



# Australian Walking & Cycling Conference 2019

**24-25 October**  
Port Adelaide, Australia



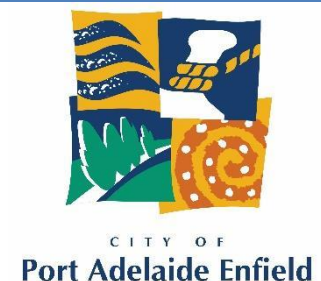
**October 24<sup>th</sup> – 25<sup>th</sup> 2019**

**Port Adelaide, Australia**

**Book of Abstracts**

**Theme: Active Transport in a Changing Climate**

THE AUSTRALIAN WALKING AND CYCLING CONFERENCE IS PROUDLY SUPPORTED BY OUR GOLD SPONSORS



## KEYNOTE SPEAKERS



### PROFESSOR BILLIE GILES-CORTI

Professor Billie Giles-Corti is a Distinguished Professor at RMIT University and Director of its Urban Futures Enabling Capability Platform. She is a National Health and Medical Research Council (NHMRC) Senior Principal Research Fellow and directs the Healthy Liveable Cities Research Group in the Centre for Urban Research. For over two decades, she and a multi-disciplinary research team have been studying the impact of the built environment on health and wellbeing; and she currently leads an NHMRC Centre of Research Excellence in Healthy Liveable Communities established in 2014. She was a Technical Advisor of the Victorian Office of the Government Architect's Design Review Panel from 2012 to 2019 and is currently a member of the Victorian Planning Authority's Precinct Structure Plan Review Committee, Chair of the Australian Urban Research Infrastructure Network's Academic Sub-Committee, and an Honorary Fellow of both the Planning Institute of Australia and the Public Health Association. She has published over 300 articles, book chapters and reports, and by citations, is ranked in the top 1% of researchers in her field globally. She is a Fulbright Scholar and in 2016, was awarded an NHMRC Elizabeth Blackburn Fellowship as the top ranked female public health fellow in 2015.



### ASSOCIATE PROFESSOR PAUL TRANTER

Paul Tranter is a geographer at UNSW Canberra, where his research focuses on two critical and related issues for modern cities: children's well-being and the dominance of speed and mobility in urban planning and society. Paul's research demonstrates that child-friendly modes (walking, cycling and public transport) are also the modes that (paradoxically) reduce time pressure for urban residents. He is currently writing, with Dr Rodney Tolley, a new book to be published by Elsevier in late 2019, with the working title of *Slowing City Transportation: Creating healthier places to live, work and play*.

## SILVER SPONSORS



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8:30 REGISTRATION & COFFEE/TEA

9:15 WELCOME & KEYNOTE

Welcome by MC Jeremy Miller

Address by Mayor Claire Boan, City of Port Adelaide Enfield – Gold Sponsor

Keynote Address, Professor Billie Giles-Corti, RMIT University

**Creating healthy walkable, liveable cities: Are we there yet?**

10:15 SPIN CYCLES

David O'Reilly, City of Port Phillip

David has worked in the public, private and academic sectors creating places for people and mixed mobility. He is the former Subject Coordinator of Urban Precinct Studio at the University of Melbourne, has helped shape hospital precincts in Bendigo and Geelong and is currently appointed as senior urban designer at the City of Port Phillip.

#### **Port Phillip Moray St Bike Path Evaluation**

Auckland's pioneer 'Greenways' project focuses on high amenity and recreational connections through open spaces. Innovations like water sensitive designs and pedestrian-priority crossing facilities are crucial in embracing the Greenways philosophy.

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Ian Radbone, WalkingSA

Ian has a passion for active transport, particularly in urban areas. Ian is a former chair of the Bicycle Institute of SA but has also been recruited to the Board of Walking SA to promote walking as a transport activity.

With a background in transport research, town planning and public policy at the UniSA, he has a wealth of experience in transport planning, advocacy and policy development

#### **Getting More Green Man Time**

Australia has developed the most sophisticated traffic light management in the world, designed to minimize the disruption to traffic flow caused by intersections. How does this management apply to Adelaide's CBD, characterised as it is by (a) being a city centre (b) having a strong orthogonal (grid) street network and (c) wide roadways? How is the imperative to minimize traffic disruption reconciled with the professed political priority for walking over other transport modes? This paper explores the options to gain more green man time.

10:25 INTERVIEW: DANIELS LANGENBERG OF ECOCADDY

Anyone lucky enough to travel in developing countries knows the extraordinary loads that a single bike is capable of carrying. Some westerners are committed to the modern possibilities of the bike, and Daniels Langeberg has been running a successful business on that basis for some years now. He started with his electric tricycle taxi fleet bearing the company name, EcoCaddy.

From urban planner, to Chinese television host and fixed-gear bike racer in Shanghai, to one of Adelaide's most beloved and celebrated entrepreneurs, we're lucky enough to have the change to interview Daniels at the Australian Walking and Cycling Conference.

10:40 MORNING TEA

11:10 ROOM 1 - LEARNSHOP: CHILDREN'S ACTIVE TRAVEL

Philippa Lee, Department of Transport and Infrastructure (DPTI), Government of South Australia

**Way2Go Walktober – School Communities Creating Change**

Millions of dollars continue to be spent promoting sport and Physical Education in Australian schools and local sporting clubs. Two recent studies have indicated that regardless of the frequency and quality of these provisions, initiatives that promote active travel need to be included in order for children and young adults to achieve the recommended daily levels of moderate to vigorous physical activity.

Consistent practice creates habits. Through feedback and research the Way2Go program has evolved to develop a range of support strands to support local governments and their school communities. The most recent addition focuses on work with school parent leaders and parent groups with school leadership endorsement.

The presenters will describe the Way2Go journey to include another focus in the program's backpack, its makeup and the success achieved by one school community in 2018 which has been shared with other schools ready for Way2Go Walktober 2019.

11:10 ROOM 1 - LEARNSHOP: CHILDREN'S ACTIVE TRAVEL

Bridgette Minuzzo, University of South Australia

Bridgette Minuzzo is an Adelaide based visual artist with over twenty years of experience in project-based art practices; public art, community art, commissions and exhibition work. From 2012 to 2015, Bridgette facilitated community consultation, creative activities and school-wide walking and cycling events, advocating for safer crossings and roads around three Prospect schools. As a University of SA PhD candidate (under examination) Bridgette investigated the

effects of landscape art on mental wellbeing for people in windowless offices.

**ScRamble Active Transport project; how arts engagement and walking/cycling events changed attitudes to active transport in three South Australian schools**

Most children live within a 20 minute walking distance from their primary school. Yet time pressures of working parents, reliance on car drop-offs and subsequent traffic congestion around schools can act as disincentives to active transport. The City of Prospect's initiative, ScRamble, aimed to create an exciting and safer street environment to encourage children to walk, ride, skate or scooter to school.

City of Prospect commissioned artists to develop creative solutions to the problem of changing people's preconceived ideas about active transport. Visual artist, Bridgette Minuzzo and performer, Stephen Noonan worked on the ScRamble project with three primary schools in the Prospect area from 2012 to 2015. ScRamble engaged the students in art activities and walk/ride to school events, to show that active transport to school is doable and enjoyable. The focus was to promote the freedom and fun of walking and cycling. Methods comprised discussions about the benefits of active transport, community consultation, neighbourhood walks with students and staff, art making, and active transport events. Student consultation included classroom surveys using maps of walking distances to determine distribution of student population and transport habits. Art workshops at each school focused on active transport themes.

Project outcomes included whole school walk or ride to school days with over 900 participants. Safety issues for walking and cycling were identified during walks around the neighbourhood with students and staff. Working with the City of Prospect, the ScRamble team advocated for improved infrastructure including an Emu crossing, traffic calming, and Kiss and Drop zones. Temporary and permanent artworks promoting active transport were created in streets around the three schools. Three video documentaries were made with footage of the active transport events and the voices of primary school students reflecting on their experiences of walking and riding to school.

Prioritizing active transport over car-dependency is both a mindset and a habit-forming behaviour. The ScRamble project enlisted creative means to change people's habits and preconceived ideas about walking and cycling, and empowered primary school students to understand that active transport is a sustainable and a fun way to commute to school.

11:10 ROOM 1 - LEARNSHOP: CHILDREN'S ACTIVE TRAVEL

Hulya Gilbert, University of South Australia

Hulya is an urban planner, demographer and researcher with over 10 years of industry experience at the local government and non-government sectors. She has recently submitted her PhD thesis on the role of child and youth friendly cities in creating socially and environmentally sustainable neighbourhoods at UniSA, sponsored by CRC Low Carbon Living. She also works as a sessional academic at UniSA and runs a consultancy business in the fields of demography and urban planning.

**Children and sustainable mobility: the less travelled path**

Children's daily lives and travel patterns are significantly different to the previous generations as they are chauffeured for the majority of their trips. A range of social and environmental factors have contributed to the formation of these travel patterns which include the changing societal perceptions of safety (traffic and stranger danger), easy access to cars, increased income levels, higher employment rates for women, increased number of trips children undertake due to contemporary lifestyles and the built environment conditions that privilege private car usage over other travel modes.

Despite these trends, there has been limited research examining the role that children's mobilities play in transport-related carbon emissions and children's potential to be catalysts in a behaviour change towards sustainable mobility.

This presentation outlines a range of findings from an ongoing research project, including the outcomes of a review on child friendly policy and guidelines and sustainable travel policies developed by a number of Australian local governments. To provide a carbon profile of school aged children's everyday mobilities, the presentation also examines the results of surveys completed by 84 parents living in Adelaide and Melbourne in relation to their children's daily travel patterns.

Overall, these findings demonstrate a lack of recognition of children's mobility needs from local governments regarding sustainable travel policies despite a large number of car trips both during the week and the weekend to school and non-school destinations. Finally, the presentation discusses the potential for carbon emission reduction through the conversion of some of these trips to non-car modes.

11:10 OUTER HARBOR GREENWAY RIDE

Hosted in conjunction with EcoCaddy and the City of Port Adelaide Enfield.

12:45 LUNCH

1:30 ROOM 1 – WHAT CAN WE LEARN FROM WALKING?

Adam Rogers, Department of Transport and Main Roads, Queensland Government

Adam is the Director of Cycling and Walking for the Department of Transport and Main Roads in Queensland and has been leading the delivery of Queensland Government programs to get more people cycling since 2013.

Working in partnership across state, federal and local government, with bicycle and walking advocacy groups and other organisations, Adam is leading the planning and delivery of Queensland Government investment in active transport infrastructure, as well as research, policy development and promotion activities across the state.

**Queensland’s first Walking Strategy**

The Department of Transport and Main Roads (TMR) led development of the Queensland Government’s first walking strategy. When we talk about walking, we also mean moving with the aid of a mobility device such as a wheelchair or cane.

The *Queensland Walking Strategy 2019–2029* (QWS) provides the vision, themes, principles, action areas and investment framework to support walking and improve local environments to make walking an easy choice, every day. It is accompanied by a two-year *Action Plan for Walking 2019–2021* and the *Walking in Queensland Report 2019* which provides a baseline for monitoring progress.

In 2017, the Queensland Government committed to deliver the state’s first walking strategy and invest \$2.5 million over three years in walking initiatives. To be successful, the strategy needed to be truly ‘community-led’ so that it reflected the community’s views on walking. The strategy also needed to clearly define the state’s role in walking as well as support and guide local government action on walking.

The strategy has been informed by extensive engagement with the community and across government using a wide range of engagement tools including surveys, written submissions, walking stories, case studies, a collaborative Ideas Wall and a photo competition.

The Queensland Walking Summit was the flagship community engagement event and was attended by close to 100 stakeholders including representatives of peak bodies, special interest groups, non-government and academic organisations. Extensive engagement across local and state government included surveys and face-to-face workshops.

This presentation will provide an overview of the strategy, key actions, and take the audience through TMR’s strategy development process, with a focus on community engagement, and share TMR’s keys to success and challenges through the process.

1:30 ROOM 1 – WHAT CAN WE LEARN FROM WALKING?

Tuesday Udell, The Heart Foundation

Tuesday has 13 years of experience working in public health policy and advocacy, and more recent experience advocating for safer and more walking-friendly transport solutions.

Tuesday's collaboration and leadership in South Australia around public health issues such as active living and mobility for an ageing population, better transport options and healthy built environments has seen real progress and outcomes through practical evidence-based solutions.

Tuesday is also the Chair of Walking SA - and loves walking!

**Why South Australia needs a state-wide Walking Strategy**

Heart Foundation launched their call for a South Australian Walking Strategy in April 2019, with an Executive Leaders breakfast and presentation from international expert and Program Director of the Walk21 conference, Dr Rodney Tolley (UK/USA).

While acknowledging some of Adelaide's positive features such as good pathways and shady public spaces, Dr Tolley said the state had a long way to go before it could deliver a "walkable future for all South Australians".

A walking strategy would not only be good for health, but has numerous social, economic and environmental benefits. The Heart Foundation promotes the value of walkable environments across multiple Government portfolios. However, not everyone understands the benefits of moving from a car-dominated transport system to one that supports more active travel – and changes to the status quo are often met with resistance and fear.

The essential element to get a walking strategy is political will.

We need a State Walking Champion – and the additional benefits will flow on from there.

The recent budget did not allocate additional funding to walking. Without funding and commitment at the highest levels nothing can be done.

This presentation will delve into the benefits that a state-wide walking strategy could deliver, go through the efforts of the Heart Foundation to promote the uptake by government in SA and interstate, and get the conference participants to discuss further advocacy strategies.



1:30 ROOM 1 – WHAT CAN WE LEARN FROM WALKING?.

Alicia Holman Arup

Alicia is creative urban planner with over four-years' experience in strategic transport and land use planning. With a focus on sustainable development and active movement, Alicia has proven experience in developing and delivering projects for both state and local government, demonstrating her skills in strategic thinking, network planning, and project coordination.

She strives to improve the liveability and functionality of places through considered planning and design.

### The economic Case for walking

Walking is an indication of a city's liveability, vibrancy, and health. Despite its prevalence and potential to deliver significant benefits to cities and people, walking is typically overlooked in planning and investment decisions – most likely due to its routine nature.

Walking can yield health benefits, which is critical to unlocking economic savings for an ageing population such as Australia. A walkable environment is one that supports all population groups to participate in an active lifestyle, and walking has a multitude of benefits which rarely exist in isolation. Increased walking for transport or recreation can improve physical activity, mental health and social connectedness, safety, and local business activity.

Shifting transport trips from driving to walking also has a range of benefits including reduced traffic congestion, noise, emissions and infrastructure costs. These benefits may not be new, but their economic assessment is not generally considered or captured in the process of government investment decision-making for walking projects.

We have identified key issues with the current investment process that present barriers to appropriate levels of investment in walking, including:

- Exclusion of walking benefits in infrastructure business cases
- Insufficient delineation of current walking spend by governments
- A lack of overarching responsibility for walking investment
- A lack of focus on walking for transport and recreational trips, as well as using walking to access services

To this end, we recommend that governments:

- Increase investment in walking projects through a dedicated funding stream
- Establish a clear governance group responsible for the strategy, planning, investment, and reporting of walking projects
- Develop a clear strategy and associated action plan for walking
- Develop a clear, consolidated set of monetisation factors for the economic justification of walking projects
- Clearly delineate investment in walking in both budgeting and annual reporting
- Collect better data on walking both as a transport mode and as a crucial element of multi-model trips

These recommendations would help drive further or more targeted government investment in walking, to create walkable cities that are safer, healthier, and more accessible for all.

1:30 ROOM 2 – LEARNING FROM ABROAD

Jo Cruickshank, Churchill Fellow

Jo Cruickshank is a Senior Policy Officer with the NT Department of Infrastructure, Planning and Logistics and her work focusses on active and sustainable transport. Jo has over 20 years' experience working in transport and planning and has a BA in Geography and a Masters of Environmental Management. In 2017 Jo was awarded a Churchill Fellowship to study cycling policies and programs in regional cities in the UK and Europe.

**What can Australia learn from Europe's Cycling Cities?**

In December 2018 and January 2019, I undertook a research project which aimed to investigate successful cycling policies and programs in several European countries, with a focus on highly successful cycling nations and smaller regional centres. The project was undertaken through a Churchill Fellowship, awarded by the Churchill Trust in 2017. The project investigated cycling policies, programs and infrastructure and involved interviews with a wide range of individuals and organisations who are actively engaged in supporting and promoting cycling, as well as infrastructure tours and inspections. Although there are obvious historical, geographic, cultural and climatic differences which influence the different levels of cycling in Europe and Australia, there are many simple, low cost initiatives to encourage cycling which are readily transferable.

Why is cycling such a fundamental part of the transport system in some European cities? What does this mean for the health, environment and liveability of these cities and what can Australia learn from these places? These are the key questions I set out to answer through my Fellowship.

Fundamentally, the simple answer is it is quicker, easier and more convenient to go by bike in many of the cycling cities I visited. Why this is and how this can be achieved varies from place to place, but all cycling cities benefit from the social, environmental and economic outcomes that arrive with higher levels of cycling. Reaching similar levels of cycling in Australia's towns and cities will take a monumental shift in governance, planning, expertise and community perceptions. However, one of the key learnings from my project is that with bold political leadership, a sustained, consistent policy approach and passionate support from at least some in the community, change can happen.

Many of Europe's cycling cities were not always cycling places. Most followed the path of car orientated development in the 1960s and 1970s. However, consensus for change and brave political decisions were a turning point and incremental improvements in cycling infrastructure over a period of 30 years or more has resulted in today's cycling havens.

A short video and link to the full report is available at <https://video214.com/play/B25wglm7mgkw0HrUwhR95g/s/dark>

1:30 ROOM 2 – LEARNING FROM ABROAD.

Daniel Osborne, Arup

Daniel is an urban transportation planner currently working in Arup's Adelaide office. He brings a strong data driven approach to planning, design and policy development, informed by the work of globally recognised thought leaders. He has a passion for public transport infrastructure and network design, human scaled street design and spatial driven data analysis. He is a big fan of challenging conventional wisdom.

**What can Australia learn from Cycling in Japan?**

When it comes to cycling policy and planning best practice, Denmark and The Netherlands naturally dominate discourse and Japan rarely ever rates a mention, despite it being one of the worlds great cycling nations. Aside from cultural barriers, this is could be due to the fact that, although urban cycling participation rates are high, there is actually remarkably little quality dedicated cycling infrastructure on the ground in Japanese cities.

In many ways, the Japanese example runs counter to the conventional dogma that if Australian cities ever hope to create a significant mode shift towards cycling, we must embark on an extensive programme of building out infrastructure in the image of the great European cycling cities, like Copenhagen or Groningen. In an environment where both large scale funding and political support for cycling infrastructure is frequently lacking, it seems this is unlikely to happen any time soon. Does the success of cycling in Japan offer an alternative path to kick start a mode shift in Australian cities?

Supported by observations made on the ground in Tokyo, Osaka and Kyoto, this presentation cover the design of the cycling environment and the reasons why so many people cycle in Japanese cities, despite the apparent lack of quality facilities (much of it can be put down to social norms, street design, a granular urban fabric and policy). It will then explore the relevance to the current situation of urban cycling in Australia and present set of clear infrastructure-light lessons drawn from the Japanese example which could work to support a more inclusive culture of cycling for transportation and increased mode share as a catalyst for increased popular support of large scale investment in cycling infrastructure.

ROOM 2 – LEARNSHOP: LEARNING FROM ABROAD.

Roxane MacInnis, WSP Australia

**If we build it, they may come...**

They may have come to play baseball in 'Field of Dreams' when the baseball diamond was built in the middle of a cornfield, but will they come if you build a new bicycle lane, shared pathway or walkway? The answer is: **maybe**. And, will those who regularly cycle, wheel or walk want to try a new route? How will we know? **How** do you encourage new users or shift occasional users to be regular users?

We need to answer these questions, as there is a misconception that building new active transport infrastructure will result in more people walking, wheeling or cycling. The question is: **how**?

This presentation will focus on the '**how**' and provide insight into improving upon the '**maybe**'. It will start with outlining **why** this is important. As professionals, we need to show residents the benefits of active transport and show how it will impact them directly. We also need to consider:

- how to encourage active transport on a new corridor
- the types of programs which will encourage more people to use active travel modes
- how to measure are shifts in the modal share toward sustainable options.

The presentation will focus on a promotion plan for Active Transportation in Halifax, Nova Scotia, a medium-sized city on the east coast of Canada. This plan included an analysis of successful programs, a tool kit of measures, and monitoring and evaluation recommendations. The successful programs that were analysed will also be discussed to indicate how specific and directed programs can be influential in encouraging travel behaviour change.

The presentation will look at the application of promotional programs and strategic planning highlighted in the presentation to the Australian context. It will conclude recommendations for how to successfully increase the use of active travel and the types of monitoring and evaluation activities that provide insight into what may or may not change travel behaviours.

3:00 AFTERNOON TEA

3:30 ROUND TABLES

All round tables will be presented concurrently a total of three times. Conference attendees will have the opportunity to change tables/rooms between rounds to attend three different presentations.

ROUNDTABLES – ROOM 1

Justin McCulloch, University of Adelaide

Justin is a PhD candidate at The University of Adelaide, researching the ongoing transitions in dock-less personal mobility programs. His 2018 honours thesis investigated the role of cycling infrastructure in the social construction of cycling places in suburban Adelaide. He also serves as a committee member of the NPSP BUG and is active with a number of sustainability minded student groups.

**Creating Cycling Places – How infrastructure influences recreational travel and expenditure in suburban Adelaide**

Urban form and transport infrastructure influences how people move around. Utilising theories on mobility and place, this research builds on the wealth of literature formed by various Australian and international studies on cycling and active travel, and investigates the effect of cycling infrastructure and interventions on the travel and revenue shares of customers in Croydon, Walkerville, and Goodwood, South Australia.

Using a non-probability sample, the results from 345 intercept surveys indicate that while drivers and pedestrians remain the dominant travel (49.3% and 33.6% respectively) and revenue share (51.7% and 31.1% respectively) in each precinct, cyclists spend more on average per user (\$26.38 p/cyclist). Of cyclists encountered, the majority of cyclists stated that they regularly cycled for transport – those who stated they arrived to a cafe precinct by roads alone were more likely to cycle for the majority of their commute than drive or catch public transport. The majority of cyclists were from the local area in each precinct, and over half utilised the local bikeway as part of their journey, with some indicating it was an attraction to the precinct as opposed to a route alone. The majority of cyclists also indicated that the infrastructure in the precincts themselves, such as bike lanes or parking, were ineffective or poorly designed at accommodating a range of bicycles.

This research highlights both an economic incentive to local businesses and governments to improve cycling facilities in the surrounding area, and how these local areas can become cycling “places” by incorporating active travel into the societal norms of suburban areas.

These findings suggest that by improving bicycle infrastructure, such as parking and wayfinding, and the aesthetic appeal of the routes themselves, precincts can become cycling place, where cycling and active travel becomes a community norm, encouraging a modal shift from cars to bicycles for short, recreational trips, and in turn encourage a shift to active travel for regular transport.

ROUNDTABLES – ROOM 1

Jerryn Zwart, Zwart Transport Planning; Kylie Nixon, Arup

Jerryn specialises in active transport planning including policy, planning and design. She has undertaken cycle and pedestrian planning for various local governments across Queensland and State Government.

Kylie is an Associate Principal at Arup with active and public transport planning experience. As a lead author of DIRD “The Whole Journey Guide for accessible public transport journeys” she brings this approach to planning for journeys by foot, cycle and PT.

**Improving active transport planning for new developments**

The presentation will present and discuss learnings and methodologies for best practice active transport planning in new development areas in Queensland. Outcomes from some key projects undertaken by the authors will also be presented to illustrate the methodologies applied.

This includes considering network densities; analysis of user type preferences; and a hierarchal approach to separate pedestrian and cycle network planning. Details on a level of traffic stress analysis undertaken for an emerging new development area will also be presented, where this has aided the authors and clients to identify most appropriate facility type. This will highlight the challenges where road/streets in a community are at different stages of delivery - e.g. early planning giving opportunity to ensure fit-for purpose cross sections, or already constructed requiring retrofit solutions to achieve network outcomes.

ROUNDTABLES – ROOM 1

Rory Rathborne, Arup

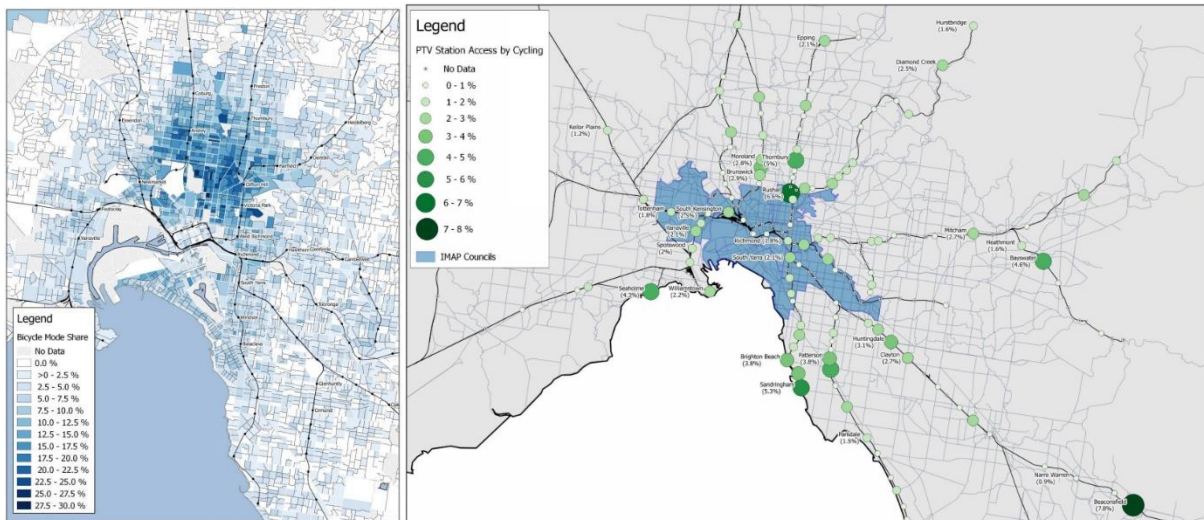
Rory is a Transport Engineer and works with the public and private sector to plan and deliver better transport outcomes. Rory believes that multi-modal transport plays a key role in shaping livable, sustainable communities for a growing population. Rory currently works at Arup and has been closely involved the precinct design around the new Melbourne Metro Tunnel stations. Rory holds a B.Eng Civil & Infrastructure (Hons) from RMIT University.

**Melbourne Metro Bicycle Parking Demand**

In cities held up as the gold standard for cycling design, such as Copenhagen, the bike is often the dominant last mile mode of access to mass transit. But what is the Australian context and what does the data say?

Conventional transport demand models don't consider cycling as a discrete transport mode, nor are they fine-grained enough to accurately consider combined bicycle + rail trips. Individual's perceptions of potential demand can vary widely, with provisions potentially seen as under forecast, or alternatively being dismissed as unimportant.

A balanced and evidence-based approach to planning is needed to support informed decision making around investment in cycling infrastructure. On the Melbourne Metro Tunnel Project, such an approach was taken to estimate bicycle park 'n' ride demand at new stations. By considering existing data, user motivations and spatial analysis techniques, the project team were able to understand the potential need for bicycle parking in far more detail than conventional demand analysis tools would typically permit.



I will present on the development of this novel data-driven approach, the technical aspects of its application to estimate bicycle demand for the Melbourne Metro project and provide commentary on the challenges decision makers face when considering the integration of cycling into major transport projects.

ROUNDTABLES – ROOM 1

Lee-Anne Fleming, Ride-a-Bike Right

A passionate bike rider and former primary school teacher, specialising in PE, Lee-Anne set up Ride-a-Bike Right in 2011 to teach the fundamental skills of bike riding to enable children and their families to spend quality time together being active and healthy in the great outdoors.

**Learning to Ride a Bike Right**

The program designed by Ride-a-Bike Right to teach anyone to ride a bike has proven results for children on the Autism Spectrum as well. Children from across greater Adelaide attend in-person, private sessions in West Adelaide. Occasionally some clients have been taught via Skype, due to their particular ASD traits that prevent them from being able to learn in a different environment, these results have been equally impressive. Our program is structured, specific, tailored and developmental for the learners to make progress with guidance. We teach using learning skills outside of the traditional scope of 'how to ride a bike'

**Results:**

Approx. 300 children have been taught to ride, most of who have diagnosis of ASD and/or LMT. Our supportive, specific and directed method of skills acquisition allows for the child to develop the elements required to become free on two wheels. The changes in the child (usually aged 4-16yrs) have been greater confidence both with riding and in skills outside of physical activity.

**Conclusion:**

Being able to ride is a rite of passage for all children, but the reality is that some miss out, many of whom have additional needs. Changing this reality means that there is one less difference that a child has with peers.

I would be able to get case studies/stories from previous clients as to the changes that the tailored tuition has had with their child/self for use in an e-poster



ROUNDTABLES – ROOM 2

Alexa McAuley, Civile

Alexa is an environmental engineer with more than 15 years' experience in green infrastructure policy, planning and design. Alexa has a strong interest in improving sustainability outcomes in cities, which she pursues by working to integrate environmental engineering with landscape and urban design. Alexa's experience ranges from stormwater management and water sensitive urban design to active transport planning and design. Alexa has substantial experience working on multi-disciplinary design projects in the public domain.

**Grass Roots to Green Grid - Sydney's Cooks River to Iron Cove Greenway**

Sydney's latest regional plan introduces the idea of the green grid: "a network of high quality green areas... that connect centres, public transport and public spaces to green infrastructure and landscape features". Proposed green grid links are mapped in district plans, and in the Central Sydney District, the Cooks River to Iron Cove GreenWay is the no. 1 priority green grid project. In 2017-18, the GreenWay secured approximately \$23 million in state and local government funding.

However the GreenWay began as a grass roots initiative around twenty years ago. Local cyclists, bushcare volunteers and other community representatives developed a vision for an environmental and active transport corridor. Advocates secured local government support and funding for a rich program of cultural and sustainability-focused activities, including community events, environmental education for schools, cycling courses for residents, bushcare, arts and cultural activities. This program cemented the idea of the GreenWay as a multi-purpose corridor integrating active transport with ecology, recreation and culture. A new GreenWay Master Plan was commissioned by Inner West Council in 2018, and concept designs for high priority works in 2019. Community GreenWay advocates remained involved, ensuring that their vision remained true, and that the process balanced a wide range of sometimes competing objectives.

The GreenWay Master Plan reflects the unique character of its place and the community who shaped it, however it also exemplifies all the things a green grid link should be. As Sydney experiences more infill development, there is increasing pressure on public open space to 'work harder' - to be higher quality, more diverse, accessible and connected - to support higher density communities. The NSW Government's draft green infrastructure strategy (Greener Places 2018) defines 'high performing' green spaces as multifunctional spaces designed to produce concurrent ecological, social, environmental and economic benefits. This strategy also recognises the roles green infrastructure can play in supporting physical and mental health, climate resilience, more diverse recreation needs of an ageing population, urban biodiversity, social interaction and inclusion. Most of these ideas have long been part of the community's vision for the Cooks River to Iron Cove GreenWay.

ROUNDTABLES – ROOM 2

Joey Fagan, BikeSA & Adelaide Bike Kitchen

**The Benefits and Challenges of Community Cycling Projects: Investing in Partnerships to Embed Cycling in Culture**

Remote and regional communities face many health and social challenges due lack of recreation options and sedentary lifestyles. Furthermore, Indigenous Australians within these communities remain highly disadvantaged as a population group regarding health, education and incarceration.

Bikes Palya has delivered remote community cycling programs for 15 years, primarily in the Anangu Pitjantjatjara Yankunytjatjara (APY) lands. In 2014, a structured pilot launched in partnership with APY schools linked cycling activities to education outcomes. Since 2016, the program adapted to focus on high risk school holiday periods and supporting local youth services. More recently, through applying the lens of health and community safety, Bikes Palya has become a frontline program to address a range of issues facing youth in remote and regional areas.

While the benefits of Bikes Palya are multifaceted, establishing sustainable funding sources remains challenging. Continuity through an ongoing presence is vital for any behaviour change program's effectiveness. By linking cycling to broad community development aims such as: recreation, education and employment; Bikes Palya facilitates collaboration between stakeholders. Maintaining strong relationships built on trust around mutual goals has been key to the program's success.

This round table will discuss the challenges of communicating the benefits of community cycling programs with funders, specifically focussing on highly disadvantaged remote and regional populations. Funding challenges notwithstanding, stakeholder engagement and collaborative partnerships provide the best model for community projects to realise their full potential.

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ROUNDTABLES – ROOM 2

John McArthur, Waikato Tramping Club & The Carbon Shop, New Zealand

John has been a trumper in New Zealand as a teenager and as a mature trumper. Joining the local tramping club has led to tramping wild, remote parts of New Zealand, with trips to Nepal and Peru.

John's career included 15 years as Carbon Reporting Manager for a multinational, reporting the "footprint", strategies for reduction and response to legislation. Conferences and reading gives John in-depth knowledge of expectations regarding the Climate Change impact on tramping.

**Tramping (Hiking) in a rapidly changing New Zealand and World Climate**

The presentation starts with a discussion of early explorers, adventurers and tourists discovering the dramatic land forms, and unique flora and fauna. Discussion of Government and station holder's building of huts in remote places for deer culling, rabbiting, musterering and shepherding, not to mention the early recreational clubs building tramping, skiing and climbing huts, leads to a quick summary of the recreational assets hidden deep in the back country of New Zealand. These are the 950 plus DOC huts, hundreds of club huts and the thousands of kilometres of well-formed tracks available to trampers, plus the endless opportunity and challenge of "off-track" exploration.

The values encapsulated in "going bush" are shared by a million New Zealanders, with the most visible manifestation of this being the hundreds of tramping clubs, with one in virtually every town.

We then need to discuss the expectations of a changing climate.

The warmer weather leading to loss of ice, retreat of glaciers and threat to those hardy creatures that inhabit our wild alpine lands.



- Less snow each year for not only skiers but also winter adventurers with crampon and ice axe.
- The stronger storms devastating our forests and recreational structures; huts, tracks and camp grounds.
- The droughts stressing even the tallest trees and giving rise to high risk of wild fires.
- sea level rise and storm surges washing away coastal walkways and beaches.

Worldwide, the story is the same, with the Peruvian Andes and Himalayan glaciers retreating, as are those in the rest of the world. For those trampers who wish to explore foreign lands and mountains, the threats they need to consider include not only the more violent storms, but also the deadly heat waves that are expected to become more prevalent.

## DAY 1, THURSDAY 24<sup>TH</sup> OCTOBER

All sessions in Room 1 unless otherwise specified

### ROUNDTABLES – ROOM 2

Julian Monfries, Friends of the Heysen Trail and Other Walking Trails, Inc.

The author has been a member of the Friends since 1990 and held the positions of President, Vice-president, Secretary and chairman of the Walk Committee. He has walked extensively in Australia and overseas, has completed the Heysen Trail five times and is closely involved in ongoing development of the Trail through the Trail Development Committee.

#### **Friends of the Heysen Trail – The story of a successful walking organisation**

The Friends of the Heysen Trail, initially established to support development of the iconic Heysen Trail, has diversified to also become a significant promoter, leader and organiser of walks on the Trail. South Australia's 1,200-kilometre Heysen Trail extends from Cape Jervis, on the Fleurieu Peninsula, to Parachilna Gorge, in the Flinders Ranges traversing coastal areas, native bushland, pine forests, vineyards, rich farmland and historic towns. It caters for the serious backpacker hiking the entire trail and for walkers doing day walks along shorter sections.

The vision of those that created this trail has not only been fulfilled but expanded upon by an organisation that embraces all aspects of the walking trail as well as all aspects of a successful organisation. The not for profit association maintains the Heysen Trail in partnership with the State Department of Environment and Water.

From the original establishment of the trail the focus has been on how this trail can be enjoyed. This has led to The Friends of the Heysen Trail establishing a range of walk options to participate in the trail from a casual acquaintance as an individual section walk to an intimate friend embracing it all over six years.

The trail has required considerable collaboration to be established and maintained. This includes landowners, local and state government, community groups all working with a band of volunteers. They work across all aspects of maintaining a trail and supporting the needs of the members to enjoy it in a structured but enjoyable manner.

To do this though has meant the establishment, all by volunteers, of diverse interest background that make up the pieces of the jigsaw for the holistic experience of the trail. These include walk planners, trail maintenance teams, marketing and promotion, administration, finance, computer systems and so on. All this requires a sound level of governance as well as solid communication between all elements.

The Friends of the Heysen Trail has grown to a membership of some 1,200 with further growth aspirations. That membership has a sound financial base to work from and a great culture built around the joy of walking in this beautiful environment. It hasn't been easy, but it has been worthwhile!

5:00 END OF DAY ONE

6:00 OPTIONAL CONFERENCE DINNER – BANKSIA TREE, 147 ST VINCENT ST, PORT ADELAIDE

\$55 per person for three course meal (drinks not included)

### BRONZE SPONSOR



7:30 MORNING WALKING TOUR – MEET AT THE PORT ADELAIDE TOWN HALL

8:30 REGISTRATION & COFFEE

9:00 WELCOME & KEYNOTE

Welcome by MC Linley Golat

*from The Right Honourable The Lord Mayor of Adelaide, Sandy Verschoor - Gold Sponsor*

Associate Professor Paul Tranter, University of New South Wales (UNSW)

**Slowing City Transportation: Creating healthier places to live, work and play**

10:00 SPINCYCLES

Garry Robinson

I qualified from university with a Masters Degree in Surveying. Then I spent the next 30 years programming databases and mining software solutions. 3 years ago I discovered bikes and found my old skills of mapping.

#### **How I made a google map of all Sydney's Cyclepaths**

I rode the Otago Rail Trail 3 years ago and found that I enjoyed cycling. I wrote a story of 4 families riding that trail, shared it on a popular blog and enjoyed it. I had been writing computer stories for magazines all my life, it was time for a new canvas.

I arrived back in Sydney and there wasn't much work around, so I would hop on a train and ride. I stored the rides in a variety of cycling apps and started to put them together in single route maps. That worked well for a while and of course the routes started criss-crossing and getting messy. Meanwhile I was getting addicted to the art of finding paths where none existed.

I switched focus and decided to make maps and not routes. I decided 3 areas would cover the city well. I had a few encounters with map limits and was worried one map wouldn't be possible. Eventually I found out how to make the map smaller and took the most popular map and combined all three maps into one giant Sydney map of 1600kms of trails.

What I learnt along the way was how to select a trail. I will show you that. I learnt how to decide if a road was busy. I learnt how to make trails small in size and I certainly learnt how to edit them. Finally, I learnt about Google legends but I still could do more.

Most important was I rode every single trail in Sydney and I love the fact that I understand Sydney very well. I also love saying hello to people and ringing my bell. They always smile back whether you are on a back lane or on the Parramatta River cycleway.

10:00 SPINCYCLES

Ali Soltani, University of South Australia/Shiraz University

Ali Soltani is an urban and transport planning scholar worked as research fellow on CRC Low Carbon Living project of Sharing Mobility with the University of South Australia. planning/design, transport planning and Geographic Information Systems (GIS) applications. Ali received his PhD in Urban Planning (with focus on land use/transport interactions) from the University of south Australia (UniSA) in 2007. He has extensive teaching experience in a range of environments in Australia and overseas. His research interests include: Land use-transport interaction; Modelling and big data; GIS and spatial statistics; Integrated transport systems; Active transport; Sharing-mobility; ABS Demography and Population projections.

**Urban Network Morphology of Major Trip Generators and its Impact on Walking and Cycling**

The volume and congestion of vehicular traffic in the city of Adelaide are increasing due to a gradual growth of population who prefers to live closer to the city. Despite the fact that urban road network and infrastructure have been improved within the last two decades, however, traffic congestion has not been significantly reduced in the City of Adelaide. For inner suburbs and CBD area, walking and cycling provide an advantage alternative over other modes of transport especially personal car and public transport. Walking and cycling are regarded as cost-effective, affordable and interactive modes which will be sustainable in the longer-term.

This paper is based on the outcomes of Sharing Mobility project, carried out in from Sept 2017 to Dec 2018 as the second module of CRC Low Carbon project on Greening Inner Travel (project e2021), included one intercept/online survey from those travellers who made a trip to six major destinations undertaken on late Feb 2018 and Mar 2018 in City of Adelaide (n = 410). Respondents were asked to report their typical travel mode, travel time and distance. Based on the above information, the six major destinations within the City of Adelaide include: Rundle Mall; Train Station; Central Market; Adelaide Oval; New RAH/SAHMRI and North Terrace.

Each of these destinations has a distinct role in addressing the needs of metropolitan Adelaide residents, therefore, different trip purposes are expected. The mode choice was significantly different among six destinations showing the impact of accessibility to the destination and the function of that destination. According to this graph, Adelaide oval and New RAH/SAHMRI had lowest share of non-motorised transport while Rundle Mall and Central Market as two shopping precinct had high share of walking and cycling. New RAH/SAHMRI, Central market and Adelaide Oval had high share of car usage. By implying two network morphology analyses included **space syntax** and **pedshed analysis**, it is examined how the morphological properties of street network influence the level of walking/cycling within a 400m boundary of each trip generator.

10:00 SPINCYCLES

Sue McMillan, Department of Transport and Infrastructure (DPTI), Government of South Australia

**Safe Schools Precincts – The power of partnerships in creating change**

Aggregated **Way2Go** data (2014 – 2018) from the program’s primary schools indicates that 52% of children live within two kilometres of their school. In Australia the rates of children walking and riding to primary school have declined from 70% in the 1970’s to a current rate of 30%. During the same period broader social trends have included higher car ownership, increased workplace participation by parents and increased parental concerns about safety.

Traffic congestion and aberrant driver behaviour for the 30 minutes at the start and end of the school day is the bane of most school principals and council traffic engineers’ lives! If even 20% of the students who live within 1 kilometre of their school rode, scooted or walked to school a noticeable safety benefit would occur. **Way2Go** commissioned research findings indicate that families who drive to school perceive the school precinct to be riskier than those who actually walk, ride or scoot with their children.

***Parental concerns about road safety is another important barrier that can be addressed through a combination of built environment modifications, public education and programs. There is strong evidence that parental attitudes are a primary determinant of their children’s participation in this form of physical activity. (Duggan et al, 2018)***

Walking and cycling accompanied by an adult or older sibling for all or part of the way to school facilitates the transition from dependent to independent travel and is key to the development of children’s safe traffic behaviours. What can governments and communities do to support families and children to use active travel modes for school journeys?

The **Way2Go** model has the overarching goal of creating and sustaining a community culture of active travel. Components include surveys (parents, students, staff), GIS maps of student residential locations, site traffic observations and inspections, a practical on-road cycling program for 9 – 13 year olds, training and curriculum resources for teachers, signage and crossing monitor support, bike and scooter storage, resources and initiatives that target families as well as small scale infrastructure improvements in partnership with local councils.

The spin cycle will provide snapshots of the role that relationships, connections and community leadership play in planning and sustaining incremental change, lessons learned and successes.

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Reb Rowe, Adelaide Bike Kitchen

**Peddling community bike collectives as resilience builders for an uncertain future**

Adelaide Bike Kitchen is an organisation which supports cyclists which feel vulnerable, and helps people to remain on their bikes by providing accessible maintenance advice and hands-on opportunities in an inclusive social environment. This presentation discusses how bike collectives such as Adelaide Bike Kitchen can improve community resilience.



10:00 SPINCYCLES

John Merory, Austin Health

Semi-retired neurologist who is a committed environmentalist. Born in 1946, distressed by my observation of destruction of native forests since 1952, known about greenhouse gas-induced climate warming since 1962, actively campaigning for the environment and mitigation of toxic and greenhouse gas emissions, active transport advocate.

Started 3 Bicycle User Groups. Encouraging walking, cycling and trains for transport, and electricification replacing polluting internal combustion engines. Member of several environment and climate action groups.

**A tale of commuting in two cities – A personal perspective**

As a highly urbanised prosperous community we face an epidemic of lack of exercise, type 2 diabetes, obesity, hypertension and hyperlipidaemia. At the same time, we pollute air, water and soil more than ever. Air pollution kills more than 3000 Australians per year. A decade ago our tragic loss of life in the fires was very visible, while double the number died of heat. We are also facing increasing incidence of depression, drug misuse and abuse, and suicide.

Walking and cycling fulfil the roles of reversing lack of exercise in an economic and non-polluting way. The infrastructure is simple and cheap. The alienation, wastefulness and pollution produced by motorised road transport is an enormous cost to society. This form of transport within a few km of a busy crowded business district persists only if the damaging externalities in traffic congestion, expensive space demands, stress, pollution and illness are left out of the cost-benefit calculation.

In the last few years in Melbourne we demonstrated in a practical way the cycling was the quickest, cheapest and least polluting for of personal transport from then Austin Hospital to the inner city. In Sydney travel from inner to mid-Eastern Suburb (Birriga Rd) to the International Conference Centre in Darling Harbour took half the time door to door on a bicycle compared to car or public transport.

I was pleasantly surprised with the social and physical infrastructure for cycling in Sydney compared to Melbourne, contrary to perceived wisdom.

Detailed observations, and recommendations for transport planning and action will be provided.



10:00 SPINCYCLES

Jerryn Zwart, Zwart Transport Planning

Jerryn specialises in active transport planning including policy, planning and design. She has undertaken cycle and pedestrian planning for various local governments across Queensland and State Government including network planning, policy development, analysis, best practice reviews, strategy development, behavioural change strategies and policies, and safety and accessibility audits.

Jerryn is currently assisting TMR with the development of cycle related technical notes and training, including developing new treatments such as cycle streets, bicycle advisory lanes, and separated cycle tracks.

**Safe mixed traffic environments – Cycle Streets and Advisory Bicycle Lanes design guidelines**

While bicycle lanes or separated bicycle facilities are always preferred to allocate a designated operating space for cyclists on the road, Advisory Bicycle Lanes and Cycle Streets are treatment options to encourage safer road user interactions where vehicles and bicycle riders are required to mix in the same space.

The presentation will summarise the technical guidelines prepared by the author on behalf of the Queensland Department of Transport and Main Roads on these emerging treatment options. The guidelines have been developed considering international best practice with adaption to Queensland conditions. Practical guidance on implementing advisory treatments where bicycle traffic and motor vehicle traffic is mixed in low speed (<50kph) and low traffic volume (<6,000 AADT) streets in urban environments is provided. Both treatment types provide advisory facilities for cyclists and can be implemented in association with local area traffic management (LATM) 'traffic calming' to facilitate low traffic volumes.

10:30 MORNING TEA

11:00 ROOM 1 LEARNSHOP: HEALTH – STRATEGY AND DESIGN

Greg Carmody, Carmody Consulting

Greg Carmody has accumulated more than 40 years of service with Department of Planning Transport and Infrastructure (DPTI) involved in road planning, road design and road traffic management. 20 years of this service was dedicated to the planning and design of cycling and walking infrastructure as DPTI's Senior Cycling and Pedestrian Advisor and 10 years of service as DPTI's Disability Access Officer and author of DPTI's Guidelines for Disability Access in the Pedestrian Environment.

**Disability Discrimination Act (DDA) compliant road and path infrastructure**

In 2018, the Disability Inclusion Act 2018 was passed in South Australia to ensure people with disability have equal access and inclusion in the community as all other citizens.

Under the Disability Inclusion Act 2018, South Australia will have its first State Disability Inclusion Plan (SDIP). This State Plan, due to be published by 31 October 2019, will set whole-of-government priorities and strategies for achieving a more inclusive South Australia.

Quote from the SDIP Discussion Paper: *"We want to create inclusive, liveable communities that are accessible for everyone in both urban and rural locations. This relates to the buildings we live in, the roads and paths we travel on, transport, information and communication technologies and systems".*

Below the overarching State Plan will be Disability Access and Inclusion Plans (DAIPs). DAIPs identify barriers and measurable actions to achieve accessible and inclusive communities, services and programs for people with disability. All State and Local Government authorities are required to create and implement DAIPs, reporting on them annually from 31 October 2020.

In relation to access to roads and paths to promote accessibility and safety it is important that civic infrastructure is planned, designed, delivered, managed and maintained to facilitate access for those with various disabilities. Key to this is the need for road and path planning and design practitioners, infrastructure managers and maintenance staff to be coherent in understanding the basic principles for designing for those with various disabilities. As important, is the need for good understanding of requirements of DDA compliant standards and guidelines.

This 20-minute 'Learnshop' presentation introduces DDA design principals and visits relevant Australian and local standards and guidelines that should be referred to when designing DDA compliant facilities.

11:00 ROOM 1 LEARNSHOP: HEALTH – STRATEGY AND DESIGN

Sam Reich, Newcastle Cycleways Movement Inc.

Sam Reich has worked extensively in advocacy and urban planning for activated communities, especially as applied to walking and cycling as transport in the Hunter region of NSW. He is currently President of the Newcastle Cycleways Movement, Inc. (NCM), sits on the City of Newcastle's Cycling Strategy Advisory Committee, and is Chairman of the CycleSafe Network initiative, a community alliance promoting the completion of the primary network of safe cycling infrastructure in the region

**The CycleSafe Network - A Community-Based Initiative for Active Transport Investment**

The CycleSafe Network (CSN) is a community-initiated design for the completion of a primary network of family safe, easily navigated and usefully connected cycling, walking and shared paths across the Newcastle and Lake Macquarie local government areas. The proposal is to connect 90km of existing paths with 160km of new construction to deliver an active transport network that will encourage locals to cycle or walk every day to work, school, university, shops and other locations.

The aim of the network is to make walking and cycling for short trips – less than 2km for walking and less than 10 km for cycling – a viable alternative to car travel. With new State Government plans to increase the population of Greater Newcastle, it is essential that active transport infrastructure be built to accommodate increased travel demands.

In addition, the CSN will also deliver health benefits to the population of the Hunter region by increasing physical activity as part of everyday life. This will help achieve the State Premier's goal of reducing childhood obesity by 5% over 10 years. In fact, when the impacts of improved public health outcomes are modelled, it becomes clear that the state government is by far the greatest financial beneficiary from investment in active transport infrastructure.

The CSN is an alliance of diverse community groups, including the Newcastle Cycleways Movement, the Heart Foundation of NSW, University of Newcastle through its Tom Farrell Institute for the Environment and others. It has the support of both Newcastle and Lake Macquarie councils, the NRMA, the Property Institute etc., and has been cited as the basis for Transport for NSW's Greater Newcastle Regional Bicycle Network proposal, contained in their 2018 Greater Newcastle Future Transport Plan.

NCM and the Heart Foundation in particular have developed a close working relationship which has resulted in partnering on other important initiatives, including the recent introduction of a Walking School Bus trial using an innovative business model which involves local commercial fitness providers supplying paid staff to marshal the school children on their walk to school.

These initiatives make safe separated active transport infrastructure a compelling community priority

11:00 ROOM 1 LEARNSHOP: HEALTH – STRATEGY AND DESIGN

David O'Reilly, City of Port Phillip

David has worked in the public, private and academic sectors creating places for people and mixed mobility. He is the former Subject Coordinator of Urban Precinct Studio at the University of Melbourne, has helped shape hospital precincts in Bendigo and Geelong and is currently appointed as senior urban designer at the City of Port Phillip.

**Hospital Precincts & Mixed Mobility**

Hospital precincts have a unique context. Some parts operate 24/7 to service all people of all ages including our most vulnerable, but whether you are servicing the health sector or seeking help from it, getting there can be difficult. Some people may be medicated, incapacitated, in shock, trauma or seeking help for physical or mental health issue. Others may be doing shift work, transporting patients, doing maintenance or an internship. You may be too young to drive, don't have access to a car or find public transport services limited or impractical. And for those that do drive, finding a car park will be most likely difficult or expensive.

Compounding demands are the offices, clinics, research facilities and health and social services that agglomerate around the hospitals. They create immense benefits, activity and employment but their demands for development, public space and access bring amenity impacts in the places we need it most. Hospital precincts must facilitate mixed-mobility but quite often, the pedestrian amenity is compromised by the uplift of industry that limits our ability to design places for people with specific needs. To implement best practice universal design in the public spaces and pathways around hospital precincts is a challenging task. It is essential to ensure that people can access health and employment regardless of their status, cognition or ability but we must also consider the access and movement of workers, residents, patients, carers, visitors, logistics and allied health services that each play an important part in the health of our communities and each has their own specific mobility needs to consider.

In an attempt to understand these issues, opportunities and trade-offs, this paper examines the urban design of hospital precincts and their most critical needs for movement and access, development and public spaces. It explores some existing hospital precincts and the urban structures used to create places for people and mixed mobility and some of the innovations and approaches used to reduce the demands on our health care and social services.

11:00 ROOM 2 LEARNSHOP: IMPROVING TRAVEL OPTIONS

Robert Kretschmer, City of Greater Bendigo

A passionate advocate for everyday walking and cycling, Robert enjoys working to create healthy, happy communities. Robert is currently working on integrating and embedding strategies and policy to support active and healthy lifestyles at the City of Greater Bendigo. As a founder of Bike Bendigo where Robert led innovative, equity focused activation, advocacy, events and creative programs and partnerships. Robert created the annual Bike Palooza Bendigo festival in 2017 and is a former conference committee member convening the conference in Bendigo in 2018.

**Walk, Cycle Greater Bendigo – Comfort, convenience, connections and culture**

In 2018 the City of Greater Bendigo initiated the development of a new Walking and Cycling Strategy. With a new focus on making everyday walking and cycling easier the City undertook a variety of engagement approaches to understand the needs and experiences of community members of all ages and abilities. The end result is the new Walk, Cycle Greater Bendigo Strategy with actions that emphasise comfort, convenience, connections and culture as the key ingredients in creating a walking municipality. Robert will provide insights into the engagement process and the application of comfortable, low traffic-stress approaches to network building linked to community experience, public space planning and urban greening initiatives.

11:00 ROOM 2 LEARNSHOP: IMPROVING TRAVEL OPTIONS

Luke Christensen, MRCagney

Luke Christensen is a Transport Planner based in MRCagney's Auckland office. He has 4.5 years' experience in public and active transport planning in cities across New Zealand and Australia. He helps cities resolve complex issues around allocation of contested street space by understanding how public transport, vehicles, walking, and cycling can be managed to improve urban outcomes.

**A new approach for the prioritisation of Bike and Ride Canberra**

Investment in Bike and Ride facilities are growing in popularity as governments seek to widen catchments for public transport and leverage the growing popularity of cycling. Too often, however, these can be provided in an ad-hoc manner resulting in disappointing levels of uptake.

This presentation outlines a new approach for selecting ideal locations for proposed Bike and Ride facilities, developed by MRCagney for use in Canberra in 2018.

Through an international best practice literature review, a series of principles was developed for the selection and planning of Bike and Ride locations in Canberra. These principles then fed into a scoring methodology, making use of spatial data and public transport utilisation data specific to Canberra's network. The tool then allowed a ranking of top sites for Bike and Ride in each suburb to be produced. Key findings from the research were that a combination of high-quality supporting bike infrastructure, and rapid public transport services would lead to the best results.

While developed specifically for Canberra, the methodology used in this project could easily be translated to other cities.

11:00 ROOM 2 LEARNSHOP: IMPROVING TRAVEL OPTIONS

Tess Lea & Nicholas Fogarty, University of Sydney

Associate Professor Tess Lea is an anthropologist who specialises in the anthropology of policy. Looking at extraction industries, everyday militarisation, houses, infrastructure (e.g. plumbing and roads) and schools, her work asks why the path to realising seemingly straightforward ambitions is so densely obstructed.

Nicholas Fogarty is a PhD Candidate at the University of Sydney. His research examines life-long attachments to sports cultures and the interpersonal politics active in movement.

**City Cycling - Policy cultures, traffic congestion and community solutions**

If Sydney is ever to become a city where bicycle commuting is taken-for-granted, something needs to change. Effectively, roads need to be more dominated by bicycles than by private cars. Funded as a part of an Australian Research Council Discovery grant, the University of Sydney specific research team provides a novel approach to generating potential policy resolutions, using a modified knowledge community approach (Whatmore and Landstrom 2011), or what we are calling dialogue groups. We will be talking to people with different urgencies around roads and public expenditure, drawn from policy communities and everyday road-users, to interrogate congestion without presupposing a solution or partisan position. These panels mobilise different forms of expertise to help generate innovative approaches to seemingly intractable infrastructure and planning problems, using an approach which is particularly useful where issues are contested, as with cycling, and new knowledge is required. By focusing on the City of Sydney, a site of arguably the most pressing congestion issues, we also aim to generate nationally usable insights.

Now three months into our fieldwork, we talk through the tensions that have emerged between research participants as a part of these dialogue panel sessions. We suggest that the very different ontological experiences of the road, that both industry professionals and everyday road-user participants provide, can form the basis for new conversations with which to make cycling a predominant transport option across Australian cities.

12:30 LUNCH

1:15 ROOM1: LEARNSHOP: SAFETY

Jennifer Bonham, University of Adelaide

Jennifer Bonham is a senior lecturer in human geography. Her research includes studies of gendering cycling, cycling subjectivities, spaces and spatial variations in cycling, and cyclist-related driver education. She is co-editor (with Marilyn Johnson) of *Cycling Futures*, and co-founder of the Australian Cycling Conference (later Australian Walking and Cycling Conference)

**Tools for a new mobility culture – Teaching learner drivers how to interact more safely with cyclists**

Researchers across the globe have demonstrated the efficacy of active travel in addressing social, economic and environmental issues. The most pressing of these issues in the Australian context are the continued growth of Greenhouse Gas emissions from the transport sector and the mental and physical health problems arising, in part, from sedentary lifestyles. Policy makers, practitioners, advocates and researchers are well aware that a lack of road safety is one of the key deterrents to active travel. Parents are reluctant to allow children to walk, cycle, scoot or skate to school because of concerns about traffic and personal safety. Further, many people in the broader community are fearful of sharing roads with (fast moving) motor vehicle traffic.

Appropriate infrastructure and a respectful mobility culture will enable people across all age groups to cycle. Producing a culture that accepts, values and facilitates safe, comfortable and timely journeys for all citizens involves, among other things, developing an understanding of the behaviour and needs of other road users. Cyclist-related driver education is one crucial element in creating a better understanding among drivers of the needs of cyclists.

*Cycle Aware* is a three-year, multi-partner, multi-disciplinary, mixed-methods study into how Australian novice drivers are taught to interact with cyclists. The first stage of the project identified a lack of advice given to novice drivers about interacting with cyclists. Where advice was given it was inconsistent or contradictory. The second stage examined motorist-cyclist crashes in three jurisdictions and found intersections, car door opening and manoeuvring from the footpath were major crash types for novice and experienced drivers. In the final stage of the project, an interactive, on-line driver training module has been developed and tested, ready to be incorporated into driver licensing processes nationally.

This presentation provides an overview of findings from the first two stages of the project then concentrates on the development and piloting of the *Cycle Aware* module. Module development was guided by the principle of active learning and involved two steps: 1) a review of interactive driver-training programs produced in Australia and overseas and 2) focus groups with learner drivers to gather feedback on what they found most engaging. In piloting the module with novice drivers, the project team sought to determine: efficacy and level of engagement with the module; and whether attitudes of novice drivers influenced their responses to module questions. The module was also piloted with experienced drivers to compare their attitudes and responses with novice drivers. Our presentation provides an overview of these findings.

1:15 ROOM1: LEARNSHOP: SAFETY

Sundance Bilson-Thompson, Freestyle Cyclists

Dr Sundance Bilson-Thompson obtained his PhD in theoretical physics in 2001 from the University of Adelaide. He has worked at the Perimeter Institute for Theoretical Physics in Canada, Seoul National University in South Korea, and the University of Adelaide. A bicycle is his preferred form of transport and in 2009/2010 he cycled 7200km across North America. In 2016 he stood as a federal senate candidate for the Australian Cyclists Party.

**Enforcement of helmet laws and cycling participation**

The idea that mandatory bicycle helmet laws (MHLs) discourage cycling is strongly contested by a few, fairly vocal, researchers. This presentation argues that the existence of MHLs themselves is not definitive, and when levels of enforcement are considered it is clear that stricter MHLs lead to a reduction in cycling.

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Andrew van den Berg, The Centre for Automotive Safety Research, The University of Adelaide

Andrew is an engineer, managing the Vehicle Testing Laboratory at the Centre for Automotive Safety Research with considerable experience in pedestrian safety, including design, reconstruction and testing. He has worked extensively with the Australasian New Car Assessment Program and vehicle manufacturers, to improve the pedestrian safety of vehicles. Andrew is developing capability for assessment of active safety systems such as Autonomous Emergency Braking, with a specific interest in testing vehicle systems designed to prevent pedestrian and cyclist's collisions.

**A future of zero injuries and deaths of pedestrians and cyclists**

Since 1999, pedestrian land transport injury hospitalisations have decreased by an average of 2.2% per annum (Kreisfeld and Harrison, 2019). However, bicyclist injury hospitalisations have increased by an average of 1.5% per annum (Kreisfeld and Harrison, 2019) and in more recent years the increase has been 4.4% per year (Johnson, 2019). Considering there has been a reported decline in cycling participation in recent years (Munro, 2017) the increase in bicyclist crashes is anomalous. But the future looks optimistic, there are solutions that can enable a reduction, or potentially even eliminate, injuries and fatalities among pedestrians and cyclists. Motor vehicles have been progressively improved in terms of passive protection for pedestrians and increasingly are being developed with active safety technology systems that will prevent crashes from happening with pedestrians and cyclists. Even when a crash cannot be avoided, these active and passive safety systems can mitigate the severity of any injuries that might be sustained, by reducing the vehicle impact speed and providing a more forgiving vehicle outer structure. This presentation explores work that the Centre for Automotive Safety Research has been conducting over the course of the last 20 years, including passive safety testing and, more recently, active safety system testing.



1:15 ROOM 2 LEARNSHOP: A CULTURE OF WALKING AND CYCLING

James Laing, GTA Consultants

**The Barriers We Ignore**

Despite some good intentions there is a real fear of change when it comes to designing and implementing active travel schemes in Australia. There are many flashy and ambitious walking and cycling strategies being banded about by various councils but when it comes to implantation the result is often found to contain too many compromises and desired outcomes are not achieved.

There are several reasons for this and often it is down to a reluctance to take a stand and challenge the status quo which leads to a poor product. Some of the barriers that are not addressed include;

- Leadership / Political will
- Following standards which are not fit for purpose
- Lack of meaningful engagement with the community
- Designing for car bias (parking, additional intersection lanes, signal phasing)
- Cost
- A lack of understanding the user experience
- Not knowing who you really designing for
- Not seeing wider opportunities

It doesn't have to be this difficult.

- International standards and post implementation studies should be followed
- Intersection layouts can be made safer without reducing capacity. Current layouts are based on improving capacity but are only adding storage and creating other conflicts.
- Changing out approach to signal phasing can make a huge difference to attracting new users.
- Designs unleashed on an unsuspecting public for consultation promote a defensive starting position.
- There are many low-cost treatments that can revolutionise the way a street performs. We can even do this without needed to create a project.
- We can look at schemes more holistically and improve access to our shops and restaurants and other trip generators. Creating a place to dwell can have a huge impact on our social connections, our high streets and the way we travel.

Breaking down the way we do things and looking at great examples as well as those with missed opportunities is key. If the approach to active travel design and implementation does not change then the benefits to our health, economy, and climate will never reach its potential.

1:15 ROOM 2 LEARNSHOP: A CULTURE OF WALKING AND CYCLING

Bill Gehling, Walking SA

Bill has a lifetime's love of walking and cycling, as well as a career in science, information technology and policy, measuring and counting things that matter

**Measuring walking and walkability**

Along with breathing clean air and drinking clean water, walking is so much a given in our lives that people rarely think about it. Until they can't. Bill will discuss why measuring walking is important, and the challenges in doing so. We will explore some practical methods to measure walking and how they differ from the ways we measure car and bicycle traffic. We will also discuss walkability, which are the causal factors that encourage or discourage walking in the community. We'll look at the new technologies becoming available to measure walking and walkability.

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1:15 ROOM 2 LEARNSHOP: A CULTURE OF WALKING AND CYCLING

Christina Sorbello, Love to Ride

Christina has over 15 years' experience as a strategic and social marketer. As Regional Manager for Love to Ride Asia Pacific, she has led some of the region's largest and most successful bike challenges including the 2019 New Zealand Challenge which engaged over 25,000 people. As a graduate of the School of Social Entrepreneurs, she is passionate about social impact and how effecting change in local communities can mean transformative shifts for our cities.

**Getting more people cycling – the next 4%**

Love to Ride are global leaders in cycling encouragement and behaviour change. Since 2007 they have worked across both the public and private sectors to engage people and workplaces, utilising a range of behavioural techniques and methodologies, to understand and influence active travel behaviour.

Their focus has been upon cycling as the single most positive and impactful form of sustainable travel. This paper will explore the findings using data from Australian and New Zealand programs over the last few years – to answer:

***Who are the next 4% of the population who will start cycling?***

To create the most effective and impactful national and regional/city programs, we need to focus our engagement and support on people who are most likely to take up cycling; but which groups make up the 'low hanging fruit' and are therefore the best people to target? And what role do regular and occasional riders have to play in inspiring the next group of new riders to participate?

By analysing the baseline and follow-up survey data from over 51,000 Love to Ride participants across Australia and New Zealand, we can determine to what extent different audiences have increased the amount of cycling they do and by how much. We can also learn more about what might motivate them to ride or ride more often, and what real and perceived barriers are getting in the way of progress.

By examining their characteristics, we can also discern which groups are most likely to take up cycling and what this tells us about who we should and shouldn't be targeting with our cycling promotions.

Much of what is created and delivered at Love to Ride focusses on encouragement and peer-to-peer support. This approach helps to foster strong connections and social interactions, ultimately resulting in big and lasting positive impacts for the individual and their community.

This will be an interesting presentation showcasing best practice behaviour change programs from Australia and New Zealand. It will provide participants with practical tips and pointers that they can take away and apply to the work they are doing to encourage cycling.

2:45 AFTERNOON TEA

3:00 ROOM 1: LEARNSHOP: INTERSECTIONS AND INFRASTRUCTURE

Hugo Nicholls, Monash University & ARUP

I work as a Consultant within the Advisory, Planning & Design group at Arup, a multi-disciplinary consulting firm, and as a Researcher at Monash University with the Institute of Transport Studies, investigating cyclist and driver behaviour on our roads.

I'm also co-founder of The Pedal Project, a platform to start conversations, to educate others about and to advocate for cycling. I want to get people thinking about their transport choices, their attitudes towards people riding bikes, and spread the right information about what riding a bike can do for our communities

**Nuances of Negotiations: How do bike riders and drivers interact at intersections?**

Intersections are complex spaces, in terms of infrastructure, road user behaviour and interactions. A particularly complex scenario known to be confusing is when a bike rider is turning left, and a driver is continuing straight. In this study, we investigated the interactions between cyclists at drivers at eight intersections across Melbourne with a range of infrastructure and road design configurations

Across the sites with dedicated bicycle lanes, the different interaction types can be grouped into three different types. All scenarios are in relation to an intersection. The cyclist is passing on the left a motor vehicle, the driver is indicating to turn left and:

- **Ride On:** The motor vehicle is still facing straight ahead, parallel to the bike rider's line of travel. The driver has slowed or stopped and is waiting for the bike rider to continue and pass safely on the left. This interaction aligns with the road rules, as the motor vehicle has not yet entered the arc of the turn, so the bike rider is not required to yield.
- **Twist and Turn:** The motor vehicle has begun to turn and is part way into the arc of the turn. However due to other activity (e.g. pedestrians crossing the road they are turning), the driver slows or stops and people ride in front of the motor vehicle to the left and pass through safely. This interaction is less clear in relation to the road rules and the interpretation of the word 'turning'.
- **Pause, Reflect, Ride:** The motor vehicle is now in the arc of the turn, and is in motion. Approaching bike riders yield to the driver, slowing and sometimes stopping, before proceeding through safely. This type of negotiation generally aligns with the road rules as the vehicle is in the act of turning left and bike riders are required to give way.

These interaction types will be unravelled in detail using supporting video examples. Potential implications for road rules, legitimacy of bike riders on the road, social norms and the importance of awareness and education about safe and intuitive cycling infrastructure will also be discussed.

3:00 ROOM 1: LEARNSHOP: INTERSECTIONS AND INFRASTRUCTURE

Penelope Bennet, Level Crossing Removal Project, Government of Victoria

I have worked predominantly in transport/traffic, in consultancy and construction in the UK, Singapore and Australia, from small schemes through to major projects such as the Singapore Marina Bay Sands Integrated Resort. I am now the project-wide Active Transport Engineer and Urban Design Advisory Panel member at the Victorian Level Crossing Removal Project. Being a CPEng with a MUP I take a multi-disciplinary approach. Car-free mum living the joy of a cycling/walking/PT life!

**Improving cycling and walking infrastructure design as part of integrated place outcomes on the Level Crossing Removal Project (LXRP)**

The Level Crossing Removal Project (LXRP) is tasked with delivering the largest rail infrastructure project in Victoria: removing 75 level crossings, upgrading/constructing more than 27 stations and associated improvement works. Simplistically, LXRP removes crossings but we also explore opportunities to improve, or at least future-proof for improved station access and walking and cycling upgrades on affected networks. LXRP has an Urban Design Framework (UDF) with principles and objectives to guide projects. The LXRP also has a Sustainability Policy and projects have been assessed using sustainability rating tools.

Numerous inputs are considered when developing design options, including Department of Transport station access and network planning requirements (using the Movement and Place framework). Walkability, bikeability and public transport connectivity, plus greenness (among others) are place qualities with a very strong association with place derived values. A pervasive issue is the constrained rail corridor or combined rail-road width, which inevitably is seen to result in trade-offs between landscaping and cycling and walking infrastructure. The criteria which are considered with respect to a level of service, are: safety, directness (or speed), coherence, attractiveness and comfort, Tree-shade and planting help achieve attractiveness and comfort criteria and will become increasingly important with climate change. Preferably all these elements can be delivered as they provide individual and synergistic benefits.

To help achieve the desired network and access hierarchy, with better user outcomes, LXRP has developed Project Requirement Specifications (PRS) and additional guidance. The PRS incorporates the two components of the access hierarchy: site planning and access planning. While shared paths have been implemented, dedicated infrastructure for both cyclists and pedestrians generally results in better outcomes for both pedestrians and cyclists. Likewise, provision of bicycle parking at stations is being re-evaluated. Again, carefully considered space allocation is needed to deliver suitable transport network infrastructure, and the contributory landscaping, for a higher level of service for users.

3:00 ROOM 2: LEARNSHOP: INFRASTRUCTURE

Fay Patterson, Bike Institute of South Australia

Fay Patterson specialised in traffic engineering for walking and cycling for 20 years. She is responsible for a number of innovative cycle infrastructure designs around Adelaide, and has been awarded both an Excellence Award and the Janet Brash Memorial Prize by the AITPM. Her research has informed Austroads and NSW RMS technical guidance.

Fay was the Chair of the Bicycle Institute at the time of the Frome Bikeway redesign.

**First-principles infrastructure design for the new Frome Bikeway**

A bikeshare to the construction of the Frome Bikeway in 2014 led to a change in Adelaide City Council's Lord Mayor – and council's political climate. Local interests campaigned for the Bikeway's removal, but were met by cyclists demonstrating in favour of the successful infrastructure, with an independent report finding the Bikeway had led to a 50% increase in cyclist numbers along the route. Council adopted the position of 'rebalancing' priorities, requiring a traffic lane to be reinstated and construction of a new bikeway at a much narrower width.

Faced with the choice between giving in and accepting inadequate infrastructure for cyclists or demanding road space in a move that could align drivers more broadly against bicycles in Adelaide, the Bicycle Institute instead sought a "middle way": a profile it could support. This would need to meet council's stated objectives, satisfy broader cyclist needs, and be delivered in a new, tighter corridor. But was this even possible?

The Bicycle Institute found that design guidance being quoted by council staff, councillors and cycling lobbyists failed to adequately address the specific capacity versus safety issues that would be critical to the successful functioning of the new Bikeway. In fact, no authoritative design guidance could be identified worldwide.

This session presents the capacity and safety principles used as part of first-principle design exercise undertaken by the Bicycle Institute for the Frome Bikeway. Adoption of the resulting design base by Council's staff underpinned our (contentious) decision to support a new bikeway design rather than engage in a culture war between drivers and cyclists.

The new Frome Bikeway has delivered on what seemed to be an impossible Council vision, restored goodwill between the disparate parts of the community and provided closure for what has been a difficult phase in Adelaide's recent past.

The Frome Bikeway is not without its flaws and compromises – which will also be discussed – but the Bicycle Institute is proud to have been instrumental in helping to create what is now an accepted, loved and admired bikeway from what was once an ideological battleground.

## DAY 2, FRIDAY 25<sup>TH</sup> OCTOBER

All sessions in Room 1 unless otherwise specified

### 3:00 ROOM 2: LEARNSHOP: INFRASTRUCTURE

Roger Vreugdenhil, University of Tasmania

Roger has an enduring interest in everyday urban cycling. Both his Masters and PhD theses focussed on everyday cycling in cities. Roger is a founding member of the Launceston Bicycle User Group and was the group's representative on the Launceston City Council Bike Committee for four years. He works as a researcher at the University of Tasmania and is community representative on the Hobart City Council Bicycle Committee.

#### **Surface matters: foregrounding surfaces in active urban travel**

Walking and cycling in urban areas entail constant interaction with the paved surfaces of roads, cycle paths and/or footpaths. Yet these pavement surfaces often barely intrude into our conscious experience of cycling and walking. While we do see and feel them on some level as we move through urban spaces, they are not afforded the same degree of attention as cars, traffic and pedestrians. This lack of attention to paved surfaces is also evident in social science research into how people practice and experience everyday cycling and walking.

Surfaces do matter and this presentation foregrounds the vital role of pavement surfaces in active and safe urban travel. Using recent cycling research, the presentation draws attention to the paved surfaces and surface treatments of urban spaces. For example, footpaths and road edges where the majority of walking and city cycling take place often present as a mosaic of rough, smooth, cracked, patched, gritty and even potholed surfaces. So called finished surfaces are often not that finished. The presentation explores surfaces beyond simply rough and smooth, good and bad, safe and unsafe to consider the part surfaces might play in planning for more walkable and bikeable neighbourhoods and cities.

### 4:00 PANEL

Address by Christian Haag, Bike SA Gold Sponsor

**Topic: What can we do to increase active travel in an ever-changing climate?**

Panellists: Professor Billie Giles-Corti, Associate Professor Paul Tranter & others (TBC)

### 5:00 END OF CONFERENCE

## CONFERENCE SUPPORTERS

