



Is Equity the new Safety?

iMOVE 2022



OUR MEMBERS

Platinum



Gold



Silver



Equality



Equity



PERSONA



Personalisers



Socialisers



Roamers



Planners



Car lovers

LIKELIHOOD TO PURCHASE MAAS

DEMOGRAPHIC

87%

- Evenly spread across metro, regional and remote areas
- More likely to be younger, male, college educated, employed, have children at home
- High overall travel needs, high motorcycle ownership, high use of mobility devices
- \$185 per capita per week

51%

- More likely to live in metro areas
- More likely to be middle aged, female, college educated, high household income
- Negative opinion of private car ownership and use; open to carsharing
- \$121 per capita per week

33%

- More likely to live in metro areas
- More likely to be college educated, single and living with parents, high household income
- Negative opinion of private car ownership and use; open to carsharing
- \$136 per capita per week

2%

- More likely to live in regional and remote areas
- More likely to be older, female, not college educated, retired, empty nesters
- Low opinion and infrequent use of public transport and carsharing
- \$98 per capita per week

1%

- More likely to live in regional and remote areas
- More likely to be older, not college educated, retired, empty nesters
- Low opinion and infrequent use of public transport and carsharing
- \$107 per capita per week

- In 2016 a typical two-car Sydney household had weekly transport costs of \$419 per week
- Survey respondents in MaaS research reported transport costs per week ranging from \$98 - \$185

Vision for MaaS in Australia

01 Promotes the efficient movement of people and goods to improve safety, and productivity, reduces congestion and environmental impacts

04 Enhances transport access and mobility options to customers across metropolitan and regional centres that Australians live and work in

07 Aims to be more convenient than individual use of private vehicles

03 options for customers

02 data sharing while protecting privacy and security concerns.

07 Aims to be more convenient than individual use of private vehicles

On-road Autonomous Driving Company-projected Deployments

Timeline reflects announced projections of *commercial* deployment of SAE J3016 level 4 automation on public roads (without a safety attendant or dedicated remote operator) unless otherwise noted. Includes official company announcements and on-record statements by corporate officers.

Key:

- Pending deployments in DARK TEXT
- Missed/abandoned deployments in GREY TEXT
- Successful Deployments in BLUE TEXT

2getthere
Low speed shuttle

Audi
"Traffic Jam Pilot"
Level 3

Drive.ai
Autonomous vanpool pilot

Nuro
Low speed NEV
microdelivery

Tesla
"Full Self-driving"

Cruise (GM)
Driverless Ridehailing
"Commercial launch at scale"

May Mobility
Low speed NEV shuttle

Tesla
"Full Self-driving"
Level 5

2getthere (ZF)
Low Speed Shuttle

Audi
"Highway Pilot"

Comma.AI
Aftermarket Solution
Level 3/4 (unclear)

Honda
Level 3 on highway

Lyft (GM ADS)
Autonomous Taxis

Mercedes
"Autonomous Drive"
Level 3

Nissan
"Autonomous Drive"
Level 3/4 (unclear)

Rivian
Level 3 on highway

Tesla
"Robotaxi"
Level 5

Waymo One

(Proof-of-Concept Fully Driverless Ridehailing Service)

In October 2020, Waymo opened its fully driverless service in metro-Phoenix to the general public and removed riders from NDA restrictions.

BMW (Mobileye ADS)
"Levels 3-5"

Ford
Driverless Ridehailing

Hyundai (Aurora ADS)
L4 in pilot cities

Renault
L3 "Eyes-off, hands-off"

Tesla
Level 5 FSD

TuSimple
Class 8 Trucks

Uber
Driverless Ridehailing

Volkswagen-Audi
"Private and shared platforms"

Volvo
L4 "Highway Assist"
(XC90 crossover)

Waymo One
Operational driverless taxi service,
Phoenix.

Cruise (GM)
Commercial Ridehailing
(SF, 10:00PM-5:30am)

Ford (Argo.AI ADS)
Commercial Service

Nissan
"Robot Taxi"

Mercedes Level 3
DRIVE PILOT
(Germany, 0-37 mph)

Mobileye with VW - Israel
Driverless Ridehailing

Tesla
Level 4 FSD

Other companies, not listed, may be working towards driverless ADS deployment but have not specified a date to remove safety operators.

Aurora (Ridehailing) (2024)

PSA Groupe (2024)

Honda L4 (2025)

VW (Argo ADS) (2025)

Aurora
Class 8 Freight

Cruise (GM)
Commercial Ridehailing on
purpose-built Origin Platform

Motional (Hyundai/Aptiv)

Transdev (Mobileye ADS)
Low Speed Shuttle

Udelv (Mobileye ADS)
Driverless Delivery

2018

2019

2020

2021

2022

2023

Note: Deployments listed as successful are determined to meet the technical definition of SEA level 3 or higher and are available to the general public without signing a non-disclosure agreement. Deployments may be very limited by operational availability such as geofences, time restraints, and weather-related stoppages. The recognition of successful deployment does not necessarily imply that the project is safe, useful, or profitable.

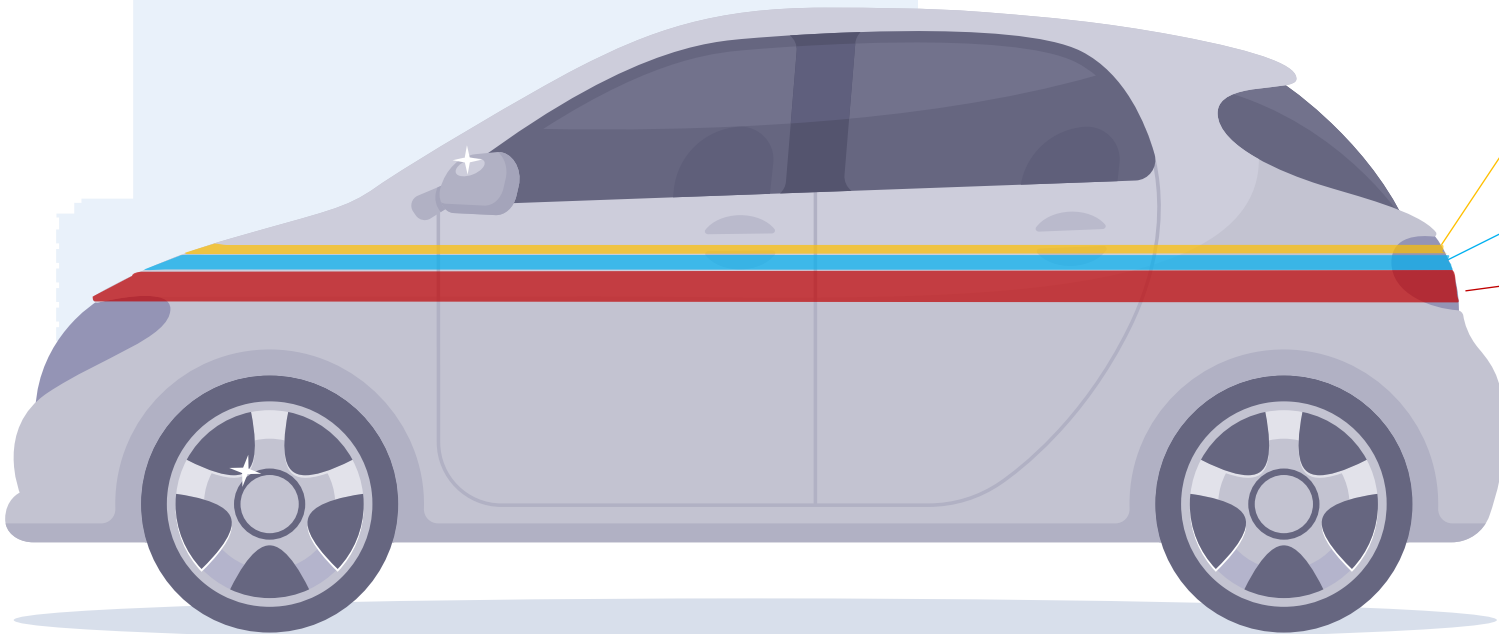
Source:

Eric Paul Dennis, PE
Ericpauldennis.ms.pe@gmail.com
Last updated 2022.11.14.

Unlocking Shared Mobility

Investigating free-flow parking for car-sharing in Australia

50% of most city land dedicated to streets and roads, parking, service stations, and traffic signs



1% sitting in congestion

1.6% looking for parking

5% driving

Typical European car parked 92% of the time

About the research



Community transport research

Customer & service delivery landscape

Policy and funding landscape

Innovation landscape

Literature and evidence reviews

Qualitative stakeholder interviews

Stakeholder workshops

Demographic analysis & modelling

Funding analysis (quant. and qual.)

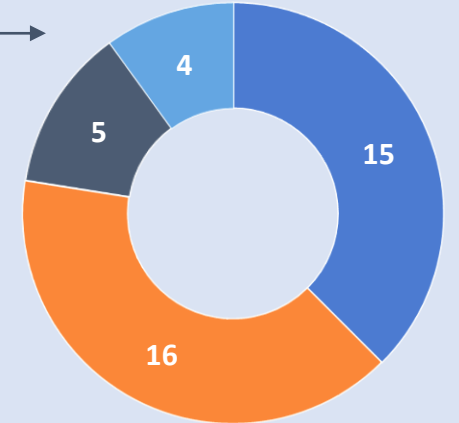
Qualitative analysis (thematic, benefits)

Systemic barriers analysis (e.g., unmet needs, customer barriers to access, barriers to innovation)

281 unique evidence sources referenced (+ many more reviewed) – including:

- ABS
- AIHW
- OECD
- WHO
- International academic research
- Commonwealth Govt
- State Govts
- Local Councils
- International Govts
- CT peak body and provider literature
- Royal Commissions
- Productivity Commission
- Industry reports
- NGOs
- Online, media, grey literature etc.

- CT Provider
- Government
- Transport/ Tech industry
- User Group



ITS & Equity

- What is 'Community Transport'
- What does equitable and accessible transport mean in 2022 and beyond
- What value does ITS provide to equitable transport
- How can technology improve equity and accessibility





Findings

Immediate and growing challenge

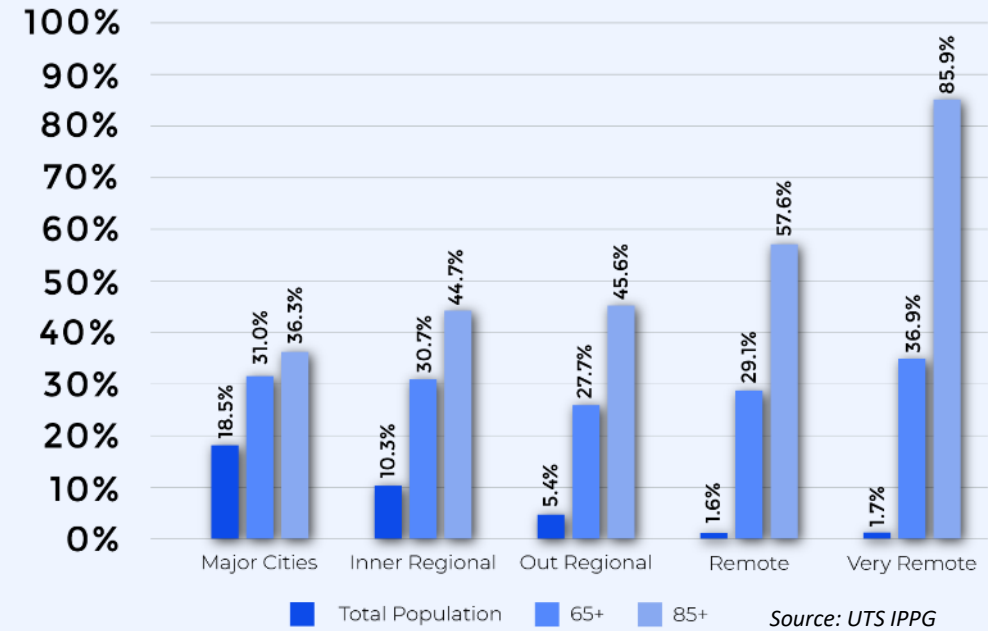


Between 2020 and 2030, the over 65 population is set to grow by over **30%**



Regional and remote

areas will experience much higher growth in the older population relative to total population.



Ageing population

Link between ageing and (profound/severe) disability

Shift towards ageing-in-community

Disproportionate impacts on regional / remote areas

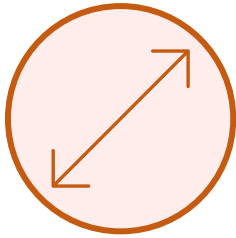


Challenges

Barriers to innovation



1. Funding and resources



2. Challenges of scale



3. Sector capacity and readiness



4. Customer barriers



5. Technology solutions not aligned to sector needs

Opportunities

Technology and service innovation

