



Department of Infrastructure, Energy and Resources

Proposed amendment to the *Vehicle and Traffic (Driver Licensing and Vehicle Registration) Regulations 2000*

Increasing the minimum age for a motorcycle learner's licence to 17 years

*Regulatory Impact Statement*

July 2005

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## 1 THIS DOCUMENT

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This document is a Regulatory Impact Statement regarding a proposed amendment to the *Vehicle and Traffic (Driver Licensing and Vehicle Registration) Regulations 2000* to increase the minimum age for applying for a motorcycle learner's licence to 17 years.

In accordance with the *Subordinate Legislation Act 1992*, where a regulation may impose a significant cost, burden or disadvantage on any sector of the public, a Regulatory Impact Statement (RIS) must be prepared.

This document:

- states the objective of the proposed amendment and the reasons for the proposed amendment;
- identifies the alternative options by which those objectives could be achieved;
- assesses the costs and benefits of the proposed amendment and alternative options to the use of regulations;
- assesses the impact of the proposed amendment on competition;
- assesses which of the alternative options involves the greatest net benefit at the least net cost to the community; and
- provides a statement of the consultation programme undertaken and to be undertaken.

All comments and submissions received during this process will be appropriately considered.

## 2 SUBMISSIONS

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Written comment from members of the public should be directed to:

The Manager  
Land Transport Safety Policy  
Department of Infrastructure, Energy and Resources  
GPO Box 936  
Hobart 7000

Or email: [lisa.lear@dier.tas.gov.au](mailto:lisa.lear@dier.tas.gov.au)

Please include your name, a return address and telephone number to enable clarification of issues as addressed in the submission if required. *Please note that your submission will become a public document.*

**The final date for receipt of submissions is: Friday 12 August 2005**

### 3 OBJECTIVE OF THE PROPOSED AMENDMENT

The objective of the proposed amendment to increase the minimum age for applying for a motorcycle learner's licence to 17 years is to reduce the incidence of injuries and fatalities suffered by 16 year olds when riding motorcycles, as well as to minimise subsequent costs and the resultant impact on families and the wider community.

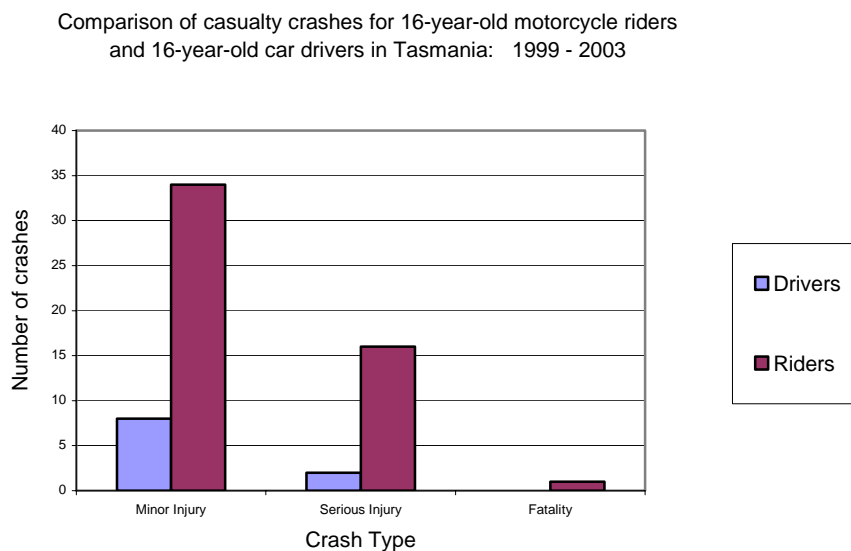
#### 3.1 RISK OF INJURY FACED BY 16-YEAR-OLD MOTORCYCLE LEARNER RIDERS

Riding a motorcycle is generally regarded as a high-risk activity. Research undertaken by the Federal Office of Road Safety in 1997 found that motorcycle riders have a 20 times greater risk of serious injury or fatality than drivers of other vehicles<sup>1</sup>.

Of particular concern are young motorcycle learners who have never held a car driver licence. While young motorcycle learners share the same three risk factors as young learner drivers (inexperience, immaturity and increased risk exposure), young learner riders face additional risks. Riding a motorcycle is more demanding than driving a car and affords far less protection to its operator, and novice riders are likely to have no, or very limited, on-road experience. The current motorcycle licence regime in Tasmania also means that learner riders, unlike learner drivers, are able to ride unsupervised from age 16.

Crash rates are very high for young learner riders. Learner riders do not share the low crash rates found for learner car drivers.

Figure 1



Source: TAS Crash Data Manager

By applying the human cost model developed by the Australian Bureau of Transport and Regional Economics (see Glossary) to the crash statistics in **Figure 1**, the cost of motorcycle crashes involving 16-year-old learner riders over the period 1999-2003 is estimated to be more than \$9 million. Comparatively, the cost of 16-year-old learner car driver crashes over the same period is estimated to be less than \$1 million.

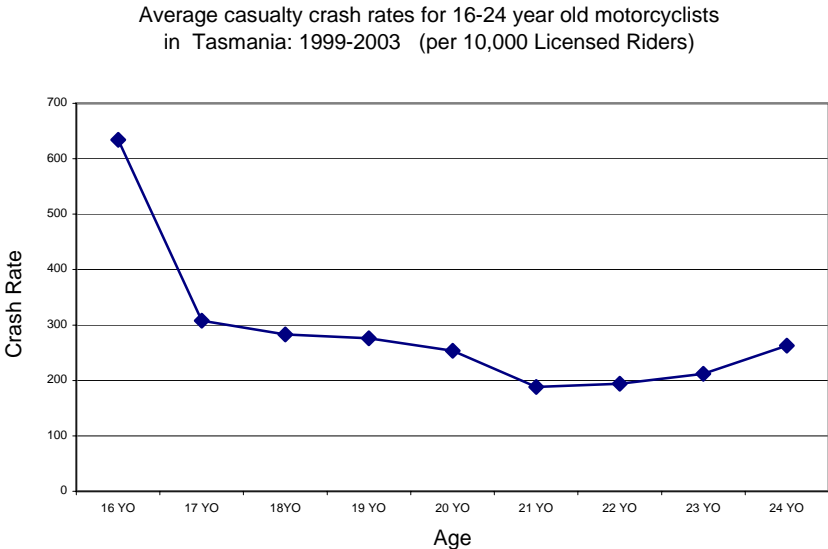
<sup>1</sup> ATSB Monograph 17 *Vehicle Type and the Risk of Travelling on the Road* 1997.

While **Figure 1** shows a relatively low *number* of motorcycle casualty crashes for 16 year olds, this is mainly due to the low number of registered riders in this age bracket. On average, over the period 1999-2003, 187 new 16-year-old learner riders were issued with licences each year. However, an alarming picture emerges when the number of crashes for this group is converted to a crash rate, which indicates the number of crashes per 10,000 registered riders. The crash rate is calculated to enable comparisons between different groups of registered riders.

For the period 1999-2003 the crash rate of riders aged under 17 in Tasmania was 634, a figure up to 70 times higher than that of other age groups.

The crash statistics for 16 year olds are even more concerning when individual crash rates of 16 to 24 year olds are analysed. While the crash rate for this age group as a whole is up to three times greater than that for older riders, the crash rate specifically for 16 year olds is two to three times higher than that of other riders in the 16-24 year age bracket. See **Figure 2** below.

Figure 2  
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*Source: TAS Crash Data Manager*

The association between age and safety has long been recognised for motorcyclists as it has been for car drivers: the older the licence-holder, the less likely the chance of crash involvement. While lack of experience is certainly a factor, this correlation between age and safety may also be due, in part, to a heightened propensity for risk-taking among young learners. A number of recent studies undertaken to explore the role of risk-taking in young driver crashes support this view. The results of one such study specifically demonstrated an increase in risky attitudes to driving between the ages of 14-15 and 16-17, especially in males.<sup>2</sup> Data from the USA also indicates that there are linkages between risk-taking behaviour and age. According to the National Safety Council data for 1991-1995, 16-year-old

<sup>2</sup> Harre et al (2000)

drivers had an average of 37 police-reported crashes for every 100 drivers. This was more than three times higher than the next worst group: 17 year olds.<sup>3</sup>

Data from crash statistics in the United Kingdom also lends significant weight to the correlation between age and safety. Although casualty rates for all road users have been falling in the UK, motorcycle traffic has grown at such a rate in recent years that the total number of motorcycle casualties has risen. Compared to the 1994-1998 average, the 2003 casualty figures are 13% higher for all riders killed or seriously injured, but 80% higher for riders aged 16<sup>4</sup>.

This type of information is of particular concern in light of the fact that novice riders in Tasmania are, at 16 years of age, able to ride unsupervised one full year before car learner drivers are able to drive unsupervised.

While the exact reasons behind the protective role of age in road crashes are subject to some debate, there is general agreement that delaying the age of both learner and independent riding would result in crash reductions, especially during the first years of riding. This policy has been adopted in Victoria, which has a minimum motorcycle learner licence age of 18 years.

As well as the increased maturity of riders, an additional benefit of raising the minimum age for holding a motorcycle learner licence is parity with the Tasmanian Novice Driver Licensing System. Under this system, car drivers are not permitted to drive unsupervised until the provisional licence phase, which has a minimum entry age of 17 years. Raising the minimum motorcycle learner licence age to 17 years would mean neither novice drivers nor novice riders would be on the road unsupervised before the age of 17 years.

All novice motorcycle riders face the dual risks of inexperience and riding without supervision. Riders under 17 years old also face the increased risk posed by a lack of general road experience, which older novice riders are more likely to have obtained through driving other vehicles.

During community consultations on the Tasmanian Motorcycle Safety Strategy, there was strong public support, particularly from people under 30 years of age, for raising the minimum age for acquiring a learner licence to 17 years.<sup>5</sup>

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<sup>3</sup> National Safety Council (US) *Accident Facts 1992 -1997*

<sup>4</sup> Department for Transport (DfT) *Transport Statistics Bulletin 2004*

<sup>5</sup> Myriad (On behalf of the Department of Infrastructure, Energy and Resources (DIER) – Tasmania) *Focus Group Research Report* June 2003 and comments received during DIER public consultation period (24 October 2003 – 7 November 2003)

### **3.2 PROVISIONS OF THE PROPOSED AMENDED REGULATIONS THAT IMPOSE A SIGNIFICANT BURDEN, COST OR DISADVANTAGE ON ANY SECTOR OF THE PUBLIC**

Proposed regulation 11(1)(b)(ii) of the *Vehicle and Traffic (Driver Licensing and Vehicle Registration) Regulations 2000* will require that a person be 17 years of age before they can apply for a motorcycle learner's licence.

#### **3.2.1 Potential impact of the proposed amendment**

Through the consultation undertaken to date it is apparent that some representatives of motorcycle groups and the Royal Automobile Club of Tasmania (RACT) oppose the move to increase the minimum age for obtaining a motorcycle learner's licence for the following reasons:

- It is discriminatory, as a young person can get a learner's licence for a motor vehicle when they turn 16 years of age.
- It does not address the high crash rates of young motorcycle learners, but instead moves the problem to 17-year-old learners.
- It may create transport difficulties for 16 year olds who rely on riding a motorcycle to get to work or an educational facility.

The argument that the proposed amendment is discriminatory is considered weak. It could equally be argued that the current situation is discriminatory in that it allows a 16-year-old motorcycle learner to ride unsupervised on the roads while a 16-year-old car learner must be supervised at all times.

Victoria's move to increase the minimum learner licence age for motorcycle riders was made, in part, to ensure a consistent approach in terms of the age that young people are permitted to ride or drive without supervision.

More importantly, however, an argument about age discrimination is not valid in light of the different safety records held by the two groups in question. **Figure 1** on page 4 demonstrates that 16-year-old motorcycle riders are involved in significantly more casualty crashes than 16-year-old motor vehicle drivers. These two groups must be considered independently of each other because of the different risk levels faced by each.

Similarly, the argument that the proposed amendment only moves the crash risk problem to 17-year-old riders is not justifiable. Although on face value there is no apparent reason why a 16-year-old learner rider would be more at risk of a crash than a 17-year-old learner rider, research shows that age is a protective factor in the prevention of road crashes, as outlined earlier in this document.

If we consider Tasmanian 16 and 17-year-old learner motorcycle riders as a single group over the period 1999-2003, 16 year olds made up approximately 62% of this group, and yet in the crash statistics they represented 72% of the minor injuries sustained by the group as a whole, 84% of the serious injuries, and the single fatality.

As mentioned previously, the current crash rate for 16-year-old motorcycle learners is up to three times higher than any other age between 16 and 24, and there is evidence to suggest that

even a small increase in the minimum age of learner riders would have a positive effect on the incidence of crashes.<sup>6</sup>

Consequently, of all the areas of potential impact raised by the RACT, it is determined that the main area where it is reasonable to suppose that a significant disadvantage to any sector of the public may occur is in regard to those 16 year olds who rely on riding a motorcycle to get to work or an educational facility.

It may also be argued that increasing the minimum learner age would have an impact on 16 year olds' access to social activities.

### **3.2.2 Impact on educational and employment and social opportunities**

Although the impact of the proposed amendment on this sector may be significant, the size of the sector is actually very small. As at 31 May 2005, there were only 219 16 year olds for whom a motorcycle learner rider's licence was their only vehicle licence.

Over the past five years, an average of 187 learner motorcycle licences were granted to 16 year olds each year. This average is the best available estimate of the maximum number of individuals at any one time whose access to educational or employment or social activities may be directly affected by the proposed changes.

However, it is difficult to determine how many of these 16 years olds rely on motorcycle transportation to commute to work or an educational facility. It is likely that not all of these 16-year-old learner riders would be affected.

Part of this current consultation process is therefore aimed at determining the size of this affected group and the potential impact that may occur so that strategies can be put into place to minimise the extent of this.

## **3.3 COSTS AND BENEFITS OF THE PROPOSED SUBORDINATE LEGISLATION**

### **3.3.1 Identified benefits**

The merits of increasing the minimum age to 17 before a person can apply for a motorcycle learner's licence are based on statistical evidence, research and expert opinion. Details of the identified benefits are provided below.

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<sup>6</sup> Forsyth E, Maycock G, Sexton B *Cohort study of learner and novice drivers: Part 3, Accidents, offences and driving experience in the first three years of driving* Transport Research Laboratory, Department of Transport 1995

### Increasing minimum age to 17 for a motorcycle learner's licence

#### *Benefits*

- This model would reduce young people's exposure to the risk of having a motorcycle crash. Currently the crash rate for 16-year-old motorcycle learners is up to three times higher than any other age between 16 and 24. Statistical evidence shows that lower rider age is associated with a significantly increased crash risk, when considered independently of other influencing factors such as rider experience.<sup>7</sup>
- The human capital costs associated with 16-year-old motorcycle crashes, estimated at \$9 million for the period 1999-2003 as outlined above, would also be significantly reduced. These human capital costs include lost workplace and household labour, as well as medical, legal and insurance costs, amongst others.
- Raising the learner age would also lead to a reduction in other costs associated with motorcycle crashes that are borne by the wider community, including the burden of pain and suffering which is difficult to quantify.
- This model would also help to reduce risks for other road users.
- A 16-year-old person wanting to ride a motorcycle may then have the benefit of having 12 months supervised road experience driving other types of vehicles before they learn to ride a motorcycle on a public road.
- Raising the learner age to 17 would also provide consistency with the Tasmanian Novice Driving System, which specifies that car drivers are not permitted to drive unsupervised until the provisional licence period, which has a minimum entry age of 17 years.

### 3.3.2 Identified costs

Increasing the minimum age to 17 for a motorcycle learner's licence is seen by some to have a number of costs or drawbacks. A summary of these is provided below.

### Increasing minimum age to 17 for a motorcycle learner's licence

#### *Costs*

- This model may create transport difficulties for 16 year olds who rely on riding a motorcycle to get to work or an educational facility. Additional costs may be imposed on 16 year olds for public transport, or on their friends and family if they are required to provide transport.
- Raising the learner rider age may also reduce access to social opportunities for 16 year olds for whom a motorcycle is their only form of transport. Riding as a source of enjoyment for these young riders would also be restricted.

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<sup>7</sup> Haworth N, Smith R, Brumen I, Pronk N *Case-Control Study of Motorcycle Crashes*, prepared by the Monash University Accident Research Centre for the Federal Office of Road Safety, Department of Transport and Regional Development, 1997

## **4 ALTERNATIVE OPTIONS BY WHICH THE OBJECTIVES CAN BE ACHIEVED**

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Provisions 1(b) and 1(d) of Schedule 2 of the *Subordinate Legislation Act 1992* specify that a RIS must include:

- an identification of the alternative options by which the stated objectives can be achieved (whether wholly or substantially); and
- an assessment of the costs and benefits of each alternative option to the making of the subordinate legislation (including the option of not proceeding with any action).

The identified alternative options, including the option of not proceeding with any action, are discussed below.

### **4.1 NO ACTION**

The proposed legislative amendment would increase the minimum age for a motorcycle licence from 16 years to 17 years. The objective of this proposed change is to reduce the incidence of injuries and fatalities suffered by 16 year olds when riding motorcycles, as well as to minimise any subsequent costs and the resultant impact on families and the wider community.

As outlined above, 16-year-old motorcyclists are involved in significantly more crashes than other age groups. The crash rate for 16-year-old motorcyclists is two-to-three times higher than other ages within the high-risk 16-24 year age bracket, and up to 70 times higher than other age groups. International research and analysis of Tasmania's own statistics support the argument that increased age, independently of other factors like experience level, helps to protect riders against the risk of crashes. Casualty crashes sustained by 16 year olds are estimated to have cost more than \$9 million over the period 1999-2003.

Given the crash rate statistics for 16-year-old learner riders and the subsequent costs, and considering that road safety is a current priority for the State Government and an area of great concern amongst the community, it is considered that this option is not appropriate.

### **4.2 INCREASE MINIMUM AGE TO 17 YEARS WITH AN EXEMPTION PROVISION FOR THOSE WHO CAN DEMONSTRATE THAT THEIR EDUCATIONAL AND EMPLOYMENT OPPORTUNITIES WOULD BE REDUCED WITHOUT ACCESS TO A MOTORCYCLE LEARNER'S LICENCE**

This option would enable the Registrar of Motor Vehicles to make exemptions for 16 years olds wishing to obtain their learner rider's license on the basis of a determination of genuine need.

#### 4.2.1 Identified benefits

Exemption Provision
<p><i>Benefits</i></p> <ul style="list-style-type: none"><li>• Would enable 16 year olds to apply for a motorcycle learner's licence if they can demonstrate that their access to employment or further educational opportunities is dependent upon them having their own transport, and that they do not have access to other appropriate transport options.</li><li>• Would reduce 16 year olds' exposure to the risk of having a motorcycle crash. However, the potential safety benefit to be gained by the increase in minimum age may be lessened by the introduction of exemptions.</li></ul>

#### 4.2.2 Identified costs

Exemption Provision
<p><i>Costs</i></p> <ul style="list-style-type: none"><li>• Would decrease the potential safety and cost savings benefits to be gained by implementing the 17-year minimum learner rider age without exemptions.</li><li>• Would involve administrative costs associated with assessing exemption applications. Applicants would incur application costs and there would be a greater administrative burden for the Registrar.</li><li>• Would place an additional burden on applicants by requiring them to provide corroborating evidence from an employer or educational institution, as well as evidence that public or other transport alternatives are not available.</li></ul>

### 4.3 REQUIRE 16 YEAR OLDS TO UNDERTAKE ADDITIONAL MOTORCYCLE TRAINING

The current training regime requires that a person undertake an eight-hour course, known as the Level 1 Motorcycle Course, prior to obtaining a learner licence.

This training only covers basic skills. However, the minimum course time could be extended to provide additional time for practice, or to learn higher-order skills.

#### 4.3.1 Identified benefits

Require 16 year olds to undertake additional motorcycle training
<p><i>Benefits</i></p> <ul style="list-style-type: none"><li>• Would enable 16 year olds to continue to apply for a motorcycle learner's licence.</li><li>• Would provide the young novice rider with the opportunity to develop better skills on how to ride safely.*</li></ul>

\* Unlike the increase in age and road experience that licensing reforms would deliver, there is no evidence to suggest that an increase in training alone will result in a safety benefit for learner riders.<sup>8</sup>

#### 4.3.2 Identified costs

Require 16 year olds to undertake additional motorcycle training
<p><i>Costs</i></p> <ul style="list-style-type: none"><li>• Would decrease the potential safety and cost savings benefits to be gained by implementing the 17-year-old minimum learner rider age.</li><li>• Would place additional costs on the end user, who would be required to pay for the extra training.</li><li>• Increasing training independently of other reforms may lead to learner overconfidence, resulting in more crashes.</li></ul>

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<sup>8</sup> Haworth N, Mulvihill C. *Review of motorcycle training in Tasmania* January 2005

## **5 ASSESSMENT OF IMPACT ON COMPETITION**

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The introduction of the proposed amendment will have no impact on competition.

## **6 GREATEST NET BENEFIT/LEAST NET COST**

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The proposal to increase the minimum age for applying for a learner's motorcycle licence to 17 years will deliver the greatest net benefit with the least net cost of all the other alternatives examined.

The proposed amendment would result in an immediate safety benefit by entirely removing the possibility for 16-year-old learner motorcycle licence holders to be involved in crashes. As stated previously, the crash rate for 16-year-old motorcycle learners was up to three times higher than any other age between 16 and 24 for the period 1999-2003.

Apart from the obvious benefit of reducing crashes, it is also reasonable to anticipate that the proposed amendment would deliver a significant reduction in the costs associated with 16-year-old learner rider crashes (an estimated \$9 million in human capital costs over the period 1999-2003).

The amendment also provides 17-year-olds wanting to ride a motorcycle with access to 12 months of supervised road experience driving other types of vehicles before they learn to ride a motorcycle on a public road. This would provide 17-year-old novice riders with invaluable information about road conditions, interaction with other vehicles and so on, before beginning the process of learning to ride a motorcycle.

Raising the learner age will also lead to a reduction in risks to other road users, as well as a reduction in costs borne by the wider community including the burden of pain and suffering.

There are, however, some additional costs that would be associated with this model, particularly the cost of providing transport to 16 year olds who could otherwise have access to independent transport, enabling them to access work, an educational facility or social activities. However, based on current licensing trends, even if every potential new 16-year-old learner rider over the next five years had to bear additional transport costs of, say, \$100 per week each over that five-year period, this would amount to less than \$5 million. This is still less than the \$9 million in potential savings in human capital costs that could be made over the same period by reducing the number of casualty crashes suffered by 16-year-old learner riders.

This results in a net saving to society and to those individuals that are involved in a casualty crash. For the majority of 16-year-old riders who would not be involved in casualty crashes, the cost of alternative means of transport is considered to be outweighed by the benefits to individuals and society in general, in terms of safety benefits and reducing the financial and other burdens associated with motorcycle crashes.

## 7 CONSULTATION PROGRAMME

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In advance of the development and circulation of this RIS, the Department of Infrastructure, Energy and Resources has consulted extensively with the community and motorcycle groups as part of the process for developing the Tasmanian Motorcycle Safety Strategy 2005-2006 (TMSS). This consultation has included the following activities:

### 1. Distributing motorcycle safety self-report survey and information brochure

- Self-report survey comprising multiple choice and open-ended questions
- Information brochure on motorcycle safety issues including statistics
- Survey and brochure randomly distributed to 1600 Tasmanian licence-holders including 800 motorcycle licence-holders
- Survey advertised in all regional Tasmanian newspapers on 29 March 2003
- Closing date for survey: 25 April 2003
- More than 400 responses received
- Survey results collated and analysed by *Enterprise Marketing & Research Services Pty Ltd*

### 2. Meetings with stakeholders

- Key community groups representing motorcycle riders were consulted
- Opportunity to raise any issues of concern and provide suggestions or ideas regarding the development of the TMSS
- Discussed results of the survey
- Specific issues discussed: risk-taking, power-to-weight ratios, licensing, training, education and road engineering
- Meeting dates:
  - Motorcycle Riders Association – 27 May 2003
  - Tasmanian Motorcycle Council – 29 May 2003
  - Tasmanian Automobile Chamber of Commerce – May 2003
  - Motorcycling Tasmania – 3 June 2003
  - Stay Upright Pty Ltd – 30 June 2003
  - Federal Chamber of Automotive Industries – 11 July 2003
  - SMART Training – 4 September 2003
- All stakeholders were sent a summary of the meeting

### 3. Focus groups

- The survey and stakeholder meetings predominantly addressed the concerns of motorcycle riders and other road users over 30 years of age
- Four focus groups were conducted in Hobart and Devonport in June 2003 to capture the views of motorcycle riders and other road users aged 16 to 29 years of age
- Focus groups were conducted and moderated by Myriad Consultancy
- A total of 34 individuals participated in the focus groups.

With regard to this RIS, the Department of Infrastructure, Energy and Resources will:

1. By notice in the Government Gazette and in the three regional newspapers published and circulated generally throughout Tasmania:
  - a. Provide opportunity for members of the public to obtain a copy of the RIS and the proposed legislation; and
  - b. Invite submissions within at least 21 days of the date of the notice from members of the public on the proposed legislation.
2. Assess submissions on the proposals and incorporate any appropriate changes prior to the finalisation of the legislation.
3. Contact in writing the following stakeholders with a copy of the RIS and proposed legislation and invite submissions within 21 days of the date of correspondence:
  - Tasmanian Motorcycle Council
  - Motorcycle Riders Association of Tasmania
  - RACT
  - Office of Youth Affairs.

## 8 GLOSSARY OF TERMS

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### *Fatality*

Death occurs within 30 days of crash

### *Serious injury*

Hospitalised overnight following crash

### *Minor injury*

Taken to hospital following crash but not detained

### *Casualty crash*

Crash including injury at any level; minor injury, serious injury and fatality

### *Novice*

A person, regardless of age, who has never held a full motorcycle licence

### *Crash rates*

The figure of 10,000 is used when calculating crash rate to allow for meaningful interpretation of the calculated rate, and is standard practice in rate calculation. For example, using the formula for Crash Rate 2, calculating the rate per 10,000 registered motorcycle riders means the rate is interpreted as follows:

For every 10,000 registered motorcycles 'x' riders will be involved in a crash. The fact Tasmania does not have 10,000 registered motorcycles does not matter, as the number of registered motorcycles is accounted for in the calculation before it is multiplied by 10,000.

### *Crash rate formulae*

#### *Crash rate (licensed rider)*

$$\frac{\text{number of crashes per age group} \times 10,000}{\text{number of licensed motorcycle riders per age group}}$$

#### *Crash rate (registered motorcycles)*

$$\frac{\text{number of crashes per age group} \times 10,000}{\text{number of registered motorcycles per age group}}$$

### *Human capital cost*

The Australian Bureau of Transport and Regional Economics has developed a model to calculate the costs of injuries and fatalities caused by motor vehicle accidents, using the human capital method. The model uses the following figures:

Crash severity level	"Human capital" cost (\$AUD in 2000 dollars)
Fatality	1,740,359
Serious injury	429,553
Other injury	14,504