Australian Government
Department of Infrastructure and Regional Development

Intelligent Transport Infrastructure and Local Government

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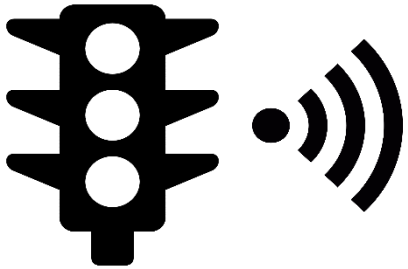
Automated Vehicles

Connected Vehicles

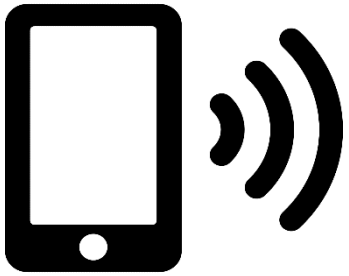
Vehicle-to-Vehicle

- Collision warning
- Emergency Vehicle Proximity
- Hard braking warning
- Traffic conditions (congestion, road work, road surface information)



Vehicle-to-Infrastructure

- Speed limit notification
- Green light optimal speed advisory
- Intersection collision warning

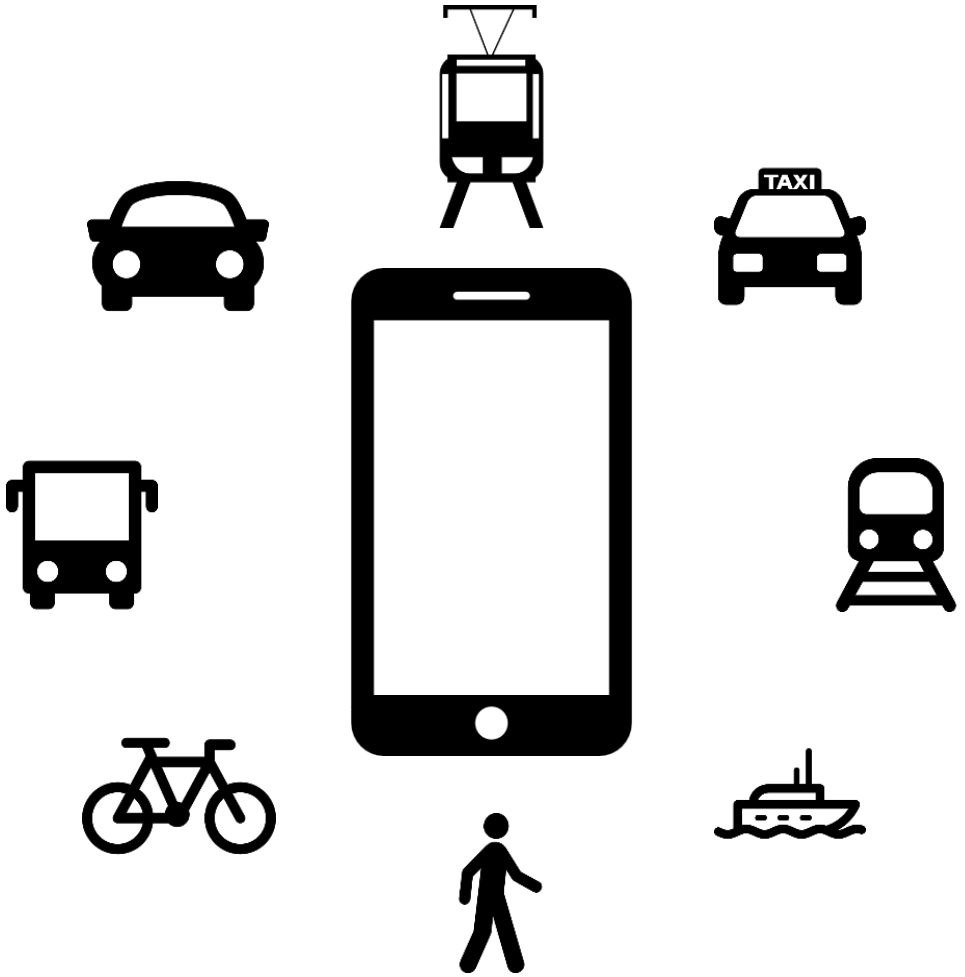


Vehicle-to-Personal device

- Pedestrian collision warning

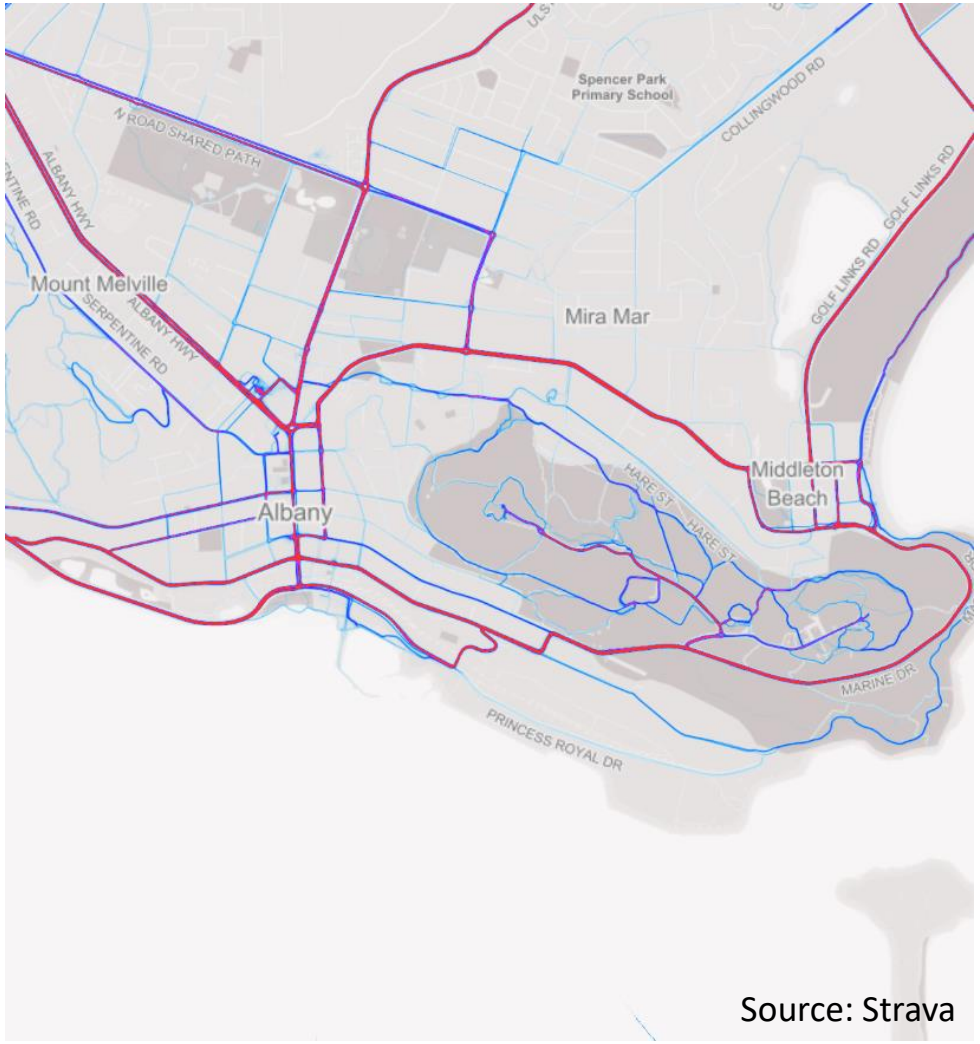
Smart Infrastructure

Mobility as a Service



Big Data

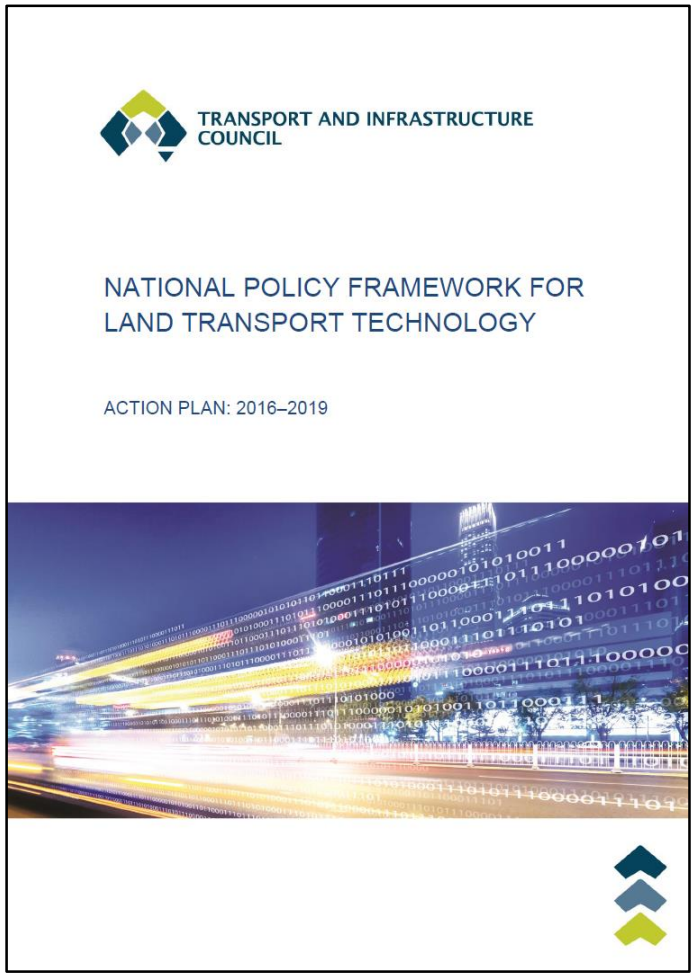
- 50 billion devices connected to the internet by 2020
- New sources of traffic data
- “Big data is what happened when the cost of storing information became less than the cost of making the decision to throw it away”
  – George Dyson



Source: Strava

A National Policy & Action Plan

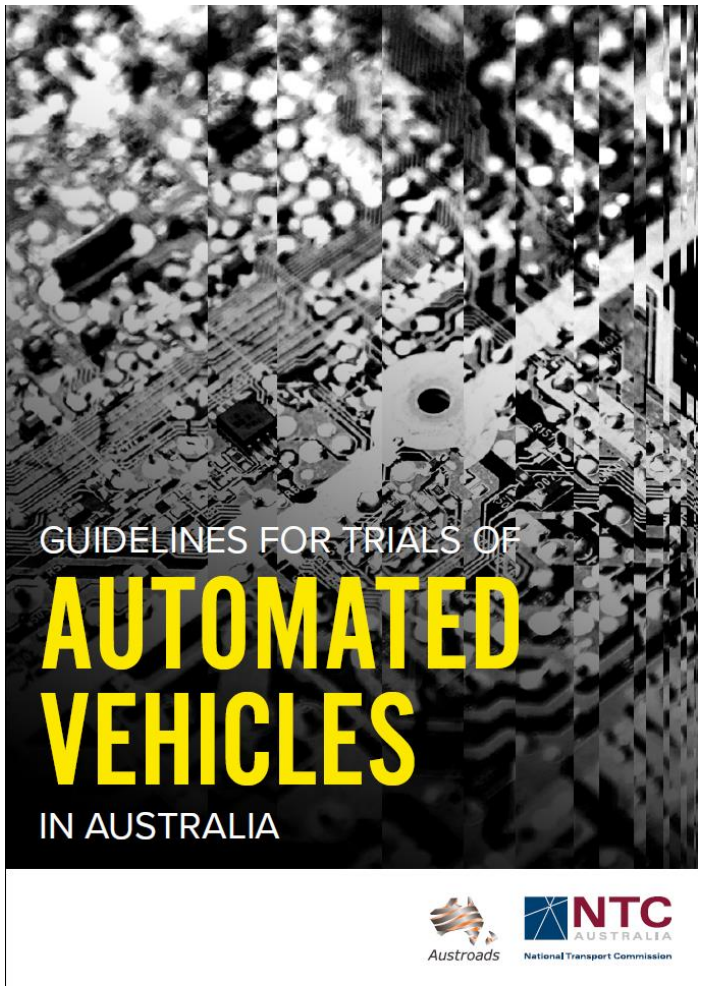
- Agreed by national transport ministers in August 2016
- Seeks nationally consistent approach to emerging technologies
- Role for government: policy leadership, enabling, supportive regulation, facilitating trials
- 3-year collaborative action plan



http://transportinfrastructurecouncil.gov.au/publications/files/National_Policy_Framework_for_Land_Transport_Technology.pdf

Automated Vehicle Reforms Underway

- National Trial Guidelines (May 2017)
- Safety regulation
- Cyber security
- Road rules
- Legislation which assumes a human driver
- Access to data
- Compulsory Third Party insurance review
- Small (footpath-based) automated vehicles



Getting Infrastructure Ready

RAC Intellibus

Easymile EZ-10

Queensland Government

CAV Initiative

Heavy Vehicle Priority Project

National Satellite-Based Augmentation System (SBAS) test bed

Curtin University Driverless Bus

Cooperative Intelligent Transport Initiative

Automated Shuttle Bus

Truck Platooning Trial

CAN Drive

Volvo XC90 Demo (2015)

RDM Driverless Cargo Pod

VicRoads ITS Grants

Transurban Trial

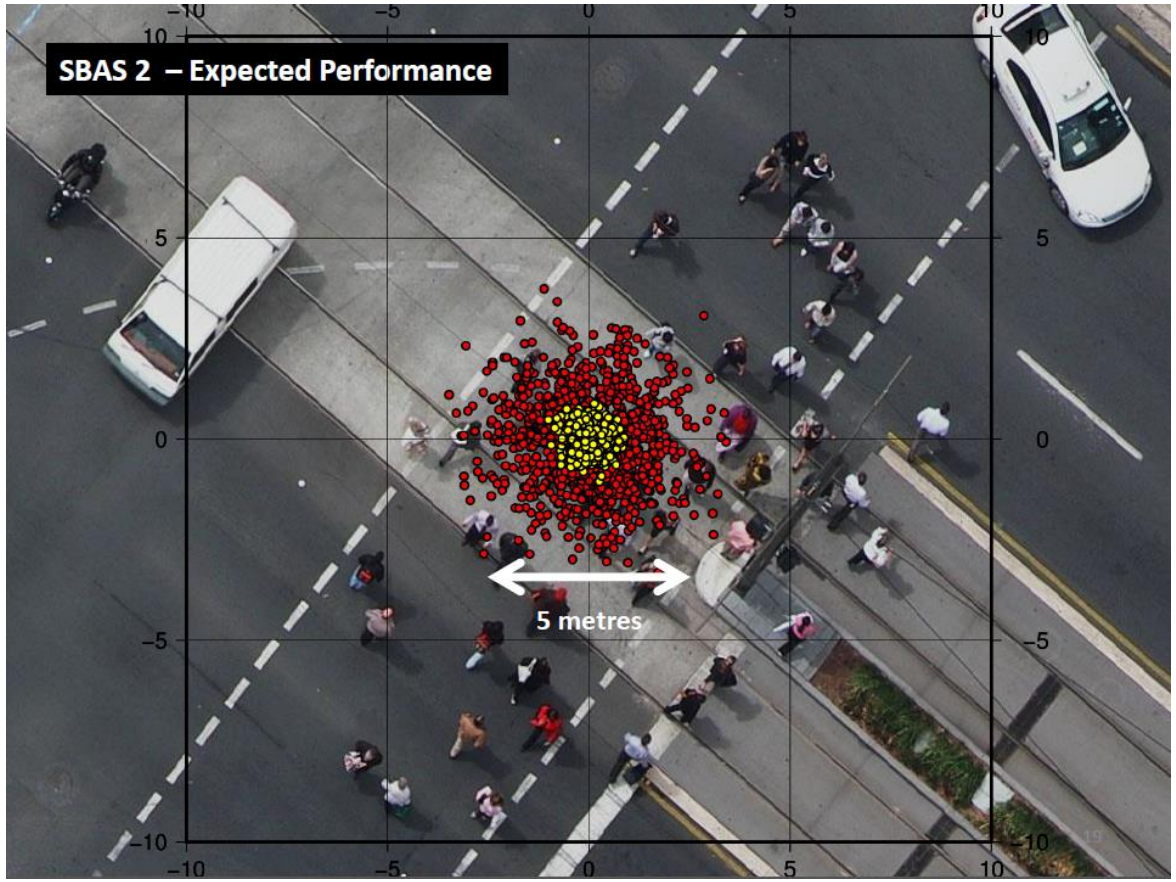
Bosch Highly Automated Vehicle

National Connected Multimodal Test-bed

http://www.austroads.com.au/drivers-vehicles/connected-and-automated-vehicles/trials

Satellite-Based Augmentation System (SBAS)

- $14 million two-year program to test next-generation instant, accurate and reliable positioning technology in Australia



http://www.ga.gov.au/scientific-topics/positioning-navigation/positioning-for-the-future/satellite-based-augmentation-system

Impacts on Local Government

- Road related revenue
- Urban sprawl and service provision
- Impacts on infrastructure and town planning
- Potential new infrastructure requirements (uncertain)

Social Issues

- House of Representatives Inquiry completed 11 September 2017
- Terms of reference: social impacts of automation (e.g. employment, access, legal issues, safety, general acceptance)
- Recommendations:
  - Trials that involve the public
  - Cyber security
  - People with a disability, older Australians and Regional Australia
  - Understanding employment impacts
  - Much more…

A challenge for further discussion

- Local government involvement is essential for solving local transport problems
- What partnerships and risks do we need to take to move forward?

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