FCAI Submission to South Australia's Road Safety Strategy to 2031.

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INTRODUCTION

The Federal Chamber of Automotive Industries (FCAI) welcomes the opportunity to provide input into the South Australia's Road Safety Strategy to 2031 aligning with **National Road Safety Action Plan 2021 to 2031.**

FCAI commentary will only be specific to certain elements of the proposed road safety strategy as it pertains to light duty motor vehicles (passenger cars and light commercial vehicles) and motorcycles.

The FCAI is the peak Australian industry organisation representing over 50 global automotive brands who design, manufacture, and sell light duty passenger vehicles, light commercial vehicles, and motorcycles around the world.

The automotive industry in general, and the FCAI membership specifically has and continues to make significant contributions towards improved vehicle safety in Australia providing technologies and innovations to market in advance of and exceeding minimum regulatory standards or non-regulatory processes. It is most often this industry driven innovation that provides technologies driving regulation rather than vice versa.

Automotive manufacturers have long recognised their role in improving vehicle safety outcomes recognising that drivers do not always make the best decisions. In fact, recent advances in vehicle safety technologies increasingly warn drivers of impending situations and in many cases assist the driver to avoid or minimise the effects of accident situations. It is these more recent developments that make it essential to reduce the average age of vehicles on South Australia roads, if in vehicle safety technology is to assist in improving road safety and reducing road trauma. Modern vehicles are far safer in preventing accidents and in the unlikely case of being involved in an accident; are far more likely to protect the passengers with advanced active and passive safety systems.

FCAI strongly supports a Safe Systems approach for road safety in general and the overall objectives of the National Road Safety Strategy (NRSS). This integrated approach involves all factors including road safety management, road infrastructure, road user behaviour, traffic rules enforcement, and safer vehicles. Such an approach is essential and must not be contradicted by attempts to single out individual factors in isolation and should apply to all users of the road including non-traditional such as pedestrians and cyclists.

EXECUTIVE SUMMARY

FCAI considers that automotive emerging vehicle safety technologies will be a key element to the next step change that substantially improves road safety outcomes over the next 10 years, whether this be from Advanced Driver Assistance Systems (ADAS) or from the progression to Connected and Automated Vehicles (CAVS). These systems increasingly support drivers to prevent collisions or minimise the effects of unavoidable collisions through to vehicles that can eliminate human error from the driving task. In support of these technologies there are several enabling actions required by Governments to support the introduction and use as follows:

- Develop a tangible target to reduce the average age of South Australia Vehicles.
- Introduce policy actions to encourage the adoption of younger safer vehicles.
- Encourage the choice of the highest ANCAP star ratings 4 or 5 Star that can be afforded.
- Ensure Left and Centre Road Markings on all roads - well maintained
- ISO Standard Road Speed Signs – well maintained
- Roadworks Speed Signs - correctly placed
- States and Territories to work collectively to develop National ITS Standards and Policies.
- Prepare a fiscal plan to introduce roadside ITS equipment in accordance with developed standards and policies:
    - Sensors
    - Communication equipment
    - Backend infrastructure that supports safety messages.
- Encourage cellular communication availability in regional and remote areas to support safety messaging – given the high proportion of severe accidents that occur in these locations.
- Align road rules and regulations domestically with other States and Territories to align with international protocols.
- Support AV development trials to confirm equipment suitability for Australian environment.
- Provide a certain legal framework for AV manufacturers to make these products available to South Australians.
- Provide contemporary communication contact details through NEVDIS to enable vehicles subject to recalls being inspected / corrected.
- Where manufacturers extensive efforts are unsuccessful in convincing owners to have safety recall actions undertaken, prevent the re-registration of these vehicles.
- Support motorcycling training to ensure that it is affordable for these vulnerable road users.
- Develop and upgrade infrastructure to ensure that it is motorcycle friendly
- Develop driver education programs for less experienced road users
- Develop a targeted plan to move less experienced road users into younger, safer vehicles
- Develop consistency in regulation across all modes of powered transport
- Assure a strong linkage between investment in nationally consistent road safety infrastructure and the vehicle technologies being introduced
- Explore additional measures to reduce the impact of driver distractions

SAFER VEHICLES ON SOUTH AUSTRALIA ROADS

FCAI supports South Australia strongly promoting safer vehicles and demonstrating leadership through government leasing / purchasing schemes for the safest, fit for purpose vehicles. However, many of these policies are already being applied and South Australia still has one of the oldest vehicle fleets in Australia. In that sense a tangible target is necessary to drive the average age of the South Australia vehicle fleet down along with a range of actions to achieve this aim. With an average age of 11.8 years this means that over half of vehicles on South Australia roads are between 12 and 24 years old. This range of aged vehicles have been shown to have much poorer outcomes both in terms of survivability and in the ability for them to avoid an accident in the first place. There have been many examples

undertaken by vehicle crash testing agencies showing graphically the advances in crumple zones and the ability to protect occupants in offset frontal crashes. Some examples can be viewed at https://www.youtube.com/watch?v=TikJC0x65X0.

It is important in the overall road safety strategy to understand that a new 4-Star rated vehicle in 2021, can be a far safer vehicle than a 5-Star vehicle rated in earlier years. Government purchasing policies need to consider the overall safety outcomes from 4 & 5-Star vehicles and not permit perverse outcomes to occur from 5 Star only purchasing policies that may restrict the volume fleet purchase of very safe new vehicles.

Enabling Actions Required:

- Develop a tangible target to reduce the average age of South Australia Vehicles.
- Introduce policy actions to encourage the adoption of younger safer vehicles.
- Encourage the choice of the highest ANCAP star ratings 4 or 5 Star that can be afforded in line with global NCAP rating definitions as follows:
    - **5 Star:** Overall excellent performance in crash protection and well equipped with comprehensive and robust crash avoidance technology
    - **4 Star:** Overall good performance in crash protection and all-round additional crash avoidance technology may be present.
    - **3 Star:** At least average occupant protection but not always equipped with the latest crash avoidance features
    - **2 Star:** Nominal crash protection but lacking crash avoidance technology
    - **1 Star:** Marginal crash protection and little in the way of crash avoidance technology
    - **0 Star:** Meeting type-approval standards so can legally be sold but lacking critical modern safety technology

Automotive manufacturers have and continue to invest heavily in developing safer vehicles and it is these technologies that can provide the next step change in road safety improvement outcomes especially when considering that the range of safety technologies is extensive even in the more affordable ranges of vehicles. For example, it is not uncommon to find the following technologies available in new vehicles sold in the sub $30,000 vehicles:

- Advanced Automated Emergency Braking
- Lane Departure Warning
- Blind Spot Warning
- Rear Cross Traffic Warnings
- Driver Monitors
- Automatic High Beams
- Traffic Sign Speed Recognition
- Adaptive Cruise Control to maintain safe following distances
- Vehicle Stability Control
- Lane Keeping Assistance
- Blind Spot Collision Avoidance
- Reverse Cameras
- LED Headlights
- Speed Limiters
- Seat Belt Warnings

This is in addition to a suite of passive safety systems designed to protect the occupants in the unlikely instance of an accident such as:

- Passenger Safety Cell with advanced crumple zones
- Multiple Airbags – Frontal / Side / Thorax & Curtain Side / Knee / Centre
- Seat Belt Pre-tensioners and Force Limiters
- Interiors designed to mitigate and lessen the possibilities of injuries to passengers
- Body Structures designed to minimise injuries to Vulnerable Road Users

Enabling Actions Required:

- Ensure Left and Centre Road Markings on all roads - well maintained
- ISO Standard Road Speed Signs – well maintained
- Roadworks Speed Signs - correctly placed

Manufacturers are continuing their efforts, developing Co-operative - Intelligent Transport System (C-ITS) technologies to further advance road safety such as:

- Advanced Red-Light Warnings – warning drivers of impending traffic light changes to red
- Turn Warnings identifying Vulnerable Road Users in the path of travel
- Road Hazard Warnings – Floods / Bushfires / Accidents
- Back of Queue Warnings
- In-Vehicle Speed Warnings
- Roadworks Warning
- Emergency Electronic Brake Lights
- Slow / Stopped Vehicle Warnings
- Intersection Movement Assistance
- Emergency Vehicle Notifications

Enabling Actions Required:

- States and Territories to work collectively to develop National ITS Standards and Policies.
- Prepare a fiscal plan to introduce roadside ITS equipment in accordance with developed standards and policies:
    - Sensors
    - Communication equipment
    - Backend infrastructure that supports safety messages.
- Encourage cellular communication availability in regional and remote areas to support safety messaging – given the high proportion of severe accidents that occur in these locations.

Further vehicle-based development is the international drive to develop Connected and Automated Vehicles. Automated vehicles have significant potential to remove human error (one of the largest

contributors to vehicle accidents) from the driving task. The development of these vehicles will progressively occur with increasing levels of automation as well as increasing their operational domain capabilities.

For these automated vehicles to be made available to Australian consumers, jurisdictions across Australia will need to align their varying State / Territory based vehicle and infrastructure regulations to ideally harmonise with international standards and at the least be consistent across domestic jurisdictions. As these vehicles are made available to Australians, specific jurisdictions derogating from national laws or model laws may result in some manufacturers considering whether the commercial costs of developing unique programming to suit is viable.

Enabling Actions Required:

- Align road rules and regulations domestically with other States and Territories to align with international protocols.
- Support AV development trials to confirm equipment suitability for Australian environment.
- Provide a certain legal framework for AV manufacturers to make these products available to South Australians.

UNSAFE VEHICLES ON SOUTH AUSTRALIA ROADS

FCAI strongly supports South Australia's initiative to apply registration sanctions on vehicles that are unsafe to be driven on the road network, due to a safety recall (not just mandatory recalls).

Automotive manufacturers go to great lengths to contact consumers to arrange for vehicles to have recall inspections and rectifications undertaken. The support of the States to provide relevant registered owner contact information facilitates prompt communication and ultimately correction as necessary. South Australia should work with National Exchange Vehicle and Driver Information System (NEVDIS) to ensure that contemporary contact details such as mobile telephone numbers and email addresses are provided in addition to the traditional address details already provided.

Names and addresses are currently provided via NEVDIS, all of course within the Australian Privacy Principles (APP) framework that permits the provision of such personal information.

Excerpt from Australian Privacy Principles:
Lessening or preventing a serious threat to life, health, or safety
6.34 An APP entity may use or disclose personal information for a secondary purpose where:

- it is unreasonable or impracticable to obtain the individual's consent to the use or disclosure, and
- the entity reasonably believes the use or disclosure is necessary to lessen or prevent a serious threat to the life, health, or safety of any individual, or to public health or safety (s16A(1), Item 1)

Enabling Actions Required:

- Provide contemporary communication contact details through NEVDIS to enable vehicles subject to recalls being inspected / corrected.
- Where manufacturers extensive efforts are unsuccessful in convincing owners to have safety recall actions undertaken, prevent the re-registration of these vehicles.

MOTORCYCLING ON SOUTH AUSTRALIA ROADS

Motorcyclists

FCAI supports the actions that the South Australia Government has introduced to encourage responsible riding of motorcycles and ensuring that inexperienced riders are restricted in various ways to provide opportunities for gaining experience in a measured way.

FCAI believes there is a role for Government to support training for motorcycle riders to become safer/better skilled/better educated as Vulnerable Road Users (VRUs). Support for subsidised training for new riders as well as returning riders (and even experienced riders) should be considered as an investment in VRUs and would no doubt have a positive impact.

FCAI is also supportive of activities mentioned under the heading of "Motorcycle Touring Routes"

- High quality advanced warning signs
- Audio tactile marking on centre and edge lines
- High quality sealed shoulders 1m wide
- Motorcycle under-run protection on all roadside barriers.

However, we would make the point that these measures need to apply to more roads than just "Motorcycle Touring Routes", that they should apply to most roads that motorcycles travel on and at the very least all Highways and Secondary roads.

Enabling Actions Required:

- Support motor vehicle and motorcycling training to ensure that it is affordable for these road users.
- Develop and upgrade infrastructure to ensure that it is motorcycle friendly

ROAD SAFETY FOR DIFFERING USERS

Younger Road Users

Younger road users are significantly overrepresented in death and serious injury statistics. This over-representation has proven difficult to address in previous road safety action plans but represents a large opportunity for success in the new South Australia Road Safety Strategy.

Targeted approaches using existing and expanded education streams within the South Australia social model could be used to improve driver education and reduce risk taking behaviours prevalent in this vulnerable group of road users.

Typically, these users are not driving the safer vehicles that older demographics can generally afford. Programs to move this group of users into safer vehicles and to increase their safer usage should be considered as fundamental to the South Australia Road Safety Strategy.

Enabling Actions Required:

- Support motorcycling training to ensure that it is affordable for these vulnerable road users.
- Develop and upgrade infrastructure to ensure that it is motorcycle friendly
- Develop driver education programs for less experienced road users
- Develop a targeted plan to move less experienced road users into younger, safer vehicles

Consider Consistency of Regulation

During recent years, the introduction to the public of a range of small electric mobility devices has continued unimpeded, and the uptake by the public has been enthusiastic. However, the lack of regulation of these products by government is somewhat perplexing. Products such as Pedalec bicycles, 'stand on' scooters, mono wheel scooters etc. are now all readily available to the public (at accessible prices), and people are taking advantage of these new 'short trip' mobility options.

The mixing of these mobility options in an unregulated manner has seen footpaths and bicycle paths become increasingly crowded and potentially unsafe, with these electrically powered devices mixing with pedestrians.

A motorcycle and a scooter both require the rider to have a licence to be legally ridden on the public road network. They cannot be legally ridden on footpaths or bicycle paths. Scooters and Mopeds must be registered, and the rider licenced and insured. Conversely however, an electric 'stand on' scooter, and other personal mobility devices (including electric bicycles) do not require any of these regulatory initiatives.

It is understood that there are certain power limitations on these alternative modes of transport. Also, lower powered products do not require licencing, registration, or insurance. However, the lines of differentiation between these vehicles are becoming less well defined, and their capabilities, such as increased speed and acceleration and range are now blurring the boundaries between products that need no regulation versus those that currently do.

A rider of a moped (sub 50cc engine and speed restricted to 50 km/h) must be licensed in South Australia, at a considerable cost. When considered in combination with the expense of registration and insurance, potentially less and less people will be willing to take up this option given the low cost of unregulated alternatives.

The electric powered mobility products including sophisticated e-bikes (bicycles), some of which can travel at similar speeds to mopeds, remain unregulated, and are able to be used in pedestrian

environments, including bicycle pathways, without requiring the rider to be trained, licenced, registered or insured.

Motorcycles and Scooters are among the options available when seeking solutions to commuting in our sprawling cities, offering savings throughout the whole spectrum of moving people around our city.

Enabling Actions Required:

- Develop consistency in regulation across all modes of powered transport

TARGETED INVESTMENT IN ROAD INFRASTRUCTURE

Investment in road infrastructure must have at its core, a fundamental requirement of improving road safety at all stages – planning, design, and construction. All road construction projects must achieve the following objectives:

- Reduce risk through safer infrastructure design
- Must align to safe system principles and treatments
- Meet minimum safety standards
- Must support current / emerging vehicle technology roadmaps
- Be in line with the National Road Safety Strategy 2021-2030

It is important to ensure that the targeted investment in road safety infrastructure over the life of the plan is continually updated to consider the introduction of vehicle-based road safety technologies. It is through this close interaction and alignment that we can realise the maximum benefit, noting that technological development will not be static over the life of the plan.

The automotive industry is progressively introducing an ever-increasing array of vehicle technologies in the areas of Connected and Automated Vehicles (CAVS). Connected vehicles – these vehicles can communicate with their external environment in several ways, typically this most commonly involves Intelligent Transport System technologies such as:

- Vehicle to Vehicle communication (V2V)
- Vehicle to Infrastructure communication (V2I)
- Vehicle to Everything communication (V2X)

To enable these communications to be most effective requires infrastructure investment that facilitates the level of communications that can improve road safety outcomes. Whilst not an exhaustive list, this can involve ensuring:

- Mobile network coverage along roads and highways
- Roadside Units at various locations such as intersections providing network information to and from vehicles.
- Traffic control systems capability to receive and transmit operational data.

Automated Vehicles – these vehicles are progressively being automated according to the 6 levels of automation as defined by SAE J3106. As the industry progresses to the higher levels of automation as defined by SAE levels 3, 4 and 5, it is vital that the road infrastructure conforms to nationally consistent standards that permit the effective operation of these advanced technologies.

Enabling Actions Required:

- Assure a strong linkage between investment in nationally consistent road safety infrastructure and the vehicle technologies being introduced

IMPROVED VEHICLE SAFETY STANDARDS THROUGH THE AUSTRALIAN DESIGN RULES (ADRS).

FCAI is generally very supportive of using the Australian Design Rule (ADR) system for the introduction of vehicle safety standards and avoiding any unique, State and Territory based requirements which will limit the uptake or hinder manufacturer's ability to introduce emerging technologies.

It is important to ensure that firstly there must be a UN international vehicle standard available for Australia and; a Regulatory Impact Statement (RIS) needs to be conducted to ensure that there is an appropriate Cost Benefit Analysis undertaken to show a net benefit.

The introduction phase should allow appropriate lead time taking new model introduction cycles into consideration.

Enabling Actions Required:

- Support nationally developed, internationally harmonised standards to be introduced using Australian Design Rules
- Ensure a RIS is undertaken to assess Cost / Benefit of regulation introduction

PROMOTE THE MARKET UPTAKE AND KNOWLEDGE OF VEHICLE TECHNOLOGIES AND OTHER SAFETY EQUIPMENT WITH HIGH SAFETY BENEFITS

FCAI supports the market uptake and knowledge of vehicle technologies and other safety equipment with high safety benefits.

Manufacturers are more than prepared to bring vehicle safety technologies to the market. In line with overseas jurisdictions the best way to achieve this is to develop a regulatory forward plan in line with UN regulation development that is then proposed as an Australian Design Rule and subject to a Regulatory Impact Statement (RIS) which would assess the community value versus the cost of the

technology considering the appropriateness for the Australian environment. High value safety systems can then be prioritised appropriately in line with vehicle development timelines to the benefit of all Australians. Increasing market uptake of newer safety technologies can easily be driven by promoting the benefits to consumers. Consumers create demand which manufacturers will respond to.

Driver distraction is a vexing issue that is a contributing factor in many road accidents, manufacturers are continuing to evolve measures that ensure safe operation of mobile communication (nomadic) devices when paired with the vehicle. Governments need to continue efforts to provide long term education of the community on the dangers of driver distraction in relation to nomadic devices in vehicles to the point where it becomes socially unacceptable.

Finally, the newer or emerging safety technologies are heavily dependent on the physical and digital infrastructure being implemented and integrated. It is this collaborative environment where the vehicle and the infrastructure communicate appropriately to improve road safety outcomes. To this end, it is important to ensure that States and Territories commence the implementation of systems and processes that align with the introduction of the safety technologies in the vehicles.

Enabling Actions Required:

- Support collaboration between infrastructure development timelines that are aligned to vehicle technology development introduction.
- Explore additional measures to reduce the impact of driver distractions.

End Of Submission.