



Chester, Louise Raynor / Public Domain



The Future of Transport: Autonomous Vehicles?

23 March 2018



Danielle Gatland Transportation Group Conference 2018 in association with the Transport and Economic Research Institute

Agenda

- Benefits and Barriers
- Timeline
- Preparations
- Integrated Transport Network



Impact of Autonomous Vehicles



Road Safety





Travel Time



Barriers

| Level | SI | S 💮 Ig | C | Re: |
|-------|----|---------|-------|-----|
| 0 | | | | |
| 1 | | | Human | |
| 2 | | | | |
| 3 | | Vehicle | | |
| 4 | | | | |



Barriers



Volvo – Drive Me Vehicle Mario Roberto Duran Ortiz / Wikimedia Commons / Public Domain

Waymo - Minivan Daniel Cardenas / Wikimedia Commons / Public Domain



Barriers

Public Support and Awareness



Outdated Regulations

Pressure on Infrastructure





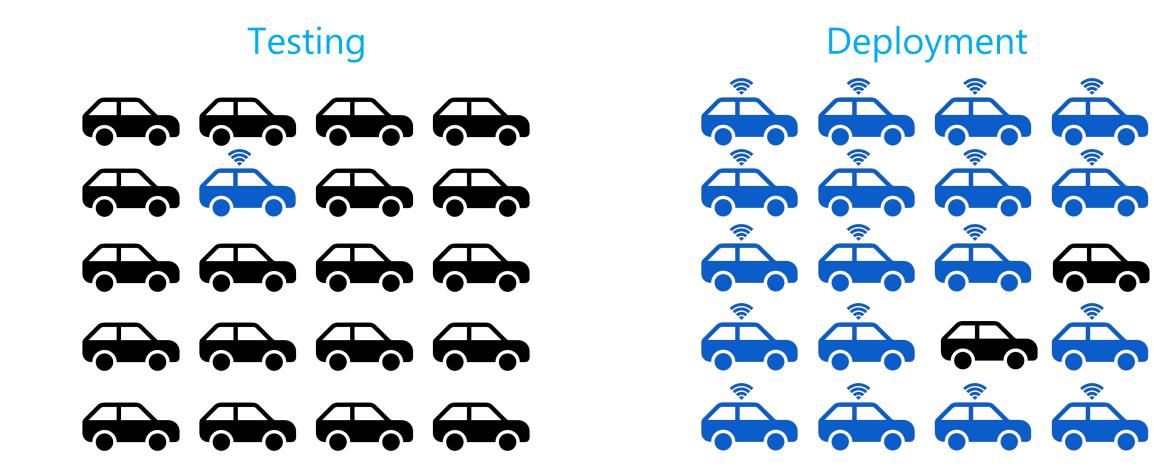
When?

| | 2018-2040 | | 2041-2055 | | 2056-2070 |
|---|--|---|------------------------------------|---|-----------------------------------|
| • | Fully autonomous vehicles are introduced | • | Autonomous vehicles are affordable | • | Most cars are autonomous |
| • | Widespread autonomous car share and public transport | • | Car ownership rates decrease | • | Some parking areas are repurposed |



Preparing for the Future of Transport

MRCagney



Preparing for the Future of Transport



MRCagney

Abu Dhabi

Future Transport Network?







Future Transport Network?





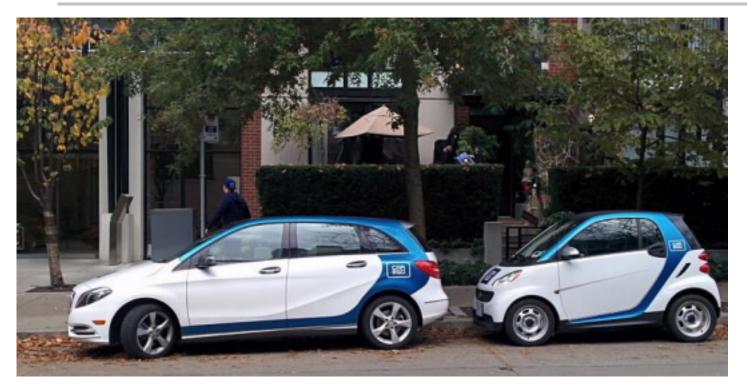
Brisbane

Victoria



Stuttgart (<u>http://trailnrail.blogspot.co.nz/</u>, 17 October 2017)

Future Transport Network?



Vancouver Car Share Wakasui / Wikimedia Commons / Public Domain



Riga, Latvia – Bike Share



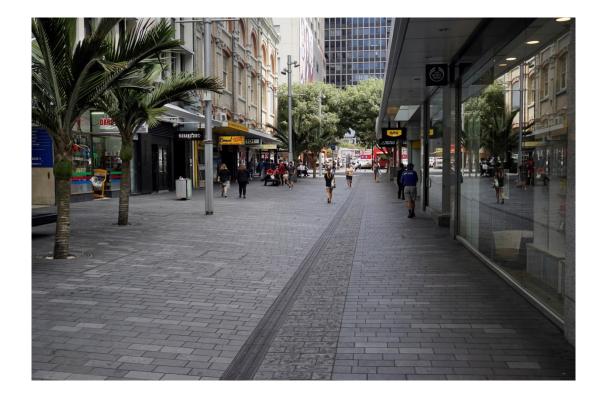
Preparing for the Future of Transport



17

Where do cars fit in?

| Urban streets | Roads | | |
|--------------------------|----------------------|--|--|
| Accessibility for People | Movement of Vehicles | | |















Chester, Louise Raynor / Public Domain

The City of the Future?









MRCagney