

The Latest from Austroads

Network & Future Vehicles Programs



Richard Delplace
Network Program Manager
19 November 2019



LOOK

Austroads

Peak organisation of
Australasian
road transport and
traffic agencies



Members: 11 road jurisdictions from Australia and New Zealand.

National, State/Territory and Local government interests.

Collectively responsible for managing 900,000 km of roads valued at about \$250b. The single largest community asset in Australia and New Zealand (with annual expenditure of >\$25b)

Austroroads

Peak organisation of
Australasian
road transport and
traffic agencies



Knowledge sharing is key across our Programs:

- Network
- Safety
- Future Vehicles + Technology
- Asset Management

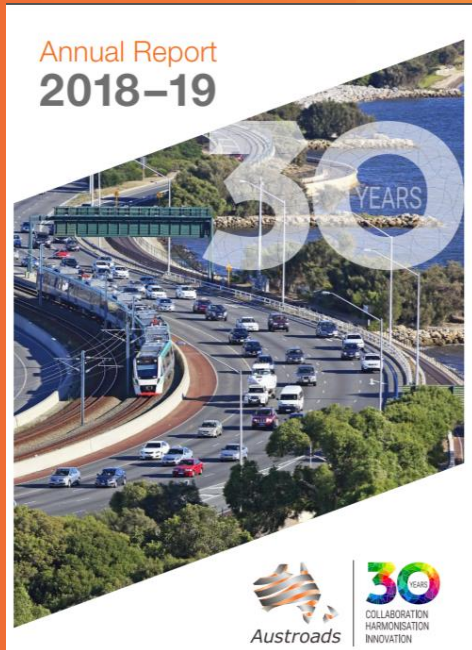


Austroads Annual Report 2018/2019



In 2018-19 Austroads:

- invested \$10.4 million in our road transport research work program
- managed 104 projects, completing 32 during the year
- published 132 reports, Guide updates and webinars with 400,000 publications downloaded
- enabled 235 million driver licence and vehicle registration database transactions via the National Exchange of Vehicle Data Information Service (NEVDIS)



Network Program

Improving mobility
within the transport
system

Network Task
Force

Freight Task Force

Traffic Management
Working Group

Intelligent Transport
Systems Working
Group

Temporary Traffic
Management Working
Group

Data & Information
Working Group

Transport
Management Centre
Working Group

Guide to Traffic Management

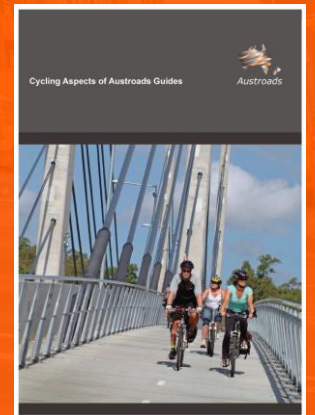


- Part 1: Introduction to Traffic Management
- Part 2: Traffic Theory
- Part 3: Traffic Studies and Analysis
- Part 4: Network Management
- Part 5: Road Management
- Part 6: Intersections. Interchanges and Crossings
- Part 7: Traffic Management in Activity Centres
- Part 8: Local Area Traffic Management
- Part 9: Traffic Operations
- Part 10: Traffic Control and Communication Devices
- Part 11: Parking
- Part 12: Traffic Impacts of Developments
- Part 13: Road Environment Safety

Key LG contact:

Ganesh Vengadasalam (City of Sydney)

GVengadasalam@cityofsydney.nsw.gov.au



Guide to Temporary Traffic Management

Launch on
11 December
in Brisbane

Planning and Design

- ✓ Safety of workers
- ✓ Safety of the public
- ✓ Creating efficient TTM
- ✓ Maintain the customer experience

Principles

- ✓ Uniformity
- ✓ Fit for purpose
- ✓ Design principles
- ✓ The safe system
- ✓ Design for the driver
- ✓ Work in accordance with TMP & TGS
- ✓ Road categories and training



Guide to Temporary Traffic Management



Planning

Design

Field

Support

Part 1: Introduction

Part 2:
Traffic Management Planning

Part 3:
Static Work
Sites

Part 4:
Mobile Works

Part 5:
Short-Term
Low-Impact

Part 6:
Field – Implementation,
Operation and Supervision

Part 7:
Traffic Controller

Part 8:
Processes and
Procedures

Part 9:
Sample Layouts

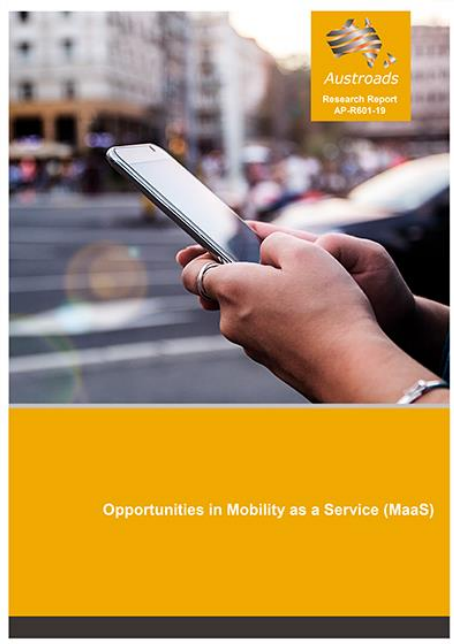
Part 10:
Supporting
Guidance

Key LG contact:

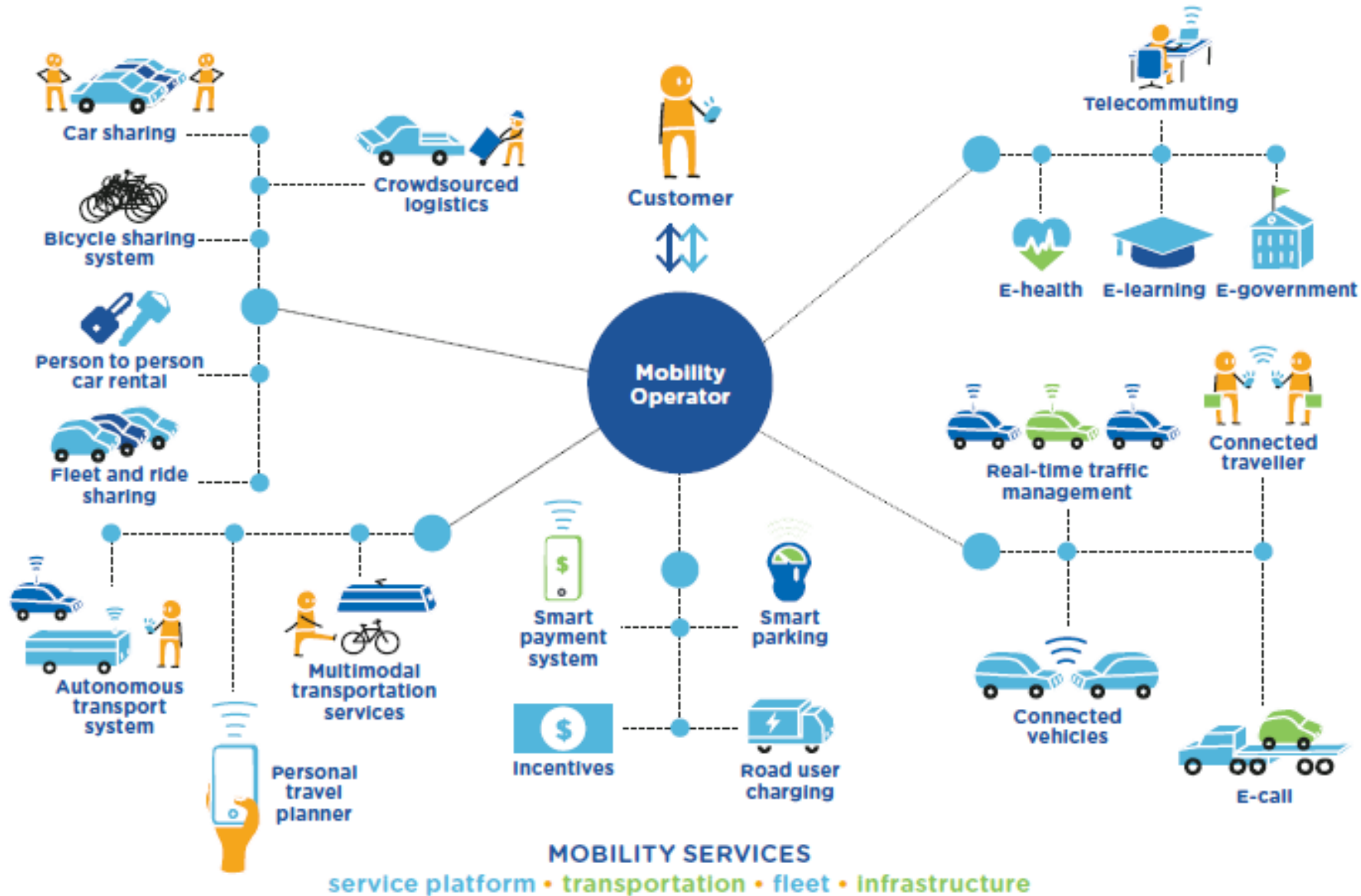
Jzanelle Cook (City of Yarra)

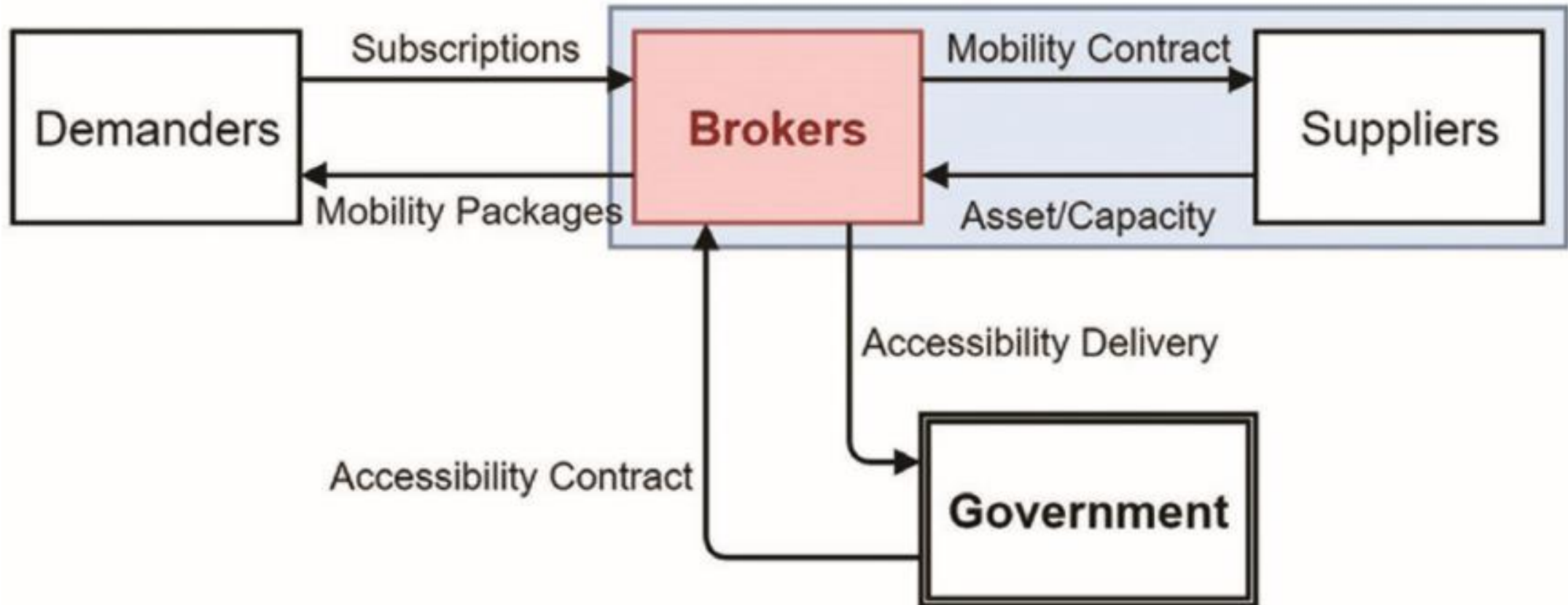
Jzanelle.Cook@yarracity.vic.gov.au

Understanding the role of public sector in Mobility as a Service



Mobility as a service (MAAS)

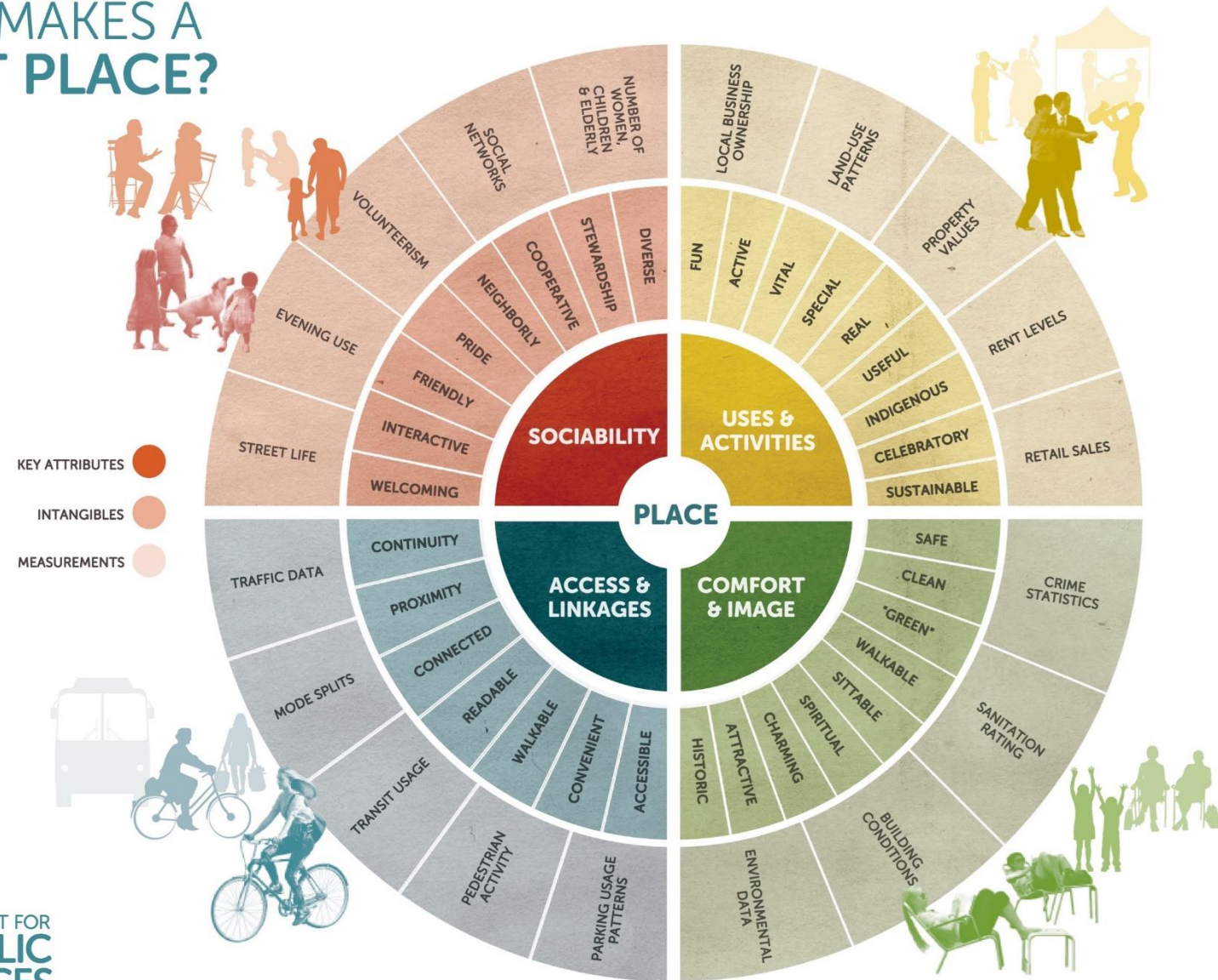




Better considering and valuing place

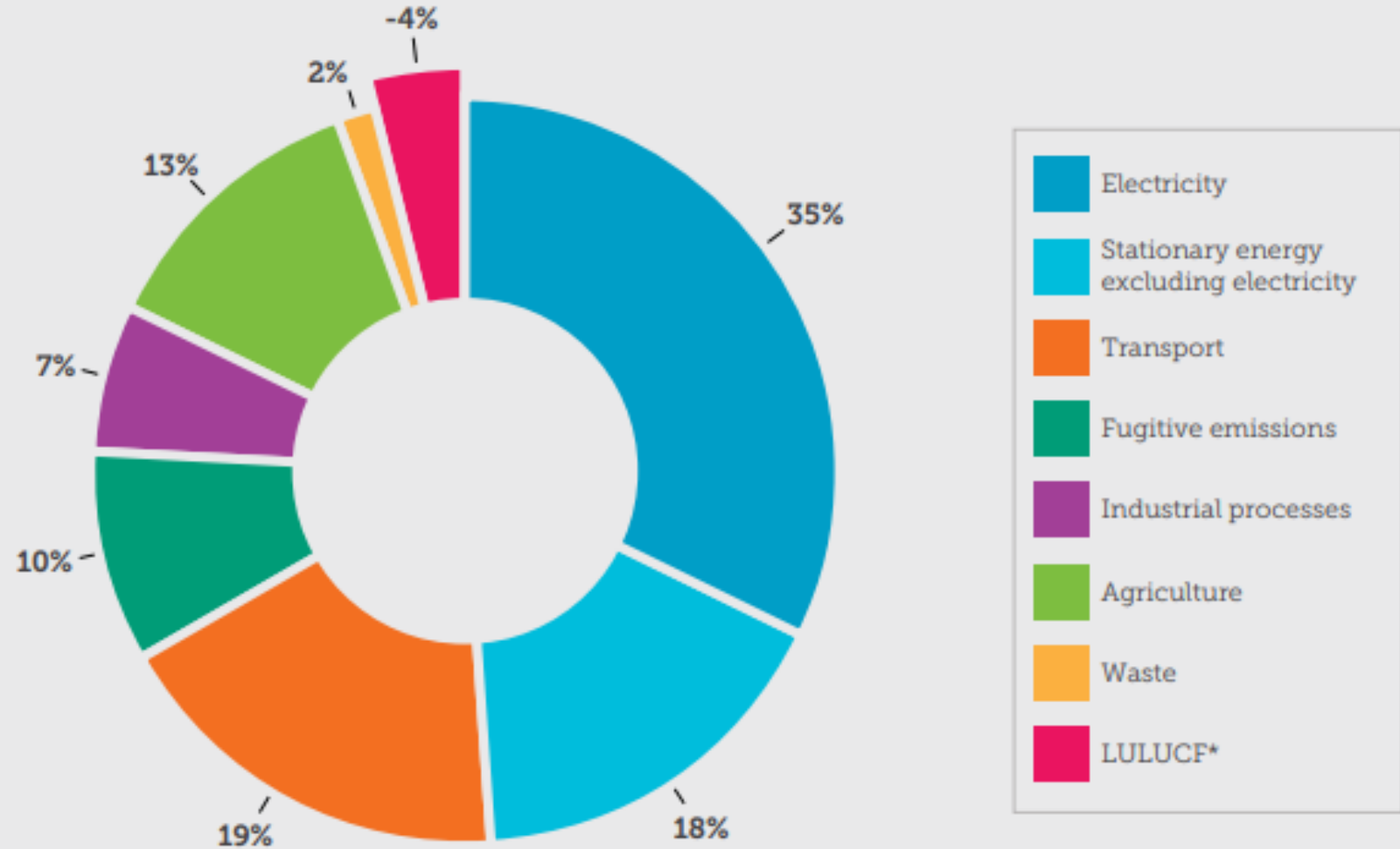
Developing metrics for (better) valuation of place by transport practitioners

WHAT MAKES A GREAT PLACE?



Decarbonisation of road transport network operations

EMISSIONS CONTRIBUTION BY SECTOR, AUSTRALIA, YEAR TO DECEMBER 2017



* LULUCF refers to land use, land use change and forestry emissions

Road Freight



CBH drives home truck-aware message

[Roarben Hale](#) | The West Australian
Thursday, 8 November 2017 10:11 AM
[Roarben Hale](#)



CBH Group spokesperson Joire manager Nick Dow in front of the CBH's road safety sign in Esperance, as part of their Be Truck Aware road safety campaign. Picture: Picture: Dorothy Henderson, Dorothy Henderson



The CBH Group is urging drivers to "Be truck aware" when driving around trucks on regional roads in the co-operative's first billboard campaign on road safety, launched this week.

Future Vehicles & Technology Program

- Connected & Automated Vehicles
- Physical & Digital Infrastructure
- Low & Zero Emission Vehicles
- Member Capability

Current projects

FCA6138	Integrating advanced driver assistance systems in driver education
FCA6239	Vehicles and technology future state 2030 project
FDI6057	Directions to C-ITS deployment
FDI6060	Strategic direction for security in C-ITS
FDI6216	Road authority data for connected and automated vehicles (RADCAV)
FLZ6171	Assessment of key road operator action to support electric vehicles
FPI6119	Automated steering functions
FSP6088	Infrastructure changes to support automated vehicles on rural and metropolitan highways and freeways

Future Vehicles & Technology Program

Full Automation
Are we there yet?

For on-road vehicles



Human driver



Automated system

		Steering and acceleration/ deceleration	Monitoring of driving environment	Fallback when automation fails	Automated system is in control
Human driver monitors the road	0 NO AUTOMATION				N/A
	1 DRIVER ASSISTANCE				SOME DRIVING MODES
	2 PARTIAL AUTOMATION				SOME DRIVING MODES
Automated driving system monitors the road	3 CONDITIONAL AUTOMATION				SOME DRIVING MODES
	4 HIGH AUTOMATION				SOME DRIVING MODES
	5 FULL AUTOMATION				

Future Vehicles & Technology Program

Integrating Advanced Driver Assistance Systems in Driver Education

- Control of automated vehicles will require a different skill set
- High levels of awareness of ADAS technologies by consumers
- Limited understanding around the limitations of ADAS technologies
- Mismatch between expectations and outcomes
- Preference of consumers to receive training at point of sale
- Dealerships providing limited, inaccurate or incomplete information
- Limited availability of information to second-hand buyers
- Only high-level information on ADAS available from Government, OEMs & Motoring Club
- No information related to driver education and ADAS

Future Vehicles & Technology Program

Infrastructure changes to support AVs on rural & metropolitan highways & freeways

For active safety systems key infrastructure attributes included:

- Line marking – including interest in line types, line quality, curve radius
- Traffic signs – position as well as types

For automated driving the key attributes include those for active safety systems plus additionally:

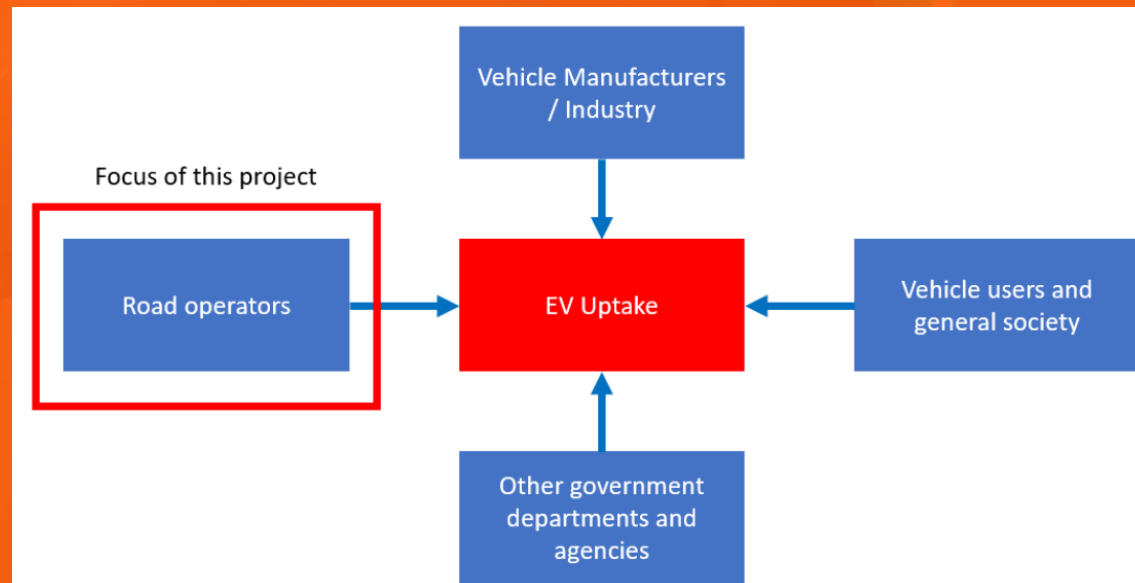
- Availability of high definition mapping
- Availability of continuous data connectivity (particularly cellular networks)

Jurisdiction	Percentage of signs					
	Readable	Not obstructed	Expected position	High condition	Medium condition	Low condition
Australian Capital Territory	100%	84%	100.0%	95%	5%	0%
New South Wales	99%	98%	99.9%	98%	1%	1%
Queensland	97%	93%	99.9%	93%	1%	6%
South Australia	100%	99%	99.7%	99%	1%	0%
Tasmania	96%	94%	99.5%	94%	1%	6%
Victoria	100%	98%	99.9%	98%	2%	0%
Western Australia	100%	98%	100%	99%	0%	1%
NZ	95%	97%	100%	97%	3%	0%

Future Vehicles & Technology Program

Assessment of Key Road Operator Action to Support Electric Vehicles

- Identify and assess the key issues and requirements of EV with regards to the road environment within which they will operate
- Better understand road authorities' role in the deployment of EVs and the governance model for planning for EV infrastructure
- Provide initial guidance on what changes to road network operations, assets and registration and licensing might be required, if any, to support the market deployment of EVs



Thank you

Visit us at our exhibition booth

Richard Delplace

Network Program Manager

rdelplace@austroads.com.au

0434 327 003

www.austroads.com.au



Austroads



COLLABORATION
HARMONISATION
INNOVATION