



# Healthy Liveable COMMUNITIES

NHMRC Centre of Research Excellence

## FINAL REPORT 2020

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Healthy Liveable Cities Group, Centre for Urban Research  
RMIT University.

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# 01. FORWARD

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Globally, the prevalence of non-communicable diseases (NCDs) is increasing, accounting for over 66% of all deaths annually (Lozano et al., 2012). Major NCDs such as cardiovascular disease (CVD), diabetes and some cancers, share common risk factors. Many of these risk factors are influenced by the way communities are planned and governed. For example, low-density 'affordable' housing on the urban fringe often has poor public transport access. This increases motor vehicle dependency, which increases levels of physical inactivity, sedentary behaviour, obesity and air pollution.

These are not problems that can be solved by the health sector. Whole-of-government, whole-of-society approaches are required to combat NCDs (United Nations 2011; World Health Organisation, 2016) and reduce health inequity (Marmot, 2011; World Health Organisation, 2008) (i.e. *avoidable* inequalities in health). This includes designing cities that encourage healthy and more sustainable lifestyles (Watts, 2009). This would increase levels of physical activity, reduce obesity risk, help create more socially inclusive communities (United Nations, 2011), and create cities that foster lifestyles that mitigate climate change risk (Watts, 2009).

Indeed, the World Health Organisation (WHO) has reaffirmed the importance of cities as critical settings to create the conditions for good health (World Health Organisation, 2016), and recommended 'placing health and health equity at the heart of governance and planning' (World Health Organisation, 2008). Similarly, an OECD report highlighted that leadership from 'transport, land-use

and health ministers' is required to facilitate action (OECD, 2011). Along with directions from the United Nations Sustainable Development Goals (United Nations, 2015), this signals high-level support for public health to be integral to city planning decision-making.

Creating cities that reduce NCDs and health inequity complements urban planning agendas focused on creating more liveable, compact, pedestrian-friendly, less automobile-dependent and more socially inclusive cities (DELWP, 2017; Committee for Sydney, 2018; Commonwealth of Australia Department of Prime Minister and Cabinet, 2017; Western Australian Planning Commission, 2007). This is a priority for Australia given that by 2050, our population may double (Australian Bureau of Statistics, 2013), with three cities growing faster than others: Perth, Brisbane and Melbourne (Australian Bureau of Statistics, 2011).

Two housing approaches are currently being adopted to meet the needs of rapidly growing Australian populations: lower-density urban fringe development and higher-density inner and middle-city development (Newton, 2010). If not carefully implemented, both approaches have the potential to produce negative health (Butland et al., 2007; Giles-Corti, 2011; Heart Foundation, 2009; Giles-Corti et al., 2014) social (Macintyre and Ellaway, 2003) and environmental (Transportation Research Board, 2005; United Nations 2015) outcomes, and to increase health inequity (Marmot, 2011).



To create liveable communities that promote health and wellbeing will require Integrated planning across multiple urban systems including land use, transport, housing and social infrastructure (Giles-Corti et al., 2016). While the concept of liveability is valued, there appears to be a gap between the concept and delivery of liveable communities on-the-ground (Whitzman, 2007; Curtis and Punter, 2004; Hooper et al., 2014). Additionally, until recently what constitutes a liveable community was not well defined (Lowe et al., 2012), nor its health impact assessed. The establishment of the National Health and Medical Research Council (NHMRC) Centre of Research Excellence (CRE) in Healthy Liveable Communities was therefore seen as an opportunity to study liveability from a health perspective, and to develop a validated set of health and urban policy-related indicators that could be used monitor progress towards creating healthy, liveable and equitable communities.



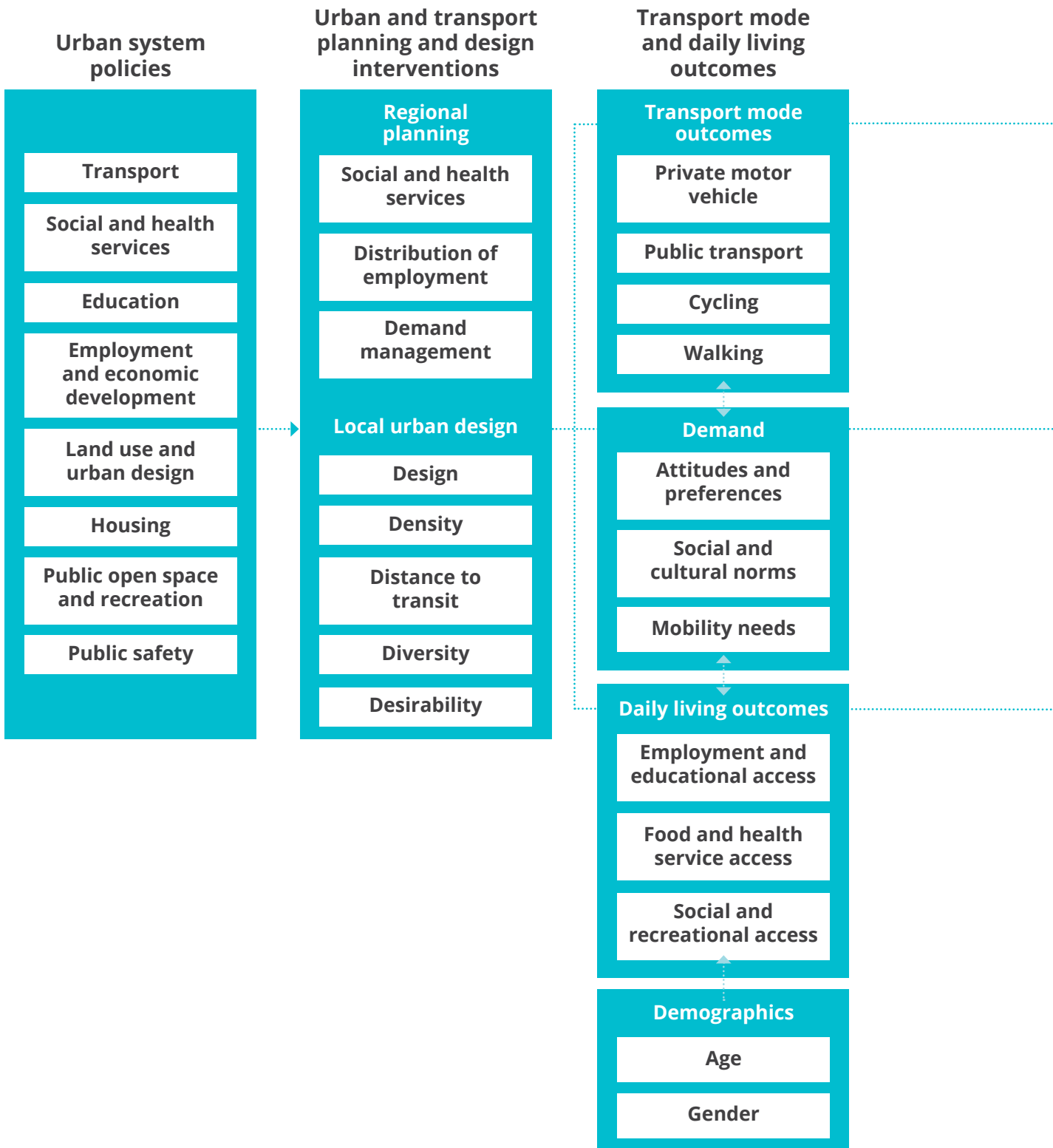






## 02. OVERVIEW

# 02. OVERVIEW OF THE NHMRC CENTRE OF RESEARCH EXCELLENCE IN HEALTHY, LIVEABLE COMMUNITIES



In a recent series on Urban Design, Transport and Health published in The Lancet (Giles-Corti et al., 2016; Sallis et al., 2016; Stevenson et al., 2016), it was argued that integrated urban policies create the regional and local planning interventions that directly and indirectly influence the daily living

opportunities, lifestyle decisions and health-related risk exposures of urban dwellers (Giles-Corti et al., 2016) that influence health and wellbeing. Some of the potential pathways through which city planning affects health – and formed the bases for this CRE – are shown in Figure 1.

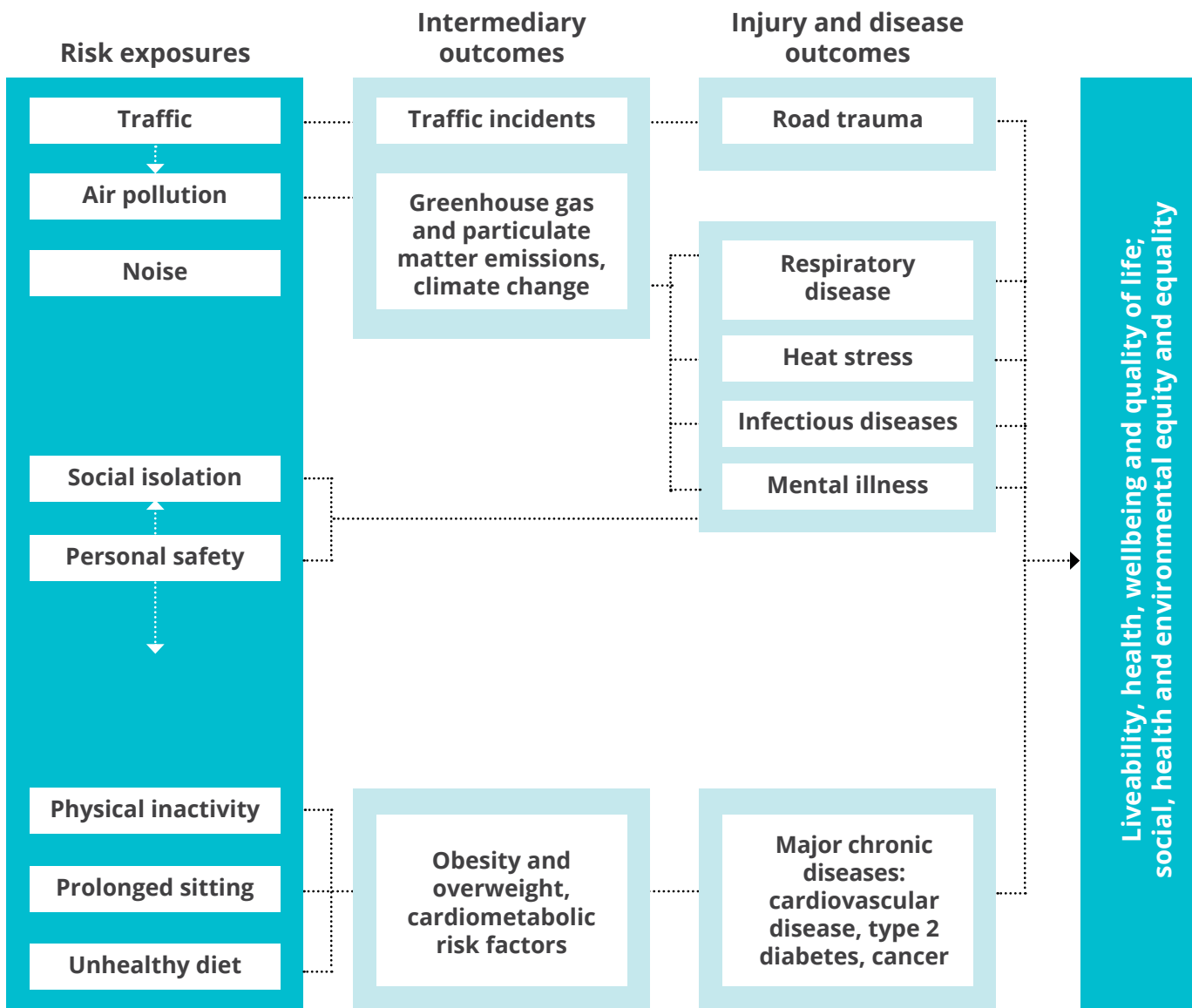


Figure 1: Potential direct and indirect pathways through city planning influences health source: (Giles-Corti et al., 2016)

For the last 15 years, there has been an exponential growth in studies about city planning and health. Yet, despite this rapid growth, the CRE team identified important research gaps that informed our work program.

**1.** The need for well-designed longitudinal evidence and natural experiments (Ogilvie et al., 2007; Petticrew et al., 2005; Kaczynski and Henderson, 2007; Kerr et al., 2012; McCormack and Shiell, 2011; Sugiyama et al., 2012; Lee and Moudon, 2004; Panter and Jones, 2010; Ding and Gebel, 2012; Renalds et al., 2010) that can assist in teasing out whether relationships between city planning decisions and health are causal, or whether people simply choose neighbourhoods that match their preferred behaviours (Mokhtarian and Cao, 2008). This includes studies of residents who relocate ('movers') and studies that incorporate longitudinal measures of attitudes and perceptions (Mokhtarian and Cao, 2008).

**2.** The need to quantify the relative contributions of built-environment and self-selection factors (e.g. preferences) as a determinant of outcomes (Panter and Jones, 2010), and the need for both perceived and objective built-environment measures in order to understand interactions between the two (Badland et al., 2012).

**3.** Studies incorporating multiple levels of influence of behaviour - individual, demographic, social and built environment factors (Brownson et al., 2009; Lee and Moudon, 2004; Panter and Jones, 2010; McCormack and Shiell, 2011; Mokhtarian and Cao, 2008) that can help unpack the difference between neighbourhood- and individual-level effects on health and wellbeing outcomes (Brownson et al., 2009; Panter and Jones, 2010; Lee and Moudon, 2004).

**4.** Studies using complex systems models designed in consultation with urban planning experts (Brail, 2008) and tested using advanced statistical methods (e.g., structural equation modelling) (Mokhtarian and Cao, 2008). These can be used to account for moderators, mediators and system-feedback loops of built environment and social environmental variables with health and wellbeing outcomes, enabling causal pathways and mechanisms to be studied (Lee and Moudon, 2004; Panter and Jones, 2010; McCormack and Shiell, 2011; Ding and Gebel, 2012). For example, little is known about when, where and for whom environmental interventions are influential (Bowler et al., 2010; Ding and Gebel, 2012). For example, could community design reduce health disparities caused by individual-level socioeconomic status? (Booth et al., 2005).

**5.** Geographic Information Systems (GIS) have enabled advancements in measuring the built environment. Yet, there is a need for GIS measures to be refined, to take account of geographic scales for different behaviours (e.g. walking, cycling), and the needs of different populations (e.g. older adults) (Brownson et al., 2009).

**6.** A void in the availability of valid health-related built-environment measures that are directly relevant to current urban planning policies and practice (Brownson et al., 2009). Hence, studies are needed that include GIS measures that are specific to urban planning requirements (Durand et al., 2011).



**7.** A need for studies that incorporate built-environment measures that could inform policy-makers and practitioners about what constitutes a sufficient level or threshold of an urban planning principle required to modify behaviours (Durand et al., 2011). This would facilitate the development of more definitive standards about built-environment interventions required to generate change for specific types of health and wellbeing outcomes e.g. transport or recreation walking (Kerr et al., 2012).

**8.** A lack of studies examining the cost-effectiveness of built-environment interventions or planning policies (McCormack and Shiell, 2011), particularly those considering benefits across multiple sectors (e.g. health, transport *and* built environment) (Woodcock et al., 2009; Giles-Corti et al., 2010) or considering the nuances of the built environment simultaneously for multiple health and wellbeing outcomes. For example, the impact on physical activity, social isolation and mental health (Kerr et al., 2012).

Hence, the NHMRC CRE in Healthy, Liveable Communities set itself the challenge of addressing as many of these research gaps as possible, to study liveability from a health perspective, and to create a validated set of health and urban policy-related indicators that could be used to benchmark cities and monitor progress towards creating healthy, liveable and equitable communities. Specifically, the CRE aimed to generate and exchange new knowledge about:

**1.** the measurement of **policy-relevant urban design features** associated with leading non-communicable disease risk factors (physical activity, obesity) and health outcomes (cardiovascular disease, diabetes) and mental health;

**2. causal relationships and thresholds** for urban design interventions using data from longitudinal studies and natural experiments;

**3.** the **economic benefits** of urban design interventions designed to influence health and wellbeing outcomes; and

**4.** factors, tools and interventions that facilitate the translation of research into policy and practice.

The CRE capitalised on an established and productive multidisciplinary team with a strong track record for undertaking innovative policy-relevant research and for training students and early-mid-career researchers. This team had access to a number of unique purpose-designed multilevel longitudinal data sets – HABITAT, RESIDE and AusDiab – that could be used to investigate the CRE's five themes and the research gaps identified above. To ensure policy relevance and to facilitate research translation, the CRE built on ongoing and new multisector collaborations with national and state policy-makers and practitioners who formed multisector advisory groups to guide research and assist in research translation.



The CRE's aims and aspirations were reflected in five main themes, which are captured in Figure 2 and are described in the sections that follow.

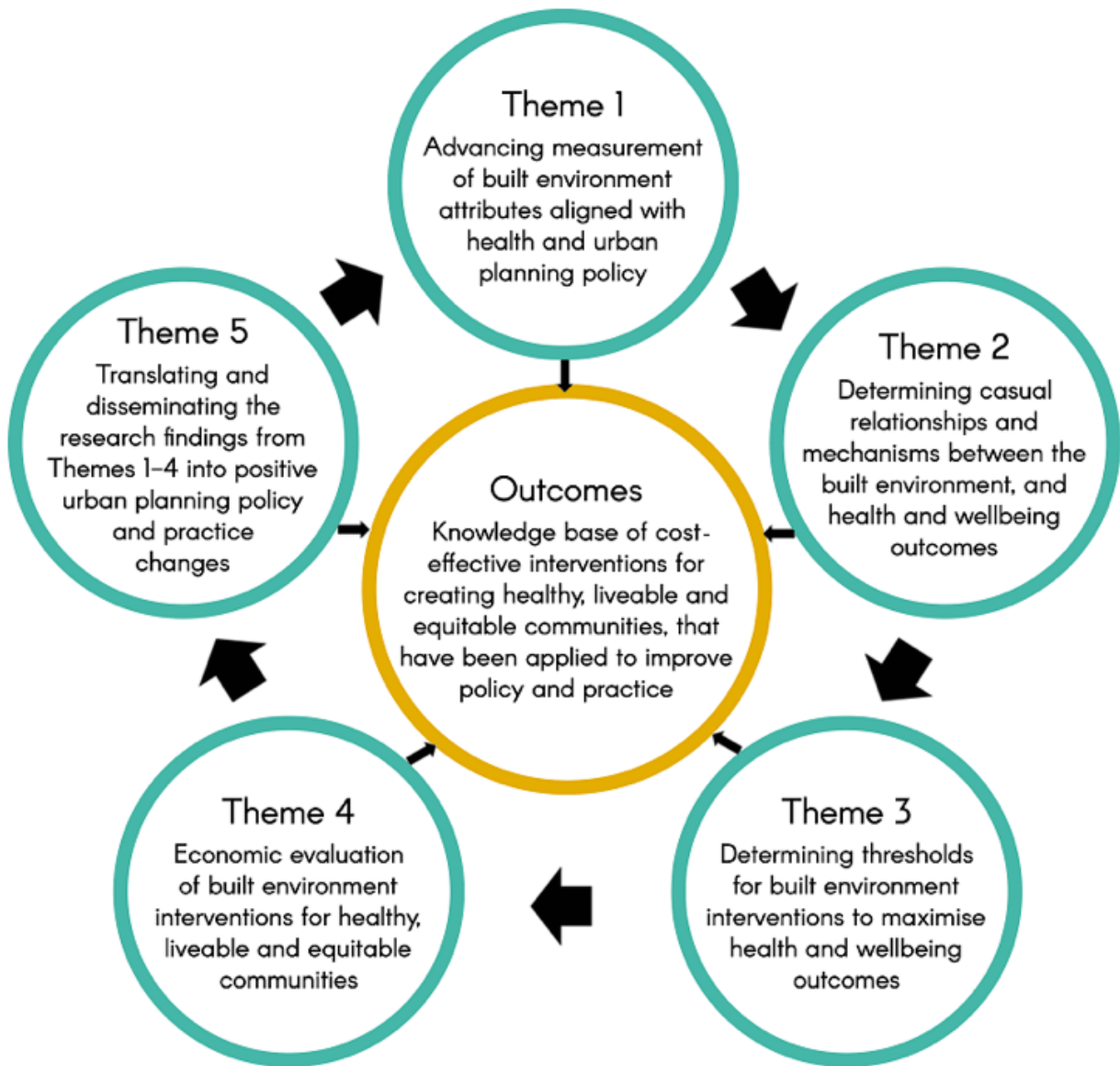


Figure 2: The CRE's five themes



### **03. CRE INVESTIGATORS, RESEARCH FELLOWS, RESEARCH STUDENTS**

### 03. CRE INVESTIGATORS, RESEARCH FELLOWS, RESEARCH STUDENTS

The research involved a collaboration with researchers drawn from 10 universities and one institute across four Australian states.

#### Chief investigators



**Professor Billie Giles-Corti,**  
RMIT University (Lead)



**Professor Gavin Turrell,**  
Deakin University



**Professor Alan Shiell,**  
La Trobe University



**Professor Lennert Veerman,**  
Griffith University



**Professor Anne Kavanagh,**  
The University of Melbourne



**Professor Matthew Knuiman,**  
The University of Western Australia



**Dr Bryan Boruff,**  
The University of Western Australia



**Professor Simon Washington,**  
The University of Queensland



**Professor Chris Pettit,**  
UNSW Sydney



**Professor Takemi Sugiyama,**  
Australian Catholic University



**Professor Fiona Bull,**  
The University of Western Australia



## Research fellows



**Dr Claire Boulangé,**  
RMIT University



**Associate Professor  
Hannah Badland,**  
RMIT University



**Mr Stefan Cvetkovski,**  
RMIT University



**Dr Paula Hooper,**  
The University of Western Australia



**Dr Lucy Gunn,**  
RMIT University



**Dr Melanie Lowe,**  
Australian Catholic University



**Dr Jerome Rachele,**  
Australian Catholic University

## CRE research students



**Dr Belén Zapata-Diomedí,**  
The University of Queensland



**Dr Fatima Ghani,**  
Australian Catholic University



**Mr King Wa Tam,**  
The University of Queensland



**Mr Manoj Chandrabose,**  
Australian Catholic University



**Dr Maureen Murphy,**  
The University of Melbourne



**Dr Venurs Loh,**  
Australian Catholic University

## Associate investigators

**Professor Adrian Barnett,**  
QUT

**Professor Brendan Gleeson,**  
The University of Melbourne

**Professor Evan Jones,**  
The University of Western Australia

**Dr Karen Lamb,**  
Deakin University

**Professor Matthew Tonts,**  
The University of Western Australia

**Dr Serryn Eagleson,**  
The University of Melbourne

## Knowledge translation team

**Ms Alex Kleeman,**  
RMIT University

**Ms Julianna Rozek,**  
RMIT University

**Dr Melanie Lowe,**  
Australian Catholic University



[The research also involved collaborations with an academy of early–mid-career researchers who worked on related projects, drawn from two additional universities in Australia \(University of Wollongong and University of Canberra\) and one additional institute \(Baker Heart and Diabetes Institute\). The academy also included international collaborators who formed an International Advisory Group.](#)

## Academy of collaborating researchers

### Early–mid-career researchers

**Associate Professor  
Thomas Astell-Burt,**  
University of Wollongong

**Associate Professor  
Hannah Badland,**  
RMIT University

**Dr Hayley Christian,**  
The University of Western Australia

**Dr Javad Koohsari,**  
Baker Heart and Diabetes Institute

**Associate Professor Xiaoqi Feng,**  
University of Wollongong

**Dr Jonathan Arundel**  
RMIT University

**Dr Sarah Foster,**  
RMIT University

**Mr Vincent Learnihan,**  
University of Canberra

**Dr Melanie Lowe,**  
Australian Catholic University

**Dr Suzanne Mavoa,**  
The University of Melbourne

**Dr Andrea Nathan,**  
Australian Catholic University

**Dr Karen Villanueva,**  
RMIT University

**Mr Carl Higgs**  
RMIT University

**Dr Koen Simons**  
RMIT University

## Other senior collaborators

**Professor Neville Owen,**  
Baker Heart and Diabetes Institute

## PhD students

**Dr Claire Boulangé,**  
The University of Melbourne

**Dr Geoff Browne,**  
The University of Melbourne

**Dr Melanie Lowe,**  
The University of Melbourne

**Ms Rebecca Maddill,**  
The University of Melbourne

## International collaborators

**Professor Lawrence Frank,**  
The University of British Columbia

**Professor Karen Lee,**  
Active Design Centre, City of New York

**Professor Christopher Owen,**  
St George's University of London

**Associate Professor Gavin McCormack,**  
University of Calgary

**Professor James (Jim) Sallis,**  
University of California (San Diego)  
and Australian Catholic University

**Professor Subu Subramanian,**  
Harvard University

**Professor Jens Troelsen,**  
University of Southern Denmark



## **04. ADVISORY GROUPS**

## 04. ADVISORY GROUPS

Investigating how to create policies and practices that would promote health and wellbeing was central to this CRE. The aim was to work with sectors and agencies that shape the built environment (e.g. urban planners and designers, transport planners, engineers and the land development industry) – as well as the health sector - to inform and influence decision-making, regulations, legislation policy and urban design practice through the integration and uptake of relevant evidence. Research translation and real-world relevance was therefore not an additional phase in this CRE: it was embedded from the outset.

Communication between researchers, policy-makers and practitioners was identified as the foundation upon which to ensure that the CRE research was policy- and practice-relevant, which would increase the potential for research translation (Giles-Corti et al., 2015). Indeed, Figure 3 outlines the activities a review of the literature suggested would maximise the potential for research translation (Radomiljac and Giles-Corti, 2011; Giles-Corti et al., 2015).

To achieve the CRE's ambition of building links with policy-makers and practitioners, state-based advisory groups were established in Perth, Melbourne and Brisbane, and chaired by a local policy-maker or practitioner. The members of the state advisory groups are as follows:

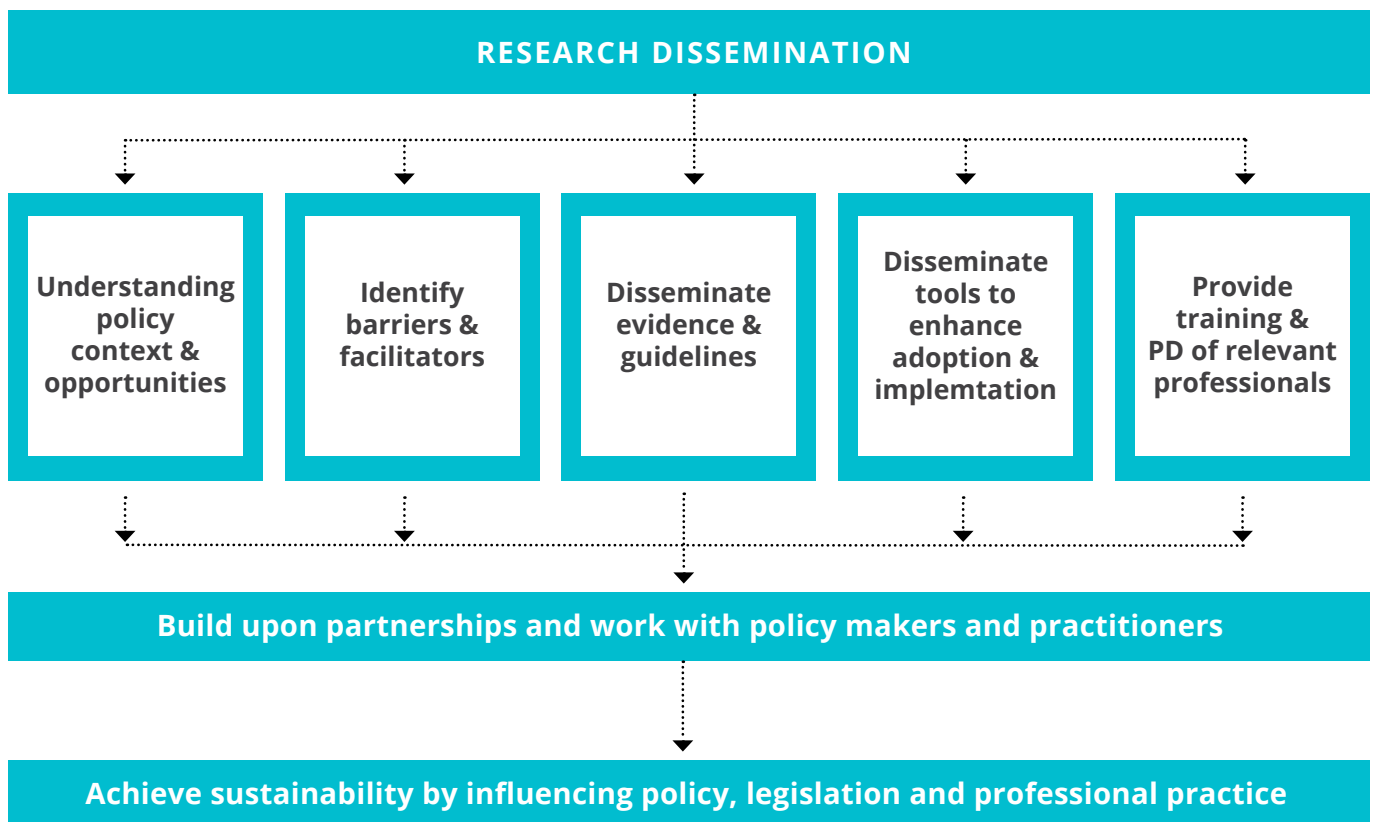


Figure 3: Framework of process to facilitate research translation. (Source: Wood L, 2010 Reside Grant)

### Western Australian Advisory Group

Evan Jones (Chair), Principal, Responsive Environments

Warren Kerr, Director / Health Portfolio Leader, Hames Sharley

Trevor Shilton, Director of Cardiovascular Health, Heart Foundation

John Clifton, Manager Strategy and Innovation, LandCorp

Margie Tannock, Partner, Squire Patton Boggs

Emmer de Jagger, Planning Institute of Australia

Emmerson Richardson, Councillor, RAC

### Queensland Advisory Group

Stephanie Wyeth Director, Urbis

Anne Savage, Bicycle Queensland

Andrew Demack, Bicycle Queensland

Andrea Young, Social Planner, Planning Institute of Australia

Hayley J Butler, Committee Support Officer, Department of Planning, Queensland Government

Fiona Coombs, Principal Advisor, Department of Transport and Main Roads, Queensland Government

Robyn Davies, Program Manager (Cycling and Active Transport) at Department of Transport and Main Roads, Queensland Government

Tamara Smith, Senior Advisor (State, National and Academic Partnerships), Department of Transport and Main Roads, Queensland Government

Roger Meany, Queensland Health, Queensland Government

Sheree Hughes, Healthy Living Manager, Heart Foundation Queensland Branch

Marcus Mulholland, Strategic Planning Manager, Brisbane City Council

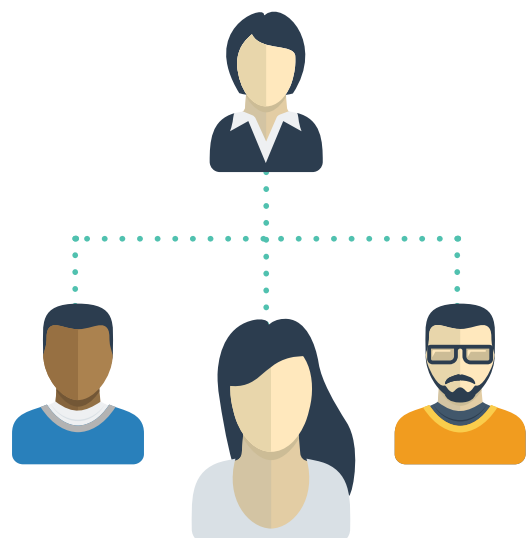
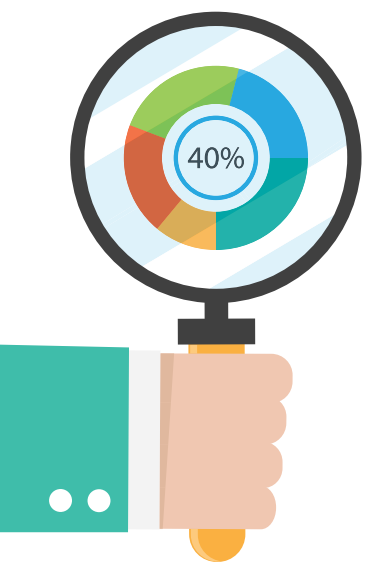
Kerry Doss, Manager, City Planning and Economic Development Branch, City Planning and Sustainability Division, Brisbane City Council

Steven McPhail, Queensland Health, Queensland Government

Les Bulluss, Manager of Community Programs, Queensland Police

Lyndon O'Neill, Queensland Police

Tracy Haynes, Principal Advisor, Planning and Development, Local Government Association of Queensland





## Victorian Advisory Group

Peter Seamer AM (Chair), Director of Planning Strategies Pty Ltd. (formerly CEO of the Victorian Planning Authority)

Jill Garner, Victorian Government Architect, Office of the Victorian Government Architect

John Merritt, CEO, VicRoads

Alex Rhodes, Lead Director – Greenfields, Victorian Planning Authority (previously Paul Byrne)

Christine Wyatt, Acting Secretary, Victorian Department of Environment, Land, Water and Planning

Rob Adams, Director of City Design, City of Melbourne

Mike Day, Director, RobertsDay

Iain Butterworth, Manager, Population Health and Planning, Victorian Department of Health and Human Services

Bruce Bolam, Chief Preventive Health Officer, Victorian Department of Health and Human Services

Kellie Horton, Executive Lead, Policy Development Office, VicHealth

Kellie-Ann Jolly, Victorian CEO, Heart Foundation Victoria

Rod Duncan, Planning Institute of Australia

Serryn Eagleson, Technical Director of Australian Urban Research Infrastructure Network.

Robin Goodman, Dean – School of Global, Urban and Social Studies, RMIT University

## The role of the Advisory Groups

The role of these advisory groups was to ensure that the CRE's research was policy-relevant, and to guide and participate in research-translation activities. Terms of reference were established that outlined the specific aims of the advisory groups as follows:

### 1.1 Research directions and priorities

To provide advice on the content, direction and relevancy of the CRE research activities to help ensure it addresses the needs, issues and priorities of policy, industry and agencies and stakeholders, including the development and health insurance industries.

### 1.2 Research translation (communicating and disseminating results and actions)

**(a)** To provide advice to CRE research staff, and students involved with the CRE, on the implications of research findings in policy and practice.

**(b)** To assist in the dissemination of CRE research outcomes.

### 1.3 Public relations (awareness / marketing)

To assist in championing and promoting the CRE programs to government, industry and other relevant groups through supporting and facilitating events and activities that:

**(a)** raise the profile of the CRE in Healthy, Liveable Communities

**(b)** support guest lectures, public and professional events and other functions designed to promulgate the CRE programs and team members where required.





## **05. RESEARCH PROJECTS AND COLLABORATORS**

## 05. RESEARCH PROJECTS AND COLLABORATORS

Through the study team and their collaborators, the CRE had access to a large number of high-quality, and unique data sets for a wide range of projects undertaken across multiple cities.

### Research projects

#### The RESidential Environments Project (RESIDE)

This was a 10-year research project commencing in 2003 at The University of Western Australia (led by CI Giles-Corti until 2011, then by CI Bull) with funding from Healthway (and later the Australian Research Council). RESIDE was designed to evaluate the impact of the Department of Planning's *Liveable Neighbourhood Guidelines* on walking, cycling, public transport use and sense of community. It involved a collaboration with the Western Australian Department of Planning, the National Heart Foundation and the Water Corporation. Approximately 1,800 people who built new homes across metropolitan Perth agreed to participate in the study. They were surveyed as their new homes were being built, one year after they moved into their new homes, at three years after relocating, and then again seven to nine years after relocating to their new home. In addition to self-administered surveys, participants wore a pedometer across a seven-day period. The built environment around their homes was also assessed using Geographical Information System (GIS) data collected each time

people were surveyed, to examine street layout of the local neighbourhood and other aspects of the built environment including their access to public open space, shops, public transport, and footpaths. GIS measures were used to assess the impact that access to these community facilities has on the health of residents. A unique feature of the study was that participants were surveyed before they moved into their new homes. This helped the study team to distinguish whether people select neighbourhoods that cater for their current lifestyles and health behaviours, or whether lifestyles and health behaviours are shaped by the environment in which people live. The study was designed to inform local and state government policy-makers, planners and developers to create healthy, more liveable communities. This was facilitated by a unique sub-study led by then-PhD student, Dr Paula Hooper, which involved a process evaluation of the implementation of the *Liveable Neighbourhood Guidelines* on the ground (Hooper et al., 2014). In 2015, the RESIDE study findings were summarised in a user-friendly report for policy-makers and practitioners (Bull et al., 2015).





### How Areas in Brisbane Influence health and Activity (HABITAT)

HABITAT was a longitudinal multilevel study (2007–2017) of physical activity and sedentary behaviours among persons aged 40–80 years living in the Brisbane Local Government Area (led by CI Turrell with CI Giles-Corti a co-investigator on the research program). The HABITAT study is funded by NHMRC (APP 339718, APP497236, and APP1047453) and has two distinct stages. Stage 1 (2007–2011) was designed to examine changes in physical activity and sedentary behaviours and the relative contributions of the neighbourhood environment and sociodemographic, social and psychological factors. Stage 2 continues Stage 1 and also examines how physical activity and sedentary behaviours influence the onset and progression of chronic disease and related risk factors (e.g. body mass index), self-rated health (physical and mental) and physical function. HABITAT provided a world-class longitudinal dataset that was used to explore issues of causality for the CRE's Theme 2.

### Ten to Men

Ten to Men is the first national longitudinal study in Australia focusing exclusively on male health and wellbeing with its first two waves of data collection led by The University of Melbourne. Australian males have poorer health than Australian females. They have shorter life expectancies than females and are more likely to experience health problems such as lung cancer, skin cancer, heart diseases, liver diseases, respiratory diseases and stroke. Males also have higher rates of alcohol use and smoking which increase their risk for health problems, and they are less likely than females to visit health professionals. An even greater health gap exists for males in rural and remote areas and in Indigenous communities. Ten to Men was established as a longitudinal study of almost 16,000 Australian men and boys between the ages of 10 to 55 years. It aims to identify the factors that contribute to the poorer health outcomes in Australian males in general, and in particular sub-groups of men and boys. It aims to generate information that can inform government policy and program development in male health. The CRE team partnered with the Ten to Men team (through CIs Giles-Corti and Kavanagh, who co-led the study component focused on social determinants of health) to add geospatial data to the Ten to Men Wave 1 dataset.

## Victorian Population Health Survey

The Victorian Population Health Survey was established in 1998 by the Victorian Department of Health and Human Services. It collected information at state, regional and local government area levels about the health, lifestyle and wellbeing of adult Victorians aged 18 years and over. The survey followed an established method to collect relevant and valid health information, which has been applied to policy development and strategic planning. Information was collected via computer-assisted telephone interview on overall self-rated health status, level of psychological distress, body mass index (to determine weight status), the presence of chronic diseases, nutrition, physical activity, smoking and alcohol consumption. Information was also collected on screening for bowel cancer, cervical cancer, breast cancer, high blood pressure, cholesterol and high blood sugar in addition to community participation, levels of social support and connections with others. Interviews were conducted in the major non-English languages used in Victoria to ensure people of culturally and linguistically diverse backgrounds were represented. The CRE team approached the Department of Health and Human Services to request collection of participants' residential address information (or closest cross street), which would allow geospatial data to be added to the 2015 survey. These data were linked to the CRE team's geospatial database in 2017.



## The Australian Diabetes, Obesity and Lifestyle Study (AusDiab)

AusDiab, led by the Baker Heart and Diabetes Institute, was the the largest Australian longitudinal population-based study examining the natural history of diabetes, pre-diabetes, heart disease and kidney disease. The baseline study, conducted in 1999–2000, provided benchmark national data on the prevalence of diabetes, obesity, hypertension and kidney disease. The second phase of AusDiab, completed in December 2005, was a five-year follow-up of the people who participated in the baseline survey. A 12-year follow-up was completed in 2012, with the results released in August 2013. These results provided a unique picture of the incidence (or number of new cases) of diabetes, cardiovascular disease and kidney disease over 12 years, and improved our understanding of the factors that increase the risk of these conditions. The CRE team partnered with the AusDiab team (through CI Kavanagh and CRE senior collaborator Neville Owen) to add geospatial data to the AusDiab dataset.

### **Kids in Communities (KiCS)**

The Kids in Communities Study (KiCS) involved an international collaboration of researchers from 10 universities plus policy-makers and child development professionals from 14 government and non-government partner organisations. The study aimed to understand community-level influences on early childhood development in five domains of influence – physical, social, governance, service and sociodemographic. Developed from the Australian Early Development Census (AEDC), a ‘learning from extremes’ approach explored community-level factors that may signal why children performed better or worse (off-diagonal), or as expected (on-diagonal) on the AEDC relative to their socioeconomic profile.

From 2015–2017, a mixed-methods investigation collected information on community factors in 25 local communities across VIC, NSW, SA, QLD and the ACT, using both qualitative methods (stakeholder interviews, parent and service provider focus groups, policy documents) and quantitative methods (surveys, mapping and the use of existing sociodemographic and early childhood education and care data). The project was funded by an Australian Research Council Linkage Grant (2013), with further funding from the Australian Government Department of Social Services (2017) to identify evidence-based community-level Foundational Community Factors that lay the foundations of a good community that foster early childhood development and a manual on how to measure these factors at the local level.

### **Victorian Integrated Survey of Travel and Activity (VISTA)**

VISTA surveyed household travel activity and was conducted across Greater Melbourne, Geelong and other regional centres by Transport for Victoria. Households were randomly selected and asked to complete a travel diary for one day. Each trip origin and destination was recorded, forming a rich dataset of individuals’ travel behaviours throughout the day. The CRE had access to three waves of data which were collected in 2007–08, 2009–10 and at various times from 2012–16 covering a total of 18,152 households and 46,562 people. The CRE team used the VISTA dataset to understand the relationship between the built environment and active modes of travel. Projects still underway include exploring the space within which daily activity occurs of VISTA survey participants, measuring access to employment by mode of transport and exploring the relationship between walking behaviours and an Urban Liveability Index for metropolitan Melbourne.



## Collaborations

[The CRE team also worked with, and received funding from, a number of large national research consortia including:](#)

### **The Australian Prevention Partnership Centre (TAPPC)**

The Australian Prevention Partnership Centre is a national collaboration of researchers (CI Giles-Corti), policy-makers and practitioners who are working together to identify new ways of understanding what works and what doesn't in order to prevent lifestyle-related chronic health problems in Australia.

TAPPC's priority areas are the main lifestyle-related determinants of chronic disease risk: obesity, diet, tobacco, physical activity and alcohol. It aims to provide decision-makers with the best evidence to inform their policies and programs to prevent chronic health problems. This includes working with the health system as well as sectors outside of health, such as in schools, food production and retailing, and urban planning.

TAPPC funded a national liveability project which involved a large number of the CRE team. This was led by CRE Principal Research Fellow Hannah Badland (until 2016) and involved CRE fellows Paula Hooper and Jerome Rachele (until 2016) and collaborators Suzanne Mavoa, Thomas Astell-Burt, Xiaoqi Feng and Vincent Larnihan. Since 2017, the centre has been led by CRE collaborator Jonathan Arundel, with the research translation led by CRE Research Fellow Lucy Gunn, and the RMIT research translation team Julianna Rozek and Melanie Lowe. This project built CRE research findings and complemented the research funded by The Clean Air and Urban Landscape Hub below. In 2017, it also resulted in a joint national liveability report (Arundel et al., 2017), the result of a collaboration between, and funding support from, TAPPC, CAUL and the CRE.



### **The Clean Air and Urban Landscapes (CAUL) Hub**

The Clean Air and Urban Landscapes (CAUL) Hub is part of the Australian Government's National Environmental Science Program. The CAUL Hub undertakes research to improve environmental quality in Australia's urban areas, including air quality, urban greening, liveability and biodiversity. It focuses on translating research into policy and practice, Indigenous Australian participation and community engagement. The CAUL Hub involves researchers from four Australian universities: the University of Melbourne, RMIT University, the University of Western Australia and the University of Wollongong.

The CAUL Hub funded a project through its Liveable Urban Systems theme, that assessed current policy and progress towards creating liveable neighbourhoods in Australian capital cities. Its focus was on developing and mapping indicators of urban liveability suitable for assessing the implementation of urban policy in Melbourne, Perth, Brisbane and Sydney. It built on research undertaken by the CRE and complemented research funded by The Australian Prevention Partnership Centre. This was published in a joint report on the liveability of Australian cities between CAUL, TAPPC and the CRE (Arundel et al., 2017).





## **06. THEME OVERVIEWS**



## THEME 1



Advancing measurements of built-environment attributes aligned with health and urban planning policy

### **Aim**

To create and validate 'second generation' spatial measures of the built environment associated with health and wellbeing that were aligned with state and national urban planning policies.

### **Research members**

Hannah Badland (Theme lead (2014-2016), Suzanne Mavoa, Thomas Astell-Burt, Xiaoqi Feng, Karen Villanueva, Koen Simons, Vince Learnihan, Carl Higgs, Melanie Lowe, Javad Koohsari, Melanie Davern, Rebecca Roberts, Stefan Cvetkovski, Jonathan Arundel.

### **Chief investigators**

Billie Giles-Corti (CRE CI Theme Lead), Fiona Bull, Simon Washington, Bryan Boruff, Serryn Eagleson, Chris Pettit.

### **Higher degree research students**

Maureen Murphy: *Measuring the access and availability of food: testing policies with outcomes* (submitted PhD thesis August 2018; supervised by Giles-Corti, Badland, Koohsari, Jordan) APA PhD Scholarship. Dr Murphy received The University of Melbourne Centre for Health Equity 2017 award for Best Published Paper by a PhD Candidate. She is currently appointed as a Research Fellow in Food Systems in the School of Agriculture and Food, University of Melbourne.

Rebecca Madill: *Delivery of health care services in Melbourne's North and West Metropolitan region* (conferred to Master of Science, passed 2018; supervised by Giles-Corti, Badland) *Windermere Foundation PhD Scholarship and APA PhD Scholarship*.



### What was done and what's next?

Prior to the CRE commencement, a comprehensive literature review was undertaken where liveability was conceptualised and defined using a 'social determinants of health' lens. (Lowe et al., 2013). This definition framed the liveability domains to be considered in this theme, and hence the scope of this work program. Importantly, since 2015, this definition of liveability was adopted in its Victorian Public Health and Wellbeing Plans (Department of Health and Human Services, 2015). It has been adopted in several local governments' health and wellbeing plans (Cardinia Shire Council, 2017; Interface Councils, 2017; Moreland City Council, 2017).

For each of the seven domains of liveability identified (employment, food, housing, public open space, social infrastructure, transport, and walkability), a conceptual framework was developed that mapped the potential pathways domain-specific indicators may influence short- and long-term outcomes. Where possible, potential indicators were based on existing state or federal urban planning policies. Where none existed, potential indicators were identified based on the literature.

Several indicators within each domain were identified and created using GIS software. These were linked at the address level to a variety of population health data sets covering metropolitan Melbourne. Conceptual models of the potential pathways through which liveability influences health and wellbeing were developed. Policy-relevant liveability indicators were developed and tested using multilevel models to examine health and wellbeing pathways identified through the conceptual models. The indicators found to be associated with health and wellbeing outcomes were included in an urban liveability index.

The urban liveability index was created in throughout 2017 and 2018, and published in 2019. The index provides an evidence-informed and policy-relevant measure of urban liveability that is associated with health and wellbeing. The urban liveability index can be applied to evaluate progress towards implementing urban planning policies designed to achieve more liveable cities, identify inequities across the city, and, in future, to explore relationships with a broader range of populations and health and wellbeing behaviours and outcomes.

Through the KICs study, child development liveability



indicators were developed by collaborator, Dr Karen Villanueva. Theme lead, Dr Hannah Badland also commenced work on disability-liveability indicators, as a Chief Investigator on the CRE in Disability and Health led by CRE CI Anne Kavanagh.

In 2017, the liveability work went national. With funding from The Australian Prevention Partnership Centre and the Clean Air and Landscape Hub of the National Environment Science Program, a national liveability report was produced and launched just prior to the CRE's national conference held in 2017. This report built on Theme 1's work program, conceptual frameworks and methods, enabling liveability indicators to be created for every dwelling in Australia's capital cities. This was upscaled to the 21 cities included in the Federal Government's National Cities Performance Framework. The report was cited in the Victorian Government's 20 minute neighbourhood report (Victorian Government 2019), and the indicators launched in the Australian Urban Observatory in 2020.

In 2017, this work also went international. Theme Lead, Hannah Badland won an RMIT Vice Chancellor's Senior Research Fellowship and commenced an international program of work examining liveability from a developing world perspective. With funding from VicHealth, working with the Bangkok Metropolitan

Administration, she led a team conceptualising the concept of liveability in Bangkok; and in 2018, won another VicHealth grant, which will enable the team to develop indicators of liveability in Bangkok.

Work also commenced in 2017, on another major international project. Through the CRE's international collaborator, Jim Sallis, and the International Physical Environment Network that he leads, members of the CRE team (Jonathan Arundel, Carl Higgs, Melanie Lowe and Billie Giles-Corti) commenced planning policy analyses and the creation of city planning indicators in 25 cities in six continents across the globe, based on The Lancet series city planning and health paper (Giles-Corti et al, 2016). Preparatory work took place in 2017-2018, with the policy analysis and indicator development work commenced in 2019 and due for completion in 2020.

At the end of 2019, The Healthy Liveable Communities Urban Liveability Checklist was released. The Checklist summarises this theme's findings and operationalises the indicators into a tool for use in established or new urban areas to assess liveability and opportunities to improve health and wellbeing. The Urban Liveability Checklist is available for download from:

[https://cur.org.au/cms/wp-content/uploads/2019/10/urban\\_liveability\\_checklist4pp-a3-aw-002.pdf](https://cur.org.au/cms/wp-content/uploads/2019/10/urban_liveability_checklist4pp-a3-aw-002.pdf)



## THEME 2



Understanding causal relationships between the built and social environments, health and associated behaviours and risk factors

### **Aim**

To establish whether and to what extent the built and social environments are causally related to health and associated behaviours and risk factors.

### **Research members**

Jerome Rachele (Lead), Thomas Astell-Burt, Karen Villanueva, Hannah Badland, Paula Hooper, Sarah Foster, Xiaoqi Feng, Hayley Christian.

### **Chief and associate investigators**

Gavin Turrell (Lead), Billie Giles-Corti, Simon Washington, Anne Kavanagh, Matthew Knuiaman, Takemi Sugiyama, Adrian Barnett, Karen Lamb.

### **PhD students**

Dr Venurs Loh: *The contribution of the neighbourhood environment to the relationship between neighbourhood disadvantage and physical function among middle-aged to older adults.* (Awarded 2018; supervised by Gavin Turrell, Jerome Rachele, Simon Washington).

APA PhD Scholarship; Three Minutes Thesis, Winner, Australian Catholic University, Australia, 2016; Graduate Scholar Award to attend the 2015 International Conference on Health, Wellness, and Society, Madrid, Spain; Real World Application Award, Queensland University of Technology, Institute of Health and Biomedical Innovation, Brisbane, Australia. Dr Loh is currently appointed as a Post-Doctoral Research Fellow in the Institute for Physical Activity and Nutrition (IPAN), School of Exercise and Nutrition Sciences, Deakin University.

Dr Fatima Ghani: *Gender and age differences in recreational and transport walking: the contribution of the neighbourhood social and built environments* (awarded 2018; supervised by Gavin Turrell, Jerome Rachele, Simon Washington) APA PhD Scholarship; Best Student Oral Presentation at the 9th World Congress on Active Ageing, Melbourne, Australia, 2016. Dr Ghani is currently appointed as a Post-Doctoral Research Fellow at the United Nations University, International Institute for Global Health, Kuala Lumpur, Malaysia.

Dr Manoj Chandrabose: *Longitudinal relationships of built-environment attributes with cardio-metabolic health* (awarded March 2020; supervised by Takemi Sugiyama, Alison Carver, Billie Giles-Corti, Gavin Turrell, Neville Owen) CRE-funded PhD Scholarship; Competitive travel grant by the International Society of Hypertension to present the research work at Hypertension Beijing 2018 conference in September 2018 and Young Investigator Award at Hypertension Beijing 2018 conference September 2018. Dr Chandrabose is currently appointed as a research assistant in the Healthy Cities research group, Centre for Urban Transitions, Swinburne University of Technology.

## What was done and what's next?

Theme 2 examined the extent of causation between neighbourhood built and social environments and health. It involved the use of longitudinal data sets with time precedence between exposures and outcomes, diagrammatic causal frameworks and natural experiments to ascertain non-spurious associations independent of issues of self-selection by study participants.

One key focus of Theme 2 was the use of longitudinal data. Cross-sectional studies, by their nature, provide weak evidence for causal inference as they do not provide explicit information about temporal precedence (i.e. we cannot be sure whether the exposure preceded the outcome). Causal relationships are commonly established and validated through experimental designs such as randomised controlled trials, where individuals are randomised to intervention or control groups, and exposure and outcomes are measured before and after the intervention. However, when conducting community-based research, randomised experiments are often not feasible, practical or ethical. Studies where environments change around individuals over time (e.g. the introduction of a park, new roads or bikeways), or when participants move residences and are therefore exposed to different environmental conditions over time, provide a

more appropriate design for examining causal effects of environments on health. Such studies were able to observe changes in environmental attributes, along with changes in individual health behaviours and outcomes, and therefore provide a stronger basis for inferring causation.

A mix of both longitudinal and causal-informed cross-sectional research was undertaken using conceptual frameworks, study designs, measurement tools and statistical techniques that form the basis for generating causal evidence. Likely causal associations were demonstrated between the neighbourhood built and social environment and a range of health-related behaviours, risk factors and health outcomes. For example, it was shown that:

- increases in street connectivity, residential density and land-use mix are associated with increases in walking for transport
- increases in population density (densification) may be protective against obesity risk but have adverse effects on blood lipid and blood pressure
- associations of densification with lower risk of obesity may be mediated by higher levels of physical activity



- travel attitudes and preferences influence transport mode choice independent of built-environment factors, suggesting that transport policy be directed at both people and places
- change in transport mode from private motorised vehicle to active travel (walking and cycling) is associated with a reduction in body mass index
- the built environment has a differential impact on the transport walking behaviours of younger and older adults, with older adults being more sensitive to their neighbourhood environment.

In a recently published systematic review of longitudinal studies examining relationships between the built environment and cardio-metabolic health, PhD student Manoj Chandrabose found strong evidence supporting longitudinal associations between walkability and obesity, type 2 diabetes, and hypertension, and strong evidence for the impact of sprawl on obesity outcomes.

Research conducted as part of Theme 2 has also made important contributions to the understanding of neighbourhood inequities in health. In particular, it was shown that, compared with their more advantaged counterparts, residents of socioeconomically disadvantaged neighbourhoods:

- are more likely to use public transport and walk for transport, but experience faster declines in transport walking as they age
- report greater concerns about crime and safety in their neighbourhood which influences their physical activity participation
- are more likely to report being diagnosed with type 2 diabetes, heart disease and comorbidity, and to smoke cigarettes, have a higher BMI and experience poorer physical function.

It was concluded that building healthier more walkable communities, particularly in disadvantaged areas, might reduce health inequities.

Furthermore, this work resulted in a highly cited publication, showing that higher levels of walking for transport in disadvantaged neighbourhoods was associated with living in a built environment more conducive to walking. The accrued health benefits from this walking might help offset the negative effects of less healthy behaviours (e.g. smoking, poor diet) thus serving to contain or reduce neighbourhood inequities in chronic disease. Planned future research, based on the CRE's findings, will further our understanding of how, and if, built and social environments in advantaged and disadvantaged neighbourhoods contribute to neighbourhood-based health inequities.

The next program of work planned for Theme 2 is examining the impact of liveability from an older adults' perspective; and importantly, the impact of changes in liveability over time on the health and wellbeing of older adults. Grant applications for this next stage of research are currently under review.





## THEME 3



Assessing thresholds for BE interventions

### **Aim**

To identify the quantity and mix of built environment interventions required to optimise health and wellbeing outcomes.

### **Research members**

Lucy Gunn (Theme Lead), Claire Boulangé, Suzanne Mavoia, Karen Lamb, Paula Hooper, Dana Jeffrey.

### **Chief investigators**

Billie Giles-Corti (CRE CI Theme Lead), Takemi Sugiyama, Lennert Veerman, Simon Washington, Anne Kavanagh.

### **Higher degree research students**

Dana Jeffrey: *Understanding the walkability of Melbourne's train stations: An analysis of station typologies in Melbourne* (Master of Planning, University of Melbourne, awarded 2017; supervised by Claire Boulangé, Lucy Gunn, Billie Giles-Corti).



## What was done and what's next?

The aim of this theme was to provide urban planning practitioners and policy-makers with specific evidence to support the development of planning standards, planning guidelines, and policies. For example, how close shops need to be to promote walking; what mix of shops is required to encourage walking; what level of density will optimise health outcomes.

Using data from a number of different studies, the research for this theme explored the walkability and mix of destinations in neighbourhoods around activity centres, train stations and residential addresses and their association with transport walking behaviour. The methods used built environment data developed using Geographic Information Systems analysis and a range of statistical techniques that accounted for the structured nature of both the built environment and the characteristics of the many different people that live within them. Cross sectional multi-level analyses and cluster analysis were used to explore the combination of built environment factors that influence active transport walking behaviour. Using these techniques, it was shown that:

- residents were more likely to walk to food related destinations if they were located between 401m to 800m
- built-environment characteristics related to higher densities, greater street connectivity, and proximity to transport and supermarkets, were found to be supportive of walking, cycling and public transport and discouraged driving.
- that people with good access to social infrastructure destinations such as educational facilities, health care and sporting facilities, when measured using specific distances, had improved levels of subjective wellbeing.
- train stations and the walkability around them influence train station patronage. Pedestrian patronage was greater for train stations with more walkable surrounds that included higher densities,

greater street connectivity and reduced car parking. This publication could be used to identify train stations with potential to become Transit Oriented Developments, since some train stations have walkable surrounds and mixed use zoning but are yet to have the density required to bring people to these stations precincts.

Several research papers produced under this theme have been used to support a revision of planning policies and guidelines. Theme 3 research added to the evidence supporting an increase in Victorian planning policy density targets from 15 to 25 dwellings per hectare. It has been explicitly referenced and used in support of the conceptualisation and development of the 20-minute-neighbourhood initiative by the Victorian Government (2019). As a result of this Theme's findings, greater consideration was given to an 800m walkable distance, on which the 20-minute-neighbourhood is now being based, rather than the 1km walkable distance which is the current planning standard for new developments in growth areas.

This theme involved a number of research collaborators beyond the NHMRC CRE. The research was conducted with input from our research partners and CRE advisory group members including the Victorian Planning Authority; Victorian Department of Environment, Land, Water and Planning; Victorian Department of Economic Development, Jobs, Transport and Resources; the Victorian Department of Health; and the Department of Health and Human Services' North West Metropolitan Region's Regional Management Forum.

The next steps for this program will be to build and expand on the understanding of thresholds using more complex datasets. Several grants applications have been developed and are currently under review, led by CI Giles-Corti, and Research Fellows Lucy Gunn and Belén Zapata-Diomedí. They were recently awarded an NHMRC/UK Research and Innovation Grant to work with Cambridge University, which extends Themes 3 and 4's research.



## THEME 4



Economic evaluation of built-environment interventions required to create healthy, liveable and equitable neighbourhoods

### Aim

To develop methods to determine the economic merit of built-environment interventions, including their effect on health and wellbeing outcomes and health care expenditure; and to evaluate the merits of specific interventions in existing and new built environments.

### Research members

Lucy Gunn (Lead), Claire Boulangé.

### Chief investigators

Lennert Veerman (CRE CI Theme Lead), Alan Shiell, Simon Washington and Billie Giles-Corti.

### PhD students

Dr Belén Zapata-Diomedí: *Modelling the health and economic impact of built-environment interventions* (awarded October 2017; supervised by Lennert Veerman, Alan Shiell, Jan Barendregt and Rob Ware) APA PhD Scholarship; School of Public Health, University of Queensland, Alan Lopez Top Up Scholarship; Endeavour Research Fellowship to Cambridge University; awarded best doctoral abstract at the International Conference on Transport and Health (2016).

King Wa Tam: *Body mass and energy balance: a framework to quantify the health impact of food and physical activity environments* (in progress, expected completion 2019; supervised by Lennert Veerman and Mark Jones) CRE-funded PhD Scholarship.

## What was done and what's next?

The aim of this theme was to generate evidence and methods to quantify the health and economic merits of physical activity-friendly built-environments. Methods to quantify health benefits related to air quality and road trauma from shifts from cars to walking, cycling and public transport were also developed. Health and economic predictions were made using the well-established method of the proportional multistate life table.

Literature was also reviewed to generate: (1) evidence for the quality of economic evaluations of active transport interventions and (2) Australian evidence for built environments that most influence physical activity. This included a major evidence review of behalf of the New South Wales Health Department addressing the economic merit of a range of features of the built environment (e.g. density, destination accessibility, diversity of land uses).

The developed method was applied to conduct an economic evaluation of installing sidewalks as means of increasing physical activity was conducted for Perth based on the RESIDE data. While this intervention was not cost-effective, the sensitivity analysis showed that increasing density was the key element for cost-effectiveness. Application of this method determined that achieving Brisbane's active-travel targets would result in significant cumulative health and economic benefits for residents of the city. Increased walking and cycling could add approximately 33,000 healthy life years over the life course of the Brisbane adult population, highlighting the value of supporting active transport initiatives.

The evidence demonstrating the economic merit of active transport interventions has been growing markedly over the last 10 years. Cost-benefit analysis is a widely used method for the economic appraisal of interventions targeting active transport. However, there are significant limitations in the literature, mostly in terms of standards of measurement used to assess the

effect of transport interventions on physical activity. In Australia, 'per kilometre' values for walking and cycling were proposed in the 'grey literature' for inclusion of physical activity-related health in cost-benefit analysis of transport interventions. As part of this theme, an alternative method was developed based on the multistate lifetable modelling approach. In this method, changes in exposure to features of the built environment are directly linked to monetised health outcomes of physical activity in order to assess health-related cost savings over time.

With the aim of developing methods to include the effects of the built environment on obesity, a second line of inquiry quantified the health impact of obesity in Australia and provided a framework for modelling food and physical activity environments. The trends in body mass in Australia were analysed. This showed weight gain is continuing, but gradually slowing over time. A disease model, based on the multistate life-table approach, was created to estimate how the trends in obesity will likely impact the health of Australians. The extent to which Australian adults misreport their energy intake, and the characteristics of under-reporters, were also examined. Misreporting of energy intake is a common source of measurement error found in dietary surveys, which needs to be adjusted for when modelling BMI and socioeconomic disadvantage, younger age, less education, and lower relative household income. Under-reporting of energy intake is high in Australian adults, and appears to have worsened over time in men, which could be partly explained by the upward trend in obesity (given that higher weight correlates with a greater degree of under-reporting).

Ongoing research included a study assessing the economic and health benefits of housing a population in a brownfield development, compared with a greenfield development in Melbourne. In the next stage of this research, several studies are planned. Using data from the HABITAT studies, the health impacts economic merit of creating

Transit Oriented Developments physical activity friendly built environments will be undertaken. This will build on work undertaken in Theme 3. Due to the successful outcomes for a fellowship application (Belén Zapata-Diomedí, RMIT Vice-Chancellor Fellowship) and RMIT University funding (Dr Lucy Gunn) a tool will be developed to predict the potential health and economic implications of urban design transport scenarios. The work will build up on the planning support system developed as part of Theme 3 (Claire Boulangé) and methods developed in Theme 4. The intended users are transport and city planners and decision

makers. Further research will investigate the range of potential externalities arising from designing healthy and liveable cities (e.g. social cohesion, productivity) and develop methods to quantify them.

In addition, working with an Urban Economist from the London School of Economics, two hedonic pricing studies are underway: one examining the economic benefits of creating more walkable neighbourhoods, while the other will explore the economic benefits of creating liveable communities.





## THEME 5



Translating research into policy and practice

### **Aim**

To work with the health sector, as well as sectors and agencies that shape built environments impacting on health (e.g. urban planners and designers, transport planners, engineers and the land development industry) to inform and influence decision-making; regulations; legislation policy and current urban design practice; and the integration and uptake of relevant evidence.

### **Research members involved in this theme**

Paula Hooper (Theme Lead 2014–2017), Lucy Gunn (Theme Lead 2017–2020), Julianna Rozek, Melanie Lowe, Carl Higgs, Rebecca Roberts, Jonathan Arundel, Hannah Badland, Claire Boulangé.

### **Chief investigators**

Fiona Bull (CRE CI Lead (2014-2017)), Billie Giles-Corti (CRE CI Lead 2017-2020).

### **PhD students**

Three PhD students supervised by the CRE team members commenced work prior to the CRE but worked on CRE-related research. Subsequently, they (and their work) contributed to the CRE work program reported in this final report.

Dr Claire Boulangé: *Modelling the impact of the built environment on transport-related walking: A complex systems approach with application to Melbourne's North and West Metropolitan region* (awarded 2016 University of Melbourne; supervised by Billie Giles-Corti, Hannah Badland, Chris Pettit). Planning Institute of Australia

Victorian 2016 Award for Planning Excellence 'Outstanding Tertiary Student Project'; Planning Institute of Australia National 2017 Commendation for Planning Excellence 'Outstanding Tertiary Student Project'; APA International PhD Scholarship

Dr Melanie Lowe: *Integrated planning for healthy communities: Victorian State Government policy and practice* (awarded in 2017 University of Melbourne; supervised by Carolyn Whitzman, Billie Giles-Corti). 2013 Winner, Global Health Challenge University of Melbourne and selected to participate in team at Emory University, USA in 2014; APA PhD Scholarship

Dr Geoff Browne: *How does local government use evidence to inform strategic planning for health and wellbeing?* (awarded 2018 University of Melbourne; supervised by Billie Giles-Corti, Melanie Davern). Winner, 2015 inaugural Centre for Health Equity, Melbourne School of Population and Global Health Prize for best student paper; APA PhD Scholarship.

### What was done and what's next?

Figure 4 outlines the approach taken by the CRE to facilitate research translation.

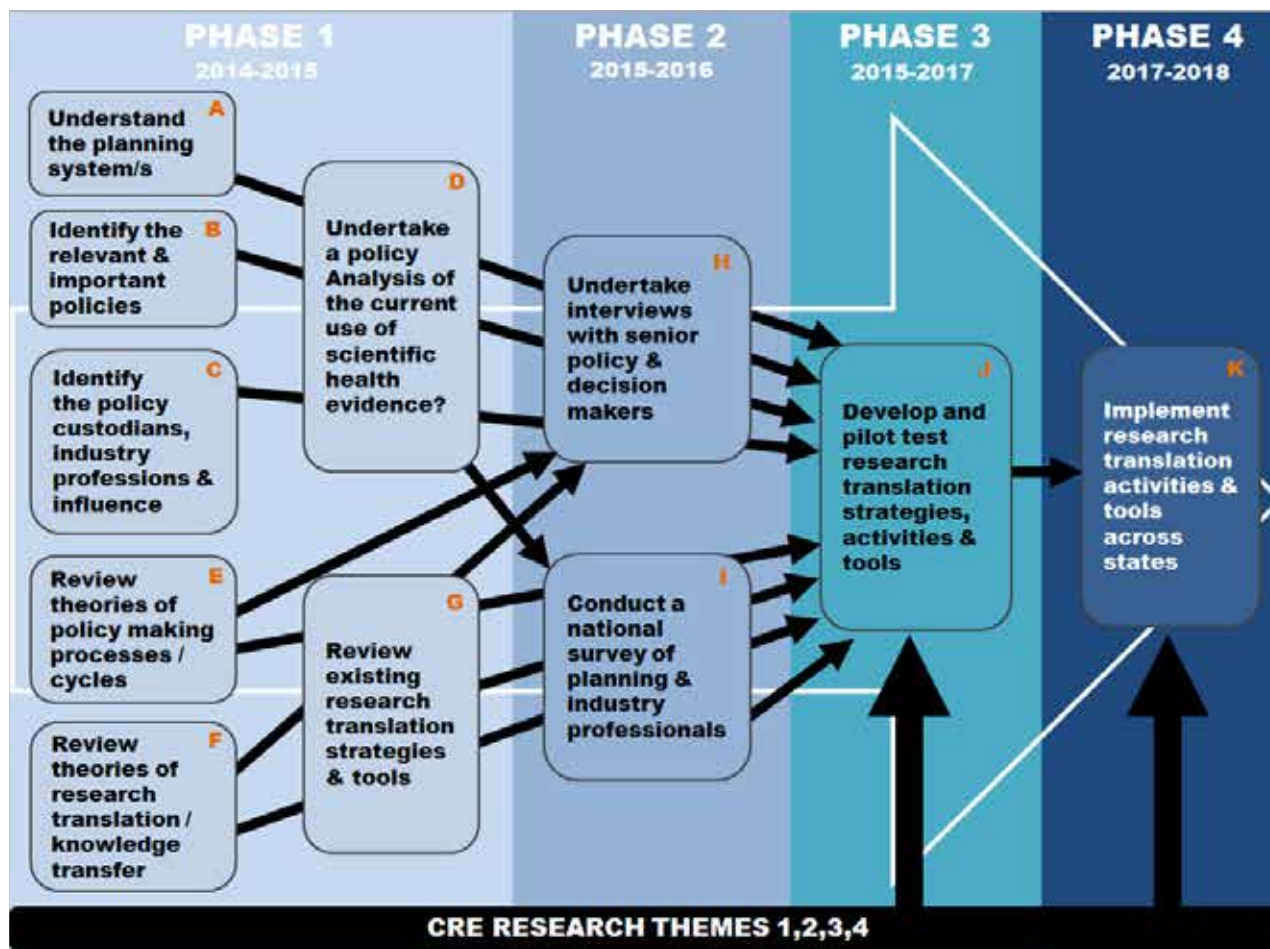


Figure 4: The approach taken to research translation in this CRE. (Source: Paula Hooper)

## Understanding the planning systems and policy contexts

Understanding the different state and local policy contexts of the three respective CRE states was key to identifying potential future policy levers and barriers to research translation and was central to this theme. Considerable work was undertaken to understand the planning system in each of the three CRE states and to understand the different regulatory hierarchies and departments. A policy review and audit of all urban planning and transport-related policies from each of the CRE states was undertaken and mapped against the regulatory hierarchy (federal, state, metropolitan, local government) and liveability domains to which they were relevant.

## Understanding the role and use of evidence in planning policy and practice

In Victoria, then-PhD student Dr Melanie Lowe, undertook a policy analysis and qualitative research with multisector stakeholders to understand barriers and facilitators of integrated planning. In her postdoctoral work, Melanie undertook a literature review to identify the types, and roles, of evidence used in the planning profession, decision-making processes and policy cycles. This was helpful in assisting the CRE team identify where in the policy cycle it is possible to intervene, at what level of planning policy it is best to attempt to intervene and what policies have the potential to be changed.

At the local government level, then-PhD student, Dr Geoff Browne, undertook a content analysis of local government health and wellbeing plans to examine how and what type of evidence they used to develop local interventions. He coded local government actions and use of evidence against Melanie's liveability framework. This was helpful in understanding the role played by local governments in promoting the health and wellbeing of residents, and where they were intervening. He found that local governments in Victoria were 'punching above their weight' to address the social determinants of health. However, while they used evidence, it was used to describe problems rather than design interventions, highlighting the need for intervention research relevant for use by local government.

## Informing the Liveable Neighbourhoods Community Design Guidelines in WA

The year 2013 marked a decade since the University of Western Australia's RESIDE study first surveyed its cohort of participants; the fifteenth anniversary since the introduction of the Liveable Neighbourhood Community Design Guidelines; and the start of a review of the guidelines by the Western Australian Department of Planning. This work continued with support from the CRE.

In 2015, three policy briefs were produced for the Department of Planning and in response to questions posed by the Department: What works? What can be improved? What hasn't worked? What's missing? The briefs were focused on a number of the elements of the policy: (1) community design and activity centres; (2) public open space; and (3) movement networks.

As part of its policy review, the Department of Planning sought to identify which Liveable Neighbourhood design features should be the 'key performance indicators or non-negotiable requirements for enhancing health'.

The evidence generated from RESIDE's longitudinal evaluation of the Liveable Neighbourhood Guidelines was summarised. This was used to assess the impacts of the policy on a range of health and wellbeing behaviours and outcomes and to identify the key urban design features of the Liveable Neighbourhood indicators that promote health-supportive behaviours and wellbeing outcomes.

Table 1 presents the shortlist of the Liveable Neighbourhood design features identified as the health-supportive 'key performance indicators' of the liveable neighbourhoods. These were selected based on the consistency and strength of associations from all RESIDE findings (nearly 40 papers), and published in *Social Science Medicine-Population Health* in 2020. The indicators provide a simplified framework that could be used to assess, benchmark and monitor future Liveable Neighbourhood developments, and could be the subject of future evaluations aimed at assessing levels of 'health-supportive' policy implementation.

These indicators were adopted by the Department of Planning and integrated into the assessment processes used by strategic planners when assessing plans submitted to the Department of Planning. A benchmarking analysis was also undertaken of all plans (n=60) currently being assessed by the Department of Planning to identify the levels of compliance with the Liveable Neighbourhood policy on submitted applications.



## Informing the Liveable Neighbourhoods Community Design Guidelines in WA

### Key performance indicators of the Livable Neighborhoods policy for positive health-supportive behaviors and wellbeing outcomes

Element	Design Feature / Requirement	Indicator	Health Supportive Behaviour/ Wellbeing Outcome
<b>Movement Network</b>	Street connectivity	High connected mode ratio (no. of 3+ way intersections / no. of intersections including cul-de-sacs)	Walking (TW, WT, WR)
	Street blocks	High % 'walkable' street blocks <240m in length	Walking (TW, WT, WR)
	Cul-de-sacs	Low % streets terminating in a cul-de-sac	Walking (TW, WT, WR)
		If present, high % cul-de-sacs <120m in length	Walking (TW, WT, WR)
	Footpaths	High % of the road network with a footpath	Walking (TW, WT, WR)
<b>Community Design</b>	Access to centers	High % dwellings <1600m of a mixed use neighbourhood / activity center	Walking (TW, WT, WR) Sense of community
	Center configuration	Activity center configured as a main street rather than a big box configuration	Walking (TW, WT, WR) Safety from / fear of crime
<b>Lot Layout</b>	Housing diversity	High % small residential lots (<350m <sup>2</sup> )	Walking (WT) Safety from / fear of crime
	Density	Higher number of dwellings per site hectare (overall)	Walking (WT)
<b>Public Open Space (POS)</b>	Access to parks	High % dwellings <400m walking distance of any park	Walking (TW, WT, WR) Mental Health

TW = Total Walking    WT = Walking for transport    WR= Walking for recreation

## Liveability indicators – report and scorecards

A national policy analysis evaluating the implementation of policies aligned to the domains of liveability studied in Theme 1 (i.e. walkability, public transport, public open space, employment, housing affordability and food and alcohol environments) formed the backbone of the *Creating Liveable Cities in Australia: Mapping urban policy implementation and evidence-based national liveability indicators report* (Arundel et al., 2017).

The report also measured on-the-ground delivery of policies that would create healthy, liveable cities. It showed inequities in the delivery of urban liveability policies, and a clear pattern of disadvantage across each of the cities examined, particularly in outer suburban areas. The report was awarded the Planning Institute of Australia's National (2019) and Victorian (2018) **Planning Excellence Award for Cutting Edge Research**.

The findings and recommendations from this report were summarised in a series of scorecards on the liveability of the four major capital cities of Melbourne, Sydney, Brisbane and Perth.

These reports were widely disseminated through the CRE's industry and research partners and their networks (including the Planning Institute of Australia and Heart Foundation) and our co-funders (the Clean Air Urban Landscapes Hub of the National Environmental Science Program and The Australian Partnership and Prevention Centre). The CRE state and national advisory groups and networks also played an important role in facilitating this exchange and dissemination.

Results from the liveability work undertaken in Theme 1 has had considerable policy impact.

- The team's definition of liveability was used in the Department of Health and Human Services state health and wellbeing plan (Department of Health and Human Services, 2015).
- The team's liveability work and indicators were adopted by a number of local government authorities including Cardinia (Cardinia Shire Council, 2017), Moreland (Moreland City Council, 2017) and the Interface Councils (Interface Councils, 2017).

Findings, indicators and/or recommendations from the national liveability report (Arundel et al., 2017) were also adopted by a number of organisations including:

- Mornington Peninsula Shire in its Liveability Index 2017 report.
- The Federal Government's National Performance Framework adopted the national liveability public transport indicator in its performance framework, with mention of a walkability indicator to be included in future frameworks. The research group also assisted with, and provided data for, its public open space indicator (Commonwealth of Australia Department of Prime Minister and Cabinet, 2017).
- The Victorian Geography Teachers Association requested that they use the national liveability report as a text for its curriculum on urban liveability.
- The Department of Land, Water, Environment and Planning's 20-minute neighbourhood report adopted our recommendation to measure the outcomes of planning and suggested that our indicators and liveability index may be suitable for this purpose (Victorian Government, 2019).

## Australian Urban Observatory

In 2020, with co-funding from The Australian Prevention Partnership Centre, the Clean and Urban Landscape Hub and the CRE, we launched the Australian Urban Observatory (AUO) <https://auo.org.au/>. It is a digital platform that transforms complex urban data developed through the CRE, into easily understood liveability maps across Australia's 21 largest cities. The Observatory maps key liveability indicators found to be associated with health and wellbeing and provides a clear understanding of the liveability of cities. In March 2020, we launched 21 score cards for the cities included in the Federal Government's National Cities Performance Framework, data for which are available in the AUO.

## Heart Foundation

Throughout the CRE, we have worked closely with CRE partner, the Heart Foundation, in promoting physical activity and health.

## Blueprint for an active Australia

In 2014 and 2019, members of the CRE worked with other researchers to update the Heart Foundation's Blueprint for an Active Australia which has been widely disseminated across Australia and used in tertiary teaching programs.

## Healthy Active by Design

As part of a partnership with the Heart Foundation, the CRE team updated research evidence briefs (and incorporated evidence generated through the CRE) for inclusion in the Heart Foundation's new national Healthy Active by Design website (2019) <https://www.healthyactivebydesign.com.au/>. CRE researchers updated the evidence review sections with new literature and new directors in the field in the following areas:

- public open space
- community facilities
- buildings
- destinations
- movement networks
- housing diversity
- sense of place
- healthy food.





## Development and application of a Health Impact Planning Support System

Planning support systems (PSS) are relatively new computer-based tools that integrate Geographic Information Systems (GIS) to support the activities of planning professionals. PSS store, visualise and analyse spatial data and can be combined with custom-built models to link outcomes of interest (i.e. health behaviours or environmental outcomes). This allows 'real-time' dynamic simulation and exploration of different design concepts to see what impact changes to the design of the built environment might have on a range of health and environmental outcomes.

Building on the PhD work that developed a walkability PSS working with policy-makers using a MapTable, Dr Claire Boulange worked with Dr Paula Hooper to develop a Health Impact PSS in GIS using Community Viz Scenario 360. The PSS was displayed on the large touch-enabled MapTable that provides an interactive environment to support engagement and planning participation.



The Health Impact PSS was developed for work with LandCorp. LandCorp is the Government of Western Australia's land development agency with responsibility for identifying, designing and implementing major land and community infrastructure projects in response to government planning directives. This includes the urban infill agendas and metropolitan planning objectives for Perth set out in Directions 2031.

LandCorp had been asked by the Government of Western Australia to prepare a redevelopment strategy for a site in Hamilton Hill, Cockburn. This project was at the beginning of the planning and community consultation process. It therefore provided an ideal opportunity for community and key stakeholders to influence planning outcomes and increase knowledge about the benefits infill development can bring to the area through participatory planning and the use of the Health Impact PSS.

In 2017, a small-scale proof-of-concept study was undertaken in collaboration with, and a \$20,000 investment from LandCorp, the Western Australian Governments' land agency. This resulted in:

- baseline indicators and visual display of current site conditions;
- results being used in LandCorp's design review of designs for the new site;
- development of health-promoting design concepts – the same indicators were run to quantify the change to the environment, potential community and health benefit (i.e. likelihood of walking with a change to the street connectivity or access to a shops and services). These results were used by planning consultants to inform their design revisions.

A community consultation event was also held in the City of Cockburn in April 2017. A demonstration workshop was held with LandCorp staff, Executive and CEO, where input was received on potential opportunities to apply the tool in LandCorp practices.

Workshops run with business development, and planning and community relations teams to understand LandCorp working practices and jointly agree upon optimal interventions and consideration of potential indicators.

### **Creating places where people love to live, public panel and professional workshop – Brisbane 2016**

The CRE Queensland Advisory Group, in collaboration with the Heart Foundation and Queensland Walks and with the support of the Queensland Department of Health, held a public panel and professional workshop in November 2016. Jim Sallis, Distinguished Professor of Family and Preventive Medicine at the University of California, San Diego; Professor at Australian Catholic University; and Director of Active Living Research, presented and provided expert advice at these activities. The CRE's CIs Billie Giles-Corti, Gavin Turrell, Lennert Veerman and Simon Washington presented evidence generated from the CRE. These events were lively and an excellent opportunity to connect advocates of active and healthy living with local and international experts to discuss why and how to create places where people love to live and be physically active.

In addition, the Department of Health took the opportunity to organise a breakfast function, hosted by the State Architect, for decision-makers and influencers responsible for various aspects of place creation in Queensland to meet Jim Sallis. Invited guests included key people from planning, transport, local government, design and architecture, developers, consultancies and universities as well as relevant ministerial advisors..

### **Public forum and symposium: Designing Healthy and Liveable Cities – Brisbane 2018**

In November 2018, the CRE Queensland Advisory Group in collaboration with the Heart Foundation, Queensland Department of Health, Queensland Department of Transport and Main Roads, and Engineers Australia hosted a public forum and symposium to disseminate the national and Brisbane-based findings. At these events, the Brisbane Liveability Scorecard was launched and findings from the Brisbane-based HABITAT study presented. Key features of these meetings were the inclusion of presentations by policy-makers and practitioners, and panels following the presentations to discuss how the findings could be translated into policy and practice. Notable built-environment and health experts presented and participated in panels, including Jim Sallis, Neville Owen and Billie Giles-Corti.

State and local governments participating at these events included Queensland Health; Queensland Department of Transport and Main Roads; Queensland Department of State Development, Manufacturing, Infrastructure and Planning; Office of the Queensland Government Architect; Sunshine Coast City Council and Brisbane City Council. Private companies and advocacy organisations including KPMG, AECOM, Urban Ethos and Bicycle Queensland, supported these events as panel members and presenters.

In addition, the Queensland Department of Transport and Main Roads took this opportunity to gain expert advice from Jim Sallis on their Walking Strategy Draft for Queensland. Billie Giles-Corti met with Treasury and Queensland Health to discuss the use of the liveability work in Queensland.

## Victorian liveability briefs

In preparation for the Victorian 2018 election, the CRE team, led by Lucy Gunn, worked with RMIT University's Policy@rmit initiative to create a liveability policy brief. This was based on the findings from Themes 1–4 <https://www.rmit.edu.au/news/all-news/2018/oct/election-listicle>. This policy brief was disseminated to the Victorian State Government and shadow ministers ahead of the state election.

## What's next?

Building on the work of Claire Boulange, in 2019, Paula Hopper won a Healthway Fellowship to develop planning support tools that can assist policy-makers and practitioners to create healthy liveable communities.

Throughout the CRE, we have identified gaps between policy and implementation, which we have called this 'leaky pipe' illustrated in Figure 4. This concept was published in 2019, and was adopted by the Victorian Planning Authority in conceptualising the leakages that occur between policy and implementation in Victorian. An important major piece of research that is needed in the future, is understanding all the 'leakages' that occur between policy and outcomes of policy on-the-ground.

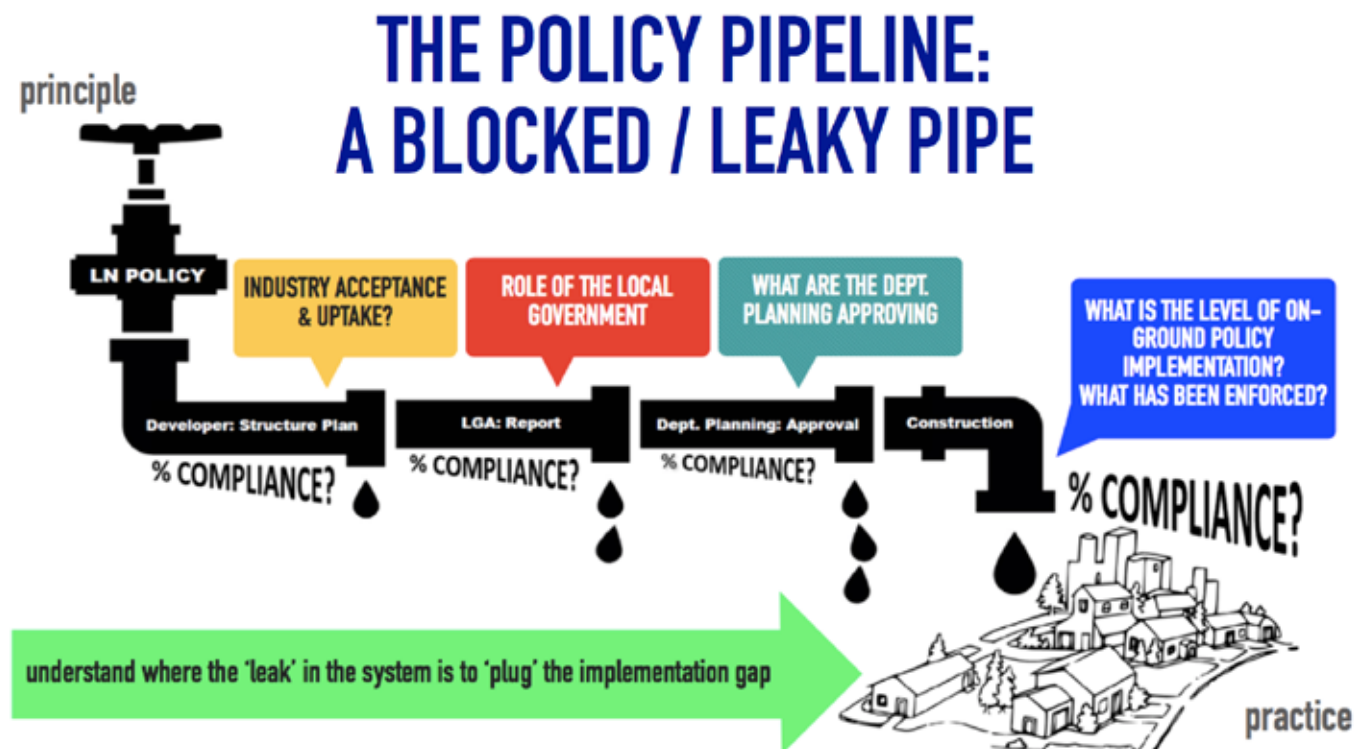


Figure 5: The 'leaky pipe' concept showing the need for research that identifies the leakages that occur between policy and policy implementation (Source: Paula Hopper)



DESIGNING  
**Healthy** **CITIES**  
Liveable

19-20  
OCTOBER 2017 | MELBOURNE







## **07. DESIGNING HEALTHY LIVEABLE CITIES CONFERENCE**

## 07. DESIGNING HEALTHY LIVEABLE CITIES CONFERENCE

### **National CRE conference, 19–20 October 2017, RMIT University**

'Designing Healthy Liveable Cities' brought together researchers, policy-makers and practitioners working to create better cities. The conference showcased the CRE's latest research and explored how evidence could be translated into real-world improvements in how cities are designed and built.

The conference was designed to help bridge the divide between the aspirations of liveability and its delivery in practice. Delegates were invited from the broad range of stakeholders involved in building cities. Of the 213 attendees, 38% were policy-makers, including from local governments across Victoria, state government departments, Melbourne Water and VicRoads. Practitioners, including representatives from Aurecon, Planning Institute of



Australia, the Heart Foundation, and urban design firms made up 26% of attendees. The remaining 36% were researchers from leading Australian universities and institutes.

Leaders in urban planning and public health, drawn from the CRE and collaborators, delved into current and emerging issues in the plenary sessions. The conference was opened by CRE International Collaborator Jim Sallis and leading UK planning academic Paul Murrain, who demonstrated why liveable cities are crucial and how to design them. Another plenary session featured John Merritt (VicRoads), Margie Tannock (Squire Patton Boggs) and Amy Child (Arup) discussing the future of sustainable transport and autonomous vehicles.

Concurrent sessions featured early-mid-career and senior CRE researchers and collaborators explaining new and important discoveries. Topics included urban greening, active transport and housing and social infrastructure. The format was designed to be useful for policy-makers and practitioners, with a strong focus on the implications of findings. Sessions concluded with panel discussions featuring relevant government and industry representatives. Together with the researchers, they explored how policy and practice can change to support community health and wellbeing.

The conference encouraged engagement and networking through themed lunchtime discussions and extended question times at the end of presentations. Delegates were very active on Twitter and the conference hashtag 'LiveableCities17' trended ahead of the 'Bachelorette' in Australia.

A post-conference survey suggested that the event achieved its goal of bringing researchers, policy-makers and practitioners closer together to deliver healthy and liveable cities. 84% of those who responded to the survey felt that the conference would influence how they practice their work in the future. As a result of the conference, 80% of surveyed delegates felt better informed about research relevant to their work, and 60% knew of more ways to access relevant research.

Examples of the comments about the impact of the conference on delegates include:

*I will work more closely with practitioners, and aim to produce evidence and tools that they can apply in their work (Research Delegate).*

*I will find more opportunities to bring researchers and policy-makers together.*

*Participation in the conference made me more acutely aware of the importance and challenges of communicating scientific results to a broad audience of diverse interests ... it made me more aware of the importance of providing the right level of information ... not too little so that its useless (i.e. we're scientists, so evidence and limitations should not be glossed over), but enough that it is useful and accessible (Research Delegate).*





## 08. MEDIA

## 08. MEDIA

The media is a powerful influence on public opinion and, in turn, public support is a powerful influence on government decisions and policy actions. Hence, one of the CRE's aims was to gain media coverage of results in order to inform the wider community of their implications, and to influence public attitudes and opinions on urban planning practice and the future planning of Australian cities.

The issues of health, liveability, sustainability and quality of life are of great interest to the public. Over the five years of the CRE's operation, the CRE's outputs were used to engage the media and gain national, state and local coverage in order to initiate and maintain community engagement and discussion about key aspects of the development of Australian city form and function. The CRE promoted its work through multiple media channels, including television and radio, as well online e.g. The Conversation and social media outlets including Twitter, Facebook.

One highlight of the CRE's use of the media to promote its research was around the series of Creating Liveable Cities in Australia: A scorecard and priority recommendations. The four short reports on the liveability of Perth, Sydney, Melbourne and Brisbane were designed to engage a broad audience in urban planning issues.

The scorecards were released over 2018, in collaboration with key organisations or events in each city. For example, the Melbourne Scorecard was launched at an event hosted by the Planning Institute of Australia at RMIT University.

Each launch was accompanied by a media release distributed through RMIT University's media contacts. The scorecards were reported on by

local radio stations and newspapers including the Sydney Morning Herald, The Age, WA Today, The Daily Mail, The Canberra Times and 6PR Perth. An article written for The Conversation comparing the Melbourne and Sydney scorecards was read over 12,000 times, mentioned in 63 tweets and shared 74 times on Facebook.

In 2020, we launched the 21 scorecards for the 21 cities in the Federal Government's National Cities Performance Framework. This was picked up by media outlets across the country generating 215 media mentions across print and broadcast to date. As at April 2, 2020, there had been 667 visits to the scorecards in the Australian Urban Observatory.





## **09. LIST OF PUBLICATIONS**

## 09. LIST OF PUBLICATIONS

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## Book Chapters

Boulangé C, Pettit C, Giles-Corti B. (2017) *The Walkability Planning Support System: An Evidence-Based Tool to Design Healthy Communities*, Geertman S, Alla A, Pettit C, Stillwell J. (Eds), in: Planning Support Science for Smarter Urban Futures. Switzerland: Springer.

\*Villanueva K, Badland H, Oliver M. (2017) *How Does the Neighbourhood Built Environment Influence Child Development?* Ergle CR, Kearns R, Witten K (Eds) in: Children's Health and Wellbeing in Urban Environments. Routledge.

## 2016

### Refereed Journal Articles

Badland H, Kearns R, Carroll P, Oliver M, Mavoa S, Donovan P, Parker K, Chaudhury M, Lin J, Witten K. (2016) *Development of a systems model to visualise the complexity of children's independent mobility*. Children's Geographies, 14(1): 91-100.

Badland H, Mavoa S, Livingston M, David S, Giles-Corti B. (2016) *Testing spatial measures of alcohol outlet density with self-rated health in the Australian context: Implications for policy and practice*. Drug and Alcohol Review, 35(3): 298-306.

Badland H, Davern M, Villanueva K, Milner A, Mavoa S, Roberts R, Giles-Corti B. (2016) *Conceptualising and measuring spatial indicators of employment through a liveability lens*. Social Indicators Research, 127(2): 565-576.

Brown V, Zapata-Diomed B, Moodie M, Veerman JL, Carter R. (2016) *A systematic review of economic analyses of active transport interventions that include physical activity benefits*. Transport Policy. 2016;45:190-208. doi:<http://dx.doi.org/10.1016/j.tranpol.2015.10.003>.

Browne G, Davern M, Giles-Corti B. (2016) *An analysis of local government health policy against state priorities and a social determinants framework*. Aust N Z J Public Health. 40(2): 126-131.

Browne G, Davern M, Giles-Corti B. (2016) *What evidence is being used to inform municipal strategic planning for health and wellbeing? Victoria, Australia, a case study*. Evidence & Policy: A Journal of Research, Debate and Practice, 1-16.

Foster S, Hooper P, Knuiman M, Christian H, Bull F, Giles-Corti B. (2016) *Safe RESidential Environments? A longitudinal analysis of the influence of crime-related safety on walking*. International Journal of Behavioural Nutrition and Physical Activity, 13(22): 1-9.

Foster S, Hooper P, Knuiman M, Bull F, Giles-Corti B. (2016) *Are Liveable Neighbourhoods Safer Neighbourhoods? Testing the Rhetoric on New Urbanism and Safety from Crime in Perth, Western Australia*. Social Science & Medicine 164, 150-157.

Foster S, Hooper P, Knuiman M, Giles-Corti B. (2016) *Does heightened fear of crime lead to poorer mental health in new suburbs, or vice versa?* Social Science and Medicine. 168: 30-34.

Ghani F, Rachele J, Washington S, Turrell G. (2016) *Gender and age differences in walking for transport and recreation: Are the relationships the same in all neighbourhoods?* Preventive Medicine Reports 4: 75-80.

Giles-Corti B, Sugiyama T, Badland H, Koohsari MJ, Owen N. (2016) *Discussion of "How to have sustainable transportation without making people drive less or give up suburban living?" by Mark Delucchi and Kenneth S. Kurani.* Journal of Urban Planning and Development. 142(2)

Giles-Corti B, Moudon AV, Reis R, Turrell G, Dannenberg AL, Badland H, Foster S, Lowe M, Sallis JF, Stevenson M, Owen N. (2016) *City planning and population health: a global challenge.* The Lancet, 388(10062): 2912-2924.

Koohsari MJ, Sugiyama T, Mavoa S, Villanueva K, Badland H, Giles-Corti B, Owen N. (2016) *Street network measures and adults' walking for transport: Application of space syntax.* Health & Place, 38: 89-95.

Loh VHY, Rachele JN, Brown W, Washington S, Turrell G. (2016) *Neighbourhood disadvantage, individual-level socioeconomic position and physical function: A cross-sectional multilevel analysis.* Preventive Medicine 89: 112-120.

Murphy M, Badland H, Koohsari M, Astell-Burt T, Trapp G, Villanueva K, Mavoa S, Davern M, Giles-Corti B. (2016). *Indicators of a health-promoting local food environment: a conceptual framework to inform urban planning policy and practice.* Health Promotion Journal of Australia, 28: 82-24. 2016.

Rachele JN, Ghani F, Hui Yee Loh V, Brown W, Turrell, G. (2016) *Associations between physical activity and the neighbourhood social environment: baseline results from the HABITAT multilevel study.* Preventive Medicine, 93: 219-225.

Veerman JL, Zapata-Diomed B, Gunn L, McCormack GR, Cobiac LJ, Herrera AMM, Giles-Corti B, Shiell A. (2016) *Cost-effectiveness of investing in sidewalks as a means of increasing physical activity: a RESIDE modelling study.* BMJ Open 2016.

Zapata-Diomed B, Veerman L. (2016) *The association between built environment features and physical activity in the Australian context: a synthesis of the literature.* BMC Public Health, 16(1): 1-10.

Zapata-Diomed B, Mantilla-Herrera AM, Veerman L. (2016) *The effects of built environment attributes on physical activity-related health and health care costs outcomes in Australia.* Health & Place. 42:19-29.

## Non-refereed Articles

Davern M, Gunn L, Roberts R (2016). *Your local train station can predict health and death.* The Conversation, February 29.

## 2015

### Refereed Journal Articles

Badland H, Mavoa S, Villanueva K, Roberts R, Davern M, Giles-Corti B. (2015) *The development of policy-relevant transport indicators to monitor health outcomes and behaviours.* Journal of Transport & Health. 2: 103-110. *Special Issue Walking & Cycling: The contributions of health and transport geography.*

Badland H, Mavoa S, Livingston M, David S, Giles-Corti B. (2015) *Testing spatial measures of alcohol outlet density with self-rated health in the Australian context: Implications for policy and practice.* Drug and Alcohol Review. 35(3): 298-306.

Bull F, Hooper P, Foster S, Giles-Corti B, Christian H, (2015) *Living Liveable. The impact of the Liveable Neighbourhoods Policy on the health and wellbeing of Perth residents,* The University of Western Australia, Perth, Western Australia.

Edwards NJ, Hooper P, Knuiman M, Foster S, and Giles-Corti B. (2015) *Associations between park features and adolescent park use for physical activity.* International Journal of Behavioural Nutrition and Physical Activity, 2015. 12: 21.

Foster S, Pereira G, Christian H, Knuiman M, Bull F, Giles-Corti B. (2015) *Neighbourhood correlates of sitting time for Australian adults in new suburbs. Results from RESIDE.* Environment & Behaviour, 47 (8), 902-922.

Foster SA, Wood LA, Francis J, Knuiman M, Villanueva K, Giles-Corti B. (2015) *Suspicious minds: Can features of the local neighbourhood ease parents' fears about stranger danger?* Journal of Environmental Psychology. 42: 48-56.

\*Goldfeld S, Woolcock G, Katz I, Tanton R, Brinkman S, O'Connor E, Mathews T, Giles-Corti B. (2015) *Neighbourhood effects influencing early childhood development: Conceptual model and trial indicator measurement methodologies from the Kids in Communities Study.* Social Indicators Research. 120(1): 197-212.

Heesch KC, Giles-Corti B, Turrell G. (2015) *Cycling for transport and recreation: Associations with the socio-economic natural and built environment.* Health & Place. 36: 152-161.

Hooper P, Knuiman M, Bull F, Jones E, Giles-Corti B. (2015) *Are we developing walkable suburbs through urban planning policy? Identifying the mix of design requirements to optimise walking outcomes from the 'Liveable Neighbourhoods' planning policy in Perth, Western Australia.* International Journal of Behavioural Nutrition and Physical Activity. 12:63.

Hooper P, Knuiman M, Foster S, Giles-Corti B. (2015) *The building blocks of a 'Liveable Neighbourhood': Identifying the key performance indicators for walking of an operational planning policy in Perth, Western Australia*. Health & Place. 36: 173-183.

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Koohsari MJ, Mavoa S, Villanueva K, Sugiyama T, Badland H, Kaczynski AT, Owen N, Giles-Corti B. (2015) *Public open space, physical activity, urban design and public health: Concepts, methods and research agenda*. Health & Place. 33: 75-82.

Koohsari MJ, Sugiyama T, Sahlqvist S, Mavoa S, Hadgraft N, Owen N. (2015) *Neighbourhood environmental attributes and adults' sedentary behaviours: Review and research agenda*. Preventive Medicine, 77:141-149.

Lowe M, Whitzman C, Badland H, Davern M, Aye L, Hes D, Butterworth I, and Giles-Corti B. (2015) *Planning healthy, liveable and sustainable cities: How can indicators inform policy?* Urban Policy and Research. 33(2): 131-144.

Madill R, Badland H, Giles-Corti B. (2015) *Health service access in urban growth areas: Examining the evidence and applying a case study approach*. Australian Planner. 53(2): 83-90.

Mavoa S, Koohsari MJ, Badland H, Davern M, Feng X, Astell-Burt T, Giles-Corti B. (2015) *Area-Level Disparities of Public Open Space: A Geographic Information Systems Analysis in Metropolitan Melbourne*. Urban Policy and Research. 3(3): 306-322.

Rachele J, Kavanagh A, Badland H, Giles-Corti B, Washington S, Turrell G. (2015) *Associations between individual socioeconomic position, neighbourhood disadvantage, and transport mode: Baseline results from the HABITAT multilevel study*. Journal of Epidemiology & Community Health. 69: 1217-1223.

Schoeppe S, Duncan MJ, Badland HM, Oliver M, Browne M. (2015) *Associations between children's active travel and levels of physical activity and sedentary behaviour*. Journal of Transport & Health. 2(3): 336-342.

Sugiyama T, Gunn LD, Christian H, Francis J, Foster S, Hooper P, Owen N, Giles-Corti B. (2015) *Quality of public open spaces and recreational walking*. American Journal of Public Health. 105 (12), 2490-2495.

Villanueva K, Badland H, Hooper P, Koohsari M, Mavoa S, Davern M, Roberts R, Goldfeld S, Giles-Corti, B. (2015) *Developing indicators of Public Open Space to promote health and wellbeing in communities*. Applied Geography. 57: 112-119.

### Book chapters

Giles-Corti B, Foster S, Koohsari MJ, Francis J, Hooper H. (2015) *The Influence of Urban Design and Planning on Physical Activity*, in: Barton H, Thompson S.M, Grant M, and Burgess S. (Eds.), in: Routledge Hand Book of Planning for Health and Well-being. New York: Routledge.

Lowe M, Giles-Corti B. (2015) *Cities and health: Preventing NCDs through urban design*, G. Blashki G, Sykes H (Eds.), in: Dancing in the Rain. Albert Park, Victoria: Future Leaders.

## 2014

### Refereed Journal Articles

Foster S, Knuiman M, Hooper P, Christian H, Giles-Corti B. (2014) *Do changes in residents' fear of crime impact their walking? Longitudinal results from RESIDE*. Preventive Medicine, 62, 161-166.

\*Knuiman M, Christian H, Divitini M, Foster S, Bull F, Badlan H, Giles-Corti B. (2014) Author Response to Invited Commentary "Taking advantage of time-varying neighbourhood environments. The RESIDE Study". American Journal of Epidemiology, 180 (5), 467-468.

\*Villanueva K, Badland H, Giles-Corti B, Goldfeld S. (2015) *Using spatial analysis of the Australian Early Development Index (AEDI) to advance our understanding of 'neighbourhood effects' on child health and development*. Journal of Paediatrics and Child Health. 51(6):S 577-579.

Turrell G, Hewitt B, Haynes M, Nathan A, Giles-Corti B (2014). *Change in walking for transport: a longitudinal study of the influence of neighbourhood disadvantage and individual-level socioeconomic position in mid-aged adults*. International Journal of Behavioural Nutrition and Physical Activity. 11:151.

\*Badland H, Whitzman C, Lowe M, Davern M, Aye L, Butterworth I, Hes D, Giles-Corti B. (June 2014) *Urban liveability: Emerging lessons from Australia for exploring the potential for indicators to measure the social determinants of health*. Social Science & Medicine. 111:64-73.



# 10. LIST OF REPORTS

## 10. LIST OF REPORTS

- Gunn LD, Davern M, Higgs C, Both A, Roberts R, Rozek J, Giles-Corti B. [Measuring liveability for the 21 largest cities in Australia: Liveability Reports](#) (2020)
- Badland H, Higgs C, Giles-Corti, B. [The Healthy Liveable Communities Urban Liveability Checklist](#), Melbourne: RMIT University, Centre for Urban Research (2019)
- Gunn, L, Browne, G, Davern, M. [An analysis and review of empirical environmental justice indicators](#). Melbourne RMIT University, Centre for Urban Research (2019)
- Healthy Liveable Cities Group. (2018) [NHMRC Centre of Research Excellence in Healthy, Liveable Communities: Final Report](#). Melbourne: RMIT University, Centre for Urban Research
- Gunn, L, Rozek, J, Arundel, J, Badland, H, Giles-Corti, B. (2018) [Liveability: Critical Policy Brief](#). Melbourne: RMIT University, Centre for Urban Research. Gunn L, Rozek J, Hooper P, Lowe M, Arundel J, Higgs C, Roberts R, Giles-Corti B. [Creating liveable cities: A scorecard and priority recommendations for Brisbane](#), Melbourne: RMIT University, Centre for Urban Research (2018)
- Gunn L, Rozek J, Hooper P, Lowe M, Arundel J, Higgs C, Roberts R, Giles-Corti B. [Creating liveable cities: A scorecard and priority recommendations for Melbourne](#), Melbourne: RMIT University, Centre for Urban Research (2018)
- Gunn L, Rozek J, Hooper P, Lowe M, Arundel J, Higgs C, Roberts R, Giles-Corti B. [Creating liveable cities: A scorecard and priority recommendations for Sydney](#), Melbourne: RMIT University, Centre for Urban Research (2018)
- Hooper P, Rozek J, Gunn L, Lowe M, Arundel J, Higgs C, Roberts R, Giles-Corti B. [Creating liveable cities: A scorecard and priority recommendations for Perth](#), Melbourne: RMIT University, Centre for Urban Research (2018)
- Hooper P, Gunn L, Rozek J, Gannet A, Giles-Corti B, Villanueva K, Christian H, Davern M, Foster S, Hadgraft N, Rachele J, Kleeman A. [Healthy Active by Design: Evidence \(2018\)](#) <http://www.healthyactivebydesign.com.au/>
- Alderton A, Nitvimol K, Laidlaw J, Ryan E, Davern M, Butterworth I, Badland H. [Contextualising urban liveability in Bangkok, Thailand](#). RMIT University (2018)
- Arundel J, Lowe M, Hooper P, Roberts R, Rozek J, Higgs C, Giles-Corti B. [Creating Liveable Cities in Australia: Mapping urban policy implementation and evidence-based national liveability indicators](#). Melbourne: RMIT University, Centre for Urban Research (2017)
- Badland H, Roberts R, Butterworth I, Giles-Corti B. How liveable is Melbourne? [Conceptualising and testing urban liveability indicators: Progress to date](#). The University of Melbourne (2015)
- Bull F, Hooper P, Foster S, Giles-Corti B. [Living Liveable. The impact of a Liveable Neighbourhoods Policy on the health and wellbeing of Perth residents](#). The University of Western Australia (2015)
- Zapata-Diomedes B, Brown V, Veerman JL. [An evidence review and modelling exercise: The effects of urban form on health: cost and benefits](#). Commissioned by the Centre for Population Health, NSW Ministry of Health, and brokered by the Sax Institute for The Australian Prevention Partnership Centre (2015)
- Ball K, Cleland V, Dollman J, Turrell G. [Action area 7: Disadvantaged populations](#). In: [Blueprint for an active Australia](#). 2nd edition. Melbourne: National Heart Foundation of Australia. p.50-55. (2014)
- Burke M, Stanley J, Duncan M, Stone J, Giles-Corti B. [Action area 4: Active Travel](#). In: [Blueprint for an active Australia](#). 2nd edition. Melbourne: National Heart Foundation of Australia. p.32-37. (2014)
- Giles-Corti B, Eagleson S, Lowe M. [Securing Australia's Future – Sustainable Urban Mobility: The Public Health Impact of Transportation Decisions](#). A report for the Australian Council of Learned Academies, The University of Melbourne. (2014)
- Giles-Corti B, Mavoa S, Badland H, Roberts R, Davern M, Eagleson S. [Transport Walkability Index for Metropolitan Melbourne](#), The University of Melbourne. (2014)

Giles-Corti B, Badland H, Hooper P, Timperio A, Sugiyama T, Foster S, Bull F, Cain L. [Action area 1: Built environments. In: Blueprint for an active Australia.](#) 2nd edition. Melbourne: National Heart Foundation of Australia. p.14-18. (2014)

Giles-Corti B, Salmon J. [Action area 13: Research and program evaluation. In: Blueprint for an active Australia.](#) 2nd edition. Melbourne: National Heart Foundation of Australia. p.82-65. (2014)

Milton K, Smith B, Bull F. [Action area 3: Health care. In: Blueprint for an active Australia.](#) 2nd edition. Melbourne: National Heart Foundation of Australia. p.26-31. (2014)

Salmon J, Ridgers N, Morgan P, Okely T, Lubans D, Hesketh K, Hinkley T, Dunstan D, Giles-Corti B. [Action area 9: Children and adolescents. In: Blueprint for an active Australia.](#) 2nd edition. Melbourne: National Heart Foundation of Australia. p.60-65. (2014)





## **11. LIST OF AWARDS**

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## 2019

Planning Institute of Australia National Award for Cutting Edge Research and Teaching: Arundel J, Lowe M, Hooper P, Roberts R, Rozek J, Gunn, L, Giles-Corti B. Creating Liveable Cities in Australia report and its scorecards.

Gunn L. RMIT University Media Stars Top Performer 2019

Giles-Corti B. The Australian. Lifetime Achievement Leader board. Australia's top 40 researchers (in field of Social Sciences)

Giles-Corti B. Thomson Reuters Highly Cited Researcher. In recognition of ranking among the top 1% of researchers for most cited publications in the field of social sciences.

Giles-Corti B. President's Certificate of Appreciation. Heart Foundation of Australia. For contribution to furthering the Vision and Mission of the Heart Foundation and to celebrate its 60th Anniversary. February 1959 – February 2019.

## 2018

Planning Institute of Australia National Award for Cutting Edge Research and Teaching, Victorian Branch Award for: Arundel J, Lowe M, Hooper B, Roberts R, Rozek J, Higgs C, Giles-Corti B. Creating Liveable Cities in Australia report.

Giles-Corti B. RMIT University Media Stars Top Performer 2018

Giles-Corti B. Thomson Reuters Highly Cited Researcher. In recognition of ranking among the top 1% of researchers for most cited publications in the field of social sciences.

Badland H. Thinker in Residence, Health Promotion Journal of Australia.

Planning Institute of Australia National Award for Cutting Edge Research and Teaching, Victorian Branch Award for: Arundel, J, Lowe B, Hooper B, Roberts B, Rozek J, Higgs C, Giles-Corti B. Creating Liveable Cities in Australia report.

Giles-Corti B, Thomson Reuters Highly Cited Researcher. In recognition of ranking among the top 1% of researchers for most cited publications in the field of social sciences.

## 2017

Giles-Corti B, Hooper P, Foster S, Christian H. New York Centre for Active Design Research Excellence Awards. Awarded for the "Evaluation of the Liveable Neighborhood Guidelines" (RESIDE Project).

Giles-Corti B. Thomson Reuters Highly Cited Researcher. In recognition of ranking among the top 1% of researchers for most cited publications in the field of social sciences.

Giles-Corti B. VicHealth Champion Award. Awarded in recognition of long-time support of and contribution to VicHealth's work in health promotion.

Giles-Corti B, Thomson Reuters Highly Cited Researcher. In recognition of ranking among the top 1% of researchers for most cited publications in the field of social sciences.

## 2016

Giles-Corti B. Thomson Reuters Highly Cited Researcher. In recognition of ranking among the top 1% of researchers for most cited publications in the field of social sciences.

Giles-Corti B. Redmond Barry Distinguished Professor, The University of Melbourne.

Giles-Corti B. NHMRC Elizabeth Blackburn Fellowship - Public Health Award. For being the top ranked female Fellow in Public Health in 2015.

Giles-Corti B, Thomson Reuters Highly Cited Researcher. In recognition of ranking among the top 1% of researchers for most cited publications in the field of social sciences.

## 2015

Giles-Corti B. 2015 Thomson Reuters Highly Cited Researcher in recognition of ranking among the top 1% of researchers for most cited publications in the field of social sciences.

2015 Victorian Health Promotion Foundation Awards Finalist for The NHMRC CRE in Healthy, Liveable Communities project. Category: Research into action.

Giles-Corti B, Macaulay G, Middleton N, Boruff B, Bull F, Butterworth I, Badland H, Mavoa S, Roberts R, Christian H. Australian Health Promotion Association (AHPA) Ray James Award for Developing a research and practice tool to measure walkability: A demonstration project. *Health Promotion Journal of Australia*, 2014: 25 (3), 160-6.

Planning Institute of Australia National Award for Cutting Edge Research and Teaching, National Award for: Byrne J, Sipe N, Dodson J. *Australian Environmental Planning: Current problems and future prospects* (2014). Routledge, London. Healthy Cities Book Chapter: Giles-Corti B, Badland H, Foster S, Mavoa S, Whitzman C, Turrell G.

Place, Health and Liveability Group, 2015 Melbourne School of Population and Global Health - Award for Excellence in Knowledge Transfer.

## 2014

Planning Institute of Australia Awards for Planning Excellence to the Heart Foundation, WA Division and the University of Western Australia's Centre for the Built Environment and Health- President's Award and the Minister for Planning's Award for the Healthy Active By Design project.

University of Western Australia's Centre for the Built Environment and Health - Parks and Leisure Research Excellence Award for the PosTool.

Giles-Corti B, Thomson Reuters Highly Cited Researcher. In recognition of ranking among the top 1% of researchers for most cited publications in the field of social sciences.

Planning Institute of Australia National Award for Cutting Edge Research and Teaching, Queensland Branch Award for: Byrne J, Sipe N, Dodson J. *Australian Environmental Planning: Current problems and future prospects*. Routledge, London. Healthy Cities Book Chapter: Giles-Corti B, Badland H, Foster S, Mavoa S, Whitzman C, Turrell G.



# 12. LIST OF GRANTS

## 12. LIST OF GRANTS

### 2020

Giles-Corti B, Woodcock J, Zapata-Diomed B, Gunn L, Kamruzzaman M, Both A, Singh D, Knibbs L, and Turrell G. Joining Impact models of transport with spatial measures of the Built Environment JIBE, UKRI-NHMRC Built Environment and Prevention Research Scheme (\$814,558)

Veerman JL, Moeller H, Haigh F, Zapata-Diomed B. Contract to deliver phase two of the Economic Active Transport Project to develop a best practice method to cost the health benefits of active transport. NSW Ministry of Health (\$149,985)

### 2019

Zapata-Diomed B. RMIT Vice Chancellor University Postdoctoral Fellowship

Veerman JL, Moeller H, Haigh F. Contract to develop a preferred method to cost the health benefits of active transport. NSW Ministry of Health (\$81,187)

Gunn L, Zapata-Diomed B, Davern M, De Gruyter C, Both A. Including health impacts in transport modelling and economic appraisal. RMIT University (\$118,229)

### 2018

Wilson A, Bauman A, Redman S, Giles-Corti B, Hawe P, Carter R, Wutzke S. NHMRC Partnership Renewal. (\$15m over 6 years) (\$530,000 allocated to RMIT for the Benchmarking, monitoring, modelling and valuing the healthy liveable city project).

Hooper P. Healthway Fellowship. Development and evaluation of the Urban Health Check: An evidence-based planning support system to assist the design of health-promoting communities. (\$320,000 over 4 years).

Badland H, Davern M, Butterworth I, Nitvimol K. Measuring, monitoring, and translating liveability through the Sustainable Development Goals to inform policy and planning in Bangkok. (\$197,504 over 2 years, Competitive grant, VicHealth).

### 2017

Mavoa S. NHMRC Early Career Fellowship. (\$74,692 over 4 years).

Kavanagh A, Lewellyn G, Emerson E, Petrie D, Dickinson H, Badland H, Carey G, Butterworth P, Enfield S, Stancliffe R. NHMRC Centre of Research Excellence in Disability and Health, 5 years (\$2.5M).

Badland H. RMIT University Vice Chancellor Principal Research Fellowship.

Foster S. RMIT Vice Chancellor University Principal Research Fellowship.

Thornton L, Coffee N, Lamb K, Ball K, Daniel M. ARC Discovery Project Grant. Testing the projected benefits of living in a 20-minute neighbourhood. (\$300,000 over 3 years).

Christian H, Rosenberg M, Lester L, Trapp G, Maitland C, Thornton A, Schipperijn J, Trost S, Boruff B. Western Australian Health Promotion Foundation (Healthway) project. Effectiveness of Childcare centre programs and environmental upgrades to increase young children's physical activity. (\$74,019 over 2 years).

Amati M, Boruff B, Caccetta P, Devereux D, Kaspar J, Li T, Phela K, Saunders A. Horticulture Innovation Australia HIA project. Where should all the trees go? Investigating the impact of tree canopy cover on socioeconomic status and wellbeing in LGA's. (\$147,771 over 2 years).

Villanueva K, Badland H, Giles-Corti B, Goldfeld S. Urban 95 Challenge, Bernard Van Leer Foundation (\$40,000). Designing Cities that Support Healthy Child Development.

Hurley J, Amati M, Arundel J, Boruff B. Department of Environment, Land, Water and Planning, Victoria Metropolitan monitoring and analysis of vegetation cover, heat and land use. (\$273,541 over 1 year).

Davern M, Gunn L, Roberts R. Living in Cardinia Consulting Work (\$6,600).

Davern M, Arundel J, Brasher K, Woolcock G. Queensland: An age-friendly community. Indicators and Performance Measures. Tender Queensland Government (\$65,890).

Davern M. Liveability Audits for Greater Shepparton City Council and Benalla Rural City, DHHS (\$50,000).

Badland H, Davern M, Butterworth I, Ryan L. Contextualising Liveability in Bangkok. (\$20,000, over 2 years Competitive grant, VicHealth).

**2016**

Astell-Burt T and Feng X. What types of local built environment synergise with, or antagonise the benefits of clinical management for the prevention of cardiovascular events among people with type 2 diabetes mellitus? Longitudinal analysis of a cohort of 20,765 Australians. (NHMRC Project Grant APP1101065 : \$704,405.20 over 3 years).

Anstey K, Lautenschlager N, Sachdev P, Cerin E, Shaw J, Cherbuin N, Ellis K, McRae I, Clare L. NHMRC CRE in Cognitive Health: Evidence, intervention and population modelling (NHMRC Project Grant APP1100579: \$2,499,871.90).

Giles-Corti B. NHMRC Senior Principal Research Fellow. Building urban planning and health evidence to inform policy and practice that creates healthy, liveable and equitable Building urban planning and health evidence to inform policy and practice that creates healthy, liveable and equitable communities designed to prevent non-communicable diseases (\$851,980 over 5 years).

Goldfeld S, Williams K, Redmond G, Oberklaid F, Badland H, Freed G, Mensah F, Woolfenden S, Proimos J, Kvalsvig A, Ahmed E. Changing Children's Chances: Exploring Pathways to Developmental Inequities. (ARC Discovery Project 2016 Round 1: \$580,000 over 3 years).

Foster S. ARC Discovery Early Career Researcher Award (DECRA). Natural experiments of the implementation of policies around high density housing (\$364,163).

Feng X. Heart Foundation Postdoctoral Fellowship. What built environment helps or hinders clinical care of type 2 diabetes to protect heart health? (\$150,000 over 2 years).

Christian H. Heart Foundation Future Leader Fellowship. Starting early: increasing young children's physical activity.

**2015**

Rayner P, Parris K, Hobbs R, Bekessy S, Griffith D, Murphy (nee Paton-Walsh) C, Giles-Corti B, Maller C, Dodson J, Hurley J, Bull F, Fletcher T, Sinnott R. Clean Air and Urban Landscapes Hub – National Environmental Sciences Programme (NESP). 2015 -2020 (\$8.8 million over 5 years).

**2014**

Bentley R, Badland HM, Giles-Corti B, Scheurer J, Carver A, Magnus A, Stewart JC, Nelson R, Michaux G,

The Association of Local and Regional Accessibility with Active Travel and Physical Activity: Health and Economic Impacts (ARC LP140100680: \$225,000 over 4 years).

**2013**

Wilson A, Redman S, Shiell A, Bauman A, Bowen S, Roberts L, Baur L, Giles-Corti (Lead, Non-Health systems Research Node (\$640k allocated to National Liveability study in Year 1 and 2), Eades S, Friel S. Systems Perspectives on Preventing Lifestyle-Related Chronic Health Problems. (NHMRC. # 9100001: \$20 million over 4 years).

Goldfeld SR, Woolcock GW, Tanton R, Katz IB, Findlay T, Brinkman SA, Giles-Corti B, Ford L, Hampshire AC, Ayres R, West S, Robinson J, Nolan CM, Strachan T, Perrett C, Gould P, Donovan JA. The Kids in Communities Study: National investigation of community level effects on children's developmental outcomes. (LP130100411, ARC Funding: \$777815 over 3 years plus \$70,000/year industry funding).

Turrell G, Burton N, Brown W. Giles-Corti B, Barnett A, Pachana N. A longitudinal multilevel study of physical activity, sedentary behaviour and physical function in mid-to-late adulthood. (NHMRC #1047453: \$1,269,867 over 5 years).

Giles-Corti B, Turrell G, Bull F, Whitzman C, Washington S, Sugiyama T, Shiell A, Veerman L, Knuijman M, Kavanagh A. NHMRC Centre for Research Excellence in Healthy, Liveable and Equitable Communities (NHMRC #1061404: \$2,499,061 over 6 years).



## **13. LIST OF CONFERENCES ATTENDED**

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## 2020

1. 3rd Global Ministerial Conference on Road Safety, Stockholm, Sweden

## 2019

1. Making Sydney More Liveable, Sydney, New South Wales, Australia

2. International Society of Participatory Mapping Conference 2019, Espoo, Finland

3. Melbourne Planning Summit, Melbourne, Victoria, Australia

4. The Healthy Tasmania Community Forum, Bellerive, Tasmania, Australia

5. Health in All Policies Forum: Working Together for the health and Wellbeing of Tasmanians, Hobart, Tasmania, Australia

6. Australian Walking and Cycling Conference, Adelaide, South Australia, Australia

7. State of Australian Cities Conference 2019, Perth, Western Australia, Australia

8. Engaging for Impact Conference, Melbourne, Victoria, Australia

9. Physical activity-related health and economic benefits of building walkable neighborhoods: A modelled comparison between brownfield and greenfield developments, Monash University, Melbourne

10. International Health Economics Society Conference, 2019, Basel: Physical activity-related health and economic benefits of building walkable neighbourhoods: a modelled comparison between brownfield and greenfield developments

11. Public Health Prevention Conference, 2019, Melbourne: International Health Economics Society Conference, 2019, Basel: Physical activity-related health and economic benefits of building walkable neighbourhoods: a modelled comparison between brownfield and greenfield developments

## 2018

1. 11th Liveable Cities Conference 2018, Melbourne, Victoria, Australia

2. Active Living Research Conference, Banff, Canada

3. Engaging for Impact Conference, Melbourne, Victoria, Australia

4. GI Science 2018, 10th International Conference on Geographic Information Science, RMIT University, Melbourne, Victoria, Australia

5. International Association of Horticultural Producers, Melbourne, Victoria, Australia

6. International Network for Children's Health of Environmental and Safety, Seoul, South Korea

7. International Society for Physical Activity and Health (ISPAH) Pre-congress Early Career Network Workshop, Institute for Sport Exercise & Health, London, United Kingdom

8. International Society for Physical Activity and Health post satellite symposium, Belfast, Northern Ireland

9. International Society for Environmental Epidemiology Asia Chapter Conference, Taiwan, China

10. National Planning Congress, Perth, Western Australia, Australia

11. Sax Institute Knowledge Mobilisation 2018, Sydney, New South Wales, Australia

12. United Nations Global Compact City Program Side Event at the 2018 World Urban Forum, Kuala Lumpur, Malaysia

13. Volkswagen Stiftung Symposia on Urbanisation and Health, Hannover, Germany

14. 27th Scientific meeting of International Society of Hypertension, Beijing, China

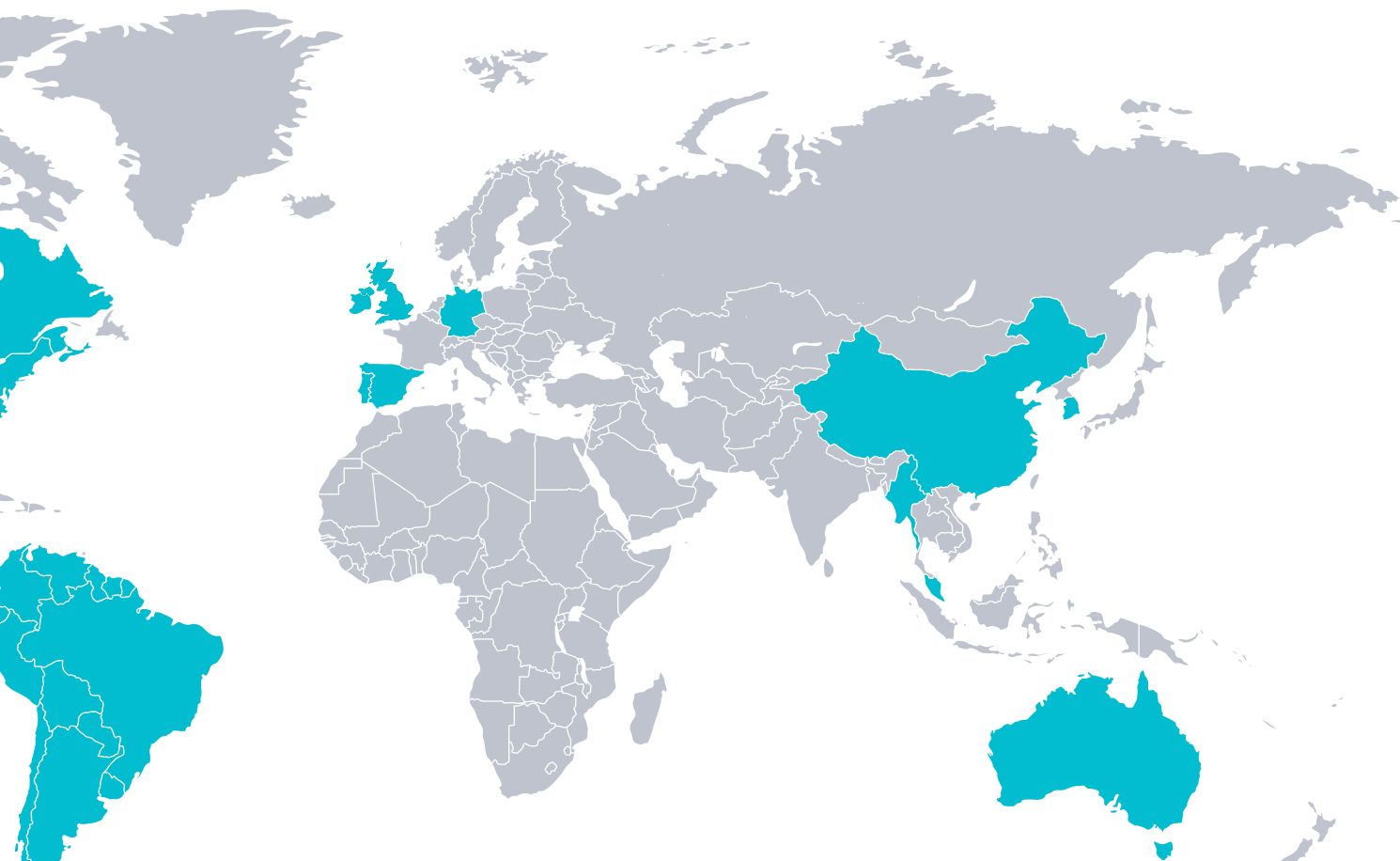
15. World Urban Forum, Kuala Lumpur, Malaysia

16. 7th International Society for Physical Activity and Health Congress (ISPAH), London, England

17. Designing Healthy and Liveable Cities, Brisbane, Queensland, Australia







## 2017

1. Australian Traffic of Planning and Management Conference, Melbourne, Victoria, Australia
2. Australian Association of Gerontology Conference, Perth, Western Australia, Australia
3. International Walk21 Conference on Walking and Liveable Communities, Calgary, Canada
4. 14th International Conference on Urban Health, Coimbra, Portugal
5. Australian Health Economics Society Conference, Sydney, New South Wales, Australia
6. Beyond Research Conference, Melbourne, Victoria, Australia
7. Designing Healthy Liveable Cities Conference, Melbourne, Victoria, Australia
8. Sciences Conference WA, Perth, Western Australia
9. The 3rd Smart Cities Asia Conference, Kuala Lumpur, Malaysia
10. 29th International Society of Environmental Epidemiology, Sydney, New South Wales, Australia
11. 15th World Congress on Public Health, Melbourne, Victoria, Australia
12. World Congress on Public Health, Melbourne, Victoria, Australia
13. 6th Conference of the International Society for Child Indicators, Montreal, Canada
14. International Congress on Physical Activity and Public Health, Bangkok, Thailand
15. International Conference in Transport and Health, Barcelona, Spain
16. Institute of Australian Geographers Conference, Brisbane, Queensland, Australia
17. Smart Urban Futures National Conference, Melbourne, Victoria, Australia
18. Spatial Epidemiology and Spatial Aspects of Public Health, Porto, Portugal
19. International Conference on Urban Health, Coimbra, Portugal
20. International Society for Behavioural Nutrition and Physical Activity (ISBNPA) Annual Meeting, Victoria, Canada
21. National Urban Greening Research Forum, Sydney, New South Wales, Australia
22. Victorian Planning & Environmental Law Association (VPELA) Conference, San Remo, Phillip Island, Victoria, Australia
23. World Symposium for Transport and Land Research, Brisbane, Queensland, Australia

**2016**

1. The Australian and New Zealand Obesity Society (ANZOS) Annual Scientific Meeting, Brisbane, Queensland, Australia
2. Municipal Association of Victoria Rural & Regional Planning Conference, Bendigo, Victoria, Australia
3. 9th Making Cities Liveable Conference, Melbourne, Victoria, Australia
4. 9th World Congress on Active Ageing, Melbourne, Victoria, Australia
5. Habitats for Happy and Healthy Ageing Conference, Edinburgh, Scotland
6. International Conference Transport and Health, San Jose, California, USA
7. 6th International International Society for Physical Activity and Health Congress (ISPAH), Bangkok, Thailand
8. International Congress on Physical Activity and Public Health, Bangkok, Thailand
9. Melbourne Metropolitan Population Health Symposium, Melbourne, Victoria, Australia

**2015**

1. ADC Forum - Creating Healthy Cities Summit, Melbourne, Victoria, Australia
2. Active Living Research Conference, San Diego, California, USA
3. Australian and New Zealand Obesity Society (ANZOS) Annual Scientific Meeting, Melbourne, Victoria, Australia
4. Association of American Geographers Annual Meeting, Chicago, USA
5. Australian Population Health Congress, Hobart, Tasmania, Australia

6. Emerging Health Policy Research Conference (EHPR), Sydney, New South Wales, Australia
7. 10th Brazilian Congress of Physical Activity and Health, Sao Luis, Brazil
8. The Australian Prevention Partnership Centre Early Career Investigators' Forum, Melbourne, Victoria, Australia
9. International Society of Behavioral Nutrition and Physical Conference, Edinburgh, Scotland
10. International Society of Priorities in Health RHD Conference, Brisbane, Queensland, Australia
11. International Conference on Transport & Health, London, United Kingdom
12. International Symposium on Health Equity, Harvard University, Boston, Massachusetts, USA
13. Melbourne 2050: How will we cope with 8 million people? Etihad Stadium, Melbourne, Victoria, Australia
14. Reimagining health in cities: new directions in urban health research and action, Drexel University, Philadelphia, Pennsylvania, USA
15. International Conference on Diet and Activity Methods 9 (ICDAM9), Brisbane, Queensland, Australia
16. Labor Party's Biennial Annual Conference - Fringe Program "Creating places for people", Melbourne Convention Centre, Melbourne, Victoria, Australia
17. Melbourne School of Population and Global Health Graduate Research Student Conference, Melbourne, Victoria, Australia
18. Institute of Australian Geographers (IAG) 2015 Conference, Canberra, Australian Capital Territory, Australia

19. Planning Institute of Australia National Congress, Melbourne, Victoria, Australia
20. 8th Making Cities Liveable Conference, Melbourne, Victoria, Australia
21. State of Australian Cities National Conference, Gold Coast, Queensland, Australia
22. 14th International Society for Behavioural Nutrition and Physical Activity (ISBNPA) Annual Meeting, Edinburgh, Scotland
23. Fifth International Conference of Health Wellness & Society, Madrid, Spain

**2014**

1. 3rd Annual NHMRC Research Translation Faculty Symposium, Melbourne, Victoria, Australia
2. Be Active 2014 Sports Medicine Australia Conference, Canberra, Australia Capital Territory, Australia
3. 2014 Institute of Australian Geography and The New Zealand Geographical Society Conference, Melbourne, Victoria, Australia
4. Health Promotion, Imagining Social Equity Conference, Melbourne, Victoria, Australia
5. Institute of Health and Biomedical Innovation (IHBI) Inspires Conference, Brisbane, Queensland, Australia
6. PIA State Planning Conference, Hobart, Tasmania, Australia
7. IUCN World Parks Congress, Sydney, New South Wales, Australia



Design of Cities: These Can Be Physical Activity Environments



# 14. LIST OF PRESENTATIONS

## 14. LIST OF PRESENTATIONS

Giles-Corti B. (2020) Climate change: What's road safety got to do with it? 3rd Global Ministerial Conference on Road Safety. Achieving Global Goals 2030. Stockholm, Sweden.

Giles-Corti B. (2020) What gets measures gets done: Creating Indicators to Benchmark and Monitor Walking and Walking Environments. 3rd Global Ministerial Conference on Road Safety. Achieving Global Goals 2030. Stockholm, Sweden

Giles-Corti B. (2020) Transformative landscapes: Reshaping the city that shapes us – a public health perspective, Melbourne Design Week 2020, March 12-22, 2020 (Cancelled due to COVID 19), but presented in an interview <https://www.foreground.com.au/>

Giles-Corti B. (2019) Disruptive mobility: Could disruptive research ensure we create Smart Healthy Cities? International Conference of Transport & Health – Smart Cities. Disruptive Mobility. Healthy People. Melbourne, Victoria, Australia

Giles-Corti B. (2019) Bridging the gap between research, policy and practice, International Society of Participatory Mapping Conference. Espoo, Finland

Giles-Corti B. (2019) Creating healthy walkable liveable cities: Are we there yet? Australian Walking & Cycling Conference. Adelaide, South Australia, Australia

Giles-Corti B. (2019) Creating healthy liveable communities in Tasmania: are we there yet? Health in All Policies Forum: Working together for the health and wellbeing of Tasmanians. Hobart, Tasmania, Australia

Giles-Corti B. (2019) Healthy Liveable Melbourne for All. How are we tracking? Melbourne Planning Summit. Melbourne, Victoria, Australia

Giles-Corti B. (2019) Creating a healthy liveable Sydney: Are we there yet? Making Sydney More Liveable. Sydney, New South Wales, Australia

Gunn L. (2019) Health Impact Assessments. Lecture to Social Impact and Community Engagement Students, RMIT University, Melbourne

Gunn L. (2019) The economic case for building healthy, liveable cities. Lecture to the Integrating Health in Urban Planning Short Course, RMIT University, Melbourne

Gunn L. (2019) Health impact assessments and economic evaluation of the built environment. Lecture within short course on Integrating Health into Planning, RMIT University, Melbourne

Gunn L. (2019) What can research say about: Greater Melbourne's transport ecosystem. Melbourne Planning Summit, ZINC Federation Square, Melbourne

Gunn L. (2019) Liveability: research overview from the Healthy, Liveable Cities Group, RobertsDay Innovation Week, RobertsDay, Melbourne

Gunn L. (2019) What is liveability and how can it be measured? Presentation to Tianjin Senior Government Leaders, RMIT, Melbourne

Gunn L. (2019) The built environment and health: research, policy, and practice. Lecture to Masters in Public Health students, The University of Melbourne, Melbourne

Gunn L. (2019) Physical activity-related health and economic benefits of building walkable neighbourhoods: A modelled comparison between brownfield and greenfield developments, Monash University, Melbourne

Astell-Burt T. (2018) Mapping Diabetes in Sydney. Invited presentation to policymakers in Diabetes Australia and Western Sydney Local Health District. Blacktown, Australia

Astell-Burt T, Feng X. (2018) More neighbourhood green space may protect child respiratory health from heavy traffic volume: a multilevel study of 4447 children in Australia. International Network for Children's Health of Environmental and Safety. Seoul, South Korea

Astell-Burt T, Feng X. (2018) Is the risk of developing Alzheimer's disease higher in rural areas? Multilevel discrete-time event history analysis of a cohort of 261,669 Australians aged 45 years and older tracked over 11 years. International Society for Environmental Epidemiology Asia Chapter Conference. Taiwan, China

Badland H. (2018) Achieving resilient, sustainable and healthy communities in the face of rapid urbanisation: Learning from Asia Pacific, South America and Africa. United Nations Global Compact City Program Side Event at the 2018 World Urban Forum, Kuala Lumpur

Boulangé C. (2018) Planning Support Systems and their applications in planning for walkability and health promotion. Active Living Research Conference in Banff, Canada

Boulangé C, Hooper P. (2018) Application of a Health Impact Planning Support System to assist in the design, planning and creation of healthy liveable communities, 2018 National Planning Congress, Perth, Australia

Boulangé C, Hooper P, Duckworth-Smith A. (2018) 2018 YPConnect – Interactive Enterprise Session, 2018 National Planning Congress, Perth, Australia

Boulangé C. (2018) Planning Support Systems & Urban Informatics. Guest Lecture for the RMIT Business, Executive Education Public Administrative Management training program. Melbourne, Australia

Boulangé C. (2018) Planning healthy communities. Guest Lecture at RMIT for the Postgraduate Course Strategic Planning Issues. Melbourne, Australia

Christian H. (2018) The role of the built environment in increasing physical activity and preventing chronic disease and the opportunities for policy makers and health promotion. Science on the Swan State Conference, Fremantle, Western Australia, Australia

Davern M, Gunn L, Farahani L, Nicholls L, & Maller C. (2018) Understanding liveability in the Victorian Interface Councils. RMIT University, Engaging for Impact Conference, Melbourne, Australia

Eagleson S. (2018) AURIN Walkability Tool, City of Glen Eira. The University of Melbourne, Parkville, Melbourne, Victoria, Australia

Feng X, Astell-Burt T. (2018) Greener Cities Healthier Lives. Invited presentation to policymakers to the International Association of Horticultural Producers. Melbourne, Victoria, Australia

Feng X, Astell-Burt T. (2018) Green space quantity and quality matter for child mental wellbeing: a multilevel longitudinal study. International Network for Children's Health of Environmental and Safety. Seoul, South Korea

Feng X, Astell-Burt T. (2018) Does green space quantity or quality matter more for mental wellbeing trajectories in childhood? Findings from a multilevel longitudinal study. International Society for Environmental Epidemiology Asia Chapter Conference. Taiwan, China

Giles-Corti B. (2018) How Liveable is Brisbane? Launch of Brisbane's Liveability Scorecard. Designing Healthy and Liveable Cities Public Forum. Brisbane, Queensland, Australia

Giles-Corti B. (2018) Could city planning metrics help achieve the new urban agenda? 9th World Urban Forum, UN IIGH and ISUH Event: An Urban Health Scorecard

Giles-Corti B. (2018) Prevention Is better than cure: the case for healthy liveable communities. RMIT Engaging for Impact Conference, Melbourne, Victoria, Australia

Giles-Corti B. (2018) Urban futures Industry Dialogue. RMIT Engaging for Impact Conference, Melbourne, Victoria, Australia

Giles-Corti B. (2018) Liveability in the Australian context: Learning and applied research in policy and practice, Launch of Cardinia Shire's Liveability Plan, Cardinia Shire Council, Melbourne, Victoria, Australia

Giles-Corti, B. (2018) Why Create Healthy Liveable Communities? Cardinia Shire Council, Melbourne, Victoria, Australia

Giles-Corti B. (2018) Why should Moreland create healthy liveable communities? Health and Wellbeing Plan Launch, Moreland City Council, Melbourne, Victoria, Australia

Giles-Corti, B. (2018) Could city planning metrics help achieve the new urban agenda? 9th World Urban Forum UN IIGH and ISUH Event: An Urban Health Scorecard, Kuala Lumpur, Selangor, Malaysia

Giles-Corti B. (2018) Building a Career as an Interdisciplinary Policy-Relevant Researcher: Are there magic bullets? TAPPC Early Career Researcher Workshop, Sydney, New South Wales, Australia

Giles-Corti B. (2018) Why Create Healthy Liveable Communities? Casey's Growth Areas – Completing the Picture Workshop, Docklands, Melbourne, Victoria, Australia

Giles-Corti B. (2018) Urban reboot: reflections... Urban Reboot: Delivering a liveable Melbourne @ 8 million, Committee for Melbourne, Melbourne, Victoria, Australia

Giles-Corti B. (2018) Co-production: fact or fiction? Reflections... New approaches to knowledge mobilisation, Knowledge Mobilisation Conference, Sax Institute, Sydney, New South Wales, Australia

Giles-Corti B. (2018) Creating healthy liveable cities: Are we there yet? 11th Liveable Cities Conference 2018, Melbourne, Victoria, Australia

Giles-Corti B. (2018) Creating the evidence-base for healthy liveable cities---a journey, The Urban Observatory Preview Event, RMIT University, Melbourne, Victoria, Australia

Giles-Corti B. (2018) Creating healthy liveable cities: Is Perth there yet? Landcorp, Perth, Western Australia

Giles-Corti B. (2018) Could a decentralized Victoria help create a healthier more liveable Victoria? Balance Victoria, RMIT University, Melbourne, Victoria, Australia

Giles-Corti B. (2018) Can urban design policy deliver active city co-benefits? Evaluation of a policy natural experiment – the RESIDE study. TAPPC National Transport and Planning Workshop, Melbourne Airport, Melbourne, Victoria, Australia

Giles-Corti B. (2018) Creating healthy liveable cities: Using spatial data to take us from niche to norm. GI Science 2018, 10th International Conference on Geographic Information Science, RMIT University, Melbourne, Victoria, Australia

Giles-Corti B. (2018) Creating healthy liveable cities: Is Melbourne there yet? Planning Institute of Australia Melbourne Scorecard Launch, RMIT University, Melbourne, Victoria, Australia

Giles-Corti B. (2018) City planning and health: The state of the art, Urbanization and Health: identifying pathways to healthy sustainable urban development. Volkswagen Stiftung Symposia, Hanover, Germany

Giles-Corti B. (2018) Developing a Strategy, ISPAH Pre-congress Early Career Network Workshop, Institute for Sport Exercise & Health, London, England

Giles-Corti B. (2018) Urban indicators for monitoring progress towards healthy, active cities, 7th International Society for Physical Activity and Health Congress, London, England

Giles-Corti B. (2018) Benchmarking and monitoring the liveability of cities: Lessons from the Australian experience, creating active and liveable environments, enhancing the interface between research, policy and practice, International Society for Physical Activity and Health post satellite symposium, Belfast, Northern Ireland

Giles-Corti B. Creating healthy liveable neighbourhoods: How can we optimise cities for ageing communities? Hong Kong Housing Society International Housing Conference 2018, Wanchai, Hong Kong (November 2018)

Giles-Corti B. (2018) Creating a healthy liveable Hobart: Are we there yet? Abercrombie Oration, Celebrating World Planning Day, Planning Institute of Australia, Hobart, Tasmania, Australia

Gunn L. (2018) Health Impact Assessments. Lecture to Social Impact and Community Engagement Students, RMIT University, Melbourne

Gunn L. (2018) The built environment and health: Research, policy and practice. Lecture to Masters in Public Health students, The University of Melbourne, Melbourne

Gunn L. (2018) Creating healthy liveable cities: Is Melbourne there yet? Planning Institute of Australia Melbourne Scorecard Launch, RMIT University, Melbourne, Victoria, Australia

Gunn L. (2018) The built environment and health: Research, policy and practice. Lecture to Masters' in Public Health students, The University of Melbourne, Melbourne, Victoria, Australia

Gunn L. (2018) Capturing the value of walkable neighbourhoods using hedonic pricing models, 7th International Society for Physical Activity and Health Congress, London, England

Murphy M. (2018) Local food environments for a healthy equitable city: evidence to inform urban planning policy and governance in Melbourne, Australia. Prevention and Population Health Branch, Department of Health & Human Services, Melbourne, Victoria, Australia

Murphy M. (2018) Urban Planning Policy and Governance for Healthy Food. CRE Victorian Advisory Group, Melbourne, Victoria, Australia

Amati M, Boruff B, Caccetta P, Devereux D, Kaspar J, Phelan K, and Saunders A. (2018) Where should all the trees go? National Urban Greening Research Forum, Sydney, New South Wales, Australia

Astell-Burt T. (2017) Keeping healthy and out of hospital: the evidence for investing in green space. Australian Bureau of Agricultural and Resource Economics 'Outlook 2017', Canberra, Australian Capital Territory, Australia

Astell-Burt T, Feng X. (2017) Green space quantity and quality matters for child health: a longitudinal study. World Congress on Public Health. Melbourne, Victoria, Australia

Astell-Burt T Feng X. (2017) Does the potential benefit of neighbourhood green space for body mass index depend upon socioeconomic circumstances and local built and transport environments - A test of the 'equigenesis' hypothesis in Australia, International Conference on Transport and Health. Barcelona, Spain

Astell-Burt T, Feng X. (2017) Healthy food deserts and body mass index among middle-to-older aged adults: a longitudinal study. Designing Healthy Liveable Cities Conference. Melbourne, Victoria, Australia

Astell-Burt T. (2017) What amount of green for healthier ageing? World EcoCity Summit 2017. Melbourne, Victoria, Australia

Astell-Burt T, Feng X. (2017) Neighbourhood green space quantity, quality and 'equigenesis' of body mass index: Evidence from a cohort of Australian mothers. International Society for Environmental Epidemiology Annual Conference. Sydney, New South Wales, Australia

Astell-Burt T. (2017) Measuring policy-relevant (or amenable) exposures for a more consequentialist environmental epidemiology: a critique and some potential avenues for future studies of green space and health. International Society for Environmental Epidemiology Annual Conference.

Sydney, New South Wales, Australia

Astell-Burt T, Feng X. (2017) Greener Cities Healthier Lives. National Urban Greening Research Conference. Sydney, New South Wales, Australia

Astell-Burt T, Feng X. (2017) Does neighbourhood green space promote narrower socioeconomic inequity in body mass index among women? Evidence from Australia. World Congress of Epidemiology. Saitama, Japan

Badland H, Foster S, Bentley R, Pettit C, Giles-Corti B. (2017) Associations between area-level spatial measures of housing with selected health and wellbeing behaviours and outcomes in an urban context. International Conference on Urban Health, Coimbra, Portugal

Boulangé C, Hooper P, Foster S. (2017) Not in my backyard? Development of a health impact planning support system to engage communities on the issue of urban infill and densification in Perth. The University of Western Australia, Perth, Australia

Christian H, Maitland C, Rosenberg M, Lester L, Trapp G, Powell J. (2017) Increasing the scale and reach of physical activity research: Embedding policy from pilot to population. World Congress on Public Health, Melbourne, Victoria, Australia

Christian H, et al. (2017) Impact of childcare centre outdoor play space upgrades on young children's physical activity. International Society for Behavioural Nutrition and Physical Activity Annual Meeting, Victoria, Canada

Christian H, Bai P et al. (2017) Relationship between physical activity, self-regulation and cognitive school readiness in preschool children. International Society for Behavioural Nutrition and Physical Activity Annual Meeting, Victoria, Canada

Christian H, Rosenberg M, Zubrick S, Trost S, Schipperijn J, Maitland C, Trapp G, Lester L, Thornton A, Boruff B. (2017) Designing for the early years: Optimising health and development in early childhood education and care. Designing Healthy Liveable Cities Conference, Melbourne, Victoria, Australia

Christian H. (2017) The built environment and health. Invited guest lecture presented to postgraduate students in Environmental Health unit, School of Population and Global Health, The University of Western Australia, Perth, Western Australia, Australia

Feng X, Astell-Burt T, Badland H, Mavoa S, Giles-Corti B. (2017) Associations between body mass index and local food environment in a sample of 15,229 Australians. World Congress on Public Health. Melbourne, Victoria, Australia

Feng X, Astell-Burt T. (2017) Is neighbourhood green space protective against associations between child asthma, neighbourhood traffic volume and a lack of perceived area safety? Multilevel analyses of 4,447 Australian children. International Conference on Transport and Health. Barcelona, Spain

Feng X. (2017) Greener neighbourhood, healthier start? World EcoCity Summit 2017. Melbourne, Victoria, Australia

Feng X, Astell-Burt T. (2017) Residential green space quantity and quality and child mental wellbeing: a longitudinal study. International Society for Environmental Epidemiology Annual Conference. Sydney, New South Wales, Australia

Feng X, Astell-Burt T. (2017) Is neighbourhood green space protective against associations between child asthma, neighbourhood traffic volume and perceived lack of safety? Multilevel analysis of 4,447 Australian children. World Congress of Epidemiology. Saitama, Japan

Ghani F, Rachele JN, Washington S, Turrell G. (2017) Does the social environment explain between-neighbourhood variation in the gender and recreational walking relationship? 15th World Congress on Public Health, Melbourne, Victoria, Australia

Ghani F, Rachele JN, Loh VHY, Turrell G. (2017) Is the relationship between age and utilitarian walking influenced by the neighbourhood-built environment? 3rd International Conference on Public Health, Kuala Lumpur, Malaysia

Ghani F, Rachele JN, Loh VHY, Turrell G. (2017) Does the built environment explain between neighbourhood variation in the age and transport walking relationship? 29th International Society of Environmental Epidemiology, Sydney, New South Wales, Australia

Ghani F, Rachele JN, Loh, VHY, Turrell, G. (2017) The contribution of the built environment to age differences in walking for transport, Designing Healthy Liveable Cities Conference, Melbourne, Victoria, Australia

Giles-Corti B. (2017) Career Pathways: On Reflection. Presentation to Early Career Researchers in the RMIT University College of Business. Melbourne, Victoria, Australia

Giles-Corti B, Badland H, Arundel J. (2017) How liveable are Australian cities? Presentation to the Department of Prime Minister & Cabinet, Canberra, Australia Capital Territory, Australia

Giles-Corti B. (2017) The challenges of communicating about and translating results of natural experiments – lessons from the RESIDE study. Workshop: Evaluation of natural experiments of social and environmental interventions with potential impacts on population risk of diabetes and cardio-metabolic disease, Atlanta, Georgia, United States of America

Giles-Corti B. (2017) Could measuring the health impact of urban liveability have both scientific and health impact? Invited Lecture to staff and students, Stanford University, San Francisco, California, United States of America

Giles-Corti B. (2017) Could measuring the health impact of urban liveability have both scientific and policy impact? Invited Lecture to staff and students, University of Wollongong, Wollongong, New South Wales, Australia

Giles-Corti B. (2017) Can urban design promote health and wellbeing? Evaluation of a policy natural experiment: the RESIDE study. Seminar presentation to Staff and Students in the School of Global, Urban and Social Studies at RMIT University. Melbourne, Victoria, Australia

Giles-Corti B. (2017) What are the ingredients of a healthy liveable community? Smart Urban Futures National Conference, Melbourne, Victoria, Australia

Giles-Corti B. (2017) Could urban policy help create global health and wellbeing and decrease NCDs? Guest Lecture for Master of Population Health, University of Melbourne, Parkville, Melbourne, Victoria, Australia

Giles-Corti B. (2017) Hack the streets: How could data and technology be used to measure a city's health and wellbeing? HASSELL Public Hack Workshop, part of Melbourne Knowledge Week. Melbourne, Victoria, Australia

Giles-Corti B. Gunn L. (2017) Healthy Liveable Cities, School of Business, RMIT University, Melbourne, Victoria, Australia

Giles-Corti B. (2017) Complex urban problems: how do we respond? World Cities Forum, Melbourne, Victoria, Australia

Giles-Corti B. (2017) Designing cities to create equity, health and wellbeing. Committee for Sydney Healthy Cities Symposium, Liverpool City Council. Sydney. New South Wales, Australia

Giles-Corti B. (2017) Urban design, transport and health: Are we there yet? World Symposium for Transport and Land Research, Brisbane, Queensland, Australia

Giles-Corti B. (2017) Could integrated land use and transport planning promote health and help achieve the Sustainable Development Goals? Social Impact Festival, University of Western Australia, Perth, Western Australia, Australia

Giles-Corti B. (2017) Creating healthy liveable communities and achieving the Sustainable Development Goals. Presentation to Tianjin Government Leaders, RMIT University, Melbourne, Victoria, Australia

Giles-Corti B. (2017) Urban design, transport and health: Are we there yet? Australian Traffic of Planning and Management Conference, Active Transport Workshop, Melbourne, Victoria, Australia

Giles-Corti B. (2017) Benchmarking and monitoring urban liveability. Presented to Department of Prime Minister & Cabinet, Canberra, Australian Capital Territory, Australia

Giles-Corti B. (2017) Building healthy liveable cities: are we there yet? Victorian Planning & Environmental Law Association (VPELA) Conference, San Remo, Victoria, Australia

Giles-Corti B. (2017) Is Urban Design Policy 'the Answer' to Achieving Walkable Cities? Lessons from RESIDE. International Walk21 Conference on Walking and Liveable Communities, Calgary, Canada

Giles-Corti B. (2017) Creating healthy, liveable sustainable cities: Why, what and how? ISEE17 Conference on Healthy Places, Healthy People – Where are the connections? Sydney, New South Wales, Australia

Giles-Corti B. (2017) Urban design, transport and health: Could city planning metrics help achieve the new urban agenda? 14th International Conference on Urban Health, Coimbra, Portugal

Giles-Corti B. (2017) Can urban design promote health and wellbeing? Evaluation of a policy natural experiment – the RESIDE study. Presentation to staff and students at Porto University, Portugal

Giles-Corti B. (2017) City planning and population health: A global challenge. Presentation at Urban Health Event, RMIT Europe, Barcelona, Spain

Giles-Corti B. (2017) How can we create a more 'liveable' 20-minute city? Re-inventing the City National Forum, University of Melbourne, Parkville, Melbourne, Victoria, Australia

Giles-Corti B. (2017) Creating healthy liveable communities: How can we optimise the golden age? David Wallace Address, Australian Association of Gerontology Conference, Perth, Western Australia

Giles-Corti B. (2017) Sustainable urban development that creates healthy cities. China Centre for Urban Development of NDRC and WHO, Beijing, China

Giles-Corti B. (2017) A year in review – NHMRC Centre of Research Excellence in Healthy Liveable Communities. Presentation to the CRE Victorian Advisory Group, Melbourne, Victoria, Australia



- Goldfeld S, Katz I, Findlay T, Dea C, Villanueva K, Tanton R, Brinkman S, Woolcock G, Giles-Corti B, Jones A, Robinson R, Roberts R and Gauvin L. (2017) Using qualitative and quantitative methodologies to investigate community-level factors that influence early child development: Examples of mixed methods research from Australia and Montreal. Panel presentation. 6th Conference of the International Society for Child Indicators, Montreal, Canada
- Gunn L, Mavoa S, Boulangé C, Hooper P, Kavanagh A, Giles-Corti, B. (2017) Designing healthy communities: What mix of urban design features encourages transport walking and helps deliver liveable sustainable communities? RMIT University, Beyond Research Conference, Melbourne, Victoria, Australia
- Gunn L, Mavoa S, Boulangé C, Hooper P, Kavanagh A, Giles-Corti B. (2017) Designing healthy communities: What mix of urban design features encourages transport walking and helps deliver liveable sustainable communities? 15th World Congress on Public Health, Melbourne, Victoria, Australia
- Gunn L. (2017) Centre of Research Excellence in Healthy, Liveable Communities. Presentation to delegates from the City of Hamburg, RMIT University, Melbourne, Victoria, Australia
- Gunn L, Boulangé C, Zapata-Diomedes B. (2017) The health economics of the built environment. Presentation to the Centre of Research Excellence in Healthy, Liveable Communities, Victorian Advisory Group, Melbourne, Victoria, Australia
- Lamb KE, Coffee N T, Mavoa S, Parker K, Richardson EA, Thornton LE. (2017) Methods for addressing neighbourhood self-selection in studies of neighbourhood effects on health. Institute of Australian Geographers Conference, Brisbane, Queensland, Australia
- Lamb K E, Thornton L E, Coffee N T, Ball K, Daniel M. (2017) Conceptualising, selecting, assessing and reporting public open space exposure measures in health research. International Conference on Spatial Statistics, Spatial Epidemiology and Spatial Aspects of Public Health, Porto, Portugal
- Lamb K E, Coffee N T, Mavoa S, Parker K, Richardson E A, Thornton LE. (2017) Methods for addressing neighbourhood self-selection in studies of neighbourhood effects on health. International Conference on Spatial Statistics, Spatial Epidemiology and Spatial Aspects of Public Health, Porto, Portugal
- Loh VH. (2017) The Contribution of Neighbourhood Environment to the Relationship between Neighbourhood Disadvantage and Physical Function, Designing Healthy Liveable Cities Conference, Melbourne, Victoria, Australia
- Lowe M, Hooper P, Giles-Corti B, Bull F, Jordan H. (2017) Evidence-informed planning for healthy urban environments: policy frameworks and research translation. World Congress on Public Health, Melbourne, Victoria, Australia
- Murphy M, Koohsari MJ, Badland H, Giles-Corti B. (2017) Inequities of food access and obesity risk in urban Melbourne: Opportunities for urban planning policy. World Congress on Public Health, Melbourne, Victoria, Australia
- Murphy M, Jordan H, Badland H, Giles-Corti B. (2017) Governance for healthy equitable food environments within rapidly urbanising cities. International Conference on Urban Health, Coimbra, Portugal
- Murphy M. Urban planning policy and governance for healthy equitable local food environments. (2017) Designing Healthy Liveable Cities Conference, Melbourne, Victoria, Australia
- Rachele JN, Sugiyama T, Giles-Corti B, and Turrell G. (2017) Associations between neighbourhood socioeconomic disadvantage and transport walking: The protective effect of the built environment in Brisbane, Queensland, Australia. International Society for Behavioural Nutrition and Physical Activity (ISBNPA) Annual Meeting, Victoria, Canada
- Saunders A, Boruff B, Hurley J, and Amati M. (2017) Who's More 'Green?': Understanding Drivers Of Residential Tree Canopy Cover On Public And Private Land. Surveying and Spatial Sciences Conference, Perth, Western Australia
- Sugiyama T et al. (2017) Land use proportions and walking: Isotemporal substitution analysis. International Society for Behavioural Nutrition and Physical Activity Annual Meeting, Victoria, Canada
- Sugiyama T. (2017) Obesogenic built environment: Expanding cities and waistlines. The 3rd Smart Cities Asia Conference, Kuala Lumpur, Malaysia
- Tam KW. (2017) Body mass and energy balance: a framework to quantify the health impact of food and physical activity environments, Designing Healthy Liveable Cities Conference Melbourne, Victoria, Australia
- Tam KW. (2017) Prediction of body mass index for the adult population of Australia 2015-2050: age-cohort trend Analysis and variance modelling, Australian Health Economics Society Conference, Sydney, New South Wales, Australia
- Villanueva K, Giles-Corti B, Woolcock G, Roberts R, Goldfeld S. (2017) The Kids in Communities Study: Does neighbourhood design make a difference to early child development? World Congress on Public Health, Melbourne, Victoria, Australia

Zapata-Diomedes B, Knibbs LD, Ware RS, Tainio M, Woodcock J, Heesch KC, Veerman LJ. (2017) A shift from motorised travel to walking, cycling and public transport: what are the potential health gains for an Australian city? International Conference in Transport and Health, Barcelona, Spain

Butterworth I. (2016) Regional Victoria's secret weapon: Liveability. Municipal Association of Victoria Rural & Regional Planning Conference, Bendigo, Victoria, Australia

Christian H, Maitland C, Rosenberg M, Lester L, Trapp G. (2016) Increasing the scale and reach of physical activity research: Embedding policy from pilot to population. International Society for Physical Activity and Health international Conference, Bangkok, Thailand

Eagleson S. (2016) Increasing mobility opportunities, especially for people at risk of transport-related social exclusion. Policy Roundtable Delivering Sustainable Urban Mobility. The Barnet Long Room, Customs House, Sydney, New South Wales, Australia

Ghani F, Rachele JN, Washington S, Turrell G. (2016) Gender and age differences in walking for transport and recreation: Are the relationships the same in all neighbourhoods? 9th World Congress on Active Ageing, Melbourne, Victoria, Australia

Ghani F, Rachele JN, Washington S, Turrell G. (2016) Do neighbourhood differences in the social environment explain gender differences in walking for recreation? International Congress on Physical Activity and Health, Bangkok, Thailand

Giles-Corti B. (2016) Could urban policy help create global health and wellbeing and decrease NCDs? Healthy Urban Environments. Master of Public Health, MSPGH, University of Melbourne, Parkville, Melbourne, Victoria, Australia

Giles-Corti B. (2016) City planning that promotes health and sustainability: What will it take? Doctors for the Environment Australia Idea 16 – protecting our future, Brisbane, Queensland, Australia

Giles-Corti B. (2016) Can we create a healthy liveable future Melbourne? Property Council of Australia Melbourne's Liveability – Fit for the Future Business Breakfast, Melbourne, Victoria, Australia

Giles-Corti B. (2016) Key ingredients for a healthy liveable Cloverton Stockland, Cloverton City Futures Seminar, Melbourne, Victoria, Australia

Giles-Corti B. (2016) Big Ideas, New Frontiers: Fishermans Bend Public Conversation. Fishermans Bend Task Force, Melbourne, Victoria, Australia

Giles-Corti B. (2016) Healthy Urban Environments, Nossal Institute for Global Health, University of Melbourne, Parkville, Melbourne, Victoria, Australia

Gunn L, and Giles-Corti B. (2016) What are the implications of the walkability of Melbourne's Activity Centres? Presentation to the Centre of Research Excellence in Healthy, Liveable Communities Victorian Advisory Group, Melbourne, Victoria, Australia

Giles-Corti B. (2016) City and Planning Health: A global priority (Launch Lancet Series on Urban Design, Transport and Health) 70th UN General Assembly

Giles-Corti B. (2016) Keeping people mobile and happy. What role for city planning? Mobility, Mood and Place: Habitats for Happy and Healthy Ageing Conference, Edinburgh, Scotland

Giles-Corti B. (2016) From research to policies and practice for activity-promoting environments. ISPAH 6th International Congress, Bangkok, Thailand

Giles-Corti B. (2016) City and Planning Health: A global priority (Lancet Series on Urban Design, Transport and Health) ISPAH 6th International Congress, Bangkok, Thailand

Gunn L, King T, Mavoa S, Lamb K, Giles-Corti B, Kavanagh A. (2016) Identifying destination distances that support walking trips in local neighbourhoods. International Congress on Physical Activity and Public Health, Bangkok, Thailand

Loh VHY. (2016) Physical activity as the mediator between neighbourhood disadvantage and physical function. 9th World Congress on Active Ageing, Melbourne, Victoria, Australia

Loh VH, Rachele JN, Brown WJ, Turrell G. (2016) Neighbourhood disadvantage and physical function: is the relationship explained by neighbourhood-level perceptions of crime and walking for recreation? ISPAH 6th International Congress, Bangkok, Thailand

Murphy M. (2016) Access and opportunities: food access, dietary & health outcomes. Presentation to Prevention and Population Health Branch, Department of Health & Human Services, Melbourne, Victoria, Australia

Murphy M. (2016) Adult dietary intake, BMI and spatial access to food in metropolitan Melbourne: PhD research in progress. Presentation to Prevention and Population Health Branch, Department of Health & Human Services, Melbourne, Victoria, Australia

Rachele JN, Schmid CJ, Healy AM, Brown WJ, and Turrell G. (2016) Change in body mass index over time and neighbourhood disadvantage: An analysis of residential stability and mobility from the HABITAT longitudinal multilevel study. International Congress on Physical Activity and Public Health, Bangkok, Thailand

- Rachele J N, Schmid C J, Healy A M, Brown W J, Turrell, G. (2016) Change in body mass index over time and neighbourhood disadvantage: An analysis of residential stability and mobility from the HABITAT longitudinal multilevel study. ISPAH 6th International Congress, Bangkok, Thailand
- Tam KW. (2016) Prediction of body mass index for the adult population of Australia: age-cohort trend Analysis and a novel method for variance estimation. The Australian and New Zealand Obesity Society (ANZOS) Annual Scientific Meeting. Brisbane, Queensland, Australia
- Veerman L. (2016) How to include health in urban planning? A quantification of physical activity related benefits of liveable neighbourhoods in Australia. 9th Making Cities Liveable Conference, Melbourne, Victoria, Australia
- Zapata-Diomedes B. (2016) Cost Effectiveness of Investing in Footpaths as a Means of Increasing Physical Activity in an Australian City: A Modelling Study. International Conference Transport and Health, San Jose, California, United States of America
- Badland H. (2015) Reconnecting urban planning with health: An overview of the National Liveability Study. Sax Institute Governance Board, Sydney, New South Wales, Australia
- Badland H, Mavoa S, Eagleson S, David S, Hooper P, Rachele J, Astell-Burt T, Giles-Corti B. (2015) Identifying and validating policy-relevant, national spatial measures of walkability. 14th International Society of Behavioural Nutrition and Physical Activity, Edinburgh, Scotland
- Badland H, Mavoa S, Villanueva K, Roberts R, Davern M, Giles-Corti B. (2015) Creating policy-relevant spatial measures of transport which map to health behaviours and outcomes. International Conference on Transport & Health, London, England
- Badland H. (2015) Healthy built environments for all: What do we need to consider? Australian Population Health Congress, Hobart, Tasmania, Australia
- Badland H. (2015) Reconnecting planning and public health: An overview of the National Liveability Study. The Australian Prevention Partnership Centre Early Career Investigators' Forum, Melbourne, Victoria, Australia
- Boruff B, Badland H, Mavoa S, Turrell G, Bull F, Pettit C, Redman S, Bauman A, Hooper P, Villanueva K, Astell-Burt T, Feng X, Learnihan V, Collett J, Hurni A, Thackway S, Miller J, Giles-Corti B. (2015) The development and validation of national liveability indicators: linking geography, urban policy, chronic disease risk factors and health outcomes in Australia. Association of American Geographers Annual Meeting, Chicago, Illinois, United States of America
- Boruff B, Badland H, Mavoa S, Turrell G, Bull F, Pettit C, Redman S, Bauman A, Hooper P, Villanueva K, Astell-Burt T, Feng X, Learnihan V, Collett J, Hurni A, Thackway S, Miller J, Giles-Corti B. (2015) The development and validation of national liveability indicators: linking geography, urban policy, chronic disease risk factors and health outcomes in Australia. Institute of Australian Geographers (IAG) 2015 Conference, Canberra, Australian Capital Territory, Australia
- Butterworth I et al. (2015) How liveable is Melbourne? Conceptualising and testing urban liveability indicators: Progress, issues, and opportunities. State of Australian Cities National Conference, Gold Coast, Queensland, Australia
- Christian H, Knuiman M, Divitini M, Foster S, Bull F, Badland H, Giles-Corti B. (2015) Longitudinal analysis of the influence of the neighbourhood-built environment on transport walking: The RESIDE Study. International Society for Behavioural Nutrition and Physical Activity International conference, Edinburgh, Scotland
- Feng X, Astell-Burt T, David S, Mavoa S, Eagleson S, Murphy MF, Badland H, Giles-Corti B. (2015) Beyond 'food deserts'? Measuring local food environments in Australian cities. 14th International Society of Behavioural Nutrition and Physical Activity, Edinburgh, Scotland
- Giles-Corti B. (2015) Health Study: The public health impact of transportation decisions. Australian Council of Learned Academies (ACOLA) Sustainable Urban Mobility Workshop, Victoria University Convention Centre, Melbourne, Victoria, Australia
- Giles-Corti B. (2015) Bringing together research and practice, what can we learn from Australia? Symposium Active Living Research Conference, San Diego, California, United States of America
- Giles-Corti B. (2015) Building evidence to support planners to create healthier communities: The NHMRC Centre of Research Excellence in Healthy Liveable Communities. PIA National Congress, Melbourne, Victoria, Australia
- Giles-Corti B, Mavoa S, Hooper P, Villanueva K, Boruff B, Astell-Burt T, Learnihan V, Badland H. (2015) Are 'liveable' communities associated with physical activity and dietary behaviours? Developing and validating a set of national liveability indicators. 14th International Society of Behavioural Nutrition and Physical Activity, Scotland
- Giles-Corti B. (2015) Health policy research that matters: closing the research-translation gap. Emerging Health Policy Research Conference (EHPR), Sydney, New South Wales, Australia
- Giles-Corti B. (2015) Creating places for people, Labor Party's Biennial Annual Conference - Fringe Program Melbourne Convention Centre, Melbourne, Victoria, Australia

Giles-Corti B. (2015) Session 5: Healthy and Green in 2050. Melbourne 2050: How will we cope with 8 million people? Etihad Stadium, Melbourne, Victoria, Australia

Giles-Corti B. (2015) Policy and community action in urban health: from climate change to chronic diseases. Symposium: Reimagining health in cities: new directions in urban health research and action, Drexel University, Philadelphia, Pennsylvania, United States of America

Giles-Corti B. (2015) Improving health equity: What role for liveable neighbourhoods? International Symposium on Health Equity, Harvard University, Boston, Massachusetts, United States of America

Giles-Corti B. (2015) Creating cities that are healthy by design. Australian and New Zealand Obesity Society (ANZOS) Annual Scientific Meeting, Melbourne, Victoria, Australia

Giles-Corti B. (2015) Could public policies reduce inequalities in physical activity and health? 10th Brazilian Congress of Physical Activity and Health, Sao Luis, Brazil

Giles-Corti B. (2015) ADC Forum - Creating Healthy Cities Summit, Melbourne, Victoria, Australia

Giles-Corti B. (2015) PhD Symposium, State of Australian Cities (SOAC) National Conference, Gold Coast, Queensland, Australia

Ghani F, Rachele JN, Washington S, Turrell G. (2015) Neighbourhood environment and walking for transport and recreation: is the association the same for men and women and older and younger persons? Institute of Health and Biomedical Innovation (IHBI) Inspires Conference, Brisbane, Queensland, Australia

Gunn L. (2015) Centre of Research Excellence in Healthy, Liveable Communities: Assessing thresholds for built environment interventions and Health economic evaluations of built environment interventions. Presentation to the Centre of Research Excellence in Healthy, Liveable Communities Victorian Advisory Group, Melbourne, Victoria, Australia

Hooper P, Boruff B, Mavoa S, Badland H, David S, Rachele JN, Astell-Burt T, Giles-Corti B. (2015) Are we creating POSitive Places for active living through urban planning policy? Developing and validating national liveability indicators of public open space in Australia. 14th International Society of Behavioural Nutrition and Physical Activity, Edinburgh, Scotland

Loh VH, Rachele JN, Brown WJ, Washington S, Turrell G. (2015) Neighbourhood disadvantage, individual-level socioeconomic position and physical function: a multilevel analysis. 5th International Conference of Health Wellness & Society, Madrid, Spain

Murphy M. (2015) Conceptualising, developing and validating local food environment indicators for a healthy, liveable and equitable city. Presentation to Prevention and Population Health Branch, Department of Health & Human Services, Melbourne, Victoria, Australia

Murphy M, Badland H, Koohsari M, Astell-Burt T, Trapp G, Villanueva K, Mavoa S, Davern M, Giles-Corti B. (2015) Conceptualising urban planning policy-relevant indicators of the local food environment. Australian Population Health Congress, Hobart, Tasmania, Australia

Murphy M. (2015) Conceptualising urban planning policy-relevant indicators of the local food environment. Melbourne School of Population and Global Health Graduate Research Student Conference, Melbourne, Victoria, Australia

Rachele JN, Learnihan V, David S, Badland H, Mavoa S, Turrell G, Washington S, Giles-Corti B. (2015) Benchmarking policy performance for active living: Developing and validating national transport liveability indicators. 14th International Society of Behavioural Nutrition and Physical Activity, Edinburgh, Scotland

Tam K. (2015) Under-reporting of Energy Intake in Australia. International Conference on Diet and Activity Methods 9 (ICDAM9), Brisbane, Queensland, Australia

Turrell G. (2015) Making future Australian cities liveable for all (not just some): urban environments that promote health equity and healthy ageing. 8th Making Cities Liveable Conference, Melbourne, Victoria, Australia

Zapata-Diomedes B. (2015) A systematic review of economic analyses of active transport interventions that include physical activity benefits; and A model to estimate physical activity effects on health. International Conference on Diet and Activity Methods 9 (ICDAM9), Brisbane, Queensland, Australia

Zapata-Diomedes B, Lennert Veerman JL. (2015) The effects of built environment attributes on physical activity: a systematic review of the Australian literature. Abstract presented at the SPH 2015 RHD Conference. Brisbane, Queensland, Australia

Badland H. (2014) Community practice in place-making, North West Metropolitan Melbourne Liveability Indicators workshop. North-west Metropolitan Melbourne Regional Management Forum, Melbourne, Victoria, Australia

Ghani F, Rachele JN, Washington S, Turrell G. (2014) How does the built and social environment (social cohesion and crime) affect the physical activity of women and men over time? Institute of Health and Biomedical Innovation (IHBI) Inspires Conference, Brisbane, Queensland, Australia

Giles-Corti B. (2014) Could urban policy help create global health and wellbeing? Crossing Boundaries: partnerships for global urban health, International Conference on Urban Health, Manchester, England

Giles-Corti B. (2014) Could urban policy increase physical activity? CEPA Symposium, 5th International Congress on Physical Activity and Public Health, Rio de Janeiro, Brazil

Giles-Corti B. (2014) Urban design and health: what's important? Victorian Design Review Panel, Office of the Victorian Government Architect, Melbourne, Victoria, Australia

Giles-Corti B. (2014) In sickness and in health: the role of planning in creating health and wellbeing. PIA State Planning Conference, Hobart, Tasmania, Australia

Giles-Corti B. (2014) Could urban policy help create global health and wellbeing and decrease NCDs? The University of Melbourne MD Student Conference, Parkville, Melbourne, Victoria, Australia

Giles-Corti B. (2014) Urban design and health: what's important? Place Victoria, Melbourne, Victoria, Australia

Giles-Corti B. (2014) Social Determinants of Health: 'Are Melbourne's suburbs liveable? And what is the health impact?', Better Health Plan for the West Forum, Melbourne, Victoria, Australia

Giles-Corti B, Badland H, Rachele J, Gunn L, Hooper P, Bull F. (2014) Healthy Liveable Communities: Strengthening the evidence base. Be Active 2014 Sports Medicine Australia Conference, Canberra, Australian Capital Territory, Australia

Giles-Corti B, Badland H, Rachele J, Gunn L, Hooper P, Bull F. (2014) The Centre for Research Excellence. Results so far. Presentation to the Department of Environment, Planning and Design, ACT Government. Canberra, Australian Capital Territory, Australia

Giles-Corti B. (2014) Improving Health and Wellbeing: Healthy Parks Healthy People', International Union for Conservation of Nature World Parks Congress 2014, Sydney, New South Wales, Australia

Giles-Corti B, Turrell G, Bull F, Washington S, Sugiyama T, Shiell A, Veerman L, Kavanagh A, Pettit C, Badland H, Gunn L, Hooper P. (2014) Healthy Liveable Communities: Bridging gaps between evidence, policy and practice. 3rd Annual NHMRC Research Translation Faculty Symposium, Melbourne, Victoria, Australia

Giles-Corti B. (2014) Delivering a double bottom line - achieving profit and a positive social outcome for development projects. Maddocks Developer Series, Melbourne, Victoria, Australia

Gunn L. (2014) NHMRC Centre of Research Excellence in Health, Liveable, Communities: An overview. Presentation to City of Melbourne, Melbourne, Victoria, Australia

Gunn L. (2014) Centre of Research Excellence in Healthy, Liveable Communities. Invited presentation to council members of the Southern Metropolitan Region as part of workshop on of the Healthy Urban Planning Initiative, Dandenong, Melbourne, Victoria, Australia

Gunn L. (2014) Centre of Research Excellence in Healthy, Liveable Communities: Assessing thresholds for built environment interventions. Presentation to Australian Capital Territory Planning, Canberra, Australian Capital Territory, Australia

Lowe M, Whitzman C, Badland H, Davern M, Aye L, Hes D, Butterworth I, Giles-Corti B. (2014) Healthy, liveable and sustainable cities: Developing and using indicators to inform urban planning policies. 2014 Institute of Australian Geography and The New Zealand Geographical Society Conference, Melbourne, Victoria, Australia





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