensland*
	Prof Jago Dodson & Annette Kroen RMIT University								
1.45pm - 2.00pm	Work from home and urban deconcentration: A spatial econometric analysis of U.S. growth patterns	Sustainable legacy of mega-events: Social and institutional evaluation of the 2018 Gold Coast Commonwealth Games *Riley Flanigan* *Urbis*		Building an integrated framework of urban affordability and climate resilience *Zhenpeng Zou The University of Queensland*	Discourse-coalitions in transport policy: investigating ride-hailing legalisation reforms in Victoria, Australia and Germany *Johanna Reinhardt The University of Melbourne*	Household urban agriculture – a nature-based solution towards climate resilient communities *Hannah Thwaites Flinders University*	Neuroarchitecture as urban strategy: Designing for emotional resilience in future cities *Michael Major Institute of Neuroarchitecture*	Legacy, innovation and sustainability of megaprojects: A case study of Queen's Wharf Brisbane *Bhishna Bajracharya & Daniel O'Hare Bond University*	
	Abolghasem Azhdari The University of Queensland	*Kava Piran Griffith University*	*Mike Harris UNSW*						
2.00pm - 2.15pm	Insolvencies in the residential construction industry: Recommendations for reform	Planning for 'Abundance': a critique and research agenda		Mapping an infrastructural community to identify human and non-human actors of an apartment building retrofit *Denise Ryan The University of Melbourne*	Understanding public perception of Brisbane's inner-city parking policy reform *Victoria Sturgeon Queensland University of Technology*	Prototyping productive landscapes on campus: a testing ground for agroecological rewilding *Lu Jin The University of Queensland*	The Heart of Urbia: From rupture to regeneration in urban design *Crystal Victoria Olin Victoria University of Wellington*	Challenging the airport city orthodoxy: Designing Sydney's third city *Philip Graus University of New South Wales*	
	Lyndall Bryant Queensland University of Technology	*Iain White University of Waikato*							
2.15pm - 2.30pm	Shifting the burden: Rethinking property tax distribution	Exploring the roles of universities in the governance and leadership of City Deals		Beyond Demolition: common housing types patterns and potential *Catherine Murphy Monash University*	Separating cars and housing: Stakeholder perspectives on unbundling car parking in multi-dwelling developments *Liam Davies RMIT University*	The natural and strategic dynamics of Greater Sydney's public urban forests *Sophie Moore Western Sydney University & Mosaic Insights*	Brutopian Perth: mapping and measuring (sub)urbanity in the world's longest city *Paul Maginn UWA Public Policy Institute*	From CBD to CAD: Melbourne city centre as a model for sustainable urban regeneration *Rajjan Chitrakar Melbourne Polytechnic*	
	George Greiss Western Sydney University	*Success Shaibu Macquarie University*							
2.30pm - 2.45pm	The calculative practices of housing supply	The utopia of shared community infrastructure: Insights from Canada's Festival City and Australia's Gold Coast		Q&A	A TOD tale of two cities: emergent 'new normal' transit urbanisms in Sydney and Melbourne *Ian Woodcock, University of Sydney & Jan Scheurer, RMIT University*	Q&A	Q&A	Q&A	
	Laurence Troy University of Sydney	*Chris Boulton City of Gold Coast*							
2.45pm - 3.00pm				Q&A IN EACH TRACK					

3.00pm - 3.30pm	Afternoon Tea

3.30pm - 4.30pm	Plenary 2 - Pat Troy Memorial Lecture

Chair: Aysin Dedekorkut-Howes Room: P421

A planning ultramarathon: Legacy placemaking at Sydney Olympic Park

Prof Robert Freestone, Professor of Planning, UNSW Sydney

4.30pm - 5.15pm	ACRN General Meeting & AECURN Launch

Chair: Crystal Legacy & Kristian Ruming Room: P421

6.00pm - 7.00pm	Public Lecture

Chair: Sara Alidoust Room: P421

State of Australian Housing: Prolonged Crisis or Progressive Change?

Prof Nicole Gurran, Professor of Urban & Regional Planning; Director, Henry Halloran Urban & Regional Research Initiative, University of Sydney

END OF DAY

8.30am - 4.30pm	Registration Desk Open

9.00am - 10.00am	Plenary 3
	Chair: 7 f│ng┤U¨@¥[UW⌐n Room: P421

9.00am - 10.00am — Women in Urban Research Panel

- **Nicole Bennetts**, National Head of Advocacy and Public Affairs, Planning Institute of Australia
- **Eloise Atkinson**, Independent Chair, Brisbane Housing Company
- **Dyan Currie AM**, Principal, Dyan Currie & Associates
- **Bec Mac**, Director, POPSART, Churchill Fellow 2025
- **Isabella Webb**, PhD Candidate & Spatial Designer, Monash University XYX Lab
- **Stephanie Wyeth,** MPIA Fellow, Director of Engagement, Planner in Residence, School of Architecture, Design and Planning, The University of Queensland

10.00am - 10.30am	Morning Tea

10.30am - 12.00pm — Parallel Session 3

	3A: City Governance and Structure (Panel)	3B: City Governance and Structure	3C: City Health and Liveability	3D: City Housing and Inclusion	3E: City Movement and Infrastructure (Panel)	3F: City Nature and Environment	3G City Economics and Development	3H: City Health and Liveability	3I: Reckoning with Settler Colonial Cities
	Panel	Governance and Growth	Ageing and Resilience	Everyday Housing Realities	Panel	Adapting with Nature	Planning for Sustainability	Climate and Wellbeing	Place, Care and Justice
Room	P504	P514	P512	P421	P506a	P506	P413a	P505	P413
Chair	Tan Yigitcanlar	Iain White	Alejandro Cohn	Francesca Perugia	Lisa Stafford	Aysin Dedekorkut-Howes	Umberto Baresi	Jago Dodson	Mirjam Schindler
10.30am - 10.45am	Urban AI: Rethinking Cities Through the Lens of Responsible AI	The absence of strategic governance in creative cities: repositioning artist-centred urban interventions	Sensing youth-friendly neighbourhood development in Singapore: A focus on adolescent recreation spaces	From density to disparity: the paradox of urban intensification in New Zealand's elite school zones	Rights to Streets: Advancing mobility justice in our communities for all through integrated planning	Climate resilient homes, lessons from Canada, Aotearoa New Zealand, and Australia	City planning is down for the count. Have city plan numbers ever been right?	Public spaces as 'cool' places: implementing a systems design approach for urban heat resilience	Māori Streets: Indigenous-led street design for just, equitable, and thriving cities
	Tan Yigitcanlar Queensland University of Technology **Tahsin Hossain**	*Louise Rollman Queensland University of Technology*	*Xin Yang Singapore University of Technology and Design*	*Timothy B. Buckenham Incite | University of Otago*	**Co-chairs** **Lisa Stafford** *Griffith University* **Hulya Gilbert** *The University of New South*	*Andreanne Doyon, Simon Fraser University &* **Trivess Moore**, *RMIT University, &* **Judy Bush**, *The University of Melbourne*	*Kirstie Allen*	*Nicholas Stevens University of the Sunshine Coast*	*Kimiora Raerino Te Manawahoukura Rangahau Centre - Te Wānanga O Aotearoa*
10.45am - 11.00am	**Abdul Shaamala** **Ke Liu** **Wenda Li** **Niklas Tilly** **Raveena Marasinghe**	Assessing and classifying publicness: typologies of public-private relationships across public spaces in Wellington and Shanghai	Transit hubs as social hubs: embedding healthy ageing in Australasian TOD futures	Lived experiences of medium density housing in Tāmaki Makaurau / Auckland	*Wales* **Panellists** **Andrew Holmes** **Penelope Bennett** *City of Adelaide* **Ian Woodcock** *The University of Sydney*	Why do coastal cities respond differently to Sea Level Rise?	Understanding urban park preferences through choice experiments	Heatmapping of city wastewater networks for urban planning purposes for heating & cooling buildings	Holding on to Tangowahine: Architectural design as resistance, memory, and connection
		Xiaohui Chen Victoria University of Wellington	*Jialing Xie University of Sydney*	*Kathryn Ovenden & Melanie McKelvie Auckland Council*		*Suhyun An Griffith University*	*Shanaka Herath University of Technology Sydney*	*Nick Meeten Applied Energy*	*Ben Siesicki Te Wānanga O Aotearoa*
11.00am - 11.15am	**Anne David** **Sajani Senadheera**	Zoning as leverage: local government responses to the NSW Transit Oriented Development program	Heat adaptation planning for aged care facilities in the (sub)tropics: Insights and future directions	Infrastructures of care and housing affordability: the everyday experiences of low-income older women		Reframing critical infrastructure: systemic risk assessment and Urban Blue-Green Infrastructure (UGBI) for climate resilience	Could New Towns be part of Australia's National Urban Policy	Utilising systems thinking to explore opportunities and challenges for local government sport and recreation infrastructure	Mapping First-Generation Property Formation in New South Wales: Methodological Considerations of Work in Progress *Andrew Leach Queensland University of Technology*
		Alistair Sisson Macquarie University	*Tony Matthews Griffith University*	*Farhana Akther RMIT University*		*Leonardo Nogueira De Moraes RMIT University*	*Paul Burton Griffith University*	*Martin De Lange University of the Sunshine Coast*	
11.15am - 11.30am		From deficit to equity: Preparing for the next wave of growth in Australian cities	Transition towards healthcare 'net zero': condition-specific patient travel carbon emission estimations	Urban density and social acceptance: tracking public perceptions and lived realities in Sydney		Nature strips for biodiversity & climate: what's the public interest?	Food diversity and accessibility enabled urban environments for sustainable food consumption: A Brisbane case study	Sensing heat in the city: how sensor variation can affect data veracity	From Erasure to Integration: What Neuroscience Reveals About Cultural Visibility and Belonging in Cities
		Anne Hurni National Growth Areas Alliance	*Jonathan Olsen The University of Queensland*	*George Greiss Western Sydney University*		*Sarah Hunter The University of Melbourne*	*Lijun Summerhayes Queensland University of Technology*	*Jason Byrne University of Tasmania*	*Michael Major Institute of Neuroarchitecture*
11.30am - 11.45am		Impact of BIDs on place management in a global city-state: emergence of a new governance?**Anupam Yog** *Xdg Labs*	Examining ageing and climate resilience within regional and rural local government planning *Rachel Winterton La Trobe University*	Local government innovation and housing: ARCHI and adaptive reuse *Todd Denham RMIT University*		Designing Cities for a Hotter Future: Prototyping a Climate Design Atlas *Daniela Ottmann Bond University*	Left of Centre: The legacy of Olympic Sites in Western Sydney *Parisa Ziaesaeidi Western Sydney University*	**Q&A**	Yarning on Country: A methodology for reviewing the Aboriginal Land Planning Framework *Nicole McNamara & Sasha Vincent Department of Planning, Housing and Infrastructure NSW*
11.45am - 12.00pm	**Q&A IN EACH TRACK**								

SOAC CONFERENCE (DAY 2) - CONTINUED

12.00pm - 1.00pm	Lunch

12.00pm - 1.00pm	**Women and carers in Urban Studies: changing cultures, building communities**
Chair: Gabriela Quintana Vigiola	Room: P-419

2025 Australasian Cities Research Network (ACRN) Speaking Out Series: Women and Carers in Australasian Urban Studies: Changing Cultures, Building Communities

1.00pm - 2.30pm — Parallel Session 4

	4A: City Economics and Development	4B: City Governance and Structure	4C: City Health and Liveability	4D: City Housing and Inclusion	4E: City Movement and Infrastructure	4F: City Nature and Environment	4G: City Cultures and Identity	4H: City Design and Morphology	4I: City Governance and Structure (Panel)
	Transforming City Economies	Planning and Power	Healthy Public Spaces	Housing Beyond Ownership	SIG	Urban Ecologies Evolving	Engaging Urban Cultures	Sensory Urban Design	Panel
Room	P504	P514	P512	P421	P506a	P506	P413a	P505	P413
Chair	Umberto Baresi	Crystal Legacy	Iain White	Kristian Ruming	Jennifer Kent	Claudia Taborda	Thomas Sigler	Nick Stevens	Charlie Gillon
1.00pm - 1.15pm	Exposing the true nature of development: An automated property parcel classification approach using deep learning — *John Duncan, The University of Western Australia*	Governance, advocacy, and place-based practice in justice focused climate change adaptation in Victoria — *Susie Moloney, RMIT University*	New parenthood, walking and parental health: Large-scale empirical evidence from Aotearoa New Zealand — **Mirjam Schindler**, *Victoria University of Wellington*	Affordable alternative homeownership pathways in Aotearoa New Zealand: participant experiences — **Simon Opit**, *Massey University* & **James Berghan**, *Te Wānanga O Aotearoa*	School runs and soccer practice: The untold story of children's transport — *Jennifer Kent, University of Sydney*	A systems thinking approach to address end-of-life renewable energy technologies in Australian cities — **Anthony Kent**, *RMIT University*	Shifting norms, changing practices: how planning cultures influence community engagement in Danang's waterfront redevelopment — **Ngoc Thao Linh Dang**, *Monash University*	Children's access to public open space in high-density urban contexts — *Raisa Sultana, The University of Melbourne*	AI for urban planning and governance — *Prof Chris Pettit, UNSW*
1.15pm - 1.30pm	Beyond nightlife: mapping Australia's night-time workforce — *Anna Edwards, The University of Melbourne*	The Just City: Plans as symbols of hope — *Joanna Ross, Massey University*	Reframing urban green space access: A spatial-perceptual analysis in Liverpool, Sydney — *Yuan Qi, University of Technology Sydney*	Would you rent your spare bedroom to help ease the rental crisis? — **Lyndall Bryant**, *Queensland University of Technology*		Case Study Cities: Jaipur and Singapore - Innovative approaches to integrating nature with urban development — **Anupam Yog**, *Xdg Labs* & **Samantha Hayes**, *Bioneering Australia*	Spot the asset: a dialectic urban relationship between bill posters, graffiti, and visual culture — **Chris Parkinson & Sabina Andron**, *University of Melbourne*	Boring Places, Big Potential: Rethinking Car Parks as Social Infrastructure in Australian Planning — **Will Fooks**, *Eukai Pty Ltd* & **Suzanne Barker**, *Monash University*	*Prof Bill Randolph, UNSW* *Dr Ryan van der Nouwelant, UNSW* *Dr Charlie Gillon, UNSW* *Dr Sophia Maalsen, The University of Sydney*
1.30pm - 1.45pm	Artificial intelligence, digitalisation and occupational geographies — *Todd Denham, RMIT University*	Planning as institutionalised maladaptation: path dependence as culture — **Ian Woodcock**, *University of Sydney* & **Hulya Gilbert**, *The University of New South Wales*	ChillOUT Hubs and thresholds of public life: loneliness and solitude in Sydney's smart public spaces — **Xue (Vera) Xia**, *University of Sydney*	Dual disruptors? Exploring Airbnb and student housing coexistence in Kensington and Chippendale's rental markets, Sydney — **Parian Hoseini**, *University of New South Wales*		Dark Matters: A manifesto for planning healthier nightscapes for people, place, and planet — **Clare Mouat**, *Massey University*	Governing Urban AI in New Zealand, Aotearoa: Risk, Trust, and Professional Readiness in Planning — **Mohsen Mohammadzadeh**, *University of Auckland*	Beyond wayfinding: Designing cities that feel intuitive, not just legible — **Michael Major**, *Institute of Neuroarchitecture*	*Prof Pauline McGuirk, University of Wollongong* *Dr Claire Daniel, The University of Sydney*
1.45pm - 2.00pm	Restructuring the investment sector in Indonesian Cities during COVID-19 pandemic — *Uly Faoziyah, The University of Melbourne*	Cities of Risk Dissonance: between planning certainty and the unknown — **Alan March**, *The University of Melbourne*	The Rights of Persons with Disabilities in New Zealand Cities — **Patricia Austin**, *University of Auckland*	Sharing Housing, Shifting Trajectories: Housing, Mobility and Life Course for Young Women in share housing — **Alessandra Buxton**, *University of New South Wales*		Urban futures in Aotearoa and the emergent potential of a nocturnal commons? — **Salene Schloffel-Armstrong**, *University of Auckland*	Framing the future: A visual ethnography of construction fences in Brisbane City — **Joanne Choueir & Kirtsy Volz**, *Queensland University of Technology*	Design innovations in regeneration: Priority Development Areas projects in QLD VS European case studies — **Sebastien Darchen**, *The University of Queensland*	
2.00pm - 2.15pm	Q&A	Critical Discourses Analysis of the digitalization policies of New Zealand with Bourdieu's social capital — **Atefe Malekkhani**, *University of Auckland*	Q&A	Home sharing could be a solution to the housing crisis — **Anna McKinlay**, *University of the Sunshine Coast*		Q&A	Risk Perception and Urban Policy: Bridging Community Knowledge and Governance Frameworks — **Francesca Perugia**, *Curtin University*	Building edge design that fosters memorable and meaningful urban legacies in subtropical cities — **Olivia Crawford**, *Queensland University of Technology*	
2.15pm - 2.30pm					Q&A IN EACH TRACK				

2.30pm - 3.00pm	Afternoon Tea

SOAC CONFERENCE (DAY 2) - CONTINUED

3.00pm - 4.30pm	Parallel Session 5						
	5A: City Economics and Development	5B: City Governance and Structure	5C: City Housing and Inclusion (Panel)	5D: City Housing and Inclusion	5E: City Movement and Infrastructure	5F: City Nature and Environment	5G: City Cultures and Identity	5H: City Design and Morphology (Panel)
	Making in Cities	Resilience and Risk	Panel	Equity in Housing	Everyday Urban Mobility	Designing with Water	Belonging and Participation	Panel
Room	P504	P514	P512	P421	P506a	P506	P413a	P505
Chair	Olivia Crawford	Sabina Andron	Kristian Ruming	Lyndall Bryant	Anthony Kimpton	Daniela Ottomann	Sebastien Darchen	Mirko Guaralda
3.00pm - 3.15pm	The geography of creative clusters: housing and work patterns of home-located creatives in Melbourne, Australia	Security as place-making: reframing resilience through situated urban logics	Housing supply and planning reform: a critical intervention	A housing research translation approach to the local government sector	Targeting Universal Basic Mobility and global exemplars	Leveraging on public knowledge and understanding to advance water sensitive transition: Insights from New Zealand	Urbanization and the Impact of Rural-Urban Migration on Urban Decay in Port Moresby City-PNG	Urban Morphology in Australia: reading the past, designing the future
3.15pm - 3.30pm	*Daniel Vasconcelos* *The University of Melbourne* Commodifying environmental solutions: a critical examination of Circular Economy through Political Discourse Theory	*Codee Ludbey* *University of Technology Sydney* The urban and infrastructure resilience nexus: towards a critical research agenda	*CONVENORS* *Kristian Ruming* *Macquarie University* *Bill Randolph* *UNSW* *Alistair Sisson* *Macquarie University* *Ryan van der Nouwelant* *UNSW*	*Greta Werner* *University of Sydney* Geography of creative jobs and housing of creatives: an insight into Melbourne city	*Lynette Cheah* *University of the Sunshine Coast* Who has a seat at the 'smart'table? Multi-actor governance for planning of digital infrastructures.	*Angelina Coelho* *University of Waikato* Embedding water-sensitive thinking in land-use planning: A PSS approach for Auckland	*Paulus Motoro* *Papua New Guinea University of Technology* Understanding the 'spatial relatedness' of communities by country of birth in Australian cities	*Convenor:* *Andrew Leach* *Queensland University of Technology* *Panellists:* *Mirko Guaralda* *Queensland University of Technology*
	Mohsen Mohammadzadeh & Elham Bahmanteymouri *The University of Auckland*	*Crystal Legacy & Sarah Bell* *The University of Melbourne*		*Shahana Sultana* *The University of Melbourne*	*Sandy Burgoyne* *University of Sydney*	*Naduni Kasthuri Arachchi* *University of Auckland*	*Thomas Sigler* *The University of Queensland*	*Alice Vialard* *The University of Hong Kong*
3.30pm - 3.45pm	Exploring planning institutions' perspective on social inclusion in the context of Delhi's urban villages	Integrating urban and climate futures: improving urban growth modelling to plan for future climate uncertainty	*PANELLISTS* *Catherine Gilbert* *University of Sydney* *Jago Dodson* *RMIT University*	Mapping affordable rental housing: A typological framework for Sydney and Melbourne	Mixed messaging: public transport, car advertising and cognitive dissonance	Using human-nature connectedness frameworks to rethink water wise community: Lessons from Greater Brisbane residents	Planning at the speed of cities: toward a practice for the modern world	*Peter Richards* *Archipelago*
	Pranavi Kasula *Griffith University*	*Katherine Booker* *University of Waikato/University of Canterbury*		*Hanie Khosravi* *Macquarie University*	*Hulya Gilbert, The University of New South Wales & Ian Woodcock, University of Sydney*	*Sian Chadfield* *The University of Queensland*	*Jonathan O'Brien* *Yimby Melbourne*	
3.45pm - 4.00pm	**Q&A**	Systemic risk assessment: Addressing compound, cascading and multidimensional disaster impacts for urban resilience action		Does ethnicity shape housing? Chinese residential and investment patterns in Greater Brisbane	City Growth and Transport Futures: Rethinking Accessibility and Mobility in South East Queensland	Universities' place-based responsibilities: Auditing AUT's contributions to Auckland as a nature-positive and regenerative environments city	The centrality of power in LGBTIQ+ housing instability: Applying Steven Lukes' three dimensions of power	
		Leonardo Nogueira De Moraes *RMIT University*		*Shuangshuang Zheng* *The University of Queensland*	*Mubeen Ahmad* *University of Queensland*	*Julie Trafford* *Auckland University of Technology (AUT)*	*BrodieFraser* *University of Otago*	
4.00pm - 4.15pm	**Q&A**	From Data to Decisions: Digitalisation and Transparency in Urban Resilience		A metropolitan geography of young-headed households: the case of Greater Brisbane	**Q&A**	Governance of novel natures: co-existing with urban rivers	**Q&A**	
		Francesca Perugia & Courtney Babb *Curtin University*		*Sophia Dow* *Therefor Group*		*Melissa Pineda Pinto* *The University of Melbourne*		
4.15pm - 4.30pm				**Q&A IN EACH TRACK**				
4.30pm - 6.30pm	Free time for attendees							
6.30pm - 9.30pm	**Conference Dinner**							
	Grove Rooftop, Level 32, 480 Queen Street, Brisbane							

END OF DAY

FRIDAY 12 DECEMBER
SOAC CONFERENCE (DAY 3)

Time	
8.30am - 4.30pm	Registration Desk Open
9.00am - 10.00am	**Plenary 4** — Chair: Alessio Russo — Room: P421
9.00am - 10.00am	**Transforming urban planning: The impact of digital technology on sustainable and inclusive cities** — Dr Nayomi Kankanamge, Lecturer in Urban Design and Town Planning, University of the Sunshine Coast
10.00am - 10.30am	Morning Tea
10.30am - 12.00pm	**Parallel Session 6**

	6A: City Nature and Environment (Panel)	6B: City Governance and Structure	6C: City Health and Liveability	6D: City Housing and Inclusion	6E: City Movement and Infrastructure	6F: City Nature and Environment	6G: Planning Education (Panel)	6H: City Design and Morphology	6I: Reckoning with Settler Colonial Cities (Panel)
	Panel	Collaborative City-Making	Measuring Liveable Cities	Affordability and Exclusion	Transport and Transition	Nature-Based Urbanism	Panel	Legacies of Design	Panel
Room	P504	P514	P512	P421	P506a	P506	P419	P505	P413
Chair	Tom Rivard	Sabina Andron	Sara Alidoust	Alejandro Cohn	Jago Dodson	Antony Moulis	Anthony Kent	Thomas Sigler	Ana Lara Heyns
10.30am - 10.45am	Radical Co-existences: Playing the Olympics to manifest Urban Play	Power and participation: navigating renewable energy planning in regional NSW	Liveability in Aotearoa New Zealand: exploring diverse perspectives on urban liveable places with arts-based methods	A Harveyan-Lefebvrian investigation of Auckland's housing affordability issues under neoliberal discourse	Bridging the gap: aligning spatial and railway development plans in New Zealand	Strategic greening of informal urban spaces: A cost-effective path to biodiversity and connectivity	The death and death of Australian planning schools	Behind the "latte line": Exploring socio-spatial inequality within Western Sydney	Indigenous Urban Water Design: Reclaiming Memory, Place and Practice in Australian Cities
10.45am - 11.00am	*Panelists:* *Amy Nadasky, Monogram Partners*; *Natalie Wright, Play32 Brisbane*	*Sanaz Alian, University of New England* — Greening in complex urban systems- decision-making, feedback loops and unintended consequences	*Rita Dionisio, University of Waikato* — The impact of community infrastructure on social connection and place attachment in regional Victoria	*Maqsood Rezayee, The University of Auckland* — Classifying barriers to integrating affordable housing and Transit-Oriented Development (TOD): A Systematic Literature Review	*Behnaz Shaabani, University of Auckland* — Gender-based violence in Melbourne's public transport	*Hugh Stanford, RMIT University* — Visioning street green canyons: Classifying and mapping typologies via deep learning and street-view images	*Anthony Kent, RMIT University*; *Francesca Perugia, Curtin University*; *Julie Rudner, Latrobe University*; *Paul Burton, Griffith University*; *Paul Maginn, University of West Australia*; *Laura Crommelin, University of NSW*; *Andrew Allan, University of South Australia*	*Nicole Campbell, Western Sydney University* — Demolishing Brisbane (1978-1988): rebranding urban identity through demolition and symbolic economy	*Dr Ana Lara Heyns, Monash University*; *Prof Carolyn Briggs AM, Monash University*; *Prof Brian Martin, Monash University*; *A/Prof Maria de Lourdes Melo Zurita, University of New South Wales*; *Dr Laura Harper, Monash University*; *A/Prof Catherine Murphy, Monash University*
11.00am - 11.15am	*Robyn Monro Miller, CEO Play Australia*; *Clay Johnsen, Brisbane urbanist, landscape architect and playground designer*	*Atefeh Soleimani Roudi, RMIT University* — Localising collaborative governance in superdiverse suburban centres: early findings from Footscray and Dandenong, Melbourne	*Suzanne Barker, Monash University* — From growth to liveability: how local leadership can shape resilient cities	*Mohammad Ali Ashouri Dahnesari, The University of Auckland* — The decline of affordable housing in Australian Manufactured Home Estates	*Longqi Lin, The University of Melbourne* — Effective interventions to increase active transport mode share: What the data tells us	*Hongming Yan, University of Technology Sydney* — Community Values in Co-Designing Resilient Street Retrofits in Melbourne	*Aysin Dedekorkut, Griffith University*; *Severine Mayere, Queensland University of Technology*; *Franscesca Perugia, Curtin University*; *Matt Collins, Planning Institute of Australia*	*Joanne Choueiri, Queensland University of Technology* — Developing Great Australian Cities: Interventions in Metropolitan Regional Structure	
11.15am - 11.30am	*Tom Rivard (moderator), Urban designer, futurist*	*Hayley Henderson, Australian National University* — 300,000 Streets: Governing from the street up — participatory cultures for regenerative city futures	*Kelly Grigsby, Municipal Association of Victoria* — Measuring liveability for community benefit - findings of the 2025 Australian Liveability Census	*Lois Towart, University of Technology, Sydney* — Analysing the impact of the 2032 games on homelessness and housing: displacement, renters, and homeowners	*Elliot Fishman, Institute for Sensible Transport* — Exploring aspects of transport-induced gentrification in Sydney's CBD and South-East Light Rail Project	*Sarah Bell, The University of Melbourne* — Which tool, when? A review of urban greening tools for integrating nature-based solutions in cities		*Jeff Humphreys, The University of Queensland* — Finding the legacies of historical planning decisions in modern neighbourhood land use patterns	
11.30am - 11.45am		*Ammon Beyerle, Here Studio & Nina Sharpe, Regen Melbourne*; Q&A	*Kylie Legge, Place Score* — Urban streetscape interventions and the everyday realities of Māori mobility, equity and wellbeing in Aotearoa — *Kimiora Raerino, Te Manawahoukura Rangahau Centre - Te Wānanga O Aotearoa*	*Fiona Caniglia & Jackson Hills, Queensland Shelter* — Sleeping Out - Designing-In: ethical considerations for planning and designing homefullness in public space — *Ian Woodcock, University of Sydney & Dr Julie Rudner, La Trobe University*	*Lara Mottee, The University of Sydney* — Research-led teaching and 'wicked' transport problems: a promising case from regional Victoria — *James Whitten, Monash University*	*Judy Bush, The University of Melbourne* — Innovative funding for green space to support quality urban density — *Nicky Morrison, Western Sydney University*		*Nick Mcfarlane, RMIT University* — From Talking to Walking: Planning for Transit-Oriented Neighbourhoods in Melbourne — *Eris Zhang, University of Melbourne*	
11.45am - 12.00pm	**Q&A IN EACH TRACK**								

Time	
12.00pm - 1.00pm	Lunch

1.00pm - 2.30pm	Parallel Session 7							
	7A: City Economics and Development	7B: City Governance and Structure	7C: City Housing and Inclusion (Panel)	7D: City Housing and Inclusion	7E: City Movement and Infrastructure	7F: City Nature and Environment	7G: Planning Education	7H: City Design and Morphology
	Financing Urban Futures	AI and Governance	Panel	Growth and Equity	Sustainable Transport Systems	Nature and Renewal	Planning Education	Density and Form
Room	P504	P514	P512	P421	P506a	P506	P419	P505
Chair	Lyndall Bryant	Crystal Legacy	Kristian Ruming	Francesca Perugia	Liton Kamruzzaman	Daniela Ottomann	Mark Limb	Rajjan Chitrakar
1.00pm - 1.15pm	Cybernetic capital cycles: A response to capitalist crises	Role of GenAI in governance and placemaking	Key theories and debates in housing research and practice: Developing an encyclopedia of housing	SEQ's Greater Springfield: 20th-century master planned community to 21st-century new city?	Transitioning towards water sensitive regions: just an aspiration or an achievable vision?	Measuring what matters: how residents redefined success in Christchurch city centre's post-quake regeneration	Seeing the Unseen: How Digital Pedagogy Cultivates Cultural Competence in Urban Housing Education	Identifying housing infill opportunities in suburban Australia
	Elham Bahmanteymouri University of Auckland	*Gabriela Quintana Vigiola University of Technology Sydney*	*Kristian Ruming Macquarie University*	*Robert Freestone University of New South Wales*	*Callym Dunleavy Water Technology Pty Ltd*	*Akram Fatourehchishabestari The University of Auckland*	*Xiao Ma & Dejan Malenic The University of Melbourne*	*Heather Shearer Griffith University*
1.15pm - 1.30pm	Residualisation and financialisation in the community housing sector: a Victorian case study of crisis potentialities	Intersectional resistance against AI-enabled surveillance: Lessons from India	*Nicole Gurran University of Sydney* *Greta Werner The University of Sydney*	Zoning for supply, zoning for equity: perspectives, practices and challenges in NSW	A sporting climate: Projections for Brisbane 2032's urban transport decarbonisation	Unequal Ground: the environmental and cultural impacts of Melbourne's urban sprawl	Balancing Local Statutory Knowledge and Transferable Competencies: Comparative Study of Planning Law Education in Australia	Quasi-experimental design and causal inference in urban analytics: understanding the causal warming effect of (re)development
	Liam Davies RMIT University	*Tooran Alizadeh The University of Sydney*		*Catherine Gilbert The University of Sydney*	*Anais Fabre Griffith University*	*Catherine Murphy Monash University*	*Dr Andrew Allan University of South Australia*	*Bryan Boruff The University of Western Australia*
1.30pm - 1.45pm	Housing market and climate change	Investigating the early adoption of AI-powered tools for development assessment in Australia		Planning under pressure: Multilevel governance, accountability, and housing policy in Australia	Assessing the effectiveness of NbS for flood resilience in coastal cities: Insights from Khulna, Bangladesh	Flood governance in Ipswich: A case study of nature-based solutions in a rapidly growing city	AI and the Future of Planning Education: Epistemology, Ethics, and Practice	Mapping urban productivity: Design, domestic space and entrepreneurialism for future housing
	Peyman Habibi The University of Sydney	*Charlie Gillon University of New South Wales*		*George Greiss Western Sydney University*	*Md Esraz-Ul-Zannat Griffith University*	*Hayley Henderson Australian National University*	*Ali Soltani Flinders University*	*Antony Moulis The University of Queensland*
1.45pm - 2.00pm	Who Pays? Emerging possibilities for resourcing managed retreat	Volumetric Urbanism: 3D urban space use modelling for compact city		Sustainable urban growth scenarios using the What If?: A case study of Central Coast Council	Spatial Analysis of the Green Infrastructure Network in a Climate-Vulnerable City	Where two Songlines meet: Regenerative urbanism and net zero innovation at Curtin Exchange precinct	Brisbane Metro - the case for bus rapid transit for a growing city	Embedding Circularity in urban form: A framework for mid-rise precincts in Southeast Queensland
	Aysin Dedekorkut-Howes Griffith University	*Kezia Hsu UNSW Sydney*		*Sirat Mahmuda & Christopher Pettit City Futures Research Centre, UNSW*	*Ifeoma Ukonze University of Otago Dunedin*	*Issana Meria Burhan Curtin University*	*Gavin Soward Brisbane City Council*	*Sevgim Pekdemir Queensland University of Technology*
2.00pm - 2.15pm	Climate finance for climate resilient development: A perspective from Vanuatu and Tonga	Q&A		When Airbnb crosses the line; evidence from Bondi, NSW	Sustainable, connected, resilient, . . .: has style replaced substance in Australian high-speed rail planning?	Q&A	Q&A	An empirical assessment based on meta-indicators in Australian diverse neighbourhoods
	Anuja Raju & Dejan Malenic The University of Melbourne			*Parian Hoseini University of New South Wales*	*James Whitten, Monash University; Alice Vialard & Ian Woodcock, The University of Sydney*			*Tayyaba Riaz Griffith University*
2.15pm - 2.30pm	Q&A IN EACH TRACK							
2.30pm - 3.00pm	**Afternoon Tea**							
3.00pm - 4.15pm	Plenary 5							
	Chair: Mirko Guaralda							Room: P421
3.00pm - 3.45pm	**State of the City Report**							
	Anthony Ryan, CEO, Brisbane Economic Development Agency							
3.45pm - 4.15pm	**Close of Conference**							
	END OF CONFERENCE							

Keynote Speakers

Prof Robert Freestone
Professor of Planning, UNSW Sydney

Prof Nicole Gurran
Professor of Urban & Regional Planning, Director, Henry Halloran Urban & Regional Research Initiative, University of Sydney

Dr Nayomi Kankanamge
Lecturer in Urban Design and Town Planning, University of the Sunshine Coast

Anthony Ryan
CEO, Brisbane Economic Development Agency

A planning ultramarathon: Legacy placemaking at Sydney Olympic Park

Prof Robert Freestone

Keynote 2: Prof Robert Freestone, UNSW Sydney, P421, December 10, 2025, 15:30 - 16:30

Biography:
Robert Freestone is Professor of Planning in the School of Built Environment at the University of New South Wales. His recent books include Planning a Continent of Cities (with Julian Bolleter, UWAP, 2025), Community Green (with David Nichols, Routledge, 2024), and Australian Urban Policy: Prospects and Pathways (edited with Bill Randolph and Wendy Steele, ANU Press, 2024). He is a Fellow of the Planning Institute of Australia, Academy of the Social Sciences in Australia, and the Australian Academy of the Humanities.

With the Brisbane 2032 Olympics now attracting headlines, it seems worthwhile revisiting the experience of the Sydney Olympics staged a quarter century ago. The 2000 Games were an archetypal urban mega-event channelling and refracting global considerations played out in a specific local setting. This presentation picks up on the legacy theme of the conference to explore how the afterlife of a fortnight-long event continues to reverberate on planning and development. The focus is on the major games precinct of Sydney Olympic Park in the middle western suburbs. It provides a case study of how innovation and sustainability have had to be continually renegotiated through land use planning, infrastructure development and urban design to secure shifting public interest and political aspirations. Set against a backdrop of Olympic legacy discourse, a longitudinal approach highlights a succession of planning initiatives beginning pre-Games seeking to balance event planning with a built environment afterlife. The central paradox is a history of arguably one of Australasia's most planned set-piece precincts regularly rethinking the quest for a convincing and lasting strategy. Such is the nature of planning as an ongoing mission. But this story also highlights the vexed legacy of staging the Olympics, a dynamic balance sheet of benefits and costs, the endless curation of urban form and structure, and the quixotic notion of determining a finite legacy in reconciling local needs with global imperatives, a far from unique challenge.

State of Australian Housing: Prolonged Crisis or Progressive Change?

Prof Nicole Gurran

Public Lecture: Prof Nicole Gurran, University of Sydney, P421, December 10, 2025, 18:00 - 19:00

Biography:
Nicole Gurran is Professor of Urban and Regional Planning at the University of Sydney, where she directs the Henry Halloran Urban & Regional Research Initiative. Over two decades her research and publications have focused on housing affordability, urban planning, and climate change. She has authored several books including Urban Planning and the Housing Market (Palgrave) and Politics, Planning and Housing Supply in Australia, England and Hong Kong (Routledge). She is committed to informing public policy and debate through her research, media commentary, and advice to governments, and most recently served as Co-Commissioner on the People's Commission into the Housing Crisis.

Australia is not alone in facing high house price inflation, stagnant new construction, falling rates of home ownership and rising homelessness. So too the existential risks threatening homes and communities under climate change, and deepening social rifts exacerbated by housing inequality. Thanks to decades of research and advocacy, we have robust evidence about the causes and consequences of these intersecting crises. Yet housing precarity continues to worsen while political responses reinforce rather than rectify unfair tax and tenure settings. This lecture situates Australia's housing crisis in international context and asks whether a disconnect between research and practice explains chronic policy failure or whether deeper forces are at play. In imagining change – ranging from micro-interventions to systemic transformation – we need to look beyond our disciplinary boundaries and policy confines to engage with wider communities of knowledge and practice.

Transforming urban planning: The impact of digital technology on sustainable and inclusive cities

<u>Dr Nayomi Kankanamge</u>

Keynote 4: Dr Nayomi Kankanamage, University of the Sunshine Coast, P421, December 12, 2025, 09:00 - 10:00

Biography:
Dr Nayomi Kankanamge is a lecturer in Urban Design and Town Planning at the University of the Sunshine Coast. She is an urban planner and researcher dedicated to integrating advanced technologies into urban planning to create smarter and more resilient cities.

Her recent publications focus on the innovative use of urban big data, including social media analytics, gamification, and crowdsourced data, to enhance urban design, disaster preparedness, and community engagement.

The role of digital technology in urban planning has become a game-changer, fundamentally reshaping how we design and manage our cities and communities. More than ever, data and technology are advancing to support both the general public and professionals, enabling us to make better decisions by understanding urban patterns and behaviours. Technologies such as Generative AI, 3D modelling, digital twins, virtual reality, and augmented reality have revolutionized our ability to visualize and communicate future development scenarios. These innovations make the planning process more transparent, collaborative, and accessible. Furthermore, these technology-enabled platforms promote public participation, empowering communities and fostering a sense of ownership and inclusion. Smart technologies, including AI, IoT, and real-time environmental monitoring, are laying the foundation for cities that are sustainable, adaptive, and resilient. They optimize vital systems such as transportation
 and energy, while also addressing critical challenges like climate change and disaster management. Ultimately, digital technology is not only transforming the field of urban planning but is also shaping a more sustainable, efficient, and citizen-centric future for all of us.

State of the City

<u>Anthony Ryan</u>

Keynote 5: Anthony Ryan, Brisbane Economic Development Agency, P421, December 12, 2025, 15:00 - 15:45

Biography:
Anthony Ryan is BEDA's CEO and responsible for leading BEDA to drive sustainable economic growth for the City. He is an inspiring leader with a proven track record in delivering strategic business outcomes and strong partnerships. Anthony is responsible for leading BEDA to drive sustainable economic growth for the City.

As Brisbane's champion, BEDA works with stakeholders to enhance the City's reputation globally, drive visitation and attract investment and talent, whilst looking ahead at emerging opportunities for the Brisbane 2032 Olympic and Paralympic Games.

He was previously CEO of Youngcare, Anthony pioneered the transformation of the national not-for-profit organisation into an innovative and entrepreneurial company that provides meaningful solutions and choices for young people with high physical care needs.

Keynote Panels

First Nations Panel: Reframing Planning Through Indigenous Knowledge and Practice

This panel brings together Indigenous voices from across Australia and the Pacific to critically examine how planning, design, and governance can move beyond the colonial frameworks that have shaped our cities and regions. Panellists will reflect on the enduring legacies of colonisation in planning practice and explore how Traditional Knowledges and Indigenous governance models can guide a more ethical, sustainable, and inclusive future. From Indigenising cultural heritage narratives and educational curricula, to embedding economic and governance empowerment within major infrastructure projects, to reasserting Country in contemporary planning, the discussion will foreground Indigenous leadership and sovereignty in shaping place. The session also invites reflection on the growing institutional interest in "Country in planning", asking how this surge can become a genuine process of decolonisation rather than another form of appropriation.

Dr Craig Cowled
Senior Lecturer, School of Civil and Environmental Engineering, Queensland University of Technology

Owen Café
Principal Landscape Architect, Blaklash

Dr Charmaine 'Ilaiū Talei
Pouako Matua | Senior Lecturer, Taumata Rau | The University of Auckland

Greg Kitson
Griffith University

Alayna Rā
Indigenous Design Director, WSP

Reframing Planning Through Indigenous Knowledge and Practice

Dr Craig Cowled, **Owen Café**, **Dr Charmaine 'Ilaiū Talei**, **Greg Kitson**, **Dr Alayna Rā**

Keynote 1: First Nations Panel, P421, December 10, 2025, 9:30 - 10:30

Biographies:

Dr Cowled is a lecturer in the Civil Engineering Discipline, School of Civil and Environmental Engineering, Science and Engineering Faculty, Queensland University of Technology. Dr Cowled has more than two decades experience in the construction industry. Dr Cowled has worked in manufacturing for 7 years as a timber frame and truss detailer, 2 years as a site engineer managing tradeworks on a $50m building project, 3 years as a structural engineer on projects up to $210m in value, and 10 years as a tutor / lecturer teaching structural engineering to undergraduate students. Dr Cowled recently completed his PhD on structural health monitoring of bridges titled, "On the influence of structural complexity on the global vibration characteristics of steel truss bridges."

Owen Cafe is a proud Whadjuk–Pindjarup person and Principal Landscape Architect at Blaklash. His work is grounded in a commitment to social, ecological, and cultural justice, using design as a tool for connection, healing, and change. At the heart of Owen's practice is a deep engagement with the intersection of culture, identity, and ecology, informing spaces that foster meaningful connections to Country. Beyond practice, teaching across several Australian universities, Owen works to embed Indigenous perspectives into design education, curriculum, and development. He also contributes to national reform through his roles on the QLD AILA Executive Board and Connection to Country committees.

Dr Charmaine 'Ilaiū Talei is a Registered Architect (BOAQ, NZRAB), Researcher, and Educator at Waipapa Taumata Rau | The University of Auckland. Charmaine serves as the director of Fofonga, the University's Platform for Pacific Research Excellence. Her research investigates how Indigenous peoples' values shape space, and reciprocally, how those values are informed by space. Charmaine specialises in Tongan and Fijian architectures, Indigenous design praxes, and the built environments of the Pacific diaspora. As an architect, Charmaine has practiced in Aotearoa New Zealand, Fiji, Tonga, and Australia, and led projects in other Southwestern Pacific Islands. She works as a consultant Cultural Engagement Designer/Senior Architect at Guymer Bailey Alliance (GB-A). She is director of Charmaine 'Ilaiū Talei Architecture which is devoted to research-informed projects that are meaningful to Pacific communities. In 2025, Charmaine joined the Education Committee for the Commonwealth Association of Architects representing the Pacific Region (New Zealand Institute of Architects).

Greg Walker is Wakka Wakka and a qualified urban and regional planning professional (UQ Hons.) with expertise in Indigenous Community Planning (ICP). Greg's career achievements combine 25 years across government, community and private sectors with a focus on: Country grounded planning, sustainable land use and major infrastructure planning/development, social housing and asset management, Indigenous engagement/consultation, organisational regulatory evaluations; and doctoral level research and publications. Greg will soon submit his PhD through Griffith University, as part of an ARC Linkage project: Being on Country Off Country. His research overarching theme is to validate and value urban and peri-urban Aboriginal people's connections and relationships with Country, within contemporary planning systems. At present, Greg works as an ICP consultant and provides professional advice and services to government, industry and community. Greg guest lectures in ICP across various planning courses at Griffith University and the University of Queensland. At SOAC 2021, Greg was conference track winner for City Nature and Environment and Reckoning with Settler Colonial Cities.

Alayna is a strong advocate for Indigenous rights and ensuring Māori agency prevails in planning, design and construction processes. She has whakapapa that extends from Te Hiku o te Ika down to Te Waka o Aoraki, and takes her tīpuna responsibilities for Kāi Tahu whānui and muriwhenua whānui seriously.
Alayna is a strategic advisor to government, iwi, and industry on long-term infrastructure investment and planning. She is the current Chair of the Māori Advisory Group to Te Waihanga – the Infrastructure Commission, where she contributes to national conversations on infrastructure resilience, climate adaptation, and social investment. She has also recently stepped down from a role on the Board of Infrastructure New Zealand and is still regularly called upon by INZ to contribute to discussions on Māori infrastructure outcomes. Her work is grounded in the belief that infrastructure must serve intergenerational wellbeing, and she is known for her ability to translate complex policy into culturally grounded, actionable strategies. Whether advising on transport, energy, housing, health, education or justice infrastructure, Alayna ensures that Māori voices are not only heard but lead the way.

Women in Urban Research Panel: Women in Urban Research Panel: Shaping Cities, Shifting Narratives

Urban research in Australia has long been shaped by diverse voices, yet the contributions of women - particularly those from underrepresented backgrounds - remain underacknowledged in mainstream discourse. This panel brings together leading and emerging women scholars, practitioners, and activists to explore how gendered perspectives are reshaping urban theory, policy, and practice. Through a dynamic conversation, panellists will reflect on their diverse experiences in designing, promoting and using the urban research, and share insights on priority themes from their own perspective. Topics will include feminist urbanism, intersectionality in city-making, mentorship and leadership, and the role of women in driving transformative change in planning and urban studies.

Eloise Atkinson
Independent Chair, Brisbane Housing Company

Nicole Bennetts
National Head of Advocacy and Public Affairs, Planning Institute of Australia

Dyan Currie AM
Principal, Dyan Currie & Associates

Bec Mac
Director, POPSART, Churchill Fellow 2025

Isabella Webb
PhD Candidate & Spatial Designer, Monash University XYX Lab

Stephanie Wyeth
Snr Lecturer - Planner in Residence, The University of Queensland

Reframing Planning Through Indigenous Knowledge and Practice

Eloise Atkinson, **Dyan Currie AM**, **Bec Mac**, **Isabella Webb**, **Stephanie Wyeth**

Keynote 3: Women in Urban Research Panel, P421, December 11, 2025, 9:00 - 10:00

Biographies:

Nicole is the National Head of Advocacy and Public Affairs at the Planning Institute of Australia (PIA), where she champions planning as a force for public good. With over 15 years' experience as a qualified and registered planner, she has worked across the private sector, local government and non-profits in Queensland, bringing deep expertise in city-shaping, precinct planning, and the integration of transport and land use. At PIA, Australia's trusted voice on planning, Nicole leads national advocacy to elevate the profession's role in creating thriving, liveable and resilient communities. She is driven by collaboration, bringing people together to solve complex challenges. Nicole believes planning is central to addressing issues like housing, climate resilience and equity, and is committed to inspiring greater understanding and support for the profession.

Dy Currie AM is a global Cities Advisor and Principal of Dyan Currie & Associates, with national and international expertise in urban planning, economic development, and Olympic legacy strategy. She is the former City Planner for Brisbane City Council (Australia's largest local government), where she led preparations for the Brisbane 2032 Olympic and Paralympic Games. Dy is Co-Chair of UN-Habitat's Stakeholder Advisory Group, a Past President of the Commonwealth Association of Planners (representing more than 40 000 planners), and a former member of the World Economic Forum Global Future Council on Cities of Tomorrow. She was appointed a Member of the Order of Australia in 2020 for significant service to planning. Dy enjoys working in Councils of all sizes and helping Cities achieve their potential.

Rebecca McIntosh (Bec Mac) is a nationally recognised Artistic Director, Campaign Specialist, and Arts Journalist. Her Churchill Fellowship establishes her as a leading expert in the night-time and arts economies, focusing on how these sectors can foster safer cities for women. As co-founder of Chrysalis Projects, she revitalises public spaces through impactful public art, uniting communities. Bec Mac pioneered arts media with POPSART and co-led an activist campaign for First Nations artist Richard Bell at the Venice Biennale. Her unique work intersects the public realm, digital content, journalism, and creative placemaking, bringing innovative thinking and successful community engagement to every collaboration.

Isabella Webb is a Spatial Designer and PhD Candidate at Monash University's XYX Lab. Her research examines approaches to women's safety and inclusion across transport, sociology, feminist theory, and design, using innovative methods grounded in intersectionality to account for diverse identities and social positions. Her current case study in Victoria examines how participatory methods and design interventions might improve safety, inclusion, and mobility for women, contributing to more sustainable and equitable urban development. She has contributed to research projects, exhibitions, and workshops, including the HyperSext City 2 exhibition in Western Australia. She is the lead author of the recently published book chapter, "Developing Advocacy: Insights from Gender-Sensitive Placemaking Training in the Public Sector." Her interdisciplinary expertise in design thinking, spatial practice, and visual representation enables her to support her work across a wide range of projects.

Stephanie is a practicing urban and social planner, with a strong interest in ensuring city-makers and community builders (government, industry and community) have the knowledge and capabilities to plan and design a better future for our cities, towns and communities. In her current role as Professional Planner in Residence, she is focused on building and strengthening understanding and links between academia, students, industry, the professions and community through a range of teaching, research and engagement activities. Stephanie has significant industry and leadership experience, prior to joining The University of Queensland she held a senior position with a national multidisciplinary property, planning and design firm where she was responsible for the social planning and engagement offer in Queensland. Between 2016-2022, she was a non-Executive Director for South Bank Corporation Board, overseeing the planning, management and operation of Queensland's premier lifestyle, community and cultural precinct. Stephanie is a Fellow of the Planning Institute of Australia and is actively engaged in community-led initiatives across the city.

Parallel Sessions Overview

Parallel Session 1

1A: City Economics and Development	**Economies of Change**
1B: City Governance and Structure	**Integrated Planning Practices**
1C: City Health and Liveability	**Health and Equity**
1D: City Housing and Inclusion	**Housing for All**
1E: City Movement and Infrastructure	**Active Mobility Networks**
1F: City Nature and Environment	**Environmental Planning Futures**
1G: City Cultures and Identity	**Place, Memory, Meaning**
1H: City Design and Morphology	**Typologies in Transition**
1I: Reckoning with Settler Colonial Cities	**Unsettling Planning**

Parallel Session 2

2A: City Economics and Development	**Economies in Transition**
2B: City Governance and Structure	**Planning Legacy**
2C: City Housing and Inclusion	**Panel**
2D: City Housing and Inclusion	**Affordability and Resilience**
2E: City Movement and Infrastructure	**Shifting Urban Mobility**
2F: City Nature and Environment	**Cultivating Climate Resilience**
2G: City Cultures and Identity	**Emotive Urban Design**
2H: City Design and Morphology	**City-Scale Transformations**
2I: City Cultures and Identity	**SIG**

Parallel Session 3

3A: City Governance and Structure	**Panel**
3B: City Governance and Structure	**Governance and Growth**
3C: City Health and Liveability	**Ageing and Resilience**
3D: City Housing and Inclusion	**Everyday Housing Realities**
3E: City Movement and Infrastructure	**Panel**
3F: City Nature and Environment	**Adapting with Nature**
3G City Economics and Development	**Planning for Sustainability**
3H: City Health and Liveability	**Climate and Wellbeing**
3I: Reckoning with Settler Colonial Cities	**Place, Care and Justice**

Parallel Session 4

4A: City Economics and Development	**Transforming City Economies**
4B: City Governance and Structure	**Planning and Power**
4C: City Health and Liveability	**Healthy Public Spaces**
4D: City Housing and Inclusion	**Housing Beyond Ownership**
4E: City Movement and Infrastructure	**SIG**
4F: City Nature and Environment	**Urban Ecologies Evolving**
4G: City Cultures and Identity	**Engaging Urban Cultures**
4H: City Design and Morphology	**Sensory Urban Design**
4I: City Governance and Structure	**Panel**

Parallel Session 5

5A: City Economics and Development	**Making in Cities**
5B: City Governance and Structure	**Resilience and Risk**
5C: City Housing and Inclusion	**Panel**
5D: City Housing and Inclusion	**Equity in Housing**
5E: City Movement and Infrastructure	**Everyday Urban Mobility**
5F: City Nature and Environment	**Designing with Water**
5G: City Cultures and Identity	**Belonging and Participation**
5H: City Design and Morphology	**Panel**

Parallel Session 6

6A: City Nature and Environment	**Panel**
6B: City Governance and Structure	**Collaborative City-Making**
6C: City Health and Liveability	**Measuring Liveable Cities**
6D: City Housing and Inclusion	**Affordability and Exclusion**
6E: City Movement and Infrastructure	**Transport and Transition**
6F: City Nature and Environment	**Nature-Based Urbanism**
6G: Planning Education	**Panel**
6H: City Design and Morphology	**Legacies of Design**
6I: Reckoning with Settler Colonial Cities	**Panel**

Parallel Session 7

7A: City Economics and Development	**Financing Urban Futures**
7B: City Governance and Structure	**AI and Governance**
7C: City Housing and Inclusion	**Panel**
7D: City Housing and Inclusion	**Growth and Equity**
7E: City Movement and Infrastructure	**Sustainable Transport Systems**
7F: City Nature and Environment	**Nature and Renewal**
7G: Planning Education	**Planning Education**
7H: City Design and Morphology	**Density and Form**

1A.1

Shaping tomorrow's regions: A systematic review of industry 4.0's role in regional development

Soroush Khalili[1], Dr Elham Bahmanteymouri[1], Dr Mohsen Mohammadzadeh[1]

[1]School of Architecture and Planning, University of Auckland

1A: City Economics and Development, P504, December 10, 2025, 11:00 AM - 12:30 PM

Abstract

The current era has witnessed an unprecedented dependence on digital technologies, with Industry 4.0 transformations becoming a global reality. While effective implementation of these technologies can enhance regional socioeconomic performance and competitiveness, concerns persist regarding their impact on regional disparities. Despite numerous countries introducing digital adoption strategies, 'one-size-fits-all' approaches fail to accommodate regional variations in technological readiness, infrastructure, and human capital. Many scholars argue that robust policies must adopt region-specific frameworks tailored to each region's unique technological transformation profile. Consequently, non-geographically targeted policies risk exacerbating regional development disparities through uneven adoption of emerging technologies. This study aims to comprehensively examine the current body of knowledge regarding Industry 4.0 in the context of regional development. Using a systematic literature review (SLR) methodology, we will analyse academic materials published from 2015-2025 that address the intersection of Industry 4.0 implementation and regional development. The primary objective of this study is to identify existing knowledge gaps in this emerging field by systematically mapping current research. The findings will provide a foundation for future investigations and policy considerations regarding the implementation of Industry 4.0 technologies in different regional contexts, with particular attention to preventing the widening of regional disparities.

Keywords: Fourth industrial revolution, Regional planning, Digital transformation, Systematic literature review, Regional disparities

1A.2

Town centres in new suburbs – How can planning achieve better outcomes?

Annette Kroen[1], Prof Robin Goodman
[1]RMIT University

1A: City Economics and Development, P504, December 10, 2025, 11:00 AM - 12:30 PM

Australia's major cities have since the 1950s pursued policies to support vibrant suburban town centres to support local-scale economic and social activity. In recent strategic plans this is expressed as objectives for local living, with the reasoning that local living can simplify daily life with easy access to relevant destinations, and can also contribute to transport decarbonisation by making sustainable transport options more feasible. Yet despite ongoing planning aspiration, the implementation of these policies is often weak with poor quality outcomes. Many suburban town centres are car-dependent, lack sustainable urban design and offer a limited mix of land-uses and fail as civic centres. Recently developed town and retail centres are not achieving the sustainability and resilience expectations set by contemporary urban planning policy.

This paper seeks to understand the causes for the endurance of generic town and retail centre design in new suburbs with limited functions and a single building, generally surrounded by car parking. It investigates why and how alternative approaches have been implemented and what experiences with these alternative centres are. It does so by analysing governance and planning system structures and seeking the perspective of those inside the planning system who offer a detailed understanding of town centre planning and implementation. Drawing on an analysis of documents and the governance structure for planning town centres in Melbourne's growth areas and interviews with staff in local and state government agencies and other relevant stakeholders, the paper will identify barriers and enablers for town and retail centres in new suburbs that respond to the strategic intent of local living and mixed uses. Based on the analysis, the paper presents possibilities for changing processes and structures that might improve the planning and implementation of town centres in new suburbs.

New suburbs, town centres, retail centres, growth areas, local living

1A.3

Olympic Shames: Host city planning for housing and homelessness. Lessons from Paris for Brisbane 2032

Dr Lyndall Bryant[1]
[1]Queensland University of Technology
1A: City Economics and Development, P504, December 10, 2025, 11:00 AM - 12:30 PM

The Brisbane 2032 Olympic and Paralympic games are seven years away and the region is already in the grips of a housing crisis. With all attention on stadium development, South East Queensland is at risk of sleep-walking off a housing affordability and homelessness cliff. Organisers are well advanced with legacy planning, however planning for housing and homelessness legacy is obvious by its omission.

Paris provides a sorry example of where policy makers and Games organisers could instead be focused. In the lead up to the Paris 2024 Olympics, French authorities were accused of "social cleansing", relocating tens of thousands of homeless people visible from venues and nearby public spaces. Such displacement is evidence of ineffective housing policies leading up to the Games, with detrimental impacts on the most vulnerable.

Prior Olympic and other mega-event host cities provide valuable evidence of the impacts on housing/homelessness and initiatives to overcome potential social and economic impacts. This research presents data gathered from a recent study tour to Paris and other European host cities to assess the success of various planning or legacy initiatives. This research will inform Queensland policy makers and Games organisers in the lead up to Brisbane 2032.

1A.4

A national analysis of planning for self-storage across Australia

Dr Umberto Baresi[1], Mr Andres Arteta Molina, Dr Fereshteh Banakar, Alistair Barros, Dr Lyndall Bryant, Robin Drogemuller, Makala Ffrench Castelli, Dr Mark Limb, Dr Sara Omrani, Luiza Quadrini Goncalves
[1]Queensland University of Technology

1A: City Economics and Development, P504, December 10, 2025, 11:00 AM - 12:30 PM

Self-storage is a relatively unexplored and neglected phenomenon that has become increasingly significant around the world, with an estimated combined total value of $20 billion for the Australasian self-storage sector across Australia and New Zealand. Existing studies often frame self-storage as a symptom of an overly decadent and consumerist culture. However, as cities pursue urban densification strategies, the need to store personal goods that cannot be kept within apartments is likely to increase. Ensuring adequate storage space is therefore of importance to ensuring liveability in the denser urban environments envisioned by planners. Yet it appears there has been little consideration of the need for sufficient storage facilities in conjunction with planning for higher density dwellings. In this study, we analyse all Australian local government planning schemes (n=566) to identify the degree to which self-storage is planned and regulated. The analysis examines three key criteria: the definition of self-storage within planning frameworks, the planning scheme codes used to regulate use, and the application of spatially based controls (such as zones). The findings reveal that self-storage is given little consideration by Australian planning authorities and is rarely specifically defined or regulated. Given the increasing demand for storage space generated by the development of apartments, this issue demands greater attention within planning policy and regulatory practice to ensure future residents have access to sufficient and conveniently located storage space.

1A.5

Household housing change under social and economic restructuring – insights from the longitudinal micro data

Dr Tiebei Li[1], Prof Jago Dodson[1]
[1]RMIT University

1A: City Economics and Development, P504, December 10, 2025, 11:00 AM - 12:30 PM

The COVID pandemic altered spatial work patterns, such as through working from home, and in turn has shifted dwelling preferences to larger detached houses biased towards outer urban and regional locations. Acute COVID factors are waning, but new pressures are altering housing demand and locational preferences, including nonlinear demographic and employment shifts, inflation, interest rates, immigration, and housing price shocks. Housing unaffordability, access to home ownership, and inter-generational inequity are fuelling public anxieties about a housing crisis, yet their spatial effects are poorly understood. The extent to which households are able to match their preferences with housing supply, such as selecting detached versus multi-unit dwellings, is in doubt, risking social distress. Policy is reacting with a new focus on intensive infill development, with uncertain alignment to household preferences. In this context there is a need to understand contemporary household preferences within newly restructuring urban systems.

This paper investigates how contemporary economic and societal changes are restructuring housing systems through changing household dwelling and location preferences at urban and regional scales. To do this the paper explores emerging micro datasets provided by ABS that combine administrative data on income and taxation, employment, and population demographics (including the Census) over time providing whole-of-life insights about households and cohorts. These datasets have not been previous exploited thus the research in part aims to test their suitability for investigation into this topic.

The results of the research can inform development of housing, infrastructure and planning policies to meet locational demand via appropriate dwelling typologies and wider infrastructural provision.

1B.1

Embedded scales, disciplines, and public policy

Emeritus Prof Stephen Dovers[1]

[1]Fenner School of Environment & Society, Australian National University

1B: City Governance and Structure, P514, December 10, 2025, 11:00 AM - 12:30 PM

Surely urban researchers are hyper-sensitive to scale? Perhaps not always. Scholarly disciplines and sub-disciplines, and the professions they inform, are shaped in thought and practice by deeply embedded, accepted spatial and temporal scales. These may be explicit, but can be implicit and not obvious to others. The jurisdiction as a spatial scale is fundamental to a lawyer or planner; it is an annoyance to an ecologist or hydrologist. Sampling over 2-3 years for PhD research may suffice, but not for a longitudinal health study or ecosystem monitoring. Seasonality may matter, or not. The household and firm are relevant scales, sometimes. The core but vague entity 'community' manifests and is variably defined across multiple scales. Investigations are defined by spatial concepts: city, precinct, community, suburb, hinterland. And not only academic disciplines construct scales – Census districts, LGA boundaries, electorates and postcodes might have little methodological justification but structure research methods. The highly variable spatial and temporal scales of climate and weather systems increasingly complicate matters. So do budget cycles and forward estimates. Without sensitivity to variations between and within disciplines, urban studies and our thinking about cities, as a necessarily interdisciplinary pursuit, may conceal the logic of, and complicate communication about, the multiple methods and policy prescriptions we are bombarded with. Theories, methodologies, data sources, sampling, analysis and – eventually and importantly – policy prescriptions, are dependent on chosen or assumed scales of time and space, as are strategies for public participation. This paper identifies major differences and their implications for research and public policy, in both a generic manner and through specific cases. It calls for being explicit about scale. The paper also identifies common scale-related afflictions including MJS (Mistaken Jurisdiction Syndrome), ETI (Exclusion through Inclusion) and and ICoS (Intentional Confusion of Scale). Conference theme: Nature, maybe?

Integrative planning in practice: The THIS framework in Indonesia's development planning system

Mochamad Nurhestitunggal[1]
[1]Griffith University

1B: City Governance and Structure, P514, December 10, 2025, 11:00 AM - 12:30 PM

This study examines the adoption and implementation of Indonesia's Thematic-Holistic-Integrative-Spatial (THIS) planning approach as a tool for policy integration within a decentralized governance system. Developed to address fragmentation and sectoral silos, the THIS approach combines spatial analytics, thematic priorities, holistic coordination, and performance-based budgeting to enhance coherence across national and subnational development plans.

Using a qualitative case study approach, the research draws on interviews with 14 stakeholders from national, provincial, and local governments, alongside analysis of regulatory and planning documents. The findings show that post-Suharto reforms—particularly decentralization, fiscal accountability, and performance-based budgeting—have created a favorable environment for integrative planning. However, practical challenges such as institutional silos, inconsistent data, limited technical capacity, and political interference continue to hinder full implementation.

A key policy shift from the "Money Follows Function" (MFF) model to the "Money Follows Programme" (MFP) principle—formalized through Regulation 17 of 2017—marks a significant step in aligning funding with development priorities. Integration is further supported by digital platforms like KRISNA, SAKTI, and SIPD, which synchronize planning, budgeting, and reporting processes. Participatory mechanisms (Musrenbang, Rakortek) and spatial tools (One Map Policy, geotagging, One Data Indonesia) enhance multilevel coordination and spatial accuracy.

Despite its strengths, the THIS framework faces barriers including limited fiscal autonomy at the subnational level, fragmented data systems, and weak institutional alignment. These are compounded by inconsistent leadership and political resistance, threatening the sustainability of reforms.

The study concludes that realizing the potential of the THIS approach requires investment in institutional capacity, unified data systems, and stronger political commitment. It contributes to global discussions on integrative governance by showing how planning instruments can bridge sectoral divides and support sustainable development in complex, decentralized contexts.

Keywords: policy integration, integrative planning, decentralized governance, Indonesia, THIS framework

1B.3

From vacancy to vitality: Participatory reuse of regional buildings for housing and civic renewal

Dr Ammon Beyerle[1]

[1]Here Studio

1B: City Governance and Structure, P514, December 10, 2025, 11:00 AM - 12:30 PM

Across regional Australasia, hundreds of old civic and commercial buildings sit empty—often in the heart of town. This presentation shares early insights from a practice-based initiative exploring how these underused structures can be transformed into housing and shared public infrastructure to address the intersecting challenges of climate, housing, and regional vitality.

Rather than relying on greenfield development or carbon-intensive new construction, this approach works with what already exists — the built form, embodied energy, and civic memory of these places. It uses participatory design to bring communities, councils, landowners and government actors into shared dialogue and project formation, positioning design as a method to co-produce new futures from the remnants of the old.

The methodology is designed to be scalable but nuanced to place, with a particular focus on reactivating centrally located buildings that once served as civic or commercial anchors. It draws on over 15 years of design and governance experience and is currently being developed into a service model with the ambition to retrofit 1000 buildings in 10 years. A recent 4000km field trip identified over 400 viable buildings across 100 towns, suggesting both scale and urgency.

Rather than offering a fixed solution, the initiative explores how governance — across local, state and community actors — might operate collectively to enable adaptive reuse. It draws on ideas of pluralism and agonism to navigate competing needs and shared ambitions, making space for inclusive and grounded transformation.

This presentation shares practical strategies and early findings, and invites critique, partnerships, and cross-disciplinary dialogue on housing, climate, and governance as interwoven urban challenges.

Keywords: adaptive reuse, regional housing, collective governance, climate-responsive urbanism, participatory design

1B.4

Scale of periurban growth challenges

David Bailey[1]

[1]Adelaide Plains Council

1B: City Governance and Structure, P514, December 10, 2025, 11:00 AM - 12:30 PM

Adelaide Plains is long established resilient and stable rural and coastal community on the peri-urban fringe of Greater Adelaide. Known as a key part of Adelaide's foodbowl, Adelaide Plains is experiencing the beginnings of massive living and agribusiness growth. From a population of around 8,500 in 2011, today Adelaide Plains is 11,500. Long term, Adelaide Plains is envisaged for 46,000.

Ongoing challenges include flood, fire and drought, cost of living, lack of water, lack of local jobs, and planning ahead to deliver needed community and economic infrastructure and initiatives presents range of opportunities.

Developing plans at different scales and opportunities for change makers to collaborate enables people to wrestle with change, consider opportunities, and identify measures to address challenges. This is across town centres and main streets, agribusiness, community connection, sustainability and circular economy.

Within a framework of live, work and play locally, Council is working towards a vision of an enviable lifestyle, emerging economy and remarkable landscapes.

1B.5

Building capability for transition governance: A living lab approach to net zero precincts

Dr Darren Sharp[1], Sam Rye, Sumit Kumar, Megan Farrelly, Rob Raven, Nedha De Silva, Sarah Pink
[1]Monash Sustainable Development Institute

1B: City Governance and Structure, P514, December 10, 2025, 11:00 AM - 12:30 PM

Achieving net zero cities requires collaborative, place-based approaches to governance that can navigate complexity, uncertainty and institutional inertia. This paper presents findings from Stage 3 of the Net Zero Precincts ARC Linkage project, which trialled a research-led Living Lab at Monash University's Clayton campus. The Lab brought together university researchers, students, operational staff, local government, industry and community partners to co-design and implement a portfolio of 10 interdisciplinary experiments addressing energy, mobility, circular economy, buildings, data and governance.

Drawing on transition management and design anthropology, the Living Lab provided a real-world testbed to build capability for transition governance through structured engagement cycles, reflexive monitoring and transformative learning. A Theory of Change was developed using the MOTION framework to guide experimentation towards five key transformative outcomes: learning, networking, navigating expectations, institutional change and actor empowerment.

This paper shares insights from the Living Lab's implementation, including its cycles of engagement, evaluation practices, and transformative outcomes. It explores how a portfolio-based approach can foster systems thinking and promote collaboration across organisational silos and governance levels. Findings demonstrate how experimentation at precinct scale can empower local actors, reveal institutional constraints, and seed transformative change—under conditions of uncertainty and constrained timeframes.

The Net Zero Precincts Living Lab illustrates how universities can play a catalytic role in urban transition governance by anchoring experimental spaces that connect operational, research and community agendas. The lessons are relevant for policymakers, researchers and practitioners exploring how to embed net zero governance capacities within urban precincts and across city systems.

1C.1

Empowering policymakers through automated scorecards using data from the Australian Urban Observatory (AUO)

Dr Ori Gudes[1], Prof Melanie Davern[1], Dr Alan Both[2], Dr Jessica Rivera Villicana[1], Dr Ozzy Yaguang Tao[1], Mrs Brigid Papaix[1]

[1]Australian Urban Observatory , [2]School of Science, RMIT University

1C: City Health and Liveability, P512, December 10, 2025, 11:00 AM - 12:30 PM

Keywords: Urban Liveability, Spatial Indicators, Evidence-Based Planning, Scorecards, AUO

The increasing complexity of urban environments requires robust tools to synthesise and visualise data for evidence-based decision-making. This study introduces a novel approach that leverages the Australian Urban Observatory (AUO) and LaTeX automation to generate professional, easy-to-digest urban scorecards tailored to government stakeholders. These scorecards present liveability indicators including health, transport, environment, and social equity in spatially contextualised formats suitable for reporting, monitoring, and planning.

To assess the scorecards' effectiveness, an online survey was distributed to AUO partners and stakeholders. It explored users' experiences with the scorecards, their perceived value, and the potential utility of Local Government Area (LGA)-level versions. Respondents were also asked to suggest additional topics, ideas, and indicators to improve the tool's applicability. Their feedback also guided iterative refinements and provided insights into the scorecards' impact on urban planning workflows.

The survey revealed that most participants had used AUO city scorecards, particularly for reporting, communication, and strategic planning. There was also strong support for expanding the tool to include LGA-level summaries, with suggested applications including grant writing, advocacy, benchmarking, and community engagement. Topics such as housing affordability, accessibility, and safety were frequently mentioned. Qualitative feedback confirmed that the structured, visual format of LaTeX-generated scorecards improved data comprehension and usability.

By embedding spatial analysis outputs directly into the scorecards, we improved the interpretability and practical value of AUO data. This integrated approach, combining LaTeX formatting, web mapping services, and automation, offers a scalable model for transforming spatial data into accessible planning resources. It bridges the gap between complex analytics and public policy, empowering local and state governments to engage meaningfully with urban data. Insights from our study, shaped by stakeholder input, support further refinement and broader implementation.

Assessing greenfield developments against 20-Minute City targets

Geoff Browne[1], Nathan Pittman[1], **Dr Xiao Ma**[1], Dr Jimmy Liu[1]
[1]The University of Melbourne

1C: City Health and Liveability, P512, December 10, 2025, 11:00 AM - 12:30 PM

In The 15-minute City, Carlos Morena (2024) asserts that everyday destinations like schools, shops and offices should be just fifteen minutes return by foot or bike. While the parts of many cities that evolved prior to the invention of the car are already effectively 15-minute cities (Nice et al., 2024), achieving 15-minute cities in the face of motor-normativity can be challenging (Li et al., 2024). The idea of living in a '15-minute neighbourhood' is compelling and marketable, but its implementation can be challenging when it butts up against residents' pre-conceived ideas of the liveability and 'Australian Dream' (Kleeman et al., 2022). Compounding the challenge, the 15-minute city movement has also been subject to disinformation (Baker & Weedon, 2023).

The Victorian Government's Plan Melbourne metropolitan strategy held the ideas of a polycentric city made up of 20-minute neighbourhoods at its core (Victorian Government, 2013). Implementation of these goals has been through a range of mechanisms, with the Precinct Structure Planning Guidelines for New Communities in Victoria (VPA, 2021) being a chief mechanism for greenfield sites. Their purpose is to "provide the framework for preparing precinct structure plans that guarantee quality outcomes while also being flexible, responsive and supportive of innovation" (p.2). The Guidelines contain twenty targets of varying specificity.

This research provides a proof of concept for assessing exemplar new and established Melbourne communities against key targets from the Guidelines, demonstrating the value of a more comprehensive assessment of the Guidelines' implementation in greenfield communities. Some of the targets are challenging to meet. In such cases, the research will provide guidance on how urban planners might garner support for their more consistent implementation across Melbourne's new greenfield communities. Other targets are more readily reached and so should be strengthened for increased sustainability and public health outcomes.

Precinct structure planning, greenfields, liveability

1C.3

Environmental Racialisation and its influences on health and wellbeing among migrant communites in Auckland

Dr Andrea Edwards[1,2], Dr Phoebe Taptiklis[3,4], Dr Rachel Simon-Kumar[1], Prof Kim Dirks[4], Naomi Simon-Kumar[5]

[1]School of Population Health, University of Auckland, [2]Eco Choice Aotearoa, [3]Motu Economic & Public Policy Research, [4]Department of Civil and Environmental Engineering, University of Auckland, [5]Mailman School of Public Health, Columbia University

1C: City Health and Liveability, P512, December 10, 2025, 11:00 AM - 12:30 PM

There is now well-established international scholarship indicating that the spatial distribution and concentrations of population groups in urban settings in multi-ethnic societies are the outcome of explicit and implicit racialised norms that permeate mainstream institutions and policy at multiple levels. The evidence also points to the effects of this uneven distribution; reproducing inequities in life opportunities (including access to education, employment, transport, civic participation, etc.), wealth accumulation, among others, with significant adverse health and well-being impacts.

This paper explores the patterns, drivers, and practices underlying racialised neighbourhood concentrations specifically in the context of New Zealand's migrant and culturally-diverse populations, and the health and wellbeing outcome of their uneven distribution. It specifically focuses on ethnic-concentrated neighbourhoods or 'ethnoburbs' typically celebrated as diverse and multicultural. Informed by a Takarangi approach, a mixed methodology study was undertaken in two sites in Auckland – the CBD and the suburb of Avondale – both with significant concentrations of migrant settlement. The analyses highlight inequities at two levels: (a) exclusionary and selective inclusionary practices that consolidate as ethnic neighbourhoods; (b) access to healthy indoor physical spaces (e.g. quiet environments, thermal comfort and clean air) and social determinant factors (e.g. access to amenities and connectedness) that are lacking, with health and wellbeing implications, particularly in relation to sleep and anxiety.

The analyses contribute to the emergent scholarship on environmental racialisation and offer pragmatic recommendations for action to transform urban planning and development practices to foster equity and healtier, more livable cities.

Keywords: Environmental racialisation, Migrant health, Liveable Cities

1C.4

Public parks on private land: Enabling healthy urban regeneration in Green Square, Sydney

Ms Katherine Sundermann[1]

[1]Monash University

1C: City Health and Liveability, P512, December 10, 2025, 11:00 AM - 12:30 PM

Creating vibrant, healthy urban communities depends on access to walkable streets, high-quality public open spaces and community infrastructure - key ingredients proven to enhance both mental and physical well-being. Yet, as cities increasingly rely on private-sector-led brownfield regeneration to accommodate growth, ensuring the delivery of these critical public assets becomes a complex and pressing challenge, particularly in contexts of fragmented private land ownership.

This study investigates how public infrastructure that supports health and well-being can be secured through private development, using the case of Green Square, a large-scale regeneration project in Sydney, Australia. It explores how local authorities have employed planning and governance tools - including master planning frameworks, negotiated development agreements, public realm guidelines, and design review panels - to influence the provision and quality of public streets and parks delivered by the private sector.

Using a mixed-methods approach involving document analysis, spatial assessments, and interviews with local authorities, developers, and designers, the study identifies three key mechanisms: strategic master planning to define infrastructure and open space needs; agreements with developers to secure public realm and infrastructure contributions; and public realm guidelines that ensure the delivery of inclusive, high-quality public spaces.

The Green Square case illustrates how planning can effectively guide private investment toward public benefit - supporting mental well-being, reducing social isolation, and enabling active lifestyles - offering valuable insights for other cities seeking to enhance health and liveability through urban regeneration.

1D.1

Well located housing: Is it time to revisit transit activated corridors?

Dr Giles Thomson[1]

[1]Curtin University

1D: City Housing and Inclusion, P421, December 10, 2025, 11:00 AM - 12:30 PM

Australia's National Housing Accord calls for 1.2 million new well-located homes to be built over 5 years from mid-2024. The current housing crisis has highlighted a tension between good planning and rapid delivery. Well-located infill housing has proven tricky. While the Building Better Cities program in the 1990s catalysed brownfield regeneration and was largely successful, few well located brownfield redevelopment sites remain. Greyfield infill on previously occupied land typically in small parcels, has proven challenging, as policy settings largely result in suboptimal low-density 'knock-down rebuild' – the small density gains come at the expense of suburban amenity, thus fuelling NIMBYism. Resultingly, where fringe lands exists, state metropolitan plans have tended to encourage 'unencumbered' greenfield housing to expedite housing delivery - but the fringes are not 'well located'. Yet, all Australian cities have vast areas of well-located land in large ownership parcels – along road corridors. Big box retail, car yards etc. are effective landbanks lending themselves to redevelopment as transit activated corridors (TACs) - strategic medium to high density mixed-use ribbon development serviced by high frequency transit. The virtuous cycle of high population density (residents and workers) and high frequency transit can displace car use with convenient and space efficient transit. The idea of TACs is not new, and the implementation challenges are significant - being both cultural, e.g. car dependence; and structural, e.g. a lack of integrated transport and planning governance. However, now seems an opportune time to revisit TACs as a unified strategic planning response at the intersection of multiple policy agendas (e.g. housing crisis, congestion, urban resilience, and net zero goals). This presentation uses case studies and scenarios to present potential TAC policy directions that may support a structural transition within Australia's rapidly growing cities that is appropriate for guiding future urban growth well into 21st century.

1D.2

Designing disability-inclusive, affordable, and sustainable homes in Australia: A path to a net zero future

Dr Jeeva Sajan[1], Prof Awais Piracha[1]

[1]Western Sydney University

1D: City Housing and Inclusion, P421, December 10, 2025, 11:00 AM - 12:30 PM

Australia's housing narrative has long been dominated by home ownership aspirations, investment returns, and rising property values. This narrow focus often overlooks the need for a forward-looking housing strategy that integrates disability-inclusive design and environmental sustainability. The National Disability Strategy 2021–2031 calls for more affordable and accessible housing to enhance choice and control for people with disability. Similarly, the Productivity Commission (2022) highlights the long-term cost-effectiveness of accessible design and the importance of energy-efficient housing in achieving Australia's net zero emissions target by 2050. While the National Construction Code 2022 mandates minimum Liveable Housing Design Standards (LHDS), their implementation varies significantly across jurisdictions. This paper presents findings from a desktop policy analysis that assesses the extent to which Australian housing policies promote accessibility, affordability, and sustainability. It also draws on international case studies to identify good practices and inform future policy directions.

Key words

disability inclusive, net zero, affordable housing, sustainability, liveable design

1D.3

A new build-to-rent-to-own model for 'generation rent'

Caitlin McGee[1], Gordon Noble[1], Dr Matthew Daly[1], Josh Gilbert[1]

[1]Institute for Sustainable Futures, University of Technology Sydney, [2]Jumbunna Institute for Indigenous Education and Research, University of Technology Sydney

1D: City Housing and Inclusion, P421, December 10, 2025, 11:00 AM - 12:30 PM

This paper presents a new model that gives Australians who may otherwise be locked out of the housing market the opportunity to own a stake in their home.

Breaking into home ownership in Australia is increasingly difficult. It is taking longer to save for a deposit and repayments are harder to afford. Unsurprisingly, home ownership is declining for all age groups, particularly younger people. Over a third of Australians rent in an increasingly competitive rental market that is one of the least secure in the world. This situation is widening economic and intergenerational inequity.

Leveraging the Australian Government's Build to Rent (BTR) legislation and operating within ASIC rules, this model enables a renter in a BTR development, including affordable dwellings, to build an ownership share in the development over time. Without needing a deposit or to service a bank loan, people on lower incomes can build equity and enjoy the lifetime security and community connections associated with home ownership. Residents can acquire shares, up to the value of their unit, which are valued quarterly. Shares can be sold back to the entity or passed on to family in an inheritance.

We argue it is in the financial best interests of superannuation and pension funds to support this model, and that supporting members to build their own wealth is entirely consistent with best interest fiduciary duties. Many Australian superannuation funds represent key workers struggling to afford housing.

This paper will explain the workings of the model and discuss the findings of consultation with institutional investors, banks, all levels of government, the development industry and housing providers. We will explore implications for cities and regions, and for different groups including retirees, key workers and First Nations communities.

This research is funded by an APPI 2024 Policy Challenge grant.

affordability/equity/finance and investment/home ownership/build-to-rent

1D.4

Breaking down barriers: Enabling cross-jurisdictional housing innovation transfer

Dr Laura Goh[1]
[1]UNSW Sydney

1D: City Housing and Inclusion, P421, December 10, 2025, 11:00 AM - 12:30 PM

Housing innovation by means of policy experimentation is becoming more popular as a method of addressing Australia's housing challenges, yet successful housing policies remain trapped within jurisdictional silos. While states and territories develop creative responses to housing affordability challenges, the transfer of approaches between jurisdictions are currently ad hoc rather than systematic. This research addresses the critical gap between identifying successful interstate housing innovations and effectively implementing them across different regulatory contexts.

Drawing on housing experimentation case studies from across Australian jurisdictions, this study investigates the barriers and enablers of cross-jurisdictional policy transfer in housing innovation. Through interviews with key housing stakeholders and analysis of both successful and failed transfer attempts, the research reveals that while there is significant interest in learning from interstate successes, practitioners lack structured guidance on how to effectively adapt and implement policies across different jurisdictional contexts. Initial study results reveal that current policy transfer practices predominantly rely on informal networks rather than formal processes. Key challenges emerge from jurisdictional differences in regulatory environments, institutional structures, and policy objectives. These incompatibilities create barriers to effective transfer, as policies developed for one context may not align with the specific housing challenges, governance arrangements, or strategic priorities of another jurisdiction.

Based on these findings, this research develops evidence-based recommendations for improving cross-jurisdictional housing policy transfer. The research outputs include a best practice guide that addresses the identified gaps in current transfer processes, providing housing practitioners with frameworks for evaluating jurisdictional compatibility, adapting policies to local contexts, and managing implementation challenges. By translating research insights into practical guidance, this work contributes to more effective sharing of housing innovations across Australian jurisdictions and supports more equitable responses to the housing crisis.

1D.5

Housing Vulnerable Households in Australia

Mr Carl Germanos[1]
[1]Western Sydney University

1D: City Housing and Inclusion, P421, December 10, 2025, 11:00 AM - 12:30 PM

The paper introduces a research project that investigates how individuals from single older women and aged persons households demonstrate agency and capability in self-identifying housing solutions through collective action in response to unaffordable housing. These two households are part of an expanding group of vulnerable people with unmet housing needs, largely due to the shortage of social and affordable housing in Australia.

Anecdotal evidence suggests that these two households are pursuing self-organised housing models such as co-housing and cooperative housing. This research focuses on how these vulnerable households may collectively address their unmet housing needs, even in the absence of sufficient institutional support from governmental and non-governmental social actors within the housing system. This research seeks to enhance understanding of how grassroots, bottom-up strategies can influence structural change within the housing system, especially when analysed through a network perspective.

The methodology includes analysing historical examples of collective action, such as Sydney's green ban movement, alongside recent grassroots activism involving single older women and aged persons, using a critical realist institutional framework. Data will be gathered from historical document analysis, structured interviews with relevant stakeholders, focus groups, and social network analysis (SNA).

The research anticipates two principal findings. First, it may demonstrate how agency and capability of these individuals facilitate housing solutions when there is insufficient institutional support, potentially revealing the capacity of agency to effect structural change within housing institutions. Second, the analysis may uncover key social causal mechanisms—such as cooperation, coordination, and solidarity within social networks—that are essential for successful collective action among social actors in the housing system.

The implications of these findings have the potential to inform policy development and improve housing delivery outcomes to better address the specific needs of vulnerable household groups, including older persons who may otherwise remain overlooked in the community.

1E.1

When bike lanes are not enough: A low stress approach to cycling network improvements

Ms Melissa Smith[1]
[1]University of Waikato

1E: City Movement and Infrastructure, P506a, December 10, 2025, 11:00 AM - 12:30 PM

The need for sustainable transportation is paramount. Utilitarian cycling has the potential to improve health outcomes, reduce environmental degradation and greenhouse gas emissions, increase labour productivity, and reduce traffic congestion. For these reasons and more, many cities across Australasia have committed to increasing utilitarian cycling, however, most have struggled to do so, with only 2% of people in Aotearoa New Zealand commuting to work by bicycle. Surveys have identified, among others, a lack of satisfactory and safe infrastructure as a barrier.

The Level of Traffic Stress (LTS) Framework is a recently developed cycling network classification scheme that is growing in popularity in the field of transportation planning due to its relatively simple data requirements, its intuitive description of cycling networks, and its potential to increase the uptake of cycling through application in policy and planning. This paper applies the LTS Framework in seven Aotearoa New Zealand cities and analyses the resulting structure when considering only low stress segments (the 'low stress' network).

It is found that for six of the seven cities, the majority of streets are sufficiently low stress to be suited to the majority of people, and in all seven cities, such low stress links are poorly connected, forming so-called "islands of low stress connectivity". Modelling further reveals a relationship between a greater provision of low stress cycling infrastructure and the number of people cycling to work. The methodology and modelling provides policy makers, planners, and local governments with an innovative method to evaluate the whole of their cycling networks by considering on commuter experience rather than solely infrastructure.

1E.2

Mapping the cycling landscape in Brisbane: A baseline study of infrastructure and use patterns

Niloofar Dehghani Samani[1], Prof Tim Ryley[1], Abraham Leung[1], Elaine Yang[1]
[1]Griffith University

1E: City Movement and Infrastructure, P506a, December 10, 2025, 11:00 AM - 12:30 PM

Cycling is promoted as a sustainable and healthy mode of transport, yet its uptake varies significantly across cities. Brisbane, despite its favourable climate and potential for cycling, has a very low participation cycling rate compared to its international peers. This study aims to examine the state of cycling in Brisbane by analysing use patterns and infrastructure development over time as the city expands. It helps understand how the city supports or hinders cycling. This is especially important as it shapes the baseline for any study with a goal that aims to improve cycling and guides future planning efforts.

This study employs a spatial analysis of quantitative data, incorporating OpenStreetMap geospatial data, bikeway count data, and government datasets. It visualises and evaluates the evolution of Brisbane's cycling network, focusing on bikeways coverage, connectivity, and density. This study also overlays historical data to track infrastructure development and cycling activity over time.

Preliminary findings reveal spatial disparities in bikeway provision and use. While some corridors demonstrate high activity, aligned with better infrastructure, many other areas lack sufficient dedicated, low-risk cycle paths. The data also suggests a shift in cycling patterns from suburbs to inner-city areas. This research contributes to the broader understanding of cycling in Australian urban contexts by providing a clear, data-driven assessment of Brisbane infrastructure and cyclist behaviour. It offers practical insights for transport planners, policymakers, and urban designers seeking to develop more effective cycling networks. The findings also support future research by establishing a comprehensive baseline to track Brisbane cycling over time.

1E.3

Pathways for cargobike logistics in Australian cities: Global lessons, local solutions for implementation and scaling

Dr Courtney Babb[1], Prof Carey Curtis[1], Dr Stephen Kovacs[1]
[1]Curtin University

1E: City Movement and Infrastructure, P506a, December 10, 2025, 11:00 AM - 12:30 PM

The rapid growth of e-commerce and home delivery has intensified last-kilometre logistics challenges in Australasian cities, creating opportunities for micromobility logistics solutions that include cargo bikes and other small electric delivery vehicles. Although bicycles and cargo bikes have long played a role in urban logistics, the number and scale of operations has increased rapidly in recent years. Cargo bike logistics is well established in many European cities, and increasingly adopted in cities across North America, Asia and South America. Although cargo bikes have had limited application in Australian cities to date, key drivers such as transport decarbonisation and increased urbanisation show there is a role for sustainable last-kilometre logistics solutions, like cargo bikes.

This presentation examines the feasibility and planning requirements for implementing and scaling cargo bike logistics in Australian urban contexts. It does this through a review of international cases of cargo bike logistics and an applicability analysis of Perth, Western Australia, informed by literature and industry reviews, interviews and a stakeholder focus group. The research draws on institutional and transitions theory to illustrate how emerging mobility technologies challenge existing institutional arrangements and require new forms of coordination between public and private actors. The findings identify several pathways for planning and policy that will be important to the successful implementation and scaling of cargo bike logistics in Australian cities, encompassing institutional responses addressing infrastructure provision, regulatory frameworks, and land use planning.

1E.4

The National Cycling Data and Analytics Platform: Transforming cycleway planning through integrated data and analytics

Dr Scott Lieske[1], Scientia Prof Chris Pettit[2], A/Prof Ben Beck[4], Prof Sharon Biermann[3], A/Prof Soufiane Boufous[2], Professor Jonathan Corcoran[1], Dr Mike Harris[2], A/Prof Parisa Izadpanahi[5], Dr Miguel Loyola[3], Dr Laruen Pearson[4], Dr Lee Roberts[2], Dr Maryam Bostanara[2], A/Prof Meead Saberi Kalee[2]

[1]The University of Queensland, [2]University of New South Wales, [3]University of Western Australia, [4]Monash University, [5]Curtin University

1E: City Movement and Infrastructure, P506a, December 10, 2025, 11:00 AM - 12:30 PM

Australian cities urgently need cycling solutions to address obesity, climate change, and traffic congestion, yet infrastructure planning remains constrained by fragmented and inconsistent data on cycling behaviour and infrastructure effectiveness.

The National Cycling Data and Analytics Platform (NCDAP) addresses this critical gap through three integrated components that transform how Australia plans for cycling:

1.   A new national-level behaviour and attitudes survey (conducted in 2025). The first comprehensive dataset covering the greater city areas of Brisbane, Melbourne, Perth and Sydney, the NCDAP survey captures attitudes and behaviours around cycling and micromobility, barriers and enablers to cycling, latent demand and infrastructure preferences.

2.   A decision support tool that predicts the impact of new cycling infrastructure to assist the planning, designing, management, and economic analysis of cycling infrastructure and policy in Australian cities. The tool uses data from the Australian Census, OpenStreetMap and the NCDAP survey to predict ridership on new infrastructure using a map-based interface.

3.   A platform for collection, harmonisation, and sharing of data to provide easy access to data on cycling, including the NCDAP survey and a range of other existing and emerging datasets.

The NCDAP tools and data are publicly available, supporting collaborative research and evidence-based policy development. This presentation will showcase the platform's capabilities and discuss opportunities for researchers, planners and policymakers to use and collaborate on this new shared resource.

Keywords:
online tool; bicycling; decision support; infrastructure; survey

1F.1

The role of urban climate knowledge in planning: an international study of built environment education

Olivia Herrmann[1]
[1]University of the Sunshine Coast

1F: City Nature and Environment, P506, December 10, 2025, 11:00 AM - 12:30 PM

Cities contain a unique urban climate often as the result of built form, building materials and the surrounding streetscape. With climate change posing increasing risks to urban environments, it is critical to engage in the building of resilient and sustainable cities. Urban Design and Planning can amend the effects of urban climate, though this is dependent on the planners understanding of the ways in which urban elements can change the climate. This study explored built environment related programs worldwide, to assess the knowledge professionals and academics believe they have of urban climate, and the extent to which they feel prepared to face future urban climate challenges. It investigated how exposure to urban climate education affects urban planning practice and policies produced around the globe. An online survey for built environment professionals and interviews with urban climate academics were the methods used. Both ran in parallel, with the survey and interview aiming to answer what and why questions respectively. It is clear, that although planning has a direct role in modifying climate, many urban climate decisions are being left to urban designers and landscape architects. Results from this study show that urban climate is being taught, but not effectively. Through the exploration of built environment education across many different countries this study uncovered best practice examples being taught to future built environment professionals during their undergraduate degrees. It demonstrates that it is important to collaborate and ensure all future students are being taught the importance of urban climate.

Keywords: urban climate, education, built environment, international

1F.2

Championing planetary health education in an anxious age

Prof Susan Thompson[1]
[1]UNSW

1F: City Nature and Environment, P506, December 10, 2025, 11:00 AM - 12:30 PM

Academics rightly focus on conducting impactful research that contributes to innovative policy development and positive practice outcomes. Attention must equally be directed to ensuring that research underpins and informs education. Developing knowledge and skills, as well as building optimism about the future is particularly crucial in environmental education. Teachers are increasingly worried about the growing alarm expressed by young people who report feeling ill-equipped to address environmental degradation, biodiversity loss, human health crises, and associated growing inequality.

This is the backdrop to my presentation. As an academic teacher and researcher, I am highly motivated to inspire my students in their quest to create a sustainable world as effective built environmental professionals. Such intent demands transdisciplinary and experiential education to impart knowledge, skills and optimism to address the interrelated impacts of climate change, biodiversity loss and health crises. Resting on the theoretical pillars of healthy planning research, environmental sustainability, resilience and transdisciplinarity, this educational program is facilitated by an outdoor classroom called the GreenWay. Located in Sydney's inner west, it hosts a multitude of human and planetary health supportive infrastructure, making it an exemplar outdoor teaching and learning setting. The corridor demonstrates, for both school and tertiary students, the complexities of managing today's urban realm in environmentally sustainable and health supportive ways. Here I focus on the university level, with an overview of the practicalities of delivering mixed disciplinary classes through the lens of the Planetary Health Educational Framework. I reflect on challenges encountered, especially navigating the long history of siloed, sequential, and unlinked faculty-based curricula and accompanying administrative hurdles. At the heart of this practice is a legacy of transdisciplinary education to prepare future built environment professionals to knowledgably and optimistically address the climate and associated health crises facing the planet and its people.

1F.3

Collaboration and systems thinking in governance frameworks for managing water in a changing climate

Jenelle Bartlett[1]
[1]Griffith University

1F: City Nature and Environment, P506, December 10, 2025, 11:00 AM - 12:30 PM

Water systems are becoming increasingly stressed by population growth, urban developments and climate change impacts. There is a growing acceptance by scholars and practitioners that these challenges may be addressed through improved water governance. Governance arrangements play a crucial role in the ability to address the challenges of climate change impacts on water, and the implementation of an appropriate framework can support positive outcomes. There are numerous governance frameworks proposed to be successful in natural resource management; however research is showing that the use of both systems thinking and collaborative governance processes are imperative for addressing the complex challenges of building climate change resilience.

The aim of my research is to identify governance frameworks suitable for water management in the face of climate change challenges. A review of the literature has been undertaken to initially identify appropriate governance frameworks for water management. Next, the concepts of systems thinking and collaborative governance were synthesised to identify critical elements. Finally, the short-listed governance frameworks were analysed to determine the extent to which they incorporated those critical elements of systems thinking and collaborative governance.

Of the 11 existing frameworks analysed, it was identified that Ostrom's IAD and SES governance frameworks incorporated the most systems thinking elements, collaborative governance elements, and consequently combined systems thinking and collaborative governance elements. It is anticipated that the implementation of these governance frameworks, with an emphasis on a systems thinking and collaborative approach can have a positive influence on policy, practice and research relating to the addressing of climate change resilience in water management.

1F.4

A comparison of state Coastal Management Programs in Australia

Dr Aysin Dedekorkut-Howes[1]
[1]Griffith University

1F: City Nature and Environment, P506, December 10, 2025, 11:00 AM - 12:30 PM

Approximately 85 percent of Australians live in the coastal region. Coupled with rapid population growth and increasing development pressure, climate change impacts such as rising sea levels and the increasing intensity of storms and cyclones pose growing risks to Australia's lifestyle, environment, and economy. The level of vulnerability and risk is well-known; however, action to date has been limited by all levels of government. Previous research indicates that in the absence of guidance and financial and technical support from higher levels of government adaptation at the local level remains patchy. In response, several states developed programs in the last decade to assist local governments and communities in developing coastal management and adaptation plans. In 2016 Queensland state government launched the QCoast2100 Program which funds coastal local governments to prepare Coastal Hazard Adaptation Strategies (CHAS). Similarly, New South Wales government funds local Coastal Management Programs (CMP) through the NSW Government Coastal and Estuary Grants Program. Western Australian Government committed $33.5 million over five years from 2021-26 to the CoastWA Program which supports planning, managing and adapting to the impacts of coastal hazards to ensure sustainable land use and development on the coast for the long-term. In 2022 Victoria launched its Resilient Coast – Adapting for 2100+ Program which provides a statewide approach and grants for development of adaptation plans or projects. South Australia Climate Ready Coasts program is developing Coastal Hazard Adaptation Planning Guidelines for the state and will start funding projects in 2025. This project aims to compare these four state programs in terms of level of support and guidance they provide and identify their weaknesses and strengths and lessons they can learn from each other.

1F.5

Dealing with uncertainty in flood risk management and land use planning decisions: Insights from Aotearoa-NZ

A/Prof Silvia Serrao-Neumann[1]

[1]University of Waikato

1F: City Nature and Environment, P506, December 10, 2025, 11:00 AM - 12:30 PM

Flooding with increasing intensity and frequency is presenting significant challenges for risk management and land use planning in urban areas. This is further exacerbated by uncertainties regarding how flood patterns are changing because of climate change. However, how such uncertainties
are considered to inform flood risk management and land use planning decisions can vary largely from place to place and remain unclear in the literature. This paper contributes to this by examining how uncertainty is dealt with in flood risk management and land use planning in Aotearoa New Zealand. Drawing on empirical data at the local level, findings indicate that
Aotearoa New Zealand's decision-makers face challenges in considering and communicating uncertainty due to the prevalence of outdated approaches and regulatory constraints, fragmented risk governance, and lack of appropriate understanding of different perceptions and assumptions
regarding flood risk between different stakeholders. Based on findings, the paper discusses the critical role of a national-level adaptive flood risk governance in helping to ensure consistency and coherency across different jurisdictions and levels of government, regarding the incorporation
of uncertainty into flood risk management and land use planning. This includes the provision of national directives for incorporating uncertainty in decision-making whilst leaving room for innovation and targeted variability at the local level.

1G.1

Cultural dispositions shaping city futures in Australia

Dr Robert Lundberg

[1]Futures Hub, Monash University

1G: City Cultures and Identity, P413a, December 10, 2025, 11:00 AM - 12:30 PM

Cities in Australia are changing; as new digital technologies are becoming part of the ways that people live and how cities are planned and managed; and as local, state, and federal government commitments to net zero carbon emissions move from policy to practical implementation. Local, state, and federal governments are tasked with navigating these transitions and in doing so are supported by advice from private sector consultants, not for profit interest and advocacy groups, and the technology sector. In this paper I draw on a recent review of 64 industry reports, plans, policies and strategies produced by these groups, that address the future of cities in Australia to identify contemporary ideas that are prominent and influential in shaping these transitions. I argue that these ideas reflect a narrow set of culturally inflected dispositions that understand the complexity of cities and futures as a problem, and that prioritise efficiency and the optimisation of the urban environment as a solution to that problem. I argue that this narrow understanding of city futures reduces awareness of alternative ways of thinking and making future cities, and that making room for a plurality of alternative ways of imagining cities and futures is vital if Australian city futures are to be ethical, inclusive, and sustainable. This requires that we recognise that the dominant ideas and ways of thinking about city futures contained in industry reports are at best partial and incomplete.

1G.2

Let's plan the future, not the past

Mr Alejandro Cohn[1]
[1]AIA

1G: City Cultures and Identity, P413a, December 10, 2025, 11:00 AM - 12:30 PM

Alex's presentation "Plan for the future, not the past" encourages the audience to reflect on their professional practice, reassess their planning mindset and the scale and timeframes for planning in today's world. Alex continues to inspire different perspectives and compels us to reexamine how we plan for the uncertain future.

Future, Mindset, Change, Impacts, Timeframes

1G.3

Building Identity: Designing for connection, culture and community impact

Mr Michael Bailey[1]
[1]Open Architecture Studio

1G: City Cultures and Identity, P413a, December 10, 2025, 11:00 AM - 12:30 PM

In an era marked by accelerating change — from climate instability to shifting demographics — the cultural identity of our cities plays a vital role in anchoring communities and shaping resilient futures. As architects working at the intersection of community, education, sport, and culture, Open Architecture Studio explores how built environments can support inclusive, place-based identities while responding to broader global challenges.

This presentation investigates how design practice can nurture city cultures through long-term social impact, particularly in regional and suburban contexts. Drawing on recent projects across Queensland — from sports precincts that foster intergenerational connection to cultural hubs that amplify local narratives — we present a framework for embedding cultural authenticity, community ownership, and future adaptability into urban spaces.

We argue that legacy in urban design is not only about iconic form or infrastructure longevity, but about cultivating vibrant, lived-in places that support collective memory, identity and well-being. Our approach is grounded in proactive collaboration with communities, including Indigenous voices, to co-create spaces that reflect shared values and aspirations. We consider how integrated planning and design can act as a catalyst for social resilience, youth empowerment, and economic inclusion — and ultimately, how the design of places influences the identity of the people who inhabit them.

By sharing tested strategies and real-world outcomes, this session contributes to the conversation on how cities can meaningfully evolve, celebrating who we are, and who we're becoming.

Key Words:
-Community
-Place-based identity
-Urban resilience
-Cultural infrastructure
-Design impact

1G.4

Impact of Culture on Women's Access to Urban Transportation: Insights from Dhaka

Mr Md Amjad Hossain Reyad[1]
[1]The University of Queensland

1G: City Cultures and Identity, P413a, December 10, 2025, 11:00 AM - 12:30 PM

Both in the global north and the global south, the presence of gendered urban transport is much more evident. Many studies on gendered mobility behaviour and urban transport focus on travel patterns, travel time, number of trips, mode choice, and similar aspects. Additionally, research specifically addresses women's harassment, safety, and security. Overall, studies on gendered mobility and urban transport have examined the physical, economic, and psychological barriers faced by women, identifying factors that encompass both material and cognitive aspects. However, research on women's access to public transport and daily mobility through a cultural lens remains limited. This study explores how Hofstede's cultural dimensions, combined with socio-demographic factors, influence women's perceptions of transport quality, safety concerns, and accessibility. A quantitative survey of 400 women in Dhaka was conducted, and the data were analysed using hierarchical multiple regression analysis. Results indicate that cultural dimensions display mixed effects on women's perceived accessibility, transport quality, and safety concerns. Demographic variables also significantly affect women's perceptions. This study emphasizes how cultural values intersect with socio-demographic conditions to perpetuate gendered mobility inequalities, highlighting the need for gender-sensitive urban transport policies in Dhaka.

1H.1

Densifying within existing urban morphology: Houses in the city and apartments in the suburbs?

Rachel Gallagher[1]
[1]The University of Queensland

1H: City Design and Morphology, P505, December 10, 2025, 11:00 AM - 12:30 PM

Existing urban morphology—shaped by historical regulations on street widths, setbacks, and lot sizes—creates a path dependency that constrains future redevelopment. Yet, this is often overlooked by densification strategies, which assume there is land readily available for the types of redevelopments envisioned. This paper presents a detailed morphological study of an entire Australian city, in the context of assessing the practical feasibility of planning strategies seeking to densify established suburbs. With a focus on lot sizes and zoning, changes to urban morphology are analysed in conjunction with a historical genealogy of planning regulations since the first penal colony was established on the banks of the Brisbane River, or Maiwar in Turrbal, in 1825. Findings question the viability of planning strategies focused on densification of inner suburbs dominated by small lot housing. Often delineated in the colonial to interwar periods, inner suburbs have a larger proportion of houses protected from demolition, due to heritage or character regulations, on lots of less than 400 square metres. As a result, amalgamation of multiple adjacent lots is required - if the maximum densities allowed by the planning scheme are to be achieved. Amalgamation is inherently difficult, posing questions about the practicality of densification strategies reliant on private, owner-led land assembly. At the same time, middle ring suburbs, developed in the post-war period, have larger lot sizes more suitable for densification, and houses that are not protected (and can therefore be demolished). Yet, most of these lots are in low density zones which prevent apartments or townhouses from being constructed. Findings highlight opportunities to revise approaches to densification by focusing on practical feasibility within existing urban morphology.

1H.2

Borders or boundaries: A typomorphology of river edges

Ruoxin Liu[1]

[1]The University of Melbourne

1H: City Design and Morphology, P505, December 10, 2025, 11:00 AM - 12:30 PM

Riverside renewal has become a growing global phenomenon since the 1970s, initially emerging in North America and Europe and now spreading to other regions around the globe. Urban riversides can either foster vibrant public spaces that promote social interaction or become restrictive barriers that segregate communities (Sennett 2006) within the urban fabric. These contrasting conditions are largely influenced by social and physical accessibility. While previous studies have examined spatial types of river edges or public access separately, these remain mostly limited to the macro-scale and the Global North.

This research applies a typomorphological analysis of riversides within urban centers across 54 cities from Australasia, Europe, Americas, Asia, and Africa. These are mapped by measuring the permeability of the urban fabric within a walkable area of 2×4 km². It enables comparisons of how riverside morphology enables walkable access. Mappings and measures of morphologies help identify street pattern types where urban social encounter is more likely to emerge.

Findings show five types of riverside morphologies, ranging from highly permeable to spatially segregated urban fabrics. It is shown how key morphological dimensions such as river width and bridge spacing influence overall accessibility and the connectivity between the two banks of a river. These relations are not simply linear, with specific thresholds between various types. Some of the most segregated conditions are linked to riverside privatisation, or large grain development. The findings of this research can inform spatial planning strategies to enhance river edge accessibility and harness synergies across the two sides of urban rivers. The findings are of particular relevance for Australasian cities where large riverside areas are being re-developed.

1H.3

How cul-de-sacs have shaped Australian subdivisions

Dr Alice Vialard[1,2], Francesco Mancini[3]
[1]The University of Sydney, [2]The University of Hong Kong, [3]Curtin University

1H: City Design and Morphology, P505, December 10, 2025, 11:00 AM - 12:30 PM

Dead-end streets make up about 21% of intersections in both Australia and the U.S., surpassing cross-intersections. Variations can be observed among Australian cities, often due to geographic features like topography and waterways that contribute to higher rates in cities like Sydney and Brisbane. Beyond geographic factors, however, the spread of cul-de-sacs within subdivisions in the U.S. is largely attributed to Radburn's planning principles and FHA guidelines, influenced by the Garden City movement. The rationale behind the use of cul-de-sacs in Hampstead Garden Suburb (1906) was primarily for its appeal as countryside-like, reflecting a value-based decision focused on lifestyle and aesthetics, while in Radburn (1929), its economic and functional advantages were more strongly emphasised. The widespread implementation of cul-de-sac subdivisions in Australia invites reflection on how these British and North American planning models have been adapted to local conditions, raising important questions about the balance between technical priorities, such as transport efficiency and cost, and values like walkability and quality of life.

This study examines model planned subdivisions in major Australian cities to understand how the cul-de-sac has been used not just as an economical tool but also as a feature with broader social and sustainability implications. Planned subdivisions from the 20th century—such as Dacey Garden Suburb (1914) in NSW, Colonel Light Gardens (1924) in SA, Heath's neighborhood unit (1944) in VIC, Medina (1953) in WA, and Charnwood (1970) in ACT, are compared and assessed based on factors like subdivision scale, the frequency and pattern of cul-de-sacs, the role of topography versus economic drivers, and their spatial configuration. From isolated clusters of houses to entire subdivision layouts, the study evaluates how cul-de-sacs impact accessibility and mobility, aiming to clarify when and how these designs hinder walkability—and the need for future planning to adapt them to create more connected, livable communities.

1H.4

Understanding the impacts of consolidation on the urban forest and implications for effective policy response

Prof Joe Hurley[1], Dr Hugh Stanford[1], Prof Marco Amati[1], Dr John Duncan[2], Mr Warin Chotirosniramit[2], A/Prof Chayn Sun[1], Prof Sally Thompson[2], Dr Bryan Boruff[2]
[1]RMIT University, [2]University of Western Australia

1H: City Design and Morphology, P505, December 10, 2025, 11:00 AM - 12:30 PM

Australian cities are in a pincer trap between sustainability informed urban intensification and the erosion of critical urban resilience infrastructure in the urban forest. The ill-considered realisation of compact city policy is depleting private land vegetation, with efforts to compensate largely targeting the public realm, without genuine assessment of capacity or feasibility. This has widespread impactions for the beneficial urban services that the urban forest provides, not least to heat amelioration.

Efforts to better plan for and manage intensification in ways that support the urban forest are hampered by a lack of understanding of the dynamics of change: of the location and nature of urban development and intensification; of the location and rates of change of green infrastructure; or of the relationship between urban intensification, vegetation loss and heat gain. Without such information it is difficult to develop and evaluate urban policy to mitigate vegetation loss and heat gain through development.

This paper reports on research that seeks to evaluate urban development patterns and land-use policy settings across Australian's major urban centres using several case study examples. Here a multi-modal deep learning model was first trained to automate property parcel classification using high-resolution land-cover data allowing for a detailed understanding of built form changes resulting from (re)development. Using several case study locations and control sites we demonstrate the potential to use model results in policy evaluation, examining the relationship between land-use policy controls and the nature of change in built form. The research highlights the importance of robust longitudinal and comparative urban evaluation to inform strategy, policy and design settings that cater to urban intensification while providing for positive urban greening and heat amelioration outcomes.

1H.5

Conundrums in land use and transport integration policies in the transformation of Australian cities

Dr Ian Woodcock[1], **Dr Jan Scheurer**[2], **Dr Hulya Gilbert**[3]

[1]The University of Sydney, [2]RMIT University, [3]The University of New South Wales

1H: City Design and Morphology, P505, December 10, 2025, 11:00 AM - 12:30 PM

According to recent policy announcements, Sydney and Melbourne, Australia's two largest cities, are destined for major disruptions driven by two headline policies: transit-oriented development (TOD) and local living policies in the form of 15- and 20-minute neighbourhoods.

NSW aims to accommodate 74% of the state's housing target within the former '6 Cities Region' within 45 rail station-based precincts over the next 15 years; Victoria is aiming to accommodate 23% of new dwellings projected for Greater Melbourne within 50 rail and tram-based activity centres. Meanwhile, policy aims that everyone should be able to live in a 15- or 20-minute neighbourhood.

Our analysis is twofold: Using SNAMUTS (Spatial Network Analysis for Multi-modal Urban Transit Systems) we seek to understand patterns of urban intensification relative to accessibility by public transport in Sydney and Melbourne. We compare this with distributions of core non-residential uses required for 15- and 20-minute neighbourhoods. From these two spatial analyses of housing, amenities and mobility, we speculate on their future trajectories under current policy settings, in the context of the kind of mode shift that should accompany Australia's commitments to Net Zero by 2050.

Some conundrums appear: Australian TOD is premised on the relative scarcity of high transit network accessibility. In this context, what land use and urban design policies might support significant mode shift towards 'Transit Oriented' urbanism? At the same time, what kind of transport, land use and urban design policies might support transitions towards 15- or 20-minute neighbourhoods across Sydney and Melbourne? How do these speculations compare to the emergent urbanisms we encounter in these cities?

KEY WORDS: Transport and Land Use Integration, Transit-Oriented Development, Local Living, X-Minute Cities

1I.1

Unsettling the story: Indigenous perspectives on mis- and disinformation in urban planning and design

Dr James Berghan[1]
[1]Te Wānanga O Aotearoa

1I: Reckoning with Settler Colonial Cities, P413, December 10, 2025, 11:00 AM - 12:30 PM

Urban planning and design in Aotearoa New Zealand have long relied on myths, distortions, and strategic omissions that serve settler-colonial agendas and obscure Māori presence and authority in city spaces. This presentation draws on findings from Urban myth-takes: Mis- and dis-information in urban planning and design, a kaupapa Māori research project examining how misinformation is embedded in planning discourse and contributes to spatial injustice.

Through critical discourse analysis of planning documents, policy texts, and historical records, this research reveals how myths about Indigenous absence, marginality, or consent have been woven into urban decision-making. One example is the Crown's broken promise to set aside 10% of land for Māori reserves in the South Island, when less than 0.1% was allocated. Such distortions are not relics of the past; they continue to shape public narratives and policy frameworks today.

Framing these dynamics as "urban myth-takes" highlights how mis- and disinformation has functioned not simply as error, but as a tool of governance to shape who is seen to belong in the city, and on what terms. This presentation argues that reckoning with these enduring stories is essential for decolonising urban planning and making space for Indigenous truth-telling and presence in our cities.

In the face of these narratives, Māori communities continue to assert their presence and reframe the urban story. Emerging forms of Māori-led urbanism in cities such as Ōtautahi, Ōtepoti, and Te Whanganui-a-Tara are making once-erased histories visible through design, public art, and placemaking grounded in mātauranga Māori. Drawing on examples such as urban walking tours, te reo Māori signage strategies, iwi-led design features, this presentation reflects on how these interventions not only challenge past erasures but re-inscribe Indigenous presence in the urban landscape, offering a glimpse into more just, inclusive, and hopeful urban futures.

Keywords: misinformation, spatial justice, Indigenous urbanism

1I.2

The tensions and incommensurabilities between participatory and decolonial approaches to planning

Janice Barry[1]
[1]University of Waterloo

1I: Reckoning with Settler Colonial Cities, P413, December 10, 2025, 11:00 AM - 12:30 PM

Indigenous peoples in countries like Australia, New Zealand and Canada have an unclear and uneasy relationship with participatory approaches to urban planning. This paper aims to uncover the 'incommensurabilities' (Dorries & Ruddick 2018) between the theoretical framings of participatory (see Forester 1999; Innes & Booher 2000; Lane 2005) and decolonial (see Dorries 2022, 2017; Harjo 2019; Ugarte 2014) approaches to planning, arguing that the two modes of practice need to be in productive tension with one informing but not becoming the other. The presentation is conceptual rather than empirical in nature. To better ground my theoretical arguments, I use illustrative vignettes of Indigenous engagement in settler-colonial planning drawn from my previous and ongoing research.

First, I examine how Indigenous peoples are asked to participate in their dispossession (Porter & Barry 2016, 2015), through community engagement processes that fail to unsettle the incredible Whiteness of contemporary planning. I then examine how the erosion of public participation in the face of neoliberal calls to 'reduce red tape' are changing this dynamic. I use examples from my home province of Ontario to illustrate how the failure to safeguard arenas for non-Indigenous dissent has left discourses about the need to uphold Indigenous rights vulnerable to settler cooptation. Finally, I use the question of whether Indigenous-led property development in Canada and New Zealand (see Barry & Thompson-Fawcett 2020) should be subject to state-based public consultation processes to illustrate how participatory planning has failed to contend with Indigenous reconciliation, restitution and sovereignty. Collectively, these three examples point to a need to radically transform the theory and practice of participatory planning—this paper sketches out some possibilities.

1I.3

Rangatiratanga: Reimagining the notion of home for Māori single mothers in settler-colonial cities

Dr Shelley Hoani[1]
[1]Te Wānanga o Aotearoa

1I: Reckoning with Settler Colonial Cities, P413, December 10, 2025, 11:00 AM - 12:30 PM

For Māori, the notion of home transcends physical shelter—it is a site of whakapapa (interconnectedness of all things), cultural continuity, and collective wellbeing. This chapter explores how Māori single mothers reimagine home as a space of rangatiratanga (self-determination), healing, and cultural affirmation, challenging dominant narratives embedded in settler-colonial urban systems that depict them as transient, dependent, and disconnected.

This work draws on findings from the author's recently completed doctoral research, Kia Tau ō Mata ki ngā Atakura: Exploring Notions of Success for Māori Single Parents Studying at Postgraduate Level, as well as a forthcoming chapter publication. In that study, home emerged as a central theme in understanding success, resilience, and cultural grounding for Māori single parents in higher education.

Home is examined through an Indigenous lens, with several Indigenous scholars contributing to the broader conversation. Central to this exploration is Jackson's (2022) articulation of a Māori and iwi notion of home, grounded in four tenets: its connection to mau

nga (mountain); its role as a site for dreaming new futures; its rootedness in whenua (ancestral land); and its foundation in love. These tenets are woven throughout the lived experiences of Māori single mothers, who create nurturing, culturally grounded environments for their tamariki and mokopuna despite systemic barriers.

Aligned with the SOAC 2025 theme Reckoning with Settler Colonial Cities, this chapter offers a decolonial perspective on urban belonging. It calls for urban futures that honour Indigenous knowledge systems, support culturally embedded models of care and kinship, and reframe home as a sovereign, relational space of identity, resilience, and transformation.

Keywords: Home, Rangatiratanga, Decolonisation, Transformation

11.4

Restoring Indigenous People and nature to the city through ecological restoration

Dr Erana Walker[1]
[1]University of Waikato

1I: Reckoning with Settler Colonial Cities, P413, December 10, 2025, 11:00 AM - 12:30 PM

Nature is integral for diverse communities across the globe, especially for Indigenous Peoples who maintain strong relational belief systems towards the natural world. Cultural, spiritual, physical and emotional livelihoods of Indigenous communities rely on nature and further shapes cultural narratives, knowledge and practice. However, when nature is degraded, limited and depleting, the outcomes can be dire for Indigenous People's. Universally, communities, like Indigenous Peoples, are striving to reduce the harmful impacts of climate change, pollution and accelerated resource depletion through a range of approaches such as ecological restoration. These approaches are now being wielded by cities in response to ever increasing environmental change and has the potential to support both the well-being of nature and people.

In cities, where nature's well-being is challenged, Indigenous communities have historically been marginalised and excluded from these spaces, resulting in cities that heavily reflect western values and histories. Here in Aotearoa, Māori communities have experienced marginalisation in cities through displacement, the disregard of their cultural knowledge and rights to the city, as well as the lack of recognition of Māori steward roles in urban areas.

As efforts to address depleting natural areas and enhance the well-being of biodiversity within the urban space grows, there is opportunity to reconcile the place of Indigenous Peoples to their traditional lands that lay beneath the concrete of cities. This presentation shares findings from a survey and interview data about Māori perspectives and experiences of urban forests and restoration. Through this data, the presentation will highlight the critical role of Māori to the protection and care of nature in cities and the wide ranging benefits that an Indigenous approach can have for cities and its citizens.

Parallel Session 2

2A.1

Investment for disaster resilience, acquiring systemic approach for Australian cities

Prof Jago Dodson, Dr Solmaz Hosseinioon[1], **Annette Kroen**
[1]RMIT University, [2]Natural Hazards Research Australia (NHRA)

2A: City Economics and Development, P504, December 10, 2025, 1:30 PM - 3:00 PM

The cost of natural hazards is increasing due to the cascading effects of climate change, and unprecedented challenges. Natural hazards are affecting Australia's economy costing $38 billion yearly which will reach $73 billion a year by 2060. Significant momentum is building across disaster management sectors in Australia to address investment in resilience which is recognised as a key priority at international and national levels, such as the Sendai Framework for Disaster Risk Reduction and the Australian National Disaster Risk Reduction Framework.
Reducing disaster risk through better investment requires a systemic approach to built environments, as complex adaptive systems and considering potential impacts and losses in case of disasters by integrating comprehensive risk assessments, valuing community assets, and promoting strategic, inclusive, and adaptable decision-making processes. Decisions and trade-offs need to incorporate and embed resilience in all scales and sectors, from multi-billion-dollar national infrastructure investments to small business continuity planning, or residential property insurance.
The benefits of investment in infrastructure are often more tangible and easier to calculate and include in business cases in decision-making processes, while the less visible and more intangible benefits of investing in community aspects are harder to quantify and hence build a case for.
Australia's governance structure for investment in resilience is focused on the national level to provide funding for lower levels. Fostering collaboration and resource-sharing among all stakeholders and scales and collaborative resilience investment need to be enhanced. The private sector and individual investment have to play an increasing role in investment
With rising vulnerability to compound cascading disasters, more robust and inclusive processes are needed to ensure loss reduction and safeguarding of resources as well as value production for the whole nation and introduce new economic methods for urban resilience investment, to build resilient and sustainable living environments.

2A.2

Work from home and urban deconcentration: A spatial econometric analysis of U.S. growth patterns

Abolghasem Azhdari[1], Dr Thomas Sigler[1], Associate Professor Dorina Pojani[1]
[1]The University of Queensland

2A: City Economics and Development, P504, December 10, 2025, 1:30 PM - 3:00 PM

This paper examines how working from home (WFH) has reshaped the geography of population and employment growth across the United States, using 2019 as a structural breakpoint to capture pre- and post-COVID dynamics. While the pandemic triggered a sudden shift in work arrangements, the continued prevalence of hybrid WFH suggests that the patterns observed in recent years offer a preview of how sustained remote work could structurally influence urban hierarchies and decentralisation over the long term. Using spatial econometric models and instrumenting for both remote work levels (WFH) and changes in adoption (ΔWFH), the study finds robust evidence that remote work has intensified spatial divergence. While central counties with high remote work rates often experienced population losses, metropolitan areas with greater WFH capacity tended to attract both people and jobs, underscoring the uneven spatial impacts of remote work across scales. This interpretation is further supported by spatial models of deconcentration, which show remote work to be a key driver of population dispersal within metros. The models control for housing affordability, land-use regulation, climate, industry structure, and education, while addressing spatial dependencies. Together, the results highlight that remote work is not a temporary disruption but a structural force reconfiguring urban hierarchies, reinforcing growth in digitally adaptive regions while intensifying divergence elsewhere. The study contributes new empirical evidence on the evolving spatial contract between work and place, and offers insights into how digital flexibility may drive long-term urban change. The presentation concludes with policy implications for Australian cities in the wake of pandemic-related sea change and tree change migration.
Keywords: Remote work, Urban decentralisation, Donut effect, Spatial econometrics

2A.3

Insolvencies in the residential construction industry: Recommendations for reform

Dr Lyndall Bryant[1,2], Dr Elisabeth Streten[1,2], Dr Amanda Bull[1,2], Morgan O'Neill[1,2], Dr Fiona Cheung[1,2]
[1]Queensland University of Technology, [2]Building 4.0 CRC

2A: City Economics and Development, P504, December 10, 2025, 1:30 PM - 3:00 PM

Construction companies make up 27% of all insolvencies in Australia, nearly double that of its closest rival, with a record 2,832 construction companies going into insolvency in 2024. Construction company insolvencies have a financial contagion affect, triggering a chain reaction throughout the housing supply chain. This can lead to job losses, reduced economic activity and productivity, and financial consequences for a range of stakeholders, affecting industries and consumers well beyond construction.

The residential construction sector is a complex system with multiple factors contributing to this record and increasing level of insolvencies. A range of external and internal factors place pressure on the cash flow of construction companies. Finance and contracting issues, as well as a lack of transparency are also systemic issues that contribute to high insolvency rates.   Aggressive underbidding contributes to tight or zero profit margins, while phoenixing activities and the presence of undercapitalised firms hinder financial resilience. The overall complexity of the system means contractors require advanced compliance, cashflow and business management skills, far beyond their base trade training.

This Building 4.0 CRC project identified and analysed the variety of factors that are drivers for residential construction industry business failures in Australia.   The findings provide a range of insights and recommendations aimed at addressing the issue from a policy/regulatory reform and educational basis. This research is important as it directly impacts productivity in the housing construction sector, a key factor for effective housing supply.

2A.4

Shifting the burden: Rethinking property tax distribution

Dr George Greiss[1], Prof Awais Piracha[1]
[1]Western Sydney University

2A: City Economics and Development, P504, December 10, 2025, 1:30 PM - 3:00 PM

Local government in New South Wales (NSW) plays a vital role in delivering a wide range of property-related services. Councils employ approximately 60,000 staff and are responsible for over $177 billion in community assets, include maintaining approximately 90% of the State's Roads and Bridges, managing more than 350 libraries, 400 public swimming, and over 600 museums, galleries, theatres, and arts centres. They also invest over $2.2 billion annually in environmental management, dealing with 4 million tonnes of waste, operating recycling systems, stormwater infrastructure, and protecting the State's native flora and fauna.

Despite these extensive service delivery obligations, local governments operate within a constrained fiscal framework, with councils consistently contending that rate increases have not kept pace with escalating financial pressures. While the Independent Pricing and Regulatory Tribunal (IPART) determines the annual rate, councils may apply for a Special rate Variation. These applications are frequently met with significant public opposition, negtive media coverage, and political resistance.

According to research by the Centre of Policy Studies (2022), only 25% of property-related tax revenue in NSW is collected through council rates, while the State Government captures the remainder, 49% through stamp duties, 21% via land tax, and 4% through the Emergency Services Levy. Based on average residential rates, property transaction frequency, and associated stamp duties, councils receive less than half of the revenue the State Government receives from the property ownership life cycle.

This paper explores the relationship between property services and the taxes they generate, in pursuit of a fair and equitable funding model. It argues that priority should be given to addressing the inequitable distribution of property-related taxation, rather than continuing the practice of costs shifting onto residents the ever-grown burden of service delivery through increased council rates.

2A.5

The calculative practices of housing supply

A/Prof Laurence Troy[1], Prof Bill Randolph[2], Simon Pinnegar[2]
[1]University of Sydney, [2]UNSW Sydney

2A: City Economics and Development, P504, December 10, 2025, 1:30 PM - 3:00 PM

The planning process has come under sustained criticism in recent years as a major impediment to housing supply. Australian governments at Federal and State levels are actively pursuing policies aimed at 'speeding up' the planning process through deregulation and centralisation of decision making. Yet little debate or analytical focus has centred on the development process in its entirety, nor the practices and decisions of the range of actors involved in producing new housing. This paper explores this issue through the analysis of apartment development in Sydney built during the 'boom' decade between 2012 and 2019. We draw on an analysis of on 1900 developments, and interviews with developers, planners, consultants and related professionals. The paper argues that planning forms an integral, but small part of the wider machinery of apartment development, which also includes land owners, speculators, contractors, financiers, global supply chains, consultants and developers. This machinery creates a variety of pragmatic and practical limitations on housing output. Second, the uncertainties within the planning system itself create a variety of opportunities for profit, which stands in contrast to the often public cry for certainty in planning. Third, the risks inherent in apartment development in particular create a structural barrier to producing any volume of housing the would undermine profits. Cumulatively, this paper argues that the structures of housing provision and the calculative practices across the range of actors in the development process create deliberate and practical limits on the capacity of the private sector to deliver housing supply.

2B.1

Managing municipal waste beyond the city: leveraging sustainability outcomes in multilevel governance systems

Ms Amelia Leavesley[1]

[1]Melbourne Centre For Cities, The University of Melbourne

2B: City Governance and Structure, P514, December 10, 2025, 1:30 PM - 3:00 PM

Municipal waste management (MWM) in Australia operates within a complex governance system, comprising various institutions, actors, policies, infrastructures, markets, and social structures. Sustainability outcomes – encompassing waste reduction, reuse and recovery activities – are therefore reliant upon coordination between actors operating across multiple levels and dimensions of the waste system. To better understand how sustainable MWM outcomes are facilitated in this system, this presentation uses a waste system framework to identify sustainability drivers across six system dimensions: legal, political, strategic, operational, economic and social. This presentation offers a multilevel interpretation of the second conference theme: City Governance and Structure. The analysis moves beyond a city-centric representation of the waste system and engages instead with the multilevel and multidimensional nature of municipal waste governing. The qualitative research approach focuses on the multilevel waste governance context relevant to three municipalities in New South Wales, Australia. It draws on data from waste policies and interviews with key stakeholders across local, regional, state, national and international governing levels. Thematic analysis reveals how sustainable MWM outcomes are both facilitated and undermined by complex system interactions that occur across multiple levels. Elements that drive sustainability outcomes, such as strengthened regulation, can also undermine them, depending on when, how and in what context the drivers are employed. The findings demonstrate how municipal waste is more than a technical issue for local government to manage, but a complex governance issue that involves multiple actors and levels of government. Identifying leverage points to improve sustainability outcomes requires deliberate engagement with the numerous and messy interactions between the system dimensions. This presentation underlines the importance of cooperative, multilevel governance arrangements for advancing sustainable MWM outcomes both within and beyond the city.

Key words: municipal waste, sustainable waste management, multilevel governance, complex systems

Sustainable legacy of mega-events: Social and institutional evaluation of the 2018 Gold Coast Commonwealth Games

Kava Piran[1]
[1]Griffith University

2B: City Governance and Structure, P514, December 10, 2025, 1:30 PM - 3:00 PM

Cities and nations have long pursued socio-economic and political advantages through competitive strategies. In recent years, hosting mega-events has emerged as a key strategy to attract international investment by enhancing city's international profile, image and attractiveness. Considering sustainability measures, mega-events can also present opportunities to foster social cohesion, civic pride, participatory governance and institutional capacity as critical elements of the social and institutional dimensions of sustainability.

Mega-events can also bring negative impacts. While the benefits of mega-events have been discussed often, little attention has been given to strategies leading to a sustainable legacy. Balancing socio-economic and environmental objectives and embracing collaborative governance are generally overlooked once the bidding process is over. Incorporating sustainability measures can transform a mega-event into an urban festival and deliver major social benefits, such as: boosting community confidence, fostering patriotism, and enhancing a sense of belonging, particularly among youth and ethnic minorities. Otherwise, poor planning process can diminish the reputation of the host city, undermine the social values of local community and increase socio-economic inequality.

This study introduces a sustainability evaluation framework derived from literature on mega-events and legacy of sustainability. The framework encompasses four dimensions of economic, environmental, social, and institutional and informed the collection and analysis of both primary and secondary data. Methods included semi-structured interviews with various stakeholders and analysis of policy documents, strategies, reports, media and news articles about the event. As part of a larger project aiming to answer the research question "How can mega-events leave a sustainable legacy?" this paper focuses on the Social and Institutional sustainability dimensions through a case study of the 2018 Gold Coast Commonwealth Games and examines to what degree the Games left sustainable social and institutional legacy behind. The findings offer valuable insights into upcoming 2032 Olympics strengthening region's long-term social and institutional assets.

2B.3

Planning for 'Abundance': a critique and research agenda

Prof Iain White[1], Dr Crystal Legacy[2]
[1]University of Waikato, [2]The University of Melbourne

2B: City Governance and Structure, P514, December 10, 2025, 1:30 PM - 3:00 PM

Ezra Klein and Derek Thompson's recent book Abundance has attracted a significant amount of international attention and debate, including from politicians in New Zealand and Australia. The book presents a powerful critique of the politics, institutions, and policies of the left. It critiques 'over-regulation' and slow progress on economic growth and outcomes, such as relating to climate or housing, and advocates for a new politics of 'supply-side progressivism'; essentially a shift from a mindset of scarcity to one of 'abundance'. While the considerable discourse stimulated so far has focused on the national and international potential to reinvent liberal politics and economics in this vein, these arguments have significant connections to planning theory, policy, and practice.

This paper offers a response to the Abundance agenda, identifying and exploring the key themes through a planning lens. While much of the broad positioning and critique of progressive politics concerning lack of delivery on outcomes is compelling, there are significant underexplored aspects of 'supply-side' liberalism relating to power, trust and participation. What a pro-growth agenda means for urban planning is a question left un-explored by Klein and Thompson, presenting an opportunity for practitioners and scholars alike to develop an expanded view of planning; one that addresses societal challenges whilst building at pace and scale, and with equity in mind. Given the significant political attention on planning with respect to a lack of progress on decarbonization, housing or rental crises, we also argue planners need to engage with this discourse to reimagine planning, or run the risk of Abundance becoming yet another promising idea or concept that is re-interpreted by others through a simple anti-planning or de-regulatory lens.

Keywords: abundance, politics, progressive planning, planning theory

2B.4

Exploring the roles of universities in the governance and leadership of City Deals

Success Shaibu[1]
[1]Discipline of Geography and Planning, Macquarie University

2B: City Governance and Structure, P514, December 10, 2025, 1:30 PM - 3:00 PM

Governments at different levels now consider universities as key urban actors capable of delivering specific projects that will trigger urban regeneration. This is achieved through policy frameworks like metropolitan strategic plans and the City Deals. Little attention has been paid to universities' role as project leaders, particularly to universities' involvement in the governance and leadership of urban regeneration. This paper draws on the concept of urban growth coalitions, as well as Fernandez-Esquinas and Pinto's (2014) conceptual framework on the roles of universities in urban regeneration to examine how universities act as project leaders within Australian City Deals. Building on the existing literature on the UK City Deals, the paper provides an overview of the roles that are assigned to universities in the Australian context. It shows that the following are significant governance and leadership roles that universities play in urban regeneration through the City Deals: 1) policy design; 2) advisory/monitoring/implementation board; 3) pilot projects; 4) policy implementation, and 5) facilitating specialized courses and programs. Empirically, this paper provides useful insights for other Australasian cities or regions seeking to adopt the City Deals model for urban regeneration.

Keywords: Universities, urban regeneration, project governance, project leadership, City Deals

2B.5

The utopia of shared community infrastructure: Insights from Canada's Festival City and Australia's Gold Coast

Dr Chris Boulton[1,2]
[1]City of Gold Coast, [2]Griffith University

2B: City Governance and Structure, P514, December 10, 2025, 1:30 PM - 3:00 PM

Cities globally confront urban challenges of providing adequate infrastructure to support growing populations in densifying neighbourhoods, where land is scarce and expensive. The difficulties in planning open space provision at a city scale for the long-term sustainability and liveability of cities, means reassessing the definition of open space, where it exists, what, when, and how it is accessible to the community. When the supply of community infrastructure falls short, schools may offer part of the solution. Paradoxically, as neighbourhoods densify and demand for additional school facilities increase, already limited school greenspace can be compromised, meaning that nearby community sports fields and parks are targeted as a solution to ensuring students can access greenspace. Meanwhile, other neighbourhoods with insufficient community infrastructure, are precluded from accessing school facilities.

While scholars recognise the opportunity for schools as community hubs, success in anchoring social and community infrastructure in neighbourhoods is rare. An approach to city planning that includes school infrastructure for social, economic, and environmental benefits alike, is increasingly urgent in pursuing sustainable and resilient cities. Sharing community infrastructure – including greenspace - seems the obvious solution; in the absence of effective governance and integrated urban planning however, the reality of sharing community infrastructure remains elusive.

Gold Coast and Edmonton are each the fifth largest cities by population, for Australia and Canada respectively. They share a surprising quantity of characteristics, including providing infrastructure for fast-growing urban populations and increasing urban density; however, their approach to sharing community infrastructure with schools, is somewhat different. This presentation offers insider perspectives that help and hinder these two cities on a journey to being a more sustainable city – the governance factors. Findings suggest there are opportunities for the Gold Coast, through evolving governance frameworks and collaboratively planned community infrastructure provision, to respond to pressures of urban growth.

2C.1

State-led regeneration: are we creating liveable neighbourhoods?

Ms Katherine Sundermann[1], **Dr Sebastien Darchen**[2], **Mr Riley Flanigan**[3], **Dr Mike Harris**[4]

[1]Monash University , [2]University of Queensland, [3]Urbis, [4]University of NSW

2C: City Housing and Inclusion Panel, P512, December 10, 2025, 1:30 PM - 3:00 PM

In response to the National Housing Accord of 2022, and a perceived housing shortage, state governments across Australia have reformed their planning schemes to deliver 'more, well-located homes'. State-led regeneration initiatives, such as the TOD Program in NSW, Activity Centre Program in Victoria and Priority Development Areas in Queensland have the potential to substantially change the form of existing neighbourhoods. While the benefits of a compact neighbourhood —where more people live and work in denser urban environments close to public transport—are well established, these processes face tight implementation timeframes and narrow focus on housing supply, rather than the elements that contribute to a healthy and liveable neighbourhood.

How do we ensure these future neighbourhoods respond to the specifics of the place, include what makes them liveable and resilient, and involve community members as part of this transformation? This panel brings together urban experts (academics and practitioners) to explore how we can improve the delivery of urban regeneration precincts in Australia; the following questions will frame the discussion:
-        How does each state compare – are there any lessons that are transferable?
-        What mechanisms could support affordable, housing, and the delivery of public realm upgrades, open space, community infrastructure?
-        How can community members be involved in this change?
-        Where is density uplift done well? What local and international case studies can we draw from?

Keywords: Regeneration; Affordable housing, Density.

2D.1

Climate Interior Design: Transitions for flood impacted homes

Mrs Sophie Barfod Vuilleumier[1], Dr Tanja Beer[1], Dr Petra Perolini[1]
[1]Griffith University

2D: City Housing and Inclusion, P421, December 10, 2025, 1:30 PM - 3:00 PM

The Brisbane creek and riverside suburb of Oxley was among the areas significantly impacted during the 2022 floods, which saw over 23,000 homes inundated across the city and resulted in more than 303,000 insurance claims totalling $7.4 billion nationwide. This research explores the application of transition design to residential interior design through the flood-prone suburb of Oxley as a case study. Transition Design is a sustainability-focused, systems-oriented methodology that engages communities in iterative, long-term design processes. It also provides a framework for addressing complex, systemic problems by working iteratively across multiple scales through speculative projects.

The study represents the first of three climate interior design projects focused on testing transition design's potential for adapting residential interior design practices to respond to the climate crisis. The project explores how interior designers might support climate adaptation not just through material or technical upgrades, but by engaging with the lived experiences and social contexts of affected households. Through semi-structured interviews with members of the Oxley community, the study gathers data on domestic life, community connection, and responses to climate risk. Participants reflected on their experiences of flooding, adaptation strategies, and perceptions of local vulnerabilities and strengths.

Findings inform speculative interior design interventions generated through the transition design process. By spotlighting local narratives and lived experience, it offers new perspectives on how residential interior design can move beyond technical retrofits toward socially embedded, regenerative approaches. The applications of this research include new tools for designers to design context-specific adaptation strategies with communities, insights for local councils and policymakers on how to support household-level preparedness, and guidance for homeowners navigating the intersection of flood risk and interior design decisions. By exploring the process of climate adaptation in interior design, this study aims to contribute to the creation of more resilient, inclusive, and sustainable urban futures.

2D.2

Building an integrated framework of urban affordability and climate resilience

Dr Zhenpeng Zou[1]

[1]The University of Queensland

2D: City Housing and Inclusion, P421, December 10, 2025, 1:30 PM - 3:00 PM

The rising cost of living and escalating climate risks are placing unprecedented pressures on communities across Australia and around the world. As climate change continues to intensify the frequency and severity of natural disasters like flooding and bushfire, it becomes increasingly important to understand how these events intersect with cost-of-living challenges. This is particularly critical for promoting sustainable urban planning and development. Compounding these issues is the slow post-pandemic economic recovery, which presents dual interrelated challenges to ensure affordability and build climate resilience.

Despite the urgency, the complex and interconnected relationship between cost of living (predominantly housing and transport) and climate resilience remains poorly understood in both academic research and urban development practice. Much of the existing literature and planning approaches have treated these issues in isolation, lacking an integrated perspective that considers their spatial and structural interdependencies.

This presentation introduces a conceptual framework designed to characterise the spatial interplays between composite measures of housing and transport (H+T) affordability and dimensions of climate resilience, including exposure to disaster risks and the adaptive capacities of communities. The framework addresses critical gaps in the literature by bridging traditionally siloed domains into a unified analytical approach.

Preliminary spatial analyses, drawing on multiple data sources related to housing markets, transport cost, and indicators of community resilience, are conducted to identify and visualise patterns across different geographic areas. These analyses support the development of a typology of locations distinguished by varying levels of affordability and climate resilience.

The presentation concludes with a discussion of the planning and policy implications of adopting an integrated assessment framework. It also outlines a future research agenda aimed at advancing this emerging interdisciplinary field, with the goal of informing equitable and climate-responsive urban development strategies.

Keywords:
housing affordability
cost of living
climate resilience
integrated assessment framework

2D.3

Mapping an infrastructural community to identify human and non-human actors of an apartment building retrofit

Ms Denise Ryan[1]
[1]The University of Melbourne

2D: City Housing and Inclusion, P421, December 10, 2025, 1:30 PM - 3:00 PM

Retrofitting existing apartment buildings, even those built in the last several decades, offers opportunities to improve original designs to increase their sustainability and liveability. However, upgrading occupied buildings that are jointly owned presents well documented challenges. This research employs the concept of an infrastructural community comprised of the structures, services and relationships associated with an apartment building to illustrate the complex forces shaping a project such as a sustainability retrofit. Using an Actor Network Theory (ANT) approach to consider both the technical and social dimensions of completed whole building retrofits of occupied apartments in Melbourne, it maps out the steps involved from concept to completion. It identifies how both the materials and design of the original build, and the resources of and governance rules imposed on owners together determine what is possible in a multi-owner setting. These preliminary findings will demonstrate the utility of the infrastructural communities concept in identifying retrofit possibilities for apartment owners and built environment professionals alike.

Key words: ANT, apartments, retrofit

2D.4

Beyond Demolition: common housing types patterns and potential

A/Prof Maryam Gusheh[1], Prof Nigel Bertram[1], Tom Morgan[1], **A/Prof Catherine Murphy**[1]
[1]Monash University

2D: City Housing and Inclusion, P421, December 10, 2025, 1:30 PM - 3:00 PM

This paper investigates the strategic potential of Australia's existing housing stock to contribute to urban densification, greening and decarbonisation. It presents a national typological analysis of common post-war housing types, such as 1950s-60s freestanding houses, 1960s-70s walk-up flats, 1980s-current townhouses, and 1970s-current project homes, found in large numbers across Australia's capital cities. Rather than focusing on demolition and rebuilding, the research explores the environmental, spatial and social value embedded in these homes, which collectively constitute the country's largest built asset: over 10.9 million dwellings.

The research adopts a systematic approach to cataloguing the built form characteristics, locations, patterns and prevalence of these typologies. This reveals consistencies based on different historical periods and locations that are formed by a combination of planning rules, building codes, economic conditions and the values about what constitutes a home. A literature review, focused on Sydney, reveals an absence of detailed knowledge about these housing types, despite their ubiquity. Through descriptions and city-wide mapping, the paper makes these 'ordinary' housing forms legible, revealing their potential for improved household density, diversity, environmental performance, accessibility, landscape quality and cultural continuity. By retaining and reimagining existing housing, the research aims to reframe these dwellings as a critical asset for addressing climate adaptation, housing supply and neighbourhood character. The paper demonstrates how incremental, retrofit-based approaches that adapt, extend and add to existing dwellings, could support affordable, sustainable and socially cohesive urban intensification.

Preliminary design investigations illustrate replicable strategies for Increasing the variety and numbers of dwellings by using sites effectively, making housing suitable for ageing-in-place, increasing tree canopy cover and habitat and reducing carbon footprint and costs to residents. The research makes a case for more nuanced, place-based infill strategies that recognise the accrued value of the built environment, while aligning with urban resilience, inclusion and decarbonisation goals.

2E.1

Unpacking the gridlock: Expert insights on phase-context dynamics of land use and transport integration barriers

Rafsana Hossain[1], A/Prof Liton Kamruzzaman[1], Dr Elizabeth Taylor[1], Tooran Alizadeh[2]
[1]Monash University, [2]The University of Sydney

2E: City Movement and Infrastructure, P506a, December 10, 2025, 1:30 PM - 3:00 PM

Land-use and transport integration (LUTI) continues to pose significant challenges in Australia and globally despite its longstanding prominence in policy agendas. While existing literature has identified several barriers to LUTI, these are often treated as uniform across different integration phases and governance contexts. This study aims to examine how the relevance and importance of these barriers varies across phases and contexts. Through a systematic review of the literature, the study identified: a) six types of barriers— unaligned goal, institutional congruences, organisational deficiencies, inadequate communication and negotiation, financial and resource limitation, and public opposition; b) three distinct LUTI phases- strategic, managerial and operational; and c) four governance contexts— policy, institutional, political and economic. A Delphi survey involving 50 global experts was conducted to assess the relevance and importance of these barriers across the identified phases and contexts. Using a mixed-methods approach, the study revealed that: a) not all barriers are relevant to every phase and context; and b) not all barriers carry equal importance across them. The findings further highlight the limitations of conventional governance approaches, questioning whether a one-size-fits-all approach to LUTI governance is adequate. The study concludes by proposing a comprehensive LUTI governance framework that enables policymakers to prioritise interventions based on specific phases and contexts of integration.

2E.2

Discourse-coalitions in transport policy: investigating ride-hailing legalisation reforms in Victoria, Australia and Germany

Johanna Reinhardt[1]

[1]The University of Melbourne

  2E: City Movement and Infrastructure, P506a, December 10, 2025, 1:30 PM - 3:00 PM

The global expansion of platform-enabled ride-hailing services has disrupted urban commercial passenger transportation, leaving cities worldwide to integrate these services into their existing transport systems. Governments have responded by legalising ride-hailing to allow users access to more flexible and often cheaper mobility options, while aiming to protect local taxi industries and mitigate social and environmental impacts - with vastly different outcomes across countries.

To explain these differences in policy reforms it is necessary to examine discourse-coalitions and the role they play in influencing policy change. According to discourse-coalition theory (Hajer, 2005), storylines are strategically used by actors to push for discursive hegemony on a specified political problem. While discourse-analytical approaches are well established in urban policy research, their application to transport policy remains underdeveloped.

In this paper, I explore how storylines and discourse-coalitions have been used to reform processes legalising ride-hailing services in Germany (Passenger Transportation Act 2021) and Victoria (Commercial Passenger Vehicle Industry Act 2017), Australia. The analysis draws on policy documents and semi-structured interviews conducted with policymakers and stakeholders in 2024 and 2025. Drawing on the data generated, I traced how actors strategically constructed storylines to mobilise support, form coalitions, and legitimise specific policy paths. While the discourse-coalitions strongly differed across the two cases, in each case, actors deployed strategic storylines – often using fear as a discursive tool – to steer the reforms in directions that protected their interests.

This research contributes to transport policy scholarship by demonstrating how discourse-coalitions shape regulatory outcomes. In doing so, I highlight the importance of considering the discursive dimensions of transport innovation, as well as whose interest policy narratives serve, and how they shape the future of urban mobility.

2E.3

Understanding public perception of Brisbane's inner-city parking policy reform

Miss Victoria Sturgeon[1]
[1]Queensland University of Technology

2E: City Movement and Infrastructure, P506a, December 10, 2025, 1:30 PM - 3:00 PM

Brisbane City Council's Inner-City Affordability Initiative, which came into effect on 14 March 2025, marks a significant planning reform targeting housing affordability in Brisbane's inner suburbs. Broadly, the initiative expands the geographic application of existing maximum parking requirements to a wider area of the inner city. While the reform aims to reduce construction costs and improve housing affordability by limiting car parking in new developments, its success ultimately depends on public acceptance, particularly in a city where car ownership remains deeply ingrained in daily life.

This research investigates how residents perceive the planning and lifestyle implications of reduced parking allowances in Brisbane. Focusing on public perception as both a response to and driver of urban policy outcomes, the study examines whether the initiative's intended benefits, greater housing affordability and improved transport system accessibility, are recognised or resisted by the communities it targets.

Employing a mixed-methods approach, the research combines policy and spatial analysis with resident survey data to identify the values, concerns, and expectations that shape public attitudes. It also draws on international and local case studies to contextualise Brisbane's experience within broader debates around car dependency, urban planning, and housing delivery.

The study will offer recommendations on how parking reform can better reflect the lived realities of residents and contribute to more inclusive, effective planning outcomes. Ultimately, it highlights the critical role of public perception in determining the practical success of urban policy reform in car-reliant cities.

Keywords:
Public perception, parking policy reform, housing affordability, transport accessibility, car dependency, urban mobility

2E.4

Separating cars and housing: Stakeholder perspectives on unbundling car parking in multi-dwelling developments

Rebecca Clements[1], Chris De Gruyter[1], **Dr Liam Davies**[1], Dr Elizabeth Taylor[2]
[1]RMIT University, [2]Monash University

2E: City Movement and Infrastructure, P506a, December 10, 2025, 1:30 PM - 3:00 PM

Transformative car parking reform has been increasingly recognised as one of the most powerful levers for enabling sustainable transport transitions and just mobilities. Off-street parking facilities (such as within residential dwellings) are one of the most ubiquitous infrastructure in Australian cities, deeply entrenched at the crossroads of transport, land use, and housing futures. Over the last two decades, unbundling parking from housing (enabling more people to buy and lease car parking spaces separately) has become one of the central calls of parking policy reform agendas due to its significant potential to reduce chronic parking oversupplies and incentives for car use and ownership, and to support housing affordability and diversity. In practice, however, bundled parking remains the dominant practice in Australian cities such as Melbourne, in part through limited government action to introduce more flexible parking requirements.

Despite unbundling's widely acknowledged importance, current Australian and international research on this topic largely remains high-level, focused on normative arguments. Recent studies reveal critical research gaps regarding understandings of implementation of diverse unbundling approaches, particularly in complex contexts of multi-dwelling developments. While unbundling remains a marginal practice, in Melbourne there are diverse emerging examples at the frontiers of change that offer valuable insights; local and state policy reform, ad hoc "car-free" or "car-lite" developments, and informal resident practices.

This presentation details findings from a research project examining current stakeholder understandings of, and the barriers and enablers to achieving, unbundled parking in multi-dwelling developments. This work draws on 20 qualitative interviews with key actors in government, housing development, and building and parking management contexts with experiences of considering and implementing diverse unbundled parking approaches. This research reveals dominant and marginal conceptions of unbundling types and motivations, and critical insights into key barriers and enablers for wide-spread implementation.

Keywords (3-5): car parking; car-free; transport; housing; governance

2E.5

A TOD tale of two cities: emergent 'new normal' transit urbanisms in Sydney and Melbourne

Dr Ian Woodcock[1], **Dr Jan Scheurer**[2]
[1]The University of Sydney, [2]RMIT University

2E: City Movement and Infrastructure, P506a, December 10, 2025, 1:30 PM - 3:00 PM

Sydney and Melbourne are not just Australasia's largest cities, they are also the region's most transit-oriented, having the largest multi-modal urban transit networks with the highest modal shares. This is partly an historical legacy but for the last generation or so, both cities have concertedly and overtly attempted to shift the paradigm of their urbanism towards Transit-Oriented Development.

This paper builds on work first presented at SOAC in 2011 when the authors began collaborating to better understand the relationships between urban public transport supply and network accessibility and the intensification of public transport catchments. We utilised the SNAMUTS (Spatial Network Analysis for Multi-modal Urban Transit Systems) tool combined with speculative intensification scenarios to understand the likely congruences and potential conflicts between transit supply, demand due to intensification and the accessibility nexus between them. We made recommendations about urban design approaches that could enable greater resilience for this kind of land use-transport integration.

Some 14 years on, we now seek to understand the conditions and inter-relationships between changes to transit supply, actual densification and urban design that has occurred in the intervening period where transit-oriented development has accelerated dramatically and significant new investment has been made (and projected to continue) in transit infrastructure and service. In addition to continuing to use SNAMUTS as the core of our analytic lens, we extend our field of view to cover the characteristic forms that TOD is taking in Sydney and Melbourne. What are the similarities and differences in the new types of built form and urban spaces being created, what is becoming the 'new normal' and how is this emergent character of transit urbanism mediated by policy and the characteristics of local context?

KEYWORDS: Transit-Oriented Development, Accessibility, Urban Design, Urban Character, Urban Intensification

2F.1

Why your canopy target will fail unless you have a 'tree survival budget'

Dr Thami Croeser[1], Prof Wolfgang Weisser[2], Prof Joe Hurley[1], Prof Thomas Rötzer[2], Ms Leila Parhizhgar[2], A/Prof Chayn Sun[1], Prof Sarah Bekessy[1]

[1]RMIT University, [2]Technical University of Munich

2F: City Nature and Environment, P506, December 10, 2025, 1:30 PM - 3:00 PM

Many cities are working hard to grow their tree cover, aiming for cooler, healthier, and greener neighbourhoods. But simply planting trees isn't enough. We need to make sure they survive and grow into the kind of large, leafy canopy trees that actually keep streets cool. This study looks at how losing trees, even a small number each year, can impact long-term tree cover in our streets.

Using a newly-built forecasting model, and data from real city trees, we explore how different tree removal rates affect canopy growth over periods of 30 and 75 years. Our results show that keeping mature, established trees is absolutely crucial. If we lose even a few percent of these trees each year, our efforts to increase tree cover can stall or even fail.

We argue that cities need to set clear limits on how many trees can be removed, no matter the reason (whether it's for construction, health, or anything else). We provide examples for four different climates, with specific tree species, showing how these limits can be implemented. Think of it as a "tree survival budget" that complements planting goals. This approach will help cities truly achieve their greening ambitions and enjoy the long-term benefits of a healthy urban forest.

Keywords: Urban Forest, Canopy, Predictive modelling, Tree management, Urban heat

2F.2

Household urban agriculture – a nature-based solution towards climate resilient communities

Hannah Thwaites[1], Prof Tim Cavagnaro[1], Prof Bev Clarke[1], Prof Melissa Nursey-Bray[2]
[1]Flinders University, [2]University of Adelaide

2F: City Nature and Environment, P506, December 10, 2025, 1:30 PM - 3:00 PM

Urban agriculture brings together people with purpose. It presents an opportunity for increased climate change adaptive capabilities via (re)connection with growing food and community, leading to strengthened local food systems, and a range of social, ecological, and economic benefits. This farming system brings people, nature and environment together in the heart of our cities and towns to address collective environmental and societal challenges. However, much of the literature that connects the concepts of community resilience and urban agriculture are centred upon public forms such as community gardens, ignoring the highly accessible and most prevalent form – household urban agriculture (growing food at home).
In this study, the concept of growing resilient communities from the home garden is being explored via a case study of South Australia, indicating globally relevant results. Within this exploration, 483 voices from the Greater Adelaide (metropolitan) community have been heard via an online survey, indicating the high prevalence of this practice and a strong desire to continue (or start) to grow food at home. Overall, 75% or greater (strongly) agreed that growing food at home builds resilient communities and that urban agriculture increases the capacity of communities to build resilience to climate change. Time, space, knowledge, and costs are all strongly implicated in terms of what is helping or hindering engagement in this farming practice. The results suggest that this community recognises a correlation between growing food at home and reducing community vulnerability and sustainability to climate change, particularly through connectedness. The range of suggested local, communal, and institutional supports to help communities overcome urban agriculture barriers reflect both the highly multidimensional nature and the accessibility of this nature-based solution.

Keywords: Urban agriculture, community resilience, climate change

2F.3

Prototyping productive landscapes on campus: a testing ground for agroecological rewilding

Lu Jin[1]
[1]The University of Queensland

2F: City Nature and Environment, P506, December 10, 2025, 1:30 PM - 3:00 PM

Productive landscapes, including community gardens and urban farms, are receiving growing recognition for their social, ecological and economic benefits in urban environments. However, obtaining institutional endorsement for embedding edible green infrastructures into the urban fabric remains a challenge. Greenspaces used for sports and recreation benefit from dedicated infrastructures with standardised maintenance regimes and are celebrated for their public value. In contrast, urban food-growing initiatives do not receive comparable levels of support and often struggle to gain legitimacy. The disparity in resourcing between greenspace typologies brings into question the underlying factors that marginalise productive landscapes in institutional and urban planning frameworks.

While existing initiatives provide valuable insights into present challenges, prototypes for new productive landscape models offer pathways to legitimising cultivation in urban contexts. Design prototypes also serve as advocacy tools to test scalable models for integrating food-producing plants into urban environments.

In this research, we propose to frame productive landscapes as a mode of rewilding that bridges ecological regeneration with community wellbeing by promoting biodiversity, strengthening local food systems, and reconnecting people with nature and place. We take a 'research through design' approach and use a university setting as an initial testing ground to investigate the complexities of designing, implementing and sustaining productive landscapes. Through prototyping across two sites on the University of Queensland's St Lucia campus, this research seeks to (1) test the viability and practicability of low-maintenance food-growing systems in urban environments, and (2) explore participatory models for engaging university staff and students in cultivation and stewardship activities. Through developing and testing an agroecological rewilding framework within a campus setting, we seek to demonstrate scalable models for productive landscapes in urban environments and advocate for the recognition of productive landscapes as essential components of green infrastructure.

Keywords: productive landscapes, agroecological rewilding, research through design

2F.4

The natural and strategic dynamics of Greater Sydney's public urban forests

Ms Sophie Moore[1,2], Prof Sebastian Pfautsch[1], Prof Nicky Morrison[1], A/Prof Rachael Gallagher[1], Dr Dom Blackham[2]

[1]Western Sydney University, [2]Mosaic Insights

2F: City Nature and Environment, P506, December 10, 2025, 1:30 PM - 3:00 PM

Greater Sydney faces an urgent challenge: achieving ambitious tree canopy targets of 40% cover by 2036, while urban development pressures intensify heat island effects and biodiversity loss. This paper highlights challenges and possible opportunities for delivering urban canopy through integrated ecological, governance, and forecasting approaches, across three interconnected studies.

Analysis of public tree canopy change in Sydney's North West Priority Growth Area reveal substantial canopy loss between 2009-2023. Using an urban forest governance framework through document review and expert interviews, this research uncovered two fundamental issues: public tree planting is funded without requisite protection and maintenance, and dominant discourse consistently prioritising housing delivery over tree retention.

Current planting approaches will never reach canopy cover goals. Using empirical crown expansion models for widespread street tree species in Greater Sydney, this research demonstrates that new housing estates will fail to reach state canopy targets. Empirical crown expansion modelling of 650 trees across 19 species demonstrates that current planning approaches will achieve less than 25% of required 40% canopy targets within 20 years. The predominance of small and medium-crown plantings, combined with minimal private land canopy (<1%) may exacerbate public health risks in areas already experiencing the highest temperatures.

Functional trait analysis reveals how strategic species selection could optimize both cooling and biodiversity benefits. Comparing actual plantings against theoretically optimized assemblages using leaf area index, crown architecture, and flowering data, this work demonstrates that current taxonomic diversity could better maximize ecosystem service delivery for thermal regulation and wildlife support.

Together, these findings highlight challenges in Sydney's urban forest planning and emphasise the urgent need for interventions addressing governance, species selection, and spatial planning to deliver measurable benefits for rapidly growing Australasian cities.

2G.1

Lines of return: Using poetry to explore Māori relationships with the built environment

Dr James Berghan[1], **Dr Marama Salsano**[1]
[1]Te Wānanga O Aotearoa

2G: City Cultures and Identity, P413a, December 10, 2025, 1:30 PM - 3:00 PM

Urban environments are often sites of both disconnection and resilience for Indigenous people. In Aotearoa New Zealand, Māori experiences of colonisation, urbanisation and land loss continue to shape the ways tangata whenua (the people of the land) relate to built environments. This presentation draws on a creative research project that uses poetry as a method for exploring Māori relationships to urban and built space.

In early 2025, we launched a national poetry competition inviting Māori to submit original poems that respond to the theme of "Māori relationships with the built environment". The project aimed to surface diverse, place-based expressions of connection, dislocation, memory, resistance, and aspiration in relation to whare (homes), whenua (land), and tāone (towns and cities). Using thematic analysis grounded in kaupapa Māori methodologies, we analysed the poems as forms of narrative data that offer insight into Indigenous spatial realities.

Preliminary findings suggest that Māori relationships with urban space are deeply layered, shaped by intergenerational trauma, ongoing acts of spatial reclamation, and the enduring presence of tikanga and whakapapa in the built form. Poets reflect on how urban environments both constrain and inspire cultural practice, identity, and consequently, wellbeing. Some write from spaces of longing; others from sites of resistance, reclamation, or revival.

This presentation will share thematic findings from the poems, along with a discussion on the methodological and ethical considerations of using creative submissions as research data to amplify Indigenous voices in urban research. In doing so, we demonstrate how poetic inquiry can centre Indigenous perspectives, challenge dominant urban narratives, and generate culturally relevant insights for urban design, planning, and health equity.

Keywords: Māori, indigenous, identity, cities, poetry

2G.2

Neuroarchitecture as urban strategy: Designing for emotional resilience in future cities

Mr Michael Major[2]
[2]Institute of Neuroarchitecture

2G: City Cultures and Identity, P413a, December 10, 2025, 1:30 PM - 3:00 PM

As Australasian cities face increased environmental stress, social fragmentation, and density pressure, urban planning must move beyond infrastructure and policy to consider how environments affect our mental and emotional resilience.

This paper introduces neuroarchitecture as a strategic planning tool that integrates neuroscience, anthropology, and behavioural psychology into the shaping of urban environments. Rather than focusing solely on aesthetics or functionality, neuroarchitectural thinking foregrounds how built environments influence human attention, emotion, and behaviour - and how these in turn affect liveability, social cohesion, and economic vitality.

Drawing on emerging evidence and case studies, this presentation explores how design elements such as spatial rhythm, sensory cues, and intuitive orientation can reduce cognitive load, support emotional wellbeing, and encourage prosocial behaviour in cities. It also examines how urban stressors - from crowding and noise to ambiguity and disorientation - can be mitigated through better spatial strategies.

The paper outlines a framework for embedding neuroarchitectural principles early in city planning processes, particularly in precinct development and public infrastructure. It argues that integrating emotional performance as a measurable planning outcome is essential for creating cities people want to live in, return to, and care for.

By repositioning emotional resilience as an urban performance metric, neuroarchitecture offers planners, policymakers, and developers a practical pathway toward healthier, more enduring cities.

Keywords: neuroarchitecture, emotional resilience, urban wellbeing, behavioural planning, liveability

2G.3

The Heart of Urbia: From rupture to regeneration in urban design

Dr Crystal Victoria Olin[1]
[1]Victoria University of Wellington - School of Architecture

2G: City Cultures and Identity, P413a, December 10, 2025, 1:30 PM - 3:00 PM

The Heart of Urbia is an emergent project that interrogates what cities are designed to prioritise – and what they neglect. It explores how urban places reflect the values we trade away in the name of progress. Employing a fictocritical approach – a hybrid methodology blending fiction, phenomenological ethnography and critical theory – the project crafts a speculative narrative and design of Urbia, a city where the relentless drive to improve erodes connection, empathy and intimacy.

Through the lens of Urbia and grounded in real-world case studies, the project examines how urban places can become disembodied from the very people and landscapes they serve. As Urbia's heart falters under the weight of its own ambitions, the narrative envisions a regenerative process: a city reborn from its own ashes, where the re-centring of care and relationality becomes paramount.

Drawing upon Indigenous perspectives and marginalised voices, this work challenges conventional urban paradigms, inviting a reimagining of what it means for a city and its inhabitants to thrive. Rather than proposing utopian solutions, it exposes the fissures in our urban fabric, prompting reflection on whether we desire to mend these cracks or embrace the possibilities they unveil.

This presentation will delve into the project's conceptual framework, discuss the integration of fictocriticism in urban studies, and explore the potential of speculative narratives and design to inform and transform city-making practices.

Keywords:
urban identity, fictocriticism, speculative urbanism, critical urbanism, urban design

2G.4

Brutopian Perth: mapping and measuring (sub)urbanity in the world's longest city

A/Prof Paul Maginn
[1]UWA Public Policy Institute

2G: City Cultures and Identity, P413a, December 10, 2025, 1:30 PM - 3:00 PM

Perth has recently been dubbed the "worlds' longest city" on account of the extent of (sub)urbanisation - 150kms - that characterises the metropolitan region. Historically, Perth has also been labelled 'a big country town' and "dullsville" on account of its predominantly suburban form and absence of a night time economy in the CBD after 6pm. Such criticisms are emblematic of a long history of anti-suburbanism within urban studies and amongst cultural elites wherein the suburbia has been portrayed as a blandscape - aesthetically, morphologically, and, socio-culturally - and subservient to the urban core. Drawing on recent conceptual work examining the types of (sub)urban landscapes within metropolitan regions, the symbiotic relationship between the urban and the suburban, and, a call to rethink urban theory from the "outside in". This paper seeks to empirically map and measure the nature, extent and degree of (sub)urbanity within the Perth metropolitan region over the last 20-25 years. An index of (sub)urbanity premised on a range of data - e.g. dwelling type, household type, car ownership, cultural diversity - from the ABS Census of Population are used in order to ascertain the geographies and typologies of (sub)urbanity within the Perth metropolitan region. Trends in suburbanity provides a basis for better-informed strategic spatial planning and wider public policies.

Key words: Perth; Metropolitanism; (Sub)urbanism; Urban Planning;

2H.1

Participatory urban design with teens: bridging practice, place, and inclusion

Deena Ridenour[1]

[1]University of Sydney - School of Architecture Design and Planning

2H: City Design and Morphology, P505, December 10, 2025, 1:30 PM - 3:00 PM

This presentation explores the intersection of three distinct yet interrelated fields—urban design, participatory design, and youth-friendly cities—to investigate how inclusive urban environments can be shaped with and for older adolescents. Each field has defined theoretical and operational frameworks. Urban design provides the physical and strategic direction for shaping cities, while participatory design introduces collaborative methodologies that democratize the design process. Youth-friendly cities foreground the rights and agency of young people in urban contexts, advocating for their inclusion in decision-making and spatial transformation. Yet, at the intersection of these fields, the literature reveals contested understandings and practical challenges for the participation of youth in major urban change precincts. The intersectionality of these domains is examined through three analytical lenses: Design Practice, Place Qualities, and Inclusive Processes. The Design Practice lens compares professional urban design methodologies with participatory approaches, highlighting tensions and opportunities for mutual learning and iterative collaboration. The Place Qualities lens investigates how urban spaces are interpreted and experienced by teens, emphasizing the need to align design intent with youth-specific spatial values and affordances. The Inclusive Processes lens evaluates principles and tools that enable meaningful youth participation, identifying gaps in current practices and proposing strategies to enhance teen agency in urban design. By synthesizing literature across these lenses, key challenges and opportunities for participatory urban design with teens are identified. Recommendations for a more integrated approach bridge disciplinary divides and support inclusive, locality-specific urban transformation. The findings contribute to a growing discourse on youth engagement in urbanism and offer an integrated framework for future research and practice aimed at designing equitable urban futures.

Key words: urban design, participatory design, youth-friendly cities, teens

2H.2

Legacy, innovation and sustainability of megaprojects: A case study of Queen's Wharf Brisbane

A/Prof Bhishna Bajracharya[1], **A/Prof Daniel O'Hare**[1], Dr Isara Khanjanasthiti[2]

[1]Bond University, [2]University of New England

2H: City Design and Morphology, P505, December 10, 2025, 1:30 PM - 3:00 PM

Global trends in the development of megaprojects (costing more than one billion dollars) in major cities often claim to be innovative in planning and design, but these projects can face significant challenges related to long-term benefits and sustainability outcomes. Queen's Wharf Brisbane, an integrated resort megaproject valued at 3.6 billion dollars, is being built in Brisbane city centre, using the planning mechanism of the Priority Development Areas (PDA) to expedite development on state government-owned land by a private developer, Destination Brisbane Consortium. This waterfront urban development project has created a major new landmark for the city, featuring hotels, entertainment areas and public spaces with strong pedestrian connections to the South Bank Parklands across the Brisbane River. Currently, the project is experiencing major issues, including cost overruns, time delays, stakeholder conflicts, protection of heritage buildings and concerns about the long-term sustainability of its components, such as the Star Casino.

The primary aim of this study is to assess the planning and urban design outcomes of Queen's Wharf Brisbane in terms of its long-term legacy, iconic design, and sustainable city-making. The paper will critically examine the planning process for the project with a focus on the roles of major stakeholders, including the state and local governments, the developer, and community groups. Additionally, the paper will conduct an urban design analysis of the megaproject, evaluating aspects such as connectivity, accessibility, and placemaking. The research methodology will primarily involve a review of the megaproject literature, waterfront developments. relevant planning and urban design documents, and the authors' insights. The paper will identify the major planning and urban design challenges of megaprojects from legacy, innovation and sustainability perspectives. Lessons drawn from this case study will be relevant for future megaprojects, such as the Brisbane Olympics 2032.

Co Author: Dr Isara Khanjanasthiti

2H.3

Challenging the airport city orthodoxy: Designing Sydney's third city

Mr Philip Graus[1]
[1]UNSW Built Environment

2H: City Design and Morphology, P505, December 10, 2025, 1:30 PM - 3:00 PM

In 2018, the newly established Greater Sydney Commission unveiled a radical new regional plan, A Metropolis of Three Cities. It sought to spatially 'rebalance' Greater Sydney, transforming an increasingly unsustainable imbalance between the globally successful and temperate eastern seaboard and the poorer, hot and dry Western Sydney periphery. The western periphery would become Sydney's 'third city', sustained economically by a long awaited international 24-hour airport and Aerotropolis, and environmentally by a beyond business as usual landscape-led urban design approach, creating a 'cool and green' Western Parkland City.

The Aerotropolis model presents a paradox. Kasarda and Lindsey (2011) described this new urban phenomenon as one of a space of flows, shifting to one of time and cost. At the same time greenfield locations would present an ideal opportunity to develop sustainable urban forms, fully integrated into their surrounds. Others have argued that the model has proved unsustainable, describing the reality of inwardly looking development disconnected from its region, subsuming agricultural areas, marginalising local businesses and the lack of public transport. Similar critiques have emerged in Australia (Searle and O'Conor 2022).

This paper explores the opportunities, challenges and contradictions that have faced the planning and urban design of Sydney's Western Parkland City and Aerotropolis as it has progressed over the past eight years since its inception. The analysis is drawn from PhD interviews with key active participants as well as the plans and policy reviews. The examination unpacks the scalar design process from the macro strategic spatial restructuring of Western Sydney, through the meso landscape-led urban design of the new airport and surrounding Aerotropolis precincts, to the evolving micro scaled master planning and early delivery of the Bradfield City Centre.

The conclusion summarises key findings and possible pathways forward.

Key words: urban design, landscape-led, airport city

2H.4

From CBD to CAD: Melbourne city centre as a model for sustainable urban regeneration

Dr Rajjan Chitrakar[1], Ms Rosalind Herriotts[1], Peter Hogg[1]
[1]Melbourne Polytechnic

2H: City Design and Morphology, P505, December 10, 2025, 1:30 PM - 3:00 PM

Modern cities have undergone radical transformation in the post-war era, characterised by the decline of the public realm in the city centres. Not only have the city centres been impacted by the increasing presence of automobiles, but the modernist approach to urban design has transformed them into empty voids that lack quality and character. Until the recent past, Melbourne represented a typical example of such a transformation. Its city centre suffered a huge setback with a decline in population and economic activities. The city centre had lost the buzz it once had in the late 19th century. Good urban design can mitigate the problem of the decline of the public realm and has a scope to transform city centres into bustling activity nodes by considering how people use urban spaces and interact socially. Jan Gehl, an eminent Danish Architect and Urban Designer, has been at the forefront of this transformation, who was invited to Melbourne in 1993 to redesign its city centre. Gehl led the 'Places for People' initiative and worked with the local council in preparing urban design plans aimed at enhancing the quality of city spaces. Gehl's main contributions during his collaboration with the council include developing the methodology for the Public Space Public Life surveys and co-authoring of the Places for People study reports. Gehl made several key recommendations that turned out to be instrumental in transforming the Melbourne CBD into a vibrant city centre. This transformation, which led to the revival of the public realm, is evident in significant changes made to some major public spaces between 1994 and 2004. His work in Melbourne is significant for setting an early example of sustainable urban regeneration by revitalising its city centre and making the urban renaissance possible.

Keywords: Urban regeneration; revitalisation; city centre; Jan Gehl; Melbourne CBD

2I.1

Designing Futures with Love Workshop: Testing Urban Design Principles for the Olympic City

Ms Stephanie Wyeth[1], **Dr Kali Marnane**[1,2]
[1]The University of Queensland, [2]Urbis

2I: City Cultures and Identity (SIG), P413, December 10, 2025, 1:30 PM - 3:00 PM

As Brisbane prepares to reshape itself around the 2032 Olympic and Paralympic Games, we ask: What kind of city are we designing—and for whom? This workshop invites participants to critically test two contrasting design frameworks: the official Olympic design principles and a set of speculative principles for a city built on love and kindness. Using the Gabba precinct as our design site, we will engage in a hands-on design challenge that explores how these principles produce different spatial, social, and ethical outcomes.

Participants will form teams and respond to two short design provocations, mapping and sketching ideas for how the precinct could look, feel, and function under each framework. We will compare outcomes to examine what is valued, who is centred, and what is made possible or foreclosed in each approach. The session will open space for conversation about legacy, justice, and whether mega-events like the Olympics can serve the everyday city.

Open to designers, planners, researchers, students, and community members, this is a critical and creative workshop that asks: What if love shaped our cities?

The results of this workshop will be used to inform an upcoming publication, and Patternbook No.2 of The Love and Kindness Project.

Inclusion, designing with kindness, urban design, 2032 Brisbane Olympics and Paralympics

Parallel Session 3

3A.1

Urban AI: Rethinking Cities Through the Lens of Responsible AI

Prof Tan Yigitcanlar[1]
[1]QUT

3A: City Governance and Structure Panel, P504, December 11, 2025, 10:30 AM - 12:00 PM

AI is increasingly embedded in urban systems—reshaping how we plan, govern, build, and experience cities. As AI technologies are deployed across infrastructure, mobility, housing, governance, and services, they act not just as tools of efficiency but as forces driving structural and political change. This panel explores the evolving paradigm of Urban AI, focusing on its responsible integration to ensure equity, transparency, accountability, and sustainability. Bringing together ten interdisciplinary scholars, the panel examines AI's influence on urban systems across diverse geographical and sectoral contexts. Topics include quantum AI in urbanism, AIoT in infrastructure, and generative AI in urban planning. Other contributions explore AI-based optimisation of green infrastructure, smart homes, and AI in construction and urban mobility. The panel further considers how local governments can guide responsible AI adoption—through technical design, ethical policy, and inclusive community engagement. It critically addresses risks such as techno-solutionism, surveillance, and algorithmic bias, while highlighting AI's potential to advance climate resilience, inclusivity, and social justice. A key aim is to shape a Responsible Urban AI framework—participatory, context-sensitive, and grounded in democratic governance. Drawing on empirical studies and theory, the session pushes the conversation beyond efficiency, toward inclusive, values-driven innovation. This panel contributes to debates in urban studies, science and technology studies, and digital governance, and invites planners, policymakers, and researchers to co-envision ethical, just, people-centred AI-enabled cities.

Keywords:
Urban AI; Quantum Cities; Algorithmic Governance; Urban Planning; Responsible Innovation

Speakers:
Tan Yigitcanlar (Quantum AI Urbanism)
Tahsin Hossain (Urban Artificial Intelligence of Things)
Abdul Shaamala (AI for Green Urban Infrastructure)
Ke Liu (Generative AI in Urban Planning)
Wenda Li (AI for Smart Homes)
Massimo Regona (AI in the Construction Sector)
Tilly Niklas (AI for Urban Mobility)
Raveena Marasinghe (Local Government Responsible AI Technology)
Anne David (Local Government Responsible AI Policy)
Sajani Senadheera (Serving Communities with Local Government Responsible AI)

3B.1

The absence of strategic governance in creative cities: repositioning artist-centred urban interventions

Louise Rollman[1]

[1]Queensland University of Technology

3B: City Governance and Structure, P514, December 11, 2025, 10:30 AM - 12:00 PM

Despite the recognised benefits of creative city policies for urban revitalisation, the role of artists and cultural institutions in shaping urban identity remains substantially neglected. Urban design approaches, shaped by political and economic imperatives, often reinforce existing development models. Moreover, the cultural sector's precariousness, compounded by limited resources for research, advocacy, and self-representation, entrenches these imbalances, relegating arts and culture to a peripheral role in urban development. This study examines the systemic challenges facing the arts sector in urban development, with Brisbane serving as a compelling exemplar. Drawing on archival research and critical urban theory, it analyses how artist-led practices have historically reimagined urban space through temporary and adaptive interventions, and develops a framework for assessing the long-term impact of cultural policies on creative spaces and communities. Emphasising the vulnerability of cultural infrastructure in a development-driven city, this study challenges the prevailing narrative that positions artists as passive contributors to urban renewal. It prompts discussions on the need for governance frameworks that integrate cultural sustainability into metropolitan planning strategies, as well as policy approaches that move beyond tokenistic inclusion. By advocating for the recognition of artistic spaces as integral to urban identity, this study offers insights for policymakers, urban designers, and cultural practitioners, contributing to the development of more equitable urban futures.

Keywords: Arts and Cultural Sector, Urban Design, Cultural Policy, Strategic Governance, Cultural Sustainability

3B.2

Assessing and classifying publicness: typologies of public-private relationships across public spaces in Wellington and Shanghai

Xiaohui Chen[1]
[1]Victoria University of Wellington

3B: City Governance and Structure, P514, December 11, 2025, 10:30 AM - 12:00 PM

As global urbanisation accelerates, public open spaces (POSs) are increasingly influenced by privatisation processes, which range from private development models to commercial priorities and exclusionary management practices. This raises a critical question: how is publicness reshaped under privatisation, and how can it be systematically assessed across diverse urban contexts? To address this, the study aims to develop a framework for assessing the publicness of public open spaces with private characteristics (POSPCs) and construct a typology that reflects diverse configurations of publicness under varying contexts. Wellington and Shanghai, two cities shaped by distinct governance models and privatisation trajectories, offer a valuable comparative lens to examine how different contexts mediate the transformation of publicness. Grounded in spatial justice theory, publicness is conceptualised as a multi-dimensional concept across ownership, accessibility, management, and use and users. A framework-based observational assessment was conducted across twelve case sites in Wellington and Shanghai, capturing regulatory mechanisms, spatial arrangements, and behavioural patterns. This enabled the development of a comparative typology that reflects both local governance frameworks and lived spatial dynamics. Initial findings suggest that similar levels of publicness may conceal very different management strategies and user experiences. By clarifying the types of publicness in hybrid spaces, this study contributes an analytical tool for diagnosing ambiguity and exclusion in contemporary urban spaces. It also lays the foundation for a subsequent phase focused on user perception and lived experience, with the broader goal of informing inclusive urban policy and design strategies.

Keywords: Publicness, Privatisation, Public Space, Spatial Justice, Typology

3B.3

Zoning as leverage: local government responses to the NSW Transit Oriented Development program

Dr Alistair Sisson[1], Liz Murphy-May[1], Prof Kristian Ruming[1]
[1]Macquarie University

3B: City Governance and Structure, P514, December 11, 2025, 10:30 AM - 12:00 PM

In December 2023 the NSW Government announced plans to rezone several dozen railway and metro station precincts. In the vast majority of cases, uniform planning controls were proposed that would permit six-storey development within 400 metres of a designated station. The housing crisis, it was argued, demanded swift development and implementation of these plans by the state government, sidelining local governments. Another episode in NSW's long history of state vs local government antagonisms over planning, the Transit Oriented Development program prompted a range of local government responses, including the development of alternative masterplans, negotiation of changes to the proposed controls, and, in one case, a legal challenge. This paper discusses and compares those responses, based on interviews with local government planners and analysis of planning documents. It shows how the TOD program functioned as leverage for the state government, forcing local governments into a position from which they could either accept the state's plan or develop an alternative that nonetheless achieved the same potential uplift in density. This dynamic of leverage generated diverse, sometimes divergent strategic responses. While popular debate has polarised between those defending local planning leadership and its critics who see it as barrier to new housing, this paper argues for a more nuanced perspective, attuned to the uneven social, political and economic geographies that shape local planning priorities.

3B.4

From deficit to equity: Preparing for the next wave of growth in Australian cities

Dr Anne Hurni[1]
[1]National Growth Areas Alliance

3B: City Governance and Structure, P514, December 11, 2025, 10:30 AM - 12:00 PM

The National Growth Areas Alliance (NGAA) is the peak advocacy organisation for local governments in the outer-metropolitan growth regions of Australia's capital cities. These 29 growth area councils collectively represent over 5.6 million residents and have absorbed more than 30 per cent of the nation's population growth over the past two decades. Despite this rapid expansion, outer metropolitan growth areas have received only around 15 per cent of Federal infrastructure funding. Greenfield residential developments in these outer metropolitan growth areas are identified to fulfil around two thirds of the next wave of urban growth under the Australian Government's Housing Accord 1.2 million dwelling target. Significant improvements in strategic planning and investment of transport and social infrastructure are urgently needed to address existing deficits and help create thriving, sustainable and liveable communities in growth areas, in line with the goals of the National Urban Policy.

This paper outlines how the NGAA is redefining outer-metropolitan growth areas, highlighting existing disparities in vital transport and social infrastructure and influencing decision making to improve planning and investment for future growth. The paper explains the collaborative approach that underpins NGAA's advocacy, drawing on robust academic research and new analysis of available data, and bringing to the fore the knowledge and expertise of local councils and their engagement with their communities. Applying this approach to the next wave of development, the paper will explore the potential of outer-metropolitan growth areas to contribute to the goal of creating more equitable and sustainable cities.

Keywords
Urban growth; Planning; Infrastructure; Investment; Local Government.

3B.5

Impact of BIDs on place management in a global city-state: emergence of a new governance?

Anupam Yog[1,2]
[1]University of Oxford, [2]XDG Labs

3B: City Governance and Structure, P514, December 11, 2025, 10:30 AM - 12:00 PM

The growth and impact of the Business Improvement District (BID) as a legitimate tool for place management and urban revitalisation in global cities has been getting increasing attention by policymakers in Asia. A pilot BID scheme was introduced in Singapore, a global city-state, in 2017 to test the feasibility of this model's capacity to empower businesses and local communities to pool their resources and co-develop tailor made solutions for their precincts.

This study uses empirical findings from interviews with pilot BID stakeholders in Singapore, and expert observers as well as BID leaders in the US and UK, to understand ways in which the BID is being conceptualised in a global city-state, in conjunction with its global city peers. Analysing strategies being implemented by pilot BID stakeholders through the lens of the 'new
governance' framework, this study argues that Singapore's policymakers privilege the BID due to its structural qualities as an innovative partnership-based place management tool with a sustainable funding model. Furthermore, the findings reveal that BID managers are modelling behaviours conditioned by the pilot's parameters and the city-state's urban dynamics while
grappling with an embedded 'free rider' mindset in their communities that the BID model seeks to mitigate. In doing so, however, BID managers are encountering operational limitations due to the absence of formal legislation, and because the 'imported' nature of the BID model has yet to be assimilated into a vastly different local context. Therefore, this study argues, the BID
as a tool for place management in Singapore is being conceptualised in a technically and creatively bounded way, preventing more relevant, radical and innovative solutions such as the Experience Improvement District (XID) to come to the fore.

Key words: Business Improvement District (BID), Place Management, Global Cities, Asia, Singapore, Global City-State, New Governance, Experience Improvement District (XID)

3C.1

Sensing youth-friendly neighbourhood development in Singapore: A focus on adolescent recreation spaces

Dr Xin Yang[1], Dr Belinda Yuen[1]

[1]Lee Kuan Yew Centre for Innovative Cities, Singapore University of Technology and Design

3C: City Health and Liveability, P512, December 11, 2025, 10:30 AM - 12:00 PM

Children are the future of our society; their development and well-being are key to the planning and design of liveable, resilient cities. Child-friendly cities have gained global attention since 2000, with major research clusters developed in New Zealand, Australia, United States and Nordic countries. Yet, there is a dearth of evidence on child-friendly space/neighbourhood in Singapore planning and literature. Adolescents aged 10-17 are an under-served population in the provision of outdoor recreation space. Meanwhile, there are rising trends of obesity rates and addiction to internet and digital devices among child population (age 6-17) in Singapore. These trends could have far-reaching consequences for child development and long-term health outcomes. Using mixed methods research, this study provides the first baseline evidence on the perceptions and preferences for youth-friendly neighbourhood in Singapore from the perspectives of youth (age 10-17) and built environment professionals. Focusing on adolescent outdoor recreation spaces, this presentation shares the key findings from two of the methods. First, a digital survey with adolescents (N=300), identifying what they do for recreation, where they go, who they interact with, what features they aspire to have for an ideal youth-friendly neighbourhood, and the link to their health and well-being outcomes. Second, a digital survey with built environment professionals (N=60), examining how they approach the concept of child-friendly neighbourhood, especially for adolescent outdoor recreation spaces. These findings are triangulated to develop evidence-based policy implications to guide future planning and design of youth-friendly outdoor recreation spaces in Singapore.

Keywords: youth-friendly neighbourhood, adolescent outdoor recreation spaces, built environment, health and well-being, Singapore

3C.2

Transit hubs as social hubs: embedding healthy ageing in Australasian TOD futures

Jialing Xie[1], Dr Rebecca McLaughlan[1], Dr Ian Woodcock[1]

[1]Sydney School of Architecture, Design and Planning, University of Sydney

3C: City Health and Liveability, P512, December 11, 2025, 10:30 AM - 12:00 PM

As Australian cities pursue transit-oriented development (TOD) to address sustainability and population growth challenges, the health and liveability needs of ageing populations remain largely marginalised within urban design and planning practices. This paper draws on open-ended, semi-structured interviews with planners, urban designers, architects, transport planners, policymakers, and ageing-focused advocates across Australia, New Zealand, the United States, Canada, and Japan to critically examines how older adults' social and spatial needs are (or are not) considered in TOD frameworks. While recent planning reforms increasingly integrate seniors' housing into station precincts, the broader public realm surrounding railway hubs remains underdeveloped, overlooking its significant potential as critical social infrastructure for healthy ageing. Our findings reveal a persistent gap between infrastructure-led TOD projects and the everyday spatial practices of older adults, as current strategies prioritise housing supply, economic returns, and short-term imperatives over long-term social outcomes. Moreover, prevailing approaches often reinforce stereotyped narratives of ageing, framing older adults primarily through physical decline, and fail to engage meaningfully with their agency to sustain diverse spatial and social routines. This paper proposes embedding a value-focused planning approach to realign TOD frameworks with the lived experiences and aspirations of older adults, centring values such as mobility, autonomy, safety, and social participation. It further highlights the need for cross-sectoral collaboration, early involvement of designers, context-sensitive engagement with ageing communities, and continuous post-implementation review to ensure ageing populations are not invisible within the push for denser, more connected cities. As Australasian cities stand at a crossroads, rethinking TODs not simply as transport hubs but as opportunities to build social hubs offers a critical pathway to enabling ageing in place and fostering socially sustainable urban futures for all generations.

Keywords: Transit-Oriented Development (TOD); Healthy Ageing; Social Infrastructure; Value-Focused Planning

3C.3

Heat adaptation planning for aged care facilities in the (sub)tropics: Insights and future directions

Dr Tony Matthews[1], Claudia Baldwin[2], Chris Boulton[3], Silvia Tavares[2]
[1]Griffith University, [2]University of Sunshine Coast, [3]The City Green Lab

3C: City Health and Liveability, P512, December 11, 2025, 10:30 AM - 12:00 PM

With escalating urban heat impacts, adaptation planning is promoted at all government levels and sectors to prepare for warming effects of climate change. A key underpinning principle is that adaptation planning needs to be tailored for local circumstances, yet this can be resource intensive and inefficient. This research aims to address this issue by offering a ten-step model Heat Adaptation Planning process drawing on seven adaptation principles derived from the literature.   Undertaken in collaboration with a major aged care provider, the research focuses on the external environments of aged care facilities to encourage outdoor use by this vulnerable population. Critically, it targets elderly needs for accessibility and security, while also using green infrastructure to mitigate heat. A draft model Heat Adaptation Plan was developed from two case study sites in Australia's sub-tropics, then applied and tested in eight other facilities: some in densely developed sub-tropical communities; others in regional communities in the tropics. As a stand-alone model, it includes monitoring and evaluation recommendations to enable adaptation planning refinement and is suited to integration within broader facility climate adaptation plans. Importantly, this research presents insights for improving thermal comfort for vulnerable people in various institutional settings: health/aged/child care institutions; private accommodation; and public spaces. While green infrastructure supports improved thermal comfort, it also delivers co-benefits for health, safety, access, well-being, environment, and finance. Our process builds capacity and facilitates corporate and individual responsibility for adaptation to climate change, based on application of adaptation planning principles at a site level, to facilitate institutional adoption.

Keywords: Heat; Adaptation; Health; Seniors; Aged Care

3C.4

Transition towards healthcare 'net zero': condition-specific patient travel carbon emission estimations

Dr Jonathan Olsen[1]
[1]The University of Queensland

3C: City Health and Liveability, P512, December 11, 2025, 10:30 AM - 12:00 PM

Introduction
Climate change has been declared a public health emergency due to its significant risks to human health and wellbeing. Achieving net-zero requires coordinated efforts across multiple levels, including patients, frontline services, hospital management, and national and local governments.

Methods
We estimated condition-specific patient travel distances and associated carbon emissions across common chronic diseases in routine NHS care, and to assess the potential carbon savings of modal shifts in transportation. Annual home-to-clinic distances and associated carbon emissions modelled under four transport modes (petrol car, electric car, bus, train) across five timepoints: two years pre-diagnosis, diagnosis year, and two years post-diagnosis. Mean annual travel distances to hospital varied by condition and peaked at diagnosis.

Results
Cancer patients had the highest travel distances. When travel was modelled using electric vehicles, emissions dropped to 3.5 kg for cancer, and below 2.7 kg for all other conditions. Train travel produced similarly low emissions. Reducing petrol car travel from 100% to 60% among cancer patients lowered emissions by 6.6 kg CO_2/patient.

Conclusions
Condition-specific patterns in healthcare-related travel emissions provide actionable insight into decarbonising healthcare. Multisectoral strategies including targeted telemedicine and integrated transport and urban planning are critical to achieving net-zero healthcare while maintaining equitable access to care.

Keywords: Transport; net-zero; sustainability; healthcare delivery; urban planning.

3C.5

Examining ageing and climate resilience within regional and rural local government planning

A/Prof Rachel Winterton[1], Dr Carmela Leone[1], Prof Andrew Butt[2], Prof Lauren Rickards[3]

[1]La Trobe University, [2]RMIT University , [3]La Trobe University

3C: City Health and Liveability, P512, December 11, 2025, 10:30 AM - 12:00 PM

Across international contexts, building capacity for climate resilience and adaptation are key challenges for rural and regional local governments. One tension relates to the ageing demographic profile of rural communities, where environmental, economic and social threats associated with climate change are posing significant challenges to the health, wellbeing and participation of older people, as well as the environmental and economic sustainability of rural communities.

This presentation explores whether and how local government planning for climate change resilience considers rural population ageing, and whether and how ageing strategies consider climate change. Data is drawn from a critical policy analysis of climate, health and ageing-related local government plans and strategies for 48 Victorian rural and regional councils. This data is supplemented by semi-structured interviews with Victorian rural and regional local government employees responsible for planning and program design related to healthy ageing and/or climate adaptation. The aim is to examine how the relationship between healthy ageing and climate resilience is problematised within rural local governments and to identify practices and processes contributing to these representations. In identifying priorities for planning for age-friendly, climate resilient rural and regional communities, the paper debates the conventional discourse about older people as vulnerable to climate change, but also warns against representing them as a mere resource for rural communities.

3D.1

From density to disparity: the paradox of urban intensification in New Zealand's elite school zones

Mr Timothy B. Buckenham[1], Prof Tracey Skelton[1]

[1]University of Otago

3D: City Housing and Inclusion, P421, December 11, 2025, 10:30 AM - 12:00 PM

In Aotearoa New Zealand, school zoning has become a mechanism of spatial injustice. By tying both educational opportunity and broader social advantage to the ability to buy or rent within defined boundaries, the enrolment zones of elite state schools inflate local housing values and embed intergenerational privilege within the urban fabric. This process is reshaping cities, creating exclusionary geographies that concentrate advantage and reinforce patterns of socio-spatial inequality.

Recent urban intensification policies, including the National Policy Statement on Urban Development 2020 and the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021, aim to improve housing affordability and promote more inclusive urban growth. In theory, increasing residential density within high-demand school zones should expand access to both housing and schooling. Yet, this paper finds that in practice, these policies risk doing the opposite.

Drawing on a dual case study of Auckland and Christchurch, this research examines how planning reforms intersect with school zoning in some of New Zealand's most desirable neighbourhoods. Using spatial analysis, community surveys, and key informant interviews, it finds that while intensification will increase housing supply, the resulting dwellings are likely to remain unaffordable to median-income households. Rather than expanding access, intensification is poised to consolidate upper-middle-class occupation within elite school zones, with rising land values and redevelopment pressures displacing lower-income residents and accelerating a process of gentrification by stealth. As these dynamics unfold, an associated increase in affluent in-zone enrolments will reduce school access for out-of-zone students, who are currently the primary source of diversity in these institutions. In this way, market-led intensification shifts from a potential solution into a mechanism for reinforcing spatial injustice, consolidating exclusivity within elite schools and their enrolment zones in ways that continue to privilege a well-off minority at the expense of a poorer majority.

Urban-intensification, School-zoning, Spatial-injustice, Housing-affordability

3D.2

Lived experiences of medium density housing in Tāmaki Makaurau / Auckland

Kathryn Ovenden[1], **Mrs Melanie McKelvie**[1]
[1]Auckland Council

3D: City Housing and Inclusion, P421, December 11, 2025, 10:30 AM - 12:00 PM

Tāmaki Makaurau / Auckland is undergoing significant housing intensification, with medium density housing (MDH) making up an increasing share of consents relative to low density typologies. MDH is a key component in achieving a quality compact approach and must enable positive lived experiences for diverse households to achieve an equitable housing system. Monitoring of the Auckland Unitary Plan identified concerns about whether recently built MDH is supporting a positive lived experience for Auckland's diverse households.

We undertook an innovative, first-of-its-kind mixed-methods study across the Auckland region in 2023 which included identifying new MDH, an online survey (n=1337), analysis of consented plans, and 20 in-home ethnographic interviews.

Overall, the study found MDH better meets the needs of smaller, adult-only households than larger households with children. Several design aspects were found to negatively impact participant's lived experiences, including:
• A lack of storage with many households retrofitting storage solutions.
• An oversupply of bathrooms for many homes, also reducing liveable space and storage opportunities.
• Upper levels of homes were often uncomfortably hot in summer, with over half of participants making changes to manage temperature. Environmental performance affects wellbeing and may become more critical as our climate changes and urban areas intensify.
• A quarter of participants were dissatisfied with visual privacy, often blocking windows, undermining passive surveillance safety benefits.

Addressing these issues requires an advocacy approach to evoke change as many are not directly regulated through legislation. Proposed legislative change will further limit Council's ability to manage liveability matters in an attempt to increase housing supply and affordability by removing "red-tape". Delivering inclusive MDH that supports positive experiences for diverse households requires the sector—from regulators to developers—to prioritise everyday functionality by optimising space, thermal comfort, and privacy.

Medium density housing, Lived experience, Housing design, Auckland

3D.3

Infrastructures of care and housing affordability: The everyday experiences of low-income older women

Farhana Akther[1]
[1]Centre for Urban Research, RMIT University, [2]Jahangirnagar University

3D: City Housing and Inclusion, P421, December 11, 2025, 10:30 AM - 12:00 PM

This research paper explores how low-income older women navigate housing affordability through the lens of infrastructures of care, focusing on government-initiated rental housing projects. Drawing on the infrastructures of Care framework outlined by Power and Mee (2020), this study explores how low-income older women, with support from family and community networks, access secure tenure, negotiate costs and maintain well-being within formal rental housing. As precarious dwellers, older women are more vulnerable because of the ineffective welfare support, socio-economic challenges, poor health conditions, and climate impact and find it challenging to secure adequate housing and care. Based on in-depth semi-structured interviews with four older women residents and housing officials in the 'Residential Rental Flats for Slum Dwellers at Mirpur (RRFSDM)' in Dhaka, Bangladesh, this research finds that intergenerational care and the project's location function as geographies of care that enabling continuity in informal livelihoods and social ties, acting as central to secure tenancy. Furthermore, the role of social values- prioritising families with older parents in beneficiary selection reflects how the infrastructures of care mediate access to state-initiated housing. while residents are often willing to sacrifice other needs for tenure security and a healthier environment, the aspiration of ownership in a affordable and stable payment system persists. By focusing on the intersections of aging, gender, informality and care infrastructures in the Global South, this paper offers a comparative lens for Australasian cities. It contributes to ongoing debates on housing affordability, care-based urban governance and aging-in-place, offering policy insights to cities across Australasia struggling with demographic transitions, care pressure and inclusive housing strategies.

Key Words: Affordability, Infrastructure of care, Older Women, Low-income, Urban Poor, Dhaka, Bangladesh, Australasian cities

3D.4

Urban density and social acceptance: tracking public perceptions and lived realities in Sydney

Dr George Greiss[1]
[1]Western Sydney University

3D: City Housing and Inclusion, P421, December 11, 2025, 10:30 AM - 12:00 PM

The negative perception of high-density developments has deep roots in Sydney's urban history. This perception has contributed to the ongoing struggle for high-density projects to gain social acceptance, often facing strong opposition from community groups. To explore community perceptions of high-density living Greiss (2020) conducted a doctoral research survey of 1,000 residents across Greater Sydney.

The survey revealed widespread concerns: 76.95% of respondents believed that high-density developments lacked adequate open space, 73.43% identified traffic congestion as a major issue, and 71.14% felt that such developments contributed to the overcrowding of suburban areas.
Additional concerns included elevated levels of pollution (59.91%), excessive noise (59.52%), and substandard design quality (57.62%). Respondents further associated high-density areas with transient populations, noting that these were predominantly occupied by renters (56.19%) and frequently located in regions facing significant social challenges (51.52%).

To investigate whether public sentiment has shifted in response to policy changes and the growing housing affordability crisis, a second survey replicating key questions from the original study is now underway. As with the original survey, the research aims not only to capture public perceptions but also to distinguish between perception and lived experience of high-density living. This approach will provide richer insights into whether the concerns are grounded in practical experience or stem from broader societal narratives.

This paper presents a comparative analysis of the two surveys, aiming to assess changes in community attitudes toward apartment living and urban density. The findings contribute new empirical evidence to urban planning discourse, shedding light on the extent to which recent housing pressures and government policy directions have succeeded, or failed, in reshaping public opinion.

3D.5

Local government innovation and housing: ARCHI and adaptive reuse

Dr Todd Denham[1], Dr Louise Dorignon[1]

[1]RMIT University

3D: City Housing and Inclusion, P421, December 11, 2025, 10:30 AM - 12:00 PM

The role of local governments in addressing housing supply is regularly seen through the narrow lens of precinct and land release, planning and building approvals. However, this view limits the agency of local government in addressing housing issues in the broader contexts of urban strategy and conditions. This presentation provides the example of the Adaptive Reuse City Housing Initiative (ARCHI), a City of Adelaide policy program that fosters adaptive reuse of underused commercial buildings within the municipal area. ARCHI responds to multiple strategic aims of the City of Adelaide: increasing inner city population and vitality following the pandemic; providing additional housing to suit the transient population within the area, including students and younger workers; make better use of buildings no longer suited to commercial use; and to address circular economy aims through the retention of building stock, rather than rebuilds. The ARCHI program provides project proponents with a project 'triaging' and approval support service, and grants to undertake feasibility studies and to support developments. The City of Adelaide have also completed audits of building stock to identify appropriate sites, and developed networks of service providers to further assist with adaptive reuse projects. This presentation draws on interviews with representatives from the City of Adelaide and people involved in the ARCHI program for a property development perspective to provide insights into the benefits of this approach to addressing housing issues, as well as opportunities for future iterations of the program and lessons for other local governments.

Key words: housing, adaptive reuse, local government, policy.

3E.1

Rights to Streets: Advancing mobility justice in our communities for all through integrated planning

Dr Lisa Stafford[1], **Dr Hulya Gilbert**[2]
[1]Griffith University, [2]The University of Melbourne

3E: City Movement and Infrastructure Panel, P506a, December 11, 2025, 10:30 AM - 12:00 PM

SDG 11.2 Transport Equity seeks to provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons. However, this goal is far from reality for the groups identified here as "vulnerable". In fact, we argue "vulnerable" is the wrong word to describe diverse pedestrians and passengers. Rather it is the hegemonic exclusionary transportation systems and utilitarian planning thinking which has invisiblised, silenced and placed diverse people in precarious unsafe situations and/or coerced immobility – that is being bounded to home and not making trips at all. All of which has impact on their lives, livelihoods, and wellbeing. The way forward to achieving transport equity and mobility justice for diverse people and communities is to rethink how we consider and plan for mobility and transport in the lives of diverse people and communities – suburbs, towns, cities and regions. This is important given how we plan for movement and place has been fragmented and, in many cases, not done well, if at all. While most high-level strategic plans across Australia consistently identify Integrated Planning as the key pathway to achieving mobility justice and inclusive sustainable cities and communities, this vision waits to be realised at the operational level. In this panel session we provoke thinking and imagination in planning for mobility justice from diverse pedestrian perspectives. This includes how can research progress integrated planning to promote mobility justice for diverse people and communities? How does your own research seek to impact? What lessons can we learn, what opportunities can we seize, and why is inaction not an option if all people and communities are to secure their rights to mobility and place

3F.1

Climate resilient homes, lessons from Canada, Aotearoa New Zealand, and Australia

Andreanne Doyon[1], **A/Prof Trivess Moore**[2], **Dr Judy Bush**[3]

[1]Simon Fraser University, [2]RMIT University, [3]The University of Melbourne

3F: City Nature and Environment, P506, December 11, 2025, 10:30 AM - 12:00 PM

The impacts of climate change on housing and households will worsen over the coming decades. Already there is a growing number of dwellings damaged or destroyed from climate events like floods and fire, and there are liveability issues from extreme weather events such as heatwaves. Climate resilient housing needs to consider not only how, but also where we build and retrofit. There has been limited research to date on how we can achieve climate resilient housing outcomes.

We present three examples of climate resilient housing policies and programs from Canada, Aotearoa New Zealand, and Australia to explore differing approaches to improve housing outcomes in a changing climate. These locations share flood as a major hazard. In the District of Squamish in Canada, a multiplex design competition was held to develop design plans suitable for the District's Flood Plain Management Bylaw. In Aotearoa New Zealand, the Ministry of Business, Innovation and Employment's Resilient Homes flood guide provides building performance advice for renovating, retrofitting, or repairing an existing home, or designing and building a new one. In Australia, the Government of New South Wales's Home Buyback scheme, involves the Reconstruction Authority buying back homes in certain locations where there is a severe risk of future flood damage and a high risk to life and safety for households.

These examples demonstrate that building and planning systems need to work together to develop a range of responses. This includes using best available climate data for policies for new housing, retrofit programs for existing housing, and acknowledging that climate resilient housing is not feasible in some locations, and that we may need to instead retreat or remove homes. There are a range of implications for climate resilient housing, not just in the case study locations, but also for other jurisdictions.

3F.2

Why do coastal cities respond differently to Sea Level Rise?

Suhyun An[1], Dr Aysin Dedekorkut-Howes[2], Dr Michael Howes[2], Dr Margaret Cook[1]
[1]Griffith University, [2]Griffith University

3F: City Nature and Environment, P506, December 11, 2025, 10:30 AM - 12:00 PM

Coastal cities face increasingly exposed to sea level rise (SLR), which intensifies flooding, erosion, and saltwater intrusion. While these challenges are global, adaptation progresses unevenly across countries. This paper examines how and why adaptation policies and planning responses differ across coastal cities and drawing on evidence from previously published work on barriers and drivers to sea level rise adaptation.

The findings reveal that differences in adaptation levels are closely linked to governance and institutional contexts rather than random policy choices. Common barriers include fragmented responsibilities, short political cycles, limited funding, and social resistance, particularly around land-use change and retreat strategies. In contrast, effective adaptation is driven by clear policy direction, consistent funding, long-term planning, and collaborative approaches between government and communities. Non-structural measures such as strategic land-use planning, policy reform, and stakeholder engagement are increasingly recognised, but their success depends on coordination between government levels and securing public support. The study highlights that adapting to sea level rise is fundamentally a political and institutional challenge, not only a technical issue. While wealthier regions often face coordination and social barriers, developing regions struggle with capacity and funding constraints. These shared but uneven challenges highlight the complexity of coastal adaptation. Understanding the underlying governance and social factors provides crucial insights into why adaptation progresses differently across regions and offers practical guidance for improving coastal planning and policy responses.

3F.3

Reframing critical infrastructure: systemic risk assessment and Urban Blue-Green Infrastructure (UGBI) for climate resilience

Dr Leonardo Nogueira de Moraes[1,2], Dr Thami Croeser[1,2], Annette Kroen[1,2], Cintia Dotto[3]
[1]RMIT University, Centre For Urban Research, [2]Natural Hazards Research Australia, [3]City of Melbourne, Climate Change and City Resilience Branch

3F: City Nature and Environment, P506, December 11, 2025, 10:30 AM - 12:00 PM

In a changing climate, Australian major urban areas are faced with complex sets of intersecting natural hazards and environmental challenges—the Millennium Drought's impact on green open spaces highlighting the need to approach climate resilience from a multi-hazard perspective. This calls for multifunctional urban interventions that allow cities to address a combination of issues such as extreme heat, flooding, droughts, the protection of biodiversity and water resources. However, despite playing a significant role in cooling our cities, reducing flood risks and supporting biodiversity, Urban Green-Blue Infrastructure (UGBI) is not formally recognised as critical infrastructure by state and federal levels in Australia. At local level, however, there is growing recognition of the critical role played by initiatives that combine urban greening and Integrated Water Management (IWM) / Water Sensitive Urban Design (WSUD) to support resilience-building and progress towards sustainability goals. This paper examines four IWM/WSUD projects that are representative of various scales in the City of Melbourne (streetscape, pocket park, park and precinct scales) and how they address urban flooding, droughts and heatwaves in integration, while supporting the protection and maintenance of green infrastructure as critical to urban climate resilience and liveability. Using a systemic risk approach, this paper then discusses the criticality of UGBI in light of cascading, compounding and multidimensional disaster impacts, calling for UGBI's formal recognition as critical infrastructure and corresponding investment on the protection, expansion and resilience of urban forests and greening initiatives in urban settings across Australia. This paper also argues that systemic risk assessment can support integration of existing greening and IWM/WSUD initiatives (such as successful state greening programs and those run by water authorities that dispense grants for stormwater harvesting) with those targeting disaster resilience and risk reduction (e.g. Disaster Ready Fund).

Natural Hazards; Climate Change Impacts; Nature-Based Solutions; Urban Forest; Water Sensitive Urban Design

3F.4

Nature strips for biodiversity & climate: what's the public interest?

Sarah Hunter[1]
[1]The University of Melbourne, Faculty of Architecture, Building and Planning

3F: City Nature and Environment, P506, December 11, 2025, 10:30 AM - 12:00 PM

Many local government municipalities in Australia have identified and named the biodiversity crisis and climate emergency as issues of concern, even identifying local impacts. But methods to address these 'wicked' problems in place are often unclear and ultimately insufficient.

In this presentation I will look at nature strip planting and maintenance as an opportunity for biodiversity and climate response. Nature strips represent an almost omnipresent site of public land with the collective potential to seriously impact these environmental issues, especially through the provision of wildlife connectivity and as a force of inspiration. With some outstanding exceptions, many councils feel constrained about the use of nature strips to address the biodiversity and climate crises.

I apply the lens of "the public interest" to explore the constraints and opportunities that apply to indigenous planting in nature strips. "The public interest" is what people are interested in and engage with both positively and negatively in media reporting around nature strip planting. In parallel it is "the common good", what benefits society, the broader environment, and other species and generations.

In response to this exploration I pick up some of the particular points of interest around nature strips for biodiversity and consider what kinds of design principles, proposals, or responses may help to address concerns and to achieve a better outcome 'on the ground'.

This paper relates to a component of my PhD design research by creative project. It draws on my experience inadvertently breaking the law planting indigenous vegetation in the nature strip outside my green wedge farm, and draws on a set of Guidelines for Nature Strip Biodiversity that I developed as a community advocate/activist in my local area in Melbourne's peri-urban fringe.

Nature Strips, Biodiversity, Climate Crisis, Periurban, Landscape Architecture

3F.5

Designing Cities for a Hotter Future: Prototyping a Climate Design Atlas

Dr Daniela Ottmann[1]

[1]Bond University

3F: City Nature and Environment, P506, December 11, 2025, 10:30 AM - 12:00 PM

This talk introduces the Climate Design Atlas QLD (Prototype Study), a research initiative addressing the urgent need for climate-adaptive design in Australia's rapidly warming cities. Focusing on various bio-climatic urban regions the study investigates how urban form, architecture, materials, vegetation, and water features influence microclimates, urban geometries and thermal comfort at the neighbourhood scale.

The project aims to map the current research landscape and identify critical knowledge gaps in how microclimatic forces interact with urban design and architecture. By drawing on the combined expertise of architectural history, climate-responsive design, and computational modelling, the team is exploring key parameters such as urban morphology, built form, material performance, and human comfort.

A key innovation of the study is the integration of future climate data into advanced microclimate simulations. This allows the team to prototype urban and architectural solutions that perform under projected 2050 conditions and beyond, aligning with global net-zero carbon targets of Australia. The built environment remains one of the most significant contributors to climate change, making the development of passive, low-energy design strategies essential for sustainable futures.

This prototype study of insights from Cairns and Gold Coast lays the groundwork for a Climate Design Atlas—offering a valuable tool for architects, planners, policymakers, engineers, and researchers working to design livable cities with low impact in a changing climate.

3G.1

City planning is down for the count. Have city plan numbers ever been right?

Ms Kirstie Allen[1]

[1]University of Sydney

3G: City Economics and Development, P413a, December 11, 2025, 10:30 AM - 12:00 PM

Population, housing and jobs numbers have been a critical feature of city plans since they emerged after World War II. They are central to where and how we plan for homes, industries and infrastructure; setting targets for housing and employment supply; and the rationale for major development decisions.

Using Sydney as a historical case study, it has been rare that the numbers have been right leading to periods of serious housing undersupply and poor infrastructure coordination. These factors fuel public debate about the inability to meet the demand for affordable housing and infrastructure, and the turnover of planning institutions.

This presentation diagnoses the key reasons for shifting numbers and our inability to track these shifts. One reason is that city plans never assess if past supply met supply targets or actual demand. Another is that city plans use static methods to determine demand. However, demand is not static, it is dynamic, and it can be place-based. Yet city plans are based on an expected set of static numbers being achieved at certain point in time. One significant reason why demand can never be static is that migration (particularly temporary migration) dominates population growth in many major cities. These numbers regularly fluctuate because they are subject to federal government policy which is driven by the talent, skills and labour needs of the national economy. Another cause is the unexpected drop in fertility.

This presentation makes the case for improving city planning methods to better inform decisions and respond to the unpredictability of growth pressures through, for example, probabilistic forecasting, risk-based scenarios and adaptive city planning. These methods are not uncommon in other sectors or jurisdictions.

If we don't change the way we plan for growth, we risk making the same mistakes made over the last 75 years.

City planning. Growth pressures.

3G.2

Understanding urban park preferences through choice experiments

Dr Shanaka Herath[1], Dr Thames Kularatne[2]

[1]University of Technology Sydney, [2]Community and Patient Preference Research Pty Ltd

3G: City Economics and Development, P413a, December 11, 2025, 10:30 AM - 12:00 PM

User preferences for public amenities such as urban parks are often assessed using revealed preference methods, grounded in economic theories of consumer behaviour. These approaches, such as the hedonic pricing method, infer preferences by observing actual market behaviour—for example, how property prices reflect proximity to parks. However, this method has limitations in the context of urban parks, as it primarily captures the preferences of nearby residents and property owners, while overlooking the value derived by external users such as visitors and tourists.

This paper outlines the design considerations of an alternative approach: the stated preference framework, specifically choice experiments. This survey-based method enables the estimation of both use and non-use values that various user groups—including residents, workers, business owners, and visitors—assign to different features and potential upgrades in urban parks. The choice experiment process includes questionnaire design, survey implementation, and data analysis using choice modelling techniques.

Understanding urban park preferences is particularly valuable for local governments when planning park upgrades or additions. The insights generated can help quantify the potential community value of proposed changes, supporting more informed and responsive urban planning decisions.

Keywords: Urban Parks; User Preferences; Choice Experiments; Stated Preference Methods; Public Amenity Valuation

3G.3

Could New Towns be part of Australia's National Urban Policy

Emeritus Professor Paul Burton[1]

[1]Griffith University

3G: City Economics and Development, P413a, December 11, 2025, 10:30 AM - 12:00 PM

Just before the end of World War Two, the UK government began a policy of new town development around London to help ease congestion and overcrowding in the capital and introduce a more orderly and dispersed pattern of post-war reconstruction and growth. Eventually, 32 New Towns were designated and now house millions of people. In 2024, the newly elected Labour government announced a policy to identify and deliver the next generation of new towns, and a New Towns Taskforce is currently developing a plan to put these ambitions into practice. They include economic development proposals, ambitious housing delivery targets, environmental sustainability principles and new forms of urban governance.

At the same time, the Australian Government published its National Urban Policy (NUP) that offered '..an agreed vision, goals, and a set of principles to guide implementation of a sustainable future for all'. While few take issue with these principles, the NUP has been criticised for lacking detail on how they might be put into effect on the ground. It is especially lacking in articulating a national settlement strategy that identifies where the Commonwealth, in partnership with the States and Territories, is willing and able to support growth.

This presentation explores whether the UK approach to national urban planning and growth management via a contemporary new towns program might offer lessons for the development of Australia's NUP.

It critically reviews the achievements of previous generations of UK New Towns and the political and institutional factors that might make its transferability and application in Australia more or less easy to achieve.

3G.4

Food diversity and accessibility enabled urban environments for sustainable food consumption: A Brisbane case study

Dr Lijun Summerhayes[1]

[1]Queensland University of Technology

3G: City Economics and Development, P413a, December 11, 2025, 10:30 AM - 12:00 PM

Food overconsumption is being addressed increasingly in the policy agendas of many advanced economies to achieve sustainable consumption. Yet, few studies define and research sustainable food consumption, particularly in understanding socioeconomic and environmental challenges and opportunities in urban environments. This paper evaluates 500 online surveys conducted in Brisbane, Australia, to explore public perceptions of food consumption and the underlying challenges and opportunities. A key finding is the co-existence of over- and under-consumption prevailing over the traditional focus on unhealthy food overconsumption. The challenges of affordability, access to healthy foods, limited retail options, and increasing carbon urban footprints complicate food consumption as a demand issue more conditional to the socio-spatial characteristics of urban environments. Opportunities for sustainable food consumption also arise in high health awareness and willingness to change dietary habits if facilitated by improved urban food provisioning. We argue that food diversity and accessibility-conducive urban environments can help transform food consumption by enabling enhanced access to affordable and nutritious foods, diversified food retail options and variety, and reduced food waste and loss-associated carbon emissions. To do so means improved global equity in food consumption and carbon footprint can optimistically reduce global food demand by 9% and generate better environmental outcomes, positively contributing to the UN's Responsible Consumption (SDG12) and Climate Action (SDG 13) for 2030.

Keywords: food consumption, sustainability, food diversity, food accessibility, climate change

3G.5

Left of Centre: The legacy of Olympic Sites in Western Sydney

Professor Michael Chapman[1], Associate Professor Marissa Lindquist, **Dr Parisa Ziaesaeidi**
[1]WSU

3G: City Economics and Development, P413a, December 11, 2025, 10:30 AM - 12:00 PM

When planning began for the Olympic games in Sydney a large amount was made of the shifting "demographic" centre of Sydney and the desire to accommodate the increasing expansion of Sydney beyond its traditional centre. As a rehabilitation site to the west of the CBD, Homebush was a large band of interconnected mostly industrial suburbs, punctuated by wetlands that had both the available land and scale to accommodate such an ambitious building program. Equally importantly, it was accessible to both eastern and western suburbs through new transit infrastructure. As well as being the centre, Homebush also became the edge of the Olympic intervention, with the village, now Newington further west, and a series of satellite sites further out across Western Sydney, including Liverpool, Bankstown, Blacktown, Penrith and Winsor.

While the eastern suburbs of Sydney have been home to large amounts of cultural and sporting investment in the period since, this paper explores the legacy sites of Western Sydney since the Olympics and how this sequence of projects transformed the surrounding suburbs and accommodated their future growth. As well as the demographic melting of Sydney, the new sporting facilities introduced culturally diverse sporting typologies into this landscape, from Archery, to Softball, Baseball, cycling, equestrian, shooting and even BMX. The paper explores the architecture and urban context of four key sites in their current form, with a focus on Blacktown, Bankstown, Liverpool (Cecil Park) and Penrith (Horseley Park). Each site has settled differently into its surrounding community and sporting context, as well as accommodating the rapid transformation of these expanding suburbs over the last 25 years, that now house some of the most diverse communities in Australia.

3H.1

Public spaces as 'cool' places: implementing a systems design approach for urban heat resilience

A/Prof Nicholas Stevens[1]

[1]Universty of the Sunshine Coast

3H: City Health and Liveability, P505, December 11, 2025, 10:30 AM - 12:00 PM

This presentation outlines the planning and design requirements to establish 'cool refuges' in public open spaces. Cool refuges are purposefully and passively designed public space areas that can provide relief and comfort to the community during hot weather. These locations are important for promoting public health, safety, and well-being in our urban environments and neighbourhoods. They seek to offer community-based resilience to heat and hot weather which could otherwise pose risks to public space users, including vulnerable populations such as the young and elderly.

Incorporated in the development of an infrastructure masterplan, this cooperative project between the University of the Sunshine Coast and Noosa Shire Council presents new approaches to climate resilience. This partnership between research science and infrastructure development is an important transition to the evidence-based integration of urban cooling within and beyond public open spaces.

This case study project details the use of sociotechnical systems (STS) modelling and analysis. The science of STS is used worldwide to improve the adaptive capacity of complex health and safety critical infrastructure systems, making them more resilient. This first-of-its-kind project supports the recognition of public open space as an important health, safety, and liveability asset. The innovation is the ability to design, and redesign, public spaces to optimise their latent adaptive capacity for urban cooling.

The project has established the necessary key indicators which support the data collection to evidence the cooling effect in public open spaces and surrounds. It has detailed the range of STS based design principles, system activities, and required resources that will establish the successful integration of cool refuges. These results are now supported in the holistic redesign of a major public space to improve the liveability, inclusion, and climate resilience for all the community.

3H.2

Heatmapping of city wastewater networks for urban planning purposes for heating & cooling buildings

Nick Meeten[1]
[1]Applied Energy

3H: City Health and Liveability, P505, December 11, 2025, 10:30 AM - 12:00 PM

Heating and cooling accounts for about half of global final energy consumption and is responsible for more than 40% of global energy-related carbon dioxide emissions. There are significant opportunities for cities to become more energy efficient, reduce their carbon emissions and reduce their water consumption, by moving away from fossil fuels and changing how buildings heating and air conditioning systems source thermal energy.

Wastewater temperatures are stable and neutral all year around. Compared to air temperatures, wastewater is warm in winter and cool in summer. These characteristics mean wastewater can be used via heatpumps for heating and/or for cooling of commercial buildings, apartment buildings or district energy schemes.

The thermal characteristics of wastewater offers significant increases in the electrical efficiency of building heating & air conditioning systems. And there are savings in potable water consumption when cooling towers are eliminated.

Using wastewater for building heating and air conditioning systems can allow buildings to stop using fossil fuels to generate heat, offering significant opportunities for cities to reduce their carbon emissions.

To help cities to take advantage of this unused energy source, mapping the thermal capacity within a wastewater network can be done.

Applied Energy have undertaken wastewater network heating/cooling mapping studies for 10 cities within New Zealand.

Wastewater heat recycling is quickly gathering popularity in Europe, with more than 1000 systems estimated to be in operation.

The wastewater network heatmaps are now being used by these cities when considering planning of new developments, refurbishment of existing commercial buildings, energy strategy studies for campuses etc.

This presentation will explain the process used for heatmapping a city wastewater network, show examples of projects from around the world and discuss examples of how some wastewater authorities are now generating a new revenue stream from selling heat from wastewater networks.

Sewer-Thermal, Heatmapping, Decarbonisation, Innovation

3H.3

Utilising systems thinking to explore opportunities and challenges for local government sport and recreation infrastructure

Mr Martin De Lange[1]
[1]University Of The Sunshine Coast

3H: City Health and Liveability, P505, December 11, 2025, 10:30 AM - 12:00 PM

In Australia, local governments provide most sport and recreation infrastructure for the benefit of their community which is seen through improved social, health, economic and environmental outcomes.

Local governments have identified that their network of sport and recreation infrastructure has become increasingly complex to design, plan, fund, manage, deliver and operate due to a range of factors. Additionally, the infrastructure requirements of the 2032 Olympic and Paralympic Games have added additional complexities for local government.

This project uniquely applies sociotechnical systems approaches to understand the challenges and opportunities for local government in their planning and delivery of sport and recreation infrastructure.

Firstly, the range of stakeholders in the system were mapped and analysed in an Actor Map which revealed that local government sits in the middle of the system with a range of international, federal and state influences funneling down to local government, while the community gives input and feedback from the bottom up.

A Work Domain Analysis model was created of the system which presented the array of purposes, measures, activities, process and resources found in the system and how they interact with each other. Key challenges and opportunities identified by local government were then applied to the Actor Map and Work Domain Analysis to identify leverage points and opportunities for optimisation and stakeholder collaboration.

The unique application of sociotechnical systems methods to this context provided evidence and decision making support for local government, whilst supporting valuable theoretical and methodological contributions.

Keywords: sport, infrastructure, planning, local government

3H.4

Sensing heat in the city: how sensor variation can affect data veracity

Professor Jason Byrne[1], Dr Pooja Shah[1]

[1]University Of Tasmania

3H: City Health and Liveability, P505, December 11, 2025, 10:30 AM - 12:00 PM

Urban planners, city managers, and built environment specialists have a growing awareness of heat impacts on cities. Heat is a silent killer, taking more Australian lives than all other natural hazards combined. To date, much of the work on understanding variations in urban heat, who is affected, and how planning might respond has relied on remote sensing data (e.g., satellite or LiDAR). Fewer studies have employed in-situ temperature and relative humidity sensors. Very few studies have sought to quantify variations across metropolitan areas using in-situ sensors. Existing studies have tended to assume that temperature and relative humidity sensors are calibrated by the manufacturer. Or they have used government weather stations to validate temperature and humidity data. But spatial interpolation of government weather station data is prone to error, due to the random spacing of these stations. We undertook controlled chamber calibration followed by in-situ sensor characterisation on a university campus, comparing eight (8) different types of low-cost sensors across nine (9) different sites, as analogues to Local Climate Zones (LCZ). We found notable differences in sensor data, suggesting the reliability of sensors warrants careful scrutiny. Our findings have implications for urban planning and management. Setting up a temperature sensor network across a city is a necessary step for being able to reliably devise interventions for urban cooling (e.g., blue green infrastructure, heat refuge centres) based on baseline spatial variations in heat. Fidelity of sensors matters. We identify the most reliable sensors that are also good value for money.

3I.1

Māori Streets: Indigenous-led street design for just, equitable, and thriving cities

Dr Kimiora Raerino[1], Dr James Berghan, Marjorie Lipsham, Morehu McDonald, Rebecca Kiddle

[1]Te Manawahoukura Rangahau Centre - Te Wānanga O Aotearoa, [2]Ngāti Awa, Ngāti Rangiwewehi, Kōtimana

3I: Reckoning with Settler Colonial Cities, P413, December 11, 2025, 10:30 AM - 12:00 PM

Colonial street grids in Aotearoa New Zealand were never neutral. Imposed through British planning templates, they disrupted Māori spatial practices, dislocated cultural markers, and entrenched a system of urban design that continues to marginalise and alienate Indigenous relationships to land, place and whakapapa. Yet despite their ubiquity, streets remain largely unchallenged as sites of colonial legacy. 'Māori Streets' is a Rangahau project that asks how streetscapes might be reimagined as determined by Māori, for Māori. Grounded in a kaupapa Māori methodology and using a mixed-methods approach - including a national survey and co-design wānanga, our work explored how street design can support whānau wellbeing, cultural expression, social and environmental connection, and the reindigenisation of public space. The project frames the street as a space of social value, where design can foster belonging, identity, safety, and intergenerational connection. It also positions Māori-led design as a form of design sovereignty - reclaiming space through visible and intangible cultural expression, and challenging dominant planning norms through Indigenous leadership. This presentation provides an overview of our project, including insights and co-constructed visualisations that reflect diverse Māori aspirations for the form, function, and feel of streets. It contributes to broader conversations about how urban design can be mobilised to decolonise streets, restore Indigenous authority, and centre cultural values within contemporary city-making. Māori Streets offers both critique and direction: a critique of the colonial foundations that continue to shape how we move, gather, and live, and a pathway forward grounded in Indigenous determination. As cities respond to climate, health, and equity challenges, this work highlights the need to move beyond inclusion toward culturally grounded, relational, and just street environments.

3I.2

Holding on to Tangowahine: Architectural design as resistance, memory, and connection

Ben Siesicki[1,2], Dr James Berghan[1]

[1]Te Wānanga O Aotearoa, [2]Wellington School of Architecture, Te Herenga Waka - Victoria University of Wellington

3I: Reckoning with Settler Colonial Cities, P413, December 11, 2025, 10:30 AM - 12:00 PM

This presentation explores the role of tūrangwaewae (one's place to stand) as a dynamic and deeply personal concept central to Māori identity, wellbeing, and belonging. While tūrangawaewae has often referred to a person's marae (tribal forum for social life), many Māori today find themselves forming new, contemporary connections to place. This research focuses on Tangowahine, a small settlement in Te Tai Tokerau, which has become the tūrangawaewae for four generations of my whānau (family).

Faced with the possibility of losing access to this whenua (land), this project reflects on what this connection has meant and how it might be sustained through design. Grounded in kaupapa Māori research principles, the study combines research-led and design-led methodologies. Semi-structured interviews with whānau members explore how tūrangawaewae is experienced, understood, and imagined, revealing a collective desire to retain connection to Tangowahine for future generations. These insights informed speculative architectural interventions, designed to give form to shared whānau aspirations.

The final design includes a series of connected structures and zones: a whānau pātaka (storehouse) to preserve stories and taonga (treasures); a tūpuna (ancestor) pathway for whānau to walk amongst trees planted for their ancestors; whare puni (sleeping houses) for whānau to stay on the whenua, and central gathering spaces to support whakawhanaungatanga (processes of making connections). While idealistic, these proposals serve as visual and spatial expressions of connection that underscore the significance of place in shaping identity and intergenerational wellbeing.

This project demonstrates that architectural design can be a form of whakapapa (genealogy, lineage) work: an act of remembering, protecting, and projecting identity into the future. It offers a model for how Indigenous-led, place-based design can support ongoing connections to important places and can guide others seeking to sustain connections in their own ways, through creative and collective means.

Keywords: tūrangawaewae, Māori architecture, identity, home

3I.3

Mapping First-Generation Property Formation in New South Wales: Methodological Considerations of Work in Progress

Andrew Leach[1], Fiona Gatt[1], Anna Li[2], Jasper Ludewig[2], Dallas Rogers[4], Samantha Rosner[2], Amelia Thorpe[3], A/Prof Laurence Troy[4]

[1]Queensland University of Technology, [2]University of Technology Sydney, [3]University of New South Wales, [4]University of Sydney

3I: Reckoning with Settler Colonial Cities, P413, December 11, 2025, 10:30 AM - 12:00 PM

This paper reports on a project funded by the Australian Research Council to document the advent of private property in New South Wales. Using such publicly available documents as deeds, land surveys and parish records, the research team seeks to understand the extent and disposition of first generational alienation of private property from the Crown land claim of 1770. After a little more than one year's activity, the team has identified a series of methodological considerations that both confirm and confound assumptions in the project design, and which will in turn shape the balance of the research, its documentation, analysis, and representation. These concern the pattern and pace of property types (including scale and conditions of formation), tactics of property accumulation and consolidation (including familial accumulation and the agency of banks), repetition and variation between lateral state-wide transect samples, constraints around privatised records (from 1964 onwards), and the relationship of formalised private ownership to modes of occupation approximating its effects. The paper reflects on both the progress already made and the work yet necessary (1) to build an informed historical model of the extent and disposition of the formation of private property in NSW from the 1790s to the 1960s; (2) to establish a robust foundation and sustainable system for documenting the complete history of private property formation in the colony and state; (3) to articulate these findings (in the medium term, within the project, and in the long-term, beyond its completion) with established platforms for public consumption; (4) to identify the terms on which this project might extent to other Australian states (or other settler colonial polities); and (5) to position this research within the suite of questions and problems concerning the role of land ownership and dispossession in Australian history.

3I.4

From Erasure to Integration: What Neuroscience Reveals About Cultural Visibility and Belonging in Cities

Mr Michael Major[1]
[1]Institute of Neuroarchitecture

3I: Reckoning with Settler Colonial Cities, P413, December 11, 2025, 10:30 AM - 12:00 PM

This talk examines historical patterns of integration vs. erasure in human settlements, drawing on neuroscience evidence to explain why cultural visibility matters for belonging and memory.

It explores:

•	How different approaches to expansion created different spatial legacies (integration vs. erasure)

•	What global examples (Wales, New Zealand, Sámi peoples) reveal about successful cultural visibility

•	How neuroscience evidence (spatial memory, healing environments, place-based learning) supports these patterns

•	What design principles emerge for creating cities where multiple cultures can coexist

This approach addresses colonial legacies and cultural inclusion through an evidence-based framework that draws on my expertise in neuroarchitecture and spatial cognition, while acknowledging that Indigenous-specific placemaking methodologies require Indigenous partnership and leadership.

3I.5

Yarning on Country: A methodology for reviewing the Aboriginal Land Planning Framework

Dr Nicole McNamara[1], **Miss Sasha Vincent**[1]
[1]Department of Planning, Housing and Infrastructure

3I: Reckoning with Settler Colonial Cities, P413, December 11, 2025, 10:30 AM - 12:00 PM

As some of the largest land holdings in NSW, Aboriginal lands present an opportunity to support and enable significant development that will contribute to the NSW Government's goals of increased housing, employment, environmental conservation, and social infrastructure.

The current Aboriginal Land Planning Framework, including Ch 3 – Aboriginal land of State Environmental Planning Policy (Planning Systems) 2021, was designed to improve planning processes to develop Aboriginal lands. However, the development of these lands has been historically impeded by the complexities of the current planning system, and conservative approaches to land development by decision makers.

The Unity team in Aboriginal Strategy, Policy and Engagement at the Department of Planning, Housing and Infrastructure (the Department) is leading a review of the Aboriginal Land Planning Framework to streamline the use of the framework and meet the land activation aspirations of Aboriginal landowners across the state.

The Department's new approach to consultation meant listening, not rushing and ensuring what was heard was acted upon, closing the loop and demonstrating how feedback would be used. We've spent over 100 hours listening to feedback on the current and future state of the framework. These workshops have taken place online and in-person out on Country.

Consultation has looked like creating a safe space for Aboriginal landowners to yarn in an honest and open way, whilst also to trying to break consultation fatigue and ineffectiveness. It has involved listening, talking through the feedback, and sharing stories and experiences. Sessions focused on 'what is not working' (current state), 'what needs to change and be built on' (future state) and what it means for community to see these changes come to fruition. Safe and authentic community consultation meant taking the time to yarn with our stakeholders, getting to know them and sharing our truths as well.

4A.1

Exposing the true nature of development: An automated property parcel classification approach using deep learning

Dr John Duncan[1,2], Mr Warin Chotirosniramit[1,2], Prof Joe Hurley[3], Prof Marco Amati[3], A/Prof Chayn Sun[3], Prof Sally Thompson[1,2], Dr Bryan Boruff[1,2]
[1]The University of Western Australia, [2]Centre for Water and Spatial Sciences, [3]RMIT

4A: City Economics and Development, P504, December 11, 2025, 1:00 PM - 2:30 PM

Monitoring parcel-level urban development is necessary to characterise how cities change to accommodate growing populations. Multi-temporal datasets of parcel-level development type are required to understand how development affects socio-economic, environmental and climatic outcomes and to guide planning policy and analyses. However, generating consistent classifications of parcel-level development across time and jurisdictions remains challenging. To address this gap, a multi-modal deep learning model is presented classifying parcels by development type using high-resolution urban land cover and built-form data detailing the characteristics of change occurring in our cities.

Here, parcels were classified as single unit, multi-unit, low-rise apartments, cluster dwellings, high-rise apartments, other urban, urban vegetation, rural and bare earth. The deep learning system is based on the SWIN-V2 Transformer architecture, adapted to consider surface cover, built form and spatial metrics encoded as attribute tables associated with each parcel. This model was trained and tested using Nearmap AI data covering five Australian cities and multiple time-points (Perth, Sydney, Melbourne, Brisbane and Adelaide). A ground truth dataset of over 70,000 parcels were labelled across Perth and a Perth-specific model was trained and evaluated. The Perth model was adapted to other Australian cities using a transfer learning workflow and fine-tuning dataset generated by detecting parcels in other cities that were out-of-distribution from the Perth training dataset. The fine-tuned model was evaluated on representative city-specific test datasets. This model was also benchmarked against several different residential and urban typology classification methods presented in the urban morphology literature, revealing insights for using machine learning to map urban development at-scale. The model was applied to every property parcel in the five cities in 2019 and 2023 to generate complete city-wide maps of parcel-level development type. These maps were then used to characterise the nature, extent and spatial patterns of different types of development occurring in Australian cities.

4A.2

Beyond nightlife: mapping Australia's night-time workforce

Dr Anna Edwards[1]
[1]The University of Melbourne

4A: City Economics and Development, P504, December 11, 2025, 1:00 PM - 2:30 PM

Night-time economies are often defined by their cultural and entertainment offerings, but the workers who sustain cities after dark remain overlooked in urban policy and data. This research provides to a clearer picture of who works at night, where they are, and the conditions they face - offering insights for policymakers, planners, and researchers seeking to support a more inclusive and better-governed night-time economy.

Using data from the 2024 Australian Bureau of Statistics Characteristics of Employment Survey, my analysis reveals that 4.1 million Australians - 29% of the workforce - regularly work at night. This figure significantly exceeds previous estimates and highlights the diversity of night workers across multiple industries, including healthcare, professional services, education, and logistics. By broadening the narrative beyond nightlife, this research demonstrates the importance of evidence-based approaches to creating safer, fairer, and more inclusive cities for all who work after dark. The research also examines how night workers are distributed geographically, revealing concentrations in urban cores, as well as regional hotspots such as Mandurah, Warrnambool, and the South Australian Outback. It challenges assumptions about night work by exploring not only industries, occupations, and geographies, but also factors such as job tenure, union membership, and caring responsibilities.

The research calls for further enhancements to temporal data collection and more consistent definitions of night work in Australia. It also highlights the need for improved consideration of night-time urban infrastructure and services, such as transport, childcare, and public safety, to better reflect the needs of night workers.

4A.3

Artificial intelligence, digitalisation and occupational geographies

Dr Todd Denham[1]
[1]RMIT University

4A: City Economics and Development, P504, December 11, 2025, 1:00 PM - 2:30 PM

While there are fears that artificial intelligence and increasing digitalisation will decimate the workforce, recent detailed analysis indicates that these processes will affect occupations differently and both positively and negatively. In recent decades, employment in Australia has grown in occupations that involved cognitive and non-routine tasks, such as professional services and finance, while the contribution of routine work to employment prospects has declined (proportionally). This redistribution of employment by occupation has contributed to the growth of metropolitan centres as the service economy rose to prominence, in Australia and as reflected in the global cities literature. This economic transition, away from employment in manufacturing in particular, has also affected the outer suburban and regional centres that thrived during the mid 20th century in association with Fordist modes of production. As the nature of work and occupations change in response to technological advancements, it is important to consider the distributions of work that are likely to be impacted by the introduction of AI in Australia, and what that means for both the distributions of people and work between urban settlements and within the major cities. Recent occupational analysis in Australia set out occupations that are likely to be affected, including categorisations of the level of routine work and whether it is primarily cognitive or physical in nature; and, detailed analysis of tasks required within occupations to consider exposure to both automation and augmentation. However, analysis to date has not analysed the implications of these focused using a spatial lens. This presentation uses categorisations of occupations affected by AI to analyse the spatial distribution of employment from the 2021 census, to provide insights into the spatial and policy implications of this latest technological change in the ways we work.

4A.4

Restructuring the investment sector in Indonesian Cities during COVID-19 pandemic

Uly Faoziyah[1]
[1]The University of Melbourne

4A: City Economics and Development, P504, December 11, 2025, 1:00 PM - 2:30 PM

The COVID-19 pandemic has transformed investment dynamics throughout Indonesian cities and districts, revealing complex and uneven patterns of sectoral transformation. Each city and regency displays distinct economic structures, sectoral predominance, and reactions to shocks, resulting in a progressively fragmented investment landscape, especially among varying city sizes. Major metropolitan areas frequently exhibit enhanced adaptability and shifts in investment, but smaller cities and rural areas tend to lag, leading to an unclear pattern of sectoral polarization. This study examines the structural reconfiguration of key investment activities— Foreign Direct Investment (FDI) and Domestic Direct Investment (DDI)—during the pandemic across 514 regencies/cities and 23 economic sectors. The analysis used a Dynamic Spatial Durbin Model to capture national trends and varying patterns across different city sizes.

The results demonstrate that structural transformation was more pronounced in FDI than in DDI. FDI underwent a significant transition towards re-industrialization in capital-intensive sectors, especially in Java-Bali, alongside substantial expansion in tertiary industries such as e-commerce, telecommunications, and real estate, sectors that flourished due to rapid digitalization during the pandemic. These shifts were predominantly focused on larger cities with developed infrastructure. Conversely, DDI exhibited no indications of significant restructuring; its investment pattern continued to be focused on the tertiary, secondary, and primary sectors, with little evidence of sectoral reorientation or substantial productivity gains.

This analysis enhances the literature by contesting the traditional perspective that structural economic transformation is only a long-term process driven by capital overaccumulation. It underscores how an external shock, such as a pandemic, can catalyze swift alterations in investment trends, especially in urban economies with specific structural capabilities. The analysis reveals the spatial and sectoral intricacies of investment restructuring, highlighting the necessity for localized policy interventions and providing significant insights for post-pandemic recovery and long-term regional development strategies in Indonesia.

Keywords: structural changes, complexity, FDI, DDI, pandemic

4B.1

Governance, advocacy, and place-based practice in justice focused climate change adaptation in Victoria

Susie Moloney[1], Haydie Gooder[1]
[1]RMIT University

4B: City Governance and Structure, P514, December 11, 2025, 1:00 PM - 2:30 PM

Alongside a period of climate change adaptation policy and strategy development in Victoria, the last five years have also seen a growing focus on climate justice across a range of local, networked and place-based initiatives operating in an environment of scarce resources and receding government support. While there is no one definition of climate justice, it often refers to the uneven and intersectional impacts of climate change, centring the voices and experience of those most at risk, and is 'as concerned with how the work is done, as much as what is done, including who is involved, how and who is accountable' (FCLC 2025, 16). Due to the rapid increase in initiatives often community-led and place-based, there has been little integrated analysis of this changing landscape in Victoria, including identifying the key enablers and barriers for transformative and reflective practice and systems change. This need for a deeper understanding of contemporary climate justice in practice and in diverse contexts has been recognised (Pellerey et al. 2024) alongside a call to rethink climate change adaptation 'success' and 'effectiveness' (Parsons et al. 2024) guided by more holistic and justice centred approaches. In response our research aims to offer clear and useful understandings of climate justice in Victoria. Through a multi-scalar landscape analysis, involving desktop research and in-depth interviews with a range of key actors (government, not-for-profit and community), we are gathering critical insights and developing, among other outputs, a typology of climate justice. This typology as a sensemaking exercise, enhances our understanding of the diverse and innovative ways climate-just adaptation is framed and practiced in Melbourne and Victoria, including identifying justice frameworks, stubborn colonialities, relational patterns, organisational culture shifts, and opportunities and challenges for both policy and practice in activating for inclusive, resilient and sustainable urban futures.

4B.2

The Just City: Plans as symbols of hope

Dr Joanna Ross[1]
[1]Massey University

4B: City Governance and Structure, P514, December 11, 2025, 1:00 PM - 2:30 PM

In a world increasingly marked by division, this paper discusses an opportunities-driven strategic plan that stands out as a symbol of hope – Waikirikiri Ki Tua Future Selwyn. This digital spatial strategy sets out Selwyn District Council's aspiration for equitable outcomes and opportunities for all. It was awarded the NZPI's supreme award for excellence in planning practice in 2025.

This paper describes the application of the Just City - Plan Evaluation Approach (JC-PEA) to Waikirikiri Ki Tua Future Selwyn, to surface and evaluate its embedded ethics using political discourse analysis. Data was generated on the practical reasoning that informed the aims of the strategy, and on the ethics and principles invoked. In order to make evaluative judgments about the plan's content, the criteria included the extent to which specific conceptions of justice and/or the just city principles were invoked in the plan content and whether there was a focus on planning for the least advantaged in the community. One of the key evaluative findings was that just city principles were strongly represented in this strategy. The evaluation also revealed the influence (perhaps subconsciously) of Sen and Nussbaum's capability(ies) approach to justice, with its focus on opportunities. Combined, these findings led to the evaluative judgement that Waikirikiri Ki Tua Future Selwyn presents an example of a strategic plan that embodies a bubbling-up of hope in this divided world.

KEYWORDS: Just City, Political Discourse, Evaluation

4B.3

Planning as institutionalised maladaptation: path dependence as culture

Dr Ian Woodcock[1], **Dr Hulya Gilbert**[2]

[1]University of Sydney, [2]The University of New South Wales

4B: City Governance and Structure, P514, December 11, 2025, 1:00 PM - 2:30 PM

Historians of planning have argued convincingly for a planning history research agenda that moves away from stories about localised case studies and a-theoretical anecdotalism towards more systematic frameworks for analysing how planning works. Under this rubric, several key concepts provide the primary building blocks for historicising planning's dynamics, trajectories, vicissitudes and in particular, planning's inertia. These core concepts include: institutions, path dependence, critical junctures and punctuated equilibrium, incremental and endogenous change.

While this work has enormous potential for opening up the body of planning's operations to more structured theorisation, we argue that in order to make a more meaningful contribution that allows understandings of the past to inform action in the future, additional framing is required to provide ethical orientation.

All planning is directed at future objectives, it is always teleological. While objectives can change, like facts and technologies can, we argue that in order to fully appreciate the ethical dimensions at stake in any subject of planning historicising or futuring, some kind of teleology must be applied.

The period we are now living into and purportedly planning for, the term 'adaptation' has become commonplace. Teleologically, adaptation is primarily aimed at beneficial responses to climate change, a highly intentional activity rather than the random mutations evolutionary theory uses the term for. This kind of adaptation relies on culture rather than biology, social learning and conscious intent rather than genetic transmission. Its opposite is maladaptation, equally conscious cultural processes acting against the purported teleological aim. We argue that planning tends to institutionalise maladaptation through naturalising path dependence and forgetting the critical junctures when maladaptive trajectories were set in motion, often despite significant resistance and evidence of potential ill-effects. The case of car dependence is offered as an exemplar.

KEY WORDS: Planning, maladaptation, path dependence, culture, car dependence

4B.4

Cities of Risk Dissonance: between planning certainty and the unknown

Prof Alan March[1]
[1]The University of Melbourne

4B: City Governance and Structure, P514, December 11, 2025, 1:00 PM - 2:30 PM

The modern planning project remains based on the putative ideal that it is advantageous to establish goals, joined with mechanisms for their achievement. In parallel, in practice and scholarship most are quick to acknowledge the imperfections and naivety of such a simplistic portrayal of urban planning. Indeed, most planning work seeks ways to determine goals and achieve them in complex, multi-layered, divisive, dynamic and contested landscapes of imperfect action. It is argued that using the perspective of risk reveals fundamental mismatches, oversights and tensions within planning systems that represent fundamental dissonance.

The paper sets out a framework of risk as a basis for assessment and treatment. It draws on the diverse work of risk theorists such as Beck, Quarantelli and practices or standards from non-planning realms such as disaster risk reduction and health. The risk framework uses systematic steps to describe fundamental elements of a planning system within wider processes and systems that are the manifestation of human settlements. This is followed by establishing sources of risk: the hazards, possible impacts, current measures taken, associated risks, and elements at risk: understood in terms of possible consequences. The next stage is risk analysis. Risk levels and characteristics are examined to establish priorities for treatment. Risk treatment is the process of selecting and assessing actions to reduce risk levels, followed by monitoring.

The risk framework, applied to the case of Victorian planning, reveals fundamental systemic shortcomings. For example, failure to identify and act to reduce the risks faced by vulnerable elements in settlements reveals a considerable gap between core goals such as social equity and multiple negative consequences. These manifest as spatial differences in access to key services, health outcome, transport opportunities and education outcome. The results provide new insights and critical descriptions of planning that provide new directions for change.

4B.5

Critical Discourses Analysis of the digitalization policies of New Zealand with Bourdieu's social capital

Mrs Atefe Malekkhani[1], Dr Mohsen Mohammadzadeh[1], A/Prof Lee Beattie[1]

[1]University of Auckland

4B: City Governance and Structure, P514, December 11, 2025, 1:00 PM - 2:30 PM

The unprecedented growth of digitalization has sparked interdisciplinary debates about the societal impact of adopting technological innovations. While most discussions have focused on social sustainability and social/digital inclusion, the concept of social capital has been under-explored. This study employs Critical Discourse Analysis (CDA) as a qualitative method and Bourdieu's capital framework to analyze the existing digitalization policies and plans of New Zealand, specifically Digital Strategy for Aotearoa (2021), revealing the ideologies, power dynamics, and inherent inequalities. These plans and policies aim to modernize public services and foster an inclusive digital nation, emphasizing trust, accessibility, and Māori perspectives. By analyzing the language, framing, and underlying ideologies, this research explores the extent to which these policies hinder or leverage social capital in the digital era. The analysis reveals a discourse prioritizing efficiency, innovation, and economic growth, aligning with neo-liberal frameworks that position citizens as passive digital users. The Strategy for a Digital Public Service emphasizes modern, agile services, yet risks sidelining marginalized communities, who face digital exclusion due to socioeconomic barriers. Meanwhile, Towards a Digital Strategy for Aotearoa highlights trust as a cornerstone, integrating Māori values like tikanga and mātauranga to strengthen social cohesion. However, tensions emerge between market-driven goals and equitable access, potentially undermining social capital in vulnerable communities. Drawing on Bourdieu's social capital theory, this study argues for a re-orientation toward participatory, community-driven digital frameworks to enhance trust and equity. This analysis contributes to understanding how digital policies shape social capital in New Zealand, offering insights for policymakers to foster inclusive digital transformation.

4C.1

New parenthood, walking and parental health: Large-scale empirical evidence from Aotearoa New Zealand

Dr Mirjam Schindler[1], Dr Eva Neely[1], A/Prof Emma Power[2]
[1]Te Herenga Waka - Victoria University Of Wellington, [2]Western Sydney University

4C: City Health and Liveability, P512, December 11, 2025, 1:00 PM - 2:30 PM

In this presentation we explore how walking matters to new parents during the deeply affective and vulnerable time of new parenthood, informing the planning of healthier (sub)urban environments for (new) parents. Recognising the pivotal role of (sub)urban environments and mobilities in shaping the relationship people develop with place, this research addresses a critical gap in existing literature on parental health, walking and connection to place.

Walking is a cornerstone of health and wellbeing, yet urban environments often fail to meet the diverse needs of all population groups. Among these, new parents represent a largely overlooked demographic in urban research. Parenthood brings significant lifestyle changes, which can influence walking behaviour, preferences for urban environments, socio-material engagements with place, and health outcomes. Despite the potential importance of walkable environments in supporting parental wellbeing, there is limited large-scale empirical evidence about how new parents experience and engage with their surroundings. This study provides much-needed insights to inform urban planning and health promotion tailored to this population.

We explore how, where, and why new parents walk in Aotearoa (sub)urban areas and how walking matters for parental health and wellbeing. A national mixed-methods online survey among parents of child/ren aged 3 or under living in Aotearoa New Zealand provides empirical evidence on 1) new parents' walking behaviour, 2) their walking experiences and socio-material engagements with place, 3) the role of walking in health and belonging, and 4) how (sub)urban environments can better support parental health.

Participant data and stories emphasise the importance of (sub)urban environments in parental health, highlighting that walking is a slow transformative process that fosters connections with local environments, people, and places. Enhancing walking experiences through care-focused planning can create healthier (sub)urban environments and mobilities, encouraging meaningful connections and providing a supportive foundation for modern parenting.

Healthy cities, parental health, parent-centred urbanism

4C.2

Reframing urban green space access: A spatial-perceptual analysis in Liverpool, Sydney

Miss Yuan Qi[1]

[1]University of Technology Sydney

4C: City Health and Liveability, P512, December 11, 2025, 1:00 PM - 2:30 PM

Urban green spaces play a critical role in promoting physical activity, mental well-being, and social cohesion. However, emerging evidence suggests that spatial proximity alone does not guarantee equitable or meaningful access, particularly in socio-culturally diverse urban contexts. This paper forms part of a broader doctoral investigation into green space accessibility in Liverpool, Sydney, and focuses specifically on the alignment between quantitative modelling and perceptual realities. It addresses two key research questions: (1) What is the gap between spatial and perceived park accessibility? (2) What factors contribute to these disparities? Spatial accessibility is quantified using the Enhanced Two-Step Floating Catchment Area (E2SFCA) method, which integrates service area, park capacity, and network-based distance-decay functions to reflect local mobility realities. Based on modelled outcomes, two parks with contrasting accessibility scores—Woodward Park (highest) and Dunbier Park (lowest)—were selected to enable comparative analysis across different neighbourhood contexts. An anonymous on-site survey was conducted at both parks, adapted from and informed by the NSW Government's Great Places Toolkit (NGGPT). The survey captures perceived access in terms of safety, comfort, inclusion, and emotional engagement. Data collection is currently underway, with planned integration of survey results and spatial scores to evaluate how well existing models reflect lived experiences.

This research contributes a multidimensional framework for understanding park accessibility and critically assesses the field application of NGGPT. Findings will inform more inclusive and community-centred planning approaches that move beyond proximity-based models of park provision.

Keywords: Liverpool, NSW; Urban green space; Park accessibility; Perceived access; Enhanced Two-Step Floating Catchment Area (E2SFCA); Community perception; Inclusive urban planning; Urban policy

4C.3

ChillOUT Hubs and thresholds of public life: loneliness and solitude in Sydney's smart public spaces

Xue (Vera) Xia[1]
[1]University of Sydney

4C: City Health and Liveability, P512, December 11, 2025, 1:00 PM - 2:30 PM

This study uses ChillOUT Hubs – smart street furniture installed in parks, streets, and plazas across Sydney – as a site to investigate young adults' experiences of 'smart' public space and loneliness. It rethinks what public space means in cities shaped by digital and technological systems, using loneliness to explore how these spaces are used and experienced. Rather than framing smart public spaces around social connectivity or productivity, the article explores the emotional rhythms, ambivalent socialities, and affective affordances they offer. It focuses on the threshold between domestic space and public life, where young adults curate solitude as a form of emotional care and spatial agency. Drawing on ten interviews with young adult users of ChillOUT Hubs, the study traces experiences of feeling 'out of place,' digitally mediated withdrawal, and ambivalent belonging. ChillOUT Hubs emerge as hybrid affective infrastructures – supporting solitude without isolation and offering temporary relief from the looping temporalities of home.

Conceptually, the article makes three contributions: it reframes loneliness as a spatial condition for urban studies, introduces 'curated solitude' as an overlooked aspect of urban well-being, and expands the notion of smartness to include emotional temporalities, sensory rebalancing, and infrastructural care. In doing so, it calls for a shift in urban design discourse – from viewing public space as a site of social activation to one that accommodates quietude, withdrawal, and affective nuance.

4C.4

The Rights of Persons with Disabilities in New Zealand Cities

Tricia Austin[1]
[1]University of Auckland

4C: City Health and Liveability, P512, December 11, 2025, 1:00 PM - 2:30 PM

1 in 6 New Zealanders self-identify as having a disability and face barriers in moving around, living, learning and working in urban areas, often poorly designed for disabled people. The disabled population is very diverse: for example there are 180,000 New Zealanders who have low vision or are blind. In addition, Tāngata whaikaha Māori face multi-dimensional impacts of poor accessibility. There are significant economic, social, health, environmental and cultural costs, and human rights are compromised. Climate change will impact urban areas and transport systems in diverse ways. Disabled people are most affected by climate change; in general, they have fewer resources, their dwellings are of lower quality and may be in poor locations for climate impacts. Individuals with mobility, sensory and cognitive limitations face significant challenges.

New Zealand ratified the UN Convention on the Rights of Persons with Disabilities in 2016.   The UN Committee assessed progress in 2022 making 63 Concluding Observations (COs). In 2024 the NZ Cabinet decided not to pursue 16 of these COs. Several remaining COs are directly related to Accessibility (Article 9), Personal Mobility (Article 20) and Living Independently…in the Community (Article 19). Full adoption of these could significantly improve the quality of lived experience. However the Independent Monitoring Mechanism (2024) noted some commitments are weak (not fully responding to the CO and lacking measurable outcomes and timelines); and in some cases rely on "an indirect means of progressing work".

This paper examines some of the challenges in the government's approach including siloed approach to identifying Actions; potential lack of integration of outcomes; reliance on future work programmes; and omission of local councils (responsible for urban, transport and pedestrian planning). Subsequently, local councils have been developing their own disability strategies, design guidance, planning regulations and bylaws, and climate change resilience.

UNCRPD
Disability
Climate Change

4D.1

Affordable alternative homeownership pathways in Aotearoa New Zealand: participant experiences

Dr Simon Opit[1], **Dr James Berghan**[2]
[1]Massey University, [2]Te Wānanga o Aotearoa

4D: City Housing and Inclusion, P421, December 11, 2025, 1:00 PM - 2:30 PM

Homeownership in Aotearoa New Zealand has become increasingly inaccessible due to systemic barriers including prohibitive deposit requirements, restrictive lending practices, and relentless house price inflation. Owner occupation is currently at its lowest level in 70 years, leading many families to lose hope of ever being able to afford to own their home. In response, Affordable Alternative Housing Tenure (AAHT) schemes, including progressive home ownership models (e.g., shared equity and rent-to-buy), have emerged offering affordable alternative homeownership pathways for the intermediate housing market, particularly for low-to-medium income families in high-cost regions. Similarly, papakāinga land trust models also present culturally grounded options for Māori whānau to access affordable homeownership.

While previous research has investigated the feasibility of implementing various AAHT models primarily from a community housing provider (CHP) perspective, there remains a lack of comparative evidence about how these schemes function and are experienced by participating households and whānau. Our presentation will share key findings from recent research examining the housing pathways of AAHT participants from schemes across Aotearoa New Zealand. We present data on the impact of AAHT schemes on their housing security, financial situation, wellbeing, and social inclusion.

Our findings demonstrate the significant potential of AAHT schemes to offer homeownership opportunities, especially for households transitioning from precarious rental situations or facing financial constraints. Study participants frequently reported an increased sense of security and stability and enjoyed living in new, good quality housing. However, several challenges were also identified, including issues with housing-household fit, concerns over fluctuating house prices, slow progress and uncertainty regarding 'staircasing' to full ownership, limitations on ownership rights, and the complexities of navigating the schemes. The findings will be of interest to policymakers, practitioners, and researchers interested in expanding pathways towards secure and affordable homeownership.

Housing affordability; Homeownership; Progressive home ownership; Community housing; Intermediate housing market

4D.2

Would you rent your spare bedroom to help ease the rental crisis?

Dr Lyndall Bryant[1], Ms Joelle Moore[2]
[1]Queensland University of Technology, [2]The University of Queensland

4D: City Housing and Inclusion, P421, December 11, 2025, 1:00 PM - 2:30 PM

Australia's housing crisis is far from over, with new housing projects years away from completion. With over 13 million spare bedrooms across the country, the aim of this research is to explore how older homeowners can be encouraged to help solve this problem. Older Australians are the country's largest group of homeowners, with more than 80% of those aged 65 and over owning their own homes. Research shows that threequarters of these homes contain three or more bedrooms, with 84% of them underused.

Many older homeowners are "asset-rich and cash-poor" with a veil of housing security that renters don't have, yet 25% of pensioners live in poverty. This is where the housing crisis meets the cost-of-living crisis, making it harder for people to age in place.   An opportunity exists to incentivise older homeowners to rent out a spare bedroom, improving access to affordable rental whilst giving cost of living relief to vulnerable older homeowners.

This research presents data gathered from two cohorts: older women who are homeowners, and older women looking to find affordable rental accommodation. It explores the question of "Why don't older homeowners rent out spare bedrooms?" and the corollary to this of "What are the barriers to people in vicarious housing sharing a home with an older homeowner?" We need the answers to both questions to suggest solutions to bring these two vulnerable groups together for the betterment of both, as well as the wider community through taking much needed pressure out of the rental market.

4D.3

Dual disruptors? Exploring Airbnb and student housing coexistence in Kensington and Chippendale's rental markets, Sydney

Parian Hoseini[1]
[1]University of New South Wales

4D: City Housing and Inclusion, P421, December 11, 2025, 1:00 PM - 2:30 PM

Private rental markets in global cities like Sydney are increasingly shaped by overlapping forces of transnational mobility, platform urbanism, and shifting housing governance. Two highly debated phenomena, Airbnb and international higher education (HE) student demand, are especially concentrated in Sydney's eastern and inner suburbs, often coexisting within the same neighbourhoods. While Airbnb's impact on rental affordability has been more extensively examined, much of this work overlooks suburb level and property type variations. In contrast, the role of student renters, particularly in mainstream tenancies and PBSA, has only recently returned to policy and academic focus following post-pandemic rent surges.

This paper draws on findings from a mixed-methods PhD study that investigates the combined impact of Airbnb and student housing on local rental dynamics in two inner-Sydney case studies: Kensington and Chippendale. Both suburbs exhibit significant overlap between short-term rentals and student tenancies, but differ in their planning contexts, housing stock, and institutional presence.

The research integrates 30 years of Rental Bond Board data with spatial analysis on 10 years of Airbnb data (2014–2024) to examine changes in rental stock and price trends at the suburb scale. These are further contextualised through interviews with local government planners, housing researchers, and policy experts.

By focusing on Kensington and Chippendale, the study highlights how the coexistence of Airbnb and student housing contributes to distinct forms of rental market pressure. It demonstrates the importance of disaggregated, suburb-level analysis in understanding urban housing dynamics and provides critical insight into how these dual forces have shaped rental conditions in two of Sydney's most impacted localities.

4D.4

Sharing housing, shifting trajectories: housing, mobility and life course for young women in share housing

Miss Alessandra Buxton[1]

[1]UNSW

4D: City Housing and Inclusion, P421, December 11, 2025, 1:00 PM - 2:30 PM

The share house has long been viewed as a fun but temporary period in a young person's life. A way to 'fly the coop' to seek independence and have a live-in social life before settling down into more independent housing prospects. However, with home ownership at record lows amongst young people and soaring rental prices across Australia, many young people are relying on share housing as one of the few affordable housing options and are living in shared arrangements for longer periods. In Greater Sydney, women aged between 18-34 make up almost 30 percent of the share housing population, with this population growing steadily in the last decade, especially for women aged between 25-34 (ABS, 2021).

Despite this, there is limited research into young women's experiences of share housing and how it may influence their future plans. In addressing this gap, this paper explores the experiences of young single women living in share housing, with a focus on how it may shape future decisions related to housing, migration and family formation. Informed by a life course perspective and rawing on data from a questionnaire of 169 young women and 20 follow-up interviews, the paper examines key themes of affordability, life course transitions and mobility.

4D.5

Home sharing could be a solution to the housing crisis

Dr Anna McKinlay[1], Dr Trudi Flynn[1], Claudia Baldwin[1]
[1]University Of The Sunshine Coast

4D: City Housing and Inclusion, P421, December 11, 2025, 1:00 PM - 2:30 PM

Australia faces a housing crisis with a shortage of affordable rental accommodation. In contrast to this prevailing narrative of housing shortage, Australian statistics also indicate a housing surplus, not measured in terms of dwelling numbers but rather as excess spare rooms in existing owner-occupied homes. A seemingly obvious housing solution is home sharing, in which individuals seeking affordable housing are matched with homeowners with spare bedrooms.

Our research examines this possibility from the perspective of end users. In conjunction with Anglicare Southern Queensland, we conducted a series of rent typology focus groups to explore attitudes about living as a lodger. Additionally, we assessed homeowners' willingness to offer a spare room through a quantitative survey.

We found that the reality of rental housing means many people currently renting would consider it a feasible option, despite concerns over having autonomy of their living space when residing with the owner. However, the results from homeowner participants indicate that only a small proportion (<5%) shows any interest in home sharing.

A significant factor that makes homeowners more willing is if the physical form of the house enables some level of separation. The ability to offer a semi-independent living setup with a separate entry, kitchenette, and bathroom helps alleviate many concerns about privacy and lifestyle disruption. Thus, a key component in addressing Australia's housing crisis is to examine the existing housing stock for the feasibility of retrofitting it as flexible semi-independent living units. This would enable greater home sharing and more successful multigenerational living. The challenge is to support homeowners in making those changes easily, economically, and with as few policy barriers as possible.

4E.1

School runs and soccer practice: The untold story of children's transport

Dr Jennifer Kent[1]
[1]University of Sydney

4E: City Movement and Infrastructure, P506a, December 11, 2025, 1:00 PM - 2:30 PM

School Runs and Soccer Practice:
The Untold Story of Children's Transport

Children's travel patterns are more than just daily routines—they are powerful indicators and drivers of broader urban challenges and opportunities. From public health and transport equity to climate resilience and city liveability, how children move shapes our cities and regions. Yet, despite oft-articulated concern over declining rates of children walking and rising car dependency, comprehensive data on children's mobility in the Australian context is scarce.

This session introduces the Australian School Travel Survey (ASTS) - a landmark, nationally representative dataset capturing the travel behaviours of over 8,000 children across Australia – and invites researchers to engage in a collaborative dialogue on the future of children's mobility in the Australasian context. More specifically, the session will centre on identifying emerging questions, methodological innovations, and cross-sectoral partnerships needed to advance understanding and practice in children's mobility. Using fresh insights into children's school and extra-curricular journeys, participants will be encouraged to reflect on gaps in current knowledge, consider diverse lived experiences of mobility, and envision inclusive, sustainable futures for young people's travel. The session will catalyse a community of inquiry that bridges disciplines and sectors, laying the groundwork for a shared and co-designed research agenda that is responsive to the needs of families, communities, and those with power to initiate change.

4F.1

A systems thinking approach to address end-of-life renewable energy technologies in Australian cities

Dr Anthony Kent[1], Dr Akvan Akvan Gajanayake[2], Dr Chamila Weerathunghe[3], Dr Justyna Dabrowska[4], Prof Usha Iyer-Raniga[2]

[1]Centre for Urban Research, RMIT University, [2]School of Property, Construction and Project Management, RMIT University, [3]School of Social Science, Monash University, [4]School of Management, RMIT University

4F: City Nature and Environment, P506, December 11, 2025, 1:00 PM - 2:30 PM

As Australia moves towards net zero emissions and related renewable energy goals, households are increasingly investing in solar panels and home battery systems. While these technologies provide long-term environmental benefits, their end-of-life (EOL) phase presents a growing challenge. By 2035, over 1 million tonnes of solar panel waste alone are projected nationally, with home batteries adding further complexity. Managing this emerging waste stream is not only a technical issue but also a systems challenge involving household behaviours, legislative frameworks, recycling infrastructure, and broader socio-economic dynamics. A holistic systems approach is needed if waste generated from supporting the net zero transition is to be managed in a sustainable manner. Systems thinking is an appropriate method to approach this problem and may be adopted by government actors to develop optimal intervention strategies. This presentation adopts this approach to explore sustainable pathways for managing EOL solar and battery waste in Australian cities. It draws on findings from two workshops conducted with over 50 Victorian State Government policymakers in 2024 and 2025. The aims of the workshops were to understand major actors and interdependencies influencing disposal of solar panels and batteries from households and optimal intervention strategies that could be implemented. The findings highlight the interventions warranted in multiple subsystems. More specifically, they illustrate the need to integrate circular economy principles, including legislative adjustments, to renewable energy goals and a need for paradigm shifts in public perceptions and attitudes toward sustainable practices. Proposed policy interventions include enhancements in housing regulations, and funding for sustainable innovations and business models to promote sustainability, while implementing extended producer responsibility and product stewardship. Participants also discussed challenges in transitioning from legacy systems and the importance of infrastructure investments. This exploratory research contributes to understanding the complexity of the problem whilst also pointing to areas of priority for action.

4F.2

Case Study Cities: Jaipur and Singapore - Innovative approaches to integrating nature with urban development

Anupam Yog[1,2], **Dr Sam Hayes**[3,4]

[1]XDG Labs, [2]University of Oxford, [3]Cities Research Institute, Griffith University , [4]Bioneering Australia

4F: City Nature and Environment, P506, December 11, 2025, 1:00 PM - 2:30 PM

Exemplars such as Dhun in Jaipur, India – a 500 acre regenerative site that is reimagining how neighbourhoods can be built from the inside out with nature being as a partner in design and development rather than a resource to be consumed, offer a paradigmatic shift in sustainable urban development. In Singapore, Bidadari Park and Estate is similarly an example of how the global city-state has evolved its focus from being a Garden City to a City in Nature, an organising principle as much as it is vision for co-existence in harmony with nature. This presentation will explore several intersecting themes and offer concrete examples to inspire, inform, and invite engagement with communities of practice that are involved in shaping these urban environments. Some of these themes include: The role of green cities and urban nature in enhancing human well-being and resilience, including the benefits of urban greenspaces, community gardens, and urban gardening; Environmental planning and management strategies that prioritize ecological health and climate resilience in urban areas; New methods for urban flora and fauna.

4F.3

Dark Matters: A manifesto for planning healthier nightscapes for people, place, and planet

Dr Clare Mouat[1]

[1]Massey University

4F: City Nature and Environment, P506, December 11, 2025, 1:00 PM - 2:30 PM

The night is a vital but neglected part of how we live, work, play, and govern in our cities and places. Night should be a galvanising feature within theories, plans, and practices for healthier cities. However, daytime is the default context for public agendas, and the security and spectacle of artificial lighting at night (ALAN) steal the limelight when dark falls. When night captures our public, policy, and scholarly notice, we witness a narrow framing of the problem as ALAN that, in turn invites correspondingly narrow and technology-driven "smart-city" and/or "dark sky" solutions. By contrast, two recent commentaries advocate for a new transdisciplinary field of "night studies".

Night studies offer us insights into the complex contradictions of night and dark in Australasian cities. Darkness, sleep, and outer space are final frontiers of extractive capitalism yet also sites of planning for healthier people place and planet. This presentation will showcase results from an ongoing research project into the dark matters of night and sky-sharing: including a systematic literature review exploring scholarly notions of "night studies" and "night science" and juxtaposing how urban dark matters illuminate the blind spots and prospects in planning for healthier nightscapes in practical and theoretical ways.

Exploring a manifesto for dark matters (after Dunn) engages the intangible with the empirical (following Lancione and Calafate-Faria). Accordingly, this paper outlines how we might address our blind spot in planning for the dark in healthier nightscapes by rethinking darkness as a critical infrastructure for the complex entanglements of wellbeing, repair, and care on a ruined planet. It concludes that regenerative planning agendas for healthier nightscapes are vital for pursuing justice, recalibrating diverse ways of knowing and being in kinship and rhythm with our habitats from place to planet, and securing regenerative sustainability and governance for human and non-/more-than-human flourishing.

4F.4

Urban futures in Aotearoa and the emergent potential of a nocturnal commons?

Salene Schloffel-Armstrong[1]

[1]University of Auckland, [2]Lincoln University

4F: City Nature and Environment, P506, December 11, 2025, 1:00 PM - 2:30 PM

Artificial light pollution is increasingly seen as a key issue of the Anthropocene, although one that has partial regulatory and technical solutions (Cieraad & Farnworth, 2023; Smith et al, 2023). This paper engages with the concept of a nocturnal or celestial commons (Rannard, 2024) as a means of protecting night skies from the growing incursion of private interests. Numerous communities across Aotearoa have engaged in processes of certification with NGO DarkSky International, to claim official dark sky place status, that helps ensure specific, grounded protections against artificial light pollution. Yet these processes are largely focused on the certification of smaller communities, in areas with darker skies than those of the cities of Aotearoa. Drawing on interviews with individuals involved in building cases for Dark Sky certification, this research investigates the potential (and limits) of international certification as a political strategy for reducing light pollution in urban space across Aotearoa.

light; commons; pollution; night; dark skies

4G.1

Shifting norms, changing practices: how planning cultures influence community engagement in Danang's waterfront redevelopment

Ms Ngoc Thao Linh Dang[1], Professor Carl Grodach[1], Dr Suzanne Barker[1]
[1]Monash University

4G: City Cultures and Identity, P413a, December 11, 2025, 1:00 PM - 2:30 PM

This paper investigates how planning cultures shape formal participation practices and provoke informal community responses in waterfront redevelopment projects in Danang, Vietnam. Through a comparative case analysis of two significant projects—the DHC-Marina and APEC Sculpture Park—this study illustrates how postcolonial planning cultures lead to conditions of participatory exclusion, inadvertently prompting communities to assert their urban citizenship rights through informal channels outside official governance mechanisms.

Using qualitative methods, including document analysis and semi-structured interviews with urban planners, the findings illuminate how institutional contexts and planners' evolving norms critically determine the inclusivity and effectiveness of participation processes. Drawing on postcolonial urbanism as a broader theoretical framework, the paper explores how colonial legacies and governance ideologies influence institutional norms, values, and behaviours of local planning authorities and planners. Furthermore, it adapts the "right to the city" as a governance-focused framing device to examine precisely how institutional arrangements enable or restrict community engagement in the production of urban space.

The paper contributes to critical debates on postcolonial planning by demonstrating that the suitability and effectiveness of planning systems rely on their cultural context and institutional flexibility, rather than simply on the rationality or formality emphasized in Western-centric planning epistemologies. Furthermore, it establishes empirical research highlighting that informal community engagement should not be viewed as disorder or resistance but should be recognized as a legitimate expression of community agency. This perspective challenges traditional assumptions within the Western-style of a rational and systematic process, particularly adding lessons for Australasian cities, emphasizing that informality has emerged as an alternative way to understanding planning in its broadest sense.

Keywords: Postcolonial urbanism, Planning cultures, Informality, Community Engagement, Waterfront Redevelopment, Public space

4G.2

Spot the asset: a dialectic urban relationship between bill posters, graffiti, and visual culture

Mr Chris Parkinson[1], **Dr Sabina Andron**[1]
[1]University of Melbourne

4G: City Cultures and Identity, P413a, December 11, 2025, 1:00 PM - 2:30 PM

Graffiti and bill posters are prominent visual discourses in the city, activating urban surfaces as locations of public display and address. The resulting surfacescapes are of interest as visual repositories in cities, as well as tellers of urban character, culture, and identity. In this paper, we explore the modes of spatial occupation of graffiti and bill posters through two concepts used in the respective scenes: spot and asset. What makes a surface a good graffiti spot and, conversely, how is a surface transformed into an outdoor advertising asset? Drawing on ethnographies and visual analyses of graffiti and bill postering practices in Melbourne and elsewhere, we put forward a spot-to-asset dialectic of the city by unpacking how surfaces are valorised.

Bill poster spots are moments where capital evidences the production of space, where a surface becomes an asset. A well-executed asset in bill poster parlance relies upon patterns of human movement in urban space; our pauses, routines, and attention spans. Graffiti spots are moments where unruly images evidence the production of space, where a property asset becomes a spot. A well-executed spot in graffiti parlance relies upon patterns of embodied urban knowledge, operating through a matrix of location, scale, risk and intuition. The bill poster enables the continuity of capital in public space through creating assets; while the graffiti writer ruptures capital's claim to legitimacy over shared urban spaces, puncturing the environment with spots of alternative value.

This paper reflects on how urban visual cultures develop surface-based economies of fame, profit, resistance, and extraction, to enrich our conceptual apparatus for understanding cities through their publicly displayed images. We present from within the elliptical contest between the socially-produced spot and the commercially-produced asset, to demonstrate some of the ways in which urban economies, cultures, and identities are negotiated through urban surfaces.

4G.3

Governing Urban AI in New Zealand, Aotearoa: Risk, Trust, and Professional Readiness in Planning

Dr Elham Bahmanteymouri[2], **Dr Mohsen Mohammadzadeh**[1]

[1]University of Auckland, [2]University of Auckland

4G: City Cultures and Identity, P413a, December 11, 2025, 1:00 PM - 2:30 PM

This paper examines risk and trust in urban digital governance with a focus on AI-enabled planning in Aotearoa New Zealand. We employ a mixed-methods design, including questionnaire survey and semi-structured, face-to-face interviews, to investigate how planners, policy makers, and AI service providers across public and private sectors understand (and are preparing for) urban digitalisation. The study investigates familiarity and use of AI tools; data governance (ownership, transparency, and potential misuse of personal information); cybersecurity concerns; and both professional and institutional readiness to adopt AI within planning practice. Participants were recruited through established professional networks, including the New Zealand Planning Institute; the dataset comprises 62 survey responses and 27 interviews. Quantitative measures are combined with thematic analysis to provide the contours of perceived benefits, risks, and governance challenges. The presentation will outline our analytic framework (risk, trust, professional readiness), briefly describe methods and sampling, and synthesise practitioner-oriented implications such as competency requirements for planners, checkpoints in procurement, privacy-by-design and data stewardship protocols, and auditability/documentation expectations for algorithmic tools. We conclude by setting out a context-sensitive pathway for trustworthy, safe, and equitable integration of AI in planning workflows across New Zealand.

4G.4

Framing the future: A visual ethnography of construction fences in Brisbane City

Dr Joanne Choueiri[1], **Dr Kirsty Volz**[1]
[1]Queensland University of Technology

4G: City Cultures and Identity, P413a, December 11, 2025, 1:00 PM - 2:30 PM

This paper examines imagery applied to the street-facing surface of construction fences in central Brisbane as spatial artefacts that mediate urban transformation while projecting aspirational visions for the future. Though typically considered temporary and peripheral, these fences occupy a significant visual and territorial role in the cityscape. They create visual boundaries, demarcate sites of capital investment, and are often embedded with marketing narratives that commodify the city's future. Unlike other signage or billboards in the city, the promotional imagery affixed to construction fences projects romanticised visions for the sites they enclose and the city at large.

Building on Walter Benjamin's concept of the wish image (1999[1930]), we argue that these fences reflect the city's imagined future, offering curated architectural renders and slogans to create utopian ideals of prosperity. Inspired by Andrea Brighenti's framework on urban walls (2009), we examine these fences through materiality, territoriality, visibility, rhythmicality, and uses. Using visual ethnography to analyse fences through field photography and street-level imagery sourced from past and present Google Street View archives, the study reveals the multifaceted ways of reading these fences that contribute to the temporal aesthetics of the streetscape.

We argue that these fences become contested terrains where developers' visions, architectural ideals, and civic identity combine to reflect broader socio-economic shifts, state-sponsored aspirations, and wish images. This research contributes to urban studies, visual culture, and critical geography, revealing how these ephemeral fences influence visual governance by shaping public perceptions of development and reinforcing narratives about who the city is actually for.

Keywords: wish images, Walter Benjamin, construction fences, visual ethnography, visual governance

4G.5

Risk perception and urban policy: bridging community knowledge and governance frameworks

Dr Francesca Perugia[1,2], Justin Dandy[2,3], Naomi Godden[2,3]

[1]School of Design and Built Environment, Curtin University, [2]Centre for People, Place and Planet, [3]School of Arts and Humanities, Edith Cowan University

4G: City Cultures and Identity, P413a, December 11, 2025, 1:00 PM - 2:30 PM

Australasian cities are shaped by diverse cultural narratives that influence urban planning, risk governance, and environmental adaptation. This paper draws from findings related to the Responding to Natural Disaster Risk: Evaluating Vulnerability, Awareness, and Liveability (REVAL) project. The project explored community awareness of and responses to extreme heat, bushfire, storm, and flooding risks while identifying the specific hazard communication, preparedness, and response needs of local residents, including Culturally and Linguistically Diverse (CaLD) and Aboriginal communities, across nine Local Government Areas (LGAs) in Western Australia.

This paper examines the alignment between resident perceptions of hazard and risk and official state and local government frameworks and how this dynamic informs broader urban policies.

Drawing specifically on the engagement with residents and local Culturally and Linguistically Diverse (CaLD) communities, this paper highlights how risk assessments often overlook the lived experiences of these groups. While technical risk definitions emphasise hazard, exposure, and vulnerability, community narratives reveal a disjunction between institutional frameworks and the realities of everyday urban life. This paper critically reflects on the alignment between risk perception and policy inclusion, examining how multicultural narratives compare to urban governance and emergency preparedness. It advocates for integrated frameworks that move beyond technical assessments to incorporate local knowledge, ensuring that risk mitigation strategies reflect the lived realities of diverse urban populations. By bridging community engagement with formal governance structures, this study underscores the need for pathways that facilitate more inclusive policy tools, equitable access to resilience resources, and culturally responsive environmental adaptation in cities.

Risk perception, Risk management, Community resilience, CaLD migrants

4H.1

Children's access to public open space in high-density urban contexts

Ms Raisa Sultana[1]
[1]The University of Melbourne

4H: City Design and Morphology, P505, December 11, 2025, 1:00 PM - 2:30 PM

In dense urban environments, scarce land resources and competing spatial demands often result in limited public open spaces, restricting children's access to these areas. This research adopts an exploratory approach to examine how children navigate their built environment and the influence of urban form elements on their accessibility. By integrating affordance theory and assemblage thinking, the research aims to comprehensively understand the complex interactions between spatial characteristics, urban form, and access. Through case studies in Dhaka and Bangkok, and employing observation and mapping techniques, this research seeks to contribute to the discourse on urban planning, advocating for equitable access to public open spaces for all children.

4H.2

Boring Places, Big Potential: Rethinking Car Parks as Social Infrastructure in Australian Planning

Dr Suzanne Barker[1,2], **Mr Will Fooks**[2]
[1]Monash University, [2]Eukai -Transport Advisory

4H: City Design and Morphology, P505, December 11, 2025, 1:00 PM - 2:30 PM

Car parks and transport touch points are among the most extensive and regulated environments in Australian cities. In Victoria, most planning schemes prescribe minimum parking requirements across land uses, producing vast landscapes of asphalt that dominate suburban life. While debates about parking have largely focused on supply, housing costs, or vehicle throughput, current discussions about reform driven by the housing crisis and efforts to enable more flexible development, open space for a different conversation: how might such "boring places" be reconceptualised as part of the civic infrastructure of cities?

Drawing on planning theory debates about conviviality, encounter, and social infrastructure, this presentation develops a framework for rethinking parking landscapes. These environments already host everyday sociability, from neighbours greeting each other in shopping centre forecourts to parents lingering at school pick-up zones. Yet they are rarely recognised in planning scholarship as spaces of encounter, and are often experienced as hostile or unsafe.

We advance three propositions: latent conviviality, that such spaces already support forms of interaction; designed conviviality, that their civic value can be amplified through modest design and management interventions that foreground safety as well as sociability; and convivial governance, that planning and engineering standards should embed social outcomes alongside efficiency.

By reframing parking landscapes in this way, we argue that parking reform debates in the context of the housing crisis should not only be about numbers but also about purpose. Rethinking parking as latent social infrastructure opens new pathways for policy and design, recognising that in a car-dependent city, even the most overlooked environments can matter for connection and community.

4H.3

Beyond wayfinding: Designing cities that feel intuitive, not just legible

Mr Michael Major[1]
[1]Institute of Neuroarchitecture

4H: City Design and Morphology, P505, December 11, 2025, 1:00 PM - 2:30 PM

Wayfinding systems are essential - but what if a city could be shaped so intuitively that formal signage becomes a last resort, not a first requirement?

This paper reframes wayfinding as an emotional and cognitive experience, not merely a navigational one. Through the lens of neuroarchitecture, it explores how spatial design can tap into our primal behaviours - orientation through landmarks, movement via visual flow, and decision-making through sensory cues - to create cities that 'make sense' to the brain.

Traditional wayfinding assumes the user is a problem-solver. Yet under cognitive stress or in unfamiliar territory, our brains revert to instinctive patterns of behaviour. Poorly legible spaces increase cognitive load, reduce dwell time, and discourage exploration. In contrast, intuitive environments extend engagement, enhance commercial performance, and improve emotional attachment to place.

Drawing on neuroscience and behavioural psychology, this presentation presents a set of neuroarchitectural principles that underpin intuitive urban environments. These include the sequencing of spatial reveals, the use of orientation markers that feel culturally embedded, and the reduction of friction in navigation through subconscious cues.

The paper proposes a planning approach where wayfinding is not an afterthought, but an embedded design logic - one that respects the natural behaviours of the human brain and leverages them for better performance outcomes.

For precinct designers, transport authorities, and developers, this opens new potential for creating places that are not only accessible - but irresistible.

Keywords: intuitive wayfinding, spatial cognition, neuroarchitecture, navigation behaviour, city morphology

4H.4

Design innovations in regeneration: Priority Development Areas projects in Qld vs European case studies

Dr Sebastien Darchen[1], Dr Mubeen Ahmad[1]
[1]The University of Queensland

4H: City Design and Morphology, P505, December 11, 2025, 1:00 PM - 2:30 PM

Urban land available for urban regeneration offers the opportunity to innovate and to propose solutions to current urban challenges such as climate change adaptation, the provision of affordable housing, etc. However, in most cases in Australia, urban regeneration projects present limited design innovations and rather promote the status quo.

Innovation in urban design as defined by Forsyth (2007) relates to 6 domains: 1. Style, 2. Project types, 3. Process and engagement, 4. Formal/functional analysis and representation, 5. Ethical, social, and cultural critiques and evaluations, 6. Innovations in collaboration with other fields, a broad area of collaborative and interdisciplinary work. This paper focuses on the analysis of points 3 and 6. for selected regeneration projects.

The paper analyses the design outcomes of selected Priority Development Areas (PDAs) projects in Queensland and presents innovative regeneration processes from European case studies to identify the factors that can trigger design innovations. The analysis focuses on the interaction between different urban stakeholders during the conceptualisation phase of projects.

By identifying some of the obstacles hindering the emergence of design innovations for PDA projects in Queensland, the paper proposes points for possible improvements based on the lessons learned from European case studies. The paper gives an overview of the outcomes of PDA projects in Queensland and suggests avenues for improvement in relation to the governance of projects.

Building edge design that fosters memorable and meaningful urban legacies in subtropical cities

Ms Olivia Crawford[1], A/Prof Mirko Guaralda[1], Dr Sarah Briant[1]
[1]Queensland University of Technology

4H: City Design and Morphology, P505, December 11, 2025, 1:00 PM - 2:30 PM

86.3% of Australians reside in cities, equating to an urban population of 26.77 million. As urban growth accelerates, so will urban development, which often prioritises commercial outcomes over buildings that respond to climatic and socio-cultural needs. In subtropical contexts, buildings can engage with outdoor environments supporting meaningful human activities at their ground plane edges, to achieve positive climatic, social and cultural outcomes. This paper explores architecture of building edges and immediately adjacent public space, focusing on resilient human-centric design outcomes in subtropical cities.

The paper reviews established theories on urban morphology, place attachment, and subtropical architecture, emphasising human and climate responsive design. Built forms and typologies of vibrant urban precincts are analysed and categorised, focusing on the blurred transition zones between private and public spaces. Design processes and governance of these zones is explored. Brisbane City Council planning documents, and associated aspirational design guidelines are reviewed for how an implementation strategy could yet be realised.

Key findings indicate successful subtropical architecture hinges on well-designed building edge transition zones. However, current design strategies are fragmented and poorly communicated among planners, architects, developers, and governments. The research underscores the necessity of a comprehensive Subtropical Building Edge Design Framework to guide multidisciplinary approaches and legislation to these transition zones, ensuring cohesive and effective design solutions.

Such a framework is vital for designers and stakeholders to appreciate the significance of building edge design in creating vibrant urban environments. As Brisbane anticipates the 2032 Olympics, the immediacy of implementing this framework is paramount to accommodate the city's growing diverse population. The legacy of Brisbane's World Expo '88 demonstrates the potential for mega-events to catalyse positive urban transformations, reinforcing the need for thoughtful and integrated design strategies in flourishing subtropical cities in Australasia and worldwide.

KEYWORDS:
Building edges, subtropical, cities, responsive architecture

4I.1

AI for urban planning and governance

Scientia Prof Chris Pettit[1], **Prof Bill Randolph**[1], **Ryan Van Den Nouwelant**[2], **Dr Charlie Gillon**[1], **Dr Sophia Maalsen**[3], **Professor Pauline McGuirk**[4], **Prof Robyn Dowling**[3], **Dr Claire Daniel**[3]

[1]City Futures Research Centre, UNSW Sydney, [2]School of Built Environment, UNSW Sydney, [3]School of Architecture, Design and Planning, The University of Sydney , [4]Australian Centre for Culture, Environment, Society and Space, University of Wollongong

4I: City Governance and Structure Panel, P413, December 11, 2025, 1:00 PM - 2:30 PM

This panel provides a forum to discuss emergent research and emerging questions around the development, adoption and use of AI for urban planning and urban governance in Australia. We encourage SOAC attendees working in/interested in urban issues and AI to participate, with early career academics and PhD students particularly encouraged.

Australian cities and regions are currently adopting and integrating AI in planning and governance processes, systems and decision-making, and this nascent real-world adoption is generating significant research interest from Australian urban planning and policy academics – such as that reflected in parallel paper sessions at this conference on responsible AI. Our own research, supported by ARC Discovery projects (Pettit et al, 'AI cities and development assessment: developing trustworthy support tools'; Maalsen et al, 'Deep learning: Governing the city in the age of artificial intelligence) explores risks, challenges and opportunities AI adoption poses for Australian cities and their governance.

In this panel session, the two ARC research teams will share project findings, provide a forum for academics with shared research interests, and propose next steps to progress shared research directions in Australian urban research.

The panel session has a three-part structure:
1)   Setting the scene and provocations for AI and the urban: A panel of researchers from the two ARC Discovery projects will introduce their projects and provide an outline of the state of AI, planning and urban governance research through a series of provocations, including autonomy, transparency, and trust (30 mins)
2)   Panel discussion and Q & A: Guided by the provocations, a facilitated panel discussion to raise questions and propose ideas (30 mins)
3)   Discussion, future research priorities and next steps (20 mins)

Our intended outcome is the formation of a network of urban researchers around this research area in Australia, towards future collaboration and partnerships.

Panellists
Prof Chris Pettit, UNSW
Prof Bill Randolph, UNSW
Dr Ryan van der Nouwelant, UNSW
Dr Charlie Gillon, UNSW
Dr Sophia Maalsen, The University of Sydney
Prof Pauline McGuirk, University of Wollongong
Prof Robyn Dowling, The University of Sydney
Dr Claire Daniel, The University of Sydney

Parallel Session 5

5A.1

The geography of creative clusters: housing and work patterns of home-located creatives in Melbourne, Australia

Daniel Vasconcelos[1]
[1]Faculty of Architecture, Building and Planning, The University of Melbourne

5A: City Economics and Development, P504, December 11, 2025, 3:00 PM - 4:30 PM

The COVID-19 pandemic has brought to light how new forms of work, such as remote and home-located work (HLW), are reshaping whole cities and regions. Yet, despite much commentary about HLW's impact on productivity or personal health, the academic literature hasn't sufficiently appraised the links between new geographies of creative work and housing. Without a clear understanding of the multifaceted geography of HLW and its techno-creative infrastructures, encompassing the spaces at the interface of work, home, and other third places, models of the 'creative cluster' may overlook the driving forces behind its reproduction. In fact, the creative cluster literature inherits a conceptual frame from traditional clustering theory, thus disregarding the specificities of post-industrial, creative work. While most studies focus on firm-level analyses and theorisations of the creative cluster, empirical evidence suggests that, at the individual level, other socio-spatial dynamics may take place. This conceptual and empirical inaccuracy may lead to misguided policy implications.

Through a multi-scalar, mixed-methods approach – comprising spatial-statistical analysis of Census data and semi-ethnographic 'home tours' of 30 home-located artists and designers –, this presentation inquiries about the clustering dynamics of home-located creative work and their intermingling with housing patterns and work practices in Melbourne, Australia. Both quantitative and qualitative evidence collected between 2023 and 2024 show that home-located creatives still concentrate in inner suburbs, which stems from a convergent residential differentiation related to their creative production, consumption and social ties. From a human rather than firm-level analysis, I argue that this city-level spatiality is linked to multilocational work and the flexible-rigid paradox of techno-creative infrastructures. This is a fundamental characteristic of post-industrial, creative work that implies the formation of probability clusters, which adds yet another degree of complexity to the geography of creativity in metropolitan areas.

Keywords: creative cluster; home-located work; clustering dynamics; creative industries; housing

5A.3

Commodifying environmental solutions: a critical examination of Circular Economy through Political Discourse Theory

Dr Mohsen Mohammadzadeh[1], **Dr Elham Bahmanteymouri**[1]
[1]The University of Auckland

5A: City Economics and Development, P504, December 11, 2025, 3:00 PM - 4:30 PM

The Circular Economy (CE) has gained prominence as a framework for addressing environmental challenges, praised for reducing waste, improving resource efficiency, and fostering economic growth. However, its integration into planning and policymaking often aligns with the hegemonic discourse of climate capitalism, where environmental issues are commodified to sustain the capitalist status quo. This article critically investigates CE as an "empty signifier," using Political Discourse Theory (PDT) alongside Marxian and Lacanian perspectives to deconstruct its ideological function and practical consequences.

Through analysis of global policy frameworks, urban strategies, and institutional narratives, the article reveals that CE is not a neutral or apolitical tool but one deeply embedded in neoliberal logics. Market-oriented solutions are frequently prioritised, sidelining transformative environmental action and depoliticising ecological crises. The theoretical framework combines Marx's critique of commodification with Lacan's concepts of desire and surplus enjoyment to show how CE not only generates economic value but also sustains ideological fantasies of progress.

CE's appeal lies in its promise of sustainability without requiring structural change. By turning waste into commodities and presenting this as innovation, CE offers planners and policymakers a sense of professional virtue and political legitimacy. Yet this conceals the systemic contradictions of climate capitalism.

The article interrogates popular concepts like circular cities and urban circularity, arguing that these often serve technocratic agendas focused on economic competitiveness and city branding. Case studies show that aspirations for circularity frequently depend on unsustainable practices.

The findings call for a critical reassessment of CE's role in planning and its complicity with climate capitalism. While CE has potential as a conceptual tool, its current application risks reinforcing, rather than resolving, environmental crises. This research contributes to critical scholarship on environmental discourse, advocating for alternatives that confront the structural roots of ecological degradation.

5A.4

Exploring planning institutions' perspective on social inclusion in the context of Delhi's urban villages

Ms Pranavi Kasula[1]
[1]Griffith University

5A: City Economics and Development, P504, December 11, 2025, 3:00 PM - 4:30 PM

Delhi's urban development is defined by fragmented governance and overlapping mandates from several planning authorities, leading to ineffective coordination and legal ambiguity. These institutional constraints along with inconsistent planning have exacerbated existing socio-spatial inequalities. While social inclusion is increasingly topical in urban planning discourse, its practical application remains limited to infrastructure provision, failing to address systemic inequality. Urban villages, formerly rural settlements, are urban enclaves that house low-income residents and support city's local economy. Despite their socio-economic significance, many are overlooked from Delhi's larger planning framework. Outdated and exclusive planning strategies, and lack of institutional recognition, have contributed to unregulated growth, inadequate infrastructure, and the continuous exclusion from urban planning. The study examines into how Delhi's planning bodies, like the Delhi Development Authority (DDA) and Municipal Corporation of Delhi (MCD), conceptualise and implement social inclusion in Delhi's urban development. Using a qualitative technique, the study conducts semi-structured interviews with these stakeholders to investigate the fundamental principles, and planning priorities. The data collected were thematically coded to identify recurring themes and sub-themes pertaining to the research objective. Findings indicate that influence of top-down planning, lack of stakeholder participation, and obsolete regulatory frameworks are limiting the adoption of inclusive approaches. The lack of formal training of urban planners further hinders the inclusive planning and implementation. The study necessitates institutional reform through active and contextually responsive urban planning. Urban villages must be integrated into the city's planning through specialised strategies like Village Development Plans, developed in collaboration with residents. The study recommends clearer institutional roles, improved coordination between the planning agencies, and capacity training for those involved in Delhi's development. Incorporating inclusive principles, decentralising decision-making, and considering neglected settlements like urban villages are critical for fostering socially cohesive urban development.
Keywords: Social Inclusion; Urban Villages; Urban Governance; Policy Reforms; Inclusive Planning

5B.1

Security as place-making: reframing resilience through situated urban logics

Codee Ludbey[1], Dr Gabriela Quintana Vigiola[1]

[1]University of Technology Sydney

5B: City Governance and Structure, P514, December 11, 2025, 3:00 PM - 4:30 PM

Security has become an important force shaping the urban public realm. No longer confined to policing or surveillance, security interventions—bollards, cameras, lighting, and regulatory codes—are now deeply embedded in the spatial logics of place-making. This paper examines how security functions as a form of spatial governance that co-produces meaning, behaviour, and access in public spaces. Through a systematic critical literature review on risk, resilience, urban security, and place theory, we argue that contemporary security practices actively shape the character and use of place—often in tension with democratic ideals of inclusion, openness, and spontaneity.

The rise of 'resilience' as a policy metaphor has legitimised ongoing securitisation in the name of preparedness, diffusing risk management logics into urban design, development processes, and placemaking activities. Yet these interventions are rarely neutral. Their material and symbolic presence can exclude marginalised groups, erode publicness, and undermine the very vibrancy they claim to protect. Drawing on a broad base of literature, this paper highlights the paradox of securing places against improbable risks while generating everyday discomfort and spatial inequality.

We argue for a reframing: treating security not merely as threat mitigation, but as an integrated design and governance practice that must be subject to the same scrutiny as any place-making intervention. This requires participatory approaches, sensitivity to context, and accountability to those who inhabit and shape public life. In doing so, urban security can move from a logic of fortification to one of facilitation—supporting safety without compromising the social, emotional, and cultural qualities of place.

By bringing together security studies and urban design theory, this paper opens new ground for thinking about how we secure the public realm and places in general—offering a framework that balances resilience with rights, protection with presence, and control with community.

5B.2

The urban and infrastructure resilience nexus: towards a critical research agenda

Prof Sarah Bell[1], **Dr Crystal Legacy**[1], Dr Imogen Carr[1]

[1]The University of Melbourne

5B: City Governance and Structure, P514, December 11, 2025, 3:00 PM - 4:30 PM

Urban resilience scholarship currently views infrastructure resilience and community resilience as distinct and sometimes conflicting domains using different expertise, frameworks and methods. Infrastructure resilience is the concern of engineers, state planners and technical experts, while community resilience is the realm of local planners, community organisers, social scientists and local knowledge-holders (Aldrich and Meyer, 2015). Community engagement lies at the intersection of these two domains and is concerned with the material outcomes of infrastructure resilience and the social outcomes generated by community resilience. Both domains are vital to the planning of and building for resilient critical infrastructure to safeguard places from the devasting physical, social and economic impacts of acute shocks (e.g., bushfires, floods and financial crises) and chronic stresses (e.g., housing unaffordability and climate change) (Clements et al, 2024). While other strands of research on resilience have proposed holistic frameworks for urban resilience, based on evolutionary and socio-ecological resilience theories (Lowe et al., 2024), they are largely silent on how power dynamics may be influencing urban resilience outcomes and shaping urban governance.

This paper considers how and to what extent the nexus between urban resilience and infrastructure resilience is addressed within urban studies, and how situating community engagement at the nexus may draw to attention the role of power – who has it and how is it wielded – in the forging of new capacities within urban governance to support resilient places. Drawing on a critical review of the urban and infrastructure resilience literatures, the findings show the need for theoretically grounded frameworks that can discern how infrastructure planning and community networks and action overlap and intersect as cities work towards greater resilience. There is a need for stronger alignment of infrastructure and community resilience to support the delivery of better outcomes for cities, including more effective infrastructure investment.

5B.3

Integrating urban and climate futures: improving urban growth modelling to plan for future climate uncertainty

Ms Katherine Booker[1,2], Prof Iain White[1], Dr Xinyu Fu[1], Prof Matthew Wilson[2]
[1]University of Waikato, [2]Geospatial Research Institute, University of Canterbury

5B: City Governance and Structure, P514, December 11, 2025, 3:00 PM - 4:30 PM

In response to housing affordability problems, many governments are turning to deregulatory approaches to boost housing supply, yet this also brings challenges for dealing with dynamic or uncertain risks. Urban planners are facing tough decisions amid the uncertainty surrounding our future climate and the changing nature of climate-related hazards. Projections of future hazards under alternative climate scenarios are available, but pairing those with current urban form fails to consider how future urban growth will change exposure, whether by new development, intensification, infrastructure investment, or greenspace strategies. In this research we explore how long-term changes in urban morphologies might be envisioned under alternative future climate and hazard scenarios, particularly if different paths for adaptation and mitigation are followed. We outline how urban growth modelling (UGM) can generate long-term climate-related urban growth scenarios if a specific set of methodological choices are selected. Application of an existing model to a study area in Aotearoa-NZ illustrates how UGM produces urban projections consistent with a plurality of economic, climate, and policy scenarios. However, the technical promise of UGM does not necessarily indicate its utility for urban planning. Results from our survey and interviews with NZ practitioners reveal that a lack of funding, data, skilled resources, and confidence in model functionality are significant barriers to uptake of UGM within local government. We conclude that stronger direction from central government is required to create a robust methodology for integrating urban futures with climate futures. Decision-makers need fit-for-purpose tools and a mandate for longer-term risk-based spatial planning that balances development needs with sustainability and resilience to a changing climate.

5B.4

Systemic risk assessment: Addressing compound, cascading and multidimensional disaster impacts for urban resilience action

Dr Leonardo Nogueira de Moraes[1,2], Annette Kroen[1,2], Dr Mittul Vahanvati[1,2], Prof Jago Dodson[1,2]
[1]RMIT University, Centre for Urban Research, [2]Natural Hazards Research Australia

5B: City Governance and Structure, P514, December 11, 2025, 3:00 PM - 4:30 PM

In the contexts of a changing climate, continuous population and urban growth, and the increasing complexity of interconnected urban systems, major cities in Australia are faced with natural hazard riskscapes of growing complexity. Changes in frequency, intensity, distribution and length of natural hazard events are part of this scenario. These imply a need for multi-hazard approaches that account for the increased risk of compounding, cascading, and multidimensional disaster impacts on critical infrastructure and urban populations. In light of the potential scale and nature of such disaster impacts, nationally coordinated arrangements for corrective and prospective disaster risk management action continue to develop. In this rapidly evolving context, systemic risk assessment emerges as a valuable approach to understand and proactively manage disaster risk in urban settings and to help build resilience to current and future hazard events. This paper reports on research conducted to understand current and emerging practices addressing resilience and vulnerability in Australia, highlighting critical challenges faced by Disaster Risk Reduction (DRR) and Climate Resilience stakeholders in bringing together different approaches for addressing systemic risk assessment. Drawing on methods and data that include conceptual mapping, documentary review, and interviews with expert stakeholders, the paper proposes a set of conceptualisation and communication strategies to bridge the identified gaps. To extend this contribution, the paper then reports on the development and testing of a practical guidance tool for systemic risk assessment that supports consideration of compound, cascading and multidimensional disasters and disaster impacts for risk-informed decision-making at local and state levels. Finally, the paper presents reflections on the validation of the practical guidance tool by end-users and draws recommendations for the ongoing review of the National Emergency Risk Assessment Guidelines, supporting action for multi-hazard and climate resilience in Australian major cities.

Disaster Resilience; Climate Resilience; Complex Urban Systems; Critical Assets; Critical Infrastructure

5B.5

From data to decisions: digitalisation and transparency in urban resilience

Dr Francesca Perugia[1], **Dr Courtney Babb**[1]
[1]Curtin University

5B: City Governance and Structure, P514, December 11, 2025, 3:00 PM - 4:30 PM

The integration of smart city technologies and digitalisation is reshaping urban governance, particularly in disaster risk management and housing planning. Drawing on findings from the AHURI Inquiry into Housing Policy and Disasters, this paper examines how information is shared among public and private actors and how it influences governance structures, policies, and decision-making in urban development.

Urban governance increasingly relies on open-data platforms, scenario-planning tools, and spatial digital twins (SDTs) to streamline decision-making and enhance risk assessment. These technologies have the potential to improve coordination among government agencies, housing providers, insurers, and urban planners, ensuring data-driven decision-making. However, research findings highlight significant governance challenges, including data fragmentation, accessibility limitations, inconsistent risk assessment practices—particularly in flood data—and a lack of resources and technical capacity to leverage digital tools effectively. This paper discusses three priority areas identified by key actors in the development process that must be addressed to improve decision-making.

Ultimately, this research underscores the transformative potential of digital technologies in enhancing transparency, improving risk communication, and fostering inclusive urban governance. However, this will require addressing data accessibility and governance coordination so that cities can strengthen disaster preparedness efforts while ensuring equitable housing and infrastructure resilience in the face of increasing climate challenges.

5C.1

Housing supply and planning reform: a critical intervention

Prof Bill Randolph[2], **Prof Kristian Ruming**[1], **Dr Alistair Sisson**[1], **Ryan Van Den Nouwelant**[2]

[1]Macquarie University, [2]University of NSW

5C: City Housing and Inclusion Panel, P512, December 11, 2025, 3:00 PM - 4:30 PM

Australia is experiencing a housing affordability crisis, characterised by high purchase and rental prices, growing housing stress, low rental vacancies, and increases in precarious housing and homelessness. At the centre of contemporary public and policy debates about possible solutions to these challenges are two entrenched discourses.

First, drawing on "economics 101" understandings of the relationship between supply and demand, the "housing supply discourse" argues that provision of more housing will put downward pressure on housing costs. The desire to increase housing supply is at the centre of current government initiatives, with Federal and State governments signing the National Housing Accord and National Cabinet agreeing a target of 1.2 million new homes by 2029, with each State having its own new housing target.

Second, the "planning reform discourse" argues that the planning system is a major barrier to new housing supply, and that changes are required to enable new housing. Delays in assessment times, community participation, and the political nature of planning, have all been identified as issues which impact supply. In response, the reform of state planning systems has been positioned as essential in facilitating new supply, with the National Planning Reform Blueprint outlining changes to zoning, development assessment, and land release strategies.

This panel will critically interrogate the relationship between planning reform and housing supply. The panel will discuss:
- current policy interventions that seek to increase housing supply and reform planning systems
- common strategies and approaches to planning reform
- barriers to new housing supply, from both within and outside the planning system
- the relationship between planning reform and new housing supply at a variety of scales (national, state, city, and precinct)

Key words: housing supply, planning reform, urban planning, housing affordability

Panel Convenors
Prof Kristian Ruming, Macquarie University
Prof Bill Randolph, UNSW
Dr Alistair Sisson, Macquarie University
Dr Ryan van der Nouwelant, UNSW

Panellists
Dr Catherine Gilbert, University of Sydney
Dr Rachel Gallaher, The University of Queensland
Prof Libby Porter, RMIT University
Prof Jago Dodson, RMIT University

5D.1

A housing research translation approach to the local government sector

Dr Greta Werner[1]

[1]The University of Sydney

5D: City Housing and Inclusion, P421, December 11, 2025, 3:00 PM - 4:30 PM

This paper sets out an approach to the translation of housing evidence to audiences in the local government sector. It is the first part of a project testing processes for housing scholars wishing to communicate their research to various audiences across government and industry, beginning with local government. The literature shows research translation is most effective when developed in close collaboration with stakeholders, in the context of strong institutions, based on high quality, relevant, and accessible research, with favourable implementation conditions at all levels of government. While implementation conditions are to some extent unfavourable for housing evidence due to the dominance of private sector discourses, better understandings of housing need and how to meet it are ever more urgent as housing need increases.

To investigate how housing evidence can be more effectively communicated to various groups, this study examines the literature on communication, with a particular focus on science communication and public relations. While remaining cognizant of issues such as state capture and the influence of the development lobby on governments, the study identifies parallels with other fields of communication, such as climate science communication, which also confronts a difficult discursive context. The paper builds on previous studies of research translation and develops a communication and engagement methodology based on findings in communication science and public relations, highlighting their potential applications in the context of raising the profile of housing research and evidence-based policy advice to improve housing affordability and environmental resilience.

Key Words: Research translation, housing, local government, communication

5D.2

Geography of creative jobs and housing of creatives: an insight into Melbourne city

Shahana Sultana[1]

[1]The University of Melbourne

5D: City Housing and Inclusion, P421, December 11, 2025, 3:00 PM - 4:30 PM

The preference of the creative class to live near the city's soft amenities and diverse employment opportunities suggests a closer proximity between their living and workplace locations. The tendency of creative jobs to follow creatives also reinforces the notion of workplace-residence proximity. This research, therefore, intends to explore how the geography of creative jobs interacts with or shapes the local housing market dynamics, using Metropolitan Melbourne as the case study. The first part of the research investigates whether the creative workplaces and creative residences are connected across Metropolitan Melbourne. The spatial autocorrelation technique, hypothesis testing and regression are employed to analyse this relation. The Global Moran I shows that creative jobs and creative class residences are more clustered than their non-creative counterparts. The Local Moran I reveals that residential clusters of creatives tend to be located closer to the creative job clusters or vice versa. To further examine workplace-residence proximity, the data on commuting distance is analysed. It shows that the average distance to the workplace is shorter for creatives compared to non-creatives. The chi-square and weighted t-test support the finding that creative individuals tend to live closer to their jobs. Industry-specific analyses largely confirm that creative individuals travel short distances to reach their workplaces. The rest of the research delves into how and why creative jobs and creative class residences interact, drawing on interview data to explore this nexus.

Keywords: Creative jobs, Creative class, Housing, Melbourne

5D.3

Mapping affordable rental housing: A typological framework for Sydney and Melbourne

Hanie Khosravi[1]
[1]Macquarie University

5D: City Housing and Inclusion, P421, December 11, 2025, 3:00 PM - 4:30 PM

Cities across the globe are confronting housing crises driven by rising inequality, financialisation, and the retreat of public sector involvement in housing provision. In Australia, affordable rental housing has emerged as a key policy response to these pressures. However, the term encompasses a wide range of models with varying objectives, delivery mechanisms, and outcomes, both across and within states and territories.

This paper develops a typological framework to classify and analyse the diverse delivery models of affordable rental housing in Sydney and Melbourne. Drawing on an integrated methodology, the study combines a theory-informed approach with empirical evidence derived from a structured, desk-based review of over 30 affordable rental housing projects delivered in the past decade. Data were collected from secondary sources, including government databases, policy reports, and academic and industry publications.

A set of classification criteria, covering funding mechanisms, land supply strategies, planning tools, target groups, and tenancy management models, was developed through an extensive literature review. Each project was then analysed using a structured template to enable cross-case comparison.

The resulting framework sheds light on the structural logics that shape different forms of affordable rental housing provision. It also lays the groundwork for future evaluations of how each delivery model performs in terms of affordability outcomes and the effectiveness of the policies shaping them. By offering a clearer classification of current models, the paper contributes to debates on housing inclusion and long-term sustainability. It also offers a practical tool to support researchers, policymakers, and practitioners in developing more coherent and accountable housing strategies in metropolitan Australia.

Keywords

Affordable rental housing, urban policy, Sydney and Melbourne, housing typologies

5D.4

Does ethnicity shape housing? Chinese residential and investment patterns in Greater Brisbane

Shuangshuang Zheng[1], Dr Thomas Sigler[1]
[1]The University of Queensland

5D: City Housing and Inclusion, P421, December 11, 2025, 3:00 PM - 4:30 PM

The residential and investment choices of buyers of Australian property markets are shaped by many spatial and demographic factors, among them ethnicity. This research analyses how Chinese residential property buyers in greater Brisbane demonstrate distinct suburban housing preferences compared to non-Chinese buyers, focusing on both homeownership and investment behaviours. Drawing on 8,624 residential transactions from 2010 to 2022, the study employs a two-stage analytical framework: spatial autocorrelation analysis to identify buyer clusters. It finds five distinctive spatial clusters and yields three key analytical insights underlain by multi-scalar considerations. At the federal level, the Foreign Investment Review Board (FIRB) regulations restrict non-resident foreign buyers, particularly Chinese investors, from new or off-the-plan properties. At the state and local levels, planning frameworks promote peri-urban expansion through greenfield development while simultaneously constraining inner-city densification through zoning restrictions. The interaction between policy-driven housing supply and Chinese property demand - spanning both residential occupancy and investment- has not only influenced the spatial distribution of new residential stock but has also contributed to the persistence of ethnic clustering along Brisbane's growth corridors.

5D.5

A metropolitan geography of young-headed households: the case of Greater Brisbane

Sophia Dow[1,2]
[1]Therefor Group, [2]The University of Queensland

5D: City Housing and Inclusion, P421, December 11, 2025, 3:00 PM - 4:30 PM

In the post-COVID period, housing has emerged as a significant issue in many countries around the globe, with cities facing constrained supply, a lack of housing diversity, and declining affordability. Young adults are among the most impacted age groups by this challenge, with potentially long-term impacts, such as delayed housing careers. Commentary on the housing crisis has both vilified and victimised young adults, depicting them as unmotivated to enter the housing market, and simultaneously pushed out of cities due to high cost of living and a shortfall of supply.

While research on young adults' residential patterns including their spatial, demographic, and economic contexts has emerged in North America and western Europe, there is a gap in Australian research. This research addresses this gap, recognising the urgent need to understand housing patterns of young adults in Australia to inform equitable planning and housing decisions.

Focusing on young adults in Greater Brisbane, this research establishes the geographical distribution of young adult headed households in the region over three Census periods, and identifies the socioeconomic and demographic features related to these patterns. The research further questions how this reality of young-headed households aligns with current planning and housing policy settings, and the implications for future housing demand, and housing and planning policy.

Utilising Census data, GIS analysis, and a policy analysis, this research contributes to an international discourse of evolving trends of young-headed households, demonstrating the decline in young adults as heads of households in an Australian context. Research findings also explore the globally observed processes of 'youthification' and 'studentification' within Greater Brisbane, describing young adults' roles in contributing to urban structures and vitality of places. The paper contributes to an understanding of the many components, particularly at locational and policy levels, shaping contemporary young-headed households' geographies.

Young adults, heads of households, youthification

5E.1

Targeting Universal Basic Mobility and global exemplars

Prof Lynette Cheah[1], Dr Abraham Leung[1], Ms Jemima Paull[2], Kristina Jones[2], Peppa Brown[2]
[1]University of the Sunshine Coast, [2]Department of Transport and Main Roads

5E: City Movement and Infrastructure, P506a, December 11, 2025, 3:00 PM - 4:30 PM

Within cities, developing efficient, sustainable and inclusive transport systems is essential for thriving economies and liveable communities. When promoting transport equity, the concept of Universal Basic Mobility (UBM) has been introduced. UBM is centred on the idea that every person deserves a foundational (or "basic") level of mobility to be able to access essential goods and services. Those with unmet transport needs are considered transport disadvantaged. These can be population groups that are socially disadvantaged – also referred to as "vulnerable transport users" or "at risk cohorts" – or communities that lack public and/or private transport access. Within cities, peri-urban, and suburban areas are particularly vulnerable to transport poverty.

This study elaborates on the concept of Universal Basic Mobility and its relevance in developing urban transport systems. We present a review of global initiatives and interventions to offer basic mobility, with the intention of identifying strategies adaptable to the Queensland context. It further involves quantitative analyses of demographic data, transit access and private transport affordability. Spatially explicit accessibility and affordability metrics are then used to pinpoint underserved communities, highlighting priority areas to focus on.

Preliminary findings reveal the mismatch between available transport services and the mobility needs of low-income households, elderly residents, and individuals without access to private vehicles. In response, this research proposes a structured framework designed to promote UBM, tailored specifically to regional and peri-urban Queensland's unique characteristics and challenges.

By integrating global exemplars with local insights, this project aims to develop best practices to inform policy and planning efforts directed towards creating inclusive, accessible, and sustainable transport systems. The outcomes will contribute to the broader scholarly discourse on equitable mobility and practical knowhow in targeted interventions addressing community needs.

Keywords: transport equity, inclusive transport, universal mobility, accessibility, transport planning

5E.2

"Who has a seat at the 'smart'table?" Multi-actor governance for planning of digital infrastructures.

Dr Sandy Burgoyne[1]

[1]University of Sydney

5E: City Movement and Infrastructure, P506a, December 11, 2025, 3:00 PM - 4:30 PM

Smart or digital cities have been a critical response to rapid urbanisation and the complex challenges that cities pose for economies, society and sustainability. It has exacerbated and disrupted an already complex and competitive landscape of actors at the municipal level - 'smart' citizens, the tech industry, NGOs, and multiple levels of government - all of which are engaged in planning for and developing housing for new fast-growing communities. Furthermore, in Australia, the multi-level hierarchy of government has contributed to the segregation of land use planning and digital infrastructures, contributing to digital inequity, particularly for new communities (Alizadeh 2017). Whilst scholars have pointed to actor collaboration as central to equitable outcomes, collaborations are at risk of not addressing power imbalance or furthering the power of already empowered actors (Hendriks 2006). With the application of technology platforms that enable predictive profiling, social monitoring (Barns 2017, 2020) and market-led deployment of networks (Alizadeh 2017), the risk for further inequity and unintended consequences for citizens is heightened. Using a longitudinal qualitative study of the digital Western Parkland City, Sydney, Australia, this paper examines how public, private and other actors interact to deliver digital infrastructures for urban planning and management, which aim to rebalance the equitable social and economic outcomes for the city. The findings inform elements of dynamic collaborative governance, in contrast to traditional and sometimes linear approaches to urban planning, where novel mechanisms for intra-government collaboration have contributed to new data infrastructures for planning and development of new communities.

5E.3

Mixed messaging: public transport, car advertising and cognitive dissonance

Dr Hulya Gilbert[4], **Dr Ian Woodcock**[3]

[1]The University of Melbourne, [2]La Trobe University, [3]The University of Sydney, [4]The University of New South Wales

5E: City Movement and Infrastructure, P506a, December 11, 2025, 3:00 PM - 4:30 PM

Despite growing concerns about car dependence and increasing urgency to address it, cars continue to hold a privileged position in urban and transport planning discourses across Australasia.
This privileged status persists even in spaces where car dominance should be most critically examined and alternative modes celebrated. This is through car advertisements on public transport vehicles and spaces, where commuters are constantly reminded of what they might have given up or what they are supposedly missing out on.

Breaking free from the vicious cycle of car dependence requires an acknowledgement within the transport policy discourse that recognises the significant role that the choices we make in planning and designing our everyday public transport spaces, and the policy contradictions and the cognitive dissonance involved in these processes. Among these processes is the appropriation of public transport spaces for commercial advertising.

Drawing on a review of local and state government policies across VIC and NSW regarding advertising on public transport vehicles, stations and stops, this paper examines how the content and placement of advertisements shape discourses of sustainable transport and how these influences vary by geography (e.g. inner city vs. fringe suburbs). The policy analysis is complemented by a visual discourse analysis of the photos taken on a range of public transport spaces across Melbourne and Sydney.

A meaningful modal shift requires a profound engagement with the discursive spaces of transport. This includes the critical review of narratives and values in advertisements, beyond personal and private spaces. By focusing on the messaging in car-related advertisements at public transport spaces, the paper discusses how car-centric logic is institutionalised through the policies that shape the planning, design and operation of our everyday public transport spaces, which contradicts the broader visions around the sustainable mobility transition.

Keywords: advertisement, transport discourse, public transport, car dependence, cognitive dissonance

5E.4

City Growth and Transport Futures: Rethinking Accessibility and Mobility in South East Queensland

Dr Mubeen Ahmad[1]

[1]University Of Queensland

5E: City Movement and Infrastructure, P506a, December 11, 2025, 3:00 PM - 4:30 PM

City growth in South East Queensland (SEQ) is being defined by transport. As one of Australasia's fastest urbanising regions, SEQ is confronted with increasing pressures of the need for accommodating over 1.5 million additional residents by 2046 while concurrently delivering mobility systems that are equitable, sustainable, and resilient. Using a Comprehensive Assessment Instrument (CAI), this paper presents how effective transport focused Urban Growth Management Strategies (UGMS) in SEQ have shaped infrastructure performance outcomes over the past decade, using practical indicators such as including public transport coverage, walkability, mode share, vehicle kilometres travelled, and congestion indices.

The paper's findings reveal a paradox, showcasing that despite significant investments in accessibility through transit-oriented and consolidation-oriented strategies, SEQ remains locked into a car-dependent trajectory, with over seventy percent of trips continue to depend on private vehicles. Increasing congestion across arterial corridors, limited cross-regional connectivity, and public transport provision remaining patchy and radial, highlight gaps between the ambitions of policy and the outcomes on-the-ground.   The paper contends that SEQ's experience highlights the limits of incremental transport investments for fast-growing Australasian cities. Meeting the demands of climate imperatives and growth will require that transport be placed at the centre of growth management, with stronger integration of land use and mobility planning. The value of evidence-based assessment tools such as the CAI would enable policymakers and practitioners to guide investment, monitor performance, and steer SEQ toward a more efficient, inclusive, and climate-ready transport future.

5F.1

Leveraging on public knowledge and understanding to advance water sensitive transition: Insights from New Zealand

Angelina Coelho[1], A/Prof Silvia Serrao-Neumann[1], Jason Kurz[1]

[1]Waikato University

5F: City Nature and Environment, P506, December 11, 2025, 3:00 PM - 4:30 PM

Urban stormwater poses growing challenges, with traditional drainage systems contributing to water pollution and ecosystem degradation. Water Sensitive Urban Design (WSUD) offers an alternative, integrating ecological, technical, and social considerations. Despite its potential, public knowledge of WSUD remain underexplored. This study examines public understanding of WSUD in New Zealand through a nationwide survey (n = 501), focusing on water-related knowledge, familiarity with green infrastructure, and urban water stewardship. Findings reveal strong support for WSUD, yet knowledge gaps persist, particularly regarding some green infrastructure technologies such as raingardens and constructed wetlands. While 81% of respondents recognize the role of nature-based solutions, only 40% correctly identify constructed wetlands and fewer understand their benefits. Demographic variations are evident, with older and higher-educated individuals displaying greater knowledge. Ethnicity also influences water-related literacy, with European and Māori respondents scoring higher than Pacific and Asian participants. The study suggests that public resistance is not a major barrier. Instead, political inertia and institutional challenges may hinder implementation. By applying a socio-technical framework, we analyze pathways to scale WSUD geographically, integrate it into policy, and embed it into cultural values. The findings emphasize the need for education and also genuine political commitment to listen to communities, align policies with public preferences, and dismantle resistance. Furthermore, Indigenous Māori perspectives align strongly with WSUD principles, with 48% of participants acknowledging this connection. Co-designed solutions incorporating both scientific and cultural perspectives could enhance sustainable water governance. To transition to water-sensitive urban environments, cities must prioritize community voices, integrate WSUD into governance frameworks, and bridge the gap between public will and policy decisions. Public advocacy and bottom-up initiatives can drive institutional change, embedding WSUD into urban planning and governance to enhance ecological integrity, urban resilience, and community well-being.

5F.2

Embedding water-sensitive thinking in land-use planning: A PSS approach for Auckland

Naduni Kasthuri Arachchi[1], Dr Elizabeth Aitken Rose[1], Dr Iresh Jayawardena[1]
[1]University of Auckland

5F: City Nature and Environment, P506, December 11, 2025, 3:00 PM - 4:30 PM

Auckland's stormwater management is under significant pressure due to urban intensification and the impacts of climate change. While Water Sensitive Design (WSD) presents a promising solution, its broader benefits are often unrealised due to the fragmented approach to urban expansion. The increased number of private plan changes ahead of the Future Urban Land Supply Strategy has led to reactive planning outcomes without strategic WSD integration. The link between land-use decisions and catchment ecosystem quality highlights the urgency of integrating WSD into planning. It is increasingly clear that the most effective WSD outcomes are achieved when WSD principles are embedded early in the planning process, enabling the integration of non-structural planning instruments through a Planning Support System (PSS).

Several WSD-driven PSS have been developed internationally and locally. Examples include the Urban Biophysical, Environment and Technologies Simulator (Urban BEATS), the Spatial Suitability Analysis Tool (SSANTO) from Australia and the Storm Water Management Model (SWMM) from the United States. New Zealand has recently developed the Freshwater Management Tool as a water quality planning tool. However, to address the limitations in the strategic integration of WSD, the existing PSSs focus on water-sensitive technologies design and implementation and are inadequate. Integrating WSD principles at the outset of early planning (land-use allocation) plays a crucial role, which has received less attention.

This paper contributes to doctoral investigation into developing a PSS methodology, using an Auckland case study, that will shift the current emphasis on design technologies to proactively embed water-sensitive thinking into the spatial configuration of urban areas. Based on a literature review, the paper comparatively and critically evaluates the influence of existing PSSs on WSD planning and strategic integration. It concludes by identifying best practices for adaptation in Auckland to enhance strategic WSD outcomes.

Keywords: Water Sensitive Design, Water Sensitive Land-Use Design, Planning Support System

5F.3

Using human-nature connectedness frameworks to rethink water wise community: Lessons from Greater Brisbane residents

Siân Chadfield[1], Yongping Wei[1], Ritva Vilppola
[1]The University of Queensland

5F: City Nature and Environment, P506, December 11, 2025, 3:00 PM - 4:30 PM

The development of water wise communities is critical to the future sustainability of urban water management in Australasian cities. With increasing challenges to urban water management such as climate change and the increasing frequency of extreme weather events and water-related natural disasters in addition to growing urban populations and increased demand — there is a need for greater consideration of the socio-political capital for sustainability and water sensitive decision making and behaviours. Seeking to understand how Greater Brisbane residents make meaning of the water wise community concept within a local context, five focus groups were conducted with a total of twenty local residents. Braun and Clarke's reflexive thematic analysis was used to analyse the data, generating five themes: 'hopeless overwhelm, eco-anxiety, and unknowing: on struggling to make sense', 'individualism's limited capacity for imagining sustainable futures', 'more than an individual responsibility'; 'ecocentric values for water and rights for rivers, and 'the equity issue: striving for justice in water governance'. Furthermore, human-nature connection and disconnection was developed as an overarching theme that connected all five themes. We propose that linking the concept of water wise community with existing frameworks of human-nature connection and disconnection offers a new way of understanding water wise communities and strategies for their development. Findings indicate the importance of fostering water wise communities via approaches that do not simply focus on individualistic behaviour change, but instead emphasise building communities that fight for structural change and water justice.

5F.4

Universities' place-based responsibilities: Auditing AUT's contributions to Auckland as a nature-positive and regenerative environments city

Dr Julie Trafford[1]

[1]Auckland University Of Technology (aut)

5F: City Nature and Environment, P506, December 11, 2025, 3:00 PM - 4:30 PM

Auckland is Aotearoa NZ's largest city by population and contribution to GDP, arguably our only city by global standards, and our nation's predominant gateway to the rest of the world. Auckland's somewhat unique positioning on a long, narrow isthmus with 53 extinct volcanoes, compared to other Australasian cities, afford the city distinctive opportunities and challenges.

Auckland is home to two universities: University of Auckland (UoA) and Auckland University of Technology (AUT). The UoA centralised its previously geographically dispersed campuses to within Auckland's CBD and close fringe. In contrast AUT, a university of technology that prioritises application of knowledge and being community-placed, has retained four campuses distributed up and down the Auckland isthmus. AUT has nature-environment responsibilities situated within multiple communities connected to different Māori hapu (sub-tribes) in Auckland City's CBD, on the North Shore and in South Auckland. The daily footprint can span more than 35 kilometres for travel between the northern- and southern-most campuses.

In this presentation I argue that universities, and academics as critics and conscience of society, have responsibilities to their host cities. Focused on City Nature and Environment, I frame the conversation within relevant global models such as Nature-Positive Cities and the Healthy Streets Approach, Secondly, I contextualise pertinent sections of plans for Auckland, and related key elements suggested for a Reimagined Auckland. I then audit how AUT's strategic plans and operational actions might support Auckland to be a nature-positive and regenerative environments city. I critique AUT's Regenerative and Sustainability Plan, net zero carbon target, KPIs as a Nature-Positive University, Regenerative Environments Research Network and Living Laboratories partnership with local Māori hapu. I encourage conference participants to consider how their university or other organisation might prioritise nurturing nature and mobilising regenerative environments for the health and sustainability of their host city.

Auckland, city, nature-positive, regenerative, university

5F.5

Governance of novel natures: co-existing with urban rivers

Dr Melissa Pineda Pinto[1]
[1]The University of Melbourne

5F: City Nature and Environment, P506, December 11, 2025, 3:00 PM - 4:30 PM

Novel natures are emergent, novel ecological ecosystems resulting from significant human alteration, often characterised by new species combinations, altered environmental conditions, and modified ecological processes. The governance of these systems presents a critical challenge, as existing planning and conservation frameworks frequently struggle to adapt to uncertain and changing social-ecological conditions. This paper explores the governance challenges of novel ecosystems in urban rivers, arguing for new models that acknowledge, reckon with, and work with, rather than against, emergent ecologies. Drawing insights from urban river systems in Melbourne, Australia, and San José, Costa Rica, we highlight how the rigidity of existing policy frameworks – often rooted in colonial legacies that devalue "alien" or "invasive" species – actively hinders effective stakeholder and community engagement. Through co-design workshops with diverse participants, including government decision-makers and community groups, our research employs a multispecies justice framework to understand the intricate interdependencies between human and non-human urban river inhabitants. We demonstrate that truly inclusive governance requires valuing these novel ecological communities, recognising their needs and "life projects," and fostering policy and urban strategies that embrace their intrinsic worth. This work contributes to a broader understanding of how to equitably manage and conserve urban ecosystems in an age of rapid ecological change.
Keywords: cities; ecological novelty; engagement; more-than-human

5G.1

Urbanization and the Impact of Rural-Urban Migration on Urban Decay in Port Moresby City-PNG

Mr Paulus Motoro[1]

[1]Papua New Guinea University Of Technology

5G: City Cultures and Identity, P413a, December 11, 2025, 3:00 PM - 4:30 PM

Abstract

Urbanization and migration from rural areas to cities in Papua New Guinea (PNG) are increasing at a rate that challenges cities like Port Moresby to accommodate new populations sustainably. This research examined how rapid urbanization and internal migration contributed to urban decline by creating informal settlements, poor infrastructure, unchecked development, and greater strain on basic services. The study looked at the behaviors and attitudes of migrants, the spread of informality in peri-urban and formal parts of the city, and its impact on the physical, social, and economic structures of Port Moresby. A purposive random sampling method was used to gather the views of 73 working-class residents through interviews and focus groups, giving a detailed understanding of how unplanned urbanization is changing the city. The results showed that the majority of respondents believe informal settlements depend heavily on formal urban areas for resources, jobs, and survival (χ^2 = 11.61, $p = 0.003 < 0.05$), indicating a significant relationship. Additionally, unemployment and the decline of small and medium enterprises (SMEs) were found to be strong indicators of the growth of the informal economy in Port Moresby (β = +0.78, $p = 0.012$**, Exp β = 2.18). The study suggests adopting rural development strategies as part of urban and regional planning policies. These policies should promote rural growth centers, regulate urban development, and create sustainable paths for balanced national growth to ease the current pressures on cities.

Keywords: Urbanisation, informality, infrastructure strain, Port Moresby, Urban Decay

5G.2

Understanding the 'spatial relatedness' of communities by country of birth in Australian cities

Dr Thomas Sigler[1]
[1]The University of Queensland

5G: City Cultures and Identity, P413a, December 11, 2025, 3:00 PM - 4:30 PM

This study examines the spatial relatedness of migrant groups in Australian cities to better understand residential segregation and its implications for social cohesion. Rather than focusing solely on individual group dispersion or integration with the Australian-born population, we analyse how migrant groups co-locate with one another across urban space. Using census data from Brisbane, Melbourne, Perth, and Sydney over three periods, we apply pairwise spatial overlap and network-based community detection methods to identify clusters of migrant groups with similar residential patterns. Findings reveal both strong co-location and avoidance between specific groups, often reflecting shared cultural or regional backgrounds. The identification of 'communities of groups' highlights persistent spatial structures that shape opportunities for inter-group interaction and support. By framing urban diversity as both spatial and relational, this approach offers a nuanced lens on residential segregation and suggests how urban planning and policy might support more inclusive, socially connected neighbourhoods in increasingly diverse cities.

5G.3

Planning at the speed of cities: toward a practice for the modern world

Mr Jonathan O'Brien[1]

[1]YIMBY Melbourne

5G: City Cultures and Identity, P413a, December 11, 2025, 3:00 PM - 4:30 PM

This paper examines how Australia's urban planning system has become captured by a self-reinforcing professional silo that operates with minimal oversight, poor measurement practices, and false beliefs about housing markets. After demonstrating how this "legacy planning" paradigm has contributed to housing unaffordability and regulatory failure, we propose a transformative framework: "planning at the speed of cities."

The reform agenda centres on three critical interventions. First, planning departments must be opened to non-planner policy professionals. Just as we don't restrict health policy to doctors or energy policy to engineers, land use planning should embrace economists, data scientists, and diverse policy experts. This would instantly resolve the alleged "planner shortage" while injecting fresh perspectives and methodologies.

Second, Australia urgently needs to develop a robust urban economics profession that takes land markets seriously. Current planning practice systematically ignores price signals, dismisses market mechanisms, and operates under the dangerous delusion that regulation has no impact on housing costs. We need professionals who understand that $120,000 in regulatory costs per Melbourne apartment represents real economic harm, not "amenity value." Urban economists must be empowered to conduct rigorous cost-benefit analyses, measure regulatory impacts, and ensure planning decisions are grounded in economic reality rather than aesthetic preferences.

Third, planners must adopt iterative policymaking toolkits that prioritise measurable outcomes over subjective concepts like "neighbourhood character" or "human scale." This means embracing reflexivity, feedback loops, and regular policy adjustments based on real-world data—rental vacancy rates, commute times, housing costs—rather than opt-in community consultations dominated by wealthy incumbents.

By shattering the planning silo and implementing these reforms, Australia can develop responsive, evidence-based planning systems that facilitate rather than obstruct urban development. This new paradigm—planning at the speed of cities— offers a path toward more affordable, sustainable, and dynamic urban environments.

Land Markets, Reflexivity, Professional Practice

5G.4

The centrality of power in LGBTIQ+ housing instability: Applying Steven Lukes' three dimensions of power

Dr Brodie Fraser[1], Dr Elinor Chisholm[1], Dr Sebstiaan Bierema[1]
[1]University of Otago

5G: City Cultures and Identity, P413a, December 11, 2025, 3:00 PM - 4:30 PM

There have been ongoing calls to better utilise theory and political science concepts in housing studies, which has resulted in a growing body of work exploring the multi-faceted ways that power relations are present in the housing sphere. This paper further contributes to the literature by exploring the role of power in the housing experiences of a marginalised group—specifically LGBTIQ+ people. Applying Steven Lukes' (2005) three-dimensional theory of power to interviews conducted with LGBTIQ+ people about their experiences of housing instability, we demonstrate the complex and varied ways that power is exerted within the housing system, as well as articulating how LGBTIQ+ people are marginalised through their housing. This paper shows the usefulness of both secondary data analysis, as well as applying and testing theory against data in order to provide a deeper understanding of the phenomenon being studied. This novel approach helps us to articulate and clarify the different forces at play that create instability and marginalisation within housing markets.

5H.1

Urban Morphology in Australia: reading the past, designing the future

A/Prof Mirko Guaralda[1]
[1]Queensland University Of Technology, [2]Curtin University, [3]Deakin University

5H: City Design and Morphology Panel, P505, December 11, 2025, 3:00 PM - 4:30 PM

Urban morphology offers a powerful lens through which to interpret the evolution of Australian cities. From pre-colonial settlements to transit corridors, from urban renewal precincts to suburban greenfields, the spatial patterns of Australian settlements reflect a dynamic interplay of heritage, legacy, planning, design, governance, and lived experience.

This panel brings together scholars whose work addresses the relevance of morphological analysis for understanding and shaping contemporary urban conditions. Drawing on a diverse range of research projects, including urban regeneration, strategic planning, and incorporation of Indigenous Knowledge into urban design practice, each speaker will consider how morphology can reveal embedded spatial logics and guide more sustainable, inclusive, and resilient urban outcomes.

Topics will include the challenges of densification within established urban fabrics; the role of green infrastructure and ecological thinking in morphological transformation; the politics of urban form in the Global South and its implications for Australian cities; and how large-scale planning frameworks interact with fine-grained morphological structures.

The panel will conclude with a roundtable discussion, inviting reflections on how urban morphology can be applied as an analytical tool, and also as a means of informing design practice, planning policy, and community engagement. It will also consider the future of morphological research in Australia and its potential to respond to climate change, housing crises, and cultural reconciliation.

This session aims to reassert the value of morphological thinking within urban studies and design practice, offering a space for renewed dialogue between theory, practice, and policy. It will appeal to researchers, educators, planners, and designers interested in how the form of the city both reflects and shapes social, environmental, and political forces.

Keywords: Urban Morphology, Urban Morphology Network, Urban Research

6A.1

Radical Co-existences: Playing the Olympics to manifest Urban Play

Mr Tom Rivard[1]
[1]Lean Productions

6A: City Nature and Environment Panel, P504, December 12, 2025, 10:30 AM - 12:00 PM

"You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete." —Buckminster Fuller.

The contemporary metropolis sits at the epicentre of civilisational transformation. Converging crises—ecological, social, economic—demand not incremental reform, but radical reimagining. As disciplines of city-making have historically reinforced capital-intensive systems and monocultures of consumption, we now require new urban narratives that foreground coexistence, resilience and creativity. The city, as humanity's greatest infrastructural achievement, becomes the stage upon which new worlds may be played out.

The Olympic Games, the most globally recognised act of "playing" games, embodies both spectacle and potential. While its competitive paradigm celebrates elite performance, the Olympics can also catalyse vernacular forms of play – natural, temporal, experimental, narrative. What might emerge if the Olympics shifted from showcasing human supremacy to enabling playful engagement with urban environments? Could its legacy be reframed from monumental infrastructure towards new ways of 'playing the city'—encouraging joy, improvisation, inclusion and ecological attunement?

Drawing from expanded ideas of "play," engagement with youth and community, and an understanding of what might (and might not) be possible in the shadow of the Games, this panel presentation proposes that Brisbane in 2032 might be designed as a site of radical coexistence. Play becomes both method and metaphor—an adaptive urban practice, disrupting established hierarchies and opening speculative futures. Through narrative inquiry and participatory workshop format, we explore how Olympic urbanism might transcend its historical complicity in extractive development, instead fostering interdependence between community, nature and play.

By shifting the focus from winning to playing, from legacy as landmark to legacy as lived experience, we invite new imaginaries of urban futures: the city as a platform for collective experimentation, joy, and transformation.

Panelists:
Amy Nadasky - Monogram Partners
Natalie Wright - Play32 Brisbane
Robyn Monro Miller - CEO Play Australia
Clay Johnsen - Brisbane urbanist, landscape architect and playground designer
Tom Rivard (moderator) - urban designer, futurist

6B.1

Power and participation: navigating renewable energy planning in regional NSW

Dr Sanaz Alian[1]
[1]University of New England

6B: City Governance and Structure, P514, December 12, 2025, 10:30 AM - 12:00 PM

Using renewable energy sources is not new in Australia. In 2023, 39.4% of the country's total electricity generation came from renewables, with New South Wales (NSW) the highest user in terms of megawatts (Clean Energy Council, 2024). In 2020, the NSW Government announced the first stage of its Net Zero Plan. To achieve this, five renewable energy zones (REZ) were declared including New England (NE) REZ. Governments have released various policies and factsheets outlining the impacts of these renewable energy projects and infrastructure, including what they mean for affected communities and how they can be involved in decision-making. The importance of planning and planning policies in this process should not be overlooked. The Minister confirmed the government "has accelerated the growth of renewable energy projects" and stressed the need to acquire social licence in communities which may become polarised by energy distribution and storage. He also emphasised not just policy development, but continued engagement of project proponents with host communities (Scully, 2024). However, since many of these policies are new, it is difficult to know how communities in regional NSW can be engaged meaningfully, especially when local governments can only partially influence outcomes.

This presentation explores tensions in planning for renewable energy projects in NSW. On one hand, these projects respond to urgent global imperatives to transition to carbon-neutral societies. On the other, they significantly affect host communities, requiring engagement to mitigate negative impacts and enhance benefits. There is an imperative to act 'now', but also to conduct thorough community engagement. Drawing on in-depth, semi-structured interviews with local council planners and other stakeholders involved in REZ policy as well as reviewing planning policies and guidelines related to REZ, we examine the extent to which communities in the NE REZ might be meaningfully engaged within an 'accelerated' yet complex planning framework.

Greening in complex urban systems- decision-making, feedback loops and unintended consequences

Miss Atefeh Soleimani Roudi[1], Dr Lucy Gunn[1], Prof Andrew Butt[1]

[1]RMIT University

6B: City Governance and Structure, P514, December 12, 2025, 10:30 AM - 12:00 PM

Greening initiatives can create multiple co-benefits for urban areas. However, due to intra-system interrelationships inherent in urban complex systems, they can also have adverse outcomes. Various examples of these have been documented in projects like the high line in New York and terms, like gentrification, have been coined to point to adverse systemic behaviours related to greening. As greening initiatives gain momentum to deal with various challenges including climate change, it is imperative to understand how these complex interrelationships are reflected in decision-making processes.

This research focuses on the role green areas play in creating healthy and water resilient urban areas. It identifies three conceptual areas of components and relationships that form greening decision: a) systems' functions/processes related to green areas, b) approaches involved in decision making, and c) contextual planning conditions. The two latter areas affect how functions and processes identified in the first area, behave as contributing or hindering factors towards urban health or water resilience.

This article explores how this highly contextual behaviour can be captured. Interviews with experts and practitioners have been conducted and analysed to develop causal loop diagrams (CLDs) of the approach-related and planning conditions-related components and relationships in the context of the western region of Melbourne, Australia.

The results indicate multiple balancing and reinforcing loops formed by the components involved in the decision-making process, the most prominent of which are related to community engagement, budgeting, high-level strategic goals and spatial entanglements with other systems such as the road system and system of urban utilities. The resulting CLDs paint a picture of how certain aspects of greening decisions can impact components from other systems. This picture can be used to better understand and account for the intended and unintended consequences of greening decisions.

Keywords: greening, causal loop diagrams, complex systems, decision-making processes, feedback loops

6B.3

Localising collaborative governance in superdiverse suburban centres: early insights from Footscray and Dandenong, Melbourne

Dr Hayley Henderson[1], **Dr Marjan Hajjari**
[1]Crawford School of Public Policy, Australian National University

6B: City Governance and Structure, P514, December 12, 2025, 10:30 AM - 12:00 PM

Suburban centres are central to inclusive and prosperous urban futures in Australia's increasingly diverse cities. Yet, many face entrenched decline and disadvantage, despite major investments and strategic planning. This paper presents early insights from two superdiverse centres -Dandenong and Footscray- on how locally-led collaborative governance is emerging as a response to stalled revitalisation. Drawing on a pilot study and recent field engagement, it explores how local leaders have initiated a governance forum in Footscray to coalesce actions, from across council, state and federal government MPs, Victoria University, Western Health, Footscray Arts, traders, developers, and community services. This collaboration aims to adapt city-shaping investments and overcome disjointed governance, offering an emerging model of locally-led, place-based collaborative planning for revitalisation. The paper also provides an overview of document analysis conducted on revitalisation evaluations in Dandenong between 2015 and 2025. One aspect of advice within revitalisation project analyses relates to governance models for Dandenong's future revitalisation, which build on past State-Government and Local Government-led initiatives. Both centres face similar and at times interconnected challenges in the metropolitan region, from low perceptions of safety to housing stress, as well as recognised strengths tied to a history of celebrated cultural diversity and social inclusion. Initial findings suggest that while resource constraints and some state policy priorities pose challenges to delivering concentrated revitalisation efforts in these centres, new, locally-led collaborative forums may provide a valuable space for information exchange, building relationships and mutual understanding, as well as foster shared purpose and creative, small to medium-scale incremental solutions.

6B.4

300,000 Streets: Governing from the street up — participatory cultures for regenerative city futures

Nina Sharpe[1], **Dr Ammon Beyerle**[2]
[1]Regen Melbourne, [2]Here Studio

6B: City Governance and Structure, P514, December 12, 2025, 10:30 AM - 12:00 PM

In the face of housing, climate, and social crises, governments across Australia are calling for urban intensification. But intensification requires more than buildings. It demands a new capacity to retrofit and reimagine existing suburbs — starting with our streets.

300,000 Streets is a collaborative response to this challenge. Convened by Regen Melbourne and piloted through initiatives like Village Zero Sandringham, the project positions streets as a civic and ecological frontier for urban regeneration. It proposes a model for activating a network of 300,000 regenerative streets across Greater Melbourne — while grounding that vision in community-led regenerative practices, place-based experiments, and cross-sector collaboration.

This paper tells the story of 300,000 Streets, situating it within a broader trajectory of regenerative urbanism and participatory street-making. Drawing on both international precedents and longstanding practice-based research in participatory urban design (in Melbourne and abroad), it engages theoretical frameworks of agonistic pluralism, urban micropolitics, and tactical transformation. These lenses help illuminate how change unfolds not through one bold system, but through the entangled dynamics of design, care, conflict, and community.

We reflect on the governance questions this work surfaces — especially around agency. Where does it reside? In individual leadership, collective impact, or in the cultivation of participatory cultures that support long-term civic transformation? How do we share responsibility and imagination across institutions and communities in ways that are inclusive, adaptive, and just?

We close by acknowledging the challenge of embedding this work into planning frameworks, policy cycles, and funding structures. What 300,000 Streets offers is not a static solution, but a replicable, relational approach to participatory governance — one that invites researchers, governments, and communities to co-create the future cultures of our streets.

Keywords: participatory urban governance, regenerative streets, collective impact, community-led placemaking, street-level governance

6B.5

AI and the Future of Planning Education: Epistemology, Ethics, and Practice

Dr Ali Soltani[1]
[1]University of New England

7G: Planning Education, P419, December 12, 2025, 1:00 PM - 2:30 PM

The emergent ubiquity of Artificial Intelligence (AI) heralds a profound epistemic rupture across academic disciplines, fundamentally reshaping the very nature of inquiry and practice; urban and regional planning, as a field deeply engaged with the shaping of human habitats, stands at a pivotal juncture in this transformation. This paper presents a preliminary analysis of AI's integration into planning education globally, focusing on its implications for curriculum design, student learning modalities, research paradigms, and the cultivation of essential skills. By surveying current pedagogical use-cases, meticulously reviewing institutional initiatives, and critically analysing emerging trends, we articulate a grounded roadmap for AI's responsible and equitable adoption. The paper delineates both the inherent affordances, such as advanced simulation-based learning, ontologically generative design processes, and the transformative power of GeoAI, and the significant constraints, including pervasive data biases, acute infrastructure inequities, and the ethical dilemmas of algorithmic governance. This duality informs a nuanced framework for AI-supported planning pedagogy. Our analysis is richly contextualised with global exemplars, deep ethical considerations that probe the societal contract between technology and human agency, , including the risk of intellectual deskilling and creative erosion, and reflective insights drawn from contemporary education research, ultimately aiming to inform robust academic strategies and foresightful professional training.

Keywords: Urban Planning Education, Artificial Intelligence, GeoAI, Pedagogy, Curriculum Design, Experiential Learning.

6C.1

Liveability in Aotearoa New Zealand: exploring diverse perspectives on urban liveable places with arts-based methods

Dr Maria Rita De Jesus Dionisio, Dr Mirjam Schindler

[1]School of Arts, University of Waikato, [2]School of Geography, Environment and Earth Sciences, Victoria University of Wellington

6C: City Health and Liveability, P512, December 12, 2025, 10:30 AM - 12:00 PM

Fostering liveable environments for all residents is a priority of contemporary city-making. As cities rapidly change, creating liveable environments is increasingly urgent due to health disparities, environmental pressures, and shifting social dynamics. What makes an urban place liveable is contextual and varies across geographical and cultural contexts, involving more than infrastructure and access to amenities. It encompasses the quality of life experienced by residents while fostering connections between people, places, economies, and nature. This study explores the subjective and relational dimensions of urban liveability through an arts-based inquiry in two Aotearoa New Zealand cities, Wellington and Hamilton. Drawing on assemblage and collage as an arts-based methodological approach, we investigate how residents perceive and experience their environments in the city, to outline what makes them liveable, how and why. Overall, this study considers the interconnections between the built environment, social interactions, and nature in shaping liveability. The participants were recruited considering diverse socio-demographic, cultural and geographical backgrounds and were invited to create visual representations of their experiences, revealing subconscious and emotional connections to places. The collage method can help uncover non-verbal and affective dimensions of place perception and attachment, with the potential to highlight both contradictions and coexistences in conceptualising health-promoting places and interactions in cities. This research opens up ways of analysing how people relate to environments, revealing the richness of urban life as an evolving, organic experience. The arts-based methodology aimed to enhance creativity, enabling participants to reflect on and reimagine their environments in ways that highlight both positive and negative aspects of liveability. This work resists fixed definitions of place and emphasises adaptability, context sensitivity while responding to the call for co-design practices in urban planning. This research provides valuable insights for planners, policymakers, and health professionals seeking to create liveable environments that reflect communities' lived realities.

The impact of community infrastructure on social connection and place attachment in regional Victoria

Dr Suzanne Barker[1]

[1]Monash University

6C: City Health and Liveability, P512, December 12, 2025, 10:30 AM - 12:00 PM

Policymakers and urban planners are increasingly recognizing the need to prioritise the delivery of community infrastructure as a strategy to combat social isolation, improve overall well-being, and contribute to broader goals of liveability and public health. This study examines the impact of various models of community infrastructure on social connection and place attachment in regional Victoria, Australia. The focus is on the Geelong region and the coastal town of Torquay, where rapid urban expansion has been driven by strong migration. The research considers this regional population growth within broader social and policy challenges such as structural demographic changes, social isolation and loneliness, and the social integration of new and established communities.

The research analyses three case studies to explore different types of facilities and their influence on residents' social connections, sense of belonging, and place attachment types such as place-social bonding and place dependence. The case studies include: a recreational facility attached to a hotel in Torquay managed by RACV Resort; a community hub developed and operated by the local council; and a developer-managed community hub and recreational facility in Armstrong Creek, Geelong. The study utilises surveys and semi-structured interviews with community members who use the community infrastructure, and professionals involved in the design and delivery of the facilities.

The findings underscore the critical role of thoughtfully designed and operated community infrastructure in promoting social interaction and fostering a sense of belonging. By examining the contributions of meeting places provided by different types of entities such as local councils, developers, and non-for-profit organisations, the study highlights the significance of different models of community infrastructure to provide important places to enhance social cohesion and well-being in rapidly expanding regions. These insights offer valuable guidance for urban planners seeking to address similar challenges in regional contexts.

Community infrastructure; social connection; place attachment.

6C.3

From growth to liveability: how local leadership can shape resilient cities

Kelly Grigsby[1]
[1]Municipal Association of Victoria

6C: City Health and Liveability, P512, December 12, 2025, 10:30 AM - 12:00 PM

As the world confronts a cascade of converging challenges, the need for strong, adaptable cities has never been greater. During this time of accelerating change, local governments are uniquely positioned to ensure communities remain resilient, and growth comes with an enduring liveability return.

This session will explore how local leadership can build social licence by championing human-centred urban planning, shaping sustainable cities that simultaneously accommodate population growth, and foster connection, equity and cohesion.

As the level of government closest to the people, councils have an unparalleled understanding of community needs, and must be at the forefront of urban planning and decision-making for our cities of the future to thrive.

Drawing on visionary examples of urban development best practice, both in Australasia and around the world, the presentation will demonstrate how devolved decision-making and local governance are creating vibrant, resilient communities with a strong sense of civic pride and belonging, built on people-centred urban design.

By leveraging collaborative governance and lived experience, local governments can ensure increased density and growth is balanced by investments in amenities, infrastructure and services that return quality of life improvements.

In a time of complex challenges – from accelerating climate change to major demographic shifts and technological disruption – bold and innovative local leadership is essential to empower and future-proof cities.

#Resilience #Planning #Sustainability #Community #People-Centred

Measuring liveability for community benefit - findings of the 2025 Australian Liveability Census

Kylie Legge[1]
[1]Place Score

6C: City Health and Liveability, P512, December 12, 2025, 10:30 AM - 12:00 PM

Community engagement is generally designed for a single purpose or project, is estimated to cost Australian governments over $600m per year, and the requirements in most states and territories are increasing. Yet communities are dissatisfied because decision making is opaque and liveability is decreasing.
In 2021 independent place-based, social research organisation Place Score undertook the first Australian Liveability Census. The objective – to deliver discipline agnostic metrics for stakeholder alignment, improved transparency and ensure that the voice of the community is heard, heeded and tracked over time. Since that time around 100,000 Australians have shared what its like to live where they do, and their ideas for improvement.

This presentation will focus on three key topics:

1.   The need for innovation in community engagement to ensure improved representation – geographically and demographically,
2.   The value of how place-based data to support equity in community visions, strategic planning, funding, implementation and reporting
3.   State and local govenment case studies – Regional planning, transport investment impacts and tracking performance against community outcomes

While the survey approach may seem traditional, the innovations in delivery, technology, data analysis and data use reflect the increasing appetite for changes that improves planning outcomes. The shared benefit of collaborative engagement techniques is evident of the census' transformative impact on the planning profession. The project successfully challenged negative assumptions about qualitative research, elevating it to a trustworthy and reputable source of high-confidence insights.

#liveability #community sentiment #palce data

6C.5

Urban streetscape interventions and the everyday realities of Māori mobility, equity and wellbeing in Aotearoa

Dr Kimiora Raerino[1], Prof Alex Macmillan
[1]Te Manawahoukura Rangahau Centre - Te Wānanga O Aotearoa

6C: City Health and Liveability, P512, December 12, 2025, 10:30 AM - 12:00 PM

Efforts to shift how Māori move, live, and thrive within urban communities often overlook the complexity of contemporary Māori realities. These realities are shaped by colonisation, structural barriers, uneven investment, and a lack of culturally appropriate engagement—factors that require responses informed by Indigenous knowledge and lived experience. This presentation explores Māori perspectives on mobility, equity, and wellbeing in relation to Te Ara Mua – Future Streets, an urban intervention in Ngā Hau Māngere, Tāmaki Makaurau, Aotearoa NZ. While the project aimed to promote walking, cycling, and Māori cultural visibility through street design features, participants' reflections revealed that physical infrastructure alone cannot address the broader community conditions, challenges, and cultural realities that shape how Māori move and live.

Māori participants expressed a range of views—from support for safer design features to concerns about neglected maintenance, poor local fit, and limited community input. More broadly, car use was described as both essential and problematic, driven by the need to reach dispersed destinations, public safety concerns, and the fact that public transport is often perceived as misaligned with daily needs. These contradictions highlight broader challenges in achieving equitable mobility outcomes for Māori when the systems shaping change fail to align with community realities. Rather than assessing interventions in isolation, this presentation offers a broader critique of urban equity, calling for Indigenous-led, place-based approaches that centre Māori aspirations, leadership, and wellbeing in the future planning and shaping of cities.

6D.1

A Harveyan-Lefebvrian investigation of Auckland's housing affordability issues under neoliberal discourse

Mr Maqsood Rezayee[1], Dr Elham Bahmanteymouri[1], Dr Deidre Brown[1]
[1]University of Auckland

6D: City Housing and Inclusion, P421, December 12, 2025, 10:30 AM - 12:00 PM

In Auckland, the dream of homeownership may be entirely out of reach for some people as housing prices remain severely unaffordable. This research challenges the way in which the housing affordability problem is perceived, arguing that housing-related issues must be analysed within the social relations of housing production and distribution as a commodity. In neoliberal capitalist societies, housing takes commodity form with a dual nature, use value and exchange value. Use value refers to the usefulness of consuming a commodity. Exchange value comprises the cost of production, land price, plus surplus value. From the neo-Marxist point of view, the main aim of housing provision in neoliberal capitalist societies is to obtain exchange value rather than to provide use value. Due to the dominant role of exchange value in the housing provision, access to affordable housing for many people has become more difficult. I set this theory as a hypothesis of my research, and the main objective of this research is to test the validity of this universally accepted theory in the particular case of Auckland.

This research integrates Lefebvre's spatial triad theory to provide a complementary theoretical framework to analyse the "contradiction between housing use value and exchange value". Lefebvrian concept of conceived space has clear core linkages to planning policymaking, perceived space to housing production, and lived space to housing distribution. This research found that, under the influence of neoliberal ideology, conceived spaces (New Zealand's national level planning policies) prioritised exchange value over use value. Housing production (perceived spaces) ensured a secure rate of return (exchange value) on investment in Auckland housing production. Housing distribution (lived spaces) highlighted that most housing units were marketed and sold at the market price. Therefore, the research's hypothesis (contribution between housing use value and exchange value) was validated in the case of Auckland.

6D.2

Classifying barriers to integrating affordable housing and Transit-Oriented Development (TOD): A Systematic Literature Review

Mr Mohammad Ali Ashouri Dahnesari[1], Dr Elham Bahmanteymouri[1], Dr Mohsen Mohammadzadeh[1]
[1]School of Architecture and Planning, Faculty of Engineering and Design, The University of Auckland

6D: City Housing and Inclusion, P421, December 12, 2025, 10:30 AM - 12:00 PM

One of the main promises of Transit-Oriented Development (TOD) is the provision of affordable housing near transit stations. TOD represents a strategic approach that can deliver much-needed affordable housing while creating inclusive and sustainable communities near transit hubs. However, in several Australasian and global cases, the implementation of affordable housing within TOD projects remains limited due to various barriers. While some studies have explored practical constraints such as financing constraints, regulatory challenges, and community opposition, deeper fundamental dynamics, including the financialisation of homeownership, also contribute to this issue. Despite these discussions, there are limited studies that offer a comprehensive classification of the barriers hindering the integration of TOD and affordable housing. This research addresses this gap by conducting a systematic literature review in accordance with the PRISMA guidelines to identify and then categorise barriers, with a focus on classifying them into practical and fundamental constraints. The findings will provide a comprehensive understanding of the barriers impeding the implementation of affordable housing in TOD projects and offer insights for policymakers and urban planners seeking to enhance housing affordability within Transit-Oriented Developments.

Keywords: Transit-Oriented Development (TOD), affordable housing, systematic literature review, practical and fundamental constraints

6D.3

The decline of affordable housing in Australian Manufactured Home Estates

Dr Lois Towart[1]

[1]University of Technology, Sydney

6D: City Housing and Inclusion, P421, December 12, 2025, 10:30 AM - 12:00 PM

Traditionally Manufactured Home Estates (MHEs) provided affordable housing popular with older Australians. More recently larger corporate operators have targeted the sector, repositioning it as aspirational retirement living. This research draws on sale prices for MHE homes since the late 2000s in the Central Coast and Port Stephens Regions of New South Wales. This examines the influence of these new operators on prices and supply. Strategies used by these new operators include purchasing established MHEs and repositioning them at a higher price point. This involved requiring incoming residents to purchase new homes from or through the operator and in some cases temporarily closing the estate and evicting existing residents. New estates have been developed at higher price points. Operators argue that MHE living remains affordable as homes are priced below surrounding residential houses. This research identifies that MHE home prices have broadly followed those for residential housing. The supply of homes in MHEs has significantly increased, however this has been for more expensive homes and the supply of affordable homes in MHEs has decreased.

6D.4

Analysing the impact of the 2032 games on homelessness and housing: displacement, renters, and homeowners

Fiona Caniglia[1], **Jackson Hills**[1], AHURI[2]
[1]Q Shelter, [2]AHURI

6D: City Housing and Inclusion, P421, December 12, 2025, 10:30 AM - 12:00 PM

Analysing the Impact of the 2032 Olympic Games on Homelessness and Housing Markets: Displacement, Renters, and Homeowner

We are pleased to submit our presentation outlining the inaugural South East Queensland Displacement Monitoring annual report series.

This report tracks housing conditions and homelessness responses in Brisbane leading up to and following the 2032 Olympic and Paralympic Games. It establishes a baseline for key factors such as housing affordability, social housing availability, and homelessness services demand. With the anticipated $8.1 billion in social and economic benefits and the creation of 91,600 full-time jobs, the Games present a unique opportunity for Queensland. However, there are significant concerns about potential displacement and the pressure on the local housing market due to increased demand for housing.

Developed in partnership with AHURI, Q Shelter, and various partner organisations—Communify, Micah Projects, The Salvation Army, InCommunity, YFS, The Committee for Brisbane, and Brisbane Youth Service—this report addresses concerns related to housing displacement. It identifies potential risks, particularly for vulnerable population groups, which have been validated by quantifiable impacts experienced by most previous Olympic Games host cities. The ongoing annual analysis series will guide future policy responses to mitigate adverse impacts on renters, homeowners, and people who experience homelessness. By continuously monitoring housing market trends and any possible community displacement, we will help inform strategic decisions to ensure that Brisbane 2032 delivers a lasting legacy of social inclusion and resilience. As legacy planning becomes a key focus for the International Olympic Committee, this research will provide insights to maximise community benefits and minimise long-term costs, ensuring Brisbane 2032 fosters an inclusive and sustainable housing market.

*Link to the first report in the annual series:
https://qshelter.asn.au/wp-content/uploads/2024/10/AHURI-05287-QShelter-Report_displacement-241014.pdf

6D.5

Sleeping Out - Designing-In: ethical considerations for planning and designing homefullness in public space

Dr Ian Woodcock[1], **Dr Julie Rudner**[2], Ms Jenny Donovan, Dr Kimberlea Cooper[2], Jialing Xie[1], Dr Magda Szypielewicz[2], Dr Helena Menih[2]

[1]University of Sydney, [2]La Trobe University

6D: City Housing and Inclusion, P421, December 12, 2025, 10:30 AM - 12:00 PM

What can we learn by engaging with the lives of people who sleep rough in public places such as railway stations? In this paper, we delve into issues raised by a collaborative research project with Transport for NSW about making stations more caring environments for people living precariously. With an ostensive focus on policy for design standards and service provider stakeholder frameworks, the research team confronted larger questions about home in contemporary neoliberal cities.

People living precariously have become inextricably part of our urbanism. Yet their representation lacks congruence with the public spaces they occupy. While current circumstances have normalised the situation of being unhoused, sleeping out is not yet universally so. Particular places form patches that are threaded together, visible yet unrecognised. Supporting people living precariously and those sleeping rough to find accommodation and live better lives is a goal, however as a sole focus, it obscures other values, possibilities and solutions. Is it possible to include precarity into policy and design considerations so care is provided, but the need for care is not entrenched? How would this care infrastructure be initiated, activated, and supported? What would it look like? Would segregation or contestation characterise shared spaces, or could something else prevail?

Designing for care and dignity to allow for engagement, solidarity, conviviality without trivialising the material and psycho-social experiences of the precariate. Rather than 'fixing' the problem of homelessness by universalising 'homefullness' (Macarow & Haslem 2012), designing for care accommodates rough sleepers making the public realm itself more homefull and personable. Ultimately, this sheds light on ways in which public spaces lack care for all who would use them, not just those 'most in need', and in turn opens up thinking for what they could become.

KEYWORDS: Homelessness, Public Space, Railway Stations, Care ethics, Homefullness

6E.1

Gender-based violence in Melbourne's public transport

Ms Longqi Lin[1], A/Prof Iderlina Mateo-Babiano[1]

[1]The University of Melbourne

6E: City Movement and Infrastructure, P506a, December 12, 2025, 10:30 AM - 12:00 PM

Public transport (PT) is essential for enabling access to economic, social, and political activities, particularly for women who rely on PT more than men. However, multiple studies have shown that Gender-based Violence (GBV) in PT persists, with women as the most severely victimized group. This has resulted in significant harm to women's mobility, well-being, and civil rights. This research aims to investigate the attitudes and strategies adopted by Melbourne PT providers in addressing GBV, and to examine female passengers' perceptions of GBV reduction strategies. The long-standing presence of GBV in Melbourne's PT and the limited existing research provided a suitable case study. First, semi-structured interviews were conducted with PT providers (Yarra Trams, Metro Trains, and Ventura Bus) to identify their attitudes and safety strategies. To complement, an online survey was conducted to collect quantitative data to show women's attitudes toward current strategies. The findings show that the level of understanding and attention to GBV among providers is uneven due to a lack of full recognition of the unique needs of women and the reality of their high-level victimization. There is a gap between existing security strategies and the needs of female passengers, who prioritize the presence of professionally trained and widely distributed security personnel over technical measures such as CCTV cameras. Collaboration and two-way information sharing between providers and external entities need to be strengthened, particularly for Melbourne buses with decentralized responsibility for multi-model operations. Finally, GBV on PT reflects broader societal issues that must be addressed through stronger legislation and public education, both to deter offenders and to foster a culture of respect for women. This research contributes to developing gender-sensitive transport strategies, aiming to reduce gender inequality and promote more equitable, inclusive urban environments in line with Sustainable Development Goal 11.

Keywords: gender-based violence, public transport, women's safety

6E.2

Effective interventions to increase active transport mode share: What the data tells us

Dr Elliot Fishman[1]

[1]Institute for Sensible Transport

6E: City Movement and Infrastructure, P506a, December 12, 2025, 10:30 AM - 12:00 PM

Australian governments have had an ambition to increase walking and cycling in cities and towns. A review of the last two decades of data suggests active transport levels have stagnated, or in some cases, gone backwards. This presentation distils the results of an Austroads-funded project focused on examining the data on the interventions most effective in growing active transport mode share.

The paper categorises interventions based on their cost, complexity to deliver, and impact on mode share and safety.
The most effective approach to increasing active transport mode share requires a focus on disincentives to car use (road volume reduction, removal of car parking, and road user pricing), as well as improved infrastructure for people walking and cycling. Additionally, the need for creating 20-minute cities is critical to lowering trip distances, which boosts the likelihood of both walking and cycling.

Key words
Active transport
20-minute cities

6E.3

Exploring aspects of transport-induced gentrification in Sydney's CBD and South-East Light Rail Project

Dr Lara Mottee[1], Dr Wei-Ting Hong[1], Prof John Nelson[2]
[1]John Grill Institute for Project Leadership, Faculty of Engineering, [2]Institute of Transport and Logistics Studies (ITLS), The University of Sydney Business School

6E: City Movement and Infrastructure, P506a, December 12, 2025, 10:30 AM - 12:00 PM

Metropolitan transport-infrastructure projects can transform places, creating opportunities for transit-oriented development and urban renewal. At the project-scale, planning calls for an understanding of local communities through social aspects such as wellbeing, health, culture, personal and property rights to deliver benefits. Infrastructure also has the potential to create social disbenefits, inequalities and negative externalities arising from the direct impacts in the urban environment. Gentrification is one such disbenefit that may be enacted by the planning of transport-infrastructure. It is a process of change in the characteristics of a neighbourhood, caused by the movement of wealthy businesses and residents.

This presentation will discuss our research into the relationship between rail transport and key aspects in gentrification processes, using the CBD and South-East Light Rail Project in Sydney, Australia as a case study.

In our research, we adopted a mixed-method approach to analyse public engagement, using Natural Language Processing (NLP) and document review of publicly available data collected during the design, construction and operation phases of the project.

Our results showed that that while there is evidence that gentrification processes may be occurring, they are not reflected in the project-led public engagement or project documentation in the case of the CBD and South-East Light Rail.

Planners raised awareness of gentrification risk through local government planning reports, however, these are likely to have been inadequate to prevent or even ameliorate impacts on local communities. It is difficult to identify a point in time when the gentrification processes were enacted and could have been slowed, given the multi-level governance context influencing metropolitan planning.

We conclude that state governments and project leaders must improve engagement practices about potential gentrification impacts of transport infrastructure projects and work with local authorities and communities to be transparent about the significance of gentrification effects over time.

6E.4

Research-led teaching and 'wicked' transport problems: a promising case from regional Victoria

Dr James Whitten[1]

[1]Monash University

6E: City Movement and Infrastructure, P506a, December 12, 2025, 10:30 AM - 12:00 PM

Regional Australia is a blind spot in progressive transport policy and academic planning advocacy relative to metropolitan Australia. Generally, it is assumed that car dependence is locked-in because sparsely populated regions are difficult to serve effectively with public transport, and active transport participation is low because of longer travel distances. Consequently, government policies to reduce the socioeconomic and environmental impacts of regional transport involve a combination of rail upgrades for longer trips, and electric vehicle infrastructure and demand responsive solutions (e.g., community transport) for shorter trips.

This paper reports on the findings of a research-led teaching project called 'Movin' the 'maine: elements of a community-led transport plan' which show that bus reform and active transport are crucial components of sustainable regional mobility. Research-led teaching was used to foreground local knowledge in the project by connecting Monash University Master of Urban Planning and Design students to representatives of community organisations and advocacy groups from Castlemaine, Mount Alexander Shire, in central Victoria.

The policies, plans and projects developed by the students would restructure regional Victoria's mobility system around a network of 'provincial cities' that are connected to surrounding townships by efficient public transport, tailored on demand transport solutions, and active transport infrastructure that is adapted to regional conditions. Additionally, the students identified opportunities to increase accessibility and reduce travel demand by reforming planning systems.

Although seemingly radical, the student's ideas are relatively conservative in their scale and scope. What is needed to move regional communities towards a sustainable mobility future is a more efficient use of existing resources (e.g., rail and road assets, government subsidies, etc.) and the implementation of existing regional policies. In conclusion, the paper reflects on research-led teaching as a method for exploring 'wicked' transport problems and devising potential planning and design solutions.

Strategic greening of informal urban spaces: A cost-effective path to biodiversity and connectivity

Dr Hugh Stanford[1,2], Dr Holly Kirk[2]
[1]RMIT University, [2]Curtin University

6F: City Nature and Environment, P506, December 12, 2025, 10:30 AM - 12:00 PM

Amid the global biodiversity crisis, cities have emerged as a crucial battleground for conservation efforts. Urban areas host a disproportionately high number of threatened species and offer one of the most immediate opportunities for people to form meaningful connections with nature – connections that are vital for fostering pro-environmental values and behaviours. However, as cities densify, the amount of green space available to support biodiversity is declining. This is undermining ecological connectivity and threatening the long-term viability of many urban-dwelling species.

Fortunately, cities are also filled with overlooked and underutilised spaces – often referred to as informal green spaces – that hold significant potential to contribute to urban biodiversity, provided they are planned and managed appropriately.

This study explores the ecological value of two such land use types: railway corridors and utility easements. We use established landscape connectivity models to assess how greening these informal spaces could improve habitat connections for key urban species – woodland birds, pollinating insects, and lizards. These species play important ecological roles and serve as indicators of broader urban biodiversity.

Our findings show that the strategic greening of these underused corridors can significantly improve habitat connectivity for a range of important urban species. We also provide a comparative cost analysis of various greening scenarios and identify areas for prioritising greening initiatives within the Greater Melbourne case study. These insights offer practical guidance for urban decision-makers, planners and land mangers seeking to integrate ecological connectivity into future urban greening efforts.

This research adds to a growing body of literature highlighting the overlooked ecological potential of informal green spaces. It presents a practical, cost-effective strategy for enhancing biodiversity in cities and emphasises the urgent need for integrated, evidence-based planning that prioritises ecological connectivity.

6F.2

Visioning street green canyons: Classifying and mapping typologies via deep learning and street-view images

Mr Hongming Yan[1], A/Prof Sumita Ghosh[1], Prof Martin Bryant[1], Dr Mukesh Ray[1]
[1]University of Technology Sydney

6F: City Nature and Environment, P506, December 12, 2025, 10:30 AM - 12:00 PM

The urban street green canyon refers to the spatial form created by the enclosure of street greenery, playing a crucial role in enhancing the ecological quality of urban environments and offering significant microclimatic and social benefits. While urban canyons have been extensively studied, research has predominantly focused on building-defined spaces, often overlooking the influence of street-side greenery. With the widespread application of Deep Learning in urban studies, an increasing number of street-level greenness indicators have been developed to quantitatively assess urban street greenery perception, e.g., the Green View Index (GVI) and the Panorama View Green View Index (PVGVI). However, most of these indicators focus on quantifying green volume, with limited emphasis placed on the classification and evaluation of urban green canyons. Moreover, an effective and accurate assessment of street green canyons is a fundamental prerequisite for research on urban greenery morphology, as traditional approaches, which largely rely on extensive field surveys, are costly and laborious. To address these limitations, this study develops a novel approach for classifying urban green canyons using Google Street View (GSV) imagery. Leveraging recent advances in Deep Learning, we adopt the Vision Transformer (ViT) model to classify green canyons at four levels: greenery-location-based, greenery-type-based, greenery-height-to-road-width(H/W)-based, and greenery-symmetry-based. The model was trained, optimised and validated using approximately 225,500 street segments across major urban areas in Sydney. Results indicate that the proposed model achieves a relatively high level of accuracy across all four classification tasks. Finally, thematic maps of the multi-level classification results were generated and spatially analysed. This classification framework not only offers a cost-effective tool for the classification and mapping of urban green canyons but also provides valuable street-level data to better facilitate further research on urban green morphology and urban microclimate.

Keywords: Street greenery, Street green canyon classification, Deep learning, Vision Transformer, Google Street View

6F.3

Community values in co-designing resilient street retrofits in Melbourne

Dr Marie Dade[1], Dr Kylie Soanes[1], Dr Nano Langenheim[1], Dr Thami Croeser[2], Dr Kerry Nice[1], Dr Dom Blackham[3], **Prof Sarah Bell**[1]

[1]The University of Melbourne, [2]RMIT, [3]Mosaic Insights

6F: City Nature and Environment, P506, December 12, 2025, 10:30 AM - 12:00 PM

Streets are essential components of cities and neighbourhoods, constituting up to 90% of all public-owned urban land. While streets are important sites of social, economic and cultural life, they have become dominated by cars. Many residential streets over-provide for traffic and parking, with limited provision of green or social spaces. Impermeable streets without trees exacerbate urban risks of extreme heat and flooding. Rethinking streets as green infrastructure is a considerable opportunity to rebalance these areas, improving urban resilience to heat and flooding and delivering co-benefits such as improved health and liveability.

Engaging residents in co-designing street retrofits has the potential to constructively balance trade-offs between cars and green infrastructure. This paper compares three community co-designs of street retrofits with green infrastructure in Melbourne. The streets were from three different neighbourhoods: an inner suburb undergoing transit oriented, high density infill; an established suburb undergoing urban renewal, including medium density infill; and a recently developed urban growth area. The urban form and demographics of the streets are distinct from each other and broadly indicative of different types of residential streets in Melbourne and other Australian cities. This paper provides an overview of the current streets and the outcomes generated from the co-design process, emphasising the role of community values in the designs. Participants in the co-design process attended workshops and completed on-line surveys before and after the workshops, with each of these activities eliciting different aspects of participants values, including things they would like to include and to avoid in their street. In comparing the participants values and the design outcomes across the three case studies this paper reflects on the influence of diverse urban form and demographics on urban design and the potential for transformation to enhance resilience.

Keywords: resilience, community co-design, retrofit, streets

6F.4

Which tool, when? A review of urban greening tools for integrating nature-based solutions in cities

Dr Sareh Moosavi[1], **Dr Judy Bush**[1]
[1]The University of Melbourne

6F: City Nature and Environment, P506, December 12, 2025, 10:30 AM - 12:00 PM

To facilitate planning and designing nature-based cities, there has been a surge in new guidelines, rating tools and assessment frameworks focused on integrating greening measures in urban environments. Despite a growing recognition of the multiple environmental and societal benefits of nature-based solutions, tools that can capture and assess this multiplicity across different systems and scales are limited. Furthermore, a number of existing tools are an expansion of tools developed for buildings, simply promoting the addition of landscape components as an afterthought, which limits the systemic integration of nature-based solutions in built environments from early stages of projects. With the concurrent emergent of different tools, there is ambiguity around the purpose and focus of each, limiting their uptake and implementation. This calls for a stock-take and review of greening tools, to understand their purpose, focus, stage and scale of application, and types of outputs. This paper offers an analysis of six selected tools currently available and used in Australia. The tools are analysed across multiple criteria with the aim of understanding how they integrate different dimensions of nature and sustainability. To this end, the 'Nature Future Framework' is adopted as an analytical lens. Results reveal a spectrum of different greening ambitions: while some tools only focus on achieving minimum standards in ecosystem service provisions, allowing for 'box-ticking' approaches in planning and designing urban landscapes, others seek to promote innovation and advocacy, or marketing leadership approaches through offering rating outputs. The findings uncover the objectives and capacity of these tools for embedding and foregrounding nature into urban areas, and help end-users such as planning and design professions make informed decisions when engaging with tools. The review also helps researchers and practitioners who are looking into embarking on developing new tools understand what might be redundant, and what is needed.

6F.5

Innovative funding for green space to support quality urban density

Prof Nicky Morrison[1], Maryann Strickling[1], Dr Vanita Yadav[1], Dr Anna Leditschike[1], Dr Farid Uddin, Dr Tom Longden
[1]Western Sydney University

6F: City Nature and Environment, P506, December 12, 2025, 10:30 AM - 12:00 PM

As Australasian cities densify, public green spaces are increasingly critical—not only for health, social cohesion, and liveability, but for biodiversity conservation, urban cooling, and climate resilience. Yet despite the widespread recognition of nature-based solutions, the funding mechanisms required to integrate and sustain green infrastructure remain under-addressed. This research tackles that overlooked dimension: how to develop sustainable, scalable models for financing and governing urban green space, particularly within the context of intensifying urban development.

Focusing on Western Sydney—a region at the frontline of growth and climate extremes—this study collaborates with local councils, state and federal agencies, and peak industry bodies to examine emerging funding and management approaches. Through in-depth interviews and action research via high-level roundtables, the project identifies systemic barriers and co-designs new models of shared investment and governance.

Findings from Phase 1—a gap analysis, stakeholder engagement, and iterative co-design process—have resulted in a suite of funding and governance models endorsed by stakeholders. This work is especially timely given ongoing intensification of housing in Western Sydney's growth corridors and increasing calls for infrastructure funding reform across all levels of government. Despite policy momentum on urban greening and climate resilience, mechanisms to fund and embed nature into high-density development remain fragmented and underdeveloped.

By focusing on the financial and institutional enablers of nature integration, the project complements existing ecological and design approaches. It contributes to a broader socio-ecological agenda—demonstrating that innovative funding is essential to realising the transformative potential of green space as a core element of sustainable and resilient urban futures.

6G.1

The death and death of Australian planning schools

Dr Anthony Kent[1]
[1]RMIT University

6G: Planning Education Panel, P419, December 12, 2025, 10:30 AM - 12:00 PM

The Planning Institute of Australia has made it very clear: there is a shortage of Australian planners as is plainly seen in the government's Occupational Shortage List. To make matters worse – far worse – the closure of planning schools across Australia continues.

The decline in the availability of planners is drastic. Since 2022, the situation has gone from 'no national shortage' to 'critical national shortage'. The PIA continues, 'This escalating shortage comes at a time when Australia is grappling with complex planning challenges, including housing affordability, population growth and climate resilience. The growing demand for skilled planners to address these issues has outstripped supply, leaving many employers struggling to fill vital roles'.

Thirteen universities have closed planning programs in the last eight years, with more likely to come. While university enrolments have declined overall, the closure of planning schools represents an interrelated downward spiral. As schools close, potential planning students see less and less opportunities for training. In addition to the concerns of the PIA, this also means potential academic planners see less job opportunities while existing academics lose their jobs altogether or are 'lost' to other disciplines. And with that loss of teaching capability comes a threat to academic planning research, itself a critical resource in 'grappling with complex planning challenges'.

This panel proposal will bring together planning academics at the front line of the crisis. Invited panelists will discuss the causes, impacts and the circumstances in which closures have occurred; the impact on planning academics; the consequences both short and long term for Australian cities and the strategies and approaches that can be pursued to arrest these concerning developments.

6H.1

Behind the "latte line": Exploring socio-spatial inequality within Western Sydney

Ms Nicole Campbell[1]

[1]Western Sydney University

6H: City Design and Morphology, P505, December 12, 2025, 10:30 AM - 12:00 PM

This paper posits that the decision-making processes and practices of agents engaged in the development of metropolitan planning strategies may in themselves be factors in observed spatial inequality and uneven infrastructure investment.

This paper outlines initial findings arising from a post-structural discourse analysis of eight NSW metropolitan planning strategies spanning from 1968-2018. An initial text and content analysis was undertaken for each strategy and then augmented with a post-structural analysis using the "What's the Problem Represented to be?" (WPR) methodology developed by Bacchi and Goodwin (2016).

WPR focusses on understanding the assumptions that may underlie the "problem" and is a useful framework for post structural discourse analysis in that it contextualises government policy documents in the time that they were written so that the 'conditions of its existence' can be elucidated (Foucault 1978 in Burchell et al,1991: 61, Lea, 2024).
WPR challenges the researcher to consider how the "problem" may have been constructed, and which agents may have been engaged in constructing the "problem". WPR encourages exploration of where silences might exist and consideration of the discursive, subjective, and lived effects produced by the representation of "the problem" (Bacchi and Goodwin, 2016).

WPR is an approach that enables a nuanced examination of Tess Lea's concept of a Policy Ecology, which posits that the breadth of policy is only revealed through consideration of three distinct but entwined lens' of focus; artifactual, ambient and hauntological (Lea, 2024).

The fifty-year time frame of the eight NSW metropolitan planning strategies in this analysis creates a unique opportunity to consider all three complexions of Lea's Policy Ecology and potentially offers a new way of identifying the drivers for decisions that shape metropolitan development, using metropolitan Sydney as a case study.

6H.2

Demolishing Brisbane (1978-1988): rebranding urban identity through demolition and symbolic economy

Dr Joanne Choueiri[1]
[1]Queensland University of Technology

6H: City Design and Morphology, P505, December 12, 2025, 10:30 AM - 12:00 PM

Between 1977 and 1988, Brisbane's urban fabric underwent significant transformation under Premier Sir Joh Bjelke-Petersen. In preparation for the 1982 Commonwealth Games and the 1988 World Expo, an estimated 60 structures, including civic buildings, theatres, markets, and historical streetscapes, were demolished across the city under the banner of development and global ambition. While this period of large-scale building has been discussed in political, economic, and heritage studies, the act of demolition itself—specifically its symbolic, spatial, and cultural implications—has received little direct scholarly attention.

This paper argues that demolition in Brisbane during this transformative period was a strategic cultural approach crucial for reshaping the city's urban identity. Drawing on Sharon Zukin's (1995) concept of the "symbolic economy," this paper posits that demolition operated as a tool for rebranding, enabling symbolic cleansing, and the production of space for consumption, all of which reshaped urban identity through state-led storytelling and visions of global modernity. Based on archival records, press coverage, and visual documentation, this paper constructs a historiography of demolition in Brisbane, demonstrating how these demolitions were crucial in presenting a modern, globally focused identity for the city that emphasised spectacle, growth, and investment.

As Brisbane prepares to host the 2032 Olympic and Paralympic Games, demolition, redevelopment, and rebranding are once again central to the political elites' rhetoric. By revisiting the historical precedent of Bjelke-Petersen's era, this paper highlights the importance of examining demolition as a powerful cultural force shaping who cities are for, what stories they tell, and whose histories they erase. This research offers insights into how symbolic economies operate through what cities destroy and then build, eventually framing their lasting cultures and identities.

Keywords: Urban identity, Demolition, Symbolic economy, Brisbane, Sir Joh Bjelke-Petersen, Sharon Zukin

6H.3

Developing Great Australian Cities: Interventions in Metropolitan Regional Structure

Mr Jeff Humphreys[1]
[1]University Of Queensland

6H: City Design and Morphology, P505, December 12, 2025, 10:30 AM - 12:00 PM

Planning the structure of Australia's major metropolitan regions is riddled with uncertainty and this research investigated how to go about improving understanding of what should be done, in response to this complexity.

Australia's population continues to grow substantially, primarily concentrated in Australia's four major metropolitan regions, Sydney, Melbourne, South-East Queensland and Perth. The largest agglomerations of jobs are located around the historical central areas of these regions, which are favoured as locations for knowledge-intensive activities. However, even though urban consolidation strategies have been pursued now for decades with some success, substantial new residential growth continues to be accommodated at the outer boundaries of these regions, further removed from the main central concentrations of jobs. Analysing what to do about this problem leads to a focus on the intersection of four factors, namely population growth, the new geography of jobs, metropolitan housing options and transport infrastructure.

This research explored the utility of using a Strategic Choice Approach-based umbrella methodology to improve understanding of this complex Australian metropolitan structural problem, and how to respond.

The research led to a hierarchy of conclusions about the metropolitan structural subject matter, expressed as an Australian Metropolitan Strategic Frame. Intended to apply to the four major Australian metropolitan regions, it is concluded that the most important (though not only) element is to strengthen continually the central employment agglomerations in each region and continually improve the radial public transport systems focused on those central areas, integrated with housing development.

On the way to that outcome, the research has also found a useful way of looking at the geography of jobs in the Australian metropolitan setting, using an occupations-based categorisation system.

Keywords: metropolitan planning, strategic spatial planning, Strategic Choice Approach

6H.4

Finding the legacies of historical planning decisions in modern neighbourhood land use patterns

Nick McFarlane[1]

[1]RMIT University

6H: City Design and Morphology, P505, December 12, 2025, 10:30 AM - 12:00 PM

Emerging global policy ideals designed to encourage sustainable, accessible, and transit-oriented networks of housing, commerce, and industry, grapple with the reality that modern cities are comprised of legacy networks of communities, infrastructure, and buildings that have developed over the course of centuries. While conventional economic investigations see apparently path-dependent land use structures as an unintended consequence of market agglomeration forces, the tools that policy-makers rely on to address these challenges—being the planning and property rules that constrain private rights to acquire, use, and develop land —are largely excluded from these conceptual models. This leaves little understanding of how legacy planning institutions have shaped, adapted, or entrenched fine-grained urban land use patterns, and how they ought to be reformed if transformative changes are to be realised.

To address this research gap, I first digitise twentieth-century tram network and initial land use zoning maps to measure long-run land use persistence around Sydney's defunct tramway network. A series of regression models identify a strong concentration of high-density housing and commerce around the defunct transit network, often defying the intended land use changes envisaged in early zoning ordinances. I then use historic subdivision plans to trace the process of decisions to acquire, transfer, divide, and develop land that can explain diverging rates of persistence in 'defiant' and 'adherent' neighbourhood blocks. This reveals an overwhelming pattern of residential land use protection and expansion, along with commercial land use inertia. However, this pattern was evident only in 'status-quo' neighbourhoods with historically complex and fragmented private property rights, along with limited regulatory constraints. I therefore identify path dependent urban land use patterns that arose not from the mutual economic benefits of like-minded market actors, but from historical institutional decisions to define and entrench neighbourhood-level private land use conflicts and disincentivise collaborative change.

Land Use, Planning, Property Institutions

6H.5

From Talking to Walking: Planning for Transit-Oriented Neighbourhoods in Melbourne

Eris Zhang, Dr Elek Pafka
[1]University Of Melbourne

6H: City Design and Morphology, P505, December 12, 2025, 10:30 AM - 12:00 PM

With accelerating global warming, the imperative for walkable environments has become central in planning discourses in Australia and globally. A direct approach to enable walkability is through planning instruments aiming for higher density, increased functional mix, and improved access within transit-oriented neighbourhoods. While there is no shortage of ambitious statements in local planning documents, overall little modal shift has been achieved in Australian cities.

This paper investigates the changes in walkability within Melbourne's activity centres from 2009 to 2024, and the policies that aimed to enable these, taking Box Hill and Dandenong as case studies. Using the Urban DMA framework—Density, Mix, and Access—the study examines how urban morphological transformations over fifteen years have influenced walkability in the 1km2 around each railway station.

The findings reveal small changes towards increased walkability in both activity centres. Box Hill experienced significant vertical intensification, with population density and Floor Area Ratio (FAR) rising sharply, driven by high-rise residential developments that integrate multiple functions. However, accessibility remained stagnant due to the persistence of a low-permeability urban fabric. In Dandenong a major government-led intervention improved access to the railway station. At the same time density and mix of uses only increased moderately, in part as a side-effect of the same redevelopment.

The morphological and policy analysis highlights the limited capacity of well-intended but vaguely worded urban policies in achieving material outcomes. Box Hill's more coherent policies fostered increased density and mix but overlooked accessibility, while Dandenong's fragmented intervention yielded contradictory results. It is argued that well-meaning statements have limited potential in achieving what they promise. Instead, ambitious targets implemented through precisely directed tools may be more potent in enhancing walkability.

6I.1

Indigenous Urban Water Design: Reclaiming Memory, Place and Practice in Australian Cities

Dr Ana Lara Heyns[1,3], **Prof Carolyn Briggs**[1], **Prof Brian Martin**[1], **A/Prof Maria de Lourdes Melo Zurita**[2], **Dr Laura Harper**[1], **A/Prof Catherine Murphy**[1]

[1]Monash University, [2]University of New South Wales, [3]La Trobe University

6I: Reckoning with Settler Colonial Cities Panel, P413, December 12, 2025, 10:30 AM - 12:00 PM

Australian cities are Indigenous places, yet Indigenous knowledge systems remain largely excluded from urban planning and design. The built environments of our cities have been shaped by colonial frameworks that have displaced Indigenous memory, materiality, and relationships to Country. As urbanisation intensifies and ecological crises deepen, there is an urgent need to reconceptualise the city through Indigenous lenses.

This panel brings together Indigenous and non-Indigenous scholars and practitioners to explore Indigenous Water Urban Design - a practice of 'unsettling' the city by reclaiming space, memory, and design through Indigenous sovereignty and living memory. At its core, Indigenous Water Urban Design resists imposed colonial definitions of the urban and instead affirms Country as the foundation for design and planning. Building on the Australian Indigenous Design Charter, this work highlights design processes rooted in respect, relationality, and Country-centred collaboration. This panel focuses specifically on water as both a material and cultural force in the city. Water is understood not merely as a utility or hazard, but as a living presence: flowing through memory, story, archive, and the physical traces of past and present ecologies. Indigenous water urban design proposes new frameworks for sustainable and culturally respectful water management, addressing challenges such as flooding, pollution, and the loss of cultural water sites.

In collaboration with Melbourne Water and Museums Victoria, the project focuses on two key urban areas: the City of Port Phillip and the City of Bayside. Through interdisciplinary research, the project suggests new pathways grounded in Indigenous knowledge, yielding environmental, economic, and socio-cultural benefits for water urban design. This panel will share the project's process and findings, and advocate for Indigenous-led water urban design as a vital strategy for just, resilient, and decolonised urban futures in Australia.

Parallel Session 7

7A.1

Cybernetic capital cycles: A response to capitalist crises

Dr Elham Bahmanteymouri[1]
[1]University of Auckland

7A: City Economics and Development, P504, December 12, 2025, 1:00 PM - 2:30 PM

The relationship between economic cycles in capitalism and technological innovations—particularly digital platforms—is a critical topic in political and urban economic theory. Platforms such as Airbnb, Uber, remote working tools, and emerging AI applications have become integral to urban economies. Yet their elasticity in the face of economic downturns and systemic capitalist crises remains underexplored. Traditional economic models often fall short in capturing the new dynamics these platforms introduce to urban environments.

While frequently portrayed as adaptive solutions to economic or social challenges, digital platforms may also reproduce vulnerabilities or generate new forms of instability, especially during periods of diminishing returns and long-wave capitalist crises (K-cycles). This research introduces the theoretical concept of the cybernetic capital cycle, a framework I developed to investigate the interactions between economic systems and digital platforms.

Through comparative analysis across seven cities—Auckland, Wellington, Queenstown, Christchurch, Singapore, Amsterdam, and Sydney—I examine how digital platforms respond to economic turbulence. These cities offer diverse contexts to explore how such platforms both absorb and exacerbate economic shocks, and how their elasticity is shaped not only by market logic but also by the urban political-economic conditions in which they operate.

This paper offers insights into how digital platforms interact with urban development, housing, labour, and post-crisis recovery strategies. It bridges urban economics and digital platform studies, highlighting the need for planners and policymakers to account for platform dynamics when addressing economic instability. In an era of technological acceleration and deepening inequality, understanding the elasticity of digital platforms could inform strategies for more equitable and resilient urban futures.

7A.2

Residualisation and financialisation in the community housing sector: a Victorian case study of crisis potentialities

Dr Liam Davies[1], Prof Jago Dodson[1]

[1]RMIT University

7A: City Economics and Development, P504, December 12, 2025, 1:00 PM - 2:30 PM

Over the past two decades community housing has emerged as the preferred mechanism for governments to procure new social housing in Australia over historical public housing programs. This paper investigates how state efforts to advance beyond the fiscal and institutional limitations of the conventional administrative-bureaucratic public housing model have, in Australia, generated new contradictions as quasi-non-government social housing actors operating under highly capital constrained growth models are forced into financialised relationships that begin to approach conditions similar to the lower-cost private rental sector.

This paper poses four principal research questions. First, what has been the trajectory of the community housing sector since the 1990s, in contrast to the preceding development of public housing and the housing system generally? Second, how has the sector developed in response to pressures to house a growing number of high-needs tenancies while also exploiting a mix of subsidies and imperatives to attract private capital investment in stock? Third, how can a case study of the state of Victoria illuminate and advance understanding and theorisation of processes of residualisation and financialisation in social housing, both within Australia and internationally. Fourth, how might the contradictions of residualisation and financialisation be addressed through better policy?

Using the state of Victoria as a case study, we contend that community housing faces dual pressures of residualisation of tenancies accompanied by financialisation of stock development and expectations of financial entrepreneurialism. Despite its policy imaginaries, community housing is struggling to expand at sufficient pace and scale to meet systemic housing need. We argue that reconceptualisation of the community housing sector will be needed if it is to serve social purposes at the scale needed to meet community need.

7A.3

Housing market and climate change

Peyman Habibimoshfegh[1], A/Prof Nader Naderpajouh[1]

[1]University of Sydney

7A: City Economics and Development, P504, December 12, 2025, 1:00 PM - 2:30 PM

Climate change-related disasters can trigger abrupt and prolonged shifts in housing prices, deepening intra-societal inequality and leading to adverse social outcomes such as housing affordability crises, homelessness, and forced migration. While some cities exhibit resilience to these shocks, others do not, reflecting varying levels of adaptive capacity across urban areas. In this research, we use fuzzy-set qualitative comparative analysis (fsQCA) on data from 1,000 cities to identify combinations of adaptive capacities that prevent extreme housing price changes following climate-related disasters. Our findings highlight the critical role of socio-cognitive constructs, institutional strength, and governance quality in shaping resilient housing markets. By addressing the policy–outcome gap at the intersection of housing and climate policy, this research offers insights for city governments seeking to stabilise housing markets and mitigate future downturns and social inequalities.

Keywords: Housing - Climate Change - Social Outcomes - Resilience - Adaptive Capacity

7A.4

Who Pays? Emerging possibilities for resourcing managed retreat

Dr Aysin Dedekorkut-Howes[1], Mr Andrew Buckwell[1], Dr Michael Howes[1], Prof Justine Bell-James[2], A/Prof Johanna Nalau[1], Dr Margaret Cook[1], Dr Edward Morgan[1]

[1]Griffith University, [2]The University of Queensland

7A: City Economics and Development, P504, December 12, 2025, 1:00 PM - 2:30 PM

The increasing impacts of climate change require more proactive adaptation options. Managed retreat, the strategic and pre-emptive withdrawal of settlements and infrastructure from hazardous zones, is now being considered in an increasing number of contexts and locations. Its implementation, however, faces numerous and complex challenges, not least of which is the issue of resource acquisition and allocation. This challenge is confounded by logistical, capacity, political, and equity issues. The failure to consider these issues can undermine implementation efforts and may even derail actions altogether. This paper aims to promote discussion about how to ensure the implementation and resourcing of effective, efficient, and appropriate managed retreat. The study reviews how resources can be mobilised from private and public sectors to motivate this through product and policy innovation. Both sectors struggle with the long term and uncertain impacts of climate change and the ramifications of how to determine where residual risk lays, leaving them looking at each other for solutions and resourcing. Local and regional governments, often responsible for planning and land use, are usually the most resource constrained, but also saddled with climate adaptation responsibility. Local governments can be exemplary borrowers, collectors of taxes, and provider of services and act in collective interest given their role as planning authorities. However, there is limited capacity in the public sector to administer innovative resourcing schemes. The private sector, when provided the right incentives, can provide significant scale, flexibility, and dynamism to enable managed retreat, although there are also significant barriers to action at the likely scale required. As the frequency, extent, and magnitude of climate-related risks combine and compound, policymakers and planners will be left with fewer options for at-risk areas. They will need to mobilise the resources of communities and the private and public sectors to adapt.

7A.5

Climate finance for climate resilient development: A perspective from Vanuatu and Tonga

Anuja Raju[1], **Mr Dejan Malenic**[1]

[1]The University of Melbourne

7A: City Economics and Development, P504, December 12, 2025, 1:00 PM - 2:30 PM

Pacific Small Island Developing States (PSIDS) are disproportionately affected by unmitigated climate change and rising sea levels. As a result, there has been a concerted effort by the international community to finance projects in PSIDS to foster adaptation, mitigation and urban resilience strategies. Australia's efforts have been directed at providing climate finance to Vanuatu and Tonga, however, many projects have had limited success or have failed to deliver the expected climate resilience outcomes owing to fragmented delivery channels and ineffective governance mechanisms.

This research showcases preliminary findings from interviews with key stakeholders in the climate finance space, aiming to advance the current understanding of climate finance in vulnerable, aid-dependent countries by examining Australia's climate finance contributions to Vanuatu and Tonga. It uses mixed-method analysis, combining quantitative data from the Pacific Aid Map with qualitative semi-structured interviews to map sectoral disbursements, implementation pathways, and degrees of localisation across eight key sectors, revealing a pronounced "projectisation" of climate finance, whereby a handful of projects dominate the disbursements.

The research identifies four critical impediments to delivering climate-resilient projects: a) fragmentation of climate finance across sectors and delivery channels; b) insufficient alignment between project objectives and delivery; c) limited institutional and community capacity at the country level, preventing localisation; and d) lack of focus on long-term climate-resilient outcomes.

The research concludes with a set of policy recommendations and research directions, advocating for streamlined accreditation pathways, enhanced transparency in climate finance reporting, adaptive financing mechanisms that are responsive to local needs, and on-ground partnerships that treat climate finance as long-term support rather than immediate or conditional assistance.

Keywords: Climate Resilient Development, Climate Finance, Urban Resilience, International aid, Urban governance.

7B.1

Role of GenAI in governance and placemaking

Dr Gabriela Quintana Vigiola[1], **Luis Lozano Paredes**[1]
[1]University of Technology Sydney

7B: City Governance and Structure, P514, December 12, 2025, 1:00 PM - 2:30 PM

This paper examines the transformative potential of Generative AI (GenAI) in reshaping governance structures and placemaking practices in Australian urban environments. Through a critical review of international literature published between 2022 and 2025, the research investigates how GenAI applications are reconfiguring urban design processes and governance frameworks, and the potential implications to the Australian context. The examination also highlights some of the challenges in implementating GenAI in these fields.

A majority of the literature focuses on IT governance around the use GenAI in urban processes and policies. Findings reveal that in placemaking, GenAI enables data-driven urban optimisation by synthesising people's behavioural patterns and generating scenario-based interventions for inclusive public spaces. In governance, GenAI facilitates advanced policy simulations and participatory decision-making, allowing governments to forecast economic, environmental, and equity outcomes before implementation.

However, significant barriers persist. Two main challenges are: 1) cultural resistance affecting government agencies and 2) traditional IT governance models being inadequate for managing GenAI's unpredictability.

There could be substantial implications for Australian cities at different levels. State governments would have to develop regulatory sandboxes that balance innovation with accountability, particularly in addressing algorithmic bias and ensuring transparency in urban decision-making. Local governments could potentially leverage GenAI for community-responsive design but would require capacity building to counter regulatory fragmentation and corporate dominance in AI policy development.

This paper contributes to emerging discourses on smart urbanism by proposing a systems approach to GenAI governance in Australian cities. It recommends integrated policy frameworks that prioritise joint accountability and iterative feedback between stakeholders, technologies, and governance structures. By addressing both technological potential and systemic barriers, Australian urban authorities could harness GenAI to create more responsive, inclusive, and sustainable urban environments.

Keywords: GenAI; placemaking; urban governance; community engagement; decision-making

7B.2

Intersectional resistance against AI-enabled surveillance: Lessons from India

Tooran Alizadeh[1]
[1]University of Sydney

7B: City Governance and Structure, P514, December 12, 2025, 1:00 PM - 2:30 PM

Urban AI, as an advanced infrastructure, has been met with mixed reactions. In particular, AI-enabled surveillance technologies, such as CCTV cameras and self-tracking devices, are primarily promoted as notions of convenience and improved safety. However, they are also situated within the rise of data-driven security state apparatuses (Ahmad & Mehmood, 2017), often resulting in reduced citizen power (Joh, 2019). Critical analysis of surveillance technologies unravel processes of exclusion and marginality (Hong, 2022) in which people from lower castes, indigenous and racialized populations are put under constant surveillance via 'predictive policing' and/or 'preventive policing' (Narayan, 2021). Furthermore, there is an imbalance in the geographies of knowledge production on surveillance and counter-surveillance practices, which is mostly Global North centric. Within this context, India is a fascinating context to learn about as it is a democratic nation in the Global South, with an increasing uptake of surveillance technologies. This article is informed by 40 interviews with stakeholders from the civil society and government in India - some with lived experience of marginalisation, and others with (counter)surveillance, (counter)policing, labour rights, legal and/or digital expertise. The findings feature three overlapping and yet distinct lines of resistance against AI-enabled gendered surveillance, expansion of caste-based policing, and labour surveillance. Understanding the intersectionality of AI-enabled surveillance resistance and refusal in India can inform the broader discourse everywhere.

References
Ahmad, M., & Mehmood, R. (2017). Surveillance, authoritarianism, and "imperial effects" in Pakistan. Surveillance & Society, 15(3), 506–513.
Hong, C. (2022). "Safe Cities" in Pakistan: Knowledge Infrastructures, Urban Planning, and the Security State. Antipode, DOI: 10.1111/anti.12799, 1345-1669.
Joh, E. E. (2019). Policing the smart city. International journal of law in context, 15(2), 177-182.
Narayan, S. (2021). Guilty until proven guilty: policing caste through preventive policing registers in India. Journal of Extreme Anthropology, 5(1), 111-129.

Keywords
Urban AI, surveillance, resistance, intersectional

7B.3

Investigating the early adoption of AI-powered tools for development assessment in Australia

Dr Charlie Gillon[1], Ryan Van Den Nouwelant[2], Prof Bill Randolph[1], Scientia Prof Chris Pettit[1]
[1]City Futures Research Centre, UNSW Sydney, [2]School of Built Environment, UNSW Sydney

7B: City Governance and Structure, P514, December 12, 2025, 1:00 PM - 2:30 PM

This paper investigates the early adoption of 'AI-powered' tools for development assessment in Australia. AI integration in the existing development assessment pipeline is being positioned by state and local governments as a key intervention in Australia's housing crisis, promising to deliver efficiencies and – crucially – speeding up approval timeframes. Planning-specific AI tools and applications are being developed, initially targeting improving the 'pre-application' process for planners and applicants, and trials are underway. The paper will provide an overview of the current landscape of AI for development assessment, illustrated by recent case study research on emerging 'AI-powered' tools and applications in Australian cities and regions. We reflect on early findings from interviews with key actors involved in the development, implementation and use of AI in urban planning processes (inc. public and private planners, policy-makers, software developers, property developers, architects, engineers, lawyers, community members), and present insights on AI adoption and implementation, and advantages and limitations arising from current use. Taking stock of this early adoption phase, we conclude with considerations for the trajectory of AI decision-making for planning and development assessment, highlighting important legal, technical and ethical considerations for future phases of implementation.

7B.4

Volumetric Urbanism: 3D urban space use modelling for compact city

Yi-Ya Hsu[1], Hoon Han[1]
[1]UNSW Sydney

7B: City Governance and Structure, P514, December 12, 2025, 1:00 PM - 2:30 PM

The diversity and mixture of urban functions within walking distance has become the norm for city workers and residents. Many studies have argued the importance of mixed-use, high-density, volumetric development in contemporary sustainable urban planning and smart growth governance. However, studies to capture the floor space use mechanism within the complex urban system and examine how space use changed in the city remain limited. This paper introduces a 3D floor space use change model by developing transition rules that consider the suitability derived from location characteristics, population behaviour, space use clustering, and the historical transition pattern. The model is applied to empirically simulate the changes of 15 use types from 2017 to 2022 in the Sydney LGA, Australia. The comparison of predicted 2022 results with observations yielded an overall accuracy of 82.70% and a Kappa coefficient of 0.79, confirming the effectiveness of this first-ever 3D urban use model. The output model provides a basis to support decision-making and planning systems for buildings in high-density cities. Future research incorporating more metrics that capture the volumetric details of the urban fabric to better digitalise the reality could refine the model and advance predictive research for 3D Volumetric Cities.

7C.1

Key theories and debates in housing research and practice: Developing an encyclopedia of housing

Prof Kristian Ruming[1], **Prof Nicole Gurran**[2], **Dr Greta Werner**[2]

[1]Macquarie University, [2]University of Sydney

7C: City Housing and Inclusion Panel, P512, December 12, 2025, 1:00 PM - 2:30 PM

How do you define a field? What key concepts and terms are critical to understanding the foundational knowledge, methodological practices, and contemporary debates that surround housing research, policy and practice? This panel discussion considers these questions as part of a collective effort develop a new encyclopedia of housing concepts and terms, and we invite your active participation.

7D.1

SEQ's Greater Springfield: 20th-century master planned community to 21st-century new city?

Prof Robert Freestone[1], David Nichols[2], Dr Elizabeth Taylor[3]
[1]UNSW, [2]University of Melbourne, [3]Monash University

7D: City Housing and Inclusion, P421, December 12, 2025, 1:00 PM - 2:30 PM

Peri-urban master-planned communities have become the flagships for greenfield metropolitan development in Australian cities but raise questions about their true transformative potential in addressing contemporary urban challenges. One of the most ambitious and hyped projects commenced in the 1990s and aimed at significantly upscaling a planned development to the status of a 'new city' is Greater Springfield in Brisbane's western corridor. The project has been well documented by its promoters and won numerous awards but has largely flown under the research radar. Our paper picks up on 'the evolution of governance structures and city planning' (a focus of this conference track) to examine the extent to which Springfield has achieved its lofty aspirations and thus earned relevance as a model for urban governance in the 2020s. The approach is framed by a dialogue between the notion of 'peripheral centrality' (on which it scores well) and the realities of South-East Queensland's '200-mile city' (which absorbs it a little too readily). We look at its basis in real estate development, its founders' aspirations for what has been called 'a mini-Singapore', and its achievements and struggles in successfully realising sustainability, educational, health and smart city goals, acknowledging its positionality as a long-haul work in progress. The methodology draws primarily on interviews with a number of key stakeholders – both observers and participants - fieldwork and review of accessible documentation. Springfield emerges as an impressive but unfulfilled product of very distinctive governance owing a great deal to corporate partnerships and significant government expenditure. While catering successfully for mainstream housing preferences it falls short on key social and economic indicators, and, ultimately, on the 'new city' claims that have steered its decision-making for over three decades.

new cities, master planned communities, regional planning, Springfield, Brisbane

7D.2

Zoning for supply, zoning for equity: perspectives, practices and challenges in NSW

Dr Catherine Gilbert[1], Prof Rolf Pendall[2]
[1]University of Sydney, [2]University of New Mexico

7D: City Housing and Inclusion, P421, December 12, 2025, 1:00 PM - 2:30 PM

Land use zoning is the principal means of development control in many countries, including Australia. Introduced to enable governments to regulate the development and use of land in the interest of public health, welfare and safety, the practice of land use zoning has been widely implicated in preserving and perpetuating unsustainable low density suburban forms and social exclusion. As urban housing affordability and socio-spatial inequity have worsened globally, significant policy attention has focused on zoning, with many governments proposing and enacting reforms designed to accommodate more new housing supply within established areas. But whether and how these reforms address socio-spatial and other forms of inequity remains unclear. In the US, where concerns about housing supply are reinforcing longer standing concerns about 'exclusionary' zoning, the American Planning Association (APA) board, in 2023, formally adopted the Equity in Zoning Policy Guide, endorsing a range of practises meant both to provide more diverse housing options in single-family neighbourhoods and to protect vulnerable people from harm. Considering the approaches in the guide, and the wider research literature on zoning and socio-spatial equity, this paper asks: (1) whether and how planners in NSW think about equity in their practice of land use zoning; (2) what, if any, competing challenges they face in both accommodating supply and addressing equity and (3) whether they think recent land use policy reforms to enable housing supply have, in practice, addressed, neglected or exacerbated the potential for zoning to protect vulnerable populations from harm and ensure access to areas of high opportunity. Our findings are based on semi-structured interviews with 15 practicing planners in NSW. In addition to generating new insights on how zoning, and zoning reform, influences different dimensions of social equity, our findings provide practical policy insights for fostering more socially inclusive cities.

Planning, zoning, housing, socio-spatial equity

7D.3

Planning under pressure: Multilevel governance, accountability, and housing policy in Australia

Dr George Greiss[1], Prof Awais Piracha[1]

[1]Western Sydney University

7D: City Housing and Inclusion, P421, December 12, 2025, 1:00 PM - 2:30 PM

This paper explores how the complexity of Australia's multi-tiered governance system - federal, state, and local - affects urban planning outcomes, particularly under conditions of rapid urban transitions. It argues that, although constitutional constraints limit direct federal involvement in urban planning, the federal government exercises significant influence through its fiscal authority, housing finance policy, and macroeconomic regulation. In contrast, state governments control statutory planning and land use, while local governments carry the primary responsibility for implementation. These structural dynamics contribute to spatial inequities and inconsistent policy application across regions.

Drawing on institutional and governance theory, this paper focuses on the dual nature of authority in urban planning, namely the dispersion of authority among a limited number of general-purpose jurisdictions and the existence of more fluid, task-specific arrangements that include both governmental and non-governmental actors. These overlapping and often conflicting styles create governance tensions and accountability challenges, particularly for local governments.

The analysis further investigates how governance structures have evolved in recent years in response to political pressure, with a particular focus on housing and infrastructure planning. It highlights the limitations of current housing policy and the intergovernmental tensions and 'blame shifting' that often ensue.

Using Sydney as a reference point, the authors reflect on key reform proposals and examine how the current dynamics influence metropolitan planning outcomes and whether Australia's governance structures are equipped to support more equitable, transparent, and sustainable urban futures.

7D.4

Sustainable urban growth scenarios using the What If?: A case study of Central Coast Council

Dr Sirat Mahmuda[1], **Scientia Prof Chris Pettit**[1]
[1]City Futures Research Centre, UNSW

7D: City Housing and Inclusion, P421, December 12, 2025, 1:00 PM - 2:30 PM

The What If? planning support system has been widely recognized as a transparent, flexible, and user-friendly platform for generating holistic land-use planning scenarios. Numerous case studies in Australia—including Hervey Bay (Pettit, 2005), Ipswich City (Lu et al., 2022), Mitchell Shire (Pettit et al., 2008), and the Perth-Peel region (Pettit et al., 2015)—demonstrate its capacity to support participatory and evidence-based planning. The latest version, developed through the Housing Analytics Lab, enhances the system's analytical and visualisation capabilities. The tool provides data augmented planning support.

In this paper we discuss both the latest technical developments in the What If? tool and its application to formulate a number of urban growth scenarios for the Central Coast Council local government area in New South Wales. The analysis integrates spatial data on natural constraints (e.g., slope and soil), infrastructure networks (e.g., proximity to train stations), and regulatory constraints (e.g., environmental protection zones, land use controls).

By defining alternative land suitability criteria, population and housing demand forecasts, and land allocation strategies, the study generated three distinct urban growth scenarios. These scenarios offer data supported tangible, spatially explicit representations of how future policy choices may shape development patterns and housing outcomes at the land parcel level across the Central Coast.

Informed by consultation with local planners and other key stakeholders this work bridges technical modelling with lived community perspectives. The What If? platform's intuitive interface and transparent logic make it accessible for planners, policymakers, and community stakeholders alike both at the local and state government level. It is envisaged that the resulting insights can help guide more inclusive housing strategies, enabling local governments to evaluate trade-offs, anticipate impacts, and co-design equitable urban futures.

7D.5

When Airbnb crosses the line; evidence from Bondi, NSW

Parian Hoseini[1]
[1]University of New South Wales

7D: City Housing and Inclusion, P421, December 12, 2025, 1:00 PM - 2:30 PM

Bondi is one of Australia's most prominent Airbnb hotspots, offering a unique lens to examine the impacts of between Airbnb growth and the local long-term housing markets. Using unpublished NSW Rental Bond Board data alongside and non-hosted Airbnb listings, this paper traces changes in rental supply and prices, across different property types
during the 2010s through to the post-pandemic period. The research also reviews short term rental accommodation regulation in NSW and identifies areas for a more effective policy response to protect local rental markets from the potential negative impacts of such property use.

7E.1

Transitioning towards water sensitive regions: just an aspiration or an achievable vision?

Callym Dunleavy[1]
[1]Water Technology Pty Ltd

7E: City Movement and Infrastructure, P506a, December 12, 2025, 1:00 PM - 2:30 PM

Cities are interconnected with and dependent on landscapes that stretch far beyond their own physical bounds. This is exemplified by their relationship with and critical dependence on water, which is not constrained by planning and administrative boundaries. The placement of political boundaries and arrangement of cities are not necessarily in alignment with their water catchments, resulting in the management and planning of water often being fragmented across multiple scales. The concept of a water sensitive city is now extensively adopted in Australia to signify an aspiration of many cities where water plays a crucial role in the planning, design and development of urban areas. However, scholars argue that this concept should be considered to a wider catchment and regional level for a greater holistic range of beneficial outcomes. The research therefore explores the concept of a water sensitive region, specifically looking to understand how regions can transition towards becoming water-sensitive. The concept of a water sensitive region is largely unexplored and a fresh perspective in solving a perceived enduring wicked planning problem. The research examines a case study of the region of South-East Queensland (SEQ) in Australia, through a policy analysis and semi-structured interviews. Findings have shown that the water sensitive city vision was first proposed in Australia as a solution to several urban challenges and fragmented water management, however failed to understand that water is a complex resource that extends well beyond the city boundaries. Water policy reform has historically and consistently been triggered by water-related crises, including flooding and droughts. Interviews highlighted that understanding the barriers and drivers in play are critical to begin the transition required towards a water sensitive region. The research findings ultimately recognize that water management continues to be treated as an engineering challenge, separate from the broader urban and regional planning agendas.

7E.2

A sporting climate: Projections for Brisbane 2032's urban transport decarbonisation

Anais Fabre[1], Dr Aysin Dedekorkut-Howes[2], Dr Millicent Kennelly[2], Dr Michael Howes[2]
[1]Griffith University, [2]Griffith University

7E: City Movement and Infrastructure, P506a, December 12, 2025, 1:00 PM - 2:30 PM

Mitigating climate change is an urgent challenge. Urban transport systems are a major contributor to emissions, so decarbonising their operation is vital for achieving the net-zero target by 2050 and ensuring long-term urban sustainability. By increasing travel demand in host countries, the Olympic and Paralympic Games (hereafter the Games) exacerbate transport emissions but also catalyse urban mitigation efforts, given the International Olympic Committee's commitment to halve emissions by 2030.

This research assesses key lessons from the London 2012 and Paris 2024 Games that can teach Brisbane about decarbonising urban transport systems for the 2032 Games. By analysing the strategies, outcomes, and challenges of previous host cities that played key roles in shaping climate mitigation efforts and investing in transport planning, this study maps the prospects for Brisbane and examines its potential to achieve transformative change in urban transport decarbonisation as a host city. Planning for Brisbane 2032 is a driver of urban regeneration and economic development for the region. It also creates opportunities for transit-oriented development around new infrastructure, including competition venues, aligning with best practices in transport decarbonisation. However, Brisbane faces greater challenges than London and Paris due to its car-oriented urban form (and culture) and limited public transport network, despite promising projects such as Brisbane Metro and Cross River Rail. There remains room for improvement, but also uncertainty about how transformative the changes underway will be by 2032.

This research adopts a case study approach using document analysis, stakeholder interviews, workshops and participant observation. Data analysis involves thematic coding and policy review. This research advocates for climate action in transport. Its findings will guide stakeholders to leverage the Games for sustainable mobility investments and identify governance changes needed to meet IOC climate commitments and build a lasting legacy.

Olympic and Paralympic Games, Urban Transport, Decarbonisation, Climate Mitigation

7E.3

Assessing the effectiveness of NbS for flood resilience in coastal cities: Insights from Khulna, Bangladesh

Mr Md. Esraz-ul-zannat[1], Dr Aysin Dedekorkut-Howes[1], Dr Edward Morgan[1]
[1]Griffith University

7E: City Movement and Infrastructure, P506a, December 12, 2025, 1:00 PM - 2:30 PM

Urban flooding presents a critical challenge to rapidly growing coastal cities, a threat intensified by the interconnected pressures of climate change and accelerated urbanization. The convergence of rising sea levels, heightened precipitation intensity, and more frequent storm events significantly compounds flood risks, especially in topographically vulnerable, low-lying areas. This study evaluates the efficacy and suitability of Nature-based Solutions (NbS) and hybrid grey–green infrastructure for enhancing urban flood resilience, using Khulna, Bangladesh as a case study. A mixed-methods approach was adopted, integrating a systematic quantitative literature review, policy analysis, semi-structured expert interviews, and hydrological modelling. Results demonstrate that although certain high-performing NbS such as green roofs and rain barrels are already established in policy and practice, their standalone effectiveness remains limited compared to integrated, and hybrid configurations. Combined interventions consistently surpassed individual measures, with the most comprehensive scenario achieving near-total flood reduction at the most vulnerable area during moderate storms. In addition, spatial disparities were evident, as another vulnerable area showed only modest reductions, highlighting the necessity of spatial targeting of NbS. While NbS substantially reduced flooding at at specific, critical locations, catchment-scale outflow volumes remained largely unaffected (~0.785 CMS), underscoring the importance of supplementing localized NbS with system-level grey-blue-green infrastructures such as detention basins and retention ponds. These findings highlight three strategic priorities: (i) implementing hybrid NbS in high-risk zones, (ii) integrating underutilized yet high-potential measures (e.g., permeable pavements and rain gardens) into spatial planning, and (iii) aligning institutional and policy frameworks to facilitate NbS mainstreaming. Beyond flood mitigation, NbS deliver essential co-benefits including urban cooling, biodiversity support, and recreational spaces positioning them as multifunctional assets for climate adaptation. This research affirms that context-sensitive, multi-component NbS, when strategically incorporated into urban strategies, can provide a sustainable pathway toward climate-resilient drainage systems in vulnerable coastal cities, significantly enhancing urban resilience.

7E.4

Spatial Analysis of the Green Infrastructure Network in a Climate-Vulnerable City

Ms Frances Ifeoma Ukonze[1], Prof Antoni Moore[1], Dr Gregory Leonard[1], Prof Ben Daniel[2]
[1]University of Otago Dunedin, [2]University of Northern British Columbia

7E: City Movement and Infrastructure, P506a, December 12, 2025, 1:00 PM - 2:30 PM

A key strategy for improving urban sustainability and resilience is the integration of Green Infrastructure (GI) into urban transportation systems. By contrasting resilience performance in transportation systems prior to and during GI interventions, this study evaluates the efficacy of GI integration. In order to evaluate the effects of interventions like vegetated swales, green corridors, and permeable pavements, the research uses a case study methodology with a focus on Dunedin, Aotearoa, New Zealand. It combines structured surveys, spatial analysis, and a multi-criteria decision analysis (MCDA) framework.

Data on the efficiency and difficulties of GI was gathered from ecologists, engineers, architects, urban planners, and transportation officials. The survey results were included into ArcGIS for spatial analysis, evaluating the extent of GI coverage, its spatial distribution, and its influence on resilience metrics including flood reduction and stormwater management. They were weighted using MCDA to determine stakeholder priorities.

Following the intervention, the results show notable improvements in air quality, flood mitigation, and urban heat island impacts, confirming the beneficial effects of GI on urban resilience. Nevertheless, obstacles including financial limitations, upkeep problems, and policy fragmentation still stand in the way of complete implementation. By identifying opportunities and limitations for better GI adoption in transport systems, the study improves the GI integration conceptual framework (Stage Four). Through a thorough comparison of pre- and post-intervention scenarios, the study emphasizes how crucial stakeholder collaboration, strategic planning, and policy alignment are to GI integration success and urban resilience.

7E.5

Sustainable, connected, resilient, . . .: has style replaced substance in Australian high-speed rail planning?

Dr James Whitten[1], **Dr Iain Lawrie**[2], **Dr Alice Vialard**[3], **Dr Ian Woodcock**[4]
[1]Monash University, [2]MVC Services, [3]Hong Kong University, [4]University of Sydney
7E: City Movement and Infrastructure, P506a, December 12, 2025, 1:00 PM - 2:30 PM

After 40-years of high-speed rail (HSR) planning, Australian governments and private consortiums are yet to develop planning strategies that effectively connect regional cities to the proposed network. The stations are routinely sited in peripheral locations that are disconnected from established urban areas and public and active transport networks. Nevertheless, the proponents attach fashionable epithets like 'sustainable', 'connected' and 'resilient' to proposals while using spatial strategies that do not follow the principles of integrated planning. This raises two complementary questions: has style replaced substance in HSR in Australia? or is there genuine confusion about what good network planning looks like?

This paper aims to cut through the rhetoric and potential confusion by developing a framework to assess the merits of different network planning approaches. The framework is informed by international literature about the social, economic and environmental effects of HSR, and tested using applied research into HSR planning for three regional cities: Albury-Wodonga, Greater Shepparton and Wagga Wagga. It emphasises the benefits of (a) serving existing regional populations to maximise ridership, (b) using station area development to enhance economic resilience, (c) value capture strategies that produce broad-based public benefits and (d) prioritising investment in sustainable transport modes for station access. Consequently, the framework foregrounds the crucial role that spatial planning plays in securing social, economic and environmental benefits from transport investments.

It is found that style has replaced substance in Australian HSR planning because proponents have not sufficiently explored the regional development opportunities that lie beyond population decentralisation and property speculation. In conclusion the strengths and limitations of the planning framework are discussed, and the potential for HSR development to propmote ecological restoration, climate resilience and institutional transformation in regional Australia are explored.

7F.1

Measuring what matters: how residents redefined success in Christchurch city centre's post-quake regeneration

Miss Akram Fatourehchishabestari[1], Olga Filippova[1], Michael Rehm[1]
[1]University of Auckland

7F: City Nature and Environment, P506, December 12, 2025, 1:00 PM - 2:30 PM

The 2010–2011 earthquakes disrupted Christchurch's city centre while simultaneously creating opportunities for urban renewal. Recovery strategies prioritised anchor projects and incentivised housing through rebates, relaxed regulations, and developer support. Complementing these efforts, the Council launched a housing programme in 2018 with the goal of attracting 20,000 residents by 2028. However, over a decade, the population has only recovered to pre-quake levels (~8,000), and several anchor projects remain unfinished.

While new housing has been constructed, an oversupply of one- and two-bedroom townhouses often lacking parking, outdoor spaces, and increasingly converted to short-term rentals has undermined long-term community stability. Meanwhile, pre-quake neighbourhoods have maintained strong social cohesion, whereas newer developments, particularly in former industrial areas with high concentrations of short-term rentals, exhibit weaker communal ties.

Drawing on interviews with residents and stakeholders, this study identifies the factors that make the city centre a desirable place to live. Throughout the interviews, the Māori concept of tūrangawaewae ("a place to stand") emerged as a powerful theme, reflecting a deep-rooted desire for belonging and identity. Although participants valued anchor projects such as the central library, they emphasised that smaller interventions like street trees, pocket parks, walkable amenities, and diverse housing options were crucial for fostering community bonds. These findings align with Lerner's (2014) urban acupuncture theory, which posits that targeted, small-scale interventions can create systemic urban improvements.

To quantify these effects, a hedonic pricing model using Normalised Difference Vegetation Index (NDVI) data and machine learning analysis of 29,389 Google Street View images, confirmed that tree canopy coverage within a 15-minute walk boosts property values, highlighting greenery's role in residents' willingness to live in the city centre.

The study concludes that post-disaster recovery must balance physical reconstruction with community-focused, incremental enhancements to achieve long-term urban vitality through human-scale interventions.

Keywords: Community resilience, Urban acupuncture theory, tūrangawaewae

7F.2

Unequal Ground: the environmental and cultural impacts of Melbourne's urban sprawl

A/Prof Catherine Murphy[1], Prof Louise Wright[1], Prof Nigel Bertram[1]
[1]Monash Urban Lab

7F: City Nature and Environment, P506, December 12, 2025, 1:00 PM - 2:30 PM

Since the colonial settlement of Melbourne, the use of unceded First Nations' land for low-rise suburban housing has created a vast metropolitan footprint, producing inequalities for non-human species, ecological systems and Indigenous cultural connections to place. Australia's cities are among the least densely populated in the world, with the largest average house sizes. Melbourne is the least dense but most populous city: 5.2 million people spread over 10,000km2 and over 90km across its extent.

Greenfield development remains the dominant form of housing supply in Australia, primarily because it enables the rapid delivery of large volumes of detached housing at relatively affordable costs. This approach is reinforced by planning systems, infrastructure delivery models and housing market conditions that favour peripheral expansion over infill or higher-density alternatives. In response to the ongoing housing supply and affordability crisis, large areas of land continue to be rezoned on the city's fringe. These areas, however, hold significant ecological and cultural value, including habitats for endangered species and cultural landscapes of significance to First Nations people.

This paper critiques the planning of these lands by foregrounding the environmental and cultural costs of Greenfield expansion. Part of the research is a large-scale video work, presented at the 2025 Triennale Milano International Exhibition with the theme 'Inequalities', which documents three recurring moments in Melbourne's peri-urban growth: in the north, housing construction strips the topsoil from critically endangered Volcanic Plains Grasslands; in the east, new development fragments and removes the wildlife corridors and habitat of the endangered Southern Brown Bandicoot; and in the west, First Nations cultural landscapes, including the ceremonial earthen Bora Rings, are encroached upon by new housing estates. In the rush to solve housing supply, the unequal treatment of land, species, and cultures deepens, calling for more just and ecologically grounded urban futures.

7F.3

Flood governance in Ipswich: A case study of nature-based solutions in a rapidly growing city

Dr Hayley Henderson[1]
[1]Crawford School of Public Policy, Australian National University

7F: City Nature and Environment, P506, December 12, 2025, 1:00 PM - 2:30 PM

This case study explores the potential for nature-based flood mitigation in Ipswich, one of Australia's fastest growing regions within Southeast Queensland's urban growth corridor. Repeated flooding, most notably between 2011 and 2022, has exposed vulnerabilities in traditional infrastructure and flood responses, and has prompted renewed attention to integrated catchment management. At the same time, Ipswich is under pressure to accommodate significant housing growth, placing increased strain on flood-prone land and increasing disaster risks. Drawing on policy analysis, interviews with local government representatives, and community workshops, this study investigates how local and regional actors navigate this tension and what conditions shape public and institutional support of NbS. While initiatives such as land buy-backs for restoration and constructed wetlands are emerging, implementation remains limited by short funding cycles, cross-jurisdictional complexity, entrenched engineering paradigms, and residential development pressures. The findings highlight the importance of community factors like public flood memory, active community groups (e.g. Bushcare) and the role of public participation, as well as high technical capacity in Council, a mandate from higher levels of government, political will and strong collaborative partnerships. Ipswich's experience underscores that while crises can open windows of opportunity for reform, sustaining policy with NbS and implementation capabilities require effective and inclusive collaborative governance with a strong, leading role for public entities. The case offers lessons for advancing effective and sustainable flood governance in high-growth urban regions.

7F.4

Where two Songlines meet: Regenerative urbanism and net zero innovation at Curtin Exchange precinct

Issana Meria Burhan[1], Prof Peter Newman[1]

[1]Curtin University Sustainability Policy Institute

7F: City Nature and Environment, P506, December 12, 2025, 1:00 PM - 2:30 PM

Net-zero strategies are commonly framed around mitigation, environmental performance, and impact reduction, particularly within energy and engineering disciplines. Regenerative urbanism, by contrast, draws from ecology, architecture, and social systems, aiming to restore ecosystems, support biodiversity, and improve human wellbeing. While net zero provides a target, regenerative urbanism offers a pathway that is both ecologically restorative and socially just. Despite their distinct origins, these approaches share complementary goals. However, integrated frameworks that combine both remain limited. This paper explores the intersection of net zero and regenerative urbanism, focusing on planning and design strategies applicable at the precinct level. The Curtin Exchange precinct in Perth, Western Australia, is examined as a case study to demonstrate how these dual strategies operate in practice.

Net zero innovations at Curtin Exchange include the generation of approximately 735 MWh of solar energy annually, integrated stormwater management and rainwater harvesting systems, and a site-wide landscape strategy that complies with Green Star certification to mitigate the urban heat island effects. Its transit-oriented design supports 130 daily bus movements and serves an estimated 12,500 commuters, reducing reliance on private vehicles and associated emissions. Regenerative urbanism is expressed through a landscape structure grounded in cultural and ecological knowledge of the Wadjuk Noongar Songlines and the Winin Katidjin Bilya (Living Knowledge Stream). Ecological and cultural regeneration is further embedded through extensive use of native plants that reflect Indigenous heritage and historical vegetation patterns. This place-based approach, co-created with communities, promotes long term resilience and adaptability.

Findings from the case study inform a proposed "net zero regenerative" framework, offering practical guidance for integrating carbon reduction and ecological regeneration in precinct-scale development.

Keywords: net-zero city, regenerative urbanism, development precinct

7G.1

Seeing the unseen: how digital pedagogy cultivates cultural competence in urban housing education

Dr Xiao Ma[1], Dr James Thompson[1], Dr Leonardo Nogueira de Moraes[1], **Mr Dejan Malenic**[1], Mr Sam Holland[1]
[1]The University of Melbourne

7G: Planning Education, P419, December 12, 2025, 1:00 PM - 2:30 PM

With 1.6 billion people living in inadequate housing worldwide, urban planning education requires approaches that develop students' cultural competence and contextual awareness to address complex global housing challenges. This paper examines how Virtual Site Visits (VSVs) can democratise access to international housing contexts and equip future urban planners with critical understanding of global housing complexities.

Drawing on the field work in Bandung, Indonesia and Melbourne, Australia, we develop VSVs documenting the cities' housing contexts. These VSVs are integrated into the curriculum to enrich student understanding of formal and informal housing systems in the Global North and South. Student engagement and learning outcomes are evaluated using LMS analytics, surveys, and interviews with both students and teaching staff.

Findings reveal that VSVs enhance urban housing education through three mechanisms: (1) providing access to diverse housing typologies otherwise inaccessible to a large proportion of students; 2) elevating marginalised voices by enabling students to hear firsthand accounts and perspectives directly from community members and (3) enabling comparative analysis of housing solutions across varied socioeconomic, cultural and regulatory environments.

In this case, we trace the effectiveness of VSV implementation back to three key design principles: (1) question-led exploration throughout the virtual housing journey that facilitates critical analysis rather than passive observation; (2) immersive self-directed learning through 360-degree video with embedded conceptual knowledge; and (3) integration of diverse stakeholder storytelling narratives that communicate lived experiences rather than simply visualising the physical context of housing environments.

Building on these implementation principles, our study contributes to Critical Digital Pedagogy by demonstrating how VSVs transform housing education through two key theoretical advances: (1) challenging the 'banking model' of education that traditionally privileges expert knowledge; and (2) developing 'critical digital citizenship' by exploring ethical approaches to developing and engaging with virtual environments to inform future urban planning practices.

7G.2

Balancing Local Statutory Knowledge and Transferable Competencies: Comparative Study of Planning Law Education in Australia

Dr Andrew Allan[1], Dr Ali Soltani[2], Mrs Atefe Malekkhani[3]

[1]UniSA Creative, University of South Australia, [2]College of Science & Engineering, Flinders University, [3]University of Auckland

7G: Planning Education, P419, December 12, 2025, 1:00 PM - 2:30 PM

Despite its foundational role in professional practice, the teaching of "Statutory Planning" varies significantly across Australian universities. This paper comparatively analyses accredited planning curricula in six states, using qualitative content analysis of public documents to examine how programs integrate state-specific legislation with transferable competencies. While all programs meet national accreditation standards, findings reveal a clear pedagogical divergence. South Australia and New South Wales favor applied statutory training through dedicated units; Victoria and Tasmania foster a more critical, reform-oriented perspective; and Queensland and Western Australia embed legal principles within interdisciplinary, project-based learning. This study underscores the tension between achieving national consistency in core competencies and respecting jurisdictional diversity, advocating for greater cross-jurisdictional integration to enhance graduate preparedness for a dynamic professional landscape.

7G.3

Brisbane Metro - the case for bus rapid transit for a growing city

Gavin Soward[1]

[1]Brisbane City Council

7G: Planning Education, P419, December 12, 2025, 1:00 PM - 2:30 PM

Brisbane is growing fast, with more than 90,000 people moving to the Greater Brisbane region in 2023-24. Buses carry two thirds of public transport passengers in Brisbane. This significant reliance on bus services has driven the implementation of a new, expanded bus network as part of the Brisbane Metro project, a bus rapid transit (BRT) system using high-capacity, fully-electric vehicles to improve reliability and capacity. The focus on bus network expansion is a strategic choice to prepare Brisbane for growth and the Brisbane 2032 Olympic and Paralympic Games, ensuring the city's public transport can scale to meet demand.

Key project infrastructure included:

•   a 225m tunnel beneath Adelaide Street connecting the Inner Northen Busway and South East Busway via King George Square station

•   a new 10-hectare metro depot providing advanced charging solutions for the all-electric fleet, making it one of the largest and most technologically advanced facilities of its kind in Australia.

•   transformation of Victoria Bridge to be converted into a pedestrian and active transport bridge with dedicated lanes for metro and bus services as well as bridge strengthening works

•   upgrades to suburban stations to accommodate metro services, including end-of-route vehicle charging facilities.

The introduction of Brisbane Metro alongside Brisbane's New Bus Network has reduced bottlenecks and eased bus congestion in the CBD and Brisbane's south-eastern suburbs. This will enable capacity for future growth for the northern and eastern corridors, providing opportunity for more turn-up-and-go, on-time services for the rest of the network. The M1 (between Eight Mile Plains and Roma Street) has recorded a 12.5 per cent increase in weekday patronage compared to the bus routes replaced. Congestion on Victoria Bridge has been cut by 30 per cent. The project has produced a huge uplift for Brisbane's public transport network that leaves a valuable infrastructure legacy for Brisbane.

7H.1

Identifying housing infill opportunities in suburban Australia

Dr Heather Shearer[1]

[1]Griffith University

7H: City Design and Morphology, P505, December 12, 2025, 1:00 PM - 2:30 PM

Note: this presentation reports further research results of my presentation at SOAC 2023.

Australian cities are vulnerable to several climate change impacts, including floods, storms, cyclones and bushfire. The conurbation of South East Queensland (SEQ), which includes Australia's 3rd and 6th largest cities (Brisbane and the Gold Coast) is characterised by predominately low density housing; with approximately 71% detached houses. Continued expansion into greenfield areas, however, is neither environmentally nor socially desirable.

This research explored the potential of infill housing to add to housing supply, whilst taking into account constraints from climate change. The research used a case study of a large local government—the City of Gold Coast—and spatial analysis tools including deep learning AI, to calculate the proportion of single residential zoned lots in the urban footprint with sufficient space available for small to medium scale infill, such as granny flats and tiny houses.

We calculated the total coverage of hard infrastructure (such as buildings, sheds and swimming pools) and planning scheme setbacks for each lot and estimated the proportion of remaining land suitable for a small dwelling. Additional data, such as planning scheme zone, environmental overlays, bushfire, slope and flood risk mapping further refined the list of suitable properties.

We found that, within the City of Gold Coast, there were up to 50,000 properties suitable for low to medium density infill, that have few or no constraints. Infill development such as this not only protects greenfield land from development but adds to the housing supply and allows for improved access to essential services such as employment, schools, public transport and healthcare.

7H.2

Quasi-experimental design and causal inference in urban analytics: understanding the causal warming effect of (re)development

Dr Bryan Boruff[1,2], Dr John Duncan[1,2], Prof Sally Thompson[1,2], A/Prof Chayn Sun[3], Prof Marco Amati[3], Prof Joe Hurley[3], Mr Warin Chotirosniramit[1,2]

[1]The University of Western Australia, [2]Centre for Water and Spatial Science, [3]RMIT

7H: City Design and Morphology, P505, December 12, 2025, 1:00 PM - 2:30 PM

Cities worldwide are contending with the challenge of housing growing populations while remaining liveable under changing climates. Population growth results in a mix of urban densification and sprawl that modifies the built form, all too often increasing heat exposure. In Australia, incremental (re)development has occurred piecemeal with varied planning oversight, and without detailed record of the types and nature of change. The lack of a consistent record of (re)development type, precludes characterising the types of urban change associated with a specific magnitude of warming. Yet, identifying the varying warming effects of different types of (re)development is important for guiding urban planning and policy that balances heat mitigation with the need to meet housing demands. This research seeks to address this gap by estimating the warming effect of different types of (re)development occurred across Australian cities.

To do so, we present a novel analytic approach designed to causally link different types of (re)development to localised changes in temperature using a quasi-experimental research design. Here we developed a parcel-level dataset of development type at multiple time points for all parcels in Perth, Melbourne, Adelaide, Sydney and Brisbane using high-resolution surface cover and built form data. A parcel's development type was classified with a custom deep learning model; then used to identify all cases where parcels have changed due to (re)development (i.e. single-house to low-rise apartment). For each case of change ("treatment parcel"), we find spatially and temporally proximal parcels similar to the "treatment parcel" that have experienced no subsequent change ("control parcels"). Treatment and control parcels are then combined with temporally matched temperature data and used to estimate the warming effect of different types of (re)development, as they occurred. This paper discusses the approach and broader utility as a tool for unpacking causality in the urban environment.

7H.3

Mapping urban productivity: Design, domestic space and entrepreneurialism for future housing

A/Prof Antony Moulis[1], Dr Silvia Micheli[1], Dr Remi Ayoko[1]
[1]The University of Queensland

7H: City Design and Morphology, P505, December 12, 2025, 1:00 PM - 2:30 PM

In a country where 40% of the workforce is employed by small businesses, increasing attention is being directed toward the needs of micro-scale and family-run enterprises—particularly their potential to thrive in suburban settings that serve localised markets. This paper explores how housing can be reimagined to better support small-scale production through evidence-based design research, employing a multidisciplinary lens that integrates architectural design, urban design, and business research methods.

The research focuses on mapping informal small-scale business interventions across Brisbane's residential suburbs. These spontaneous adaptations—such as the use of undercrofts, verandas, backyards, and boundary edges—demonstrate how everyday domestic spaces are being repurposed to support niche production. Operating within zones regulated as strictly residential, these adjustments reveal how productive activity already exists in layered and sometimes concealed ways, blurring the lines between public and private, living and working.

The mapping aims to shift the perception of the home from a site of living and consumption to one of living and production, framed within an equity lens that recognises the diversity of work-from-home activities and the socio-economic opportunities they represent. By surfacing this latent economic potential, the paper argues for a reconsideration of housing typologies to better accommodate and support these emerging forms of urban productivity.

This project challenges prevailing assumptions about residential space and its role in urban economies. It proposes new design research pathways that link housing, work, and decentralised production across urban and peri-urban areas. In doing so, it seeks to spark a national conversation about the overlooked economic role of the home and its potential to support resilient, locally grounded forms of enterprise in the cities of the future.

urban resilience; urban design; productive cities

7H.4

Embedding Circularity in urban form: A framework for mid-rise precincts in Southeast Queensland

Ms Sevgim Pekdemir[1], A/Prof Mirko Guaralda[1], Dr Mark Limb[1]

[1]Queensland University of Technology

7H: City Design and Morphology, P505, December 12, 2025, 1:00 PM - 2:30 PM

Circular Urban Design (CUD) offers a theoretically grounded framework for addressing the spatial, social, material, and ecological failures of linear urban development. It enables designers to reconceptualise precincts as regenerative systems that embed reuse, adaptability, and integrated lifecycle thinking. In Southeast Queensland (SEQ), where densification pressures are producing a fragmented urban landscape shaped by suburban sprawl and high-rise intensification, mid-rise precincts (MRPs) present a critical spatial opportunity for applying CUD principles.

Mid-rise typologies emerging from SEQ's densification policies are often speculative, market-driven, and poorly integrated with their urban context. This disconnect limits the capacity of urban design to deliver typologies that are resilient, inclusive, and spatially coherent. Reframing MRPs as dynamic, place-responsive systems shaped by CUD offers a way to align building form with broader precinct-scale relationships of context and performance in response to these fragmented conditions.

This research tests and refines the CUD framework through the iterative design of MRPs in SEQ. Adopting a design-based methodology, it draws on case study analysis and applies the CUD framework in a series of expert-participated design charrettes currently underway in Australia, Italy, Poland, and Türkiye. These charrettes are structured around three phases—concept design, street layout, and building typology—through which the morphological, spatial, and performative dimensions of circularity are being developed, prototyped, and critically evaluated.

The project will produce a spatial catalogue of mid-rise typologies tailored to the SEQ context, along with a tested CUD framework at the precinct scale. Preliminary findings highlight the need for design approaches that bridge regulatory aspirations with morphological specificity and social inclusion. This study contributes to rethinking urban form as a vehicle for systemic change, positioning MRPs as experimental platforms where designers mediate between material cycles, spatial flexibility, and urban legibility.

7H.5

An empirical assessment based on meta-indicators in Australian diverse neighbourhoods

Ms Tayyaba Riaz[1]
[1]Griffith University

7H: City Design and Morphology, P505, December 12, 2025, 1:00 PM - 2:30 PM

This paper evaluates the performance, applicability, and operational efficiency of neighbourhood sustainability assessment tools (NSATs) for neighbourhood-scale sustainability evaluations. The neighbourhood scale plays a pivotal role in sustainable urban development, as it shapes everything from resource use and environmental quality to social interactions and community cohesion. By addressing sustainability at the neighbourhood level, we can effectively influence broader urban outcomes, creating spaces that are more resilient, resource-efficient, and socially inclusive. Focusing on both high-density and medium-low-density existing neighbourhoods, the research investigates how these tools assess sustainability across environmental, social, and economic dimensions. Through a comparative analysis of widely recognised NSATs, the study examines each tool's strengths, weaknesses, and relevance across diverse geographical and socio-economic contexts. By analysing data overlap, divergences, and tool-specific methodologies, the paper identifies key challenges and opportunities in applying these tools to real-world scenarios. The findings provide insights into the performance of the tools across different neighbourhood types, as well as the time and resource investments required for implementation. This paper contributes to the evolving discourse on NSATs by shifting focus from tool content to practical effectiveness, offering early insights and actionable guidance for urban planners, policymakers, and sustainability practitioners. The study remains in progress, with results intended to inform enhancements in sustainability assessment frameworks and improve the contextual adaptability of tools for diverse urban settings.

From vacancy to vitality: Participatory reuse of regional buildings for housing and civic renewal

Dr Ammon Beyerle[1]
[1]Here Studio

SOAC Poster

Across regional Australasia, hundreds of old civic and commercial buildings sit empty—often in the heart of town. This presentation shares early insights from a practice-based initiative exploring how these underused structures can be transformed into housing and shared public infrastructure to address the intersecting challenges of climate, housing, and regional vitality.

Rather than relying on greenfield development or carbon-intensive new construction, this approach works with what already exists — the built form, embodied energy, and civic memory of these places. It uses participatory design to bring communities, councils, landowners and government actors into shared dialogue and project formation, positioning design as a method to co-produce new futures from the remnants of the old.

The methodology is designed to be scalable but nuanced to place, with a particular focus on reactivating centrally located buildings that once served as civic or commercial anchors. It draws on over 15 years of design and governance experience and is currently being developed into a service model with the ambition to retrofit 1000 buildings in 10 years. A recent 4000km field trip identified over 400 viable buildings across 100 towns, suggesting both scale and urgency.

Rather than offering a fixed solution, the initiative explores how governance — across local, state and community actors — might operate collectively to enable adaptive reuse. It draws on ideas of pluralism and agonism to navigate competing needs and shared ambitions, making space for inclusive and grounded transformation.

This presentation shares practical strategies and early findings, and invites critique, partnerships, and cross-disciplinary dialogue on housing, climate, and governance as interwoven urban challenges.

Keywords: adaptive reuse, regional housing, collective governance, climate-responsive urbanism, participatory design

Cultural Heritage in Urban Transformation: Implications of China's Zhuhai Experience for Australian Citiest

Yunqin Ye[1], **Dr Bing Zhang**[2]
[1]China Academy Of Art, [2]Beijing Institute of Technology (Zhuhai)

SOAC Poster

As urbanization accelerates globally, the preservation and reuse of historical urban spaces have become vital strategies for maintaining cultural heritage while fostering urban diversity and innovation. This research selects Zhuhai, a key city in China's Guangdong–Hong Kong–Macao Greater Bay Area, as a case study to inform urban transformation in Australia. Zhuhai's rapid urban development, which aligns with international trends, has attracted diverse populations seeking opportunities. Its cultural dynamics share strong similarities with those of Australian cities, particularly in terms of their diversity. The city's approach to integrating historical heritage with modern urban needs provides valuable insights for fostering a balanced urban identity that promotes innovation and community cohesion.

Drawing on case studies from several Zhuhai's historical urban villages and buildings, this research demonstrates how adaptive reuse strategies can safeguard both the physical integrity and cultural significance of historical sites. These case studies highlight the potential of adaptive reuse in preserving the authenticity of historical architecture while ensuring its relevance in contemporary urban settings. The application of traditional Chinese philosophy, particularly Fengshui, plays a critical role in this process. As a guiding principle for urban design, Fengshui integrates the principles of nature, social harmony, and belief systems, addressing urban challenges while reinforcing cultural identity.

Through revitalizing heritage sites with a focus on "place-making," Zhuhai exemplifies a dynamic interaction between the past and present, where historical structures serve new functions such as cultural hubs, creative industries, and residential spaces. This model offers Australian urban planners and designers a perspective on engaging with cultural heritage without hindering innovation, emphasizing the importance of preserving historical identities while adapting to modern urban demands, promoting diversity, sustainability, and inclusivity. The research suggests that Australia can benefit from adopting similar strategies to integrate cultural heritage into urban development.

Keywords: Cultural Heritage, Urban Villages, Urban Identity, Urban Renewal

How does one model a regional mega-event? Developing a methodological framework for the Brisbane 2032

Mr Muhammad Usman Haider[1]

[1]Griffith University

SOAC Poster

Approximately sixty percent of the tickets to the Brisbane 2032 Games are projected to be purchased by residents of Southeast Queensland. The aim of this paper is to develop a methodological framework to research two key challenges for the 2032 Games. The two challenges this paper focuses on are i) the residential "base layer" travel, which is the non-Games travel of those living in the SEQ region during the Games period; and, ii) the non-ticketed event travel during the Games, which is travel by both visitors and SEQ residents to events such as the marathons, cycling road races, the triathlons, surfing, sailing, and more. This requires predicting travel choices of residents during the event, distinguishing between regular daily travel and event-related travel, and identifying the propensity to travel, the peak travel times, and modes of transportation to popular non-ticketed events. Predictor variables include sociodemographic variables, residential proximity to event venues, the availability of transportation options, and the transportation policies (such as hypothecated 'free' public transport fares and parking restrictions) applied during the Games. These are important inputs into the models being developed by the Queensland Department of Transport and Main Roads to forecast travel demands during the Games period. The approach to both challenges is to use past event data from the Gold Coast Commonwealth Games, from previous Olympics, and from online stated preference cross-sectional surveys. The outcome of this and the other modeling work by the broader team will produce a set of agent-based models to aid forecasting. This research builds on previous studies on mega-events and host community travel choices but is also novel, partly due to the regional nature of the 2032 Games.

Keywords: travel behaviour, demand forecasting, methodological frameworks, Olympics

Sponsors

Host Universities

Destination Partner

Gold Sponsor

Bronze Sponsor