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**FCAI Response to;  
(draft) National Road Safety  
Strategy 2011-2020**

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## 1. INTRODUCTION

The Federal Chamber of Automotive Industries (FCAI) is the peak industry organisation representing manufacturers and importers of passenger vehicles, light commercial vehicles and motorcycles in Australia.

This submission outlines the FCAI's response to the Australian Transport Council's (ATC) (draft) "*National Road Safety Strategy 2011-2020*<sup>1</sup>."

The FCAI fully supports the "Safe System" approach. However, the FCAI considers that the NRSS would send a much clearer message and more accurately reflect the "Safe System" approach if the term "Safe behaviour" was used rather than "Safe speeds" and "Safe people". The NRSS would then have three key areas: "Safe roads, Safe vehicles and Safe behaviour".

The NRSS should have realistic expectations regarding its ability to influence the design of mass produced light vehicles. The relatively small size of the Australian new vehicle market means that any new unique Australian vehicle regulations cannot be justified and adopting any unique Australian vehicle regulations may not have the desired effect of 'leading' the world. It may in fact be counter-productive as the increased cost of developing unique model specifications for such a relatively small market will limit Australia's ability to access new state of the art technology.

Vehicle manufacturers are now concentrating on error tolerance in the next generation of collision avoidance systems. Electronic Stability Control, Lane Departure Warning, and Vehicle to Vehicle Communications (V2V) are all designed to mitigate the consequences of driver error. V2V systems offer the greatest opportunity for reduction of side impact crashes, particularly at intersections, and need to be encouraged by government support of large scale trials and raising public and manufacturer awareness of these systems and their benefits.

To achieve the next big reduction in road fatalities, the driver/vehicle/road system needs to become more error tolerant, actively assist the driver to make decisions, and mitigate injury in the event of an error. Human error is inevitable; however it should not result in death or serious injury.

The FCAI believes the "Safe System" element that offers the most potential for improvement in Australia is "Safe behaviour". The NRSS should therefore place more emphasis on interventions that will encourage and enforce "Safe behaviour". The full benefits of "Safe roads" and "Safe vehicles" will not be achieved unless there is also a significant increase in "Safe behaviour".

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<sup>1</sup>Australian Transport Council (ATC) National Road Safety Strategy 2011-2020 Draft for consultation, 1 December 2010

## 2. NATIONAL ROAD SAFETY STRATEGY 2011-2020

The draft *National Road Safety Strategy* (NRSS) 2011-2020 presents a 10 year plan to reduce fatalities and serious injuries from road crashes by at least 30% by setting out a range of high level directions and priority actions across the four headings; Safe Roads, Safe Speeds, Safe Vehicles and Safe People.

The FCAI recognises the need for and consequently supports the development and implementation of a comprehensive National Road Safety Strategy and its aim to improve road safety throughout Australia. In particular, the FCAI supports the systems approach proposed in the draft NRSS and agrees with the statement in the “Key Challenges” that “to achieve substantially greater gains in the future, much greater emphasis needs to be placed on initiatives that improve the inherent safety of the road transport system.”

The FCAI supports the overall ideal to enhance the quality of Australia’s roads, improve compliance with road laws and create a safety culture. While the FCAI supports the introduction of safer vehicles, we do not support strengthening regulation beyond international norms as a means of providing safer vehicles.

The draft NRSS has identified various linkages and synergies, including economic conditions, environmental priorities and conflicting transport challenges that will impact on the safety performance and that road safety initiatives will support other government priorities and deliver additional societal benefits. However, the road safety strategy does not articulate the need for a whole of government approach to ensure successful delivery of the road safety targets along with ensuring there is no conflict between the road safety targets of other government outcomes/deliverables.

New safety technology is being continually developed and delivered to the market by the automotive industry, therefore ‘strengthening regulation’ should be an option of last resort. Regulation does not necessarily deliver new safety technology, and in fact the recent evidence shows that regulation has lagged the development and introduction of new technology, e.g. ESC. The FCAI considers that the NRSS should consider a range of options to deliver new safety technology to the market with the aim to deliver new safety technology more cost effectively and targeted to the relevant road user groups.

Infrastructure and vehicle technology could be targeted in the most effective areas by focusing the ANCIS project to research crash causes and contributing factors as part of the study. Up to now the ANCIS project has concentrated on vehicle crash-worthiness assessment, but technology has moved on, and the focus of road safety research by vehicle manufacturers is now focused on crash avoidance. Consequently, the FCAI considers that for any research conducted in Australia should also be focused on crash avoidance in areas such as infrastructure and road user behaviour to be cost effective and being able to deliver improvements in road safety.

The NRSS has adopted a 'Safe System' approach built around a range of initiatives and interventions under four headings; Safe Roads, Safe Speeds, Safe Vehicles and Safe People. While the FCAI fully supports the "Safe System" approach, we consider there are only three elements to the "Safe System":

- Vehicles
- Infrastructure
- Road User Behaviour - this covers drivers of motor vehicles, riders of motor cycles and cycles, and pedestrians.

The "Safe System" approach used in the NRSS uses the terms "Safe roads", "Safe speeds", "Safe vehicles" and "Safe people" to describe the key elements. While "safe vehicles" and "Safe roads" are clearly understood i.e. vehicles and infrastructure, the FCAI considers that "Safe people" is ambiguous or could be misleading and therefore does not send a clear message that it really means road user behaviour. "Safe people" could be taken to mean occupant safety or pedestrian safety rather than road user behaviour.

"Safe speeds" implies that there is such a thing as a safe speed. It encourages a simplistic belief that observing the speed limit alone will ensure safety. Travelling at appropriate speeds and compliance with speed limits should be treated as a sub-set of road user behaviour. The setting of speed limits that are appropriate to the road and the road environment should be addressed as one of the issues covered by "Safe Roads" rather than by "Safe speeds".

The FCAI considers that the NRSS would send a much clearer message if the term "Safe behaviour" was used rather than "Safe speeds" and "Safe people". The NRSS would then have three key areas: "Safe roads, Safe vehicles and Safe behaviour".

As many crashes in Australia have a significant element of driver error (e.g. driver distraction or not obeying the road rules), the "Safe System" element that offers the most potential for improvement in Australia is "Safe behaviour." The term "Safe behaviour" would cover:

- Managing the risk - Driving involves risk and drivers need to be responsible for their actions and make the correct decisions to manage these risks. Good drivers aim to reduce and manage the risk. Factors that have been shown to increase the risk of crashing or increasing the risk of injury in the event of a crash include:
  - alcohol and/or drugs
  - speeding
  - fatigue

- not wearing seat belts
- Sharing the road safely or cooperative driving (showing courtesy and consideration for other road users) such as;
  - keeping to the left unless overtaking,
  - allowing other traffic to merge,
  - not following too closely behind,
  - changing lanes correctly,
  - always using signals when turning or changing lanes, and
  - obeying road signs and signals (e.g. stopping at red signals, not queuing across intersections).
- Obeying the road rules (e.g. not exceeding posted speed limits, wearing seatbelts, ensuring children are properly restrained, obeying road signs etc)
- Travelling at appropriate speeds (i.e. travelling at the posted speed limit may be too fast for the prevailing road and weather conditions).
- Concentrating on the road ahead and not being distracted whilst driving, e.g. using mobile phones, texting.
- Pedestrians being aware of traffic before crossing roads.
- Motorcyclist and Cyclists making themselves conspicuous to other vehicles and pedestrians.

The most effective ways of improving "Road user behaviour" is by training, education and enforcement. Road rules alone will not lead to a significant improvement in road user behaviour.

However, as the NRSS currently has identified four target areas the FCAI has specific comments on each of the four identified target areas are included below.

### 3. SAFER ROADS

The FCAI agrees with the draft NRSS is that safety treatments to roads and roadsides have a major influence in preventing crashes or minimising the consequences or injury to any person in the event of a crash. Consequently, it is important to maximize the safety benefit from investment in Australia's road infrastructure.

While these principles are further developed in the rest of the Safer Roads sections including “Directions -what the strategy aims to achieve by 2020” and “First Steps: Actions for the first three years” the FCAI considers that many of these statements could be strengthened with targeted aims. For example, target dates could be included in the “First steps” such as;

- Develop guidelines for the “Safe Systems principles”
- Assess high risk roads and begin the process to implement the appropriate treatments

The Australian Road Assessment Program (AusRAP)<sup>2</sup> has provided safety rating for Australia’s main highways for a number of years. This information is publicly available and provides vital benchmarking information for the public and also road engineers and planners to show them how well, or badly, their roads are performing compared with others, both in their own and other countries.

AusRAP is part of the International Road Assessment Program (iRAP)<sup>3</sup> that is active in more than 50 countries throughout Europe, Asia Pacific, North, Central and South America and Africa.

The draft NRSS does not acknowledge the work that has already been undertaken by AusRAP and the opportunity that this provides for governments to use existing road safety benchmarks that are used throughout the world. It would appear that the AusRAP rating already provides for an opportunity for governments to not only benchmark the existing road network but to also use the AusRAP safety rating protocols to measure the benefits of any improvements.

As this information and rating method currently exists the FCAI considers that the NRSS should include targets for minimum AusRAP safety ratings of national and state highways to be achieved by 2020. This would include targets for new road construction and also a challenging target for upgrading the existing road network to meet the relevant AusRAP ratings.

Expenditure on road infrastructure throughout Australia is a significant investment with \$13.9 billion in 2007-8 (and \$11.4 billion in 2006-07)<sup>4</sup> and the Australian community must receive value for this level of investment.

Also, the Australian community provides for this level of investment through the range of government taxes and charges leveled on motor vehicle use. The BITRE estimated that more than \$16 billion was collected in 2006-07 by both Federal and State governments. Importantly this estimate did not include government revenue from;

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<sup>2</sup> <http://www.ausrap.org/ausrap/aboutus.htm>

<sup>3</sup> <http://www.irap.net/>

<sup>4</sup> BITRE Information Sheet 37 “Public road-related expenditure and revenue in Australia 2009”

- GST on fuel and motor vehicle purchase
- Import duties (currently 5%)
- Luxury car tax

When these taxes are included the annual total government revenue from motor vehicle use would exceed \$20 billion. Consequently, the FCAI considers that the government receives sufficient revenue to undertake the actions in the NRSS to improve the safety of the road infrastructure.

The draft NRSS also should acknowledge that there are many low cost improvements to existing infrastructure (e.g. appropriate roadside plantings, remove roadside vegetation that obscures the visibility of traffic merging onto highways, not planting large trees next to main roads or removing trees, adding roadside barriers to identified high risk sections of road, additional road speed limit signs.)

The FCAI considers that the setting of speed limits that are appropriate to the road and the road environment is essential but it should be addressed as one of the issues covered by "Safe Roads" rather than by "Safe speeds". The draft NRSS acknowledges that it will not be practical (or feasible) to improve all roads, therefore, lower speed limits may need to be considered as a temporary or permanent treatment.

#### 4. SAFE SPEEDS

The FCAI agrees that inappropriate speed increases the risk of a crash and potentially increases any subsequent injury severity. It is noted that the NRSS in "Directions – what the strategy aims to achieve by 2020" and "First Steps" address infrastructure, behaviour and vehicle technology to address inappropriate speeding. As outlined above the FCAI considers that these actions should be included within each of the other three relevant aspects of the "Safe Systems" rather than have a dedicated "Safe speeds" section.

The vehicle technology considered to address inappropriate speeding includes a range of Intelligent Transport System (ITS) technologies including Intelligent Speed Adaption (ISA). The FCAI considers that many of the new ITS technologies, including ISA, are in the early stages of development and is not yet ready for broad commercial applications in either Australia or other advanced markets. Once the technology is mature enough to be introduced into mass market vehicles, market/customer acceptance will be required prior to broader implementation.

"Safe speeds" implies that there is such a thing as a safe speed and potentially promotes a simplistic belief that observing the speed limit alone will ensure safety. The FCAI does



not condone speeding but considers that the NRSS places undue emphasis on speed by having a separate key area called "Safe speeds". As outlined above the FCAI believes speeding should be more appropriately addressed as one of the issues covered by "Safe behaviour", and the setting of appropriate speed limits should be addressed as one of the issues covered by "Safe Roads".

There is also a perception that the strict enforcement of speed limits in many parts of Australia is a revenue raiser rather than a road safety measure. The perception is encouraged because speed limit enforcement is a cost effective revenue raiser (e.g. can be automated by the use of "Safety" cameras).

The community will be more inclined to accept strict speed limit enforcement if it is generally accepted that the speed limits (and tolerances) are appropriate for the road.

The link below is to an article in The Age (11 Oct 2010) which quotes the Mercedes-Benz safety expert who recommends improving traffic management to reduce the road toll as opposed to focusing on speed. It is also worth reading some of the 255 readers' comments from the article: "<http://theage.drive.com.au/motor-news/140kmh-safer-in-australia-safety-expert-20101011-16fer.html>"

In Victoria at least, the strict enforcement of the 100 km/h speed limit (only 3% tolerance allowed) on busy divided highways leads to dangerous behaviour (e.g. risky overtaking manoeuvres or 'tailgating') because all the traffic is moving within a very small speed range around the 100 km/h limit. Consideration should be given allowing a 10% tolerance on the 100 km/hour speed limit on divided highways.

There is also a widely held view that the strict enforcement of speed limits in residential areas has the effect of distracting drivers who are spending too much time looking at their speedometers rather than the road ahead.

The FCAI would like to comment on two particular "**FIRST STEPS; Actions for the first three years**" in the Safe Speeds section;

Draft NRSS Action	FCAI Comment/Position
<p>10. Governments will use national guidelines to assess speed limits on higher-risk roads and road lengths not amenable to cost-effective engineering fixes. This work will examine issues such as:</p> <ul style="list-style-type: none"> <li>• Setting safe speed limits on road lengths that are narrow, have</li> </ul>	<p>The FCAI supports the need for a national guideline for consistent assessment of speed limits for roads.</p> <p>Additionally, we consider that the NRSS should set targets for road authorities to develop and use the guidelines to assess the speed limit and program in any necessary infrastructure upgrades to</p>

<p>substantial levels of roadside hazards, have many intersections or property entrances, are windy or undulating, or have higher than average serious casualty crash rates.</p> <ul style="list-style-type: none"> <li>• Reducing limits at high-risk intersections, especially on high-volume outer urban arterials, where engineering treatments are not feasible.</li> </ul>	<p>improve the safety of higher-risk roads.</p>
<p>12. Facilitate the implementation of Intelligent Speed Adaptation (ISA) systems, by encouraging the development of digital speed limit maps.</p>	<p>ISA can be considered to be part of a range of ITS technologies that are in the early stages of development and have the potential to provide road safety improvements.</p> <p>The FCAI considers that many of the new ITS technologies, including ISA, are in the early stages of development and is not yet ready for broad commercial applications in either Australia or other advanced markets. Once the technology is mature enough to be introduced into mass market vehicles, market/customer acceptance will be required prior to broader implementation.</p> <p>Prior to the widespread adoption of ISA the legal implications of mapping or system-caused inaccuracies must be studied.</p>

The FCAI would also like to make specific comments on two initiatives in **“Future Steps – what else will be considered?”**

- *Investigating the case for promoting speedometer displays, which place more emphasis on the range of Australia’s legally permissible speeds, and limit the display of higher speeds.*

Promoting or mandating the speedometer displays in any passenger car or motorcycle to have more emphasis placed on Australian speed limits, will inevitably lead to an increase in cost of the vehicle. As outlined in Appendix 3, the Australian automotive

industry is a small player in the global industry and any “Australian specific” regulation will incur an increase in the cost of manufacture which will then be passed along to the consumer.

When considering motorcycles in particular, the Australian market is simply not large enough to warrant the manufacturers building motorcycles specifically for the Australian market. Therefore any “Australian specific” adaptations will need to be absorbed into the cost of the new motorcycle with the follow-on effect to limit the number and type/style of motorcycles available to the Australian consumer.

- *Promoting or mandating speed governing and ISA in a broader range of vehicles.*

In addition to the general statement in relation to ISA and ITS technologies above, the FCAI considers it necessary to make specific comments on applying these technologies to motorcycles.

Technologies that have developed for cars are not always directly transferable to motorcycles and in the case of ISA, the FCAI considers that the adding of a device that may be able to override the riders input into the throttle of the motorcycle is a very dangerous. A motorcycle’s stability (including its cornering radius, and suspension travel and settings) are affected by many inputs and use of the throttle is one of the main inputs. In the case of an active ISA system, where an electronic sensor that can override the riders throttle use and close the throttle is extremely dangerous as it could lead to the rider losing control of the motorcycle and/or becoming involved in an accident. The FCAI considers that ISA is inappropriate for use on a single track vehicle, such as a motorcycle.

## 5. SAFE VEHICLES

The Australian vehicle industry is part of a global industry and therefore requires national regulations and standards set at a national level. Also any relevant vehicle regulation or standard needs to be harmonised with the relevant international regulation;

- That is any existing ADR must allow the UN-ECE regulation as an alternative standard
- Any unique standard or regulation will simply reduce the number of models available to Australia.

As a signatory to the United Nations Economic Commission for Europe (UN-ECE) 1958 Agreement Australia should (where appropriate) align any new ADR with UN-ECE regulations. However, this does not mean that Australia should adopt any and all ECE Regs. There must be due process that, reviews the appropriateness of any regulatory

proposal to Australia according to established COAG and OBPR principles and guidelines. There will be cases where some technical requirements of UN-ECE regulations may not be appropriate and/or necessary for Australian conditions. A rigorous process must ensure any new regulation is addressing an identified problem and is the best way to deliver the desired outcome.

All manufacturers of mass produced light vehicles are committed to a policy of continuous improvement and have a proven track record in improving vehicle safety. Improvements in vehicle safety will continue regardless of Australia's NRSS. As outlined in Appendix 1, Australia's ability to influence the design of mass produced light vehicles is very limited.

Automotive companies have global strategies that include their commitment to continuous improvements in safety. Following are examples of some of companies global strategies outlining their commitment;

- Toyota's worldwide business is guided by seven principles; one of these principles is providing clean and safe products and enhancing the quality of life.
- GM-Holden's visions, energy diversity and real world safety have the aim to provide the occupants with the highest level of driving safety and injury protection.
- Ford's "drive safe" vision aims to deliver safety advancements to the mass market.
- Volvo 2020 vision is that no one will be killed or seriously injured in a Volvo by 2020.
- Honda's "power of dreams" is Honda's way of thinking that will continue to lead to new insights and technologies in all areas of their business. In relation to mobility, is aimed at helping to protect the environment and enhance safety.
- Daimler – has a vision of "accident free driving." Daimler's vision is an integrated approach with driver assistance systems, to make the driver's job easier and help prevent crashes.

Vehicle brands provide substantial investment in R&D in new safety technology and bring these to market when the technology is mature and there is customer acceptance. Attempting to "pick winners" in new technology has the potential to increase the cost of new vehicles without any corresponding improvement in safety. The range of potential new technology is vast and its development and delivery to market needs to be carefully managed to ensure there are no adverse impacts such as increase driver distraction that will impede customer acceptance and uptake.

It is important to recognise that in 2010, the combined sales of the locally manufactured Holden, Ford and Toyota vehicles represented just 16% of the Australian new vehicle market (see Appendix 1).

The relatively small size of the Australian new vehicle market means that new unique Australian vehicle regulations cannot be justified and adopting new unique Australian vehicle regulations may not have the desired effect of 'leading' the world. It may in fact be counter-productive as the increased cost of developing unique model specifications for such a relatively small market will limit Australia's ability to access new state of the art models.

The FCAI therefore believes that the NRSS should have realistic expectations regarding its ability to influence the design of mass produced light vehicles. The area where the NRSS can have the most significant effect regarding vehicles is to encourage a younger fleet. The FCAI therefore welcomes the proposal to investigate ways to encourage people to buy newer, safer vehicles as a first step.

The FCAI would also make the following comments on the **“FIRST STEPS; Actions for the first three years”** in the draft NRSS;

Draft NRSS Action	FCAI Comment/Position
<p>16. Develop nationally-agreed fleet purchasing policies with practical, evidence-based safety criteria that drive an increase in the safety features required for vehicle purchases.</p>	<p>The FCAI supports this action, provided the fleet safety purchasing criteria is practical and “evidence-based” as noted above. A unified national approach to fleet purchasing policies will provide a better safety outcome rather than multiple approaches.</p>
<p>17. Require all government fleets to implement nationally-agreed fleet purchasing policies and encourage adoption by other fleet operators.</p>	<p>The FCAI supports this action, provided the fleet safety purchasing criteria is practical and “evidence-based” as noted above.</p>
<p>18. Improve the current ADR process to ensure that minor changes to UNECE regulations are accepted automatically, timely consideration is given to new and amended UNECE regulations and GTRs, and priority is given to implementing new and amended ADRs that can deliver the greatest safety benefits.</p>	<p>The FCAI agrees that minor changes to UN-ECE regulations should be accepted automatically.</p> <p>However, consideration for implementing new or amended ADRs needs to be subject to careful consideration. There will be cases where some technical requirements of UN-ECE regulations may not be appropriate and/or necessary for</p>

	<p>Australian conditions.</p> <p>A timely and rigorous process is required to ensure any new regulation will address an identified problem and is the best way to deliver the desired outcome.</p> <p>If a regulation has been shown to be justified, careful consideration then needs to be given to determine the appropriate implementation timing.</p>
<p>19. Subject to the final outcomes of Regulatory Impact Statements (RISs), mandate the following vehicle safety features for new vehicles: advanced seatbelt reminders (driver’s seat); provision for ISOFIX child restraint fittings; ESC in light commercial vehicles; pedestrian collision safety requirements for vehicles; Anti-lock Braking Systems (ABS) / load proportioning brake systems for heavy vehicles and trailers.</p>	<p>Implementation of any new ADR needs to be subject of careful consideration. There will be cases where some technical requirements of UN-ECE regulations may not be appropriate and/or necessary for Australian conditions.</p> <p>A timely and rigorous process is required to ensure any new regulation will address an identified problem and is the best way to deliver the desired outcome.</p> <p>If a regulation has been shown to be justified, careful consideration then needs to be given to determine the appropriate implementation timing.</p>
<p>20. Prepare RISs to consider mandating of ABS for motorcycles, increased heavy vehicle cabin strength, ESC and Lane Departure Warning Systems for heavy vehicles, and Brake Assist Systems for light passenger vehicles.</p>	<p>Implementation of any new ADR needs to be the subject of careful consideration. A rigorous process must ensure any new regulation is addressing an identified problem and is the best way to deliver the desired outcome.</p> <p>A timely and rigorous process is required to ensure any new regulation will address an identified problem and is the best way to deliver the desired outcome.</p> <p>If a regulation has been shown to be justified, careful consideration then needs</p>

	<p>to be given to determine the appropriate implementation timing.</p>
<p>21. Lead international development of a GTR on pole side impact, which will require strong protective measures for motorists involved in side impacts with narrow objects (such as a street lamp or tree), other side impacts and rollovers. This will entail provision of effective side curtain airbags or other airbag configurations.</p>	<p>The FCAI supports the Federal Government’s initiative to take a lead role in the development of a GTR on pole side impact. Once finalised, the GTR should undergo the process to consider implementation of the GTR as an ADR.</p> <p>A timely and rigorous process is required to ensure any new regulation will address an identified problem and is the best way to deliver the desired outcome.</p> <p>If a regulation has been shown to be justified, careful consideration then needs to be given to determine the appropriate implementation timing.</p> <p>The FCAI member companies have adopted a “Code of Practice” to supply all passenger cars, passenger vans and passenger SUVs fitted with head protecting side airbags by 2016.</p>
<p>22. Expand the ANCAP program to increase the coverage of crash test results across the full range of new vehicles on the Australian market, including light commercial vehicles, and develop a crash test standard and protocol for rollover crashes.</p>	<p>The recently released ANCAP road map sets a significant challenge for vehicle manufacturers, especially with the proposed introduction of roof crush requirements in 2014 and also the increasing numbers of new safety technology.</p> <p>To achieve a positive safety outcome from any new test, ANCAP must demonstrate there is a need for the test, and develop the necessary test and rating protocols with sufficient lead time for the industry to respond prior to introduction of the new requirement.</p>

<p>23. Support the implementation of a national 'Stars on Cars' program to increase consumer demand for safe vehicles through the promotion of ANCAP safety ratings.</p>	<p>Any national 'Stars on Cars' program should be voluntary and provide the maximum flexibility to allow car brands to consider their level of participation.</p>
<p>24. Encourage vehicle manufacturers to develop industry codes of practice committing to incorporation of vehicle safety features, while ensuring that safety features are not packaged only with luxury or comfort features.</p>	<p>The FCAI recommends further investigation of the current marketing of safety features in new vehicles is required to evaluate if the basic hypothesis (i.e. that safety features are bundled with luxury or comfort features) is accurate prior to including this action in the final NRSS.</p>
<p>25. Investigate incentives (including tax-based and insurance incentives) and promote options to encourage greater turnover of the vehicle fleet and/or the inclusion of enhanced safety features, encourage young drivers and their parents to purchase safer new or used cars, and encourage vehicle manufacturers to support ANCAP through the provision of vehicles pre-release.</p>	<p>New technology is often initially introduced on premium models. Inefficient taxes such as the luxury car tax (LCT) and state government stamp duties increase the cost of these models, and consequently price new cars with new and emerging safety features out of the reach of many new car buyers.</p> <p>The perverse incentive embodied in such taxes discourages the uptake of advanced safety technologies. The FCAI submits that the NRSS should address this issue directly and recommend reform of these taxes to overcome this effect.</p>
<p>26. Evaluate community concerns and work with the vehicle industry to strengthen regulation of vehicle advertising to avoid display and promotion of unsafe and illegal behaviours.</p>	<p>The FCAI considers that the Voluntary Code of Practice for Motor Vehicle Advertising, implemented has been effective.</p> <p>The FCAI supports the need to accurately evaluate community concerns (i.e. the broad community rather than a small vocal minority) with vehicle advertising prior to any consideration of strengthening regulation of vehicle advertising.</p>



	<p>The FCAI supports the principle that advertising of vehicles should display safe motor vehicle use.</p>
<p>27. Strengthen regulation of post-production modifications and additions (for example, by adopting appropriate standards for bullbars and limiting the raising of vehicles) which may compromise the safety of the vehicle as manufactured.</p>	<p>In addition to strengthening regulation of post-production modifications the FCAI considers there also exists a need for harmonisation of state regulations with national standards (i.e. ADRs and AVSRs) to provide national consistency of regulations and standards for post-production modifications and a high level of compliance and enforcement activities to be undertaken by state governments.</p>
<p>28. Investigate further regulation of speed and other safety features for powered alternative vehicles (for example, mobility scooters and power-assisted bicycles).</p>	<p>These vehicles should not be permitted to operate on roads where they would interact with traffic and as they should be restricted to footpaths or bicycle paths their speeds should be managed to ensure integration with pedestrians or cyclists.</p>

The FCAI would also like to make specific comments on an initiative in **“Future Steps – what else will be considered?”**

- *Investigating the scope for regulatory action to further improve stability, traction and braking standards on motorcycles supplied to the Australian market.*

There is a diverse range of use for motorcycles in Australia is diverse and registered motorcycles can be used from the suburban streets through to the rural road network and into the bush. Such is the diverse nature of the specific design of the motorcycles used in these environments the idea of a “one size fits all” approach to this issue is impracticable.

ABS has been introduced into new model “on-road” motorcycles and the uptake has increased with ABS has been developed during new product development programs.

However ABS is not appropriate for registerable “off-road” motorcycles, i.e. Trail or Enduro dirt bikes. Part of the riding technique for Trail and Enduro riding involves the deliberate locking of the motorcycles wheels. Obviously ABS is incompatible with this riding technique as well as increasing weight, complexity and cost. The complexity of ABS on a motorcycle would also mean that the system would need to increase in its robustness to survive extreme off-road riding, and would therefore need to be even

heavier and more costly. This would significantly disadvantage the Enduro and Trail bike riders through including a system on the machine that is not needed nor wanted.

## 6. SAFE PEOPLE

The FCAI considers that "Safe people" is an ambiguous term and could be taken to mean occupant safety or pedestrian safety rather than road user behaviour. We consider that a clearer message would be delivered if the NRSS used the term "Safe behaviour" rather than "Safe people".

The FCAI supports the intention of the NRSS to improve driver (and motorcycle rider) training.

The NRSS proposes to introduce a national motorcycle helmet rating and the FCAI considers that a significant first step is to review the current Australian Standard for motorcycle helmets and align the Australian Standard with leading international standards for motorcycle helmets. Such action will then provide the opportunity for motorcycle helmets currently used in other parts of the world (including Europe) will be able to be imported and used in Australia.

## 7. CONCLUSION

The FCAI fully supports the "Safe System" approach. However, the FCAI considers that the NRSS would send a much clearer message and more accurately reflect the "Safe System" approach if the term "Safe behaviour" was used rather than "Safe speeds" and "Safe people". The NRSS would then have three key areas: "Safe roads, Safe vehicles and Safe behaviour".

All manufacturers of mass produced light vehicles are committed to a policy of continuous improvement and have a proven track record of improving vehicle safety. Improvements in vehicle safety will continue regardless of Australia's NRSS. As outlined in Appendix 1, due to the globalization of the automotive industry, Australia's ability to influence the design of mass produced light vehicles is very limited.

The relatively small size of the Australian new vehicle market means that any new unique Australian vehicle regulations cannot be justified and adopting any unique Australian vehicle regulations may not have the desired effect of 'leading' the world. It may in fact be counter-productive as the increased cost of developing unique model specifications for such a relatively small market will limit Australia's ability to access new state of the art technology. A timely and rigorous process is required to ensure any new regulation or technology will address an identified problem, is evidence-based and is the best way

to deliver the desired outcome. If such a change is shown to be justified, careful consideration then needs to be given to determine the appropriate implementation timing.

The FCAI therefore believes that the NRSS should have realistic expectations regarding its ability to influence the design of mass produced light vehicles. The area where the NRSS can have the most significant effect regarding vehicles is to encourage a younger fleet. The FCAI therefore welcomes the proposal to investigate ways to encourage people to buy newer, safer vehicles (including tax-based and insurance incentives).

The FCAI believes the "Safe System" element that offers the most potential for improvement in Australia is "Safe behaviour". As many crashes have an element of driver error the NRSS should place more emphasis on interventions that will encourage and enforce "Safe behaviour". The full benefits of "Safe roads" and "Safe vehicles" will not be achieved unless there is also a significant increase in "Safe behaviour".

The most effective way of encouraging "Safe behaviour" is by training, education and enforcement. Road rules alone will not lead to a significant increase in "Safe behaviour". Enforcement needs to be seen to address more than just speeding.

The FCAI does not condone speeding but considers that the NRSS places undue emphasis on speed by having a separate key area called "Safe speeds". The FCAI believes speeding should be more appropriately addressed as one of the issues covered by "Safe behaviour".

The FCAI considers that the setting of speed limits that are appropriate to the road and the road environment is essential but believes it should be addressed as one of the issues covered by "Safe Roads" rather than by "Safe speeds".

There is a perception that the strict enforcement of speed limits in many parts of Australia is a revenue raiser rather than a road safety measure. The perception is encouraged because speed limit enforcement is a cost effective revenue raiser (e.g. automated by the use of "Safety" cameras). The community will be more inclined to support strict speed limit enforcement if it is generally accepted that the speed limits (and tolerances) are appropriate for the road.

The FCAI recognises the need for and supports the development of a comprehensive NRSS to improve road safety in Australia. For this Strategy to be successful, a whole-of-government approach is necessary to align the disparate approaches to a common goal.

## APPENDIX 1 – OVERVIEW OF THE AUTOMOTIVE INDUSTRY

The automotive sector is a globally integrated industry with many product lines sharing platforms and major components to achieve productivity gains from economies of scale. Even with more than one million new vehicles sold in 2010, Australia comprises less than one and a half percent (1.5%) of the global market.

With growth expected to continue in the emerging economic markets of India, China, Russia and Brazil, Australia’s share of the world market will decline.

Australia is one of the most open and competitive automotive markets in the world with more than 50 brands, 350 models and 20 source countries. In 2010, around 16% of new vehicles sold were manufactured locally with the remaining 84% of new vehicles imported from many countries and regions of the world including Asia (more than 60%), Europe, North America and Africa.

Table 1 below shows the major countries/regions of origin of new vehicles sold in Australia during 2010.

**Table A1.1 – Country/region of origin of new vehicle sales in 2010**

Country/Region of Origin	Percentage of new vehicle sales <sup>1</sup>
Australia	16%
Europe	13%
Americas	1%
Japan	36%
Korea	13%
Thailand	16%
Other (including China and South Africa)	4.5%

**Notes:**

1. Based on 2010 Vfacts

The motor vehicle is increasingly a global product and one of the most comprehensively regulated products. In considering regulations, the government’s role is to balance social and economic benefits with safety and environmental performance.

As economies of scale are critical in the automotive industry all manufacturers have tended to limit the number of locations any one model is produced and that model is then cross-shipped to markets where there is demand. This approach initially benefits the manufacturer through reducing costs and ultimately benefits the consumer by improving affordability and increasing product choice.

Australia is a small player with only 1.5% of the global build sold in this market. Consequently, Australia's ability to influence global design and investment is limited and as individual states are even a smaller proportion of the market and their ability to influence multi-national companies is correspondingly very limited.

## APPENDIX 2 - PRODUCT DEVELOPMENT IN THE AUTOMOTIVE INDUSTRY

The vehicle industry is a global industry and product development plans are prepared to align with the introduction of international regulations.

Product development and research is a finite resource within each FCAI member. Even if a proven technology can be readily adapted to an existing model range, product development cycles, from concept to mass production of three years are typical. Due to the long lead times for product development, introduction of new technology are usually aligned with the introduction of new or upgraded models or the introduction of international regulations.

An indicative timeframe for model cycle development is;

### ***Single global architecture for each vehicle size;***

More than 7 years prior to release to the market automotive companies develop a single global architecture for each vehicle size. The design considerations for the architecture include;

- Crash structure
- Suspension geometry that the vehicle will accommodate
- Powertrain technology
- Core electronics

### **Regional derivatives of global architecture;**

The next step is to then develop derivatives of this architecture for each region where the vehicle will be sold. This occurs more than 5 years prior to the vehicle arriving in the showroom.

In this instance the automotive companies consider region at a very high level such as Europe, USA/north America and Asia. The design considerations at this stage include;

- Ride and handling
- Interior and exterior design

Australia is not considered as a separate region and some companies will use their European region vehicle for Australia.

In this region, the focus of multi-national car companies is on the large and growing markets in China and India.

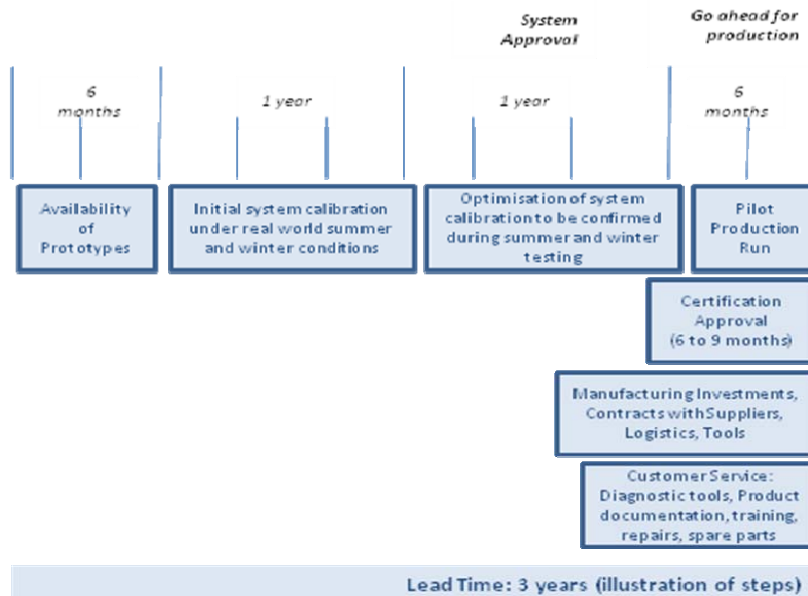
**Localisation;**

Localisation of the vehicle that includes selection of non-structural features (such as power train, non-structural safety features and non-structural body features such as fascias, grills or lamps) for the local market (i.e. at a national level) occurs 3 years out from sale.

Once the features are selected a 3 year product development period to fit the proven technology to an existing model range (i.e. localisation) will be undertaken:

- Development of prototype – six months.
- Initial calibration of system in all weather and seasonal conditions – one year. It is important to undertake extensive testing to assess performance of a new system in all weather and seasonal conditions, especially in a country like Australia with a wide range of seasonal conditions and climates.
- Optimization of system in all weather and seasonal conditions – one year.
- Pilot production run – six months.

**Figure A2.1 – Generic Three Year Product Development Cycle to Fit Proven Technology to an Existing Model Range**



The above diagram also shows the activities undertaken during the last 12-18 months of system development to gain the necessary regulatory approvals invest in any manufacturing changes, enter into contracts with suppliers and the activities required for maintenance of the new system once in service.

## APPENDIX 3 - THE AUTOMOTIVE INDUSTRY IN AUSTRALIA

The vehicle manufacturing industry is a global industry with manufacturing in more than 50 countries, producing more than 70 million passenger cars, SUVs and light commercial vehicles per year. The industry, globally, employs more than 8 million people and represents 5% of worlds manufacturing employment.

Even though the new light vehicle market in Australia is small in world terms (as outlined in Appendix 1 above) the automotive industry in Australia is a significant part of the Australian economy. The automotive industry is the largest manufacturing industry, employing more than 50,000 people and has significant investment in training and skills development of technicians, engineering and other professions.

The automotive industry is a national industry and every state in Australia has a stake in the industry and is crucial to employment in sectors such as tooling, iron and steel, paint, rubber and glass product manufacturing sectors, which together employ a further 50,000 people and have a turnover exceeding \$16 billion a year.

The Australian automotive industry also is a significant investor in research and development; as the leader in R&D spending in the manufacturing sector

The Australian automotive industry is also significant export industries with in 2010 out of the (approx) 250,000 cars manufactured approx 50% were exported. Over the 5 years from 2004 to 2009, the average value of automotive exports was \$4.8 billion per year. This places the automotive industry in Australia's the top 10 export earners and the automotive industry is the only manufacturing industry in the top 10 export earners.

In addition to the export of automotive product, the Australian automotive industry has developed international expertise in research and development and many of the local companies perform a crucial role in new product design and development within their global parent company structure, as shown in the following examples;

### ***Ford Australia;***

Ford Australia is one of Australia's largest private sector investors in research and development. It is a leading automotive company with more than 3500 employees and extensive design, engineering and manufacturing facilities located in Broadmeadows and Geelong, Victoria. In recent years, the company has undertaken a major expansion of its research and development capability.

It now has an enhanced role as a design and engineering "Centre of Excellence" for the Asia Pacific and Africa region. To support this role, the company has opened a new Research and Development Centre in Geelong and has significantly expanded its Proving Ground at Lara where the new facilities include a new wind tunnel facility.



Under this "Centre for Excellence" umbrella, the company employs around 1000 designers, engineers and support staff and has been the lead design and engineering source for the recently launched Ford Figo - a small car manufactured and sold in India - and the yet-to-be launched new Ford Ranger pick-up truck. This vehicle, which was first publicly shown at the Sydney Motor Show last October, will be manufactured in three global locations and sold in some 180 different markets. Its creation represents the largest automotive engineering export services project ever undertaken in Australia.

***Toyota Motor Corporation Australia;***

Toyota Motor Corporation Australia (TMCA) is one of Toyota Japan's global manufacturing centres with a long term commitment to the domestic and export markets. TMCA employs over 4700 people and thousands more are employed in its supplier and retail networks. As well as its locally built Camry, Hybrid Camry and Aurion, TMCA imports a wide range of passenger, 4WD and commercial vehicles. Toyota has been in Australia for over 50 years.

TMCA is Australia's largest vehicle exporter and more than half of the Camry, Hybrid Camry and Aurion vehicles manufactured at the company's plant in Altona are exported overseas – to more than 20 markets in the Middle East, New Zealand and the Pacific Islands.

Toyota Technical Centre Australia (TTC-AU) was established in 2003 with a primary focus on product development for Australia and Asia in the areas of body design, chassis design, evaluation and specification development. In addition, Toyota's Australian engineers are increasingly responsible for development and design expertise for Japan, Europe and America.

TTC-AU is one of five Toyota Technical Centres around the world, the only one in the southern hemisphere and is one of the most advanced automotive design engineering facilities in Australia, with the capability to design a range of models to global standards. TTC-AU in Melbourne performs specialised operations and is a key contributor to the development of innovative vehicle designs for Toyota's global regional markets, while also involved in fine tuning models for the particular needs of Asia and Australia.

***GM Holden Ltd***

Given the globalisation of vehicle development processes within the General Motors organisation, Holden designers and engineers contribute their expertise to major product programs and develop rear wheel drive vehicles for export markets that include the Middle East, the United States, South Africa and Brazil.