

---

FCAI Response to the  
VicRoads Regulatory  
Impact Statement for the  
proposed Road Safety  
(Vehicles) Amendment  
(Electronic Stability  
Control) Regulations

31 Jul 09

---



---

**Federal Chamber of Automotive Industries**

Level 6, 10 Rudd Street  
Canberra ACT 2600

Phone: +61 2 6247 3811  
Facsimile: +61 2 6248 7673

**Contact: Mr James Hurnall**

---

## Contents

1. INTRODUCTION .....	2
2. THE REGULATORY IMPACT STATEMENT.....	3
3. PROPOSED STANDARD FOR ESC.....	4
4. AUSTRALIAN DESIGN RULE FOR ESC .....	6
5. AUSTRALIAN INDUSTRY SUPPORT FOR ESC.....	7
6. LOSS OF SALES ANALYSIS .....	9
7. BUSINESS IMPLICATIONS OF A UNIQUE VICTORIAN REGULATION .....	15
8. WHO SHOULD PAY FOR A VICTORIAN GOVERNMENT POLICY? .....	17
9. OVERVIEW OF THE AUTOMOTIVE INDUSTRY .....	17
10. PRODUCT DEVELOPMENT IN THE AUTOMOTIVE INDUSTRY .....	18
11. CONCLUSION .....	20
APPENDIX 1 – BACKGROUND DATA.....	22

## 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 motor cycles in Australia.

This submission outlines the FCAI's response to the VicRoads Regulatory Impact Statement (RIS) for the proposed Road Safety (Vehicles) Amendment (Electronic Stability Control) Regulations;

- The FCAI member companies recognise the importance of electronic stability control (ESC) to improve safety and have taken a pro-active approach to fitting ESC. In the absence of any regulation, more than 65% of passenger cars, passenger vans and SUVs are fitted with ESC and this rate is expected to continue to increase to more than 70% by the end of this year.
- On 23 June 2009 the Federal Minister for Transport announced the Australian Design Rule (ADR) for ESC based on the international regulation. The introduction of a national ESC regulation (i.e. the ADR) negates the need for any individual state regulation for ESC.
- The ADR is harmonised with UN-ECE Regulation in terms of both the technical standards and introduction timetable. Accordingly, the ADR requires ESC to be fitted to new model passenger cars, passenger vans and SUVs from 1 November 2011 and 1 November 2013 for all new passenger cars, passenger vans and SUVs.
- The automotive sector is a globally integrated industry and technical vehicle regulations in Australia must be at a national level and harmonised with international regulations. Product development plans are developed on a global level, and aligned to meet the introduction timing of international regulations. This is achieved via the Australian Government's *Motor Vehicle Standards Act* and policy of harmonising ADRs with the international regulations (i.e. the UN-ECE Regulation and Global Technical Regulations).
- This proposal would be regarded as a "local standard" under Section 14B of the *Motor Vehicles Standards Act* and potentially leaves the Victorian Government open to a legal challenge from an affected party, e.g. the owner of a vehicle that has certification approval, can be registered in another state, but cannot be registered in Victoria.
- Introduction of individual state regulations will have significant business impacts on the automotive industry for both brands and dealers that include removing models from sale in Victoria, increased complexity and cost in inventory management, distribution systems and administration of any additional regulatory compliance system.
- Reductions in choice of new vehicles available for sale and increased costs to the industry will have negative flow-on effects to the Victorian economy with decreased competition and the potential for reduced vehicle sales.
- Many current models have ESC systems that do not meet Global Technical Regulation No. 8 (gtr 8) as required by the draft *Road Safety (Vehicles) Amendment (Electronic Stability Control) Regulations*. The FCAI analysis of current models fitted with ESC systems, confirms that all of the current Australian manufactured vehicles and the entire model range of some of the top-selling imported brands do not comply with gtr 8. FCAI

members have plans to ensure their vehicles are fully compliant with gtr 8 in accordance with the ADR phase in schedule, i.e. 1 November 2011 for new models and 1 November 2013 for all new vehicles.

- The FCAI analysis of potential impacts on the vehicle industry from this proposal shows that a substantial number of models will need to be withdrawn from sale in Victoria. Where ESC systems will need to comply with the international regulatory standard, as proposed in the draft regulation, it is estimated that vehicle models that comprise up to 80% of sales with a retail sales value of between \$4.2 billion and \$6.6 billion will not be available for sale in Victoria from 1 January 2011. As well as the negative impact on marketplace competition, withdrawing such a significant number of vehicles from sale in Victoria will have a significant implication on government revenue. The FCAI estimates this could be as high as \$959 million per year.
- In the best case scenario where models with existing and planned ESC systems will be considered acceptable to continue to be sold in Victoria the FCAI estimates there will be a reduction in sales of between 31,800 and 40,600 vehicles with a retail value of between \$958 million and \$1.2 billion dollars. This scenario would also result in lost revenue for the Victorian Government of between \$137 million and \$174 million per year.
- As the Victorian proposal covers all vehicles up to 4.5 tonnes GVM, there is still the potential for 50% of current light commercial vehicle sales and 90% of current light buses to no longer be available for sale in Victoria even with the introduction of the ADR for ESC requiring ESC on all passenger cars and SUVs by 1 November 2013.
- 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 and that market is less than 1.5% of global sales. Victoria represents approximately one quarter of Australia's total new car sales which translates to less than 0.4% of the global market.
- Less than 17% of new passenger vehicles sold in Australia in 2008 were manufactured locally with the remaining 83% of new vehicles imported from various countries and regions of the world including Asia, Europe and Africa.
- As the options evaluated in the RIS do not acknowledge the introduction of the ADR for ESC or the loss of sales and associated costs imposed on business the FCAI considers that the RIS is invalid and should be withdrawn.

## 2. THE REGULATORY IMPACT STATEMENT

The Regulatory Impact Statement (RIS) recommends the adoption of a regulation requiring ESC to be fitted to all vehicles up to 4.5 tonnes GVM, manufactured after 31 December 2010 when first registered in Victoria from 1 January 2011.

The preferred implementation option, as outlined in the RIS, is;

*“Option 3 – whereby fitment of ESC is mandated in Victoria from 2011 onwards, and that no action is taken at the national level. Specifically, motor vehicles weighing 4.5 tonnes or less*

*which are manufactured after 31 December 2010 will not be able to be registered for the first time in Victoria without ESC being installed.”*

Now that an Australian Design Rule (ADR) has been implemented to introduce ESC, the FCAI considers that this option is no longer valid. Similarly, Options 2 and 4 are also now invalid and need to be reassessed as the scope and introduction timing of the ADR is different to the assumptions used to evaluate these two options.

Section 10(1) (b) of the *Victorian Subordinate Legislation Act 1994* requires;

*“a statement explaining the effect of the proposed statutory rule, including in the case of a proposed statutory rule which is to amend an existing statutory rule the effect on the operation of the existing statutory rule;”*

With the introduction of the ADR the FCAI considers that the RIS does not meet this requirement.

The shortcomings of the RIS have also been noted by the Victorian Competition & Efficiency Commission (VCEC) in their letter of 4 June 2009. The VCEC notes that there is uncertainty surrounding the *“implementation and transitional issues, and the associated costs on individuals and businesses.”* The VCEC also noted that the compliance system would impose additional burden on business and that details of the compliance scheme are not yet developed.

The VCEC indicated that the costs provided in the RIS need to be quantified, following the consultation period for the RIS, to re-evaluate the net benefits of the proposal.

The RIS assumes that the introduction of a Victorian only regulation will not affect sales of new vehicles. The FCAI review has shown that a significant number of vehicle models will be withdrawn from sale with a subsequent major impact on the vehicle industry in Victoria. This submission provides an analysis of the potential impacts and cost on business in the section *“Business Implications of a Unique Victorian Regulation.”*

As the options evaluated in the RIS do not acknowledge the introduction of the ADR for ESC or the loss of sales and associated costs imposed on business the FCAI considers that the RIS is invalid and should be withdrawn.

### 3. PROPOSED STANDARD FOR ESC

The draft regulations for this proposal calls up Global Technical Regulation No. 8 (gtr 8), Electronic Stability Control Systems, the international standard established by the United Nations Economic Commission for Europe (UNECE), as the standard for ESC. The industry still has additional work to comply with the detailed requirements of gtr 8 on many models currently sold throughout the world, including Australia. Advice from many FCAI member companies confirms that their current ESC systems do not comply with gtr 8 and any necessary changes to ESC calibration or tell-tales and controls are programmed to meet the international (i.e. UN-ECE) regulation timings.

The additional ESC calibration work required to comply with gtr 8 performance requirements includes detailed engineering testing and analysis in coordination with suppliers. Any changes that are required to meet gtr 8 will then need to be thoroughly validated to ensure correct

operation in-service prior to being released for production. The automotive industry has global plans in place to ensure this work is completed in accordance with the introduction timing of the international regulation. Due to the timings required to undertake this work and introduce any required changes into production, the industry cannot accomplish this work in the timeframe proposed by Victoria, i.e. 1 January 2011.

The real world safety data used in the RIS showing the benefits of ESC (as referenced in Appendix F) is based on ESC systems that were developed by vehicle manufacturers and their component suppliers in the absence of any regulation.

The first regulation for ESC developed anywhere in world was the US FMVSS 126 which was initially published in April 2007. The international technical regulatory standard, gtr 8, which is based on FMVSS 126, was only finalised in 2008.

Prior to FMVSS 126 and gtr 8, vehicle manufacturers set their own requirements for ESC performance and ESC controls and tell-tales. Determining when ESC intervention shall occur is a complicated balance of effectiveness and intrusiveness. As such, one of the challenges of designing ESC control algorithms is how to anticipate when a loss of control situation may occur and the corresponding corrective action necessary. The gtr 8 requirements are different to many of the protocols currently used and consequently, it will take time to make the necessary changes to current vehicles.

The introduction timing for the international regulation and the ADR recognises that vehicle manufacturers will need to implement changes within their vehicle cycle plans.

The proposed Victorian regulation introduction date of 1 January 2011 is less than 18 months away. This is insufficient lead-time to make changes to current ESC systems (including the necessary testing, certification and production changes) to ensure full compliance with gtr 8. Vehicle manufacturers will need to test the current system, make any necessary changes, re-calibrate and re-test and then introduce any necessary changes into the production run.

As each model range may have several different variants (e.g. sport variant, upper specification variant and base variant) along with different engine, suspension and tyre/wheel combinations, the ESC will need to be calibrated for each variant. This adds complexity and time to any test program and subsequent production.

As acknowledged in the RIS there is no evidence of any safety issues with current ESC systems but the proposed Victorian regulation, if it requires full compliance with gtr 8, will mean that many vehicles (up to 4.5 tonne GVM) currently with ESC, manufactured after 31 December 2010 cannot be sold in Victoria.

FCAI members have plans to ensure their vehicles are fully compliant with gtr 8 in accordance with the ADR phase in schedule i.e. 1 November 2011 (for new models) and 1 November 2013 (for all new vehicles).

#### 4. AUSTRALIAN DESIGN RULE FOR ESC

National vehicle technical regulations that are harmonised with international regulations are required by the industry to minimise any administrative regulatory burden and provide avenues for supply of a broad range of automotive products to the Australian consumers.

In its *Inquiry into Vehicle Safety*, the Parliament of Victoria Road Safety Committee noted the benefits of harmonization with international regulations and stated;

*“To ensure that Australia keeps pace with safety developments the Committee recommends that Australia adopt United Nations Economic Commission for Europe vehicle regulations.”*

The *Victorian Road Safety (Vehicles) Regulations 1999, Schedule 8 – Vehicle Standards, Section 2, “Object of vehicle standards”* states;

*“The object of the Vehicle Standards is to set standards, about the construction and performance of motor vehicles, trailers and combinations, that are uniform throughout Australia.”*

The FCAI considers that the federal *Motor Vehicle Standards Act* fulfils both the benefits identified by the Parliament of Victoria Road Safety Committee and the objective of the Victorian Road Safety (Vehicles) Regulations as one of its objectives is;

*“to achieve uniform vehicle standards to apply to new vehicles when they begin to be used in transport in Australia.”*

The *Motor Vehicle Standards Act* achieves this through providing for the federal Minister for Transport to make national vehicle standards for road vehicles, (i.e. ADRs). This is reinforced in Section 14B of the *Motor Vehicle Standards Act* that allows manufacturers to supply a new vehicle that meets all applicable ADRs even if the vehicle does not meet any unique state based vehicle standard;

*“Section 14B; No requirement to comply with certain standards*

*(1) A person may supply a new vehicle to the market even though it does not comply with a local standard.*

*(2) In this section:*

*“local standard” means a vehicle standard for new vehicles, other than a national standard, purported to be required by a law of a State or Territory.”*

The FCAI considers that the Victorian proposal would be regarded as a "local standard" under Section 14B of the *Motor Vehicles Standards Act* and potentially leaves the Victorian Government open to a legal challenge from an affected party, e.g. the owner of a vehicle that has certification approval, can be registered in another state, but cannot be registered in Victoria.

Over the last ten or so years the Australian Government has been progressively harmonising the ADRs with the UN-ECE Regulations and is at a point where the majority are harmonised. The FCAI supports the Australian Government’s approach to harmonising with the UN-ECE Regulations and that the Australian Government is a signatory to the two international agreements for the

development and implementation of international vehicle technical regulation, i.e. the UN-ECE Regulations and Global Technical Regulations.

As more than eighty per cent (80%) of new vehicles (including all motorcycles and scooters) sold in Australia are imported, the harmonisation of ADRs with UN-ECE Regulations assist with providing a greater range of product choice for Australian new vehicle buyers and provides the platform for allowing vehicle brands to both manufacture locally (for both domestic sale and export) and also import vehicles with world standard safety equipment.

On 23 June 2009 the Federal Minister for Transport announced the Australian Design Rule (ADR) for Electronic Stability Control (ESC) based on the international regulation.

The introduction of a national ESC regulation negates the need for any individual state regulation for ESC.

The ADR is currently applicable to passenger cars, passenger vans and SUVs (i.e. MA, MB and MC category vehicles). Mandatory fitment of ESC to commercial vehicles is far more complex than the mandatory fitment of ESC to passenger vehicles as the different centre of gravity position with different payloads and body-types introduces additional complexities that must be considered in development of an ESC system. The sales volume of commercial vehicles is much lower than passenger cars and accordingly any development costs must be amortised over a smaller sales volume resulting in a higher price increase when compared to passenger cars.

The FCAI understands that the Australian Government will shortly begin a process to investigate the appropriate timeframe for mandatory fitting of ESC to light commercial vehicles. Similarly, the National Transport Commission's *Heavy Vehicle Braking Strategy* identifies the introduction of ESC for heavy vehicles (i.e. over 3.5 tonnes GVM) from 2015.

The FCAI will work with the Australian Government to investigate and develop appropriate ADR requirements for ESC fitment to commercial vehicles.

## 5. AUSTRALIAN INDUSTRY SUPPORT FOR ESC

The FCAI supported the introduction of an Australian Design Rule (ADR) for mandatory fitting of electronic stability control (ESC) to passenger cars, passenger vans and SUVs that is harmonised with the international regulations.

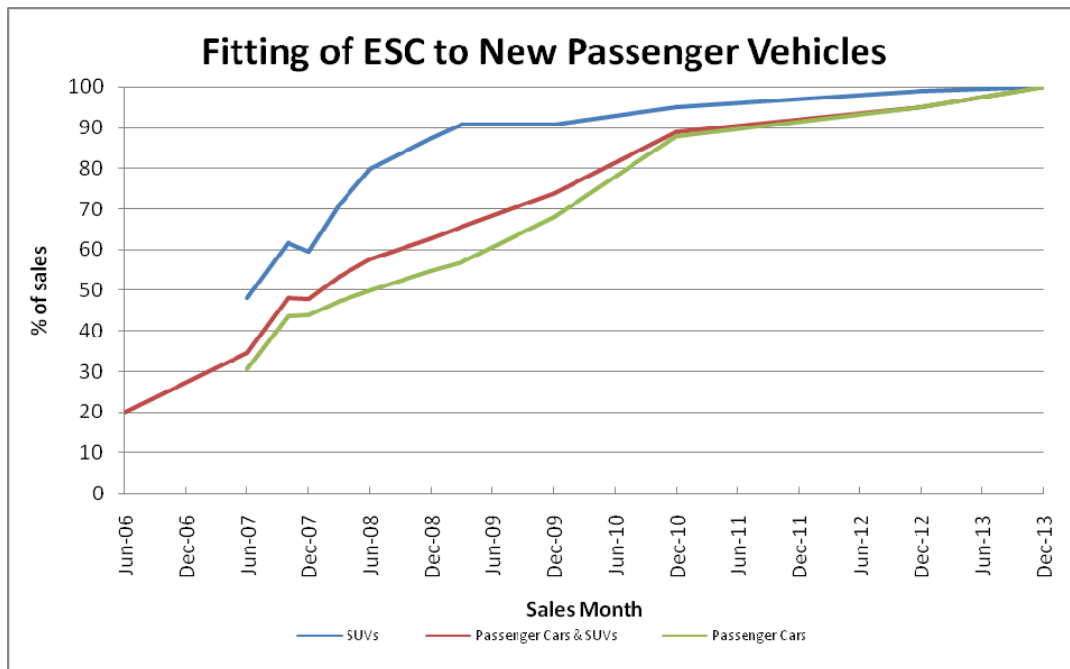
The FCAI member companies recognise the importance of ESC to improve safety and have taken a proactive approach to fitting ESC. As demonstrated in the graph below, the fitting rate of ESC for new passenger cars/vans and SUVs has continued to increase since mid 2006. Currently, more than sixty five percent (65%) of all new passenger cars/vans and SUVs are fitted with ESC. This rate is expected to continue to increase and it is expected that by the end of this year more than seventy percent (70%) of all passenger cars/vans and SUVs sold will be fitted with ESC.

The graph shows that the industry has responded to evidence showing the positive safety benefits of fitting ESC to passenger cars/vans and SUVs. As demonstrated in various studies and recognised in the RIS, ESC has a greater impact on high centre of gravity vehicles (e.g. SUVs) than sedan-type passenger cars.



Current plans indicate that this increase in fitting of ESC to new passenger cars/vans and SUVs will continue. FCAI members expect to have ESC available (standard fit or as an option) on more than ninety five percent (95%) of new passenger cars/vans and SUVs by 2012. This will move to one hundred percent (100%) by 1 November 2013 with the recent introduction of the ADR.

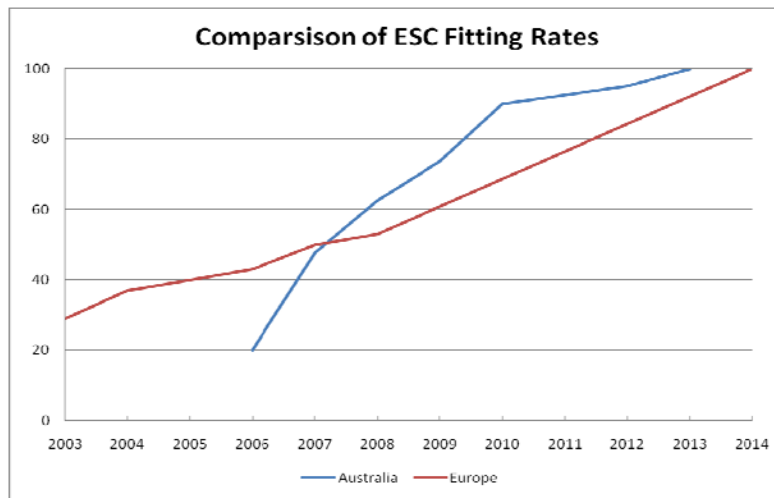
Due to the global nature of the vehicle industry and Australia’s small share of the world market the introduction of ESC into an ADR must recognise the scheduled introduction timing of overseas markets. While Australia’s introduction of mandatory ESC is in line with the UN-ECE Regulation, the final phase-in date of November 2013 for all remaining models will be one year ahead of Europe’s.



Source: FCAI member surveys

The harmonisation of introduction dates is required to ensure the availability of components for vehicles to be sold in Australia. As the major automotive markets of Europe, the US and Japan will also be increasing the fitting of ESC to vehicles as their own regulations are implemented the component suppliers will also need to tool up and increase production of the ESC components.

The RIS, in *Chapter 3 – Reasons for Market Failure*, assumes that the market has failed to respond to fitting ESC and that the rate of fitting ESC in Australia lags other markets. The FCAI disagrees with these assertions as the rate of fitting ESC in Australia is above the average European fitting rate (as shown in the following graph), and at least equal to the fitting rates in other major automotive markets including the United States and Japan.



Source: FCAI member surveys for Australian fitting rates  
Bosch for Europe fitting rate

Information from Bosch on rates of fitting ESC in Europe demonstrates that the fitting rate of ESC in new vehicles sold in Australia far exceeds many European countries. When the past and projected rate of fitting ESC to passenger cars and SUVs in Australian is compared with the ESC fitting rate in Europe (as supplied by Bosch), and estimating that 100% fitting will be achieved in 2014 in line with the EU General Safety Regulation, it shows that Australian fitting rate passed the European rate in 2007 and will remain above the European rate until 2014 (see graph above).

## 6. LOSS OF SALES ANALYSIS

The proposed Victorian regulation is out of step with both the ADR and the international regulation. As more than 80% of vehicles are imported into Australia the introduction of any regulation that is not harmonised with the international regulations will significantly impact on the availability of new vehicles in Australia.

Consequently, a significant number of vehicle models will need to be withdrawn from the Victorian new vehicle market. This is not acknowledged in the RIS and consequently the impact on business is not fully assessed.

The draft *Victorian Road Safety (Vehicles) Amendment (Electronic Stability Control) Regulations* defines a “compliant system of electronic stability control” as

“a system of electronic stability control that –

(a) *Complies with the United Nations electronic stability control standard; or*

(b) *Has been determined to be acceptably equivalent to that standard by the Corporation under regulation 215B;”*

The RIS does not provide any information on what would be an “acceptably equivalent” ESC. Therefore, the FCAI has identified 2 different scenarios that need to be considered;

- Scenario 1; where only vehicles with ESC systems that have been shown to meet gtr 8 will be available for sale in Victoria.

- Scenario 2; where ESC systems on current and planned models will be considered to be “acceptably equivalent” to gtr 8 by VicRoads and will therefore continue to be available for sale in Victoria.

Both of these scenarios are applicable from the proposed introduction timing of 1 January 2011 until ESC systems complying with the ADR are progressively introduced from 1 November 2011 on new model passenger cars and SUVs. As the ADR requires ESC on all new passenger cars and SUVs only light commercial vehicles and light buses without ESC systems will not be available for sale in Victoria from 1 November 2013.

It must be recognised that ESC is still a relatively new technology and that the first regulation for ESC developed anywhere in the world was the US FMVSS 126 which was initially published in April 2007. The international technical regulatory standard, gtr 8, which is based on FMVSS 126 (and FMVSS 101 for ESC Controls and Tell-tales), was only finalised in 2008. Prior to FMVSS 126 and gtr 8, vehicle manufacturers set their own requirements for ESC performance and ESC controls and tell-tales. (Note: the FMVSS 101 requirements for ESC Controls and Tell-tales do not apply until 1 September 2011.)

It will therefore take a period of time to make the necessary changes to current ESC systems to comply with gtr 8. The introduction timing for the ADR recognises that vehicle manufacturers will need to implement changes within their vehicle cycle plans. More information on product development timing is detailed later in this submission in Section 10.

Now that gtr 8 has been finalised, new models which comply with gtr 8 are progressively being introduced into the Australian market as their product development is completed in line with the international regulatory timings.

### **6.1 Scenario 1 – ESC systems must comply with gtr 8.**

Scenario 1 is where vehicles must have ESC systems that comply with gtr 8 to be sold in Victoria from 1 January 2011. A significant number of models do not have ESC systems that have been shown to comply with gtr 8, including all current Australian manufactured vehicles and the entire model range of some of the leading imported brands.

The removal from sale of many vehicle models comprising such a large proportion of vehicle sales has other significant business implications and costs to all sectors of the automotive industry and also to the Victorian Government.

The lost sales in all segments of passenger cars, light and medium commercial vehicles and light buses as summarised in the following tables;

- Table 6.1a estimates the total commercial value of lost sales if all ESC systems are required to comply with gtr 8. The information in this table is based on FCAI member advice on their ESC systems. In the absence of confirmation from the company, it was assumed that the ESC system **would** comply with gtr 8 and the vehicle model will continue to be available for sale in Victoria from 1 Jan 2011.
- Table 6.1b estimates the total commercial value of lost sales if all ESC systems are required to comply with gtr 8 similar to Table 6.1a. However, in this case, in the absence

of any confirmation from the company, it is assumed that the ESC system **will not** comply with gtr 8 and the vehicle model will not be available for sale in Victoria from 1 Jan 2011.

**Table 6.1a – Estimate of Lost Sales if ESC Required to Comply with gtr 8**

**(In the absence of information it is assumed that the ESC system will meet gtr 8.)**

Segment	Percentage of lost sales in segment <sup>1</sup>	Estimated average cost of vehicle <sup>2</sup>	Range of estimated retail cost of lost sales	
			Lower sales limit (215,000 units)	Upper sales limit (277,000 units)
Passenger Cars	67%	\$25,050	\$2,081 million	\$2,685 million
SUVs	48%	\$38,475	\$794 million	\$1,023 million
Light commercial vehicles < 4.5 tonnes GVM	90%	\$34,204	\$1,293 million	\$1,638 million
Light buses up to 4.5 tonne GVM	90%	\$83,500	\$32 million	\$41 million
<b>Total</b>			<b>\$4.201 billion</b>	<b>\$5.388 billion</b>

**Table 6.1b – Estimate of Lost Sales if ESC Required to Comply with gtr 8**

**(In the absence of information it is assumed that the ESC system will not meet gtr 8.)**

Segment	Percentage of lost sales in segment <sup>1</sup>	Estimated average cost of vehicle <sup>2</sup>	Range of estimated retail cost of lost sales	
			Lower sales limit (215,000 units)	Upper sales limit (277,000 units)
Passenger Cars	83%	\$25,050	\$2,578 million	\$3,327 million
SUVs	77%	\$38,475	\$1,274 million	\$1,641 million
Light commercial vehicles < 4.5 tonnes GVM	90%	\$34,204	\$1,293 million	\$1,638 million
Light buses up to 4.5 tonne GVM	90%	\$83,500	\$32 million	\$41 million
<b>Total</b>			<b>\$5.177 billion</b>	<b>\$6.647 billion</b>

Notes for Tables 6.1a and 6.1b:

1. It is assumed that there is no transfer of sales to another model within the same vehicle segment due to the lack of available models.
2. Average cost of vehicle is outlined in Appendix A.

Therefore, it is estimated that the total loss of sales revenue for the industry, where Victoria would require ESC systems to meet gtr 8 would be in the range of \$4.2 billion to \$6.6 billion per year from 1 January 2011.

It is estimated there will be a reduction in sales of between 142,000 and 223,000 vehicles. This represents up to 80% of vehicles up to 4.5 tonnes GVM currently sold in Victoria and would not result in any safety benefit to the Victorian community.

As noted above there will be an introduction of passenger cars and SUVs that meet gtr 8 in accordance with the ADR timings. Section 6.3 will estimate the total loss of sales revenue in Victoria post 1 November 2013.

**6.2 Scenario 2 – ESC systems on current and planned models will be considered “acceptably equivalent” to gtr 8.**

Scenario 2 is where ESC systems on current and planned models will be considered to be “acceptably equivalent” to gtr 8 by VicRoads and will continue to be sold in Victoria.

**Table 6.2 – Estimate of Lost Sales where current ESC Systems are “acceptably equivalent”**

Segment	Percentage of lost sales in segment <sup>1</sup>	Estimated average cost of vehicle <sup>2</sup>	Range of estimated retail cost of lost sales	
			Lower sales limit (215,000 units)	Upper sales limit (277,000 units)
Light Passenger Cars <sup>3</sup>	30% <sup>4</sup>	\$15,000	\$125 million	\$161 million
SUVs	5% <sup>4</sup>	\$38,475	\$83 million	\$107 million
Light commercial vehicles < 4.5 tonnes GVM	50% <sup>5</sup>	\$34,204	\$718 million	\$910 million
Light buses up to 4.5 tonne GVM	90%	\$83,500	\$32 million	\$41 million
<b>Total</b>			<b>\$958 million</b>	<b>\$1,219 million</b>

Notes for Table 6.2:

1. It is assumed that there is no transfer of sales to another model within the same vehicle segment due to the lack of available models.
2. Average cost of vehicle is outlined in Appendix A.
3. Light passenger cars are 22.4% of passenger car sales
4. It is estimated that models of light passenger car that currently account for 60% of sales and models of SUV that currently account for 10% of sales will not have ESC available by 1 Jan 2011.
5. It is estimated that models of light commercial vehicles that currently account for more than two thirds of sales will not have ESC available by 1 Jan 2011.

This scenario still results in significant lost sales in light passenger cars, light and medium commercial vehicles and light buses as summarised in Table 6.2 (above).

While there may be some transfer of sales to a model still available in the market, it cannot be assumed that all sales will be transferred. From the table it can be seen that due to the large percentage of sales represented by the models to be withdrawn in the commercial vehicle and light bus segments and the resulting small number of models available, it would be very unlikely that sales in these market segments would be recovered through transfer to another model.

For the purposes of estimating loss of sales revenue we have assumed;

- Half of the light car sales and SUVs will be picked up through transfer of sale to another model.
- One quarter of light commercial sales are transferred to another model.
- No transfer of sales for medium commercial vehicles or light buses.

Therefore, it is estimated that the total loss of sales revenue for the industry, where VicRoads would consider ESC systems on current and planned models to be “*acceptably equivalent*” to gtr 8 would be in the range of \$958 million to \$1.2 billion per year from 1 January 2011.

It is estimated there will be a reduction in sales of between 31,800 and 40,600 vehicles, again without any safety benefit to the community.

### 6.3 Scenario 3 – Post ADR implementation

As the ADR requires ESC on all new passenger cars and SUVs only light commercial vehicles and light buses without ESC systems will not be available for sale in Victoria from 1 November 2013.

**Table 6.3 – Estimate of Lost Sales Post 1 November 2013**

Segment	Percentage of lost sales in segment	Estimated average cost of vehicle <sup>1</sup>	Range of estimated retail cost of lost sales	
			Lower sales limit (215,000 units)	Upper sales limit (277,000 units)
Light commercial vehicles < 4.5 tonnes GVM	50% <sup>2</sup>	\$34,204	\$718 million	\$910 million
Light buses up to 4.5 tonne GVM	90%	\$83,500	\$32 million	\$41 million
<b>Total</b>			<b>\$750 million</b>	<b>\$951 million</b>

Notes for Table 6.3:

1. Average cost of vehicle is outlined in Appendix A.

2. It is estimated that models of light commercial vehicles that currently account for more than two thirds of sales will not have ESC available by 1 Jan 2011.

The annual loss of sales revenue from 1 November 2013 is estimated to be between \$750 million and \$951 million.

This represents 50% of light commercial vehicles and 90% of light buses currently sold in Victoria.

The community safety benefit of ESC fitted to all passenger cars and SUVs would be delivered through the ADR.

#### **6.4 Loss of Government Revenue**

The substantial loss of vehicle sales has a potential to significantly impact on Victorian Government revenue. Using the assumptions outlined in Appendix A the loss of revenue for each of scenarios outlined above is;

**Table 6.4 – Estimate of Loss of Victorian Government Revenue**

<b>Scenario</b>	<b>Lower sales limit</b>	<b>Upper sales limit</b>
Scenario 1a	\$606 million	\$777 million
Scenario 1b	\$747 million	\$959 million
Scenario 2	\$137 million	\$174 million
Scenario 3	\$105 million	\$133 million

Therefore the loss of revenue to the Victorian Government from 1 January 2011 is in the range of \$137 million to \$959 million (depending on assumptions and acceptance of ESC systems) per year.

The annual loss of government revenue from 1 November 2013 is estimated to be between \$105 million and \$133 million.

#### **6.5 Summary of Loss of Sales Analysis**

The proposed regulation is out of step with the ADR and international regulation introduction timings. Consequently, there will be significant number of vehicle models that will need to be withdrawn from sale in Victoria resulting in a significant reduction in sales of new vehicles of between 142,000 and 223,000 units. This represents up to 80% of sales of vehicles up to 4.5 tonnes GVM with a value in the range of \$4.2 billion to \$6.6 billion per year from 1 January 2011.

Even with the introduction of the ADR for ESC from 1 November 2013, there will still be an annual loss of sales revenue of between \$750 million and \$951 million.

In addition to the direct financial implications to the vehicle industry other impacts on the wider Victorian community and economy include;

- Reduction in choice and lack of competition in these segments.
- Lack of new commercial vehicles purchased which would lead to an increase in the age of the in-service fleet with a corresponding reduction in safety and environmental benefits.
- Loss of revenue to both FCAI members and dealers leading to financial pressures that could result in job losses and/or failure of business. For example, one company has advised that at least eleven (11) Victorian dealers will be unable to market ten of its models.
- Annual loss of revenue to the Victorian Government ranging from \$137 million to \$959 million (depending on assumptions and acceptance of ESC systems).

## 7. BUSINESS IMPLICATIONS OF A UNIQUE VICTORIAN REGULATION

In addition to the withdrawal of sale of various models as outlined above, introducing a unique state only regulation will introduce other business impacts, with significant costs, on the automotive industry;

- Logistics and distribution challenges.
- Administration for an additional compliance regime.

### **7.1 Logistics and distribution challenges**

The introduction of a unique Victorian regulation will result in significant challenges to the logistics and distribution of new vehicles in Australia.

FCAI members will need to modify their existing logistics arrangements and develop internal processes to;

- Identify which vehicles (variant, option specification and even paint choices) will be sold in Victoria.
- Supply the relevant VINs to VicRoads to gain the necessary approvals. As this process will involve significant time, all FCAI members will need to introduce additional lead time into their forward plans and inventory management systems.
- Fit the VicRoads label in addition to the Australian compliance plate/label. It is estimated that this will cost between \$8 and \$12 per vehicle which would equate to between \$1.7 and \$3.3 million additional cost to the industry (using the estimated lower and upper estimate of 215,000 and 277,000 sales in Victoria).
- Monitor the distribution of all stock to ensure that only those vehicles that have been approved by VicRoads are sold in Victoria.

In addition to affecting the FCAI members' logistics and distribution systems the proposed regulation will impose additional constraints on the dealer network. As there has been common national vehicle standards regulations (the ADRs) for more than 35 years, the existing vehicle



distribution methods facilitates inter-dealer transfers of new vehicles to meet customer demands. Such dealer transfers are commonly inter-state as well as intra-state. With this proposed Victorian only regulation inter-state dealer transfers will no longer be possible.

The need to change systems as described above will impose additional costs from both one-off changes to inventory management systems and also an additional cost to administer the additional stages imposed. As these costs cannot be quantified, the cost of adding the proposed Victorian label to all vehicles will be used for an indicative minimum cost. This gives a minimum cost to the industry of between \$6.9 and \$13.3 million per annum (as Victoria comprises approximately one quarter of Australian new car sales).

### ***7.2 Administration for an additional compliance regime***

The introduction of an additional compliance regime in Victoria will also impose additional costs on FCAI members via the need to administer a second compliance regime.

The most obvious costs are those associated with fitting the Victorian label/plate (as outlined above) and the fee proposed in the draft regulations of “0.5 fee units” which translates to \$5.85 per vehicle. The VicRoads fee would cost the industry between \$1.2 and \$1.6 million per year (based on sales volumes of 215,000 and 277,000 vehicles).

However, there are additional costs that would be imposed on the vehicle industry resulting from administration of an additional compliance regime. Some FCAI members, who would have a large number of models impacted, estimate that additional staff would be required. When the cost of implementing and administering the relevant compliance system is taken into consideration the cost could be in the region of \$200,000 per year for those brands with significant numbers of models impacted.

It is difficult to estimate the total industry cost. However, noting that the top 10 brands sell more than eighty percent (80%) of new vehicles, the total industry cost of administering an additional certification scheme will be estimated at \$2 million per year.

### ***7.3 Summary of Business Implications***

In summary, imposing an additional, unique, state-only regulation will have significant business implications for the vehicle industry with significant additional annual costs;

- Fitting Victorian label and/or changes to logistics and distribution systems – between \$6.9 and \$13.3 million
- Fee for approval – between \$1.2 and \$1.6 million
- Additional administration costs - \$2 million

Total cost to industry to administer the proposed Victorian regulation of between \$10.1 and \$16.9 million per annum.

The RIS does not acknowledge these costs to the industry.

## 8. WHO SHOULD PAY FOR A VICTORIAN GOVERNMENT POLICY?

The draft regulation requires the industry to pay a fee of “0.5 fee units.” As noted above, this translates to \$5.85 per vehicle for a total of between \$1.2 and \$1.5 million.

The FCAI questions why the industry should pay an additional fee for government policy that is claimed to provide a community benefit through safety improvements, especially when the safety improvement is also being delivered at a national level through the ADRs.

The Victorian Government already collects substantial revenue from the sale of new vehicles through GST, stamp duty, registration and TAC charges. The FCAI estimates that the Victorian Government already collects in excess of \$900 million per annum from the sale of new vehicles comprising;

- Annual vehicle sales in Victoria of 250,000 units at an average sales price of \$25,000.
- GST revenue of \$2,500 per vehicle to give a total of \$625 million.
- Stamp duty of 2.5% per vehicle to give a total of \$156 million.
- Registration charges of \$200 per vehicle to give a total of \$50 million
- TAC charge of \$380 (medium risk zone for passenger cars) per vehicle to give a total of \$95 million.

The FCAI considers that the imposition of the proposed fee for an additional certification scheme is unnecessary. If the purpose of the proposed regulation is to improve safety, the full cost of administering the scheme should be sourced from the existing charges.

For example, one of the TAC’s intentions is to “*reduce the incidence and severity of road trauma*” and the FCAI considers that any Victorian Government policy to improve the safety of road users, including additional mandatory vehicle standards, should be funded from the existing TAC charge.

## 9. 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. While more than one million new vehicles were sold in Australia in 2008, this still represents less than one and a half percent (1.5%) of the global market. As Victoria represents approximately one quarter of Australia’s total new car sales, Victoria accounts for less than 0.4% 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. With the expected fall in Australian new vehicle sales of up to twelve percent (12%) in 2009, Australia’s share of the world market could decline even further.

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. Less than 17% of new passenger vehicles

sold in 2008 were manufactured locally with the remaining 83% of new vehicles imported from various countries and regions of the world including Asia, Europe and Africa.

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.

The FCAI considers that government should base regulations on sound science and economics and that regulation is justified only when there is demonstrated need for government intervention because the market or vehicle manufacturers are not responding to a demonstrated need or new technology. Additionally, vehicle regulations in Australia should be both nationally consistent and harmonised with international regulatory standards.

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 benefits initially the manufacturer through reducing costs and ultimately the consumer by improving affordability and increasing product choice.

The introduction of individual or unique national or state standards and regulatory requirements can seriously affect this approach through increasing production cost, which must be passed along to the consumer, without necessarily improving safety or environmental performance.

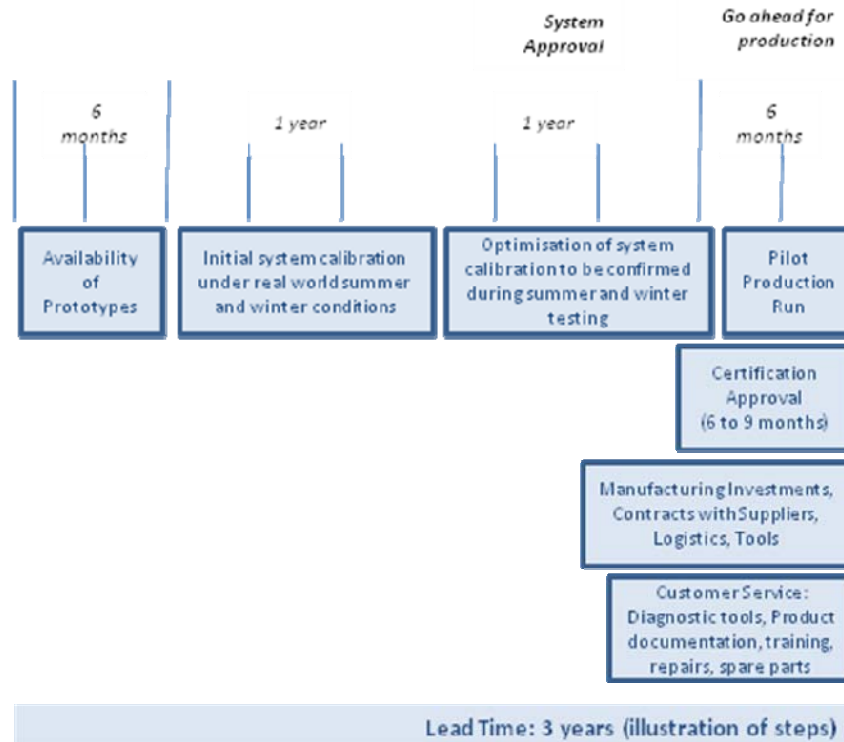
## 10. PRODUCT DEVELOPMENT IN THE AUTOMOTIVE INDUSTRY

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. As it takes up to three years to bring a known technology to mass production, development plans are aligned with the introduction of new or upgraded models or the introduction of international regulations.

The three year product development period comprises (as outlined in the diagram below);

- 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.



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 contract with suppliers and the activities required for maintenance of the new system once in service.

The introduction of a unique standard in a small market (i.e. less than 0.4 percent of the global market) is unlikely to result in a change in any current plans. When considering ESC, all vehicle manufacturers have global plans to test and certify their vehicles meet the standard required under GTR 8 in accordance with the timelines in the UN-ECE Regulation, the EU General Safety Regulation or FMVSS 126.

In response to the proposed Victorian regulation, which will be introduced in advance of the ADR and the corresponding international standard, a number of vehicle models will be withdrawn from the Victorian market until ESC is available in accordance with the timetable from the UN-ECE Regulation. Some FCAI members have advised there will be models that will need to be withdrawn from sale in Victoria with an estimated loss of sales of more than \$570 million (as outlined above).

Obviously, this will not be consistent across all parts of the vehicle market for those categories that will be affected by the proposed Victorian regulation. It is expected that more than 70% of new passenger cars and SUVs sold in Australia by the end of 2009 will be fitted with ESC (see following section). The industry expects that the fitting rate will continue to improve and will be close to eighty percent (80%) of new passenger cars and SUVs by the beginning of 2011. However, not all segments of the passenger car market will have ESC introduced at the same rate, purely due to practical issues of model cycle and the introduction into higher volume selling models first.

## 11. CONCLUSION

The FCAI member companies recognise the importance of ESC to improve safety and have taken a proactive approach to fitting ESC. The FCAI supported the introduction of an ADR for ESC and is committed to improving the safety of new vehicles but we do not support the introduction of a unique Victorian regulation requiring the fitting of electronic stability control (ESC).

The FCAI does not support the introduction of a Victorian regulation for ESC;

- The introduction of an ADR for ESC negates any perceived need for a Victorian regulation.
- The RIS, and options presented, does not consider all information that is available. Specifically, it does not consider the implications of the introduction of the ADR for ESC or the total costs of this proposal.
- Introducing a unique state regulation has significant implications for the automotive industry for both brands and dealers that include removing models from sale in Victoria, increased complexity and cost in inventory management, distribution systems and administration of any additional regulatory compliance system.
- The FCAI analysis considers a range of scenarios where vehicle models are withdrawn from sale in Victoria. For the worst case scenario, where ESC systems need to comply with gtr 8 (as required in the draft regulation), the FCAI estimates that models that comprise up to 80% of annual new vehicle sales in Victoria, with a retail sales value of between \$4.2 billion and \$6.6 billion, will need to be withdrawn from sale.
- In addition, withdrawing such a significant number of vehicles from sale in Victoria will have a significant implication on government revenue. The FCAI estimates this could be as high as \$959 million per year.
- In the best case scenario where models with existing and planned ESC systems will be acceptable to continue to be sold in Victoria the FCAI estimates there will be a reduction in sales of between 31,800 and 40,600 vehicles with a retail value of between \$985 million and \$1.2 billion dollars. This scenario would also result in lost revenue for the Victorian Government of between \$105 million and \$137 million per year.
- As the Victorian proposal covers all vehicles up to 4.5 tonnes GVM, there is still the potential for 50% of current light commercial vehicle sales and 90% of current light buses to no longer be available for sale in Victoria even with the introduction of the ADR for ESC requiring ESC on all passenger cars and SUVs by 1 November 2013.
- In addition to the implication on vehicle models that could be offered for sale in Victoria, the proposed regulation would impose additional costs to the industry to administer an additional compliance scheme (i.e. a compliance scheme that replicates the national scheme administered by the Federal Government's Department of Infrastructure, Transport, Regional Development and Local Government) of between \$10.1 million and \$16.9 million.

- None of the options in the RIS considers the ADR for ESC, the implementation issues, costs imposed on business or the compliance system that is required to administer the proposed scheme. Consequently, the FCAI considers that the RIS does not meet the requirements of the Victorian Subordinate Legislation Act 1994 and should be withdrawn.



Appendix 1 summarises the background data used in the loss of sales analysis and also to calculate the business impacts of the proposed Victorian regulation.

**Annual Sales**

The RIS<sup>1</sup> estimated that in 2010, 277,000 new vehicles up to 4.5 tonnes GVM will be registered in Victoria.

This assumes that the growth in new vehicle sales experienced in recent years will continue. However, new vehicle sales data for January to June 2009 showed a 16.4% reduction in Victoria<sup>2</sup>.

The 2008 new vehicle sales data<sup>3</sup> showed total Australian sales of 976,239. Victoria accounted for 26.3% of new vehicle sales in 2008.

Therefore, a lower estimate for new vehicle sales, in Victoria in 2009 is;

$$(26.3\% \times 976,239) \times (1 - 0.164) = 214,917.$$

Therefore, the FCAI will use the range of sales of new vehicles of;

- Upper limit – 277,000
- Lower limit – 215,000

The June 2009 Vfacts data will be used to estimate sales in the different vehicle segments, based on the upper and lower limits identified above;

**Table A1.1 - Estimated annual sales in Victoria**

Segment	Percentage of sales	Estimated sales in Victoria;	
		Lower limit	Upper limit
Passenger cars	57.6	124,000	160,000
SUVs	20.0	43,000	55,400
Light commercial	19.2	42,000	53,200
Light buses	0.2	430	550

**New vehicle sales price**

To assist with estimating the financial impact on new vehicle sales the following new vehicle sales prices are used;

- Passenger cars - \$25,050 (used in Scenario 1 rather than attempting to break up into passenger cars into individual segments) as estimated from a consolidation of percentage of sales (see Table A1.2)

<sup>1</sup> VicRoads Regulatory Impact Statement June 2009

<sup>2</sup> Vfacts June 2009

<sup>3</sup> Vfacts December 2008

- Light passenger cars - \$15,000 (used in Scenario 2 where it is assumed that only light cars will need to be withdrawn from sale).

**Table A1.2 - Estimated average passenger car sale price**

Passenger Segment	Estimated Price	Percentage of sales
Light	\$15,000	22.4
Small	\$20,000	39.1
Medium	\$30,000	13.9
Large	\$40,000	18.7
Upper Large	\$50,000	0.7
People Movers	\$30,000	2.1
Sports	\$40,000	3.1
<b>Average passenger car sale price</b>	<b>\$25,050</b>	<b>100.0</b>

- SUVs - \$38,475 (used in Scenarios 1 and 2 for all SUVs) as estimated from a consolidation of percentage of sales (see Table A1.3)

**Table A1.3 - Estimated average SUV sale price**

SUV Segment	Estimated Price	Percentage of sales
SUV Compact	\$25,000	45.5
SUV Medium	\$40,000	38.5
SUV Large	\$60,000	5.5
SUV Luxury	\$80,000	10.5
<b>Average SUV Sales Price</b>	<b>\$38,475</b>	<b>100.0</b>

- Light commercial vehicles (LCV) - \$34,204 (used in Scenarios 1, 2 and 3 for all LCVs) as estimated from a consolidation of percentage of sales (see Table A1.4)

**Table A1.4 - Estimated average LCV sale price**

Light commercial vehicle Segment	Estimated Price	Percentage of sales
Commercial Vans	\$25,000	12.9
4x2 LCV < 3.5 tonne GVM	\$25,000	36.5
4x4 LCV < 3.5 tonne GVM	\$43,000	45.8
LCV > 3.5 and < 4.5 tonne GVM	\$45,000	4.8
<b>Average LCV Sales Price</b>	<b>\$34,204</b>	<b>100.0</b>



- Light buses - \$83,500 (used in Scenarios 1, and 3 for all light buses) as estimated from a consolidation of percentage of sales (see Table A1.5);

**Table A1.5- Estimated average light bus sale price**

<b>Bus Segment</b>	<b>Estimated Price</b>	<b>Percentage of sales</b>
Bus < 3.5 tonne GVM	\$40,000	27.5
Bus > 3.5 and < 4.5 tonne GVM	\$100,000	72.5
<b>Average Bus Sales Price</b>	<b>\$83,500</b>	<b>100.0</b>

#### ***Government Revenue – GST***

The federal government collects a 10% goods and services tax (GST) on all new motor vehicles sold in Australia.

As GST revenue is returned to state governments this analysis assumes that a reduction in GST revenue for Victoria due to reduced vehicle sales will impact on total state revenue.

#### ***Government Revenue – Stamp Duty***

Information from the VicRoads website indicated that stamp duty charges were last updated on 1 May 2007.<sup>4</sup> The information indicates that all new passenger vehicles up to the value of \$57,009, and all light commercial vehicles have a motor vehicle duty (stamp duty) of 2.5%.

For the estimates of government revenue a stamp duty of 2.5% will be applied.

#### ***Government Revenue – Registration Charge***

The Victorian government also charges an annual registration fee. For the purposes of this analysis this fee is estimated at \$200 per vehicle regardless of vehicle segment.

#### ***Government Revenue – TAC Charge***

The TAC charges, effective from 1 July 2009<sup>5</sup>, for the medium risk zone will be used, i.e.

- \$383.90 for all passenger vehicles
- \$325 for light all commercial vehicles

<sup>4</sup> Vicroads website

<sup>5</sup> TAC website