Queensland Government Response to Transport and Public Works Committee Report No. 41, 56th Parliament

In June 2018, the Transport and Public Works Committee commenced an inquiry into Transport Technology.

The terms of reference for the inquiry were:

a. identifying trends and changes in fuel type usage in the sectors of personal transport, freight transport and public transport, such as the increasing uptake of hybrid and electric vehicles

b. examining the readiness of the transport network for increasing electrification of vehicles in coming years

c. identifying other emerging technological factors which will impact on transport networks into the future, such as driver aid technology and 'driverless' car technologies

d. examining how technology is affected employment arrangements in the transport industry, particularly in the food delivery area.

On 20 July 2020, the Transport and Public Works Committee tabled Report No.41 *Inquiry into Transport Technology*, noting some 16 recommendations. The Government supports all recommendations, either in full or in principle.

I would like to thank the Transport and Public Works Committee for their efforts in considering the challenges and opportunities technology will bring to the transport sector in coming years. I would also like to note the many submissions made by the Queensland community that have assisted the Committee in the inquiry.

The Government notes that implementing the Government response will require collaboration with the community, industry and the Federal Government to maximise the benefits from emerging transport technologies.

The Department of Transport and Main Roads will continue to engage with stakeholders to create opportunities to support the Government response to the recommendations you have raised.

In accordance with *section 107* of the *Parliament of Queensland Act 2001*, the Government response to the recommendations is outlined below.

Queensland Government Response to Transport and Public Works Committee Report No. 41, 56th Parliament

Response to Recommendations

Recommendation No.1

The committee recommends that, in regard to electric personal mobility devices, the Queensland Government consider:

a. reviewing legislation to provide for the legal operation of electric personal mobility devices that encourages use for first and last mile trips as an alternative to private car use.

b. reviewing planning and design guidelines and retrofit areas to ensure safe interaction and mitigate conflict on shared infrastructure between pedestrian and traditional active transport, and electric mobility device users.

c. undertaking public engagement and education about the safe operation of electric personal mobility devices and supported use cases.

Government Response: Supported

The Queensland Government is committed to proactively exploring ways suitable to encourage the safe use of electric personal mobility devices, or 'rideables', as an alternative to private car use.

On 14 December 2018, laws were introduced in Queensland to allow a broader range of personal mobility devices, or 'rideables' to be legally used in public spaces across Queensland. Development of the laws followed work over a number of years to examine the safety implications of these devices and their role in "*first and last mile"* transportation. Queensland was the first state or territory in Australia to introduce legislation to provide for the safe use of personal mobility devices, including e-scooters.

Under the laws, rideable users must ride in a safe manner around pedestrians. This means they must keep left, give way to pedestrians and travel at a safe speed, which may be considerably less than the maximum allowed speed of 25 km/h. They must also keep a safe distance from pedestrians to avoid a collision. To help ensure that rideables are used safely, penalties apply for rideable users who disobey the rules.

Local access infrastructure (such as footpaths and cycleways) provides key connections between the public transport facility and the immediate surrounding environment. TMR's Public Transport Infrastructure Manual provides guidance on this, including that the design of public transport stations and park 'n' ride facilities should consider the use of personal mobility devices (such as e-scooters) to accommodate first and last mile solutions, including designated storage areas for 'rideables'.

The Government regularly reviews its planning and design guidelines for transport infrastructure, including shared infrastructure, to ensure the safe interaction of their users. The Department of Transport and Main Roads (TMR) recognises the importance of providing dedicated cycle paths for active transport, including 'rideables'; and will continue to work with local councils and industry to deliver new and upgraded footpaths and cycling paths around centres and along key corridors that are safe and connected. TMR supports the recommendation in this regard.

Public communication campaigns have been undertaken to educate the community and users of 'rideables'. These include a social media campaign that ran over December 2018 and January 2019 to promote the new laws and educate riders on their safety obligations. A more comprehensive campaign was undertaken in April 2019, where key safety messages were

communicated through social media and on digital signage on paths across 40 streets in the Brisbane central business district area. Information on the rules for rideables is available on the Queensland Government website. TMR will continue to proactively engage and educate the public about the safe use of 'rideables'.

Recommendation

The Queensland Government supports this recommendation. TMR will continue to monitor required changes in legislation, continue to review planning and design guidelines related to 'rideables' and continue to proactively engage and educate the public about the safe use of 'rideables' into the future.

Recommendation No.2

The committee recommends the Queensland Government consider the potential risk for first responders using their equipment alongside an electric vehicle in future training as and when needed.

Government Response: Supported

The Queensland Government supports the recommendation of the committee and is committed to the safety of its first responders by ensuring new risks posed by technology and other industrial hazards are identified in a timely manner and appropriate mitigation measures are put in place. There are many potential dangers that are present at incidents involving vehicles that could impact Queensland Fire and Emergency Services (QFES) first responders, as well as Queensland Police Service (QPS) and Queensland Ambulance Service (QAS) responders.

In response to this issue, the Department of Employment, Small Business and Training is funding an *Electric Vehicle First Responder Safety Training Program* for Queensland, to be facilitated by Energy Skills Queensland (ESQ). On 30 October 2020, ESQ hosted an Industry Consultation Forum to finalise the *Electric Vehicle First Responder Safety Program* with key first responder organisations in attendance including QFES, QAS, QPS, Royal Automobile Club of Queensland (RACQ), TMR, Energy Queensland and the Federal Chamber of Automobile Industries (FCAI). The training program addresses the responsibility and role of each first responder organisation and is expected to be made available to first responder organisations early 2021 once completed.

QFES supports the abovementioned program funded by DESBT and developed by ESQ, for delivery through QFES internal departmental training programs, once finalised. Additionally, as part of an ongoing commitment between the QFES and the QAS, Road Crash Rescue (RCR) training is conducted as a component of the state recruit training. This training provides new recruits with an awareness of the hazards associated with EVs, the initial safety concerns and strategies to minimise risk. For example, the continued evolution of fuel cells requires a dynamic approach to safety and hazard identification, as do proximity key enabled vehicles where the ignition key location may not be known in order to shut down the engine.

In addition to future first responder training, TMR has worked with the National Transport Commission to introduce a nationally agreed update to the Australian Light Vehicle Standards for electric vehicles (EVs) manufactured after 1 January 2019. The changes include requirements for a safety label to be affixed to the registration plates of EVs, ensuring these vehicles are more easily identifiable by first responders.

The legislative requirements which came into effect in October 2020, require all new EVs to display the safely label. A 12-month grace period was also provided to allow owners of EVs manufactured since 1 January 2019, that were already registered when the new safety label requirements were introduced, time to comply with the requirements.

Recommendation

The Queensland Government supports this recommendation and has made steps to develop an accredited *Electric Vehicle First Responder Safety Training Program* in consultation with first responder organisations. The accredited training program is expected to be made available to all first responders early 2021.

Recommendation No.3

The committee recommends the Queensland Government consider:

- how it can incentivise and support local councils, property developers, carpark owners and shopping centres to install electric vehicle charging stations with a variety of chargers to meet market demand.
- the benefits and potential of providing electric vehicle charging stations in park 'n' ride facilities
- liability concerns if a vehicle fails to charge or a fire occurs due to technical fault.

Government Response: **Supported in Principle**

The Queensland Government's response has been disaggregated to address each element of the recommendation.

The committee recommends the Queensland Government consider how it can incentivise and support local councils, property developers, carpark owners and shopping centres to install electric vehicle charging stations with a variety of chargers to meet market demand.

Government Response: Supported in Principle

The Queensland Government is working towards meeting renewable energy and emission reduction targets by 2030. To achieve these targets, Queensland requires a greater uptake of EVs and supporting infrastructure for low and zero emissions vehicles (LZEVs).

The Queensland Government is committed to working with local councils, property developers, carpark owners and shopping precincts to provide consumers with the confidence to make the switch to EVs knowing they are supported with a range of charging opportunities in easily accessible locations. This was demonstrated in the delivery of the Queensland Electric Super Highway (QESH), completed in January 2018. An additional 13 new sites are progressively coming online, with all sites to be operational in the first quarter 2021.

The Queensland Government, through the Department of State Development, Infrastructure, Local Government and Planning (DSDILGP), has identified an opportunity to further support the expansion of EV charging stations by providing guidance to local governments about how to support mandatory or optional EV charging stations within developments to enable opportunities for smart transport infrastructure in Queensland.

The Queensland planning framework does not regulate EV charging stations and therefore does not impose any regulatory hurdles to their installation. Market demand is already resulting the installation of EV chargers in locations that are suitable for destination charging including retail, hotels and tourism locations.

The Queensland Government, through Economic Development Queensland (EDQ), has enabled the uptake and adoption of EV charging through several initiatives. This includes:

- publishing an EV Charging Infrastructure Practice Note which outlines the principles for planning EV charging infrastructure and supports the selection of the right type of infrastructure at the right location
- delivering a demonstration project, the *Tropical North Queensland Electric Vehicle (EV) Drive* and the learnings from this project are available for local governments to consider
- conditioning developments within some Priority Development Areas to have charging infrastructure installed or to be EV infrastructure ready (e.g. ensuring parking areas

have certain levels with charging capability, along with carports and garages to be fitted with dedicated electrical circuit).

The committee recommends the Queensland Government consider the benefits and potential of providing electric vehicle charging stations in park 'n' ride facilities

Government Response: Supported in Principle

The Government continues to monitor EV uptake and usage trends which are needed to inform future investment decisions.

The Queensland Government is committed to investigate ways to encourage the use of public and active transport modes, including through integrating EVs and electric bicycles with public transport hubs to ensure an integrated and accessible transport network.

The Government adopts a considered approach when planning modal access to park 'n' ride facilities. Supporting greater access for accessible modes is a key part of the planning approach. Charging stations should be targeted at locations that support and complement existing initiatives such as Queensland's Electric Super Highway. This will ensure our transport network remains integrated, accessible and connected for its customers.

The committee recommends the Queensland Government consider liability concerns if a vehicle fails to charge or a fire occurs due to technical fault.

Government Response: Supported in Principle

The Queensland Government recognises the paramount importance of safety, including in the context of using transport infrastructure, such as EV charging stations.

The Government strongly recommends that all EV equipment is installed by a licensed and qualified electrician. Installation of EV charging infrastructure must comply with applicable local, state and national standards and regulations.

In respect of liability, the design, manufacture and operation of EV charging infrastructure is subject to established state and national product standard and consumer protection laws.

Recommendation No.4

The committee recommends the Queensland Government consider how it can support infrastructure for new transport technologies in rural, remote and regional Queensland to ensure no Queenslander is disadvantaged in relation to access to electric vehicles and the infrastructure required to support them.

Government Response: Supported

The Queensland Government is committed to supporting the uptake of, and access to, low and zero emission vehicles across the state, including in regional Queensland.

As EV technology, including battery range and charging times, continues to evolve, the Queensland Government will consider future needs for infrastructure to complement technological advancement. As a large and decentralised state, long distance travel is common and often unavoidable across Queensland. The expansion of charging infrastructure to other rural, remote and regional Queensland communities will be explored through partnerships across industry and local governments.

EV tourism and the transition to EVs is an opportunity for the development of tourism in regional Queensland. Research undertaken by the Queensland Government (which was also independently verified) identified that the risk from not investing in regional EV infrastructure in Queensland was in the vicinity of $234 million across the next decade (until 2026). This research partly informed the decision to build the QESH from Coolangatta to Cairns and the demonstration *Tropical North Queensland Electric Vehicle (EV) Drive*, rather than focus purely on EV infrastructure in urban areas. The Queensland Government will continue to work with local governments and tourism bodies to develop strategies to encourage and support EV-tourism across the state and into regional areas.

This commitment is detailed in the Queensland Regional Transport Plans (RTPs) published on the TMR website. The RTPs were developed to outline regional transport priorities and actions for developing Queensland's transport system in a way that supports regional goals for the community, economy and environment over the next 15 years. A key long-term action is that the Queensland Government continues to plan for the future roll out and integration of low and zero emission vehicles (plug-in electric and hydrogen fuel-cell) across a number of rural, remote and regional Queensland locations. The Queensland Government is also committed to the identification of network impacts and potential benefits of low and zero emission vehicles in these locations.

Recommendation

The Queensland Government supports this recommendation. TMR will continue to monitor advancements in technology and update the Regional Transport Plans as progress is made over the longer term.

Recommendation No.5

Whilst acknowledging that this is a national issue, the committee recommends that the Queensland Government take a leadership role in regard to the restructure of the road funding model to ensure that the matters raised by submitters during the inquiry are considered.

Government Response: Supported in Principle

The Queensland Government notes the matters raised by the submitters with regards to impacts from the emergence of new transport technologies on the funding model for transport infrastructure. Holistically, the State Infrastructure Plan (SIP) outlines an option assessment approach to investment which encourages reform and better use of existing infrastructure, where possible. Similarly, as one of the five strategic infrastructure documents under the SIP, the Queensland Transport Strategy recognises the need to ensure sustainable funding, noting that "transport is competing for limited funding, as the government manages the state's available funding to balance different, including increased demand for health and human services."

The Queensland Government is working with the Commonwealth and other jurisdictions to explore different ways to reduce reliance on general revenue to fund, operate and maintain transport networks. We will investigate potential use cases and applications of revenue generation and ensure equitable and accessible transport options are prioritised. Options being explored around Australia and internationally include value sharing, innovative tolling approaches, Mobility as a Service and pricing regulation.

As the committee notes, TMR is working with the Land Transport Market Reform Steering Committee to progress this agenda. A national Steering Committee and Sub-Working Groups are included in the governance structure. These groups include representatives from Commonwealth and all jurisdictional Treasuries, as well as transport agencies. Queensland Treasury and TMR both actively participate in these groups to guide the reform.

Recommendation

The Queensland Government supports this recommendation in principle. TMR will work collaboratively with relevant state and national counterparts into the future, and in doing so will consider the issues raised by the submitters.

Recommendation No.6

The committee recommends the Queensland Government undertake modelling on potential new transport models to determine the government's best use of resources and how it will manage the overall transport network impacts into the future and ensure social equity for all Queenslanders.

Government Response: Supported

The Queensland Government supports the committee's recommendation to undertake modelling on potential new transport service models that may assist in transitioning Queensland's transport system to a safer, more sustainable future.

The committee's recommendation reflects TMR's past, current, and future modelling efforts that are funded under TMR's Transport System Planning Program (TSPP). The government is committed to undertake and improve transport modelling to assess how new transport service models can help achieve TMR's strategic transport outcomes. The outcomes of these modelling efforts formed part of the evidence base for the Queensland Transport Strategy, as noted by the Committee.

The government also notes the submitters' concerns that the transition to these new transport technologies and service models, if poorly managed, may *'hinder*' the Government's ability to achieve its strategic transport outcomes. In particular, the comments provided in the Royal Automobile Club of Queensland (RACQ) submission on the need to '*evaluate a range of policy and regulatory options to encourage emerging transport models and business*' when seeking to model emerging transport service models and technologies.

The government also notes submitters' concerns that the opportunity posed by the technology, and its associated service models, may vary across urban, rural and regional Queensland. The government supports the committee's recommendation on the need to investigate any equity issues further.

Recommendation

The Queensland Government supports this recommendation and the need to continue to undertake further modelling to better understand the policy, planning and investment opportunities and ensure social equity for all Queenslanders.

Recommendation No.7

The committee recommends that the Queensland Government consider submitter comments regarding the best model of implementation for a mixed fleet operating on Queensland roads.

Government Response: Supported

The Queensland Government notes the submitters' comments regarding the challenges of Cooperative and Automated Vehicles (CAVs) in a mixed fleet environment and supports their consideration.

While specific deployment timeframes are yet to be determined, it is inevitable, because of vehicle replacement policies and useful lives of vehicles, that CAVs will operate in a mixed fleet environment on Australian roads as the fleet transitions. This will include CAVs interacting with human-driven vehicles, pedestrians, cyclists and motorcyclists.

A range of preparations are occurring to support the safe operation of CAVs in a mixed fleet environment. For example, the Queensland Government, through TMR, is taking a lead role in national regulatory reforms being led by the National Transport Commission. These reforms aim to develop an end-to-end regulatory framework for CAVs. This is planned to address many of the issues raised by submissions, including product faults, in-service modifications, and liability for safety breaches.

The Queensland Government also agrees with submissions highlighting the importance of community education, engagement and trust associated with future transport technologies. Work is underway to increase awareness and understanding of Advanced Driver Assist Systems and AV technologies. This includes identifying education and training needs of users and how these are best delivered.

Community engagement and awareness is also a key focus of the Queensland Government's work in CAV trials. The Cooperative and Highly Automated Driving Pilot (CHAD Pilot), operated in partnership between the Queensland Government, the Queensland University of Technology and iMOVE Australia, includes a research stream aimed at understanding community attitudes towards CAVs and increasing community exposure to these emerging technologies. This has included a demonstration where members of the public can ride in a CAV on public roads.

As an enabling technology for CAVs, the Ipswich Connected Vehicle Pilot (ICV Pilot) will seek to validate the benefits of connected vehicle safety applications, build public support and awareness, and develop new industry partnerships. The pilot findings will also inform national planning and preparation for connected vehicles. Additionally, findings from the pilot will also be used as part of a greater connected vehicle campaign, aimed at raising community awareness of the technologies. In August 2020, the pilot called for participants from the community.

Noting submitter's comments, the Queensland Government is also exploring the role that vehicle sharing, in combination with emerging transport services models, such as Mobility as a Service, may have in enabling a faster transition to a connected and automated fleet, through modelling tasks.

Recommendation

The Queensland Government supports this recommendation. TMR will continue to investigate, test and validate concerns to minimise the challenges of fleet transition.

Recommendation No.8

The committee recommends that the Queensland Government note submitter concerns regarding faulty manufacturing in vehicles with new transport technologies and considers them during the regulation making process.

Government Response: Supported

The Queensland Government supports the committee's recommendation.

Product safety, in-service modifications, quality of repairs, insurance requirements and consumer protections are all key considerations of the national end-to-end regulatory framework for Automated Vehicles (AVs). The development of this framework is being led by the National Transport Commission, and TMR is actively involved.

Unsafe vehicles, including AVs, will continue to be subject to recall processes managed by the Federal Government. Recall processes place obligations on vehicle manufacturers to rectify unsafe vehicles and can be either voluntary or mandatory.

Further regulatory arrangements are also proposed to support the safe operation of AVs. This will include statutory obligations on Automated Driving System Entities (ADSEs), and their executive officers, to ensure the safe operation of AVs. ADSEs will be required to have an Australian corporate presence and demonstrate ongoing minimum financial requirements to ensure they can appropriately respond to emerging safety issues.

Recommendation

The Queensland Government supports this recommendation. TMR will continue to be actively involved with the National Transport Commission's work and in doing so, consider the submitter's comments during the regulation making process.

Recommendation No.9

The committee recommends the Queensland Government, working with other jurisdictions, continue to address the key concerns raised by submitters about infrastructure, including:

- the ability of automated vehicles to react to road hazards by developing interoperable connectivity, infrastructure, and traffic management systems
- the potential community investment required to install and upgrade infrastructure connectivity and network management software
- conducting trials to identify and rectify infrastructure design and maintenance issues
- working across jurisdictions to update road design and maintenance standards consistently to ensure automated vehicles operate safely and reliably.

Government Response: Supported

The Queensland Government supports this recommendation. Through TMR, the Queensland Government is committed to addressing the key concerns raised by submitters about future infrastructure needs to support the transition to CAVs.

Automated vehicle technology and connected/cooperative vehicle technology are parallel technology developments with cooperative technology expected to come to market in vehicles in the near term, irrespective of the level of automation. Cooperative vehicles talk and listen to other road users and infrastructure via a variety of network and short-range communications - automated vehicles (AVs) do not. Co-operative vehicles require digital, communications and data investment by government.

AVs see and feel road infrastructure from a range of sensors - cooperative vehicles do not. AVs rely on those sensors to identify and recognise road features.

Convergence of these – a cooperative and automated vehicle - makes for a safer and more capable vehicle.

Cooperative vehicles can already be purchased overseas, however, they are not yet commercially available in Australia. By 2025, cooperative technologies are likely to be part of ANCAP's five-star vehicle rating. Widespread deployment of highly automated vehicles is likely to significantly lag the deployment of co-operative vehicles.

The Cooperative and Automated Vehicle Initiative (CAVI) within TMR is running two major pilots, the Ipswich Connected Vehicle Pilot (ICV Pilot) and the Cooperative and Highly Automated Driving Pilot (CHAD Pilot). The ICV Pilot is purposed with testing connected transport infrastructure to develop an interoperable cooperative intelligent transport system. This technology is an enabling technology for longer term CAVs.

In the ICV Pilot, six scenarios will be tested. Two will be guided by the connected road infrastructure and focus on red-light warning and an alert that pedestrians and cyclists are crossing at an upcoming intersection. The other four scenarios that are included in the ICV Pilot are based on input from traffic management centres or roadwork teams.

Under these scenarios, drivers will be alerted to roadworks, road hazards such as a crash or that a queue is forming ahead, plus the speed limit for that particular section of road, even factoring in changes due to school holidays.

The ICV Pilot commenced in August 2020 and will be evaluated over a nine-month period. Pilot outcomes and learnings will be available after this time.

Similarly, conducting trials of AVs, including the CHAD Pilot, on Queensland roads serves a variety of important lessons for the Government. These include the opportunity to learn more about the technology, how best to regulate, possible road infrastructure design and maintenance issues, and the possible investment requirements for physical and digital infrastructure to support the deployment of CAVs.

It also has the benefit of raising community awareness and understanding of how these emerging transport technologies will benefit the community, including road safety outcomes.

TMR actively works with Austroads in developing recommendations for Australian Standards for harmonising road design standards, including pavement marking, that will consider the future requirements of CAVs. TMR will continue to work with other jurisdictions and stakeholders on these organisations to develop these standards for these emerging transport technologies.

Recommendation

The Queensland Government supports this recommendation. TMR will continue test and address the key concerns raised by submitters about future infrastructure needs to support the transition to CAVs.

Recommendation No.10

The committee recommends the Queensland Government continue working with all Australian governments to ensure that the issue of black spots and mobile phone coverage across Australia is resolved in order to facilitate connectivity for automated vehicles.

Government Response: Supported

Telecommunications, including addressing mobile phone black spots, is the responsibility of the Federal Government. Since 2015, the Federal Government's Mobile Black Spot Program (MBSP) has focussed on identifying known mobile black spots and working with mobile network operators, in conjunction with local and state governments, to improve mobile telephone coverage across Australia.

The Queensland Government has sought and made investment as a co-contributor with the Federal Government and telecommunications providers, through four rounds of the MBSP as a key mechanism to facilitate connectivity for communities and businesses for the State, and intends to participate, subject to budgetary processes.

The Federal Government has indicated its interest in addressing mobile black spots for major regional and remote transport corridors, along with other proposed priorities, in its recently conducted consultation on draft guidelines for proposed Round 5A of the MBSP. The former Department of Housing and Public Works (HPW) provided feedback into that consultation process which included general support for addressing mobile black spots for major regional and remote transport corridors as one of the target areas under the proposed guidelines.

Further, in July 2019, the Queensland Government established QCN Fibre to make spare government owned fibre optic cable available to internet service providers at competitive prices, to improve access to quality, high-speed internet for regional Queenslanders. By using the State's existing fibre network, owned by Powerlink Queensland and Energy Queensland, QCN Fibre will enable regional and remote communities to access the same or better quality internet service as metropolitan areas, keeping jobs in the regions and creating opportunities for further job creation.

The Department of Communities, Housing and Digital Economy will continue to pursue opportunities to leverage Queensland Government-owned telecommunications infrastructure for the benefit of Queenslanders.

Initially, QCN Fibre is delivering three pilot projects in Toowoomba, Warwick and Goondiwindi. These projects have established partnerships with local internet service providers, enabling them to offer significantly improved data capacity and speeds in a cost-effective manner to the local communities including schools, small businesses and health providers.

This project is also investigating a range of other initiatives that offer the potential to enhance connectivity opportunities in regional Queensland in connection with the QCN Fibre network. These include the Australian Government's Regional Backbone Blackspots Program, and the Mobile Black Spot Program.

Recommendation

The Queensland Government supports this recommendation. I have requested that the current activities continue to ultimately help to facilitate connectivity for automated vehicles into the future.

Recommendation No.11

Noting the concerns raised during the inquiry process, the committee recommends the Queensland Government address the following issues relating to protecting the privacy of individuals and reducing the risk of cyber-attacks by developing and implementing legal, policy and operational frameworks or working with the federal government to:

- prevent unauthorised privacy breaches relating to tracking and location of individuals
- ensure that any access by law enforcement and transport regulators to data produced from transport technology is subject to safeguards and transparency
- maintain clear records of who is accessing the data and for what purposes
- consider that the principles of the *Information Privacy Act 2009* are embedded in legal, policy and operational systems that involve personal information as recommended by the Office of the Information Commissioner and undertake Privacy Impact Assessments early in the policy process to manage, minimise or eliminate negative impacts of unauthorised data access
- investigate the potential for privacy breaches involving conversations in vehicles and address as needed to ensure privacy
- review the issues in relation to privacy raised by the Privacy Commissioner during the inquiry process with a view to strengthening the privacy legislation where necessary
- consider a 'privacy by design' approach as recommended by the Office of the Information Commissioner when regulating for new and emerging transport technologies.

Government Response: Supported

The Queensland Government, through TMR, is committed to ensuring the privacy and security of personal, sensitive and safety information.

Privacy, by design, is already a standard process within TMR and privacy impact assessments are regularly conducted on new projects that deal with personal information to ensure safeguards are in place. This includes ensuring TMR's practices are compliant with the *Information Privacy Act 2009* (IP Act).

As a custodian of customer information, TMR's approach to managing data privacy also extends beyond the IP Act. TMR operates in accordance with specific provisions within transport law that govern how personal information can be collected, stored, used and disclosed. These provisions ensure relevant safeguards and restrictions are in place to mitigate privacy risks.

Information privacy and security are critical components of the national Automated Vehicle (AV) regulatory reforms, currently being led by the National Transport Commission. Based on agreement to date, the AV industry will be required to certify the safety and security of their vehicles as part of first-supply arrangements. Ongoing compliance will also be required while AVs are in use on Australian roads. From a privacy perspective, the AV industry will be subject to the *Privacy Act 1988* (C'wlth), and the associated Australian Privacy Principles. In accordance with these principles, personal and sensitive information must only be collected as necessary and with the consent of the person to whom the information relates. Significant penalties exist for breaches of these requirements.

Under the umbrella of the national AV reforms, TMR has taken a lead role in policy reform projects exploring the use of future vehicle data. Government access to data generated by AVs and other future vehicles will be subject to privacy by design processes. This will include privacy impact assessments, appropriate legislative amendments that are subject to government and Parliamentary scrutiny, as well as in-built safeguards to prevent misuse. The Privacy Commissioner will be engaged throughout the course of policy and legislative development.

Recommendation

The Queensland Government supports this recommendation. TMR will continue to incorporate a 'privacy by design' approach.

Recommendation No.12

The committee recommends that the Queensland Government consider the following, as recommended by submitters, as it continues to develop and implement its policies in relation to improving accessibility of transport now and into the future:

- ensure the adequate provision of wheelchair accessible vehicles, including methods for securing wheelchairs when a human driver is not present
- conduct a local and state government review of standing zones and parking spaces, and amend as necessary, to allow sufficient room for the safe and, if possible, automated deployment of a ramp to the rear of the AV, and otherwise safe and efficient boarding for passengers with a disability and those requiring extra time and assistance
- ensure the accessibility of smart phone applications in relation to transport and transport hubs
- ensure appropriate licencing arrangements are reviewed with the emergence of automated vehicles
- assess whether existing policy approaches and incentives in the disability sector should be adjusted or retargeted
- continue consulting with people with disabilities on transport policies early in the planning process
- invest in research, development and real-world trials that benefit the entire transport network customer base, including people with disabilities to provide a sound basis for government decision-making.

The Queensland Government's response has been disaggregated to address each element of the recommendation.

- *Ensure the adequate provision of wheelchair accessible vehicles, including methods for securing wheelchairs when a human driver is not present.*

Government Response: Supported in Principle

All new public transport vehicles entering service (after 31 December 2002) must conform to the requirements of the Commonwealth's *Disability Standards for Accessible Public Transport 2002* (DSAPT). Those vehicles currently in service, and in service prior to 2002, will require a 100 per cent fleet accessibility by 2022 for buses and ferries and 2032 for trains and trams.

Taxis and dial-a-ride vehicles are an exception to this full fleet compliance approach. No target for percentage of accessible vehicles per fleet has been set. Rather, compliance with DSAPT takes a demand-driven approach, stating 'Response times for accessible vehicles are to be the same as for other taxis'.

There are 640 wheelchair accessible taxi service licences in 79 taxi service areas across Queensland. This is almost 20 per cent of the total number of taxi service licences in Queensland. The Queensland Government continues to support the delivery of accessible taxi services in Queensland by:

- Subsidising taxi travel of half the total fare, up to a maximum of $25 per trip, for Taxi Subsidy Scheme members

- Providing a $20 lift payment for each wheelchair accessible taxi trip involving transport of a Taxi Subsidy Scheme member who requires a wheelchair for travel
- Delivering a four-year, $21 million wheelchair accessible taxi grant funding scheme to assist the taxi industry to replace aging and written off wheelchair accessible taxis, or to replace conventional taxis with wheelchair accessible taxis in identified taxi service areas
- the introduction of mandatory driver training in providing wheelchair accessible services for drivers of wheelchair accessible taxis.

CAVs are likely to form part of the public transport fleet in future. Currently, vehicles such as Wheelchair Accessible Taxis, where passengers are required to wear seat belts, also require active restraining systems. These systems are usually belt systems complying with *AS/NZS 10542.1-2015 Technical systems and aids for people with disability—Wheelchair tiedown and occupant-restraint systems Part 1; Requirements and test methods for all systems.* These systems are deployed by drivers or other trained staff. It is extremely doubtful that a wheelchair user, regardless of their degree of manual dexterity, could safely deploy a belt-dependent active restraint system.

- *Conduct a local and state government review of standing zones and parking spaces, and amend as necessary, to allow sufficient room for the safe and, if possible, automated deployment of a ramp to the rear of the AV, and otherwise safe and efficient boarding for passengers with a disability and those requiring extra time and assistance.*

Government Response: Supported in Principle

All taxi ranks are required to be accessible under the DSAPT by December 31, 2022.

Passenger loading zones are not covered by the DSAPT and so have no target date for compliance. They are covered by the Commonwealth *Disability Discrimination Act 1992* and *Anti-Discrimination Act 1991* and are therefore subject to complaint if not accessible.

Accessible parking spaces on-street have no required minimum proportion of the total parking spaces available, unlike accessible parking spaces off-street, which have required proportions of accessible spaces to general spaces under the National Construction Code.

On-street taxi ranks, loading zones and parking spaces can all be made accessible if constructed in compliance with *AS2890.5-2020 Parking Facilities: On-street parking*. This standard specifies spaces for accessible vehicles that can be entered from both the side and the rear. Having both options is important as side load, usually by ramp deployed to kerb side, has quite different dynamics to rear load, usually lift platform deployed to carriageway.

- *Ensure the accessibility of smart phone applications in relation to transport and transport hubs.*

Government Response: Supported

Applications for mobile devices that access information stored on beacons should conform to the requirements of Web Compliance Accessibility Guidelines (WCAG) 2.0 AAA.

TMR's Accessibility and Inclusion Strategy (AIS), released in July 2020, makes a commitment to provide accessible and inclusive transport products, services, information and infrastructure. TMR aim to achieve WCAG compliance for smart phone applications.

- *Ensure appropriate licencing arrangements are reviewed with the emergence of automated vehicles.*

Government Response: Supported

Human drivers will continue to be required to be licenced and capable of handling vehicles without depending on assistive or automated systems. The existing driver licensing system in Queensland is considered appropriate for the near future. However, this will be continually reviewed as vehicle technology advances.

TMR is the lead agency on an Austroads project that is exploring the most effective ways of educating and training drivers in the use of Advanced Driver Assistance Systems (ADAS). This includes technologies such as lane-keep assist, automated emergency braking and adaptive cruise control. This project will explore options for delivering education and training outside of traditional licensing processes to ensure engagement of all drivers. Lessons learned from this project will inform future education and training needs for AV users.

In the future, drivers of CAVs may be allowed to perform some non-driving tasks while the Automated Driving System (ADS) is engaged. However, they will still need to take back control as the 'fallback-ready user.' The obligations that will be placed on fallback-ready users will be developed as part of ongoing national CAV regulatory reforms, led by the National Transport Commission, to ensure they are consistent across jurisdictions.

- *Assess whether existing policy approaches and incentives in the disability sector should be adjusted or retargeted.*

Government Response: Supported

Approaches and incentives in the disability sector are constantly evolving. Current approaches that are working well will require modification over time to remain relevant. The Queensland Government keeps its policy approaches and incentives under regular review to ensure they continue to meet the needs of the disability sector in providing accessible passenger transport. TMR's AIS includes a commitment to developing the TMR Accessibility and Inclusion Action Plan, to focus on key accessibility projects. The Action Plan will document TMR's accessibility and inclusion journey, through programs of work to be implemented over the next ten years.

- *Continue consulting with people with disabilities on transport policies early in the planning process.*

Government Response: Supported

The New Generation Rollingstock Train Commission of Inquiry 2018, (The Forde Inquiry), found that the failure to consult the disability sector early in the procurement process was a key issue that contributed to a non-compliant train. Early engagement with the disability sector, whether in planning, procurement or policy development is crucial to the success of any venture.

The AIS, released in July 2020, makes a commitment to provide accessible and inclusive transport products, services, information and infrastructure. A key principle of the AIS is to engage early and co-design with our customers, employees and partners.

- *Invest in research, development and real-world trials that benefit the entire transport network customer base, including people with disabilities to provide a sound basis for government decision-making.*

Government Response: Supported

Trials and pilots are currently underway within TMR to support people with disabilities and the broader community, some of these include wayfinding trials, research into hidden disabilities and passenger transport behaviour towards those who are marginalised or vulnerable. Trialling products prior to their wider introduction is an established practice that should be universal.

Recommendation No.13

The committee recommends the Queensland Government consider a community awareness campaign, including what actions are being taken by government, to build understanding of the benefits, safe use, and automated features of connected and automated vehicle technology.

Government Response: Supported

The Queensland Government, through TMR's Cooperative and Automated Vehicle Initiative (CAVI), is tasked with demonstrating connected and automated vehicles publicly and building public awareness and uptake. To achieve this, the CAVI project is running two major pilots, the Ipswich Connected Vehicle Pilot (ICV Pilot) and the Cooperative and Highly Automated Driving Pilot (CHAD Pilot).

The ICV Pilot is Australia's largest connected vehicle technology pilot, with up to 500 public participants volunteering their vehicles to be retrofitted with connected vehicle technology for up to nine months. The ICV Pilot has called for participants since August 2020. Once underway, the pilot will validate the benefits of safety applications, build public support and awareness, and develop new industry partnerships. The pilot findings will also inform national planning and preparation for connected vehicles. Additionally, findings from the pilot will also be used as part of a greater connected vehicles campaign, aimed at raising community awareness of the technologies.

Although commercial deployment of AVs is further away than connected vehicles, TMR is piloting CAV technology through the CHAD Pilot. This pilot will evaluate the safety benefits and impacts of these technologies on Queensland roads. To deliver its objectives, the pilot is using a CAV in partnership with QUT (Queensland University of Technology), Motor Accident Insurance Commission and iMOVE Australia. The CAV, named ZOE2, is a custom-built Society of Automotive Engineers level four vehicle which does not require the driver to act when the system is driving but allows them to take back control if needed. Should the driver not be able to take back control, the vehicle will take safe action.

As part of this pilot a broader awareness campaign is being developed. As part of this campaign, there are planned static and dynamic demonstrations to help build public awareness and acceptance around the technologies.

Informed by the findings of both pilots, TMR will continue to develop and implement future campaigns where there are opportunities to educate the Queensland public on connected vehicles and CAVs.

Recommendation

The Queensland Government supports this recommendation. With the ICV pilot recently being announced and the broader public awareness campaign also planned, the recommendation of the committee is well in hand.

Recommendation No.14

The committee recommends the Queensland Government consider planning for how a future regulatory framework around automated vehicles will operate and how state and federal governments can work cooperatively to successfully integrate these vehicles into transport networks.

Government Response: Supported

The Queensland Government is committed to the development of a nationally consistent regulatory framework to ensure Australia is a desirable place for commercial deployment of AVs and their use across Australia is efficient and convenient for consumers.

The Queensland Government, through TMR, plays a lead role in national AV regulatory reforms. These reforms aim to establish an end-to-end regulatory framework to support the safe use of AVs in Australia. This includes first-supply to the market, safe and compliant on-road use, compulsory third-party insurance, government access to data and operational issues such as vehicle registration and user education and training. The reforms are being led by the National Transport Commission and Austroads, in partnership with the Federal Government and all state and territory governments.

The proposed regulatory framework will place a range of responsibilities on Automated Driving System Entities (ADSEs), who are the entities that bring AVs to market and take responsibility for their safe operation on Australian roads. ADSEs will be required to certify the safety of their AVs against agreed safety assurance criteria as a part of first-supply regulations administered by the Federal Government. This will include certifying the design and on-road competency of AVs. Once an AV is approved for the Australian market, ADSEs will have an ongoing obligation to maintain the safety of AVs under their control.

The next phase of the national AV reforms is to develop and agree on the roles, responsibilities and interactions between relevant regulators and enforcement agencies. This will ensure an effective national approach, while best utilising existing resources at a state and territory level.

The Queensland Government, through TMR, is also continuing to model the possible impacts of AVs through fleet deployment scenarios. This will help to pre-empt and mitigate unwanted policy outcomes in the future. This includes investigation into emerging business models such as Mobility as a Service which can encourage a shared autonomous vehicle future.

Recommendation

The Queensland Government supports this recommendation. TMR will continue to play a lead role in the national AV regulatory reforms; and continue work to better understand the possible future deployment models.

Recommendation No.15

In regards to training, the committee recommends that the Queensland Government liaise with peak bodies in the transport industry and workers' representatives to consider how to assist workers to retrain and upskill to meet the changing demands of the state's workforce.

Government Response: Supported

The Queensland Government acknowledges the need for a skilled and adaptable transport and logistics workforce and supports this recommendation.

Through TMR and the Department of Employment, Small Business and Training (DESBT), the Queensland Government is committed to providing ongoing support to the Transport and Logistics Workforce Advisory Committee (TLWAC). TLWAC is a group of representatives from a range of transport and logistics industry associations, industry operator businesses and government, established in 2006. DESBT also works with peak industry bodies, including employee associations at both the state and national levels in the Automotive and Transportation sectors to ensure that training pathways meet the current and emerging needs of businesses, employers and individuals.

The TLWAC focuses on common issues impacting the current and future transport and logistics workforce and engages on behalf of the industry to identify and prioritise solutions for industry. The TLWAC, in partnership with the Queensland government developed the Queensland Transport and Logistics Workforce Strategy and Action Plan 2018–2023 to ensure a skilled, sustainable and supported workforce into the future. Nine key strategies were identified as high priority by industry, including a specific strategy dedicated to transition planning for sectors impacted by digital disruption and/or automation.

Recommendation

The Queensland Government supports this recommendation. In collaboration with the TLWAC, the Queensland Government will continue to provide ongoing support to the industry as it undergoes significant change, and that industry is encouraged to actively contribute to developing and implementing solutions to ensure they have the right people with the right skills to take industry forward.

Recommendation No.16

The committee recommends that the Queensland Government liaise with all jurisdictions to ensure the consistency of licensing, accreditation and training of mechanics across jurisdictions, including specific training to reduce the risk of electrocution and fire associated with electric vehicles.

Government Response: Supported in Principle

The Queensland Government, through the Department of Employment, Small Business and Training (DESBT) in principle supports this recommendation. DESBT is committed to work with industry, all interstate jurisdictions and the Federal Government to update training packages in line with advancements with technology, particularly electronic vehicles.

As an example, the automotive training package has recently been updated. The updated package takes into consideration the advancements in EVs and further highlights the need to regularly review the training package product to keep pace with advancement in EVs. Matters for licensing and accreditation rely on completion of accredited training.

Recommendation

The Queensland Government supports this recommendation in principle. DESBT will engage with industry regarding the development and update of training packages, to keep pace with advancements in EVs and encourage industry to complete them.