

Streamlining Victoria's Roadworthiness System VACC Submission

September 2013





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Executive Summary

The VACC is fully supportive of the Victorian Government's red-tape reduction program but expects a rigorous and robust review to be undertaken with a comprehensive cost benefit analysis to the proposed options in respect to the roadworthiness system. This is necessary to enable the Victorian Government to make an informed decision and to provide the wider community with confidence in our road safety programs and consumer protection laws.

The VACC rejects the proposed options put forward in the Consultation Paper on the grounds that VicRoads has not made a case for changing Victoria's roadworthiness system consistent with the principles of evidenced-based public policy development. VicRoads has ignored the advice of the Victorian Competition and Efficiency Commission to undertake detailed data collection and analysis to determine whether the proposed options provide a superior alternative to the current regulatory framework. Furthermore, it has not analysed the impact of the proposed options on road safety.

Inadequate data

Instead, the Consultation Paper has repeated old data from the VicRoads regulatory impact statement (RIS) for the Road Safety (Vehicles) Regulations 2009 that was found inadequate to assess the proposed options, conveniently omitted critical German motor vehicle defect related crash data that was considered superior to the police data and over-estimated the benefits of removing the delay costs by \$46 million.

Consumers support the existing RWC system

Victorian motorists expect when they purchase a new or used car that it is safe and meets Australian Design Rules. A recent Newspoll found 86 per cent of Victorian motorists would not buy a used car without a roadworthy certificate. Most Victorian motorists own their cars for about six years and consider the \$150 roadworthy certificate inspection fee a small price to pay for peace of mind that the used car they are purchasing meets the required safety requirements.

Under the proposed options in the Consultation Paper, Victoria would have lower roadworthiness requirements than QLD, NSW, and most countries such as Europe, U.S.A, Canada, Japan, and New Zealand. Even jurisdictions such as South Australia and Tasmania that have operated only roadside random roadworthiness inspections by the police, are considering the introduction of roadworthiness inspection programs.

VicRoads objective of targeting older vehicles would not be achieved. Instead, many of the motor vehicles below a three year or five year threshold would eventually become older motor vehicles and would escape a roadworthy inspection. This is based on Victorian motorists keeping their vehicles for an average of six years. By way of example, a used car just under five years of age that is sold and held for six years would incur its first roadworthy inspection under Option Three at 11 years of age upon sale. By comparison, the same car in

NSW, Europe, and New Zealand would have undergone seven roadworthy inspections and two inspections in QLD within the same time period of 11 years.

Options One, Two, and Three would reduce inspections and likely to increase crashes

The cumulative impact of the proposed options would undermine the roadworthiness of the Victorian motor vehicle fleet. Our analysis shows six years after the introduction of Option Three, an estimated 777,000 motor vehicles exempt from a roadworthy certificate would be between five to 10 years of age (high risk age group for serious defects) and will have never been subject to a roadworthy inspection. This would represent about 22 per cent of the motor vehicle fleet in Victoria.

Five years after the introduction of Option One or Option Two, an estimated 277,000 motor vehicles exempt from a roadworthy certificate would be between five to eight years of age (high risk age group for serious defects) and will have never been subject to a roadworthy inspection. This would represent about 8 per cent of the motor vehicle fleet in Victoria.

It is not clear from the Consultation Paper whether repairable written-off vehicles are included in the proposed options. The VACC is strongly opposed to exempting repairable written-off vehicles from requiring a roadworthiness certificate in addition to the vehicle identity validation certificate.

The current Victorian roadworthy inspection is far more comprehensive than NSW and to a lesser extent, Queensland. However, NSW has a visual inspection system and is not comparable to Victoria and Queensland. Most of the time involved in undertaking a roadworthy inspection in Victoria relates to the critical motor vehicle defects that cause or contribute to crashes: brakes, tyres, structural integrity of the chassis, steering. Many of the other items such as lighting, horn etc only take a few minutes and comprise a small part of the overall roadworthy inspection. Given the small amount of time required to check minor safety items, the proposed exclusion of these items would not result in a significant fee reduction from \$150 to \$100 as suggested in the Consultation Paper.

To improve VicRoads analysis, it needs to be cognizant of the limitations of the different types of motor vehicle defect data. There are three main sources of motor vehicle defect data: roadworthiness inspections, post-crash investigations undertaken by police and post-crash investigations undertaken by crash experts.

In respect to roadworthiness inspection data, VicRoads does not keep a database on the pass and failure rate for the 730,000 roadworthiness inspections conducted on an annual basis. However, several European countries such as the U.K and Germany keep detailed databases including information regarding the age of the motor vehicle and the number of kilometres traveled. The U.K and German inspection data shows that 20 per cent of three year-old motor vehicles and 30 per cent of five year-old motor vehicles fail the initial inspection. This data is indisputable and demonstrates that newer motor vehicles have considerable defects that put motorists at risk if not fixed. However, not all motor vehicle defects result in crashes.

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Reliance on inspection data alone would over-estimate the influence of motor vehicle defects causing or contributing to a crash.

There are many factors that cause motor vehicle accidents including human behaviour and attitudes, environment, road design, motor vehicle defects etc. Many studies have been undertaken to estimate the proportion of crashes directly attributable to motor vehicle defects and generally rely on police crash investigation data.

Police crash investigation data shows that motor vehicle defects cause or contribute from 2 per cent to 4 per cent of crashes (U.SA, Europe & Australia). However, it is generally accepted in the research literature that post-crash investigations undertaken by police under-estimate the true extent of motor vehicle defects that cause or contribute to crashes. This is because police are not trained to undertake crash investigation and invariably make an assessment on the cause of a crash based on a visual inspection of the exterior of the vehicle (primarily the condition of the tyres) and interviews with the driver. Not surprisingly, tyres are the predominant motor vehicle defect cited by police in official crash investigations.

The third level of data involves post-crash investigation by crash experts. Germany leads the world in post-crash investigation and is the only country to undertake comprehensive destructive testing and inspection of crash vehicles on a large scale. The German crash investigation studies show 11 per cent of motor vehicles less than three years of age and 21 per cent of motor vehicles three to five years of age were found to have serious defects. However, older motor vehicles showed higher serious defect rates: 24 per cent of motor vehicles (six to seven years), 30 per cent (eight to nine years), and 39 per cent (10 to 11 years) were found to have serious defects.

Some types of motor vehicle defects discovered in the German crash investigation are not necessarily related to the cause of the crash. About 26 per cent of the motor vehicles with serious defects were considered to cause or contribute to the crash.

While post-crash investigation by crash experts is superior to police investigation techniques, there are still many uncertainties as to whether a discovered defect played a role in the cause of the crash. All of the research literature including studies from MUARC recognise this conundrum.

VicRoads must collect data as recommended by VCEC

Going forward, VicRoads needs to undertake comprehensive data collection and analysis as recommended by VCEC: motor vehicle defect related crashes by the age of the vehicle, the number of kilometres travelled and other relevant factors that are populated on the MCIU records, analysis of the pass/failure rates and the type of defects from licensed vehicle tester records. This analysis should be complemented by comparative analysis of EU studies; particularly from the United Kingdom and Germany.

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It should be noted that the European Commission undertook a comprehensive review of motor vehicle defect related crashes including cost benefit analysis that resulted in strengthening the minimum periodic motor vehicle inspection standards for the EU 27 member countries. The previous standard of 4-2-2 has been changed to 4-2-1 to reflect the greater risk associated with older motor vehicles.

Electronic processing of RWC data should be introduced

The current paper-based roadworthiness certificate (RWC) makes the collection of this data onerous and costly. The current development of a modern motor vehicle registration and licensing database system (Randl) will improve the integrity and efficiency of the current roadworthiness system that was heavily criticized by the Ombudsman in his "Own Motion Investigation into VicRoads Registration Practices 2005 report; particularly in regard to the registration of stolen and illegally imported vehicles that are unlikely to meet Australian safety standards. However, consideration should be given to the development of an electronic roadworthiness system to complement the Randl project and to prevent illegal activities that put unsuspecting buyers and other motorists at risk.

An electronic roadworthiness certificate system would complement the integrity of the registration system by enabling the recording of critical roadworthiness information. For example, VicRoads could incorporate and maintain odometer readings from the RWC into the registration database. This would enable VicRoads to better detect potential or future odometer tampering in cases where the odometer reading on the subsequent sale of a motor vehicle is suspiciously low or below the previously recorded odometer reading.

An electronic roadworthiness system would also provide VicRoads with a powerful database similar to the U.K and Germany. This would enable VicRoads to undertake detailed policy analysis, risk assessment, cost benefit analysis and make informed adjustments to the policy-settings.

An electronic roadworthiness system would also provide administrative savings to licensed vehicle testers and VicRoads. This would assist with reducing the cost of roadworthiness inspections. In addition, prospective motor vehicle buyers (particularly for private sales) would avoid the delay costs associated with submitting a RWC to VicRoads.

An electronic roadworthiness system deserves further investigation as it would contribute to the Government's red-tape reduction program, improve the integrity of the registration system, lower roadworthiness inspection fees, save consumers time and money with the current paper-based system and provide a rich source of data to enable VicRoads to develop evidence-based policy.

The relatively high failure rate of 20 per cent for roadworthiness inspections in motor vehicles at three years of age and the 11 per cent of motor vehicles (up to three years of age) found with serious defects at accident scenes, suggests counter-intuitively a greater risk for this age group of vehicles. While there is no conclusive evidence that these serious

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defects always cause or contribute to a crash, most Victorians value the current roadworthiness system as it gives them peace of mind for a small fee of \$150 that is only incurred about every six years for most Victorian motorists.

Evidence based decisions required

A central issue that needs to be weighed up is whether the small red-tape saving per individual on an infrequent basis is worth the increased road safety risks to about 777,000 motorists.

In the past 12 months, VACC members have observed about 20,000 motor vehicles less than five years of age that are unroadworthy and we urge VicRoads to reconsider recommending any of the proposed options to the Victorian Government or undertake further detailed data collection and analysis as recommended by VCEC to ensure an evidence based public policy process.

Issues with consultation paper

The VACC is fully supportive of the Victorian Government's red-tape reduction program but expects a rigorous and robust review to be undertaken with a comprehensive cost benefit analysis to the proposed options in respect to the roadworthiness system. This is necessary to enable the Victorian Government to make an informed decision and to provide the wider community with confidence in our road safety programs and consumer protection laws.

The Consultation Paper has not made a case for changing Victoria's roadworthiness system consistent with the principles of evidenced-based public policy development.

Dr Matthew Butlin, Chairman of the Victorian Competition and Efficiency Commission in his assessment of VicRoads 2009 regulatory impact statement (RIS) acknowledged VicRoads position that, *"one of the roadworthy certificate options considered, which involves a more targeted approach to requiring roadworthy certificates for vehicle transfers".....is attractive and potentially superior to the proposed remaking of the current regulation. However, further detailed data collection and analysis is required"*.

Lack of data

VCEC reiterated this position in its "Inquiry into the Victorian Regulatory Framework 2011", *"One key shortcoming of the RIS was the lack of data to support a decision on the best approach to vehicle roadworthy inspections in reducing fatalities and injuries on the road. These data would help to inform a better approach to targeting RWCs within the current system — for example, exempting low-risk cars — or it may suggest that a different approach — for example, biannual roadworthiness inspections — provides the greatest net benefit. The outcomes would greatly depend on the findings from the data"*.

Accordingly, VCEC concluded, *"Based on the Commission's earlier assessment of the RIS, this area of regulation is likely to be excessive and burdensome, and significant cost savings could be achieved. The necessary data should, therefore, be collected and a proper evaluation of the regulation conducted within 18 months."*¹

It is abundantly clear from the Consultation Paper the detailed data collection and analysis VicRoads said was required, has not been undertaken. As stated in the VicRoads 2009 RIS, *"VicRoads does not collect roadworthiness test pass rates. Accordingly, there is no data on the percentage of unroadworthy vehicles by age such as one to three years; four to five years; six to ten years etc."*

The detailed data collection and analysis required for the assessment of a targeted approach to roadworthy certificates is in relation to the causation and contribution of motor vehicle defect related accidents by age of motor vehicles and any other relevant factors such the number of kilometres driven etc. This detailed data collection would need to be obtained from several sources: Victorian Police accident records and motor vehicle defect notice

¹ Victorian Competition and Efficiency Commission, "Part 2 Priorities for Reform- Inquiry into Victoria's regulatory framework", a draft report for further consultation and input, March 2011, p 116-117

records, VicRoads inspection records and Licensed Vehicle Testers roadworthy certificate records.

Instead, the Consultation Paper has repeated the data from its 2009 RIS and even older data prior to the Parliamentary Committee Inquiry into Victoria's vehicle roadworthiness system held in 2001:

- The defect rates for light vehicles by year of manufacture spans from 1968 to 1998 (Figure One, page nine of the consultation paper);
- The contribution of vehicle defects to fatal crashes by Australian jurisdictions is from 1999 Table Four, page 13 of the consultation paper);
- The Table One (on page 10 of the consultation paper) with percentage distribution of defects in crashed heavy and light vehicles is undated

Omissions

In addition, the Consultation Paper has conveniently omitted half of the motor vehicle defect related crash data in respect to fatalities and injuries. The Consultation Paper states 4.09 per cent. However, the VicRoads 2009 RIS actually stated,

"The MCIU data of 4.09 per cent in 2007 from Table 2.1 will be used along with 10 per cent from the German study to calculate the estimated costs of road collisions caused and contributed by unroadworthy vehicles".²

The VicRoads 2009 RIS selected 10 percent from the German study as the police MCIU data was viewed as under-estimating the impact of motor vehicle defects on fatalities and serious injuries,

Rechnitzer, Haworth & Kowadlo (2000) undertook a literature review of Australian and international studies on the effect of vehicle defects and vehicle inspection systems. These studies showed vehicle defects contributed from 3 to 19 per cent with the more robust studies showing at least 6 per cent. However, most of these studies are based on police investigations at the scene of the accident. A recent in-depth study undertaken in Germany which took vehicles involved in accidents and subjected them to full roadworthiness inspections, found they contributed to 10 per cent of crashes. Germany has a similar roadworthiness inspection system to the United Kingdom. This type of study provides a more robust analysis than the police investigations.

The aforementioned limitations of police data would tend to under-estimate the extent of unroadworthy vehicles involved in serious crashes. At the other end of the spectrum, the studies that show vehicle defects contributed up to 19 per cent of crashes are less robust. The recent German study that shows vehicle defects contributed to 10 per cent of crashes is in the mid-point of most research and is more credible given that the vehicles were subjected to a full roadworthiness inspection.³

² VicRoads, "Road Safety (Vehicles) Regulations 2009 Regulatory Impact Statement", p57-58

³ *ibid*, p 57-58

Victorian road safety record – best in Australia

The claim that Victoria's road safety is no different to other jurisdictions that do not have roadworthiness inspection programs is simply untrue. Victoria has the best road safety record in Australia and some of this is probably attributable to the roadworthiness inspection program. South Australia, Western Australia and Tasmania are the only jurisdictions without a roadworthiness inspection program.

South Australia and Western Australia have higher rates of road fatalities whether measured by population, registered motor vehicles or vehicle kilometres traveled. Due to Tasmania's small population, the death rate tends to jump around from year to year and is too volatile for comparison. Other than in 2011, Tasmania has always had a higher rate of road fatalities than Victoria.

It should be noted that South Australia and Tasmania that have operated only roadside random roadworthiness inspections by the police, are considering the introduction of roadworthiness inspection programs.

There are many factors that may explain the higher rates in South Australia and Western Australia. The absence of a roadworthiness inspection program may be a contributing factor. However, there is no research literature that proves the position either way.

The following tables are sourced from the Australian Government's Department of Infrastructure and Transport Road Deaths Australia 2011 Statistical Report (2012). As can be seen from the Table below, South Australia and Western Australia have greater deaths per 100,000 population. It has remained higher from 2002 to 2011 with 6.22 and 7.67 deaths respectively compared with 5.10 deaths in Victoria.

Table 8 Deaths per 100 000 population by jurisdiction

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
2002	8.46	8.16	8.67	10.12	9.29	7.83	27.58	3.10	8.73
2003	8.08	6.70	8.14	10.25	9.22	8.58	26.49	3.38	8.15
2004	7.60	6.89	7.97	9.02	8.98	12.01	17.32	2.75	7.86
2005	7.52	6.85	8.26	9.53	8.08	10.49	26.65	7.87	7.98
2006	7.28	6.57	8.19	7.46	9.71	11.23	21.36	3.89	7.72
2007	6.30	6.36	8.58	7.82	11.12	9.12	27.00	4.10	7.61
2008	5.33	5.69	7.61	6.17	9.42	7.83	34.01	4.04	6.68
2009	6.36	5.32	7.48	7.33	8.47	12.52	13.26	3.41	6.78
2010	5.61	5.20	5.53	7.18	8.43	6.11	21.37	5.30	6.06
2011	5.16	5.10	5.87	6.22	7.67	4.90	19.12	1.64	5.71
% change 2010-2011	-8.0	-1.8	6.3	-13.4	-9.0	-19.9	-10.6	-69.0	-5.9
Ave. change 2002-2011	-5.4	-4.7	-4.0	-5.4	-1.2	-4.4	-3.1	-2.1	-4.3

Vehicle occupant deaths per 10,000 registered motor vehicles also shows South Australia and Western Australia with higher rates than Victoria over the period. As can be seen in the table below, in 2011, South Australia and Western Australia had 0.52 and 0.68 deaths compared with 0.45 deaths in Victoria.

Table II Vehicle occupant deaths per 10,000 registered motor vehicle by jurisdictionⁱ

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>	<i>Australia</i>
<i>Deaths of a vehicle occupant per 10 000 registered motor vehicles^j</i>									
<i>2002</i>	1.07	0.84	0.96	1.08	0.92	0.65	3.99	0.40	0.97
<i>2003</i>	0.98	0.72	0.86	1.18	1.00	0.83	3.87	0.39	0.92
<i>2004</i>	0.89	0.72	0.86	0.96	0.89	1.33	2.44	0.24	0.86
<i>2005</i>	0.83	0.68	0.83	1.04	0.82	1.09	3.76	0.57	0.83
<i>2006</i>	0.85	0.60	0.80	0.72	0.94	1.27	2.37	0.32	0.79
<i>2007</i>	0.69	0.65	0.81	0.86	1.09	0.87	3.70	0.44	0.79
<i>2008</i>	0.60	0.51	0.72	0.61	0.88	0.80	4.07	0.30	0.66
<i>2009</i>	0.71	0.51	0.71	0.80	0.77	1.30	1.79	0.34	0.69
<i>2010</i>	0.61	0.49	0.51	0.68	0.78	0.54	2.88	0.50	0.60
<i>2011</i>	0.57	0.45	0.56	0.52	0.68	0.43	2.67	0.12	0.55
<i>% change 2010-2011</i>	-5.9	-7.6	8.9	-23.6	-13.4	-20.6	-7.2	-75.5	-7.6
<i>Ave. change 2002-2011</i>	-6.6	-6.4	-5.7	-7.4	-2.9	-4.9	-3.9	-5.2	-5.8

ⁱ Counts of registered motor vehicles are obtained from the Australian Bureau of Statistics *Motor Vehicle Census Australia* (ABS Cat. No. 9309.0) Note that the census is taken at March 31 for 2001-2010 and January 31 for 2011.

^j Includes cars, trucks, LCVs and buses

A similar finding is found with deaths per 100 million vehicle-kilometre traveled (VKT). Once again, South Australia and Western Australia have higher death rates than Victoria. The Table below shows South Australia and Western Australia had 0.65 and 0.69 deaths respectively compared with 0.50 in Victoria in 2011.

Table 10 Deaths per 100 million vehicle-kilometre travelled (VKT)

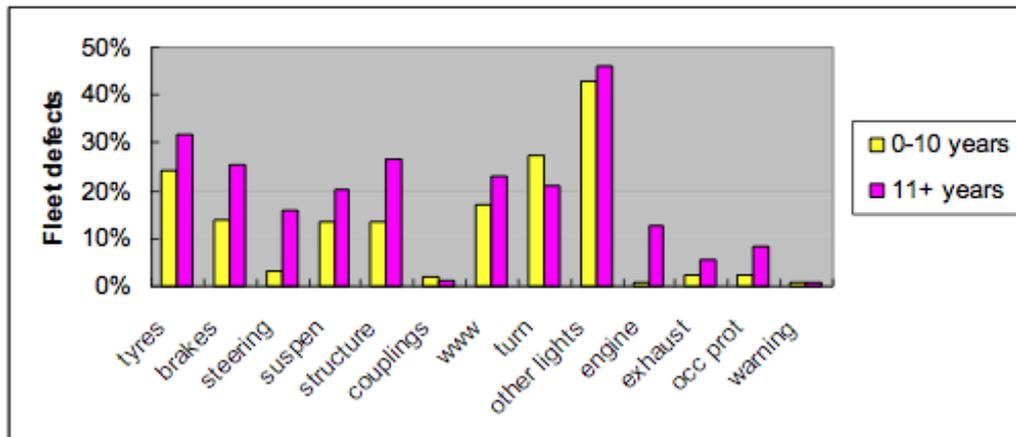
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
2002	0.92	0.73	0.78	0.98	0.82	0.76	2.98	0.30	0.84
2003	0.87	0.59	0.70	0.98	0.79	0.80	2.88	0.32	0.77
2004	0.80	0.59	0.70	0.89	0.79	1.12	1.90	0.26	0.74
2005	0.81	0.60	0.73	0.96	0.71	1.00	2.89	0.75	0.76
2006	0.78	0.58	0.72	0.75	0.83	1.05	2.39	0.37	0.73
2007	0.67	0.57	0.75	0.80	0.97	0.84	2.91	0.39	0.72
2008	0.59	0.53	0.68	0.63	0.82	0.73	3.60	0.39	0.65
2009	0.70	0.51	0.70	0.75	0.75	1.17	1.48	0.33	0.67
2010	0.62	0.50	0.53	0.75	0.76	0.59	2.39	0.52	0.61
2011	0.58	0.50	0.58	0.65	0.69	0.49	2.20	0.17	0.58
% change 2010-2011	-6.9	-1.3	8.5	-13.4	-9.3	-17.9	-8.2	-68.5	-5.0
Ave. change 2002-2011	-4.9	-3.5	-2.8	-4.6	-0.9	-4.2	-2.7	-1.5	-3.5

Vehicle defects

The Consultation Paper states that older vehicles have more defects than newer vehicles. This is true but the Consultation paper could have provided a more balanced appraisal to show the extent of defects in newer vehicles as described in the VicRoads 2009 RIS;

“A traffic survey of the roadworthiness of 507 vehicles at nine different locations in Victoria was conducted in 2003 by Pearsons Transport Resource Centre Pty Ltd (PTRC) on behalf of VicRoads. While the survey is six years old, it is far more detailed than the VACC surveys in terms of the type and level of defects found by age of the motor vehicles. The survey results revealed that in the newer vehicles, 52 per cent had defects compared to 75 per cent in the older vehicles. A comparison of defects by age for all vehicles is shown in Figure 2.3. Surprisingly, the differences between vehicle less than ten years old and vehicles more than ten years old was not as large as would have been expected. In fact, more turn signals defects were detected in younger vehicles than in older vehicles. However, engine, steering occupant protection, exhaust, and structure were at least twice as bad in older vehicles, while other significant areas where older vehicles were worse were structure and brakes.”⁴

⁴ ibid p 58

Figure 2.3: Comparison of defects by age (all vehicles)

Source: VicRoads Road Safety (Vehicles) Regulations 2009, Regulatory Impact Statement

On page 18, the Consultation Paper claims the following for including heavy vehicles in the proposed options *“It can be strongly argued that the main deterrent against unroadworthy heavy vehicles is on-road enforcement. Heavy vehicles are exposed to much more wear and tear due to the higher number of annual kilometres traveled. Therefore inspections on transfer of ownership are not likely to capture safety defects at the rate required to provide an effective deterrence. Given the increased on-road enforcement effort for heavy vehicles, it is proposed to remove the need for roadworthiness certificates in line with other types of vehicles”*.

It is so ‘strongly argued’ that the Consultation Paper provides no evidence whatsoever to support its position. The VACC supports increased on-road enforcement to complement the current roadworthiness inspection program in Victoria. However, it would be useful for VicRoads to disclose the annual number of heavy vehicles inspected for roadworthiness by Transport Safety Services and one-off operations such as ‘Trishula’ to ascertain whether enforcement does constitute a deterrent to the operators of the 104,050 heavy vehicles registered in Victoria.

Heavy vehicles

The Joint VicRoads and Worksafe ‘Operation Trishula’ conducted during 2012 and 2013 resulted in 77 per cent or 1,300 of the 1,693 heavy vehicles being issued with defect notices (unroadworthy). The key defects were:

- Brakes 25.7 per cent
- Tyres 23.7 per cent
- Chassis/Body (inc rust) 20.9 per cent
- Suspension 11.7 per cent
- Seatbelt 11.0 per cent
- Steering 9.9 per cent

In addition, 71 or 4 per cent of the heavy vehicles were grounded or towed.

Consistent with the VicRoads' lack of adequate data to assess the proposed options, the age and km profile of the heavy vehicles that were issued with defect notices is not known.

Contradictions

The Consultation Paper makes several illogical statements. On the one hand it states, *"the evidence shows there's no demonstrated link between roadworthiness schemes and a reduction in road trauma associated with vehicle defects"*.

The logical response to such a conclusion would be to scrap the current roadworthiness scheme. Yet, the consultation paper contradicts itself and dismisses the random roadworthy inspection regimes conducted by police in South Australia and West Australia as, *"it does not achieve any of the benefits that might be associated with systematic roadworthiness inspections"*. (Page 12)

The consultation paper goes onto state, *"the relatively poor performance of older vehicles in crashes, combined with the cost of crashes and their increased risks of defects, means that further consideration of the option of removing the roadworthiness requirement is not warranted"*. (Page 12)

Inconsistencies

The times allocated for roadworthiness inspections in Table 2 of the Consultation Paper for NSW is "30 minutes" and for QLD "of in the order of 1 hour". These times are inconsistent with the times detailed in the VicRoads 2009 RIS;

*"New South Wales prescribes a maximum fee of \$31.70 for a "pink slip" inspection that takes about 25 minutes on average. The pink slip inspection involves more of a visual inspection and cannot be compared with the comprehensive inspections in Queensland and Victoria that entail putting a vehicle on a hoist to check critical parts. Queensland prescribes a maximum fee of \$60.55 and takes about 45 minutes on average."*⁵

The content of the roadworthiness inspection is far more comprehensive compared to NSW and QLD to a lesser extent. Vehicle Standards Information Roadworthiness requirements No 26 (2009) sets out in detail the area of a motor vehicle that need to be tested. Accordingly, the regulatory framework requires that licensed vehicle testers and their employees undertake prescribed training to obtain accreditation and are subject to self-auditing and external auditing by VicRoads. The content of the NSW roadworthiness inspection is not comparable to Victoria. The NSW periodic roadworthiness inspection system entails a visual inspection. Wheels are not removed to check the condition of brake-pads and the integrity of brake rotors as is done in Victoria.

⁵ ibid p 114

Advances in technology

While motor vehicle design and safety has improved considerably, many of the latest safety features such as Electronic Stability Control, airbags, ABS brakes need to be checked during a roadworthy. A comprehensive roadworthy inspection includes these safety features. Failure of these safety features in a crash puts the driver and other passengers at a greater risk more than ever before due to the changes that have been made to the materials inside a vehicle as pointed out in this extract from the European Commission,

“With this increased reliance on advanced technology, the role of vehicle roadworthiness testing is changing. While preventing catastrophic consequences caused by failure of mechanical systems is still important, the role of vehicle roadworthiness enforcement needs to ensure the benefits of new technologies and system are preserved. Failure of, for example, Electronic Stability Control (ESC) means that the benefits of that new technology are lost.

This loss is compounded by drivers increasingly relying on the technology to get them out of difficult situations and their consequent change in driving behaviour. In addition the malfunction of some systems can result in the vehicles being less safe than traditional vehicles. For example, vehicles fitted with airbags in accordance with ECE94 and ECE95 have more rigid dashboards and vehicle interiors than vehicles not fitted with airbags. This means that injuries are likely to be more severe in vehicles fitted with airbags that fail to deploy than vehicles not fitted with this technology.

*Unfortunately many vehicle owners do not adequately maintain their vehicles, making roadworthiness enforcement necessary. Defects are often not attended to by the vehicle owner/user because of their lack of technical knowledge and interest. It is easier and cheaper for them to ignore warning lights and other symptoms with the hope that the problem will go away”.*⁶

The difference in the fee between Victoria and Queensland was about \$40 at the time of the VicRoads 2009 RIS. The unit cost was about the same when the \$100 Victorian fee for a bit over an hour is compared with the QLD \$60 fee for about 45 minutes.

Since 2009, the average roadworthiness inspection has increased to about \$150. This is primarily due to the additional administrative requirements VicRoads has imposed on licensed vehicle testers (LVTs) since last year. These include a series of photos that need to be taken to demonstrate integrity of the process: that the vehicle attended the LVT's workshop and the LVT's No displayed alongside the VIN plate of the vehicle. These photos for each vehicle subjected to a RWC need to be kept as records by the LVT.

Regulatory burden misunderstood

The Deloitte Access Economics “The regulatory burden of roadworthiness inspections” report has misunderstood the market for selling motor vehicles and the operations of roadworthy inspections in respect to delay costs. The report notes “*delay costs were*

⁶ Autofore, “Study on the Future Options for Roadworthiness Enforcement in the European Union, CITA

estimated on the basis of approximate productive time lost in order to have the vehicle inspection completed. For individuals this comprised the hours foregone in delivering the vehicle for inspection. For businesses it includes the approximate productive hours foregone in delivering the vehicle for inspection as well as the foregone use of that vehicle while it is at inspection”.

The inclusion of delay costs to recognize a vehicle owner's time for an inspection is entirely appropriate for periodic motor vehicle inspection programs that operate in other jurisdictions but not for most inspections that operate under a transfer of registration system.

For motorists that trade-in their existing car to purchase either a new or second-hand car, most second-hand car dealers have either a licensed vehicle testing facility on-site or have a business relationship with several licensed vehicle testers. Accordingly, these transactions do not require an owner of a motor vehicle to undertake a separate trip to a licensed vehicle tester. The trade-in vehicle is subject to a market valuation and is handed over to the dealer. The dealer undertakes the roadworthiness inspection following the trade-in, not the owner of the vehicle. Hence, there is no delay cost to the owner in these cases. This is a business as usual cost incurred by the dealer as the trade-in vehicle would be subject to a mechanical check-up, repairs and detailing concurrently with a roadworthy inspection either on-site or at another motor mechanic business that also happens to be a licensed vehicle tester.

Similarly, business trade-in their vehicle to a commercial vehicle dealer and the latter undertakes the roadworthiness inspection. This allows a smooth transaction that allows the business to take delivery of the new or used commercial vehicle while the dealer arranges for a roadworthy certificate as part of the normal course of mechanical inspection, repairs and detailing. Accordingly, it should be assumed that business do not incur the delay cost of \$29 million.

The operational matters described above are the normal approach by most dealers. The VACC accepts there will be some occasions where an individual or business may incur delay costs. However, this would be the exception rather than the rule.

It is accepted owners selling their vehicle privately would incur delay costs as they need to take their vehicle to a licensed vehicle tester. About 40 per cent of used car sales are undertaken by motor-car dealers. Accordingly, the \$42.3 million delay costs for individuals needs to be adjusted to \$25.4 million (to take into account the 16.9 million or 40 per cent of used car sales where the roadworthiness inspection would be mostly undertaken by the motor-car dealer).

In view of the above, the delay costs need to be adjusted from a total of \$71 million to \$25.4 million.

The VACC accepts that these figures are rather loose and would need to be refined but they are consistent with the loose assumptions used in the Deloitte Access Economics' 14 page report.

The impact of motor vehicle defects in crashes

Overview

In view of the absence of robust MCIU data and VicRoads data on motor vehicle defects, VicRoads should draw upon international studies, particularly from Europe where a considerable amount of research and investigation has occurred in the past five years due to the harmonisation of the EU-27 member countries periodic roadworthiness inspection systems.

The European Union directive for periodic motor vehicle roadworthiness inspections prescribes a minimum standard of 4-2-2. That is the first inspection occurs in the fourth year of a motor vehicle and then every two years thereafter. However, EU members are permitted to impose more stringent periodic regimes. For example, the U.K, Germany and Sweden have operated PMVI program commencing at three years.

In July 2012, the European Union agreed to PMVI harmonization across the 27 member countries and changed its minimum standard from 4,2,2 to 4,2,1. The introduction of an annual inspection upon the seventh year of a motor vehicle is based on the evidence that motor vehicles older than seven years of age are twice more likely to be involved in an accident and have higher levels of motor vehicle defects.

It is important to note that roadworthiness inspection data for motor vehicles less than three years of age does not exist as the PMVI programs commence at either three or four years in EU member countries.

There are several sources of motor vehicle defect data:

- Pre-crash roadworthiness inspections
- Post-crash police investigations
- Post-crash destructive inspections

In respect to pre-crash roadworthiness inspections, Germany, UK and the Netherlands have similar failure rates, about 20 per cent for motor vehicles (three year age group); 30 per cent (five year aged group); 40 per cent (seven year aged group) and 50 per cent to 60 per cent (>nine years aged group). Sweden is the only country in this comparison that showed slightly lower failure rates of 14 per cent (up to five years), 21 per cent (six to nine years) and 32 per cent (10 to 12 years).

The failure rate for older motor vehicles is about twice that of newer motor vehicles. However, a 20 per cent failure rate for a three year-old motor vehicle is not a low risk.

The EU revised PMVI directive 4,2,1 would appear to reflect the higher risk of older motor vehicle with twice as many defects, particularly the introduction of an annual inspection for motor vehicles post seven years of age.

Streamlining Victoria’s Roadworthiness System

Official crash data shows that motor vehicle accidents that are caused by motor vehicle defects range from about 3 per cent to 6 per cent. The most frequent defect cited is the condition of tyres. The research literature notes that police crash investigation significantly under-estimates the influence of motor vehicle defects in accidents.

By contrast, destructive post-crash investigation in Germany reveals a higher percentage of crashes with motor vehicle defects; about 26 per cent across all age groups and 11 per cent for motor vehicles up to three years of age. Unlike official crash records, the destructive inspection revealed that braking systems were the most frequent defect. Despite the significant number of crash vehicles inspected (5,956), this was not a random sample. These inspected vehicles were suspected to have defects.

Clearly, there is a correlation between the main defects (other than lights) found during a roadworthiness inspection and destructive inspection. The police crash investigation data under-estimates the true extent of motor vehicle crashes that are attributed to motor vehicle defects. However, the destructive investigation data probably over-estimates the influence of motor vehicle defects. The truth probably lies somewhere in between the police and the destructive investigation data.

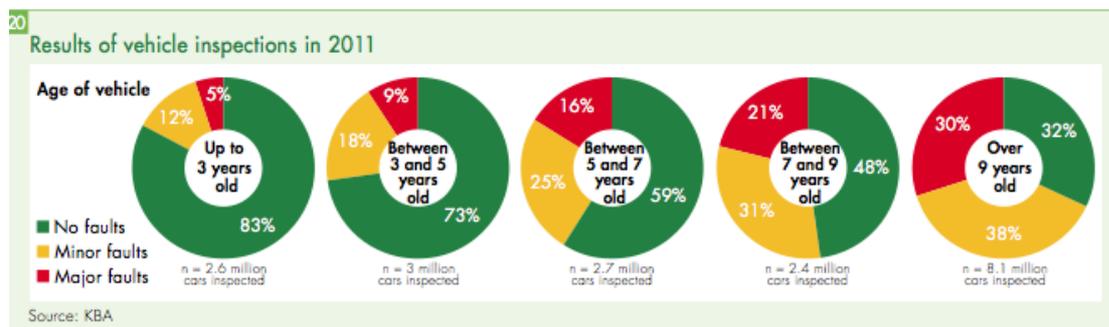
Pre-crash roadworthiness inspection data

This section provides inspection findings by age group for Germany, U.K, Sweden and the Netherlands.

Germany

Germany operates a 3-2-2 PMVI program.

DEKRA is an independent vehicle tester that undertakes motor vehicle periodic inspection services on behalf of the German government. DEKRA’s vehicle inspection results for 2011 are shown below by age group.



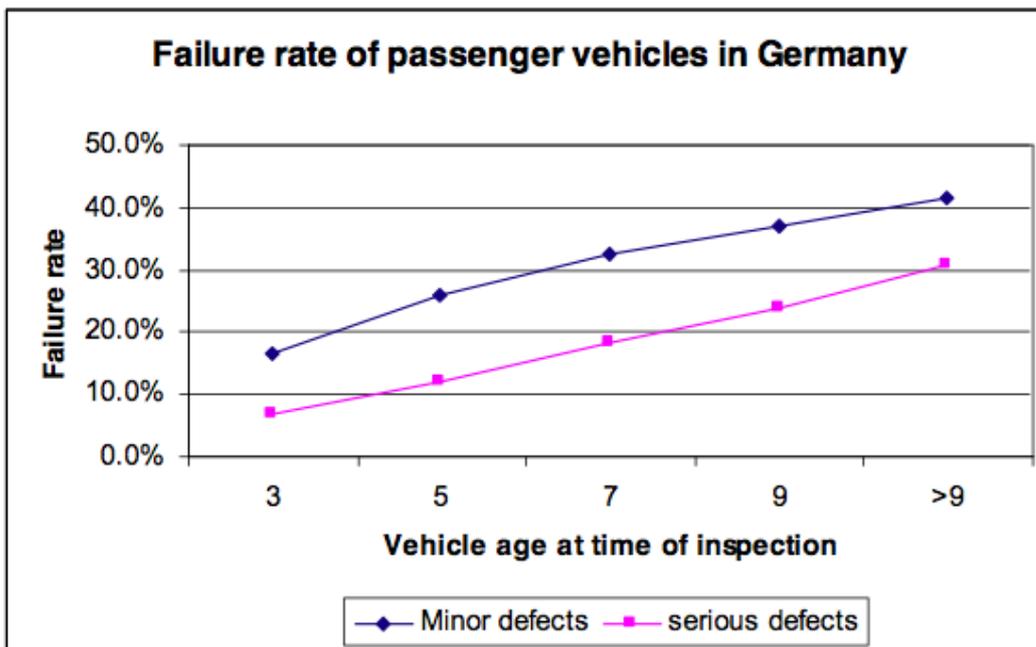
Source: DEKRA, “Strategies for preventing accidents on European roads”, Road Safety Report 2013, p 24

Streamlining Victoria's Roadworthiness System

Another way to look at this is the ratio of major faults to minor or no faults. This reveals across all age groups a reasonable to high probability of risk to the owner or prospective purchaser of these vehicles:

- 1 in 20 vehicles (up to three years old)
- 1 in 10 vehicles (three to five years old)
- 1 in 6 vehicles (five to seven years old)
- 1 in 5 vehicles (seven to nine years old)
- 1 in 3 vehicles (over nine years old)

As can be seen from the graph below, the failure rate of passenger vehicles from the period 2001 and 2006 shows a similar trend across all age groups.



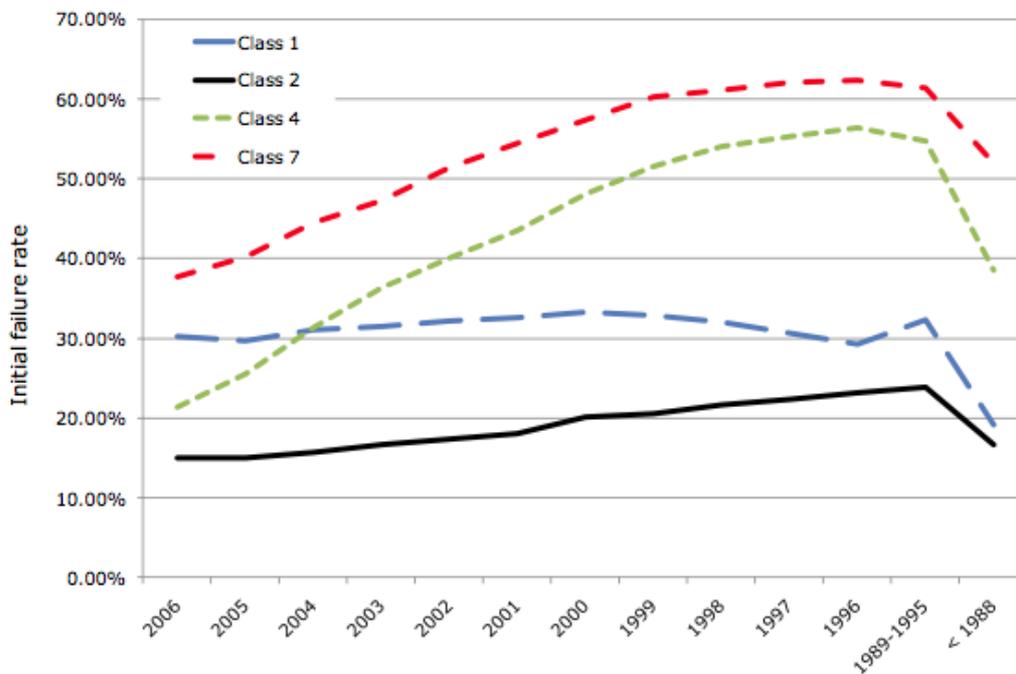
Source: AUTOFORE 2006, DEKRA 2001.

Source: Schulz, W.H, "Cost-Benefit Analysis for Transport Policy Considerations: A European Trade-off between Consumer Benefits, Welfare Effects and Administrative Burden.

United Kingdom

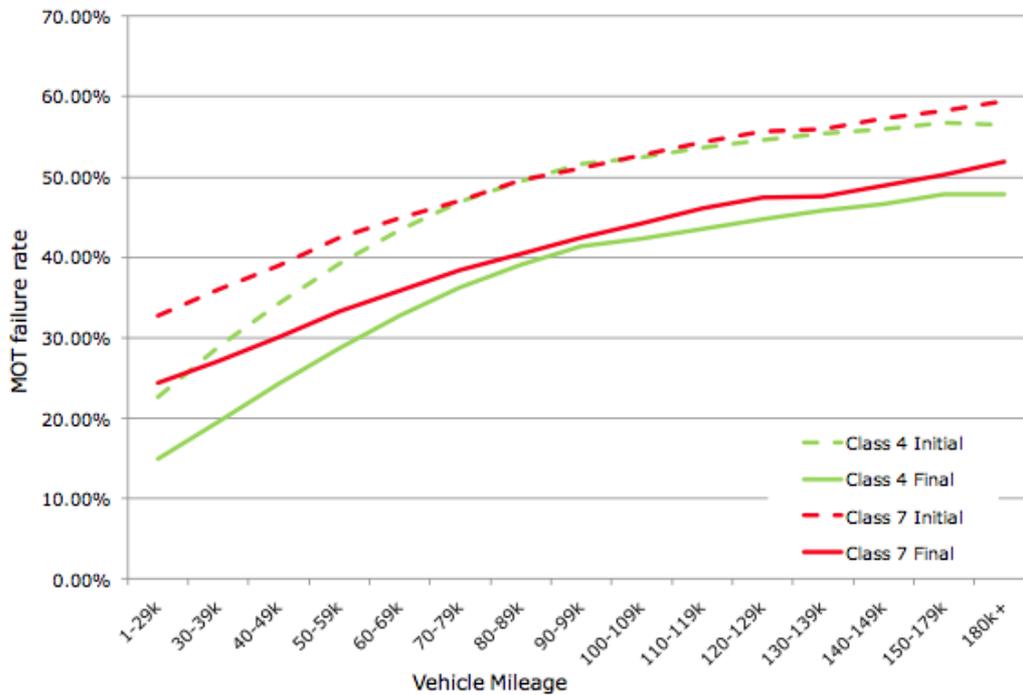
The UK operates a 3-1-1 PMVI program. The figure below shows Class 4 (passenger vehicles) with slightly over 20 per cent failure rate for three year-old motor vehicles (2006), 30 per cent failure rate for five year-old motor vehicles (2004) and a failure rate of 55 per cent for 13 year-old motor vehicles (1996).

The failure rate for Class 2 vehicles (all motorcycles) is relatively stable across all age groups. The failure rate for Class 7 vehicles (light trucks up to 3.5 tonne) has the highest failure rate and mirrors Class 4 vehicles in respect to the failure rate across the age profile.



Streamlining Victoria's Roadworthiness System

The figure below shows the MOT failure rate based on vehicle mileage. Not surprisingly, the failure rate increases with the increase in vehicle mileage.



Source: Cuerden. R.W, Edwards. M.J, & Pittman. M.B, "Effect of vehicle defects in road accidents", Transport Research Laboratory, March 2011

However, it is noteworthy that Class 4 (passenger vehicles) with up to 29,000 kms have over a 20 per cent failure rate, 30,000-39,000 kms have 30 per cent failure rate and 50,000 to 59,000kms the failure rate is 40 per cent.

The Table below shows the reasons for rejection during a MOT inspection. For Class 4 (passenger vehicles) brakes are the most frequent defect (25.3 per cent); followed by suspension (18.9 per cent); lighting and signaling (18 per cent) and tyres (14.8 per cent).

Table 5-9: Summary of Reasons for Rejection (Fail, PRS and Advisory); 2009

System Failure	Class 1	Class 2	Class 4	Class 7
Number of RfR =	285,318	533,428	56,287,125	1,910,649
Lighting & signalling	25.5%	18.5%	18.0%	20.6%
Steering	25.5%	19.1%	3.0%	3.9%
Suspension			18.9%	21.4%
Brakes	19.4%	23.9%	25.3%	27.3%
Tyres	13.3%	18.3%	14.8%	7.5%
Road wheels			0.6%	0.2%
Seat belts			1.8%	2.6%
Body & structure	2.7%	1.4%	1.8%	4.0%
Drive system	5.6%	7.0%		
Fuel & exhaust	5.3%	7.4%	7.5%	3.8%
Drivers view of the road			6.9%	7.3%
Registration plate & VIN	1.6%	3.3%		

Source: Cuerden. R.W, Edwards. M.J, & Pittman. M.B, "Effect of vehicle defects in road accidents", Transport Research Laboratory, March 2011

While this data is useful, it does not provide the types of defects discovered by age group and vehicle mileage.

The Table below shows the failure rate for heavy vehicles > 3.5 tonne. Similar to Class 4 vehicles, the failure rate increases for older vehicles.

HGV motor vehicle initial test fail rate by age

Age	2010/11	2009/10	2008/09
Up to 1 year	8.2 %	8.2%	14.1%
2 years	8.9%	12.5%	15.8%
3 years	11.8%	13.7%	18.9%
4 years	13.9%	17.3%	21.7%
5 years	17.1%	19.8%	23.8%
6 years	20.0%	22.2%	28.5%
7 years	23.8%	28.0%	34.5%
8 years	28.0%	32.4%	38.7%
9 years	31.0%	37.1%	41.8%
10 years	35.3%	41.4%	44.6%
11 years	37.6%	40.9%	47.4%
12 + years	43.4%	45.3%	51.5%
Average	25.5%	27.4%	32.4%

Source: National Archives, UK Government

Streamlining Victoria's Roadworthiness System

Sweden

Sweden operates a 3-2-1 PMVI program. The failure rates are not directly comparable to Germany and the U.K as Sweden uses larger age groups. Notwithstanding this, the failure rates would appear, prima facie, to be lower than the U.K and Germany.

Failure rates for passenger motor vehicles				
	0-5 years	6 to 9 years	10 to 12 years	>13 years
2003	14%	21%	32%	44%
2004	13%	21%	32%	45%
2005	14%	21%	32%	45%
2006	13%	21%	31%	46%
Average	14%	21%	32%	45%

Source: Autofore, 'Study on the Future Options for Roadworthiness Enforcement in the European Union', CITA, p39

Netherlands

The Netherlands operates a 4-2-2-1 PMVI program. The figure below shows a similar failure rate across age groups to Germany and the U.K although it is based on a much smaller sample of inspections.

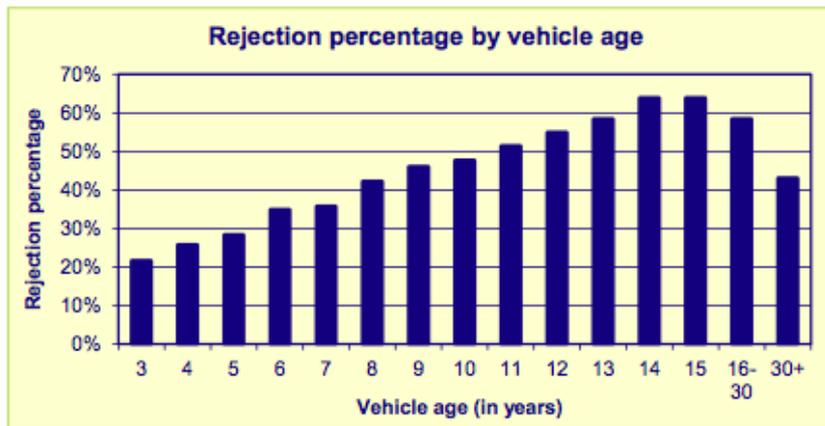


Figure 1. The rejection percentage of 10,322 inspected vehicles by vehicle age in the period July-October 2006. Source: Van Abele neutral inspection stations.

Source: SWOV Netherlands

Post-crash police investigation data

As stated by Keall et al (2012), “The proportion of crashes in which vehicle defects play any role is also not easy to estimate, and will be underestimated by a significant degree in official crash statistics, as police attending a crash normally do not have the time, training or motivation to examine a vehicle thoroughly”.⁷

In the UK, the STATS19 database is the main source of road accident information. Police record the cause of the accident and as can be seen in the table below, about 3 per cent of crashes are attributed to motor vehicle defects. Defective tyres are the most frequent defect recorded.

Table 5-12: Contributory factors: Casualties in reported accidents² by severity: GB 2009

Contributory factor reported in accident	Fatal accidents		Serious accidents		Slight accidents		All accidents	
	Number	%	Number	%	Number	%	Number	%
Vehicle defects	46	2	467	2	3,045	2	3,558	2
Tyres illegal, defective or under inflated	20	1	196	1	1,168	1	1,384	1
Defective lights or indicators	2	0	31	0	207	0	240	0
Defective brakes	16	1	141	1	1,058	1	1,215	1
Defective steering or suspension	4	0	63	0	375	0	442	0
Defective or missing mirrors	0	0	2	0	17	0	19	0
Overloaded or poorly loaded vehicle or trailer	5	0	54	0	340	0	399	0
Total accidents	2,094	100	22,146	100	155,407	100	179,647	100

In the U.S.A, the National Highway Transportation Safety Administration (NHTSA) maintains the Fatality Analysis Reporting System (FARS). This database is populated with crash information by police and shows about 2 per cent to 3 per cent of motor vehicle defects cause or contribute to crashes.

These official records from other countries are consistent with the low percentages recorded by the Victorian MCIU data that shows 4.09 per cent of crashes were caused or contributed by motor vehicle defects.

⁷ Keall.M, Stephan.K, Watson.L & Newstead.S, “Road safety benefits of vehicle roadworthiness inspections in New Zealand and Victoria”, Monash University Accident Research Centre, Report No. 314, November 2012, page 8.

Post-crash destructive investigation data

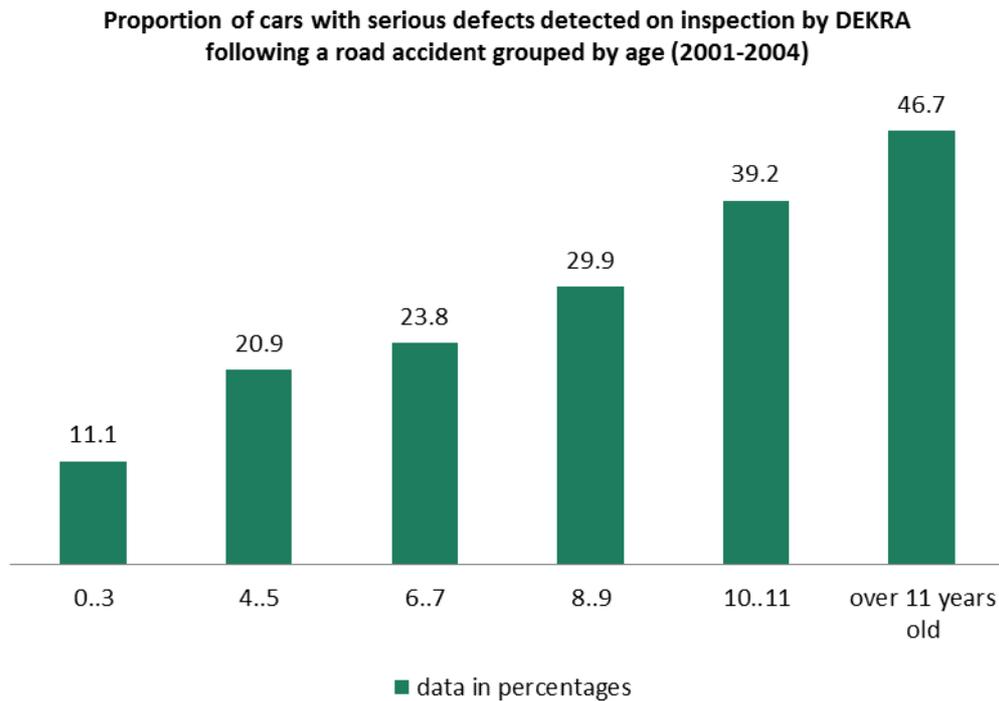
DEKRA (German Motor Vehicle Inspection Association) was founded in Berlin in 1925. It is the largest motor vehicle inspection company in Germany and the third largest in the world. DEKRA undertakes periodic inspection of motor vehicles, expert appraisals, accident analyses, safety inspections and the inspections of technical systems. DEKRA carries out about 23 million motor vehicle inspections per annum across Europe and North America, and provides expert analysis to EU Commission road safety policy development.⁸

Germany is the only country to conduct destructive inspection of motor vehicles to determine the prevalence of motor vehicle defects in crashes. Police request the services of DEKRA after an accident if it is suspected that it could have been affected or even caused by a technical fault. DEKRA experts subsequently inspect the accident vehicles in a specially equipped workshop, breaking down assemblies into their individual components, so that they can find out the cause of, say, a brake failure. The aim of this individual analysis is to document possible technical causes of the accident or to exclude technical defects with certainty. Accident analysis vehicle inspections ensure legal security, for both the authorities and those involved in accidents. Data was collected and analysed from examinations conducted on 5,956 vehicles from 2001-2004.⁹

The average proportion of cars with serious defects across all age groups was 26.4 per cent, but this figure dropped to 11.1 per cent in the under-three-years- old group. The proportion of cars over five years old with serious defects was almost 24 per cent, slightly under the overall average, while almost 40 per cent of cars between nine and eleven years old had serious defects.

⁸ DEKRA Annual Report 2012

⁹ DEKRA, "International Strategies for Accident Prevention", Technical Road Safety, DEKRA Technical Paper 58/05, 2008 p 40.



The older the car, the more defects the accident analysts find

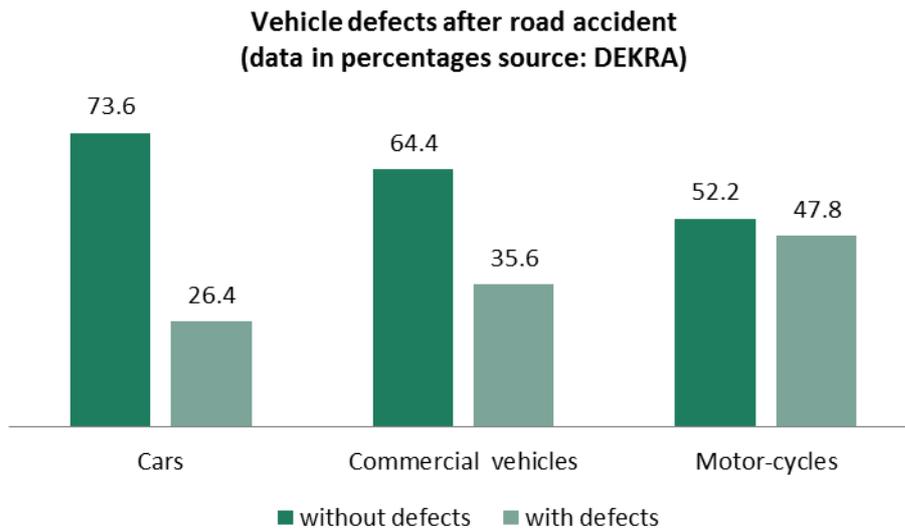
Police crash investigation data tends to find poorly maintained or bald tyres are the predominant defect that causes crashes. However, DEKRA's destructive and comprehensive inspection reveals braking system defects were the most frequent cause. The key defects are listed below:

- braking system defects 45 per cent
- running gear defects 23.5 per cent
- tyre defects 22 per cent¹⁰

While the DEKRA sample is relatively large, it does not necessarily represent the entire crash vehicle population. In some respects, the results are likely to over-estimate the prevalence of motor vehicle defects in crashes as the 5,956 vehicles examined did not represent a random sample but rather crashed vehicles suspected to have motor vehicle defects.

As can be seen in the Figure below, the proportion of defects of inspected commercial vehicles (trucks, semi-trailers, coaches) was 35.6 per cent. Almost half of the motorcycles inspected after an accident was found to have one or more defects. However, the age and km profile of commercial and motorcycle defect related crashes were not disclosed.

¹⁰ Ibid p 42.



The only other comprehensive studies that undertook detailed examinations of crash vehicles were Grandel (1985) and Treat (1977) where they found motor vehicle defects were a contributing factor in 6.5 per cent to 12.6 per cent of crashes.¹¹

It would appear destructive inspection of crash vehicles reveals a higher rate and percentage of defects that cause and contribute to crashes.

Literature Review of the Cost Effectiveness of Roadworthiness Inspections

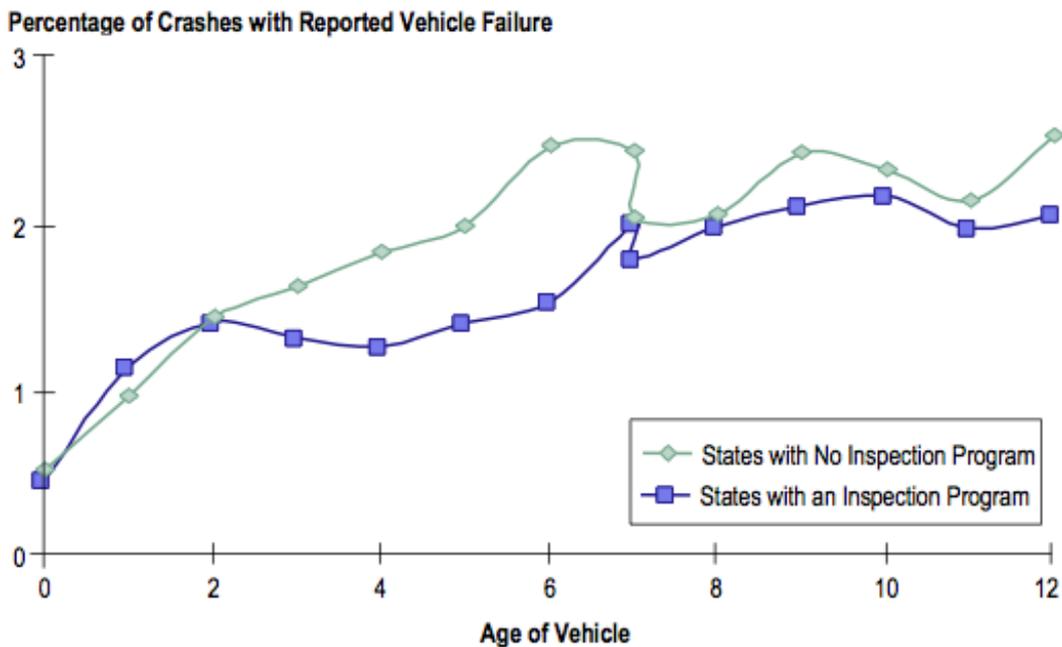
Most of the research studies regarding the cost effectiveness of roadworthiness inspections have focused on periodic motor vehicle inspection programs. Most were conducted during the 1970s and 1980s in the U.S.A. Many of these studies produced mixed results in terms of roadworthiness inspections reducing motor vehicle related fatalities and serious injuries. However, some of these studies suffered methodological and data issues.

Not many studies have been conducted in the U.S.A since the 1980s other than a notable study undertaken for Pennsylvania in 2009¹² that drew upon the FARS database and controlled for other crash factors. As can be seen in the figure below, the analysis revealed the percentage of crashes with reported vehicle defects were similar for vehicles up to 2 years of age in states with, and states without an inspection program. However, there is a significant departure for motor vehicles two to seven years of age with states having an inspection program experiencing a lower percentage of crashes with motor vehicle defects.

¹¹ Rechnitzer. G, Haworth.N,Kowadlo.N,“The Effects of Vehicle Roadworthiness on Crash Incidence and Severity”, Monash University Accident Research Centre, Report No 164, 2000, p 48

¹² Cambridge Systematics Inc, “Pennsylvania’s Vehicle Safety Inspection Program Effectiveness Study”, Final Report, Department of Transportation, Commonwealth of Pennsylvania, March 2009

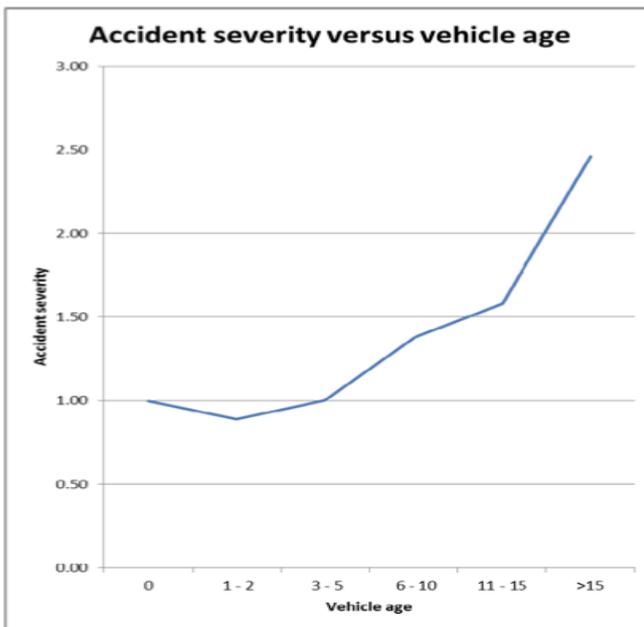
**Figure 4.2 Comparison of Fatal Crashes with Reported Vehicle Failures
By Age Proxy and Program Presence**



Most of the cost effectiveness research studies that have been conducted recently have occurred in Europe under the auspices of the European Commission. The impetus for these studies arose for a move to harmonise the periodic motor vehicle inspection programs operating across the EU 27 member countries.

The European Commission undertook a comprehensive review of motor vehicle defect related crashes including cost benefit analysis that resulted in strengthening the minimum periodic motor vehicle inspection standards for the EU 27 member countries. The previous standard of 4-2-2 has been changed to 4-2-1 to reflect the greater risk associated with older motor vehicles, and the greater proportion of older vehicles within the motor vehicle fleet of European countries.

As shown in the figure below, there is a clear correlation between severity of accidents and vehicle age. Empiric evidence shows that between year five and year six, the number of serious accidents (with fatalities) related to technical failure increases substantially.



Source: European Commission 2012

Motorcycle crash failure rates

Most of the research literature focuses on the cost effectiveness of roadworthiness inspections in relation to passenger vehicles. Rechnitzer et al (2000) summarise the findings of a case-control study of motorcycle crashes:

- Defects are relatively common in crashed motorcycles;
- Defects contribute to about 12 per cent of motorcycle crashes and 28 per cent of single vehicle crashes
- Despite motorcycles being relatively newer, on average, than cars
- There are no clear differences in crash risk for motorcycles of different ages – any pattern appears to be obscured by older, more experienced, riders having older motorcycles.

However, a number of data and methodology limitations need to be noted. Only 167 motorcycles of the 222 crashes recorded in Melbourne from 1995 to 1997 were inspected to ascertain the cause of the crash. Time constraints prevented the inspection of the 1,195 control motorcycles that passed the crash sites. For 94 crashes (42 per cent) there was insufficient information to judge the factor that had caused the accident.

Crash data – causes

The next three tables are from Rechnitzer et al MUARC (2000) and summarize the literature review in respect to the effectiveness of roadworthiness inspection programs in reducing accidents, and the percentage of motor vehicle defects that cause or contribute to crashes. The tables are provided to demonstrate wide disparity in the extent defects play in motor

vehicle crashes. The wide disparity in results is due to the quality of data used, methodologies used (some provide control for other causal factors, others do not). The quality of data is a key issue due to the dependence on police reporting which varies across jurisdictions.

Percentages of crashed vehicles with defects that played a significant causal role in the accident

Study	Percentage
McClean et al (1979) Australia	1.5% of motorcycles 2.9% of cars
Treat (1977) USA	4.5% of cars
Rompe and Seul (1985) lit review	3%-24% 1.3% (Japan)
Asander (1992) lit review	23% (direct causes or increasing damage or injury) (Finland) 7%-9% (major causal role, a contributing cause, or by increasing the consequences of the accident) (Denmark)
Gardner (1995) lit review	2%-10%
RACQ (1990) lit review	5%

Source: Reznitzer et al (2000)

Percentages of crashed vehicles with defects that played a contributory role in the accident

Study	Percentage Reduction
Grandel (1985)	6.5% of crashed passenger cars 5% of crashed two wheel vehicles
Treat (1977) USA	12.6% of cars
Rompe and Seul (1985) lit review	4%-19% (and possibly up to 33%)
Asander (1992) (lit review)	23% (direct causes or increasing damage or injury) (Finland) 7%-9% (major causal role, a contributing cause, or by increasing the consequences of the accident) (Denmark)
CCRAM (1978) Melbourne (from Forest and Youngman)	5.8% 0.6%-1.8% of these defects may have been detected in an inspection
Haworth et al (1997) single vehicles crashes- Australia	3%
Haworth et al (1997) – motorcycle crashes – Australia	12% overall 28% for single vehicle crashes 7% for multi-vehicle crashes

Source: Reznitzer et al (2000)

Percentage reduction in accident rates following the introduction of Periodic Motor Vehicle Inspection (PMVI), or between jurisdictions with PMVI and those without

Study	Percentage Reduction
NHTSA (1989) USA	10% (in accident rate) 0% (in fatal crash rate)
Asander (1992) Sweden	16% (in accidents with personal injury)
Berg et al (1984) Sweden	14% (in police reported accidents) 15% (in injury accidents)
Romp and Seul (1985)	50% (in accident rate; figure cited in Romp & Seul based on USA studies)
Little (1971) USA	-5% (in death rates)
Fosser (1992) Norway	0% (Norway has a significant random inspection program)
Schroer & Peyton (1979) USA	9.1% (in accident rate, after one inspection, compared to uninspected vehicles) 21% (in accident rate, after periodic inspections, compared to uninspected vehicles) 5.3% (in accident rate for inspected vehicles compared to their accident rates before inspection)
White (1986a) NZ	10%-15% (in accident rate)
Crain (1981) USA	Found reduction in accident rate, but no figures given
Loeb & Gilad (1984) USA	Fatality and accident rates found to decrease, but no proportion figures given

Source: Reznitzer et al (2000)

Cumulative Impact of Options One, Two & Three on the Roadworthiness of the Victorian Motor Vehicle Fleet

The following analysis has been undertaken to assess the cumulative impact of the proposed threshold changes to the roadworthiness of the Victorian motor vehicle fleet. The analysis makes the assumption that the average motorist retains their motor vehicle for an average of six years on the basis that about 17 per cent or 588,292 motor vehicles out of the total passenger vehicle fleet of 3.4 million motor vehicles have their registration transferred (2011 p six Deloitte)

Tables One to Five below calculate the number and age of the average number of motor vehicles sold at a particular given age (four to five years, three to four years, two to three years, one to two years and <one year) across the six years these motor vehicles would be held by the owner.

The average number of motor vehicles sold per annum by age group has been estimated using the information provided in Figure Two of the Consultation Paper:

- 16,000 motor vehicles < 1 year old
- 35,000 motor vehicles 1 to 2 years old
- 35,000 motor vehicles 2 to 3 years old
- 50,000 motor vehicles 3 to 4 years old
- 50,000 motor vehicles 4 to 5 years old

Using Table One as an example, the 50,000 motor vehicles < five years of age in Year One become 50,000 motor vehicles six years in Year Two while a further 50,000 motor vehicles < five years are added to the Year Two column. This basic calculation is expanded across each of Years Three, Four & Five to calculate the final number and age of motor vehicles in Year Five. The cells coloured in red are those motor vehicles that are deemed to fall within the five to 10 years high risk age group for motor vehicle defects that have not been subject to a roadworthiness inspection. The same approach is taken with Tables Two, Three, Four and Five. The red coloured cells in Tables One to Five have been summed to calculate the total number of motor vehicles from five to 10 years of age that would not have had a roadworthiness inspection.

This analysis assumes all motor vehicles sold less than five years would be retained for six years before selling. In reality, there would be some variation to the exact turnover of motor vehicles. However, for the purposes of illustration, rather than precise calculations, this analysis still reveals the likely outcome of changing to a three year or five year threshold for roadworthiness certificates upon registration transfer of a vehicle.

The results in Tables One to Five show the cumulative impact of the proposed options would undermine the roadworthiness of the Victorian motor vehicle fleet. For Option Three, the red coloured cells in Tables One to Five have been summed. Six years after the introduction of Option Three, an estimated 777,000 motor vehicles exempt from a RWC would be between five to nine years of age (high risk age group for serious defects) and will have

never been subject to a roadworthy inspection. This would represent about 22 per cent of the motor vehicle fleet in Victoria. (based on 3, 446,548 passenger cars for Victoria –source ABS Motor Vehicle Census 2013)

For Options One and Two, the red coloured cells in Tables Three to Five have been summed. Five years after the introduction of Option One or Option Two, an estimated 277,000 motor vehicles exempt from a RWC would be between five to eight years of age (high risk age group for serious defects) and will have never been subject to a roadworthy inspection. This would represent about 8 per cent of the motor vehicle fleet in Victoria.

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
50,000 <5yrs	50,000 6yrs	50,000 7yrs	50,000 8 yrs	50,000 9 yrs	50,000 10 yrs
	50,000<5yrs	50,000 6yrs	50,000 7 yrs	50,000 8 yrs	50,000 9 yrs
		50,000<5yrs	50,000 6 yrs	50,000 7 yrs	50,000 8 yrs
			50,000<5yrs	50,000 6 yrs	50,000 7 yrs
				50,000<5yrs	50,000 6 yrs
					50,000<5yrs
Total >5 yrs	50,000	100,000	150,000	200,000	250,000

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
50,000 <4yrs	50,000 5yrs	50,000 6yrs	50,000 7 yrs	50,000 8 yrs	50,000 9 yrs
	50,000<4yrs	50,000 5yrs	50,000 6 yrs	50,000 7 yrs	50,000 8 yrs
		50,000<4yrs	50,000 5 yrs	50,000 6 yrs	50,000 7 yrs
			50,000<4yrs	50,000 5 yrs	50,000 6 yrs
				50,000<4yrs	50,000 5 yrs
					50,000<4yrs
Total >5 yrs	50,000	100,000	150,000	200,000	250,000

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
35,000 <3yrs	35,000 4yrs	35,000 5yrs	35,000 6 yrs	35,000 7 yrs	35,000 8 yrs
	35,000<3yrs	35,000 4yrs	35,000 5 yrs	35,000 6 yrs	35,000 7 yrs
		35,000<3yrs	35,000 4 yrs	35,000 5 yrs	35,000 6 yrs
			35,000<3yrs	35,000 4 yrs	35,000 5 yrs
				35,000<3yrs	35,000 4 yrs
					35,000<3yrs
Total >5 yrs		35,000	70,000	105,000	140,000

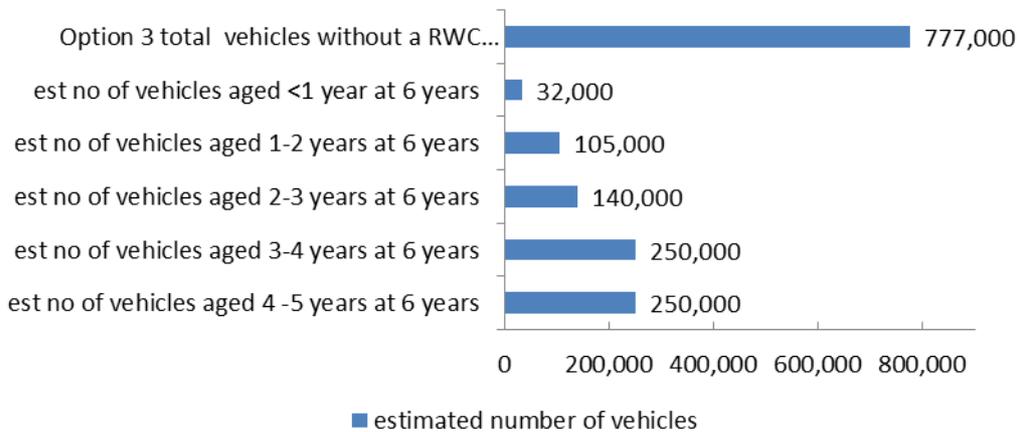
Table 4: Cumulative Impact of No RWC for Motor Vehicles aged 1 to 2 yrs

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
35,000 <2yrs	35,000 3yrs	35,000 4yrs	35,000 5 yrs	35,000 6 yrs	35,000 7 yrs
	35,000 <2yrs	35,000 3yrs	35,000 4 yrs	35,000 5 yrs	35,000 6 yrs
		35,000 <2yrs	35,000 3 yrs	35,000 4 yrs	35,000 5 yrs
			35,000 <2yrs	35,000 3 yrs	35,000 4 yrs
				35,000 <2yrs	35,000 3 yrs
					35,000 <2yrs
Total >5 yrs			35,000	70,000	105,000

Table 5: Cumulative Impact of No RWC for Motor Vehicles aged < 1 yr

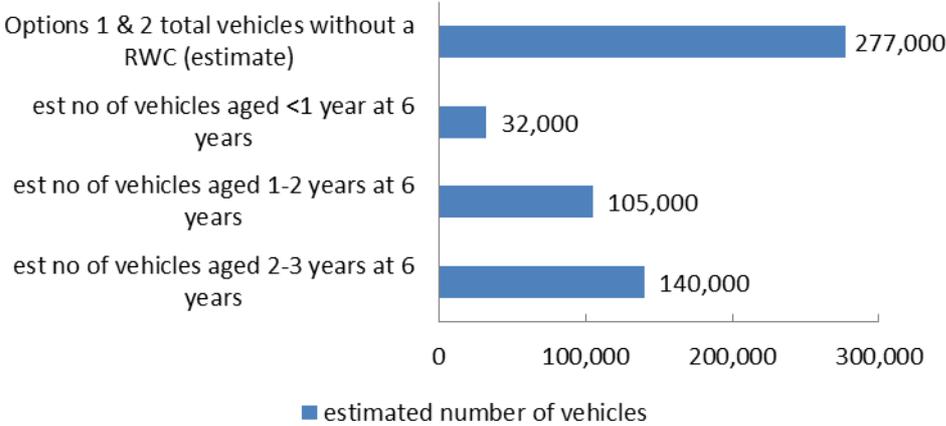
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
16,000 <1yr	16,000 2yrs	16,000 3yrs	16,000 4 yrs	16,000 5yrs	16,000 6 yrs
	16,000 <1yr	16,000 2yrs	16,000 3 yrs	16,000 4 yrs	16,000 5 yrs
		16,000 <1yr	16,000 2 yrs	16,000 3 yrs	16,000 4 yrs
			16,000 <1yr	16,000 2 yrs	16,000 3 yrs
				16,000 <1 yr	16,000 2 yrs
					16,000 <1yr
Total >5 yrs					32,000

Option Three Impact on no's of Victorian motor vehicles held for six years without a RWC





Option One and Two Impact on no's of Victorian motor vehicles held for six years without a RWC



Conclusion

The literature review of the cost effectiveness of roadworthiness inspections reveals one common finding: the influence of motor vehicle defects causing and contributing to crashes and fatalities is disparate. This wide disparity is a result of the quality of data used by respective researchers.

The quality of data remains a key issue. This is even more pertinent for Victoria.

Several points are clear. The roadworthiness inspection data from Europe reveals relatively high failure rates. The police investigation data under-estimates the true extent of motor vehicle crashes attributable to serious defects. The limited studies on destructive inspection of crash vehicles reveal a higher percentage of crashes attributable to serious defects, including for motor vehicles less than three years of age.

Most of the studies have been conducted in jurisdictions that operate a periodic motor vehicle inspection program and this is likely to affect the level of defects and cost effectiveness of the programs. Victoria is one of the few jurisdictions that operate a roadworthiness inspection system solely upon transfer of registration.

There is no doubt the effectiveness of a roadworthy certificate erodes over time. This is the case with any roadworthiness inspection system. However, in Victoria we have taken the position that it is important for consumers to be able to purchase a second-hand car regardless of age that has been certified by a licensed vehicle tester that the car is safe and roadworthy.

The VACC is not basing its objections to the Consultation Paper's proposed options on any particular research paper but has provided this wide array of results to reinforce the need for VicRoads to do what it said was required to assess these options in its 2009 regulatory impact statement: detailed data collection and analysis. This requirement was acknowledged and recommended by the VCEC.

In summary:

The VicRoads consultation paper has not made the case for a change to the roadworthiness system in Victoria.

It has not provided any evidence (other than outdated evidence) for the proposed options One, Two or Three.

The VACC considers there is no reason to change the current system and therefore,

VicRoads needs to answer several questions:

- What is the failure rate of roadworthy inspections (by age and kms)?

Streamlining Victoria's Roadworthiness System

- How many vehicles (by age and km) are involved in crashes?
- How many of these vehicles in each age & km group had serious defects?
- What proportion of these serious defects caused or contributed to crashes?

This data is required to enable a cost benefit analysis to be conducted across age and km groups of motor vehicles. The data is critical to enable a robust cost benefit analysis to be undertaken otherwise the cost benefit analysis will be based on assumptions rather than evidence. The development of an electronic roadworthy certificate system would enable the collection and analysis of this data and also provide considerable red tape reductions to licensed vehicle testers and consumers.

The Consultation Paper's options propose thresholds that are similar to the thresholds used in other jurisdictions with periodic motor vehicle inspections (PMVI). These motor vehicles are eventually inspected annually or bi-annually above that threshold.

Given most vehicles are held by motorists for at least six years, the proposed thresholds under a transfer of registration roadworthiness inspection program are unlikely to be inspected as frequently as motor vehicles under a PMVI program.

The motor vehicles that are proposed for exemption from a roadworthy inspection will eventually fall into the high-risk category (five to 10 years of age) without ever having a roadworthy inspection. A motor vehicle less than five years of age that is unroadworthy is likely to get worse as it gets older unless all owners are prepared to fully maintain their vehicles.

The potential risk and cost to 777,000 motorists under Option Three and 277,000 motorists under Options One & Two needs to be seriously considered and assessed in the haste to provide minimal savings to Victorian motorists.

Streamlining Victoria's Roadworthiness System Appendices

September 2013



Appendices

- 1 Newspoll Roadworthy certificate – yes or no?
- 2 Roadworthiness faults – Vehicles under five years of age VACC appraisal
- 3 Vehicle roadworthiness VACC member survey August 2013
- 4 Photographs of unroadworthy vehicles



VACC

ROADWORTHY CERTIFICATE – YES OR NO?

TOPLINE RESULTS

AUGUST 13, 2013

1. BACKGROUND

- In Victoria a Certificate of Roadworthiness is generally required when a vehicle is sold or if a used vehicle is to be re-registered. This helps minimise the number of poorly maintained vehicles on the road.
- A Certificate of Roadworthiness can only be issued by a licensed vehicle tester, operating from a nominated garage or service station – the majority of whom will be VACC members
- A recent report has been issued by Vic Roads called “Streamlining Victoria’s Roadworthiness System”. Three options for the system have been canvassed in the report, and they are seeking feedback from stakeholders with respect to these options

Option 1 : Remove the requirement for vehicles less than three years of age to present a roadworthiness certificate on transfer of ownership.

Continues on following slide >>



1. BACKGROUND (cont)

Option 2 : Remove the requirement for vehicles less than three years of age to present a roadworthiness certificate on transfer of ownership and develop a shorter roadworthiness test to reduce costs involved.

Option 3 : Remove the requirement for vehicles less than five years of age to present a roadworthiness certificate on transfer of ownership and develop a shorter roadworthiness test to reduce the costs involved.

- On behalf of its members, VACC wished to test Victorians' commitment to the Roadworthy Certificate system, by conducting a short survey. The key question put to the survey respondents was:

R2 In Victoria, a Certificate of Roadworthiness is generally required when a vehicle is sold. Would **you, personally**, buy a car, truck or motorcycle **without** a Certificate of Roadworthiness?

2. METHOD AND SAMPLE

- The survey was included in the Newspoll telephone omnibus survey. This is a National poll conducted on a weekly basis, and is a shared cost survey meaning that a number of subjects are included in the survey and the cost shared across clients. This provides a cost-effective vehicle for surveys such as this
- The VACC survey was conducted only with **Victorian** respondents including
 - Melbourne
 - Regional Victoriaand fieldwork was conducted August 9-11, 2013
- The sample included a total of $n = 300$ respondents, weighted to be representative of the Victorian population by age, gender and location. The margin of error at the Total Sample level is $\pm 2.5\% - 5.8\%$ depending upon the Response Level.



3. RELEASING THE DATA PUBLICLY

- From a reporting perspective, Newspoll have indicated that where results are to be released publicly, to ensure they are statistically reliable, any statistic quoted with the Newspoll name should be based on a sample of at least 200 respondents. While the total Melbourne or the Victorian sample meet this criteria, subsamples such as sex and age may not.
- In addition, if the data is release publicly using Newspoll's name it is a requirement that Newspoll is provided with a copy of any proposed release and given 48 hours for its review prior to its release.



4. EXECUTIVE SUMMARY

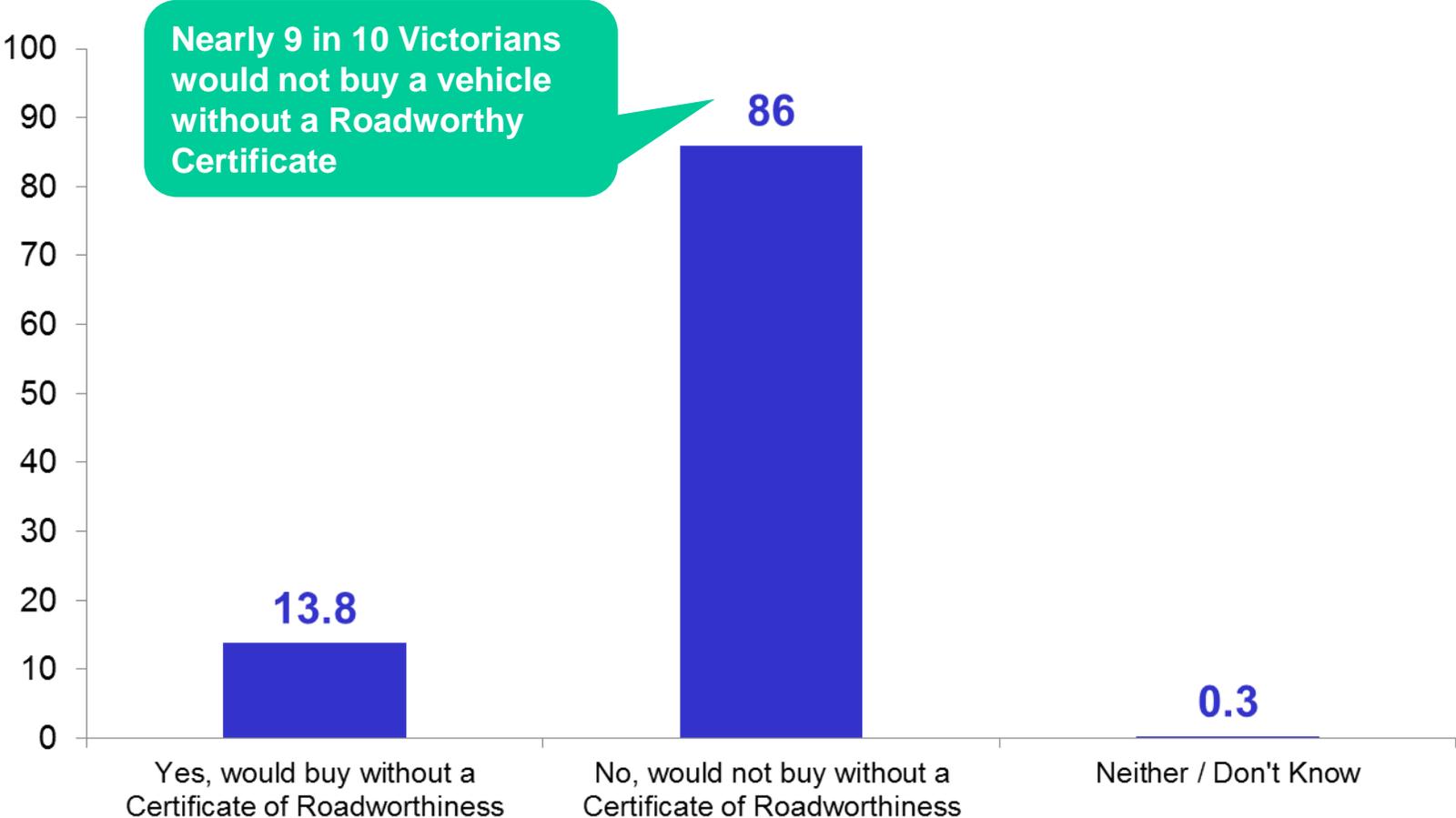
- 86% of Victorians would not buy a vehicle which did not have a Roadworthy Certificate
- Women are more likely to want a Roadworthy Certificate than men (94% compared to 78%)
- Car owners are also more likely to want a Roadworthy Certificate – than owners of other vehicles such as motorcycles or commercial vehicles (88% compared to 59%)

FINDINGS



1. WOULD YOU BUY WITHOUT A CERTIFICATE OF ROADWORTHINESS?

Base: All Victorians 18+ years (n = 300)

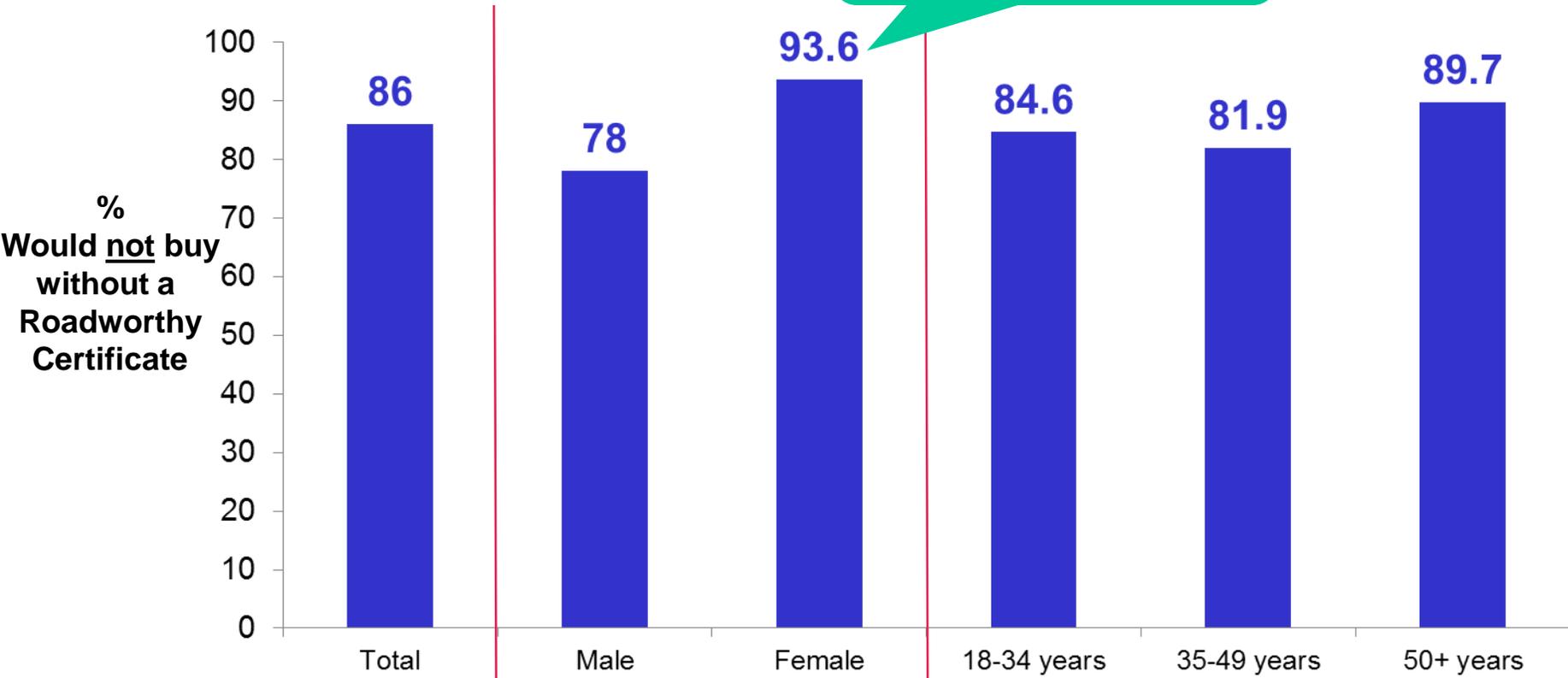


QR2 In Victoria, a Certificate of Roadworthiness is generally required when a vehicle is sold. Would you, personally, buy a car, truck or motorcycle **without** a Certificate of Roadworthiness?

2. WOULD NOT BUY WITHOUT A CERTIFICATE OF ROADWORTHINESS?

2.1 Demographics

Women are more likely to require a Roadworthy Certificate than men



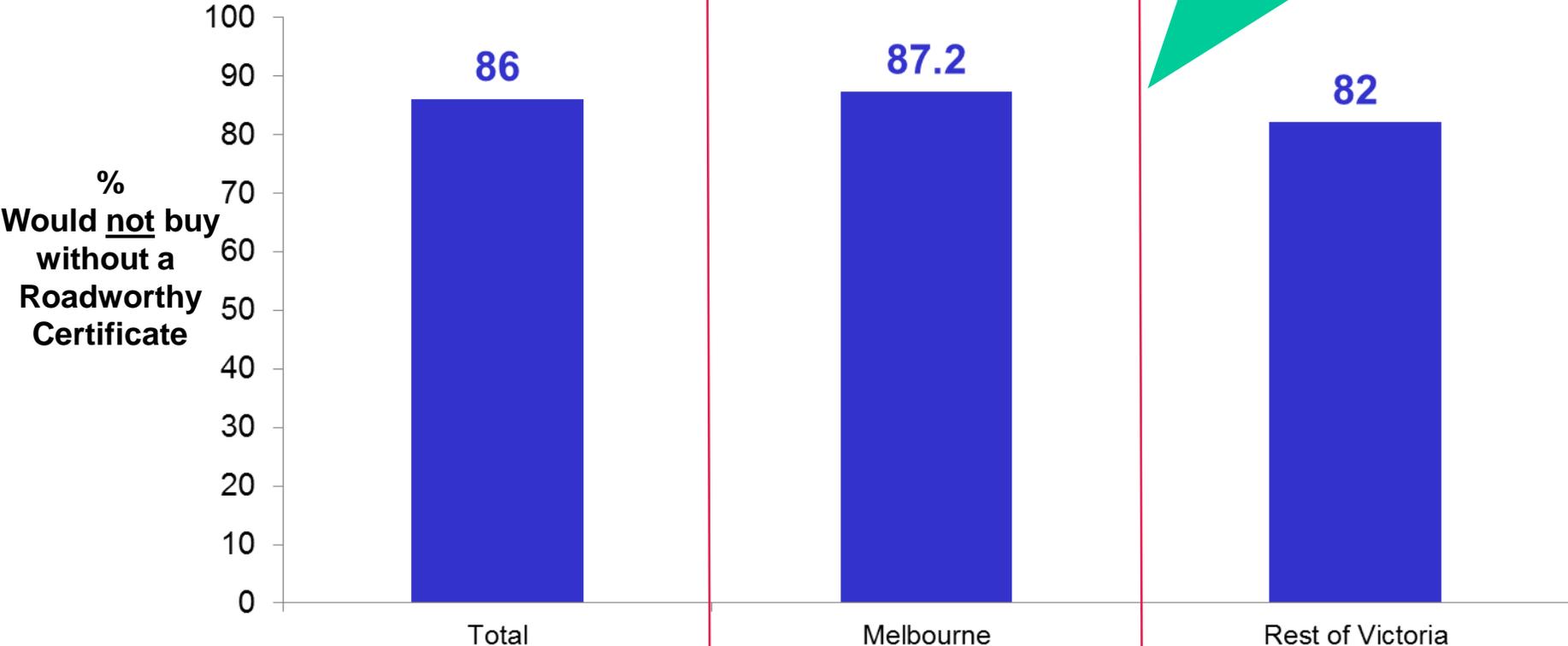
Sample Size	Total	Gender		Age		
		Male	Female	18-34 years	35-49 years	50+ years
	300	150	150	76	87	137

QR2 In Victoria, a Certificate of Roadworthiness is generally required when a vehicle is sold. Would you, personally, buy a car, truck or motorcycle without a Certificate of Roadworthiness?

2. WOULD NOT BUY WITHOUT A CERTIFICATE OF ROADWORTHINESS?

2.2 Location

No statistically significant difference between Melbourne and Rest of Victoria

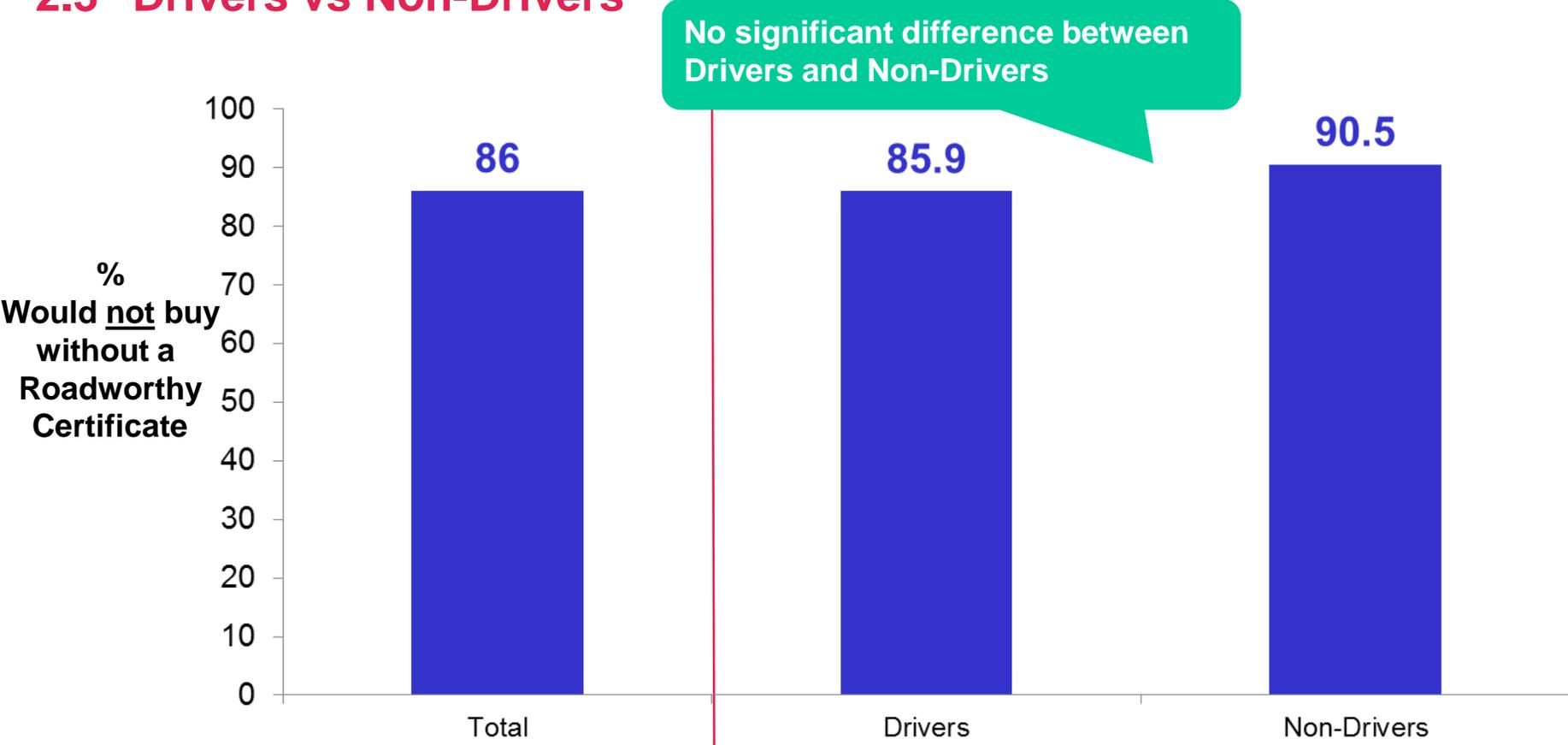


	Total	Melbourne	Rest of Victoria
Sample Size	300	200	100

QR2 In Victoria, a Certificate of Roadworthiness is generally required when a vehicle is sold. Would you, personally, buy a car, truck or motorcycle **without** a Certificate of Roadworthiness?

2. WOULD NOT BUY WITHOUT A CERTIFICATE OF ROADWORTHINESS

2.3 Drivers vs Non-Divers



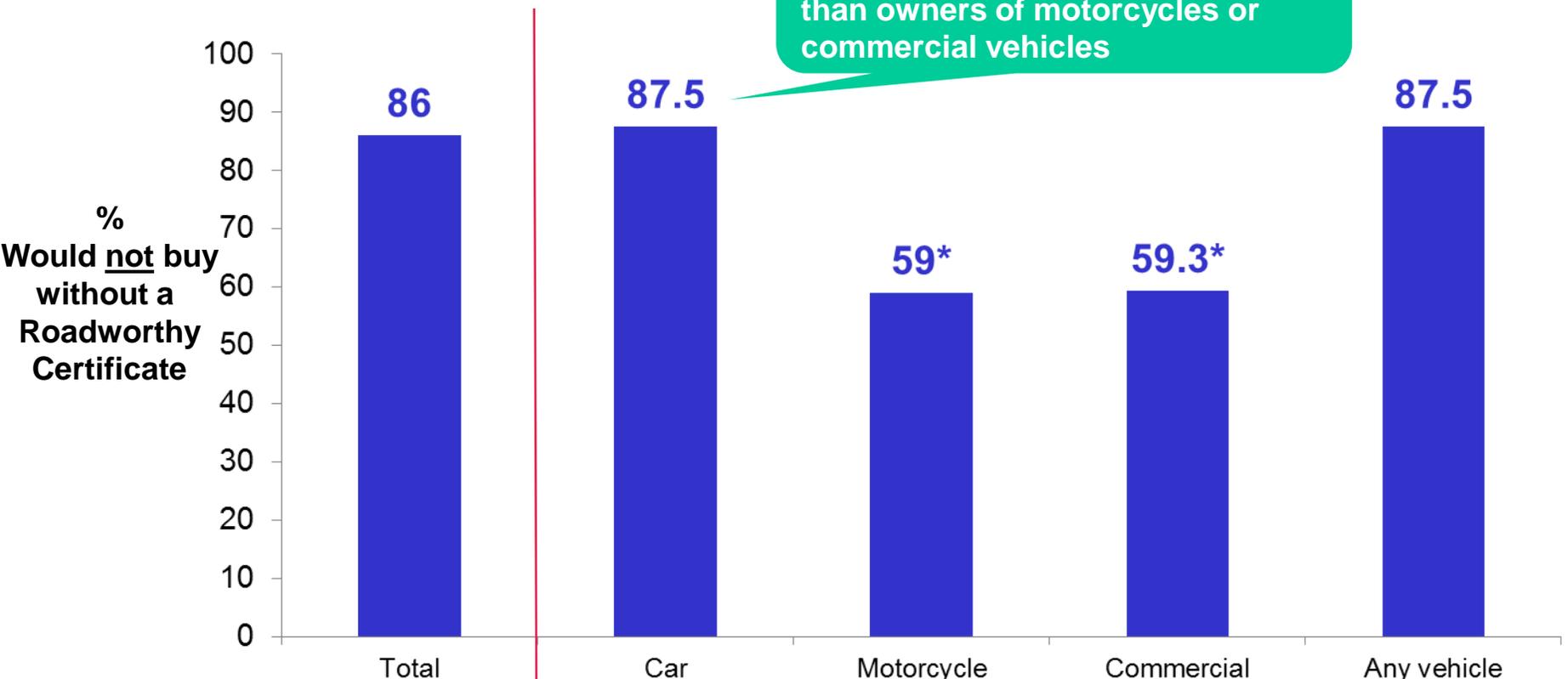
	Total	Drivers	Non-Divers
Sample Size	300	288	9*

QR2 In Victoria, a Certificate of Roadworthiness is generally required when a vehicle is sold. Would you, personally, buy a car, truck or motorcycle without a Certificate of Roadworthiness?

2. WOULD NOT BUY WITHOUT A CERTIFICATE OF ROADWORTHINESS

2.4 Vehicle Owners

Car owners are more concerned about Roadworthy Certificates, than owners of motorcycles or commercial vehicles



	Total	Car	Motorcycle	Commercial	Any vehicle
Sample Size	300	263	17*	9*	262

QR2 In Victoria, a Certificate of Roadworthiness is generally required when a vehicle is sold. Would you, personally, buy a car, truck or motorcycle **without** a Certificate of Roadworthiness?

APPENDIX I

Sample Profile



1. DEMOGRAPHICS

		Total (n = 300) %
Gender	Male	50.0
	Female	50.0
Age	18 – 24	12.7
	25 – 34	19.1
	35 – 49	26.9
	55+	41.3
Location	Melbourne	75.7
	Rest of VIC	24.3



2. DRIVER / OWNER STATUS

		Total (n = 300) %
Drivers License	Yes	95.5
	No	3.4
Vehicle Ownership	Car	87.1
	Motorcycle	5.7
	Commercial	2.7
	Net Any	87.2





Roadworthiness faults – motor vehicles under five years of age

VACC automobile repairer inspection results

During July and August 2013, VACC collected repair records from our automobile repairer and automotive dealer members to ascertain the extent of roadworthy faults for vehicles under the age of five years.

A total of 285 vehicles with a car year aged between 2008 and 2012 were identified as being 'unroadworthy' over a 12 month period by VACC members.

It was found that¹:

- 46 per cent of vehicles showed tyre problems
- 27 per cent of vehicles reported brake faults
- 22 per cent of vehicles presented with windscreen faults
- 17 per cent of vehicles revealed faults with lights
- 13 per cent of vehicles had faulty suspensions

- Most vehicles (46 per cent) were two years old (car year 2010)
- 39 per cent of total vehicles reported 'other' non major faults

VACC's investigation also found that roadworthy faults were evident across all car year categories. Tyre and brake faults were the most common.

40.7 per cent of vehicles were found to have 'other' faults.

Methodology

VACC member repairers were approached by personal visits and email to supply written and photographic evidence of roadworthiness faults.

Data was supplied in the form of completed roadworthiness tests, repair orders, and photographs.

¹ Vehicles unable to be identified by car year not included in these calculations

Roadworthiness faults – Vehicles under five years of age

Roadworthy inspection by car year
When compared by year of manufacture,
inspection of motor vehicles aged 4 years
(2008 car year) revealed:

2008 car year	% of vehicles with fault
Lights	43%
Tyres	36%
Brakes	29%
Windscreen	21%
Suspension	21%

2008 car year
5 years x 14,600km = 73,000 km i.e. average
low km = 2.5years x 14,600km = 36,500 km
high km = 14,600km ² x 10 years = 146,000 km
1 vehicle travelled low km
5 vehicles travelled high km or 35.7% of vehicles
Total 14 vehicles

Three year old vehicles (2009) showed:

2009 car year	% of vehicles with fault
Tyres	49%
Brakes	26%
Windscreen	20%
Lights	15%
Suspension	12%

2009 car year
4 years x 14,600km = 58,400 km i.e. average
low km = 2 x 14,600 km = 29,200km
high km = 14,600km x 8 years = 116,800km
4 vehicles travelled low km
7 vehicles high km or 9.4%
Total 74 vehicles

² Av km travelled according to ABS Cat no 9208.0 year 2007, 2010, and 2012

Two year old motor vehicles (2010) showed:

2010 car year	% of vehicles with fault
Tyres	46%
Brakes	27%
Windscreen	25%
Lights	15%
Suspension	14%

2010 car year
3year sx14,100 km= 42,300 km i.e. average
low km = 1.5 years x 14,100 km =21,150km
high km= 14,100 km x 6years= 84,600km
4 vehicles travelled low km
50 vehicles high km or 38%
Total 131 vehicles

One year old motor vehicles (2011) showed:

2011 car year	% of vehicles with fault
Tyres	46%
Brakes	35%
Windscreen	23%
Lights	19%
Suspension	12%

2011 car year
2 years x 14,100km = 28,200km i.e. average
low km= 1x 14,100km = 14,100km
high km=14,100 km x 4 years = 56,400km
1 vehicle low km
16 vehicle high km or 30.7%
Total 52 vehicles

Roadworthiness faults – Vehicles under five years of age



Current year motor vehicles (2012) showed:

2012 car year	% of vehicles with fault
Tyres	36%
Brakes	14%
Lights	14%
Suspension	14%
Windscreen	nil

2012 car year
1 year x 14,000= 14,000 i.e. average
low km =0.5 x14,000= 7,000km
high km= 14,000km x 2 years = 28,000km
1 vehicle low km
4 vehicle high km 29%
Total 14 vehicles

Refer to appendix for more details

Roadworthiness faults – Vehicles under five years of age



Comparison of RWC and non RWC tested vehicles 2008 - 2012				TYPE OF DEFECTS												Total defects
				Windscreen		Tyres		Brakes		Lights		Seatbelts		Suspension		
car year	No of vehicles with RWC testing	No of vehicles with 2> defects	% of vehicles with 2> defects	No	%	No	%	No	%	No	%	No	%	No	%	No
2008	10	8	80.0	3	20	4	26.7	2	13.3	4	26.7	0	0.0	2	13.3	15
2009	50	22	44.0	9	15.3	25	42.4	11	18.6	7	11.9	4	6.8	3	5.1	59
2010	63	30	47.6	18	22.5	26	32.5	12	15.0	13	16.3	2	2.5	9	11.3	80
2011	21	12	57.1	6	21.4	9	32.1	4	14.3	6	21.4	0	0.0	3	10.7	28
2012	6	4	66.7	0	0.0	2	33.3	0	0.0	2	33.3	0	0.0	2	33.3	6
Total	150	76	50.7	36	19.1	66	35.1	29	15.4	32	17.0	6	3.2	19	10.1	188

Out of a total 285 assessed vehicles, 150 vehicles were recorded as having RWC testing, with 50.7 per cent reported 2 or more defects.

Appendix

- Total vehicles inspected by VACC repairers
- Motor vehicle faults by car year
- Total roadworthiness faults found across all car years
- 'other' faults

Roadworthiness faults – Vehicles under five years of age



2013 RWC information collected by VACC members

Total vehicles

Car year	No of vehicles	% of vehicles
2008	14	5%
2009	74	26%
2010	131	46%
2011	52	18%
2012	14	5%
Total	285	100%

All vehicles were unroadworthy in some aspect, full details are found in the tables of faults by car year.

Roadworthiness faults – Vehicles under five years of age



Motor vehicle faults by car year

	2008		2009		2010		2011		2012		Total car years	
	No of cars	% of cars	No of cars	% of cars								
Tyres												
YES	5	36%	36	49%	60	46%	24	46%	5	36%	130	46%
NO	9	64%	38	51%	71	54%	28	54%	9	64%	155	54%
TOTAL	14	100%	74	100%	131	100%	52	100%	14	100%	285	100%

	2008		2009		2010		2011		2012		Total car years	
	No of cars	% of cars	No of cars	% of cars								
Brakes												
YES	4	29%	19	26%	35	27%	18	35%	2	14%	78	27%
NO	10	71%	55	74%	96	73%	34	65%	12	86%	207	73%
TOTAL	14	100%	74	100%	131	100%	52	100%	14	100%	285	100%

	2008		2009		2010		2011		2012		Total car years	
	No of cars	% of cars	No of cars	% of cars								
Wind screen												
YES	3	21%	15	20%	33	25%	12	23%	0	0	63	22%
NO	11	79%	59	80%	98	75%	40	77%	14	100%	222	78%
TOTAL	14	100%	74	100%	131	100%	52	100%	14	100%	285	100%

	2008		2009		2010		2011		2012		Total car years	
	No of cars	% of cars	No of cars	% of cars								
Lights												
YES	6	43%	11	15%	19	15%	10	19%	2	14%	48	17%
NO	8	57%	63	85%	112	85%	42	81%	12	86%	237	83%
TOTAL	14	100%	74	100%	131	100%	52	100%	14	100%	285	100%

Motor vehicle faults by car year (cont.)

	2008		2009		2010		2011		2012		Total car years	
	No of cars	% of cars	No of cars	% of cars								
Suspension												
YES	3	21%	9	12%	18	14%	6	12%	2	14%	38	13%
NO	11	79%	65	88%	113	86%	46	88%	12	86%	247	87%
TOTAL	14	100%	74	100%	131	100%	52	100%	14	100%	285	100%

	2008		2009		2010		2011		2012		Total car years	
	No of cars	% of cars	No of cars	% of cars								
Seat belts												
YES	1	7%	4	5%	3	2%	1	2%	0	0	9	3%
NO	13	93%	70	95%	128	98%	51	98%	14	100%	276	97%
TOTAL	14	100%	74	100%	131	100%	52	100%	14	100%	285	100%

	2008		2009		2010		2011		2012		Total car years	
	No of cars	% of cars	No of cars	% of cars								
Protrusions												
YES	0	0	1	1%	1	1%	0	0	0	0	2	1%
NO	14	100%	73	99%	130	99%	52	100%	14	100%	283	99%
TOTAL	14	100%	74	100%	131	100%	52	100%	14	100%	285	100%

	2008		2009		2010		2011		2012		Total car years	
	No of cars	% of cars	No of cars	% of cars								
Horn												
YES	0	0	0	0	0	0	0	0	0	0	0	0
NO	14	100%	74	100%	131	100%	52	100%	14	100%	285	100%
TOTAL	14	100%	74	100%	131	100%	52	100%	14	100%	285	100%

'Other' faults across all car years

adjust hand brake	5
adjust rear brakes	1
Bad oil leak	1
bonnet release cable	1
car pulling to right - repair	1
car too low / exhaust scraping	1
Clutch Pedal	1
drive shaft seal	1
electrical faults	1
engine oil leaks, wiring loose	1
exhaust too loud	2
front screen	1
Front wheel alignment and exhaust manifold leak and front suspension K-Frame	1
front wheel bearings	1
hand brake adjust	4
hand brake assembly	1
handbrake	1
incorrect plates and lable	1
Indicators not working,wiper washers not working, cruise control not working rear wiper not working tail light broken trims under vehicle not fitted after a accident	1
major oil leak	1
mirror	1
modifications done on car	1
muffler repairs	1
Oil cooler lines and front suspension k-frame damage	1
Oil leak in engine, secure bumper bar	1
Oil leaking from transmission selector shaft	1
Oil leaks	5
power steering / transmission leaks	1
power steering fault	2
Rear axle seal	1
rear brakes scoured	1
Rear muffler	1
remove tint	1
replace brake fluid	1
replace front sway bar	1
replace muffler	1
replace wipers / oil leaks	1
requires wheel alignment	3
seat repair	1
secure fire extinguisher	1

Roadworthiness faults – Vehicles under five years of age

shock absorber leaking	2
steering / wipers	1
sump leaking	1
tail shaft	1
tie rod end	1
tint too dark	3
transm leak. Steering	1
tyres incorrect load rating	1
warning lights on	2
wheel alignment	5
wheel alignment / tailgate repairs	1
wheel rims cracked	1
Window tint to be removed	1
wiper assemblies	3
wiper blades	9
wiper blades / adjust hand brake	2
wiper inserts	25
wipers	1
(blank)	
Grand Total	116

VACC MEMBER SURVEY AUGUST 2013

Vehicle Roadworthiness



Survey aim

To ascertain the level of unroadworthy vehicles entering VACC member workshops in response to Victorian Government intention to change Victoria's roadworthy system via three potential options. Options include vehicles less than three years of age to present:

- a roadworthiness certificate on transfer of ownership
 - a roadworthiness certificate on transfer of ownership, and develop a shorter safety test to reduce costs
- or
- vehicles less than five years of age to present a roadworthiness certificate on transfer of ownership and develop a shorter safety test to reduce costs.

Survey questions

Q1 In the last 12 months, how many vehicles less than three years old have you had in your workshop that were, in your opinion*, unroadworthy?

Q2 Do you have any further comments that you wish to add?

Methodology

The survey was conducted from the 9th till the 26th August 2013 on a Survey Monkey platform as a self-administered survey online on the VACC website.

142 responses were received were received from members of VACC's Automobile Repairers Division, Motorcycle Industry Division, and Australian Automobile Dealers Association. These members represent businesses which would be affected by the Victorian Government's proposed roadworthy system changes. Many are also Licensed Vehicle Testers (LVTs)

Survey results

Total responses	142
Q1 Average number of unroadworthy motor vehicles presented to member workshops	149.1
Q1 Total number of unroadworthy motor vehicles	21,174
Q 2 Number of open ended comments	60 (42.2 per cent of total responses)

Most, (71.8 per cent) of respondents saw 100 or less vehicles through their workshop during the last 12 months that were presented in an unroadworthy condition.

From the responses received, it is clear high numbers of vehicles under five years of age are driven in an unroadworthy condition.

Member comments indicate the depth of their collective repairer experience. (Refer to appendix)

A significant number of respondents (i.e. larger workshops) saw hundreds of unroadworthy vehicles over the last 12 months.

In total, respondents saw over 21,000 vehicles that were unroadworthy when presented at their workshops.

These vehicles were not presented for roadworthy inspection but regular servicing or repair.

Therefore it can be reasonably surmised that many vehicles under five years of age are being driven in an unroadworthy condition and vehicles under five years of age are at risk of becoming unroadworthy and unsafe.

Appendix

- Copy of VACC Roadworthiness survey
- Other comments

Proposed Major Overhaul of Victoria's Roadworthy System

1. In the last 12 months, how many vehicles less than 3 years old have you had in your workshop that were, in your opinion*, unroadworthy?

Number of vehicles

2. Do you have any further comments that you wish to add?

'Other' comments¹

Total 60 responses

Vehicle age irrelevance

1. 'We sell truck parts and see many unroadworthy vehicles of ALL ages'
2. 'We have 52 unroadworthy vehicles less than 3 years old since January 2013.'
3. 'Age has little to do with roadworthiness. Condition is what is inspected, not age. Tyres can be worn, suspension can be damaged and, in some cases, hidden damage caused by dodge repairs'
4. 'A vehicle can become unroadworthy the moment something as small as a globe is blown, there are unroadworthy vehicles less than three years old everywhere; get real...'
5. 'Although we have only had two vehicles unroadworthy [that were] under 3 years old, we have also had vehicles a lot older that are roadworthy. You can't generalise.'
6. 'Cars should be inspected every year. It doesn't matter if it is one year old or ten, it is still a mass of moving and wearing mechanical parts that can fail if not attended too.'
7. 'Just because a car is 3 years old does not make it roadworthy; brakes, tyres, can wear in 20,000-30,000 km. It's a joke that they want to stop roadworthies on these cars, also the security of people buying unroadworthy vehicles [is compromised] '
8. 'There is no mandatory requirement for automotive repairers to monitor/report on the roadworthy condition of vehicles. However, we have seen vehicles as young as 18 months old that are unroadworthy. There have been instances of vehicle still under manufacturer warranty that develop conditions that are unroadworthy. Example: - Ford Territory suspension bushes! If road safety (and vehicle condition is an important factor that effects the drivability and handling of all vehicles) is a genuine concern, then the Vic Government will not only adopt, but improve on the mandatory requirements of other states in Australia. Why would any reasonable person soften the requirement of roadworthiness when safety is such a paramount concern to authorities/public!'

¹ (N.B. some comments are edited for clarity)

'Other' comments (cont)

New doesn't always mean safe

1. '.. At the very least. Some newer cars are owned by people who figure they've spent enough buying the car, and don't need to service it. This happens a lot.'
2. 'A new vehicle can have a cracked windscreen or broken lens within a short time of leaving the showroom. Some euro cars just make the 20K service with worn out front brake pads, often this can be in little over 1 Year - and not all vehicles have wear sensors'
3. 'As a dealership, the majority of our repairs are on new vehicles. These vehicles have components fail well within the three year warranty period and are roadworthy related items.'
4. 'As we can also do structural checks on vehicles [being that we are on a busy road], we see lots of unsatisfactory and unsafe repairs especially on newer vehicles.'
5. 'We find that once cars are purchased new, some people modify their vehicles. Most common are imported rims and tyres with no load rating or central locating hole in the rims, and tyres we have never heard of. Also, we quite often fail a window tint that is too dark'
6. 'Due to the front end design and efficient brake design, most new cars will only get 25,000km to 30,000kms and will need extensive repairs disc pads & disc rotors & tyres and most cars that come into the workshop are not in a roadworthy condition and need repairs to make them safe and in a roadworthy condition. Any down grade in vehicle testing will put the roadworthy scheme back 30 years. The time, the effect, the training, the knowledge needs to be at the same level to give the consumers the peace of mind knowing the roadworthy has meet a high level of expertise in checking the vehicle for any major defects. - the current scheme needs to remain as it is. LVT [number]'
7. 'Had a vehicle today, less than 12 months old with worn out rear disc brakes.'

'Other' comments (cont)

What about safety?

1. **'There are many company vehicles out there that have high kilometres on them that are under 3 years old; roadworthies are about safety, not politics.'**
2. 'Can't believe it can be a good idea to put people at risk by not checking the roadworthiness of a vehicle as it changes owners.'
3. 'I see a lot of disgruntled owners coming in after buying a vehicle from dealers with a roadworthy with serious oil leaks & other issues. I inform them to return it to the dealer & have faults rectified. Brake rotors are usually undersized, especially the European vehicles. Without proper roadworthies, I feel the safety of vehicles will be compromised. Vehicles in Victoria now I believe are at a high level of safety due to the on-going assessments of our rules. I also notice the amount of vehicles from N.S.W. & Queensland that have been brought into Victoria that don't seem to be close to our safety standards.'
4. 'If the new law was to be brought in, it would endanger peoples' lives on the road. We already have clients thinking that they don't need have to make their car roadworthy if they wish to sell it, with what they are hearing on the radio, and their vehicles are older than 3 Years. We have many cars that we service under 3 Years that we find have unroadworthy Items - Tyres, Brakes, Lights (Major Defects)'
5. 'Our Honda Motorcycles dealership of 20yrs' service department are always replacing Tyres, Brakes, Chain & Sprockets all safety parts. On bikes 3yrs + Please do not mess with RWC and bike rider safety.'
6. 'These changes will put the safety of all drivers and passengers at risk. This is an absolute joke and insult to the safety of people.'

'Other' comments (cont)

Vehicle mileage impacts roadworthiness

1. 'It really depends on the kilometres the vehicle has travelled and what sort of work it's done. Usually if they are serviced correctly, there are very few RWC issues.'
2. 'Some vehicles less than 3 years old have high mileage'
3. 'Average tyres last around 50,000KLM. Most cars do 20,000 KLM per year'
4. 'Commercial/ business - high kilometre/vehicle hours'
5. 'Due to high kilometres travelled by our customer base in the outer suburbs, a three year old vehicle can have up to 90,000kms and will have considerable unroadworthy issues.'
6. 'Vehicles over three years old, depending on kilometres, can have numerous road worthy issues. Defects included but not limited to tyres, brakes, w/screens etc. The average Australian motorist travels approximately 20-25,000kms per year, why would we change existing working laws? This is a major safety issue for the Australian public, I am totally opposed to any changes to our roadworthy certificate system.'
7. 'Not all vehicles do the same miles or country driving. Our roads are so bad, there are always tyre and suspension notes on all vehicles in our area. A lot and low tyre treads and oil leaks.'
8. 'Most [vehicles] have 80km plus already, tyres inside edge, brake pads needed immediate replacement, unseen underbody damage'

'Other' comments (cont)

Licence vehicle tester concerns

1. 'If we are to scrap RWC for up to 3year old cars, why is a LVT licence so expensive to get and hold onto with so many rules and requirements?'
2. 'This legislation is typical of a political move to win or retain public support by compromising vehicle & occupant safety to appease people's pockets. It will all be too late when a life is lost for political approval. **I am further disgusted having been MADE to be put through vehicle structural awareness course to retain my LVT licence** to now exclude the very vehicles this course was designed for ? I fail to see how a politician sitting in an office has the faintest idea what he or she is preaching unless of course he has the training & expertise to know what they are talking about! This is a bad legislation any attempt to push it through will compromise not only vehicle safety but people's rights in protecting them when making a purchase of a vehicle which they believe to be in good condition by the mere fact that is not very old. If passed, this bill will be criminal. [respondent name] (above vehicles were spotted on pre purchase vehicle inspections all of which were cut & shut repairs, with crumple zone rails compromised).'

'Other' comments (cont)

Drivers unable to assess unroadworthy vehicles

1. 'Tyres, especially modern cars with ultra-low profile are regularly un-roadworthy as these tyres have lower than standard tyres km achievement. For example 17.18.19.20.21 inch tyres get much lower kms when they are worn out. **These tyres maybe only get between 20,000kms to 40,000kms and are not noticed until either worn out or blown out causing the owner to do replace without even knowing his tyres were un-roadworthy.** With cars not being serviced or checked on a regular basis such as increased intervals say 20,000km between services at garages or dealers this has a serious effect on the car knowing the **modern day owners** have little savvy to [do] what is required. They are **not advised or taught the fundamentals of high maintenance modern cars require.** **Most young people only know how to fill the car up with fuel and not much else.** If these people are not reminded on a regular basis the problems that are or will occur these vehicles just fall into a state of repair that is dangerous to themselves and other members of the public. I state my case as I see it on a regular basis.'
2. 'Many vehicles under three years old have [a] requirement for brakes, tyres, exhausts, lights, windscreens, external mirrors, all of which affect the roadworthy capacity of a vehicle. **Most drivers are unaware of tyre wear due to poor alignment and most that are not returning for regular service are not aware of the roadworthiness of their car.** Vehicles that are traded and are less than three years old still require windscreens and brake pads and tyres, leaving most cars with re-conditioning costs of approx, \$600-\$700 in reconditioning to re-sell on the used vehicle yard. I believe that 12 monthly roadworthies are required, as most people not knowing their vehicle is roadworthy, not only face their vehicle being unsafe on the roads, and endangering lives, but also face possible rejection of their insurance in the event of an accident'

'Other' Miscellaneous comments (cont)

- Brakes and tyres un-roadworthy
- Get real. All cars less than 3 years old need 'something' for a RWC. Tyres, brakes, wipers, Globes.....
- Have not kept a record of this so I can't truly answer this question
- I believe all vehicles need a roadworthy inspection yearly.
- I have already CC'd VACC in a letter I sent to VicRoads
- if not for regular servicing of vehicles including safety checking when servicing, thousands of unsafe under 3 year old vehicles will be on our roads
- If this overhaul is approved, it would have a very negative outcome for our small business. As in other European countries, it would be much better if this overhaul would include a roadworthy test every 2 years for older cars and this would boost small businesses and would make the roads a safer place.
- Mainly due to tyre wear caused by the state of our roads
- Mainly due to tyres, brakes, lights, damage
- Modern vehicles often suffer from severe tyre wear on shoulders, especially [car brand]. Therefore we often see tyres on vehicles under 20,000km being unroadworthy.
- Mostly worn tyres, worn brakes, cracked lenses
- Motorcycles 3 years & under do not represent a big volume of our RWC business. Unlike cars, bikes are not racking up kms. Most bikes are lucky to do 3,000kms per year. All bikes should have at least a brake fluid change within 3 years.. On that basis alone, a RW check should still occur.
- No (2 responses)
- Perhaps the question should be: - If a vehicle is not tendered to an appropriate service/repair business at least once annually then a RWC is required. That way there is pressure on taking vehicles in for a service maintaining or growing business opportunity
- Some [vehicles] were from interstate with flood damage some were from Melbourne bought via auctions with flood damage. All needed thousands spent on them
- Stop increasing the cost of doing business for LMCT traders. This is a step in the right direction to cut red tape and costs.
- They had either worn tyres or worn brakes
- This is a high volume dealership which would service 6,000 vehicles a year. Most of the failures would be tyres which are worn out, globes not working, and cracked windscreens, another area is customers modifying their vehicle outside the guide lines, e. g. raised suspension, incorrect tyres fitted, incorrect coloured globes fitted.
- This is only an estimate but fairly accurate
- Tyres, brakes, suspension, & fuel gauge - all 2010 & 2011 vehicles.
- Tyres, brakes, windscreens, light globes are all roadworthy items.
- What happens when there is a hail storm?
- With vehicles being on extended service intervals & general cost cutting of maintenance, vehicles in Victoria are not inspected often enough. A vehicle is often someone's work place and should be inspected at very regular intervals to ensure it is safe & roadworthy, items on construction sites i.e. drills, leads etc are checked 3 monthly, yet vehicles that are easily damaged & often abused are only checked if & when vehicles go in for kilometre based services or vehicle stops. The proposed 3 year, no roadworthy rule would result in 'smart' fleet operators selling off vehicles often privately before they reach the age of three - saving them money, however resulting in unsuspecting persons purchasing 'as new' vehicles with a questionable history or safety standard
- This appears to be a very uninformed proposal. It would increase illegal activity and effect safety.
- This change must surely be treated as a backward step in vehicle safety. It will be encouraged by shonky unlicensed traders and loved by the Auction houses'
- You should be making the inspection intervals shorter - every 12mths, not longer.

Photographs of motor vehicles less than five years of age

The following collection of photographs was provided to VACC by members during July and August 2013. The photographs were taken of vehicles on hoists in workshops.

The photographs show motor vehicles under the age of five are not immune from defects, deterioration and damage, with many defects detected that are un-roadworthy and requiring immediate repairs. These photographs represent a small sample of the many vehicles under the age of five years identified by VACC members as un-roadworthy over the past 12 months.

Unfortunately, many drivers do not know when a vehicle becomes un-roadworthy. Many purchasers of vehicles rely heavily on the Roadworthiness Certificate (RWC) to supply a basic guarantee of safety. It is clear from the photographs that these vehicles under the age of five would present an unacceptable risk to consumers when purchased without a RWC.

Of even greater concern, is the continuing deterioration of the vehicles and risk to safety if the items identified in these pictures were unattended.



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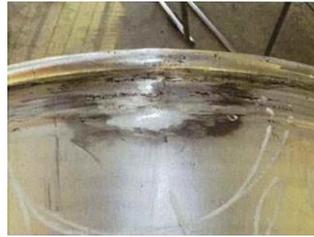
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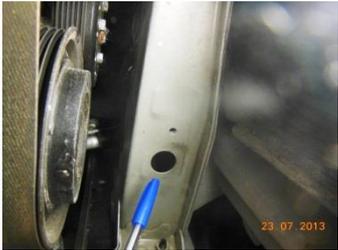
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Components damaged in collisions and repaired must meet minimum standards.

The RWC test includes structural integrity and vehicles poorly repaired will fail a subsequent RWC test.

Make: Dodge

Model: Caliber

Year: 2008

Defect: Rackend poor and unsafe weld repair. Likely to fatigue and break causing loss of all steering. Evidence of crash damage and repair.



A good looking car with a number of faults in need of attention to meet RWC before sale.

Under the current arrangements this vehicle would be sold with a RWC by an LMCT.

Make: Ford

Model: Mondeo

Year:2011

Defects: two tyres, Windscreen, stop light globe, blown fuse.



Essential items in need of repair include stop lights.

Make: Ford

Model: Territory

Year: 2012

Defect: Stop lights inoperable, front screen, rear diff bushes.



A Very clean and good looking four year old car however upon inspection it needs six repairs to make roadworthy.

Make: Ford

Model: Falcon

Year: 2009

Defect: two tyres, rear diff bushes, rear sway bar links, front lower ball joints, window switch, windscreen, replaced to meet RWC.



It is not uncommon for vehicle traded to be modified and un-roadworthy. This car needs significant work to pass a RWC. Although it is near to new the cost involved to rectify modifications would be expensive.

Make: Ford

Model: Falcon

Year: 2012

Defect: four tyres below standard, Exhaust - too loud, replace all suspension- too low, front screen, headlight, stop light.



Make: Ford

Model: Ute

Year:2011

Defect: windscreen, mirror switch, front lower ball joint, rear diff bushes, rear ball joint.



Make:

Model:

Year:

Defect:

Tyres worn to this extent are not uncommon even on vehicles under five years old. The age of the vehicle is not the determinant of wear or maintenance.

VACC members report that tyres like these are driven into their premises every day.

Many tyres are worn to the point of failure before replacement.

Tyres in this condition will not react as they should under sudden braking or steering. Tyres in this condition will not respond as they should to the electronic programming of ABS antilock or ESC anti skid input.



Make:

Model:

Year:

Defect: Tyre damage like this must not be ignored.



Make: Ford

Model: Ute

Year: 2012

Defect: Wheel and tyre combination wrong for vehicle, load capacity under limit for utility vehicle.



Modifications such as this which completely change the vehicle steering dynamics are dangerous and not well understood by consumers who think it is a good idea.

In reality it is a dangerous modification that could otherwise escape the attention of an untrained eye. However a Licensed Vehicle Tester will know immediately that this is an unsafe modification.

Make: Jeep

Model: Wrangler

Year:2010

Defect: Illegal modification using spacers on all wheel hubs. Causing steering to be off centre to the right.



Vehicle has travelled 18,250 KM's however it has unrepaired damage to bent arm of front end, parts that may now either fail or contribute to premature wear of tyres and un-roadworthiness. A vehicle in this condition must be repaired.

Make: Nissan

Model: Micra

Year: 2009

Defect: Damage to suspension



This tradesman's ute was modified with the structural integrity of the Chassis so badly compromised by the cutting of the cross member it was extremely lucky that the owner had never towed a trailer. With the load carrying capacity of this vehicle and the increased strain a catastrophic failure was likely to occur.

Make: Toyota

Model: Hilux

Year: 2010

Defect: Cross member cut to accommodate an LPG tank installation.



A wheel damaged in a minor accident had been repaired contrary to roadworthiness regulations. This of course would not be checked under the options One, Two and Three proposed in the VicRoads consultation paper.

Make: Holden

Model:

Year: 2009

Defect: Damaged wheel repaired



Make:

Model:

Year:

Defect: Spring cut to lower vehicle- illegal dangerous and potentially fatal.



Make: Holden

Model: VE Commodore

Year:2011

Defect: Tyre worn on inner edge rear tyre unseen.
Vehicle has travelled just 24,915 kilometres. All four
tyres on this vehicle in need of replacement.



58,000k car, pads and rotors need replacement .

Make: Audi

Model: Q5

Year: 2010

Defect: Front Disc brake pads and Rotors worn out



Make: Holden

Model :Commodore

Year:

Defect: Rubber exhaust support missing



Quick fix repairs often include filler and paint instead of correct procedure to replace or repair of important structural parts.

Make: Mitsubishi

Model: Outlander

Year: 2012

Defect: Poor repair structural integrity compromised by body filler

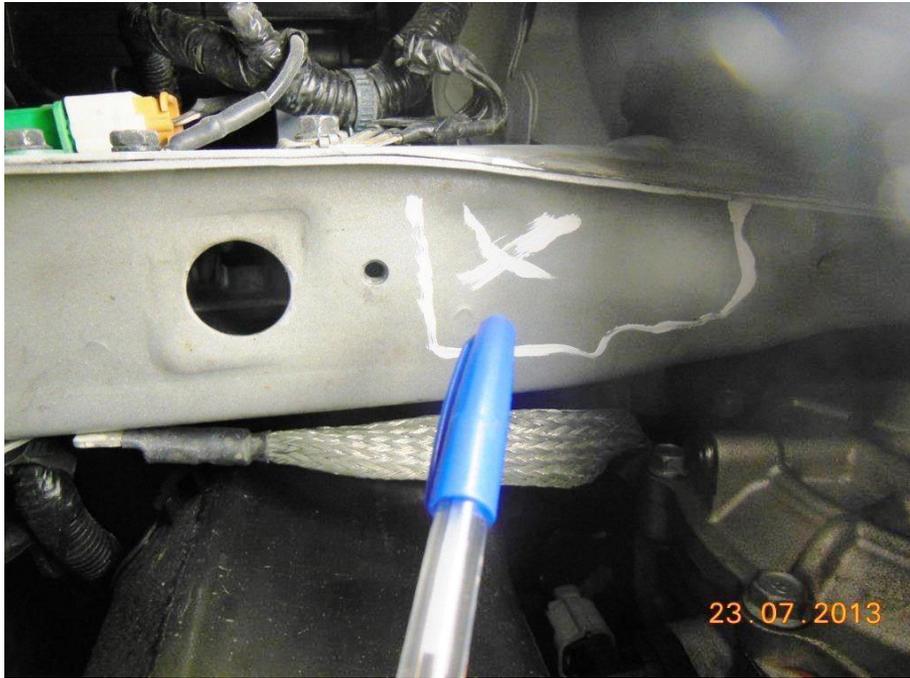


Make: Holden

Model: Commodore

Year:

Defect: Poor repair and structural integrity compromised.

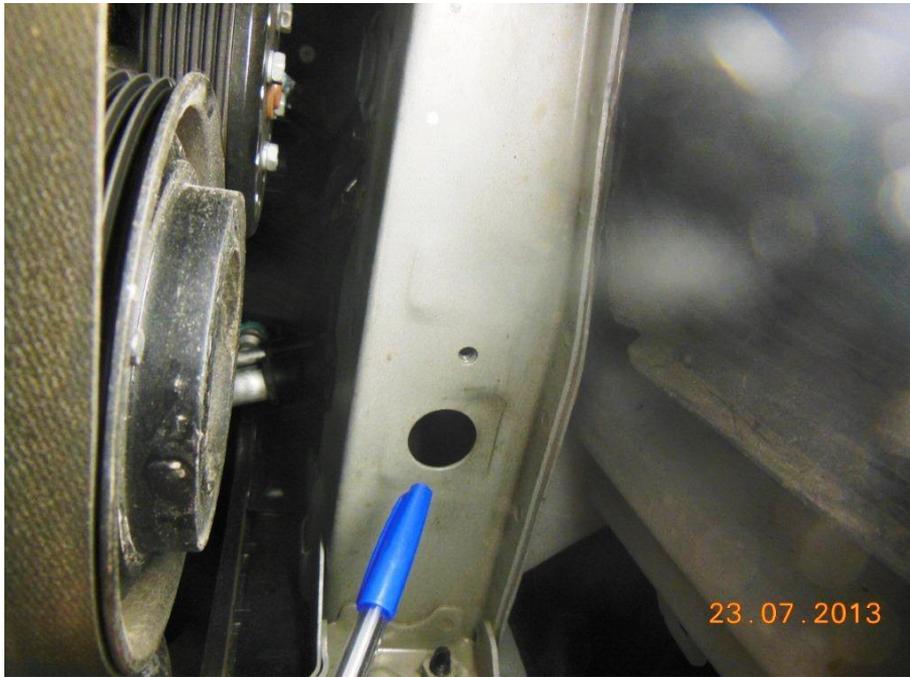


Make: Hyundai

Model: Accent

Year: 2012

Defect: Structural repair contrary to manufacturers specifications. Structural integrity compromised.



Make: Hyundai

Model: Accent

Year: 2012

Defect: Inspection hole (see next photo for repair inside)



Short cut repairs made by backyard repairers of repairable write offs are concealed from the untrained eye. Using a bore scope to inspect the interior of the structure reveals to the Licensed Vehicle Tester an un-roadworthy repair that will change the crashworthiness of the vehicle.

Make: Hyundai

Model: Accent

Year: 2012

Defect: Bore Scope picture of interior of heated and repaired structural item. Part should have been replaced not repaired.



Make: Hyundai

Model: Accent

Year: 2012

Defect: Quickly applied body paint attempts to cover up repair work.



Make: Nissan

Model:

Year:

Defect: Unrepaired under-body damage



Make: Audi

Model:

Year: 2010

Defect: Inner edge damaged and lifting likely to blowout.



Make: Audi

Model:

Year:2010

Defect: Inner edge of tyre scrubbed out and un-roadworthy



Make: Mitsubishi

Model: Outlander

Year: 2012

Defect: Rear floor and rail dented and damaged.
Structural integrity compromised.



Make: Mitsubishi

Model: Outlander

Year: 2012

Defect: Rear floor and rail dented and damaged.
Structural integrity compromised.



Make: Mitsubishi

Model: Outlander

Year: 2012

Defect: Rear floor and rail dented and damaged,
structural integrity compromised.

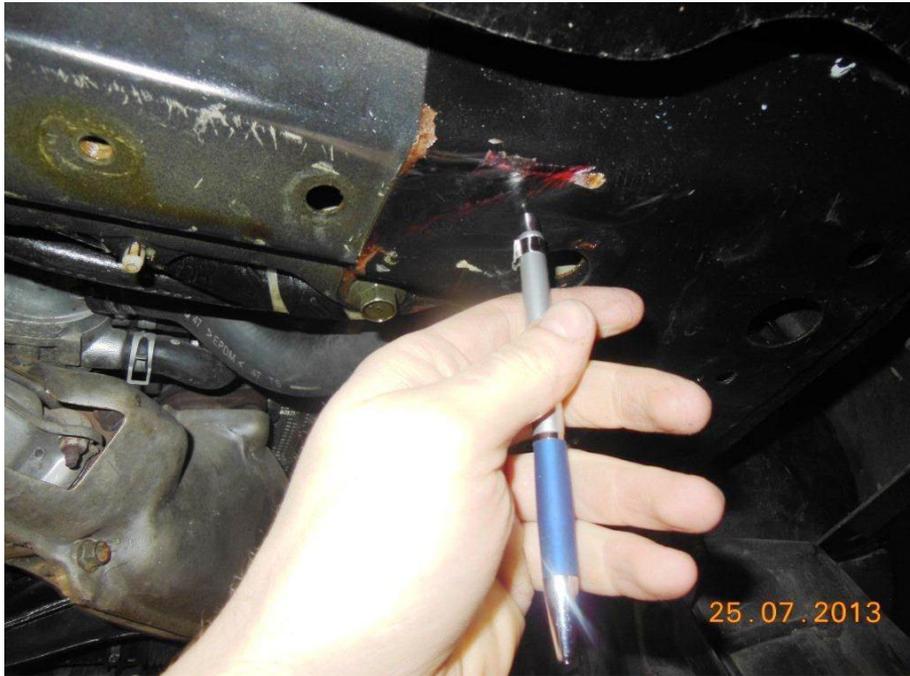


Make: Subaru

Model:

Year:

Defect: Very poor repair and structural integrity compromised. Vehicles must be repaired according to manufacturer specifications.



Make: Subaru

Model:

Year:

Defect: Body filler used to hide non – repair.
Structural integrity compromised.



Make: Subaru

Model:

Year:

Defect: Headlight ill fitting and loose, screws missing.
Will not aim correctly

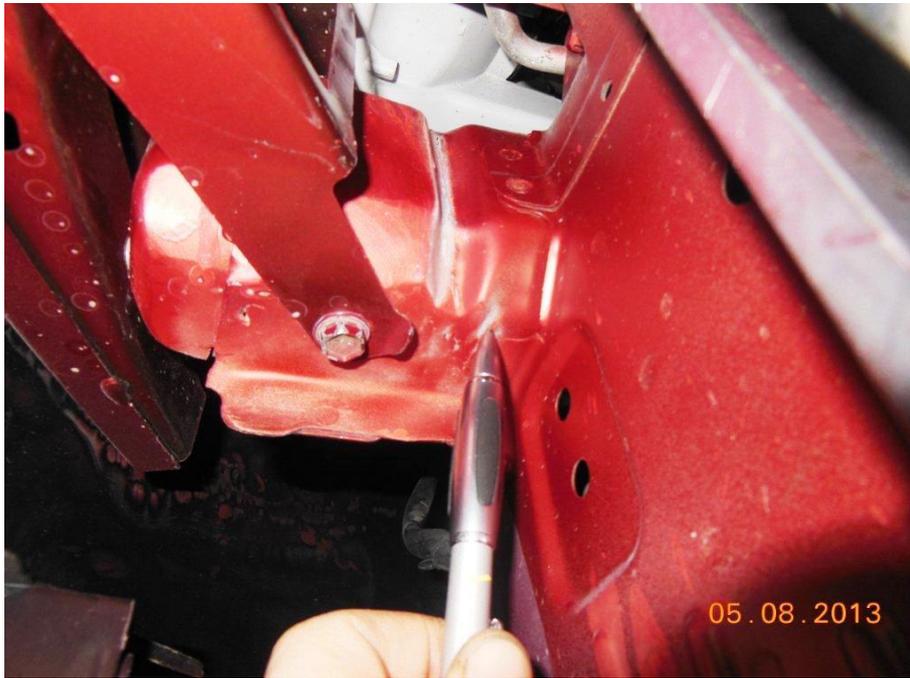


Make: Subaru

Model:

Year:

Defect: Headlight misfit and unaligned

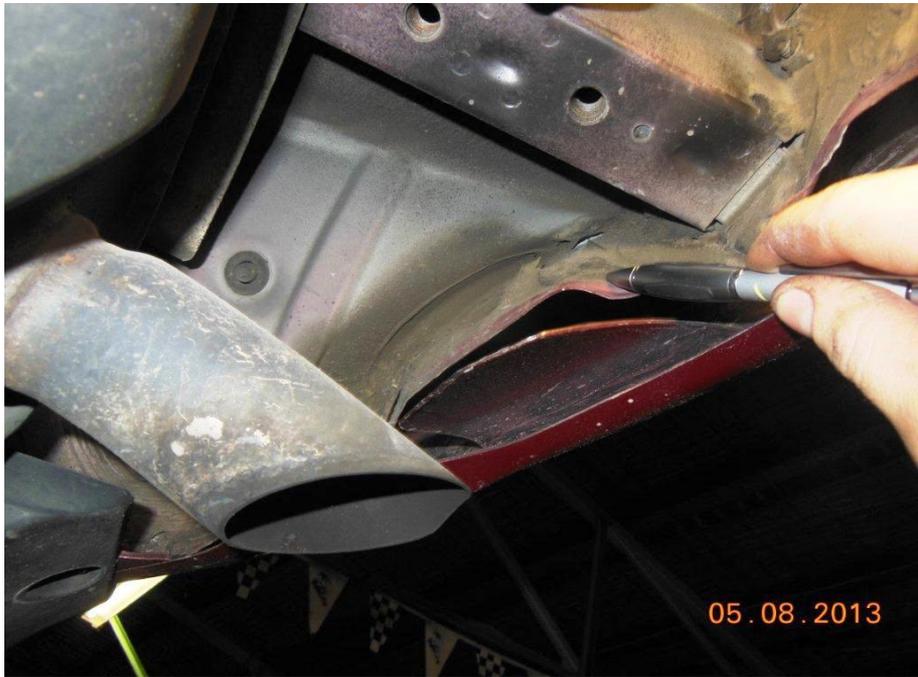


Make: Toyota

Model:

Year:

Defect: Incorrect structural repair. Structural integrity compromised



Make: Toyota

Model:

Year:

Defect: Poor repair, panels misaligned.



Make: Toyota

Model:

Year:

Defect: Poor and concealed repair



Make: Toyota

Model:

Year:

Defect: Poor and concealed repair, structural integrity compromised.



Make: Nissan

Model: Navara

Year: 2008

Defect: unrepaired under-body damage to structure



Make: Nissan

Model: Navarra

Year: 2008

Defect: unattached and dangerous, structural integrity compromised.



Make: Holden

Model: Commodore

Year:2008

Defect: LH front rail bent and full of filler. Structural integrity compromised.



Make: Holden

Model: Commodore

Year: 2008

Defect: Rail bent at inspection rail. Needs repair or replacement according to manufacturers specifications and vehicle standards bulletin. Structural integrity compromised.