Mobility in a driverless world

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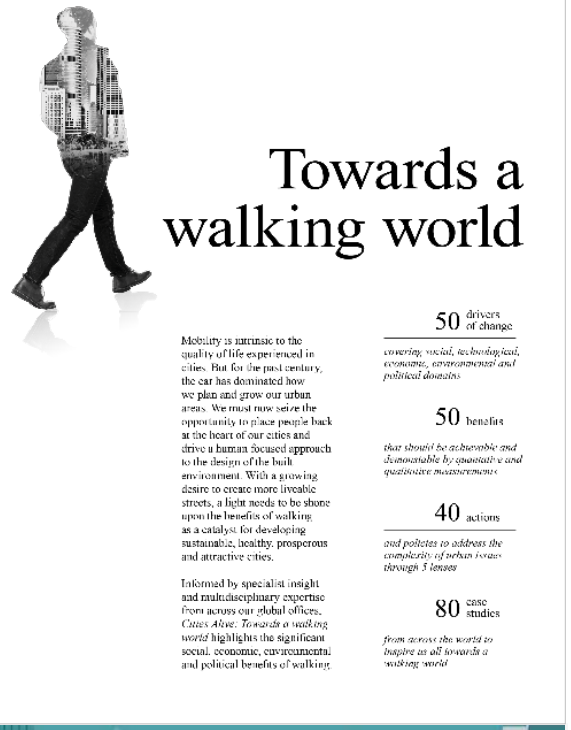


Towards a walking world

Mobility is intrinsic to the quality of life experienced in cities. But for the past century, the car has dominated how we plan and grow our urban areas. We must now seize the opportunity to place people back at the heart of our cities and drive a human focused approach to the design of the built environment. With a growing desire to create more liveable streets, a light needs to be shone upon the benefits of walking as a catalyst for developing sustainable, healthy, prosperous and attractive cities.

Informed by specialist insight and multidisciplinary expertise from across our global offices, *Cities Alive: Towards a walking world* highlights the significant social, economic, environmental and political benefits of walking.

50 drivers of change

covering, social, technological, economic, environmental and political domains

50 benefits

that should be achievable and demonstrable by quantative and qualitative measurements

40 actions

and policies to address the complexity of urban issues through 5 lenses

80 case studies

from across the world to inspire us all towards a 'walking world'

Transport Planner and City Shaper

Interest in mobility, people and cities

Exploring mobility in a driverless world

The past

The future(?)

Redefining our cities

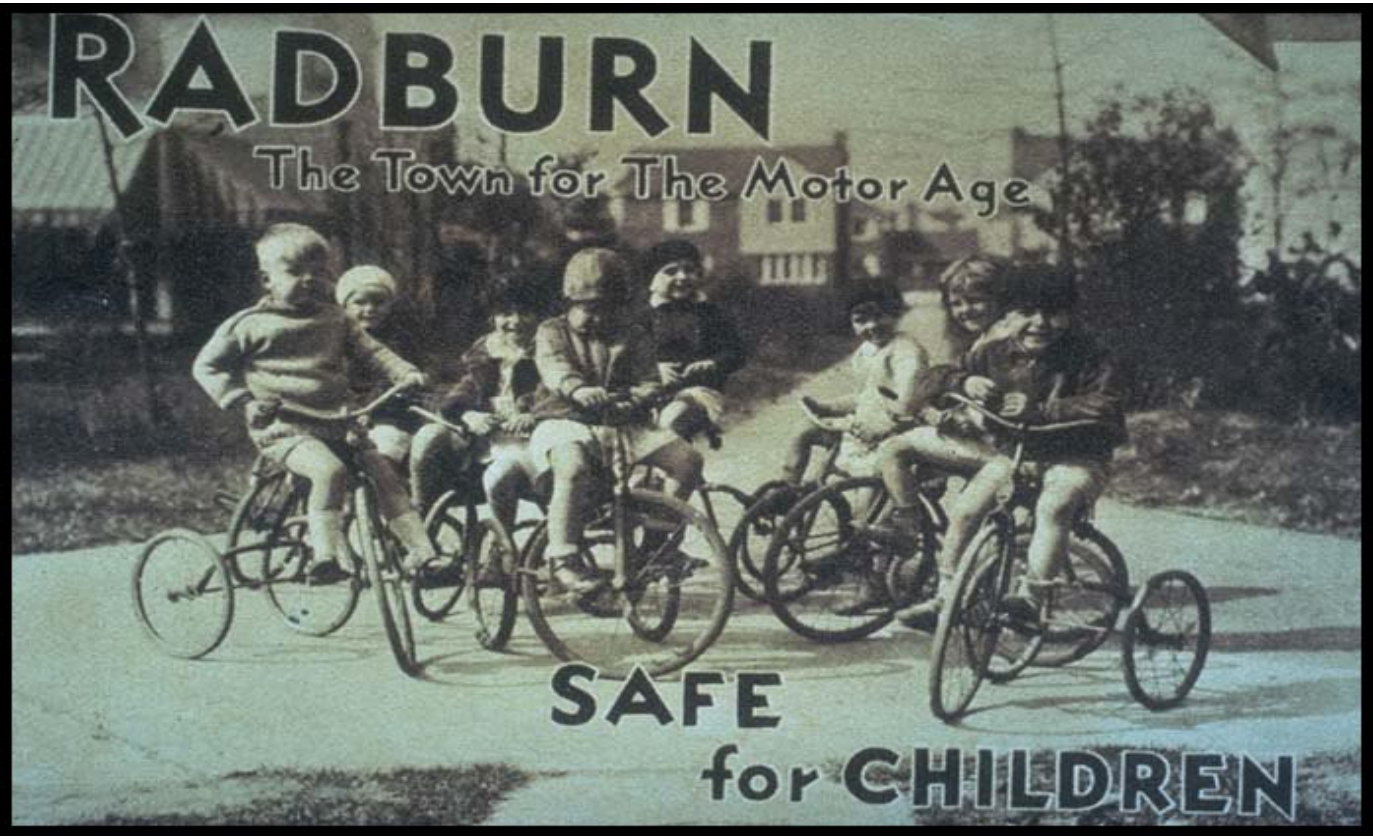
Redefining mobility

14th Century

Walkable settlements

1908

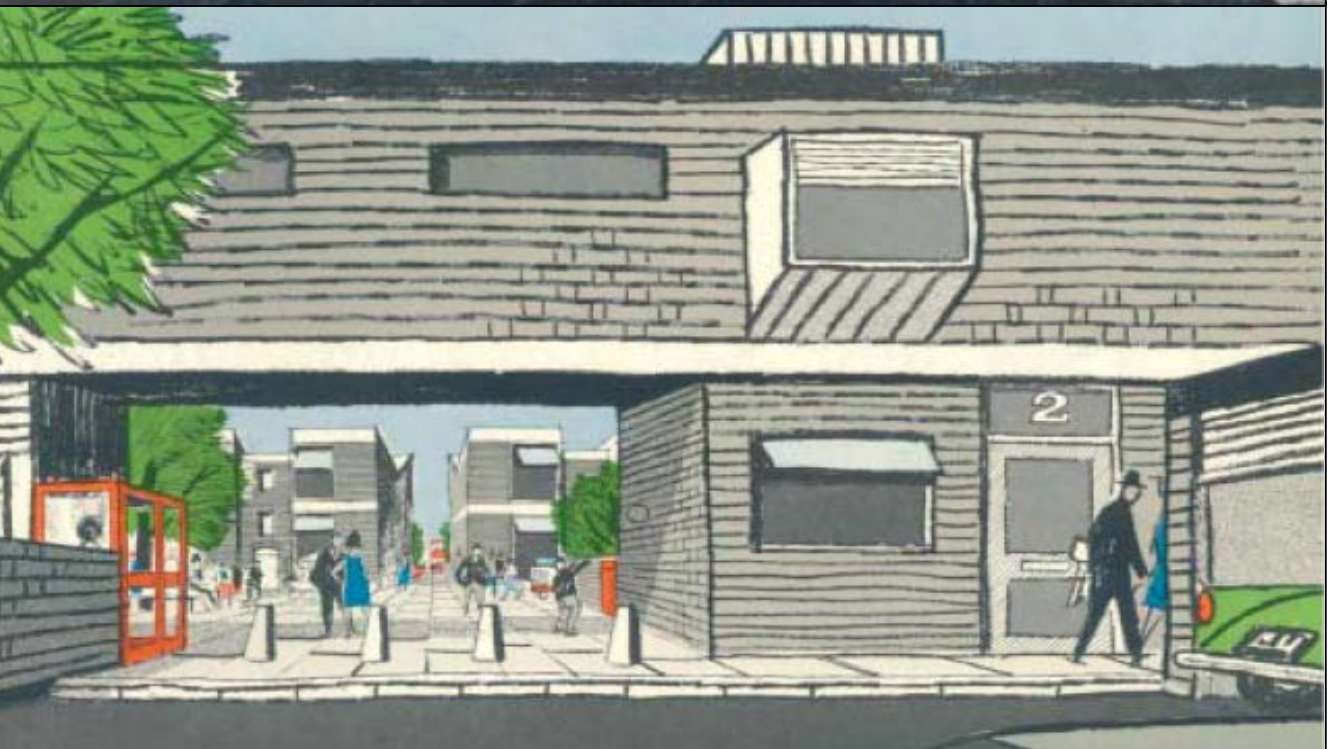
Ford Model T
15 million units in 20 years



1929

‘A town for the motor age’

Radburn, New Jersey



1947

Australia First
Traffic Engineer


110 NORTH
Pasadena
NO TRUCKS
NO TRUCKS
101 NORTH
Hollywood
TRUCK RTE
5 SOUTH
Santa Ana
10 EAST
San Bernardino
TRUCK RTE
MAXIMUM SPEED 55
76
TOYOTA


NONCE

The Future?

Autonomous and Connected vehicles


YUB
WOW


METRO
AUTO-
MATED
TAXI

Cities of the Futures

Mobility for all or automobility for a few?

Evolutionally Vs Revolutionary

Evolutionally

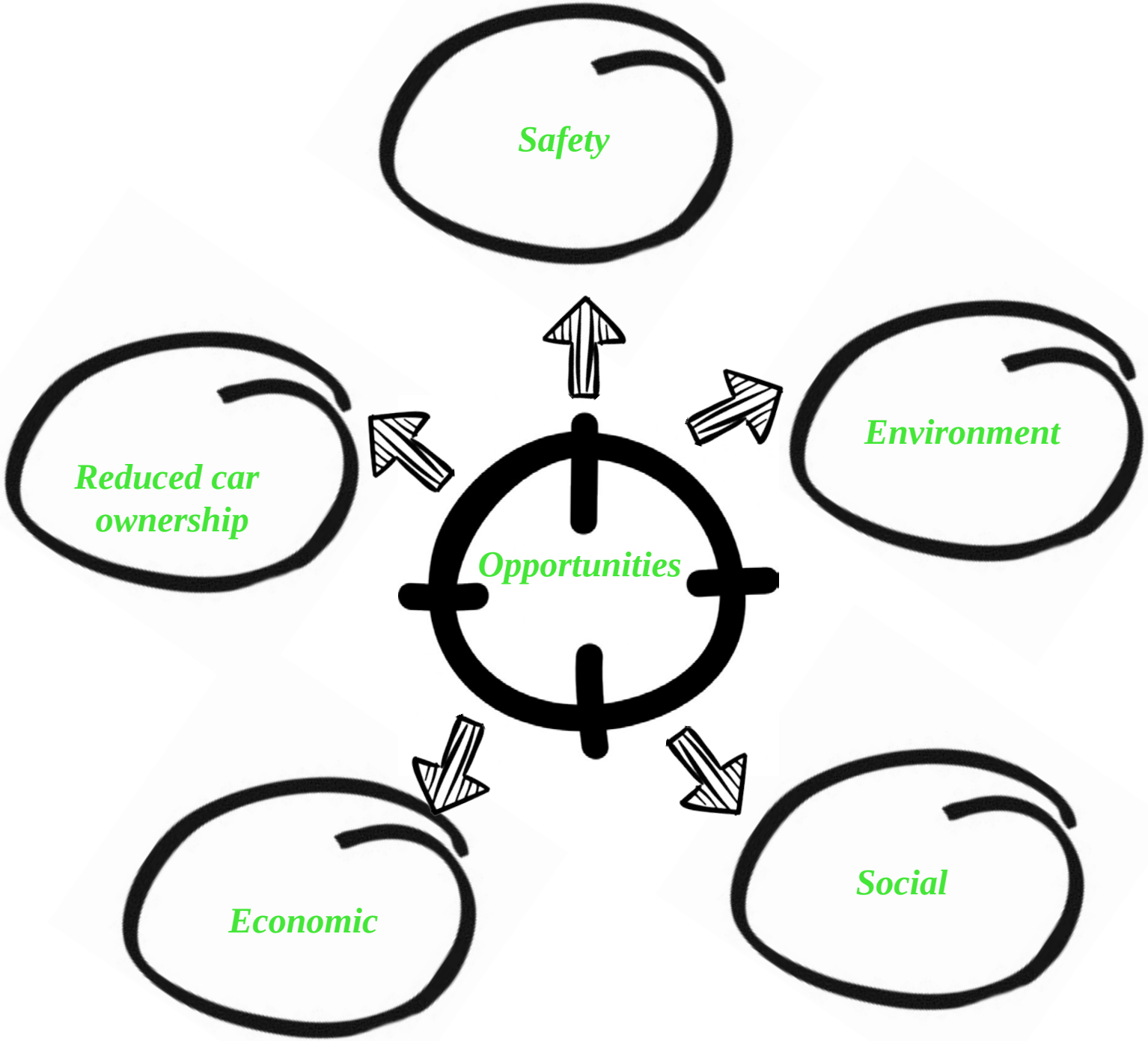
Increasing automation and connectivity of current vehicles | autopilot, GPS, self parking

Revolutionary

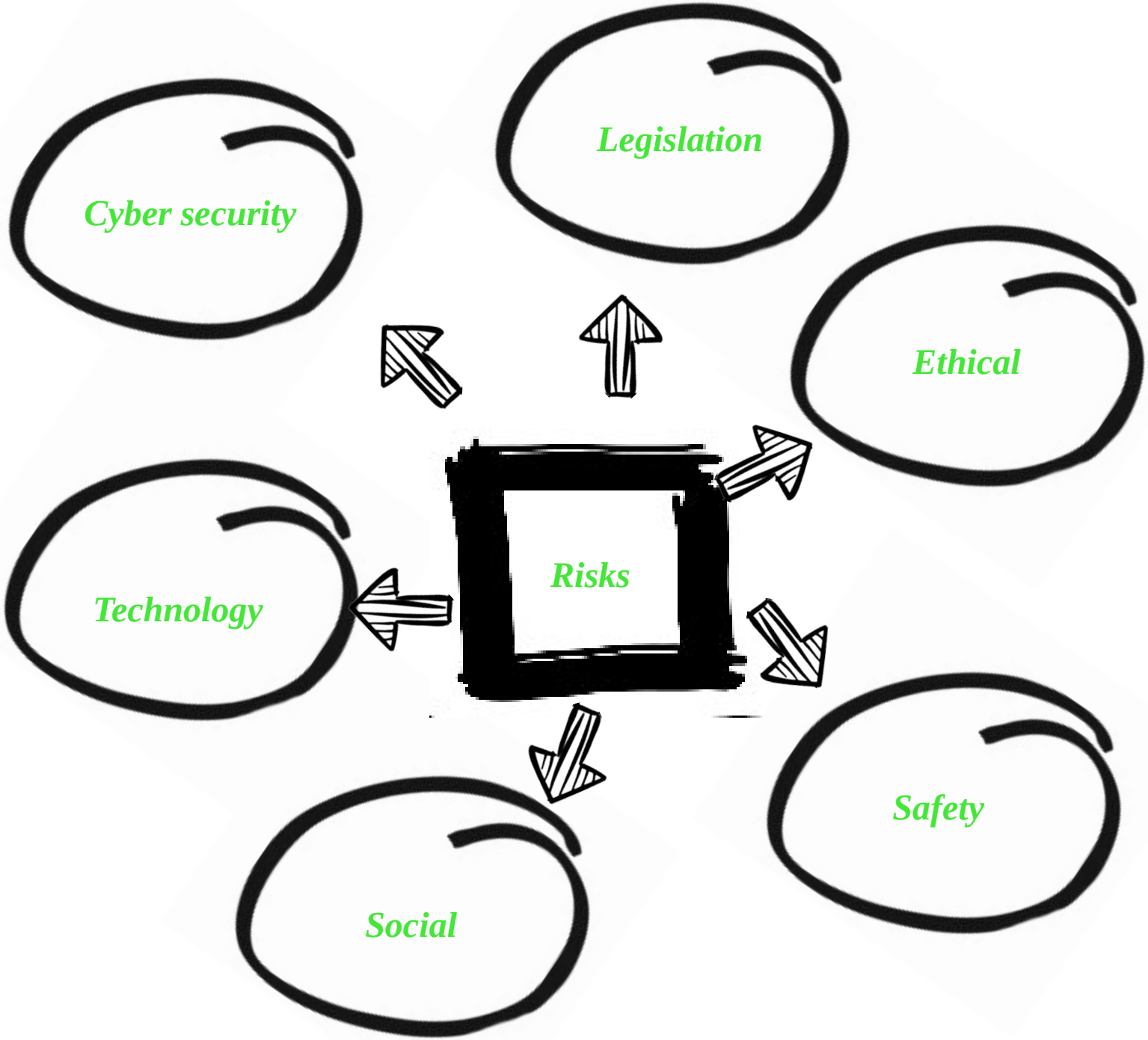
Full automation | Google car

Redefining Car Ownership

Private Vs Shared

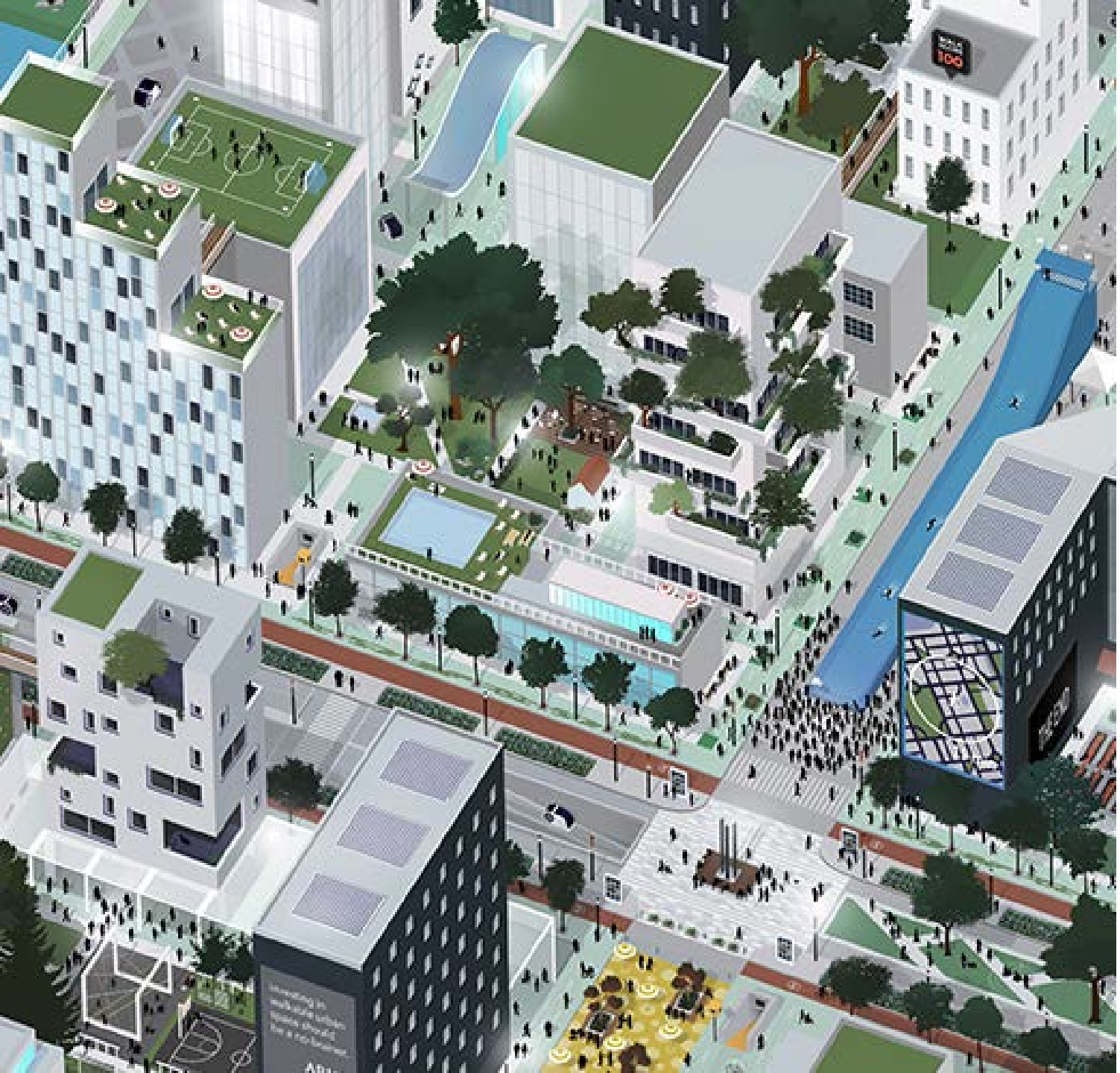


Opportunities



Risks

Who's life matters?



Social implications

Redefining the shape of our cities and mobility for all

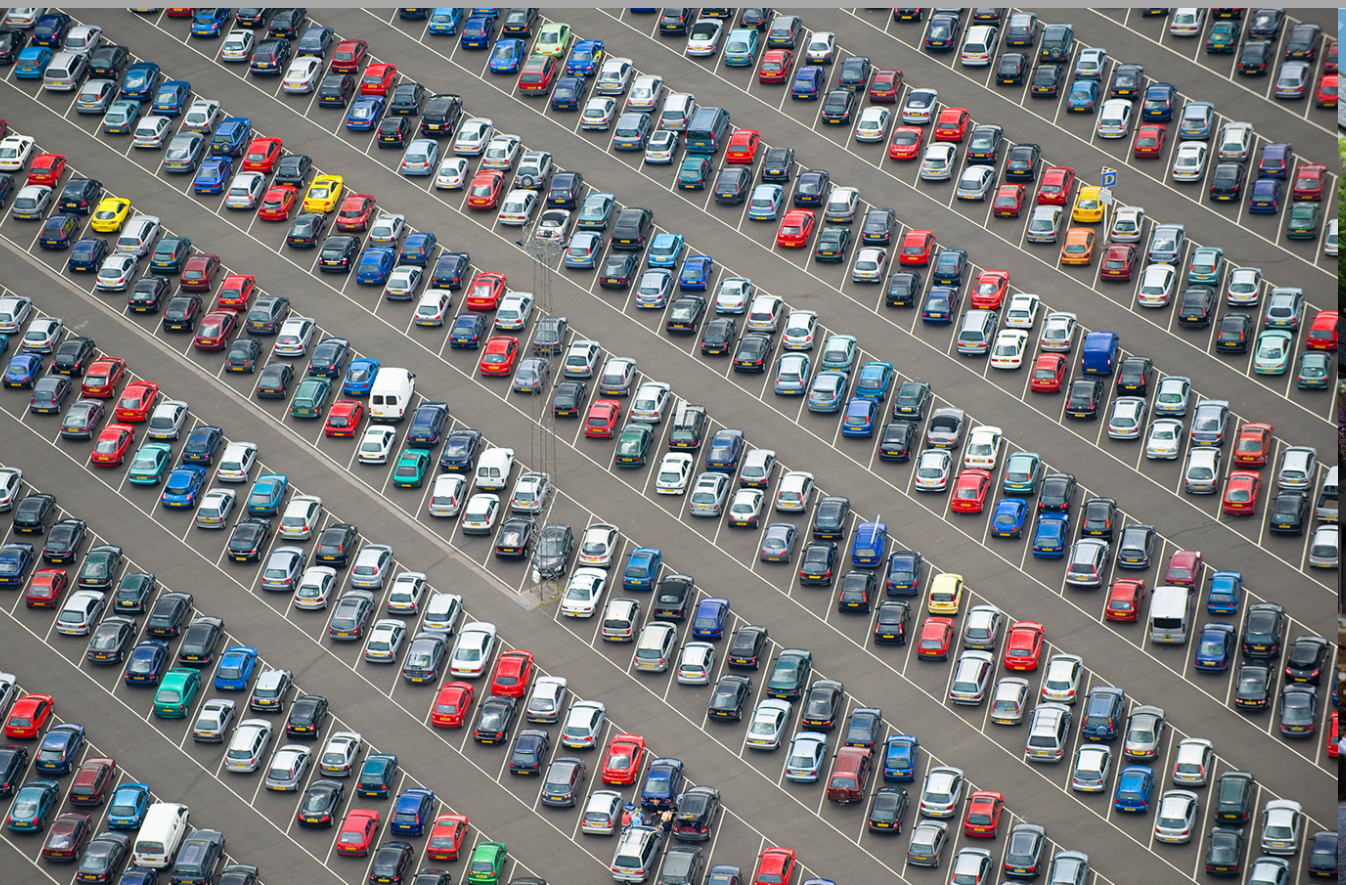
Urban Patterns

Suburbanisation? *Or* *Densification?*

“A typical automobile is parked for about 95 percent of its lifetime.”

D. Shoup

Space for People, Not Parked Cars?



Street Design | Public Realm

Source: NACTO

Driverless vehicles | Refining access for all

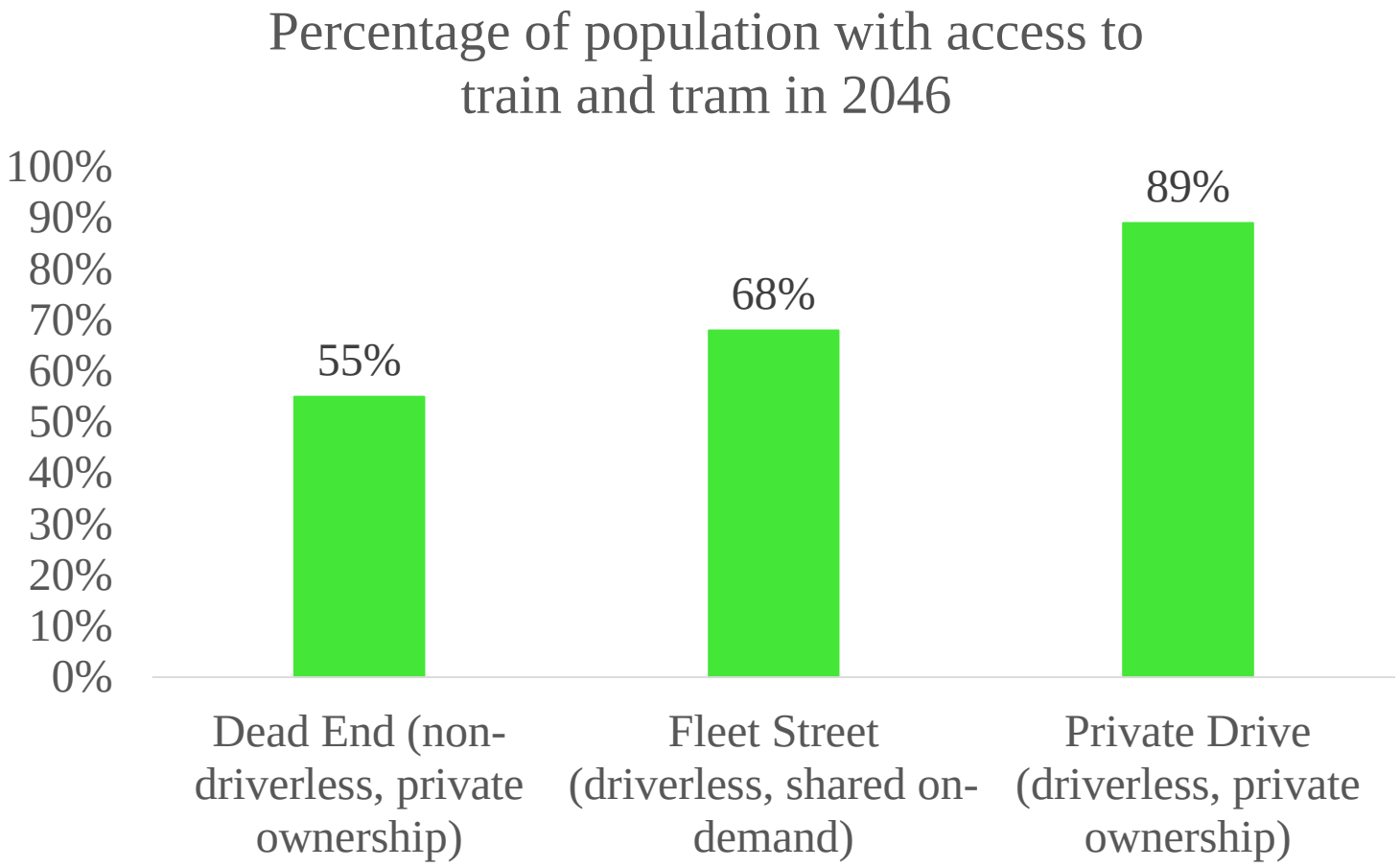
‘Millennials, they’re calling their Ubers and having a grand old time, and then down the corner, the cleaning lady is standing on the corner waiting for the bus that isn’t coming’

Texas A&M

Greater access to transportation

23 million Australians who are elderly or have a disability

Approximately 3 million use public transport



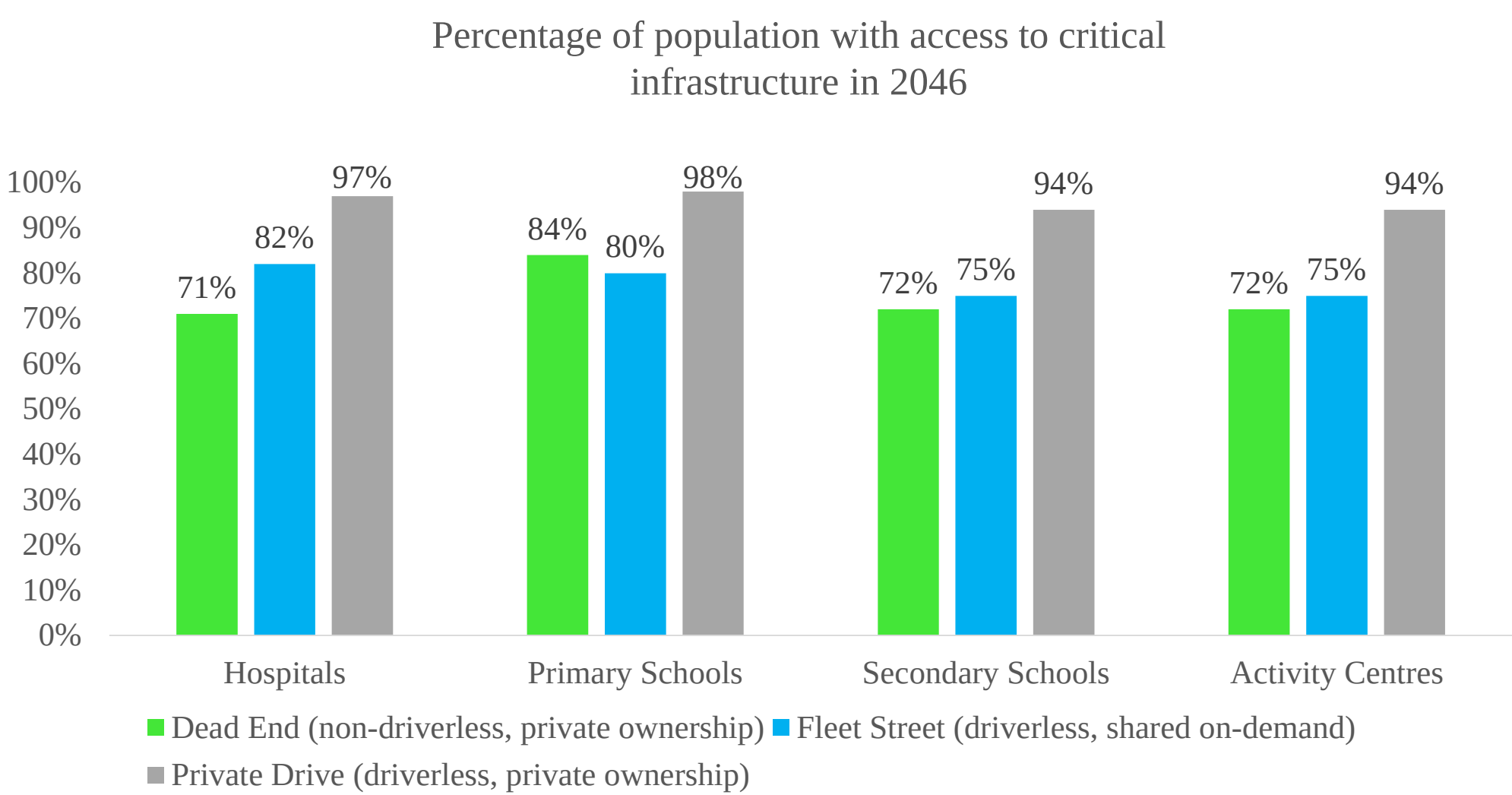
Infrastructure Victoria: Automated and zero emissions vehicles infrastructure advice, Socio-economic impact analysis, Deloitte, July 2018

Victorian Study | The Winners?

- *Individuals with lower incomes*
- *Those living a significant distance from urban areas*
- *Those without a driver's licence*

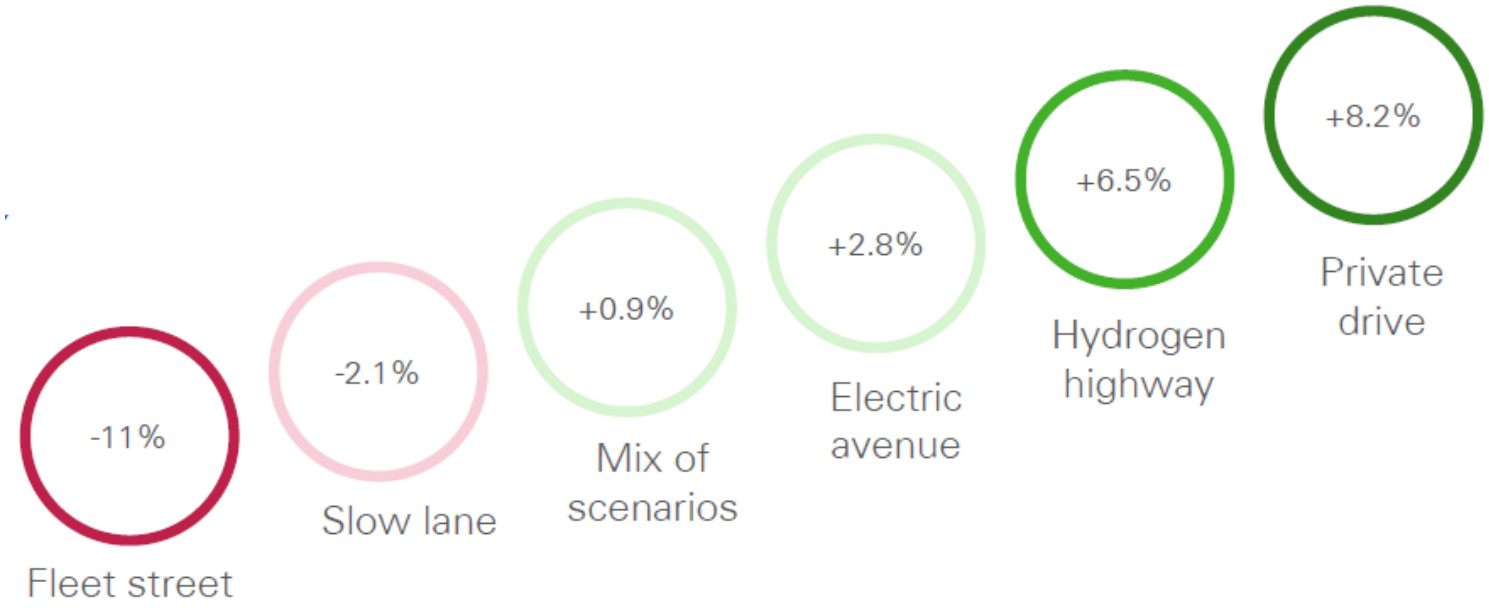
Greater access to employment and services

In Australia 50% of people with a disability are unemployed



*Regions with **lower incomes** tend to have the **largest improvement** in coverage over time across all scenarios, however, this is partially **due to lower initial levels of coverage***

Infrastructure Victoria: Automated and zero emissions vehicles infrastructure advice, Socio-economic impact analysis, Deloitte, July 2018



Infrastructure Victoria: Automated and zero emissions vehicles infrastructure advice, Traffic Modelling, KPMG, August 2018

Victorian Study | The Reality?

Scenarios with on-demand AVs have the worst accessibility scores due to wait time and fares for on-demand AVs

Public transport interface remains key

“If we’re moving toward this autonomous, decentralized transit system, we need to make sure that it’s accessible to everybody, that there’s a social equity concept in the design.”

Gerry Tierney, Perkins + Will


How will driverless cars interact with different user groups, and in particular those with visual or hearing impairments?

Aurrigo/Jaguar Land Rover

Virtual eyes

Jaguar Land Rover and Aurrigo, are testing the hypothesis to understand how humans will react to autonomous cars

Wellbeing | Social Interactions

Walking contributes to increased social interaction and the development of social capital

Health | Active Lifestyles

Those who walk for more than 8.6 min per day are 33% more likely to report better mental health

33%

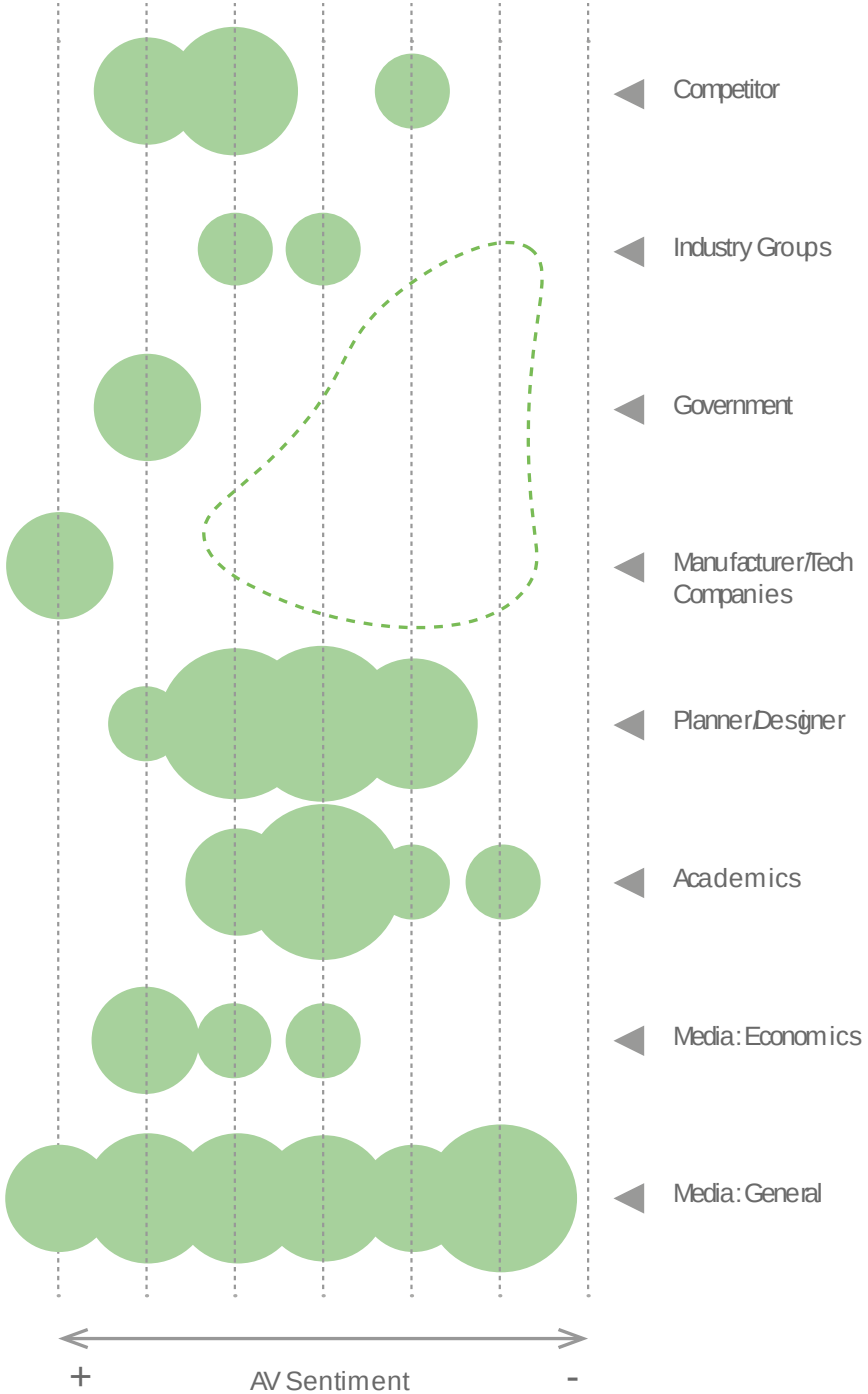
mental health

Current sentiment

Where is the conversation at?

Visual story

How do we see autonomous vehicles and cities?

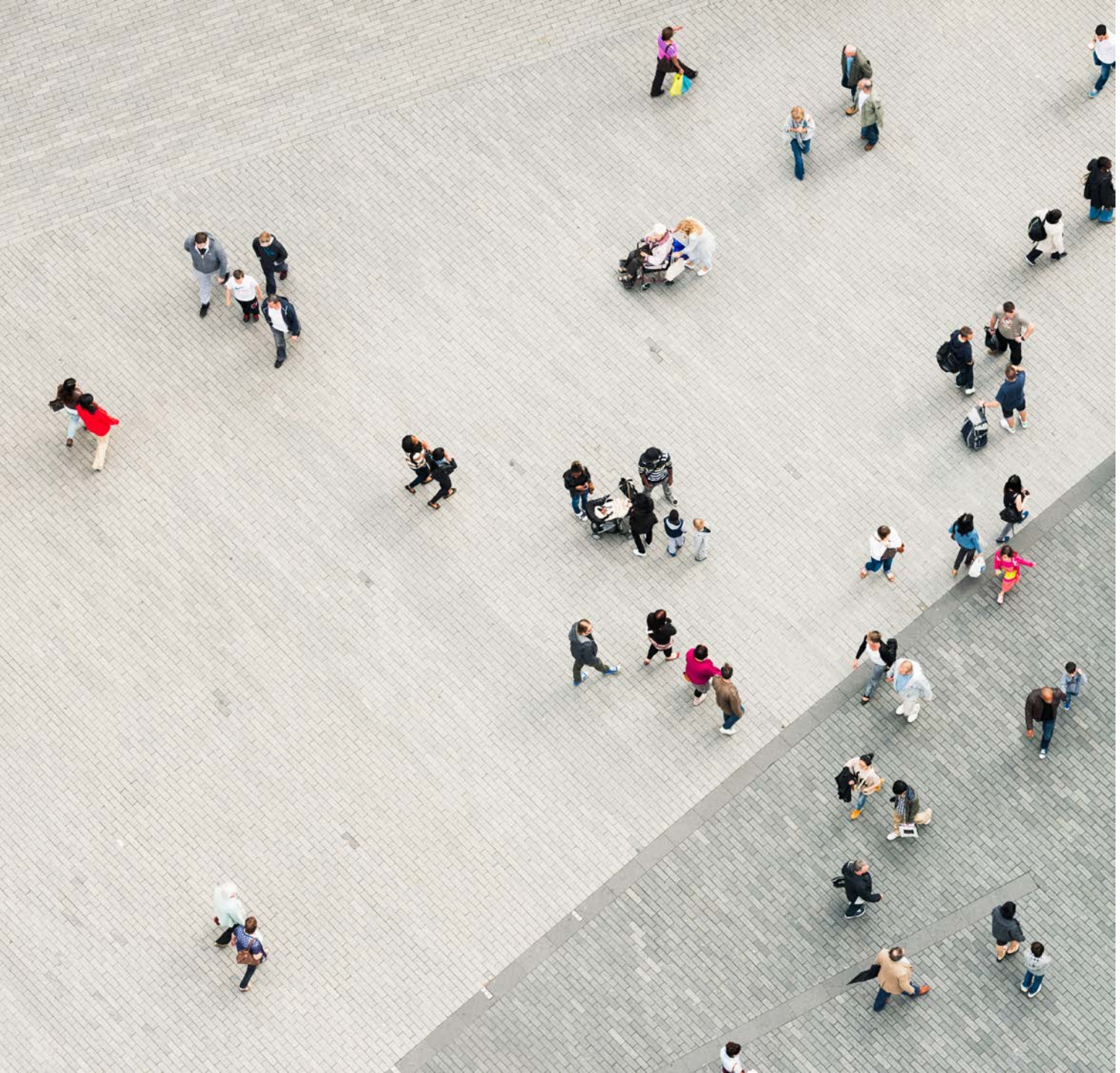


Current Sentiment

Where do we sit in the conversation?

In conclusion?

Ensuring a universal design approach is embedded into any work on driverless cars will help to design truly accessible technology



“If you plan cities for cars and traffic, you get cars and traffic. If you plan for people and places, you get people and places”

Fred Kent

Mobility in a driverless world

Thank you

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