ATRF 2022 PROGRAM

WEDNESDAY 28 SEPTEMBER	
8.00am – 5.00pm	Registration Desk Open **Location:** MAB, Tonsley Campus, Flinders University
8.00am – 9.00am	Arrival Tea/Coffee & Networking **Location:** MAB, Tonsley Campus, Flinders University
9.00am – 10.30am	Opening Plenary **Chair:** Rocco Zito **Room:** Theatre 1
9.00am – 9.15am	Forum Welcome including Acknowledgement of Country **Professor Rocco Zito**, Flinders University
9.15am – 10.15am	Opening Presentation - Beyond the BCR: Taking an outcomes focussed approach to infrastructure assessment **David Tucker**, Chief of Investment Assessment, Infrastructure Australia
10.15am – 10.30am	Housekeeping
10.30am – 11.00 am	Morning Tea **Location:** MAB, Tonsley Campus, Flinders University

ATRF 2022 PROGRAM

WEDNESDAY 28 SEPTEMBER (CONTINUED)				
11.00am – 12.20pm	Concurrent Session 1			
	Session 1A: Advances in Transport Technology	Session 1B: Transport and Environment (Active Travel)	Session 1C: Rail Transport	Session 1D: Traffic Modelling
	Room: Theatre 2	**Room:** 1.04 - 1.05	**Room:** 1.01-1.03	**Room: Theatre 1**
	Chair: Nick Holyoak	**Chair:** Alexander Paz	**Chair:** Graham Currie	**Chair:** Pedro Camargo
11.00am – 11.20am	Autonomous Vehicles and Ride-pooling: Insights from a qualitative study [14] Xiaolin Tang, The University of Western Australia	Can kerbside bicycle lanes increase cycling during a pandemic? A case study from Melbourne [64] Alexa Delbosc, Monash University	Exploring the relative performance of regional passenger rail in New South Wales and Victoria [10] Graham Currie, Public Transport Research Group, Monash University	15 Comparison of time-series data imputations for real-time traffic application Zay Maung Maung Aye, Saeed Asadi Bagloee and Majid Sarvi
11.20am – 11.40am	Public preferences for testing and trialling of CAV technologies [66] Ali Ardeshiri, UniSA Business School	The narrative change of sustainable practices: the case of bicycle lanes implementation [81] Miguel Loyola, The University of Sydney	Forecast Accuracy of Recent Australian Passenger Rail Projects [41] Yadi Wang, The University of Sydney	Threshold-free Anomaly Detection on Traffic Flow Data with Reinforcement Learning [39] Dan He, The University of Queensland
11.40am – 12.00pm	Consumer preferences for different CAV technologies and service models [67] Ali Ardeshiri, UniSA Business School		Ridespace: Predicting short-term rail passenger crowding using Machine Learning [82] Sam Pardy, Department of Transport Victoria	18 Abnormality Detection in Urban Traffic Data: A Review Iman Taheri Sarteshnizi, Majid Sarvi, Saeed Asadi Bagloee and Neema Nassir
12.00pm – 12.20pm	97 How are Australian cities preparing for Autonomous Vehicles? A systematic review of transport and planning policies Sanaz Nikfalazar and Md Kamruzzaman	NIMBYs, YIMBYs & green bridges: Local attitudes towards large-scale active transport infrastructure on the Gold Coast, Australia [95] Madison Bland, Griffith University	The Development of Rail Path Modelling [87] Don Wignall, Transport Futures	Online Traffic Incident Prediction with Hybrid Graph-based Neural Network and Continual Learning [90] Dan He, The University of Queensland
12.20pm – 1.10pm	Lunch **Location:** MAB, Tonsley Campus, Flinders University			

ATRF 2022 PROGRAM

WEDNESDAY 28 SEPTEMBER (CONTINUED)				
1.10pm – 2.10pm	**Plenary 2** **Chair:** Liz Ampt **Room:** Theatre 1			
1.10pm – 2.10pm	Connected technologies and the ability for accessibility **Damian Hewitt**, Head of Smart Cities and Future Mobility, SAGE Group **Cassie Hames**, Programmer, SAGE Automation			
2.10pm – 2.20pm	**Room change time**			
2.20pm – 3.40pm	**Concurrent Session 2**			
	Session 2A: MaaS and Shared Mobility	**Session 2B: Road Safety**	**Session 2C: Public Transport**	**Session 2D: Freight and logistics**
	Room: Theatre 1	**Room:** 1.01 - 1.03	**Room:** Theatre 2	**Room:** 1.04-1.05
	Chair: David Hensher	**Chair:** Matthew Burke	**Chair:** Brendan O'Keeffe	**Chair:** Lindsay Oxlad
2.20pm – 2.40pm	Data in Mobility as a Service: A Real-World Trial in Queensland, Australia [63] Maisie Rahbar, The University of Queensland	Beyond Proximity: a child-friendliness index for local living policies in Australasian cities [57] Hulya Gilbert, La Trobe University	Where did all the passengers go? - transit commuter transitions through COVID-19 [38] Graham Currie, Public Transport Research Group, Monash University	The need for collaborative research to develop the transition path for hydrogen trucks in Australia [37] Andrew Tessler, BIS Oxford Economics
2.40pm – 3.00pm	Identifying MaaS schemes that maximise benefits to society through an economic appraisal framework [5] Sae Chi, University of Western Australia and Samuel Mazzer, Hadron Group	Evidence for designing safer intersections for pedestrians using data analytics, video processing, and simulation [86] Bahman Lahoorpoor, The University of Sydney	Co-evolution of Sydney's public transport access and demand [91] David Levinson, The University of Sydney	Evaluation of governments' role in coping with city logistics problems [42] Russell Thompson, The University of Melbourne
3.00pm – 3.20pm	Putting the user at the heart of decision making: A reflection on applying the double diamond to enhance understanding of the customer for Mobility as a Service [111] Chris Chinnock, Mott MacDonald	A comparative road safety study of seven Adelaide metropolitan high schools [83] Andrew Allan, University of South Australia	19 Investigation into public transport fare noninteractions using large-scale automatively collected data Tianwei Yin, Neema Nassir, Joseph Leong, Egemen Tanin and Majid Sarvi	Evaluating initiatives for improvement of urban freight deliveries: A case study of Sydney metropolitan area [71] Russell Thompson, The University of Melbourne
3.20pm – 3.40pm	The impact of high-occupancy lanes on the uptake of on-demand ridesplitting services [33] Elham Hajhashemi, The University of Melbourne	Can movement types provide better insights than DCA (Definitions for Coding Accident) for crashes involving pedestrians? [100] Sadia Afroza, Deakin University	Evidence of changes in travel behaviour after the introduction of a new transit mode: Canberra's light rail [94] Durba Kundu, The University of Sydney	Modelling rural freight [7] Robert Nairn

ATRF 2022 PROGRAM

WEDNESDAY 28 SEPTEMBER (CONTINUED)				
3.40pm – 4.00pm	Afternoon Tea **Location:** MAB, Tonsley Campus, Flinders University			
4.00pm – 5.00pm	Concurrent Session 3			
	Session 3A: Transport Economics	**Session 3B: Transport Surveys**	**Session 3C: Transport & Land Use**	**Session 3D: Traffic Modelling**
	Room: Theatre 1	**Room: 1.04 - 1..05**	**Room:** 1.01-1.03	**Room: Theatre 2**
	Chair: Andrew Tessler	**Chair:** Alexa Delbosc	**Chair:** Andrew Allan	**Chair:** David Hensher
4.00pm – 4.20pm	Productivity differentials for valuation of move to more (or less) productive jobs [108] Thao-Mi Bui, KPMG	Spatial Impacts of COVID-19 on Long Term Commuting in Melbourne [11] Graham Currie, Public Transport Research Group, Monash University	City-shaping transport for good in growth areas: A national agenda beyond the commuter car park [68] Matt Faber, Niobe Consulting	Network resilience analysis with large streams of mobility data and Open-Source software [43] Pedro Camargo, Outer Loop Consulting
4.20pm – 4.40pm	The economic value of stay time [29] Helen Ye, Aurecon	Designing a multi-year travel behaviour change program: lessons and opportunities [110] Liz Ampt, Concepts of Change	A methodological approach to field optimisation trials for wildlife monitoring in a longitudinal highway study [75] Christopher Johnson, Griffith University	49 Estimating Macroscopic Fundamental Diagram solely from probe vehicle trajectories Elham Saffari, Mehmet Yildirimoglu and Mark Hickman
4.40pm – 5.00pm	Producer Surplus in Transport Economics [9] Robert Nairn	The case for qualitative methods in transport research [48] Jennifer Kent, The University of Sydney	An empirical model of land use and public transit co-development in Sydney [50] David Levinson, The University of Sydney	Data-driven evaluation model of safety risks at signalised intersection [27] Neema Nassir, The University of Melbourne
5.00pm	Close Day One			
5.00pm – 6.30pm	Welcome Reception **Location:** MAB, Tonsley Campus, Flinders University			

ATRF 2022 PROGRAM

THURSDAY 29 SEPTEMBER				
8.00am – 5.00pm	Registration Desk Open **Location:** MAB, Tonsley Campus, Flinders University			
8.00am – 9.00am	Arrival Tea/Coffee & Networking **Location:** MAB, Tonsley Campus, Flinders University			
9.00am – 10.00am	**Plenary 3** Chair: Liz Ampt Room: Theatre 1			
9.00am	Day 2 Welcome Lindsay Oxlad, Co-Chair, Local Organising Committee/ Lindsay Oxlad Consulting			
9.00am – 10.00am	Cities and future mobility **Willem Snel**, Technical Director, Cities and Future Mobility, Mott MacDonald			
10.00am – 10.10am	**Room change time**			
10.10am – 11.10am	Concurrent Session 4			
	Session 4A: Transport Economics	Session 4B: Transport Demand & Travel Behaviour	Session 4C: Public Transport	Session 4D: Traffic Modelling
	Room: Theatre 1	**Room: 1.01 - 1.03**	**Room: Theatre 2**	**Room:** 1.04-1.05
	Chair: Patrick Tsai	**Chair:** David Levinson	**Chair:** Andrew Allan	**Chair:** Sekhar Somenahalli
10.10am – 10.30am	Urban Impacts of Accessibility - Brisbane's Green Bridges Program [55] Brendan O'Keeffe, Brisbane City Council	Understanding Perceptions of Bus Service Attributes in Major Australian Capital Cities [30] Knowles Tivendale, Movement & Place Consulting	Public transport bunching: A critical review with focus on methods and findings for implications for policy and future research [77] Neema Nassir	What causes slow-down on two-way two-lane expressways? [20] Jian Xing, Nippon Expressway Research Institute
10.30am – 10.50am	Measuring Road Travel Time Reliability Benefits in Victoria [56] David Prentice, Victorian Department of Transport		Cashless Payments for Public Transport: a systematic review with learnings from early adopter cities [107] Matthew Burke, Griffith University	Demand and state estimation for perimeter control in large-scale urban networks [65] Sakitha Kumarage, The University of Queensland
10.50am – 11.10am	It's All Good: Considering negatives in the cost-benefit analysis framework [44] Anthony Vine, Tom Frost, Nine Squared	98 Rail Replacement Bus Patronage: counting and forecasting Zahra Shahhoseini, Kent Lai, Richard Rossmann, Paul Reichl, Christopher McCarthy, Franz Konstantin, Yehuda Weizman, Adin Tan, Prem Jayaraman, Felip Marti, Nathaniel Peiffer, Hadi Ghaderi and Hussein Dia	An examination of an approach to assist transit in maintain political legitimacy by achieving reliability for passengers and efficiency for the public [24] Mathew Hounsell, University of Technology Sydney	Deep-learning methods for long-term traffic flow forecasting [25] Xiao Zheng, The University of Melbourne

ATRF 2022 PROGRAM

THURSDAY 29 SEPTEMBER (CONTINUED)				
11.10am – 11.40am	Morning Tea **Location:** MAB, Tonsley Campus, Flinders University			
11.40am – 12.40pm	Concurrent Session 5			
	Session 5A: Transport and the Environment	Session 5B: Transport Demand and Travel Behaviour	Session 5C: Public Transport	Session 5D: Road Safety
	Room: Theatre 1	**Room:** 1.01 - 1.03	**Room:** Theatre 2	**Room:** 1.04-1.05
	Chair: Matthew Burke	**Chair:** Alexander Paz	**Chair:** Graham Currie	**Chair:** Jennifer Kent
11.40am – 12.00pm	Driving and charging an EV in Australia: A real-world analysis [80] Thara Philip, The University of Queensland	Developing a shopping destination choice model for people living in Metropolitan Melbourne [28] Annitta Lin, The University of Melbourne	The land use effects of public transport infrastructure: Coherence and divergence between subjective and objective assessments [51] Abdulrhman Gbban, Monash University	Optimising Random Breath and Drug Tests Scheduling in Networks [93] Hongjun Yu, The University of Sydney
12.00pm – 12.20pm	The emergence of EVs: the interaction between the electricity and transport sectors [74] Martin Chow, HoustonKemp	101 Quantification of Disruption, a scoping paper Zahra Shahhoseini, Richard Rossmann, Paul J Reichl and Manmeet Bedi	A Multi-Criteria Decision Analysis for selecting a bus-based transit corridor supporting transit-oriented developments (BTODs): an Australian case study [99] Munshi Nawaz, University of South Australia	How to think about road accidents - What happens and why - The initiating and reacting road users [22] Paul Hutchinson, The University of Adelaide
12.20pm – 12.40pm	New simulation tool of electric taxi services for analysis of charging infrastructure placement [32] Andrea Raith, University of Auckland	Driver Perception of Food Delivery Riders [104] Shabna SayedMohammed, Qatar University	Case Study: Standard deviation as a reliability measure for public transport managed by headways [21] Mathew Hounsell, University of Technology Sydney	Traffic congestion and road safety in urban areas: an analysis of Melbourne [85] Long Truong, La Trobe University
12.40pm – 1.40pm	Lunch **Location:** MAB, Tonsley Campus, Flinders University			
12.40pm – 1.40pm	Special Session: ATRF Futures - Standing Committee on Public Transport The ATRF Executive have been considering ways to expand and improve the way ATRF works. One idea is to run research topic standing committees to encourage good research in a specific field much like the model adopted at the US Transportation Research Board. This meeting is an open discussion of this idea which focuses on a Standing Committee on Public Transport Research. All who are interested are invited. Room: TBC			

ATRF 2022 PROGRAM

THURSDAY 29 SEPTEMBER (CONTINUED)				
1.40pm – 2.40pm	**Plenary Session 4** Chair: Liz Ampt Room: Theatre 1			
1.40pm – 2.40pm	Building systems and infrastructure for tackling place-based inequities **Prof Ingrid Burkett**, Co-Director/Professor, Yunus Social Business Centre, Griffith University			
2.40pm – 2.50pm	Room change time			
2.50pm – 3.50pm	Concurrent Session 6			
	Session 6A: Social Issues in Transport	Session 6B: Transport Demand and Travel Behaviour	Session 6C: Active travel	Session 6D: Traffic Modelling
	Room: 1.04 - 1.05	**Room:** Theatre 2	**Room:** 1.01-1.03	**Room: Theatre 1**
	Chair: Alexa Delbosc	**Chair:** David Hensher	**Chair:** Jennifer Kent	**Chair:** Andrew Allan
2.50pm – 3.10pm	Housing prices and transport policy in Canberra [8] Robert Nairn	A multi-objective optimization framework for assisted estimation of discrete choice models [58] Prithvi Bhat Beeramoole, Queensland University of Technology	How can economy theorems empower cycling infrastructure planners? [72] Li Meng, University of South Australia	Evaluating the effect of time-dependent utility on the performance of the route choice model [73] Chintan Advani, Queensland University of Technology
3.10pm – 3.30pm	Defining transport disadvantage in Perth: early findings [45] Sae Chi, The University of Western Australia	Frozen randomness at the individual utility level [70] Jan Zill, Veitch Lister Consulting	Assessing walkability in Bandar Sunway [88] Susilawati Susilawati, Monash University Malaysia	60 Multivariate Time-varying Kalman Filter Approach for Cycle-based Maximum Queue Length Estimation Wanuji Abewickrema, Mehmet Yildirimoglu and Jiwon Kim
3.30pm – 3.50pm	Exploring the Social Licence to Operate Buses in Australian Cities [31] Hesara Weliwitiya, Movement & Place Consulting	Beyond the inner ring: air, coach and train services to regional centres further from state capitals [35] Philip Potterton, Economic Connections	Valuing the Walk Environment [105] Matthew Jones, Transport for NSW	Development of alternative methods for road condition monitoring [96] Helena Angerer, Nuremberg Institute of Technology
3.50pm – 4.10pm	Afternoon Tea **Location:** MAB, Tonsley Campus, Flinders University			

ATRF 2022 PROGRAM

THURSDAY 29 SEPTEMBER (CONTINUED)				
4.10pm – 5.10pm	Concurrent Session 7			
	Session 7A: Transport Economics	Session 7B: Advances in Transport Technology	Session 7C: Parking	Session 7D: Traffic Modelling
	Room: Theatre 1	**Room: 1.04 - 1.05**	**Room:** 1.01-1.03	**Room: Theatre 2**
	Chair: Patrick Tsai	**Chair:** Matthew Burke	**Chair:** Andrew Allan	**Chair:** Sekhar Somenahalli
4.10pm – 4.30pm	Land use after ATAP 08 – suggestions for implementation and review [78] Alex Svanberg, Transport for NSW	The use of automated planning for the strategic management of transport systems in developing countries [16] Andrew Tessler, BIS Oxford Economics	Do apartment residents have enough car parking? Assessing car parking adequacy in Australian cities [84] Chris De Gruyter, RMIT University	Exploring factors influencing bus travel time on mixed traffic [92] Yaiza Montero-Lamas, Universidade da Coruña
4.30pm – 4.50pm	Local economic appraisal: A study in boundary effects [54] Lee Jollow, RPS	23 Implementation of ZigBee-Based WSN to Enhance the Performance of SCATS-Compatible Intelligent Traffic Controllers Hossein Parineh, Majid Sarvi and Saeed Asadi Bagloee	Perth Parking Policy: Towards 25 Years [106] Courtney Babb, Curtin University	62 Impact of human drivers on automated vehicles' traffic flow: An integrated driving simulator study Saeed Mohammadian, Zuduo Zheng, Dongyao Jia, Md. Mazharul Haque, Mehmet Yildirimoglu and Andry Rakotonirainy
4.50pm – 5.10pm	The re-emergence of transport costs as an influence on industrial location within a low carbon economy [47] Christopher Day, The University of Sydney	Road Safety Benefits with the Deployment of Vehicle Communication Technologies [26] Neema Nassir, The University of Melbourne		A cooperative eco-driving system for mixed traffic on urban roads [40] Zhiwei Yang, The University of Queensland
5.10pm	**Close Day Two**			
6.30pm – 11.00pm	Conference Dinner **Location:** Victoria Room, Hilton Adelaide			
6.30pm – 7.00pm	**Pre-dinner drinks**			
7.00pm – 11.00pm	**Dinner** Dinner Speaker: Joining the dots, **Dr Jane Lomax-Smith**, Don Dunstan Foundation			

ATRF 2022 PROGRAM

FRIDAY 30 SEPTEMBER				
8.00am – 1.00pm	Registration Desk Open **Location:** MAB, Tonsley Campus, Flinders University			
8.00am – 9.00am	Arrival Tea/Coffee & Networking **Location:** MAB, Tonsley Campus, Flinders University			
9.00am – 10.10am	Plenary Session 5 **Chair:** David Hensher **Room:** Theatre 1			
9.00am	Day 3 Welcome **Name,** Nick Holyoak, Co-Chair, Local Organising Committee/ Flinders University			
9.00am – 10.00am	Transforming transportation forecasting using the Internet of Things **Nic Kaliszewski**, Transport Analytics, SA Dept for Infrastructure and Transport			
10.00am – 10.10am	**Room change time**			
10.10am – 11.10am	Concurrent Session 8			
	Session 8D: Transport Economics	Session 8A: Transport Models	Session 8B: Road Safety	Session 8C: Urban Traffic Issues
	Room: 1.01 - 1.03	**Room:** Theatre 1	**Room: Theatre 2**	**Room:** 1.04-1.05
	Chair: Peter Tisato	**Chair:** David Hensher	**Chair:** Lindsay Oxlad	**Chair:** Brendan O'Keeffe
10.10am – 10.30am	61 The New Zealand land transport policy: Is the regime delivering on the intended outcomes? Ofori Ansu-Gyeabour, Andries van Heerden	A practical approach to cost functions in large scale models: A case study from the Tactical Adelaide Model (TAM) [112] Mohammad Saifuzzaman, Aimsun	Spatial targeting method for road safety education to reduce fatal and serious injury crashes [34] Sekhar Somenahalli, University of South Australia	Impact of Speed Hump on Noise Pollution [103] Mohamed Jassim Haroon, Qatar University
10.30am – 10.50am		A scalable and flexible single-level framework for O-D matrix inference using IoT data [69] Wei Sun, University of South Australia	Sizing the road crash cost iceberg [109] Neil Douglas, Douglas Economics	Simulated Annealing for Modeling Crash-Counts [36] Zeke Ahern, Queensland University of Technology
10.50am – 11.10am				
11.10am – 11.40am	Morning Tea **Location:** MAB, Tonsley Campus, Flinders University			
11.40am – 1.00pm	Plenary 6: Closing Plenary **Chair:** Neil Douglas, President, ATRF Inc **Room:** Theatre 1			
11.40am – 12.40am	Awards Presentation			
12.40am – 12.50pm	Handover to ATRF 2023 Hosts			
12.50pm – 1.00pm	Official Close			
1.00pm – 1.45pm	Farewell Lunch **Location:** MAB, Tonsley Campus, Flinders University			