

WALGA Forum: Sustainable Transport and Emerging Technologies



Date: Wednesday, 1 August 2018
Time: 9:00am – 3:30pm (Registration from 8:30am)
Venue: Perth Convention and Exhibition Centre, 21 Mounts Bay Road, Perth
Cost: \$95.00 (Incl GST)

ABOUT THE FORUM

Please join us for this fantastic opportunity to hear about Local Government sustainable transport initiatives, from strategic planning to delivering improved pedestrian and cycling environments for local communities. The event will include an afternoon session on transformative technologies that will disrupt our current transport systems, including electric and autonomous vehicles, and how to plan and prepare for their adoption.

Expert speakers include representatives from the Local Government Authorities of Perth, Melville, Cockburn, Canning and Albany, together with the Planning and Transport Research Centre (UWA), Curtin University Sustainability Policy Institute, Western Power, CSIRO, RAC, and the Heart Foundation. The event will include a morning tea and lunch break where attendees can network with others in their field, and question sessions with all presenters.

PROGRAM

- 9:00am** **Welcome and introduction**
Melanie Davies, Biodiversity and Sustainability Project Officer, WALGA
- 9:05am** **Sustainable transport policy in the local and international context**
Professor Sharon Biermann, Director, Planning and Transport Research Centre
- 9:35am** **Integrated transport planning in a fast growing local authority**
Andrew Trosic, Manager Strategic Planning, City of Cockburn
- 10:10am** **Stepping up to the challenge of walkable communities**
Jo Appleby, Manager Planning for Active Living, Heart Foundation
Claire Franklin, Principal, Franklin Planning
- 10:40am** **Morning tea**
- 11:10am** **Implementing cycling infrastructure in constrained environments**
Noah McDonald, Senior Transport Planner, and Melissa Rachan, Active Transport Planner, City of Perth
- 11:40pm** **Integration of bicycle boulevard planning and water sensitive urban design**
Martin Spencer, Senior Strategic Urban Planner, City of Melville
- 12:10pm** **TravelSmart in the cycle city of Albany – a regional perspective on active transport**
Julie Passmore, TravelSmart Officer, City of Albany
- 12:40pm** **Lunch**



- 1:30pm** **Autonomous transit for corridors and local precincts: a Perth case study**
Professor Peter Newman AO, Curtin University Sustainability Policy Institute
Etienne Brits, Executive Manager Strategic Planning, City of Canning
- 2:00pm** **The Australian transition to electric vehicles**
Lia Hilton, Senior Insight Analyst, Western Power
- 2:30pm** **RAC automated vehicle program and electric highway**
Anna Sawyer, Manager Road Safety, Royal Automobile Club of WA (RAC)
- 3:05pm** **Hydrogen as a sustainable transport fuel**
Dr Sarb Giddey, Principal Research Scientist, CSIRO
- 3:35pm** **Close of Event**

PRESENTATION OVERVIEW

Professor Sharon Biermann, Director, Planning and Transport Research Centre (PATREC) at the University of Western Australia will provide a strategic overview of current and emerging challenges and opportunities facing smart and sustainable transport planning and policy-making, both locally and internationally. Self-drive modes, mobility as a service, first and last mile solutions, gig economy, on-line retail and drone services are some of the emerging trends which challenge traditional city functioning and management. Enabled by technology and big data availability, researchers and policy-makers are well positioned to develop and test emerging solutions. Sharon will highlight some collaborative policy-research initiatives in the areas of integrated land use and transport futures, smarter personal travel decisions, freight system integration and network optimisation and intelligence.

Andrew Trosic, Manager Strategic Planning, City of Cockburn will discuss how the strategic planning, infrastructure and engineering disciplines of the City of Cockburn work collaboratively to achieve integrated transport planning for a fast growing district. Andrew will outline how the City partners with State and Federal Government agencies to coordinate and leverage action to solve transport challenges. Deliberative discussion processes with the community and business has been key to developing a shared vision for integrated transport initiatives, and ensuring they are community focused and supported. Andrew will discuss the continued emergence of Cockburn Central as a regional centre, and the cross-agency partnerships to deliver the scheduled METRONET link between Cockburn Central and Thornlie Stations. Andrew will also outline a case study on the repurposing of road space to form a boulevard road befitting of a town centre, and public involvement to achieve a desired outcome.

Jo Appleby, Manager Planning for Active Living, Heart Foundation and Claire Franklin, Principal, Franklin Planning will discuss how movement networks within and between neighbourhoods need to be accessible, safe and cohesive. There are eight key design features that promote active transport such as walking, as showcased in the Heart Foundation's award-winning Healthy Active by Design program. Jo and Claire will discuss why some street designs make walking more likely and encourage residents to walk more. They will provide case studies on Local Governments and other agencies that have applied the design features in their planning and policy making frameworks for new developments and established neighbourhoods, and created environments that encourage walking by



local communities. The importance of specific elements such as infrastructure, street trees, shelter, street furniture, lighting and overall amenity will also be discussed.

Noah McDonald, Senior Transport Planner, and Melissa Rachan, Active Transport Planner, City of Perth will discuss the key design features of a number of important cycling infrastructure projects recently implemented by the City of Perth. These include initiatives new to Western Australia, such as dedicated Copenhagen style cycling lanes, bicycle head-start boxes and armadillos at potential vehicle conflict points. Supported by the City of Perth's Cycle Plan 2029, the initiatives aim to ensure Perth is a cycle friendly city, with a convenient and direct cycle network. Monitoring has shown a 50% increase in cyclists in some of the target locations. Noah and Melissa will also discuss options for the implementation of low cost 'quick win' projects that can be achieved in constrained environments.

Martin Spencer, Senior Strategic Urban Planner, City of Melville will discuss how the Department of Transport's Safe Active Streets Bike Boulevard program will support the City to create a low speed environment linking two key activity centres within the municipality. The connection, passing both a primary and secondary school, provides opportunities for a safer cycling and walking environment for students and families through traffic reduction and lower speeds. It also offers the opportunity to collaborate with the schools and adjoining stakeholders on landscaping, tree planting and water sensitive urban design features, to increase amenity for users. Working through the Safe Active Street process, in partnership with State government agencies, has allowed exploration of opportunities to meet the programs mandates for connecting schools, tourist attractions, recreation facilities and activity centres. Martin will discuss some of the challenges raised during the project planning process, and how identified barriers were resolved.

Julie Passmore, TravelSmart Officer, City of Albany will discuss how the City of Albany was Western Australia's first regional local government to employ a TravelSmart Officer. The City has worked to guide a car-centric community towards active transport. From a cycle strategy and share the road safety campaigns to e-Bikes and a cycling Mayor, Julie will journey through the successes and challenges of TravelSmart in a regional centre.

Professor Peter Newman AO, Curtin University Sustainability Policy Institute (CUSP) and Etienne Brits, Executive Manager Strategic Planning, City of Canning will discuss how the world is about to adopt a new approach to transport, where smart systems are enabling 'local shared mobility'. Light rail technology has improved rapidly in recent years, with the invention of driverless guidance systems and trackless trams, which use rubber tyres instead of metal tracks. As trackless trams can run on asphalt or concrete using magnetic strips or sensors painted onto the ground, no major earthworks are required and they can be installed quickly. Peter will provide examples of the adoption of trackless trams internationally, and discuss how the technology is becoming more affordable, with real potential to be implemented locally in Perth. The City of Canning is one of five Local Governments that have partnered with CUSP to investigate financing of a proposed corridor through a consortium model, and Etienne will discuss why trackless trams are a highly applicable sustainable transport option for local communities.

Lia Hilton, Senior Insight Analyst, Western Power will reflect on how 2017 was a year full of momentum for electric vehicles with many new announcements, but what has happened now we're firmly in 2018? Lia will outline the approach that leading countries are taking in moving their passenger and commercial fleets to electric vehicles, and look at the price point at which electric vehicles are expected to become cost competitive in Australia. Closer to home, Lia will discuss research that has evaluated the barriers and opportunities relevant to the Western Australian community, including considerations for public charging points, the role of hybrid versus full electric vehicles, and how to influence consumer behaviour.



Anna Sawyer, Manager Road Safety, Royal Automobile Club of WA (RAC)

will discuss the RAC's automated vehicle program and electric highway. In August 2016, with support from the State Government and the City of South Perth, RAC launched Australia's first Automated Vehicle Trial, Intellibus. The trial has three aims, three stages, and three phases along its South Perth location, with each phase increasing in complexity. Anna will discuss the trial learnings and outcomes to date. In addition, Anna will discuss the RAC Electric Highway®, a network of 11 publically accessible electric vehicle fast-charging stations between Perth and Augusta. Installed in 2015, RAC partnered with a number of local governments with the shared goal of opening up the South West to electric vehicle drivers. Anna will outline the delivery process and the mechanisms needed to plan for and support electric vehicle take up, including the role of appropriate incentives, CO2 emissions standards for light vehicles and the provision public electric vehicle charging facilities.

Dr Sarb Giddey, Principal Research Scientist, Electrochemical Energy Systems, CSIRO will discuss hydrogen as a renewable energy power source for various transport applications. Sarb will explain the worldwide interest and activities in this area, the market divide between the electric and hydrogen fuel cell vehicles, and the challenges of mass scale adoption. Sarb will conclude with projections on the worldwide deployment of hydrogen fuel cell vehicles and suggestions on how this technology can play a critical role in reducing Western Australia's transport related emissions.