Where can I find more information?

Further information, including the National Policy Framework for Land Transport Technology and links to work by national organisations including the National Transport Commission and Austroads can be found at infrastructure.gov.au/automatedvehicles.
What?
Vehicle automation means that driving tasks like accelerating, braking, turning or changing lanes will be performed by a vehicle's automated system instead of a person.

Automation is a continuous process. People used hand cranks to start their cars until this was automated by batteries and starter motors.

Today, some new cars have automated features such as self-parking or traffic jam assist. These features assist with driving, but a licensed human driver is still in control of the car.

Over the coming decades, vehicles will become more and more automated, and eventually a human will not need to drive at all.

When?
Within the next few years cars will be available that can drive themselves in certain situations such as on highways, but with a human driver ready to take back control. At other times, the human will need to drive as normal.

As the technology develops over the next decade, the next step will be cars able to drive on certain roads without a driver, and without a person ready to take back control.

Experts are divided about when a truly ‘driverless vehicle’ will be available. There are a number of technical challenges to overcome before a vehicle can safely drive itself in every situation.

The levels of vehicle automation and the changing roles of the person in the vehicle are described in the adjacent chart.

What are the benefits?
Highly automated vehicles have large potential benefits for Australia, including to:

- reduce road deaths
- reduce traffic congestion by making better use of our roads
- encourage greater use of ridesharing and improve access to public transport
- increase transport options for people who cannot or do not want to drive, including older people and people with disabilities, and
- reduce greenhouse gas emissions.

There will also be other benefits, such as improved freight industry efficiency and productivity. In order to get the benefits of vehicle automation, Australian governments need to work together to prepare for automated vehicles.

How?
Australian governments are working together to make sure automated vehicles can be used safely and legally.

This includes work to:

- make sure that automated vehicles can operate safely and legally on our roads
- ensure the data produced by automated vehicles is not misused
- make sure automated vehicles are secure from hacking
- consider what these vehicles will mean for driver licensing and road rules
- make sure our roads are ready and things like road markings and traffic lights can work with automated vehicles
- look at consumer issues like insurance and liability
- make sure that vehicles take into account the needs of all Australians, and
- consider the impacts on our workforce and future skills needs.

A lot of information will come from real-world trials of automated vehicles. State and territory governments are working on trials with industry so they can understand how these vehicles can work on Australian roads. A list of current trials is at http://www.austroads.com.au/drivers-vehicles/connected-and-automated-vehicles/trials. Some of these trials give the public the opportunity to ride in these vehicles.

Where to from here?
It is important that Governments do not move too fast or slow to respond to automated vehicles. If we go too quickly, we may create barriers to innovation and invest in the wrong infrastructure. If we go too slowly, we could miss opportunities.

Over the coming decades, the Australian Government will continue to work with industry, the community, and governments, so that our policies and laws keep pace with automated vehicle technologies and the opportunities they create.

Automated Vehicle Levels

**Level 1 and 2**
- Person watches the road with hands on the steering wheel and intervenes when required
- Adaptive cruise control and traffic jam assist

**Level 3**
- Person not required to watch the road but, in some circumstances, must respond to requests to take back control
- Future vehicles with highway autopilot

**Level 4**
- Person is not required to take action when the system is driving
- Future vehicles that are ‘driverless’ on some routes

**Level 5**
- Person is never required to take action
- Fully driverless

**Level 6**
- Vehicle drives itself all of the time
- Future vehicles that are fully automated

- Vehicle assists with driving
- Adaptive cruise control and traffic jam assist