



Consultation Paper

Motorbike safety in Queensland



What is this paper for?

We are seeking your views about how to increase the safety of motorbike riders in Queensland. Since motorbike safety was highlighted as a significant and increasing problem at the Queensland Road Safety Summit in 2006, Queensland Transport has undertaken a comprehensive review of motorbike safety. The review involved analysis of Queensland road crash data, independent reviews of the Q-RIDE licensing system and independent reports on improving motorbike safety in Queensland.

At the same time, the Parliamentary Travelsafe Committee conducted an inquiry into the Q-RIDE rider training program, and released its report in June 2007. On tabling its response to the Travelsafe Committee's report, the Queensland Government announced that there would be a number of changes to the current motorbike licensing system, including:

- an enhanced graduated licensing system;
- a review of engine capacity restrictions; and
- moves to identify dormant licence holders.

The full report, and the Government's response to the report are found at:

www.parliament.qld.gov.au/view/committees/documents/TSAFE/reports/TSRo47.pdf

www.parliament.qld.gov.au/view/committees/documents/TSAFE/responses/TP2777-2007.pdf

The outcome of the Queensland Transport review is this **Motorbike Safety in Queensland Consultation Paper**. The Consultation Paper documents the findings of the review and presents initiatives that could be adopted

to improve rider safety in Queensland, including specific recommendations of the Travelsafe Committee.

We want to hear what you think about these new proposals to make motorbike riding safer on our roads.

Guidelines for making a submission

Motorbike riders, trainers, motoring groups and anyone in the community with an interest in motorbike safety are invited to have their say about the initiatives proposed here.

Submissions can be made by completing the online feedback form under the "What's New" section at:

www.transport.qld.gov.au/motorbike_safety

or by written submission to:

Motorbike Safety in Queensland
Queensland Transport
PO Box 673 Fortitude Valley 4006
Fax: (07) 3253 4960

Responses should be received by Friday 30 May 2008.

If you need more time to make a submission, or would like further information about the initiatives proposed, please contact the project manager:

Telephone: (07) 3253 4910

Copies of the Motorbike Safety in Queensland Consultation Paper are available on the Queensland Transport Internet under the "What's New" section at:

www.transport.qld.gov.au/motorbike_safety



What has already been done to improve motorbike rider safety in Queensland?

In December 2007, the Queensland Government announced changes to improve the safety of motorbike riders and pillion passengers. The initiatives proposed include:

- A requirement that all new motorbike riders must hold an RE licence⁶ before progressing to an R licence⁷ (currently, riders holding a car licence for at least three years and who successfully complete a Q-RIDE assessment can progress directly to an R licence);
- A requirement that all provisional 1 and provisional 2 car licence holders display a P plate whilst riding a motorbike;
- A minimum age restriction of eight years for pillion passengers; and
- Enhancements to the Q-RIDE audit scheme to provide for on-the-spot, 'without notice' audits.

These changes build on motorbike road safety reforms completed in 2007, which were:

- Improvement of the Q-RIDE system through:
 - Enhanced audits of Q-RIDE Registered Service Providers;
 - Student to trainer ratio limited to a maximum of 5:1;
 - New competency standards introduced, including a consistent assessment process for Q-RIDE; and

- New penalties for Q-RIDE Registered Service Providers who fail to comply with Q-RIDE training and assessment standards.
- A requirement that car drivers hold a provisional car licence for a minimum period of 12 months before being eligible for a motorbike learner licence;
- A motorbike safety campaign, with messages for motorbike riders and car drivers;
- A dedicated website, www.motorbikesafety.qld.gov.au; and
- Road improvements totalling \$1.5m to provide safer motorbike routes, under the 'Safer Roads Sooner' program.

Responses to this Consultation Paper will help us to improve motorbike safety in Queensland. Some of the initiatives proposed might not be feasible, and some might not be popular. However, something must be done to reduce the number of motorbike riders killed or injured on Queensland roads.

This Consultation Paper contains initiatives that could contribute to improved motorbike safety. Please take the time to read the following sections and consider the initiatives proposed. You are invited to indicate your level of support for each initiative and make comments on the form provided at the end of the Consultation Paper, or via the online feedback form.

⁶ RE licence restricts the rider to motorbikes with an engine capacity of 250 cc or less.

⁷ R licence has no restrictions on the engine capacity of the motorbike.



Improving safety of all motorbike riders

Novice riders are the focus of the changes proposed to the licensing system, but all motorbike riders have an increased crash risk. To improve motorbike safety in Queensland, we are taking the Safe System approach. This was developed to guide the National Road Safety Action Plans⁸. Safe System provides an overarching framework for road safety, consisting of:

- Safer Road Users and Behaviours;
- Safer Vehicles;
- Safer Roads and Roadsides; and
- Safer Speeds.

Background

Current motorbike licensing options are set out in Diagram 1.

As of 1 July 2007, all potential motorbike learners must have held their car provisional licence for a minimum of 12 months prior to obtaining their motorbike learner licence.

⁸ National Road Safety Action Plan 2007–2008, Australian Transport Council. www.atcouncil.gov.au/documents/nrss_actionplan_0708.pdf

Diagram 1 Current motorbike graduated licensing system

Current Licence Process Licence Conditions and Restrictions Training and Assessment

Q-SAFE	Q-RIDE	Q-SAFE	Q-RIDE
<p>Pre-learner period</p> <p>Complete rider knowledge test</p> <p>Issue Learner Licence</p> <p>Minimum 6 Mths</p> <p>Q-SAFE rider test – RE class</p>	<p>Complete rider knowledge test</p> <p>Issue Learner Licence</p> <p>No minimum period</p> <p>Q-RIDE program – RE class</p> <p>If held C class licence for 3 years can apply immediately</p> <p>Issue Provisional/Open Licence – RE class</p> <p>Issue Provisional RE class licence</p> <p>Minimum 12 Mths</p> <p>Q-RIDE program – R class</p>	<p>Pre-learner to Learner – No practical training</p> <p>Assessment – Queensland Transport administered theory test</p>	<p>Learner to RE or R</p> <p><i>Theory</i></p> <p>Cognitive and perceptual skills associated with riding including roadcraft and hazard detection</p> <p><i>Practical – Off-road</i></p> <p>Basic motorbike operation</p> <p>Operation and manoeuvring of motorbike at low speed</p> <p>Operation and manoeuvring of motorbike at road speed</p> <p><i>Practical – On-road</i></p> <p>On-road practical riding in urban speed zones (60km)</p> <p>On-road practical riding in high speed zones (80–100km)</p> <p><i>Assessment</i></p> <p>Theory assessment on road craft</p> <p>Practical assessment by trainer</p> <p>Note: There is no difference in content between RE and R Q-RIDE program, only the size of bike that the learner uses to train on.</p>
<p>Learner period</p> <p>Minimum 6 Mths</p> <p>Q-SAFE rider test – RE class</p>	<p>Issue Provisional/Open Licence – RE class</p> <p>Issue Provisional RE class licence</p> <p>Minimum 12 Mths</p> <p>Q-RIDE program – R class</p>	<p>Learner Licence</p> <p>No maximum validity</p> <p>Display L plate</p> <p>250cc restriction</p> <p>Only supervisor as pillion passenger</p>	<p>Learner to RE</p> <p>No theory</p> <p>No practical on or off road training</p> <p><i>Assessment</i></p> <p>Practical assessment by QT</p>
<p>RE Licence</p> <p>Issue Provisional/Open Licence – RE class</p> <p>Minimum 12 Mths</p>	<p>Issue Provisional/Open Licence – RE class</p> <p>Issue Provisional RE class licence</p> <p>Minimum 12 Mths</p> <p>Q-RIDE program – R class</p>	<p>RE to R</p> <p>No theory</p> <p>No practical on or off-road training</p> <p><i>Assessment</i></p> <p>Practical assessment by QT</p>	<p>RE to R</p> <p>No theory</p> <p>No practical on or off-road training</p> <p><i>Assessment</i></p> <p>Practical assessment by QT</p>
<p>Provisional period*</p> <p>Minimum 12 Mths</p> <p>Q-SAFE rider test – R</p>	<p>Issue Provisional/Open Licence – RE class</p> <p>Issue Provisional RE class licence</p> <p>Minimum 12 Mths</p> <p>Q-RIDE program – R class</p>	<p>R Licence</p> <p>If first motorbike licence no pillion passenger for 12 months</p>	<p>R Licence</p> <p>If first motorbike licence no pillion passenger for 12 months</p>
<p>Open</p> <p>Open licence R class</p> <p>Open licence RE class</p>	<p>Open licence R class</p> <p>Open licence RE class</p>	<p>Open Licence</p> <p>No Restrictions</p>	<p>* Whether a person receives a provisional or open licence is based on what type of car (C class) licence they hold. If a person holds a provisional car licence, they will receive a provisional motorbike licence. The provisional licence will last as long as the remaining provisional period of the car licence. If a person holds an open licence they will be granted an open class motorbike licence.</p> <p>There are no further specific motorbike restrictions associated with a provisional licence</p> <p>Note: RE licence – restricted to >250cc or less</p> <p>R class licence – unrestricted motorbike</p>



Current process – Q-SAFE

The Q-SAFE option is based on the graduated licensing system in place for car, (class C) licences. Motorbike licence classes comprise the restricted motorbike (class RE) and unrestricted motorbike (class R). Candidates must first obtain a class RE licence and hold that licence for one year before being eligible to apply for an unrestricted class R licence.

In order to get a class RE licence (250cc or less):

- Learner riders must have held a P, P1, P2 or O type licence of another class for at least one year during the five years before applying for the class RE learner licence; or
- holds a driver licence granted outside Queensland before 1 July 2007 that corresponds to a class RE learner licence; and applies for the class RE learner licence before 1 July 2010.

A person must then:

- pass a written knowledge test and then ride accompanied for at least six months. (The accompanying rider must hold and have held an open motorbike licence for at least one year for either a class RE or R licence.)
- pass a practical Q-SAFE test administered by Queensland Transport.

Licence holders are eligible to apply for a learner class R motorbike licence once they have held their class RE motorbike licence for at least 1 year. Again,

learners must be accompanied by a person who has held an open class R licence for at least one year. Learners must pass a Q-SAFE practical test before they can be issued with a class R licence.

Current process – Q-RIDE

Q-RIDE training and assessment is based on the Q-RIDE Competency Standards developed by Queensland Transport. The Competency Standards specify the skills and knowledge required by a person being trained and assessed through Q-RIDE. The standards quantify what a learner must do and how well it must be done to enable them to apply to Queensland Transport for the class of licence for which they have been trained and assessed through Q-RIDE. Q-RIDE courses are offered by private Registered Service Providers who are accredited and audited by Queensland Transport.

The competency based training and assessment can be divided into three learning environments supervised by an accredited rider trainer – classroom (theory), off-road and on-road.

Riders who obtain a restricted (class RE) motorbike licence through Q-RIDE, can learn to ride an unrestricted (class R) motorbike immediately if they re-enrol in Q-RIDE. However, riders who have not held a car licence for at least three years, cannot apply for the unrestricted (class R) licence until they have held the restricted (class RE) for one year.

Currently, where a person has held a car licence for at least three years they can enrol in a Q-RIDE course to enable them to progress immediately to an unrestricted (class R) licence. Changes announced by the Queensland Government in December 2007 would require that all riders hold a restricted (class RE) licence for 12 months before being eligible to progress to an unrestricted (class R) licence.

Registered Service Providers must provide Queensland Transport with a documented training program showing sequence, time allocation and content of provision that enables learners undertaking Q-RIDE training to attain the Competency Standards. Service Providers wishing to register with Queensland Transport undergo an application process and once registered, must undergo scheduled annual compliance audits to retain registration. There are currently 29 Registered Service Providers located throughout Queensland.

For quality assurance purposes, Registered Service Providers are subject to the following audits during the currency of registration:

- Scheduled compliance audits
- Random audits
- Random operational reviews.





Proposed Initiatives

Safer road users and behaviours

Improvements to the current licensing system

Should Queensland Transport introduce an enhanced graduated licensing process for new motorbike riders?

In 2007, the Travelsafe Committee recommended that Queensland Transport investigate the benefits and road safety implications of introducing an enhanced graduated licensing system for novice motorbike riders, similar to the system implemented for young car drivers.

Research has identified that the integration of motorbike rider education and licensing play a key role in improving motorbike safety⁹. When a comprehensive graduated licensing system for motorbikes was introduced in New Zealand, there were significant reductions in crashes amongst the 15–19 year old age group and smaller reductions in all other age groups¹⁰. An evaluation of motorbike licensing laws in America concluded that states requiring training, minimum licence periods, restrictions and testing had lower motorbike fatalities than those states that did not¹¹.

Best practice licensing and education includes a graduated licensing system. This combines training, assessment and testing to progress the rider through the licence stages from pre-learner to learner, learner to provisional phases and through to an open licence¹². This also incorporates restrictions at the pre-learner, learner and provisional stages to reduce the risk to novice riders.

The enhanced graduated licensing system proposed here could be based on the current system of motorbike training and assessment used in Q-RIDE. All licence applicants, regardless of age or length of time they have held a car licence, would be required to progress through the new system. Similar to obtaining a car licence, an enhanced graduated licensing system would require a rider to progress through four licence stages:

- Stage 1. Pre-learner to Learner
- Stage 2. Learner to Provisional 1
- Stage 3. Provisional 1 to Provisional 2
- Stage 4. Provisional 2 to Open

⁹ Baldi et al (2005) Identifying best practices states in motorcycle rider education and licensing, *Journal of Safety Research* 36:19–32.

¹⁰ Reeder et al (1999) An evaluation of the general effect of the New Zealand graduated driver licensing system on motorcycle traffic crash hospitalisations, *Accident Analysis and Prevention* 31:651–661.

¹¹ McGwin et al (2004) The effect of state motorcycling licensing laws on motorcycle driver mortality rates, *The journal of TRAUMA: Injury, Infection and Critical Care* 56(2):415–419.

¹² Baldi et al (2005) Identifying best practices states in motorcycle rider education and licensing, *Journal of Safety Research* 36:19–32.

Proposed process for obtaining a motorbike licence

It is proposed to introduce an enhanced graduated licensing system for motorbikes, aligned to the graduated car driver licence system. This would ensure that both novice drivers and riders have parity in their licensing methods.

The motorbike licensing system would consist of two streams, one for moped riders, and a second for motorbike riders (motorbike size restricted or unrestricted).

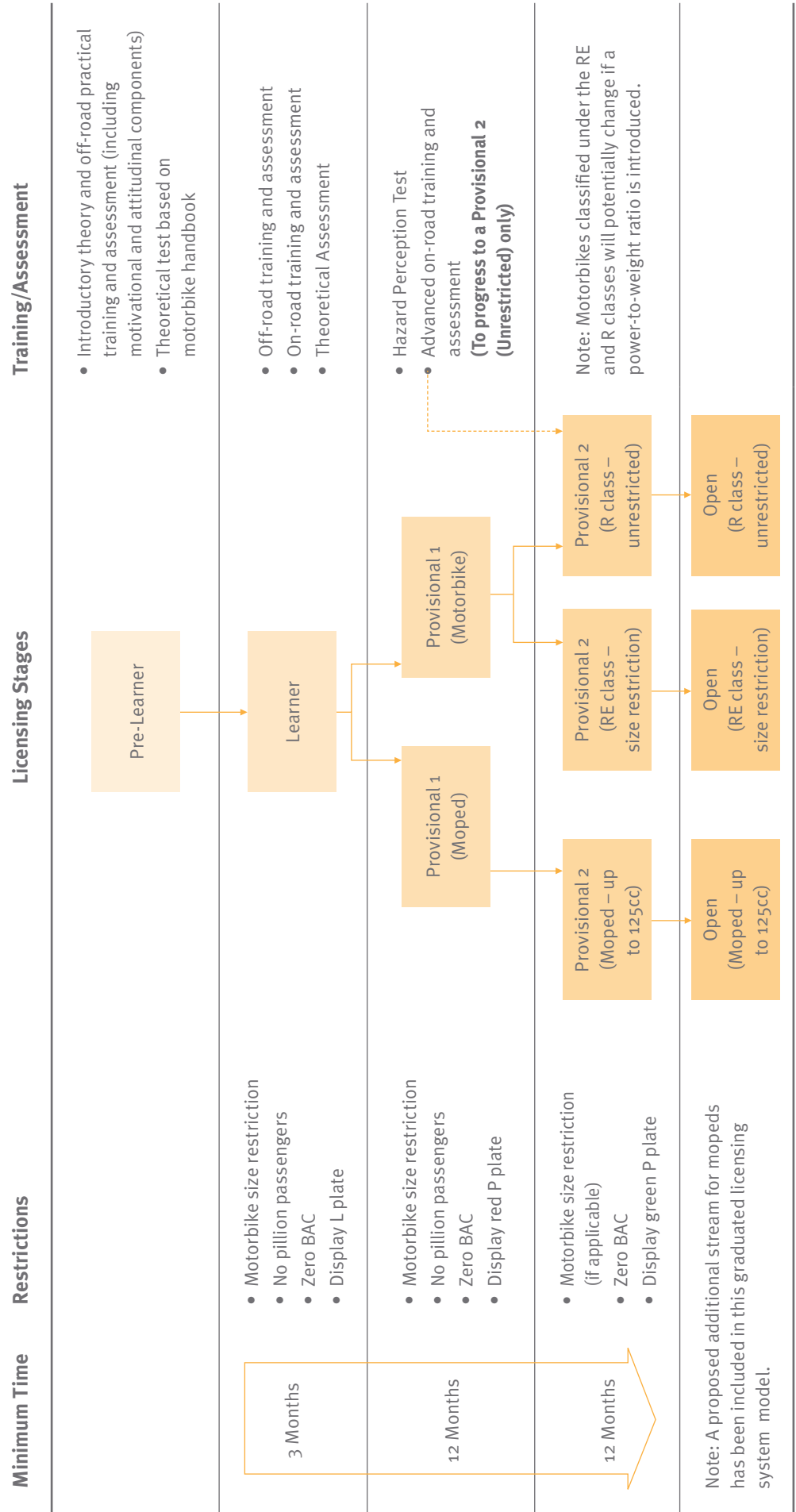
It is proposed that a new rider of any age would need to progress through this enhanced motorbike graduated licensing system. As noted earlier, a graduated licensing system would involve four stages, from pre-learner to open, with gradual lifting of restrictions as a rider gains more experience.

As noted earlier, the first year of riding is the most critical. The increased crash risk is not isolated to young riders, with motorbike riders aged 30 – 49 years old in their first year of a motorbike licence involved in 36% of fatal crashes¹³.

Each stage of an enhanced motorbike graduated licence is more fully explained after this outline of the licence process (Diagram 2).

¹³ Queensland Transport (2006).

Diagram 2. Proposed enhanced motorbike graduated licence





Pre-learner

To obtain a learner licence, a person might have to complete a pre-learner course.

Potential riders, regardless of age, might have to undertake some introductory off-road training and assessment, including motivational and attitudinal components, before passing a theory test. The theory test could be based on a motorbike handbook similar to Your Keys to Driving in Queensland. On successful completion a potential rider could receive a pre-learner certificate of competency to be presented to a Queensland Transport Customer Service Centre to obtain a learner licence.

Learner

All potential learner riders could hold their learner licence for a minimum of three months prior to progressing to a provisional 1 licence.

To upgrade to a provisional 1 licence, a learner rider might have to undergo a training course or certify that they have completed an agreed number of hours of off-road and on-road skills, before passing a theory and competency test.

Motorbike size could be restricted. For the motorbike licensing stream this could be restricted to 250 cubic centimetres (cc) or based on power-to-weight restriction. Other restrictions could include zero blood/breath alcohol concentration (BAC), pillion passenger restrictions and displaying an L plate, regardless of the age of the learner rider.

On successful completion, a learner rider could be issued with a learner certificate of competency to be presented to a Queensland Transport Customer Service Centre to obtain a provisional 1 licence.

Provisional 1

All riders might need to display a red P plate and be subject to a number of restrictions for a minimum of 12 months. Motorbike size could be restricted to 250cc or power-to-weight for the motorbike licensing streams. Pillion passenger restrictions and zero blood/breath alcohol concentration could also apply.

To progress from a provisional 1 licence, riders might need to pass a hazard perception test.

Provisional 2

A provisional 2 licence stage might last for a minimum of 12 months. During this time a rider might need to display a green P plate and be subject to zero blood/breath alcohol concentration. The pillion passenger restriction could be lifted. Motorbike size could be restricted to 250cc or power-to-weight for the restricted (RE) motorbike licensing stream.

At the provisional 2 stage, a motorbike rider could have the motorbike size restriction lifted by undertaking advanced on-road training and assessment. On successful completion the rider could be issued with a certificate of competency to be presented to a Queensland Transport Customer Service Centre to obtain a provisional 2 (R – motorbike size unrestricted) licence.

Open

Once riders have held their provisional 2 licence for a minimum of 12 months, riders might automatically progress to the appropriate open licence. This includes: moped licence with maximum bike size of 125 cc; open restricted licence (RE) with maximum bike size of 250cc or power-to-weight; and open unrestricted licence (R) with any sized motorbike.

Moped Licensing

Should a person who rides a moped be required to hold a specific moped or motorbike licence?

A moped requires similar skills to riding a motorbike.

In Queensland, a moped can be ridden by people who have a car licence or motorbike licence.

A moped is sometimes called a scooter. In Queensland a moped is a motorbike with an engine capacity not exceeding 50ml and a maximum speed not exceeding 50km/h. Moped riding is increasing in popularity in Queensland.

Riding a moped requires skills similar to riding a motorbike, and moped riders have similar exposure and risk levels of motorbike riders. However, currently a person who holds a car licence can ride a moped. To improve the skills of moped riders and reduce exposure and risk moped riders might be required to either obtain a specific moped licence or obtain a motorbike licence.

If a moped licence is created, the licensing process may be similar to that for motorbikes with similar restrictions, but tailored specifically for riding a moped. This would mean that there are a number of stages a person would progress through, with various restrictions placed on a rider as they graduate from a learner to provisional to an open licence holder.

The introduction of a moped licence may have significant impacts on the moped hire industry.

Possible restrictions in an enhanced graduated licensing system

To implement an enhanced graduated licensing system, there might be various restrictions that are removed as a person progresses from one licence stage to the next. It is proposed that there will be a number of new restrictions for pre-learner, learner, provisional 1 and provisional 2 motorbike (including moped) licence holders.

Minimum and maximum learner periods.

Should an enhanced graduated licensing system limit the length of time a learner licence is held to a minimum of three months and a maximum of three years (before being renewed)?

Currently in Queensland the learner licence can be extended indefinitely if a person holds another licence class such as a car licence.

A minimum period could apply to ensure that skills are gained prior to upgrading to a provisional licence. This will help ensure that valuable on-road experience and understanding of the operation of the motorbike is obtained.

To encourage people to learn the necessary skills to progress from a learner licence, those who have not upgraded their licence within a defined time frame (eg. three years) would need to reapply for a learner licence. A person who has not upgraded their learner licence would be required to re-sit the practical and theoretical assessment before being granted a learner licence. This would ensure that people are gaining the necessary practice and skills to become safer riders as well as ensuring new riders maintain current road rules knowledge.

Power-to-weight motorbike restriction

Should an enhanced graduated licensing system include a power-to-weight ratio to determine what bike a restricted licence holder could ride, replacing the existing 250 cubic centimetres (cc) restriction?

Currently there is a 250cc restriction on an RE licence. This was introduced when small engine capacity generally related to the power of the motorbike. However, some modern small capacity motorbikes which satisfy engine capacity restrictions are very powerful.

Alternative restrictions could be based on power-to-weight instead of engine capacity. The research supporting this initiative is mixed. Some research found that risk increases with motorbike size. However this could be related to the longer distances that bigger motorbikes are generally ridden, so people who ride further each year are more likely to be involved in crashes¹⁴.

Queensland Transport wants to ensure that motorbike riders gain the necessary on-road riding experience and skills before riding unsupervised and on high-powered motorbikes. This may involve introducing a power-to-weight ratio similar to that introduced in some other jurisdictions. This may also minimise motorbike riders' crash risk and severity of crashes.

New South Wales (NSW), Australian Capital Territory (ACT) and South Australia (SA) have introduced a 150 kilowatts per tonne restriction in conjunction with a restriction on engine capacity (a maximum 660 cc), and Victoria will introduce a similar restriction during 2008.

¹⁴ Haworth, N. and Mulvihill, C. (2005) *Review of Motorcycle Licensing and Training*. MUARC.

Zero blood/breath alcohol concentration (BAC) limit for all learner and provisional riders regardless of age

Should an enhanced graduated licensing system require that all learner and provisional motorbike licence holders (regardless of age) have a zero blood/breath alcohol concentration limit?

Currently in Queensland, there is a zero blood/breath alcohol concentration restriction for learner and provisional licence holders aged less than 25 years. Research shows that novice drivers and riders have a higher crash risk when exposed to alcohol, even at low concentrations¹⁵. A zero blood/breath alcohol concentration limit has been shown to reduce the crash risk of young car drivers.

In terms of numbers of motorbike fatal crashes per years licensed, the highest number of fatal crashes occurred in the first year (12 months) of holding any type of motorbike licence. Further examination of the data suggests that inexperience may not be an issue that is unique to younger novice riders. While 17–24 year old riders represented 39% of those involved in fatal crashes in their first year of licensure during 2002–2006, collectively the 30–39 and 40–49 age groups make up 36% of fatal crashes in the first year of licensure¹⁶.

Overall, between 2003 and 2007, the age categories of riders most frequently involved in fatal crashes was the 30–39 year old age group (32%), followed by the 17–24 year old age group (24%)¹⁷.

Queensland data from 2006 shows that per kilometre travelled in Queensland, a motorbike rider is at 44 times the risk of being killed in a crash than a car driver¹⁸.

The main causes of all motorbike crashes between 2003 and 2007 were speed (34%), inattention (24%) and drink riding with an illegal blood/breath alcohol concentration (19%). Seven percent of riders had alcohol present but below the riders' legal limit¹⁹.

Enhanced pillion passenger restrictions

Should an enhanced graduated licensing include a restriction that learner riders cannot carry pillion passengers, including a supervisor?

In this initiative, a pillion passenger is a passenger seated behind the rider on a motorbike.

Currently, learner riders can carry their supervisor as a pillion passenger. However, a motorbike rider is then restricted from carrying a pillion passenger in their first year of solo riding.

The carriage of pillion passengers increases the risk to the rider and pillion passenger and can lead to more severe injuries. The carrying of pillion passengers requires more advanced skills from the rider as a pillion passenger can affect the balance and stability of a motorbike.

As well as maintaining the one year restriction for first year licence holders, learner riders would also be restricted from carrying pillion passengers, including their supervisor.

¹⁵ Mayhew & Simpson (1990), cited in Mayhew & Simpson (2001), Traffic Injury Research Foundation, www.trafficinjuryresearch.com

¹⁶ Queensland Transport (2006).

¹⁷ Data Analysis Unit, Queensland Transport.

¹⁸ Data Analysis Unit, Queensland Transport.

¹⁹ Data Analysis Unit, Queensland Transport.

motorbike jackets, trousers, suits, impact protectors, boots and gloves. The tests examine abrasion, tear, burst and impact resistance.

Motorbike protective gear made for the European market should be marked with a CE label which states that it has been tested and complies with the relevant European Standard.

Reduce the number of people who hold motorbike licences but don't ride a motorbike

Should there be a separate licence fee for a motorbike licence to encourage dormant licence holders to surrender their licence?

There has been a lot of concern about 'returning riders'. It is difficult to determine if this is a real effect or not. These riders may be at greater risk because they have limited recent riding experience. A person who holds a current motorbike licence may be an active rider or may have held onto the licence for a number of years and only recently returned to riding (a 'returned rider'). There has, however, been an upward trend in fatalities among riders 40 years and older, suggesting that the 'returning rider' is a real phenomenon²¹.

The relative ease with which a motorbike licence holder can return to riding may contribute to the increase in older riders. There is no additional cost to a licence holder to maintain the motorbike licence, so many riders may hold the licence for years while not actively riding.

To address this issue, a separate licence fee could be introduced to encourage motorbike

licence holders who are no longer actively riding or planning to ride to surrender their licence. This would be expected to be equivalent to the cost of a current licence product which is approximately \$68 for a five year licence. If a person then chooses to return to riding they would then progress through the graduated licensing system to obtain the appropriate training and experience.

Public education safety campaigns

Should Queensland Transport have specific education campaigns to address motorbike safety?

Promoting safe road behaviours and "share the road" messages might discourage speeding and other risky on-road behaviours.

Public education material could also be developed to support the introduction of an enhanced graduated licensing system and measures to improve the visibility of riders. This could address the needs of both riders and other road users.

The campaign material could focus on enhancing awareness of motorbike riders as vulnerable users sharing the road system. This would be similar to other public education campaigns run to improve road safety, such as those highlighting the dangers of fatigue, speeding and drink driving.

Campaigns trying to raise awareness of motorbike riders amongst other road users have been introduced in other jurisdictions, including internationally and interstate. To date, the impact of these campaigns upon road safety outcomes has not been comprehensively evaluated.

²¹ ATSB, 2002, Monograph 12 – Motorcycle rider age and risk of fatal injury. www.atsb.gov.au/publications/2002/Mcycle_Age_1.aspx

Safer vehicles

Public education material could also be produced to target those that are at greatest risk. This could include:

- occasional riders who accrue low kilometres each year;
- commuter riders who ride in busy, urban traffic contexts; and/or
- recreational riders who ride in rural areas and in off-road contexts.

The Queensland Government recently released a new motorbike safety campaign. This campaign has a dual message for both motorist and motorbike riders to encourage both users to share the road and look out for one another. A dedicated motorbike safety website has also been developed at www.motorbikesafety.qld.gov.au. This website will provide motorbike riders with up-to-date safety information.

The Queensland Government will continue to support the development of motorbike safety education material and will keep looking at ways to improve the safety of all road users.

Motorbikes with advanced safety technology

Should motorbikes be fitted with advanced safety features such as anti-lock and linked braking systems?

Unlike drivers, motorbike riders are not enclosed within a vehicle. Many of the improvements in vehicle technology that protect car occupants are not effective for motorbike riders. However, specific technology to improve motorbike safety is available and motorbike riders should be encouraged to consider the safety features that reduce their crash risk or injury outcome.

Braking is one of the most difficult tasks when riding a motorbike, particularly in emergency situations. Braking errors can easily result in skidding, capsizing or instability. About 13% of single vehicle motorbike fatalities have been related to a braking manoeuvre used during the crash²². The front and rear braking system on motorbikes usually operate separately and the rider has to decide which brake to apply and in what proportion²³. It may be worth investigating technology that improves the braking systems on motorbikes.

Motorbike air bags are another technological innovation. These are designed to reduce rider head and chest injuries if the rider is thrown from the bike in a head-on collision. This technology does not protect riders who are thrown over the bike or are not involved in a head-on collision.

²² The National Highway Traffic Safety Administration, Motorcycle Safety Program www.nhtsa.dot.gov/people/injury/pedbimot/motorcycle/motorcycle03/moto_operational.htm

²³ The Royal Society for the Prevention of Accidents 2006, Motorcycling safety policy paper, http://www.rosipa.com/roadsafety/advice/motorcycling/info/motorcycling_safety_policy_paper_2006.pdf



Should motorbikes run with their front headlight on to improve their visibility?

Another safety initiative could be the use of daytime running lights. Although no longer compulsory, motorbike riders should still consider purchasing motorbikes that have hardwired daytime running lights or be encouraged to choose to ride with their lights on. Current research suggests that motorbikes with daytime running lights are more easily seen than motorbikes without daytime running lights²⁴.

Safer roads and roadsides

Funding specific motorbike safety projects, including additional road infrastructure improvements, through a motorbike safety levy

Should a motorbike safety levy be introduced to fund additional motorbike safety projects, over and above Queensland Government-funded motorbike safety initiatives?

In 2002, the Victorian Government introduced a specific Motorbike Safety Levy to raise funds for specific motorbike safety programs. The Motorcycle Safety Levy was added to the Transport Accident Commission premium on motorbikes with a capacity of 126cc and over and is paid as part of the registration renewal. The levy is linked to the Consumer Price Index and is approximately \$56 per registration.

The motorcycle projects funded from the levy are over and above the annual motorcycle safety programs supported by the Victorian Government²⁵.

The Victorian Motorcycle Advisory Council administers the funds from the levy. It advises the Victorian Government on a range of issues affecting motorbike riders and has a specific role in advising the Government on projects to be funded by the Motorcycle Safety Levy.

The Victorian Motorcycle Advisory Council has representatives from motorbike interest and advocacy groups, user groups, motorbike clubs, retailers, manufacturers and industry groups, rider trainers, and independent researchers. The Council also includes a representative from each of the road safety partner organisations (VicRoads, Victoria Police and the Transport Accident Commission).

If a levy was introduced in Queensland, a similar group could be established to ensure that the money is spent on projects that benefit motorbike riders. The four key project areas that the levy could fund are:

- education and training of riders and other road users;
- engineering improvements and technology;
- enforcement to identify illegal rider behaviour; and
- enhanced data collection and analysis.

The Victorian Levy has resulted in funding or commitments to fund 148 projects, including 123 on-road projects and 25 non-road projects. While most road improvements provide safety benefits by preventing crashes, other measures like safe roadsides and barriers aim to reduce injury severity if a crash occurs.

²⁴ Australian Transport Safety Bureau (2003). CR 218: *Review of the literature on daytime running lights (DRL)*

²⁵ Fotheringham (2007) Proceedings of the Australasian Road Safety Research, Policing and Education Conference. www.roadsafetyconference2007.com.au/finalpapers.php

In Queensland, blackspot road improvements for motorbike riders are currently funded through the Department of Main Roads' Safer Roads Sooner program. Road conditions such as potholes, corrugations, debris, rough surfaces, gravel on corners, limited sight distance, and sharp curves can be more dangerous for motorbikes than for cars. Over 40% of fatal motorbike crashes in Australia are single vehicle crashes²⁶. Treatments such as the removal of dangerous roadside obstacles or replacing roadside objects with more forgiving products will help to reduce the severity of injuries.

Queensland Transport could introduce a levy similar to that in Victoria to fund additional motorbike safety projects. A levy will benefit Queensland motorbike riders by funding specific additional projects to provide riders with safer road conditions.

Safer speeds

Development of new identification methods for better enforcement

Should Queensland Transport consider the use of alternative methods to identify speeding motorbikes for enforcement purposes?

During 2003 to 2007 the major contributing factor associated with motorbike riders involved in fatal

crashes was speeding (34%)²⁷. There are some difficulties in detecting a speeding motorbike which is often attributed to a lack of front number plates. The exemption is based on the concern that a metal plate at the front of a motorbike poses a safety risk to the motorbike rider and other road users should they be involved in a crash.

Queensland Transport recently looked at the suitability of using Radio Frequency Identification Devices (RFIDs) to aid detection of motorbikes for enforcement purposes such as speeding. However, Queensland Transport determined that the Radio Frequency Identification Devices technology currently available does not yet meet Queensland Transport's requirements.

The Victorian Government is developing prototype front identification mechanisms for motorbikes. There are other technologies being developed and trialled to identify vehicles without a front number plate such as dual-lens speed cameras. These cameras take a photo of the front and rear of a vehicle. Technological solutions such as these avoid the safety concerns associated with a front metal plate.

Queensland Transport will continue to monitor these technologies and, if appropriate, consider their implementation.

²⁶ National Road Safety Action Plan 2007–2008, Australian Transport Council. www.atcouncil.gov.au/documents/nrss_actionplan_0708.pdf

²⁷ Data Analysis Unit, Queensland Transport.

Other initiatives

What other initiatives can you think of?

For example:

- a log book requirement during learner training
- rider refresher courses after 5 or 10 years
- mandatory refresher or skills course for 'dormant' riders

We value your input and ideas.

Motorbike safety – feedback sheet

You are invited to use this response sheet to have your say on motorbike safety in Queensland. You should read the consultation paper Motorbike Safety in Queensland before answering these questions. The consultation paper can be found at:

www.transport.qld.gov.au/motorbike_safety

This response form can be completed online at:

www.getinvolved.qld.gov.au/consultqld/index.cfm

Or send to:

Motorbike Safety in Queensland
Queensland Transport
PO Box 673 Fortitude Valley 4006
Fax: (07) 3253 4960

Responses should be received by Friday 30 May 2008.

Submissions will not be returned.

Do you agree, somewhat agree, somewhat disagree, or disagree with the following statements? (please tick only one box for each question)



For further information

Web: www.transport.qld.gov.au/motorbike_safety

Phone: (07) 3253 4910 (during business hours)