

Queensland Future Conversations: Visioning Future Transport Mobility

15 March 2023. Speakers' Hall, Queensland Parliament House, Brisbane.



MC: Paul Turner



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Queensland Future Conversations



Brisbane, FOMO and our Transport Future

Prof Matthew Burke

Deputy Director, Cities Research Institute

Transport Academic Partnership Chair
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Fear of Missing Out (FOMO):

def. *noun, informal*: “fear of not being included in something (such as an interesting or enjoyable activity) that others are experiencing” [Merriam-Webster]





Higher Vehicle Speeds Increase Likelihood of Pedestrians/Cyclists Dying in Collisions



10%
likelihood of
pedestrian/cyclist fatality



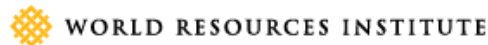
30%
likelihood of
pedestrian/cyclist fatality



85%
likelihood of
pedestrian/cyclist fatality



Source: Cities Safer by Design (2015)
wri.org/publication/cities-safer-design



Stopping Transit-Oriented Developments



Transit oriented development guide



‘Sports rorts on steroids’: scathing report finds Coalition car park program not effective or merit-based

Labor says audit office has uncovered ‘ineligible projects, rampant under-delivery and political targeting’



An Australian National Audit Office report finds the Coalition’s commuter car park program selection process was ‘not designed to be open or transparent’. Photograph: Graeme Robertson/The Guardian

Not one of the 47 commuter car park sites promised by the **Coalition** at the 2019 election was selected by the infrastructure department, with projects worth \$660m handpicked by the government on advice of its MPs and candidates.

Karp, 2021 (The Guardian)



Salisbury
Brisbane

Burke, 2022

Tallebudgera
Gold Coast

Stolz, 2021 (GC Bulletin)





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FIVE NEW Industry PhDs on “Transport for Major Events”

Travel Demand Modelling (x2)

MaaS & Tourism

Wayfinding

Micromobility and Events



Queensland Government

Department of Transport and Main Roads



Brisbane City Council



dotdash



Wallets on wheels: city visitors who use e-scooters more spend more

Published: June 22, 2021 6:11am AEST

Japhet Tetteh/Research Mobility. Author provided (no reuse)

Shared e-scooters are becoming common across Australia and in major cities around the world. Initial safety concerns about e-scooters left some councils wary, but early results from our research survey shows major benefits from e-scooters for tourists and local economies.

We already knew visitors and local residents use bike-sharing schemes differently. The effects for tourist attractions and visitors – an increase in visits and better experience – are complementary. But that’s bikes.

Until now there has been limited evidence that e-scooters help tourists either visit more local attractions or spend more. Australia’s first e-scooter trials began in Brisbane as recently as 2018. Services have since been launched in South

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FOMO means we must not:

1. Let space-efficient light-EVs into our cities
2. Make 30 the new 50 (km/h)
3. Build Transit-Oriented Suburbs and Centres



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Queensland's Path to a Transport Innovation Ecosystem

Ronald Schroeter
CARRS-Q, QUT

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Less Waste

Safety

Environment

Society

Mobility

Carbon
Reduction

Equity

Transport & Mobility

Efficiency

Industry

Resilience
Driver Shortages

Productivity

Zero Emissions

Zero Fatalities & Injuries

Transport & Mobility

Zero Emissions

Zero Fatalities & Injuries

Transport & Mobility

Zero Gold Medals

Zero Emissions

Zero Fatalities & Injuries

Transport & Mobility

Zero Gold Medals *missed because of Traffic ;)*

Less Waste

Safety

Environment

Society

Mobility

Carbon
Reduction

Equity

Benefits

Automated Vehicles
on **open road**

Efficiency

Industry

Resilience
Driver Shortages

Productivity

Automated Vehicles



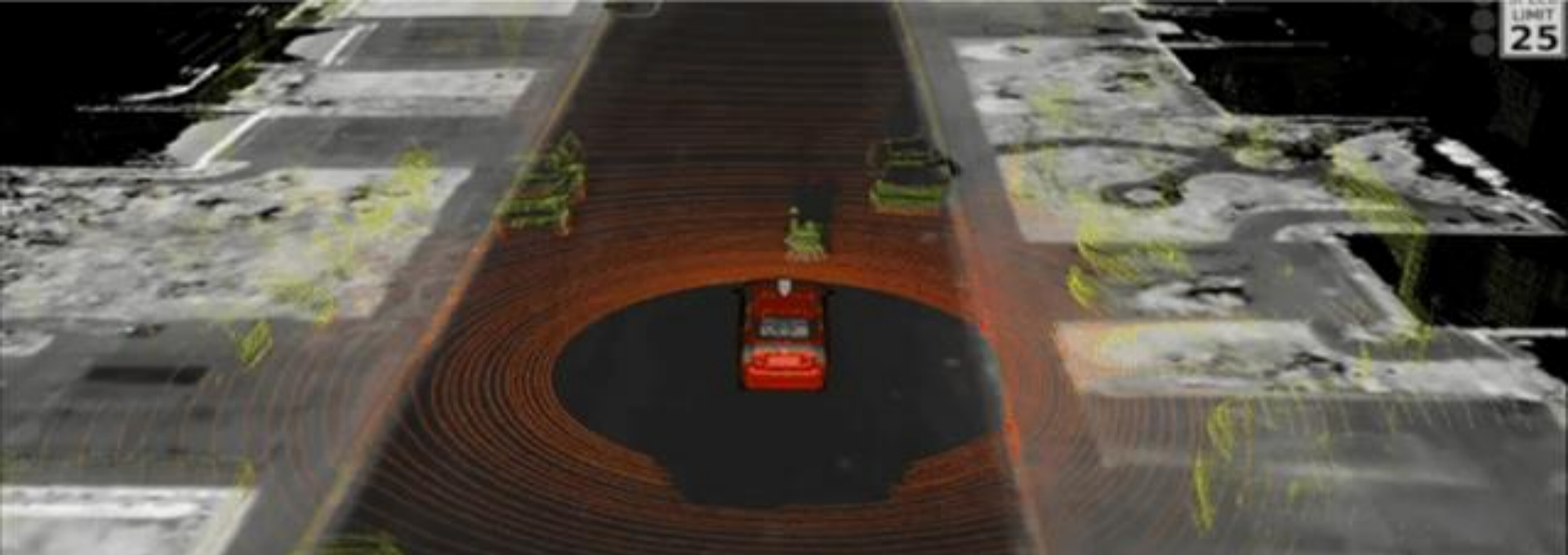
Farms



Mines



Source: www.belaustralia.com.au



Open Road

= uncontrolled, complex, and uncertain



Unique Road Environment

So what do we need to drive transport innovation and capability building in this field?

1. Innovation Hubs for Transport & Mobility



This background was created using generative AI. Source: DALL-E @ labs.openai.com

1. Innovation Hubs for Transport & Mobility

Sandpits

Precincts

Living Labs

Proving Grounds

This background was created using generative AI. Source: DALL-E @ labs.openai.com

1. Innovation Hubs for Transport & Mobility

Real Communities

Real People

Real Interactions

Living Labs

Gondwana

Yarrabilba

This background was created using generative AI. Source: DALL-E @ labs.openai.com

1. Innovation Hubs for Transport & Mobility

Precinct

Global Players

BMW

Ford

This background was created using generative AI. Source: DALL-E @ labs.openai.com

1. Innovation Hubs for Transport & Mobility

Precinct

Academia

Gov

Start-ups

Adv Manufacturing

**Collocate with
Local Talent**

Global Players

BMW

Ford

This background was created using generative AI. Source: DALL-E @ labs.openai.com

1. Innovation Hubs for Transport & Mobility

Precinct

Nearby

Living Labs

This background was created using generative AI. Source: DALL-E @ labs.openai.com

1. Innovation Hubs for Transport & Mobility

Precinct

Nearby

Co-design

Living Labs

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1. Innovation Hubs for Transport & Mobility

Shuttle Suburb to River Rail

Olympics

Precinct

First & Last Mile

Co-design

Living Labs

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1. Innovation Hubs for Transport & Mobility

Precinct

Living Labs

First & Last Mile

PoB

Inland Rail

Corridors

Pit to Pit

Paddock to Paddock

This background was created using generative AI. Source: DALL-E @ labs.openai.com

1. Innovation Hubs for Transport & Mobility

Olympics

First & Last Mile

Corridors

Precinct

Living Labs

Visible Innovation

Acceptance

This background was created using generative AI. Source: DALL-E @ labs.openai.com

1. Innovation Hubs for Transport & Mobility

Any in your area?

First & Last Mile

Corridors

This background was created using generative AI. Source: DALL-E @ labs.openai.com

2. “Pathway” Applications

This background was created using generative AI. Source: DALL-E @ labs.openai.com

Platooning



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Platooning



Remote Control

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Recycle & Retrofit

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Agile Regulatory Framework



Recycle & Retrofit

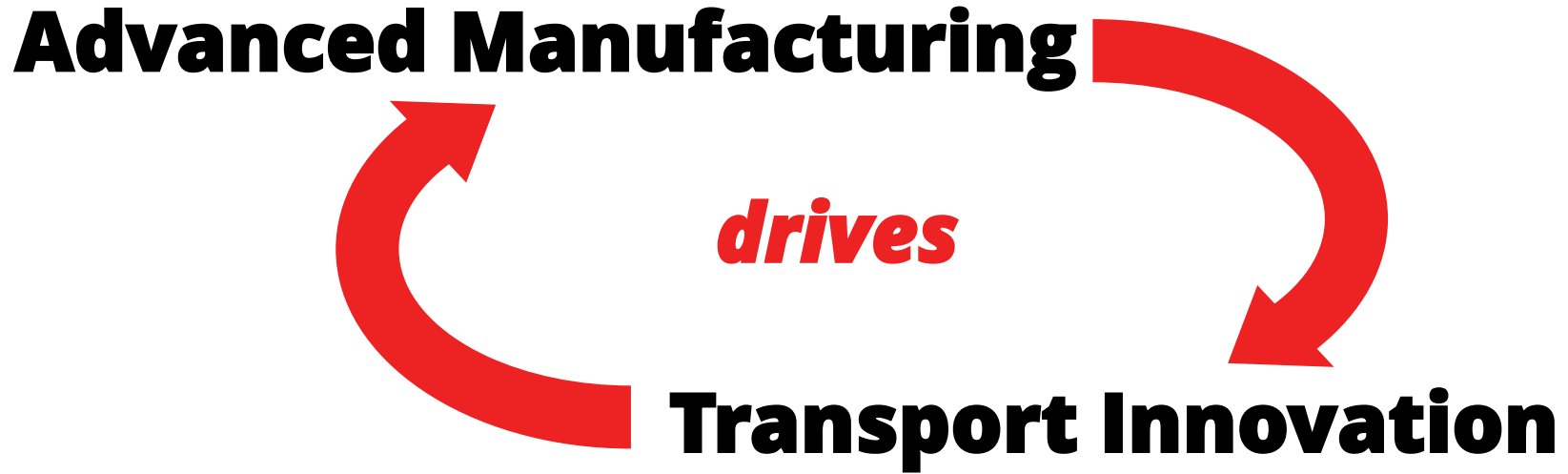
Agile Regulatory Framework



Recycle & Retrofit



The images were created using generative AI. Source: DALL-E @ labs.openai.com



3. Multidisciplinary Cross-Sector



Collaborations

3. Multidisciplinary Cross-Sector

Engineering



Collaborations

3. Multidisciplinary Cross-Sector

Engineering

Design Thinking

Speculative Futures

Community Engagement

Human-Centric Approaches

Business

Psychology

Human Behaviour

Human Factors

Collaborations

Mutual Benefit



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Mutual Benefit



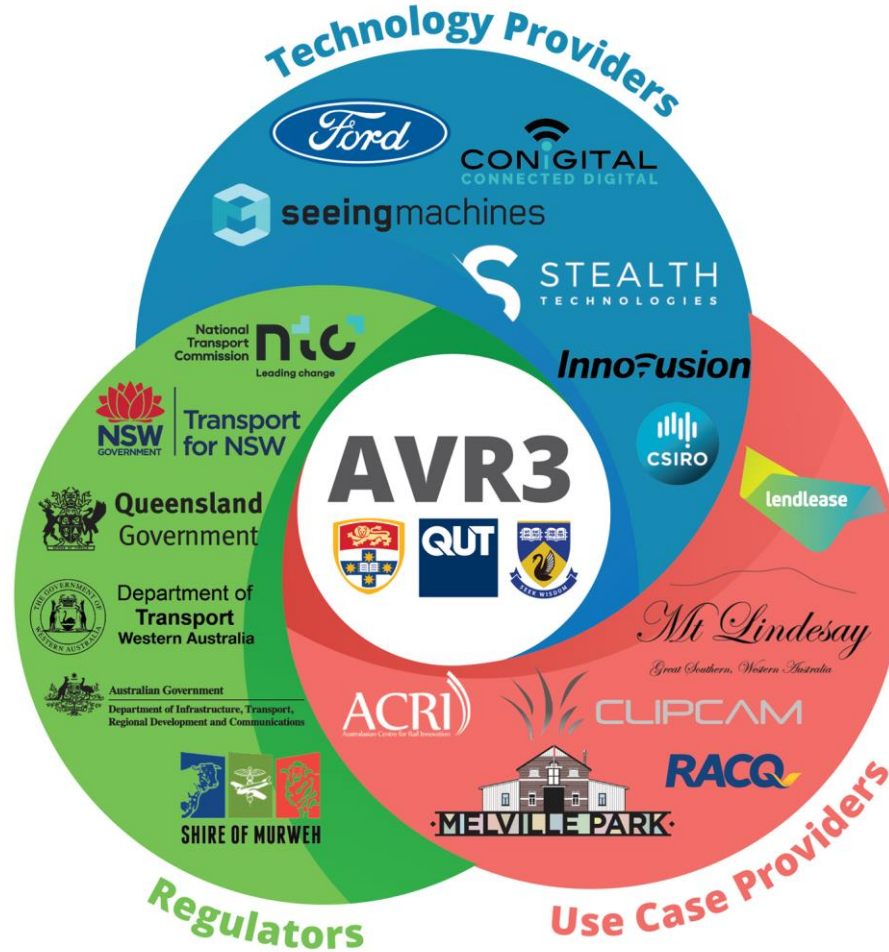
**“Transport”
& “Road Safety”
Research Priority**

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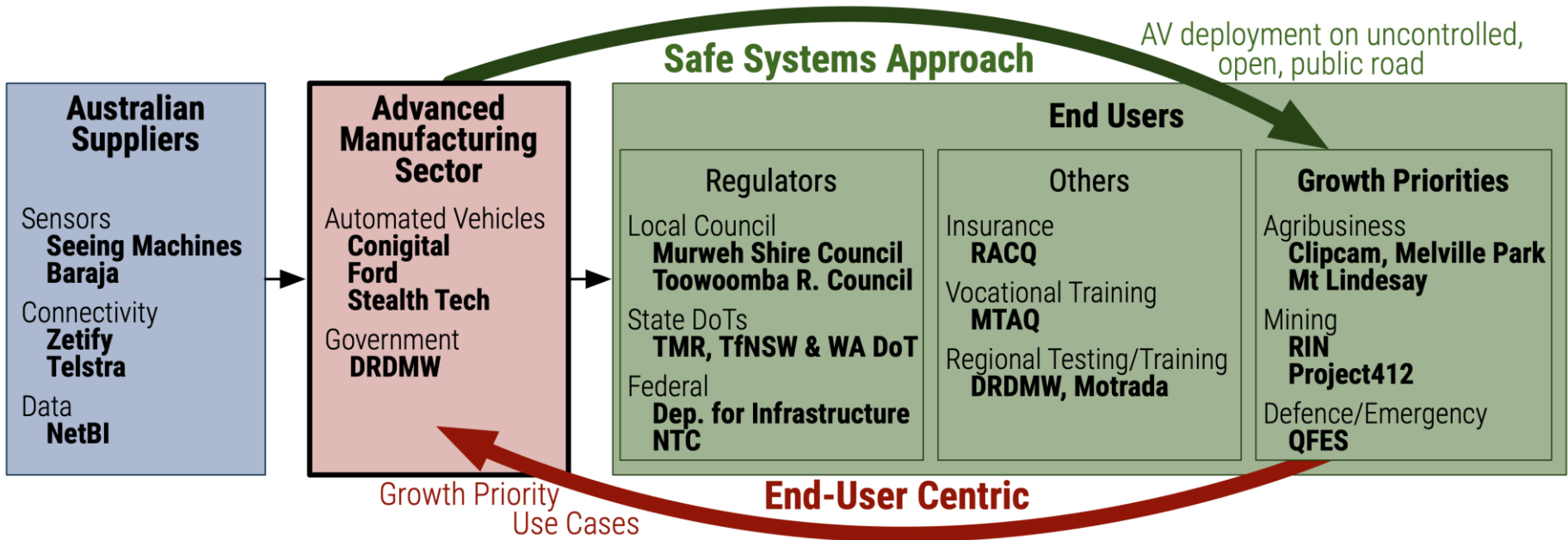


**ARC Training Centre
for
Automated Vehicles
in Rural and Remote Regions**

20+ Partners



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3 Key Takeaways



1 Innovation Hubs for Transport & Mobility

3 Key Takeaways



1 Innovation Hubs
for Transport & Mobility



2 Pathway Applications
(Recycle & Retrofit)

3 Key Takeaways



1 Innovation Hubs
for Transport & Mobility



2 Pathway Applications
(Recycle & Retrofit)



3 Collaborations
Multidisciplinary and Cross-Sector

3 Key Takeaways



1 Innovation Hubs
for Transport & Mobility



2 Pathway Applications
(Recycle & Retrofit)



3 Collaborations
Multidisciplinary and Cross-Sector



Ronald Schroeter
r.schroeter@qut.edu.au

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Mobility as a Service: Future of Mobility

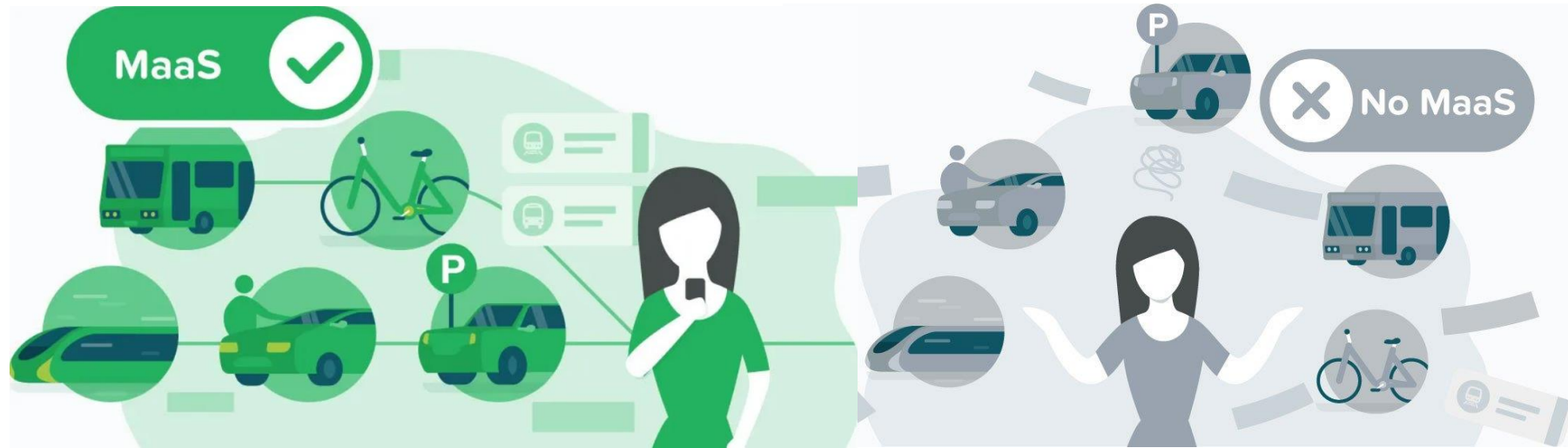
Dr Maisie Rahbar

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What is MaaS?

MaaS is a combination of public and private transportation services accessed via one application which provides personalised journey planning, booking, and payment.



Source: <https://skedgo.com/what-is-mobility-as-a-service-maas/>

The UQ MaaS Trial: ODIN PASS

- 2-year trial launched late July 2021 (after 3-month beta trial)
- 2.5-year research program
- Available exclusively to UQ students and staff (closed group)
- In partnership:



ODIN PASS – The Trial Objectives

- Understand consumer preferences towards transport modes within a MaaS subscription scheme.
- Deploy a real-world subscription MaaS trial with a variety of differing modes, focused on enhancing personal mobility and increasing public transport patronage.
- Investigate whether a sustainable business model for MaaS exists locally.
- Understand the relative importance and attractiveness of a smartphone based MaaS application.



ODIN PASS – Operation Partners



Public Transport



Micro-mobility (e-Scooters and e-Bikes)



Micro-mobility (e-Scooters and e-Bikes)



App Developer



Taxi



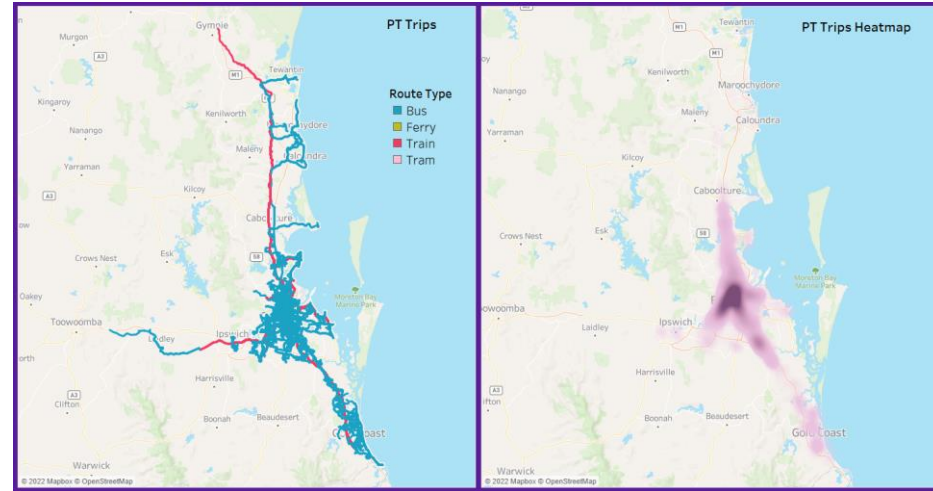
Car-sharing

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Highlights

- Around **20,000** subscriptions
- Around **6000** unique users
- Around **750,000** PT trips
- More than **25,000** micro-mobility trips
- **20%** of micro-mobility trips are first / last mile trips to / from PT stations
- Around **50%** of users reported that they would not buy any car, or it would be less likely to buy a car, if a MaaS project was available in the future



Monthly passes

Student Starter 30

\$63

✓ 30-days access

✓ Unlimited public transport trips in South East Queensland (excl. AirTrain between Eagle Junction and Airport)

💎 Pay-as-you-go for Neuron, Beam, 13cabs, GoGet

Student PT+N 30

\$103

✓ 30-days access

✓ Unlimited public transport trips in South East Queensland (excl. AirTrain between Eagle Junction and Airport)

✓ Unlimited Neuron e-scooter & e-bike trips in the Brisbane rideable zone for up to 90 minutes every day

💎 Pay-as-you-go for Beam, 13cabs, GoGet

Student PT+B 30

\$103

✓ 30-days access

✓ Unlimited public transport trips in South East Queensland (excl. AirTrain between Eagle Junction and Airport)

✓ Unlimited Beam e-scooter & e-bike trips in the Brisbane rideable zone for up to 120 minutes every day

💎 Pay-as-you-go for Neuron, 13cabs, GoGet

Student PT+N+B 30

\$129

✓ 30-days access

✓ Unlimited public transport trips in South East Queensland (excl. AirTrain between Eagle Junction and Airport)

✓ Unlimited Neuron e-scooter & e-bike trips in the Brisbane rideable zone for up to 90 minutes per day

✓ Unlimited Beam e-scooter & e-bike trips in the Brisbane rideable zone for up to 120 minutes per day

💎 Pay-as-you-go for 13cabs, GoGet

Monthly passes

Staff Starter 30

\$125

✓ 30-days access

✓ Unlimited public transport trips in South East Queensland (excl. AirTrain between Eagle Junction and Airport)

💎 Pay-as-you-go for Neuron, Beam, 13cabs, GoGet

Staff PT+N 30

\$165

✓ Equates to \$4.63 per day or \$32.43 per week

✓ 30-days access

✓ Unlimited public transport trips in South East Queensland (excl. AirTrain between Eagle Junction and Airport)

✓ Unlimited Neuron e-scooter & e-bike trips in the Brisbane rideable zone for up to 90 minutes every day

💎 Pay-as-you-go for Beam, 13cabs, GoGet

Staff PT+B 30

\$185

✓ Equates to \$5.30 per day or \$37.10 per week

✓ 30-days access

✓ Unlimited public transport trips in South East Queensland (excl. AirTrain between Eagle Junction and Airport)

✓ Unlimited Beam e-scooter & e-bike trips in the Brisbane rideable zone for up to 120 minutes every day

💎 Pay-as-you-go for Neuron, 13cabs, GoGet

Staff PT+N+B 30

\$215

✓ Equates to \$6.30 per day or \$44.10 per week

✓ 30-days access

✓ Unlimited public transport trips in South East Queensland (excl. AirTrain between Eagle Junction and Airport)

✓ Unlimited Neuron e-scooter & e-bike trips in the Brisbane rideable zone for up to 90 minutes per day

✓ Unlimited Beam e-scooter & e-bike trips in the Brisbane rideable zone for up to 120 minutes per day

💎 Pay-as-you-go for 13cabs, GoGet

3 Key Takeaways

- *MaaS has the potential to provide more choices to customers in the modes that they use to travel and how these modes can connect.*
- *There is a sustainable pricing model under an unlimited subscription model for the general public.*
- *Government support will likely be required to facilitate data-sharing to enable wider deployment of MaaS in Australia, and internationally.*



Dr Maisie Rahbar
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Expert Q&A



Dr Maisie Rahbar
(UQ)



Professor Mark
Hickman (UQ)



Professor Matthew
Burke (Griffith
University)



Dr Kelly Bertolaccini
(Griffith University)



Professor Ronald
Schroeter (QUT)



Professor Sebastian
Glaser (QUT)

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Thank You

Researcher biographies and slides can be found here:



The next Queensland Future Conversations event is proposed for
Wednesday 24 May (same place/time)

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