

**Submission on bike safety to QLD Parliament Transport, Housing and Local Government Committee Inquiry into Cycling Issues.**

Author and contact:

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This submission to the Inquiry into Cycling Issues is set out under five headings, raising five main issues which are of concern to us. These are legislative as well as engineering issues. The headings used in this submission are:

1. **The green line markings:** a report on the success of painting green sections of bicycle lanes near intersections.
2. **The shoulder lane:** a submission on the growing importance of the shoulder lane (to the left of the solid white line) for bicycle and traffic safety.
3. **The 1-metre rule:** advocacy of the introduction of a 1-metre Law in Queensland
4. **Vulnerable user law:** a request to open discussion on a vulnerable user law following the North American experience.
5. **Bicycle registration:** advocacy for not introducing bicycle registration.

We submit that the use of the shoulder lane by cyclists, the introduction of 1-metre legislation and the advocacy of a vulnerable users law are complementary to each other and are directed towards improving road safety for cyclists and other road users. We advocate against the registration of human-powered devices, including bicycles.

### 1. The Green Lane Markings

The experiment in recent years to mark the bike lane green at the approach to an intersection where there is a left-turn only lane, is a significant contribution to safety for which traffic planners and engineers are to be commended. The green lane alerts drivers to its existence and provides added security for the cyclist on a straight through path. Figure 1 is a photo of an effective green lane marking.

We submit that the green lane marking should be used in all future urban road improvements where a left-turn only lane is defined.

### 2. The Shoulder 'Lane'

Over recent decades the shoulder to the left of the solid white line has become increasingly used by cyclists. It is the de facto bike lane even when it is not marked as such. The use of the shoulder is accepted by most cyclists and other users but road engineering has lagged behind the common usage. There is a need to revise the planning

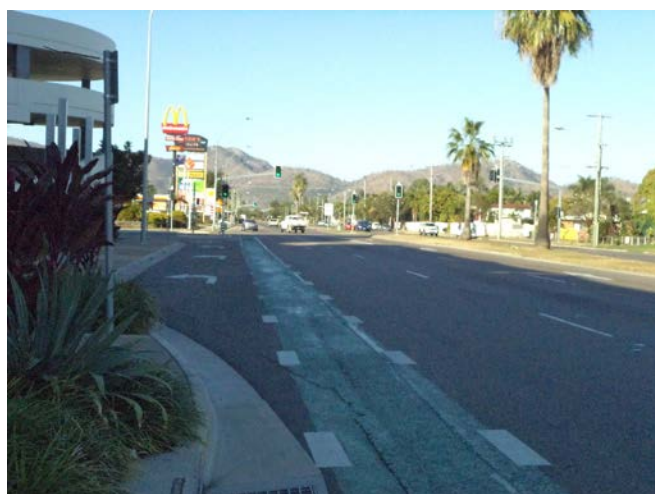


Figure 1. Photo travelling south on Nathan Street at the intersection with Alfred Street.

and construction guidelines for the road shoulder in urban and country areas in Queensland.

One of the problems and potential danger areas is the abrupt ending of the shoulder lane where the cyclist has to move into the left traffic lane. While it is noted that the cyclist must give way to traffic already in the lane, there is an increased risk because of the change in conditions: drivers have been travelling in a cycle-free lane and now have the cycle traffic to contend with, and have to make decisions about overtaking.

This is exacerbated in some cases where the left side of the lane is bounded by a kerb, as illustrated in Fig. 2. In this case the traffic veer left to follow the left lane into the roundabout. There is a tendency for cars and trucks (particularly large vehicles) to cut close to the kerb, and if they are overtaking a cyclist at that point there is nowhere for the cyclist to go.

This structure with a bike lane ending abruptly with a kerb, coupled with a left veer in the traffic lane is not uncommon. The cost to construct this concrete and kerb obstacle would be greater than the cost to guide traffic with painted lines. This problem is sufficiently acute that a directive should be issued by the Department to systematically remove these hazards where they presently occur.

An example of improved engineering is shown in Figure 3 where the solid line which defines the bike lane, stops at the entry to the roundabout but it provides the cyclist with a pathway into the roundabout without having to manoeuvre into the traffic lane. This construction retains the responsibility of the cyclist to give way to traffic leaving the roundabout, while avoiding the need for the dangerous manoeuvre to the right that is required in the situation shown in Figure 2.

We submit that in such cases the shoulder lane should be continued through the roundabout (or intersection, or chicane) as a broken line.



Figure 2. Photo travelling south on Thuringowa Drive at the intersection with Hinchinbrook Drive, Townsville.



Figure 3. Photo travelling east on Mervyn Crossman Drive at the first intersection with Murray Lyons Crescent.

As stated above, the shoulder has become the de facto bike lane. We submit that this should be acknowledged in guidelines for road re-alignment and construction. This would mean that full consideration would be given to continuity of the shoulder lane. We submit that this should apply to all roads, urban and regional. Figure 4 is a photo on a new section of Dalrymple Road in Townsville where the road construction has produced a hazard for cyclists using the shoulder at an exit road from a shopping car park. It appears that the road design is focussed on discouraging traffic to make an illegal left turn into the exit-only lane. In doing so the use of the shoulder lane by cyclists is compromised.



Figure 4. Photo travelling west on Woolcock Street between Hugh Street and Dalrymple Road.

We note the summary comment in the Rutgers Report (The 3ft. Law: Lessons learned from a National Analysis of State Policies and Expert Interviews, Charles Brown, Rutgers University, New Jersey, February 2013) (hereafter referred to as the Rutgers Report) that some cycling advocates who opposed the 3 ft (1 m) Law in the USA, based their case to some extent on opposing the use of the shoulder lane. They were reported as saying:

*Finally, policies should move away from delineating specific sections of the road where bicycles and cars belong. Operators of both vehicles need to become more comfortable sharing this space together. The 3 Foot Law encourages the cyclist to ride to the shoulder under most circumstances. It reinforces in the motorist that this is where the bike belongs. In many situations this is simply not true—the cyclist is safer sharing the whole lane with the car. Narrowing roadways and reducing speeds is the most effective way to create conditions where motorists and cyclists learn to interact in a safe manner. The 3 Foot Law perpetuates the outdated American tradition of separating users and narrowly defining where different types of vehicles belong. Cyclists in the U.S. will not be truly safe and respected on the nation’s roadways until motorists and cyclists learn to interact with each other in a safe and mutually respectful way. This can only be done through policy that encourages their interaction, not separation.*

We submit that this argument has less traction in Australian road usage where there is increasing acceptance of the use of the shoulder lane by cyclists and we advocate improving the quality of that facility. We submit that the improvement of the shoulder lane complements the efficacy of the 1 m Rule.

### **3. The 1 metre Rule**

There is now a depth of experience with legislation for a safe passing distance and in Queensland this has distilled into advocacy for the 1 metre Rule, whereby motorists are obligated to allow at least 1 metre of separation when overtaking a cyclist.

The Rutgers Report, commissioned by the Department of Transportation, New Jersey reviews the introduction of the so-called 3 ft. Law in 20 states in the USA and evaluates the effectiveness of the legislation.

The report concludes that the value of the legislation is not so much in enforcement and penalties to motorists as it is in education and awareness of the shared road. The effectiveness of the 3 ft. Law is

therefore difficult to evaluate numerically or statistically and the evaluations are made by interviews and surveys of community stakeholders, police, administrators and advocates. There is a broad consensus that the 3 ft. Law, where it has been introduced, is an effective basis for education and awareness. This summary suggests that the introduction of a 1 m Law in Queensland would need to be accompanied by an appropriate budget for an awareness and education campaign.

All 20 states in the USA which have introduced a 3 ft. Law experienced small degrees of opposition during the legislation process. Opposition was raised/lobbied in some cases by the trucking and insurance industries, mainly on the grounds of increased responsibility and economic effects on those industries. Opposition was also expressed by some cycling advocacy groups, based mainly on the argument that specifying 3 ft. as a minimum requirement would discourage drivers to exercise judgement when a safe passing distance might be 4 or 5 ft. Other voices insisted that 3 ft. would be safe at low speeds but an increased distance is required at high passing speeds. The State of New Hampshire introduced the wording:

*Every driver of a vehicle, when approaching a bicyclist, shall insure the safety and protection of the bicyclist and shall exercise due care by leaving a reasonable and prudent distance between the vehicle and the bicycle. The distance shall be presumed to be reasonable and prudent if it is at least 3 feet when the vehicle is traveling at 30 miles per hour or less, with one additional foot of clearance required for every 10 miles per hour above 30 miles per hour.*

The Rutgers Report recommends the New Hampshire template for any legislatures considering similar legislation.

We endorse the introduction of a 1 m Law for Queensland as an educational tool as well as an enforcement tool. We acknowledge the need for increased passing distance at higher speeds, but avoiding the complication of the sliding scale used in New Hampshire. We recommend a draft Law which includes two speed categories and following the New Hampshire template we recommend:

*Every driver of a vehicle, when approaching a bicyclist travelling in the same direction, shall insure the safety and protection of the bicyclist and shall exercise due care by leaving a reasonable and prudent distance between the vehicle and the bicycle. The distance shall be presumed to be reasonable and prudent if it is at least 1 metre when the speed zone is 70 kilometres per hour or less, and at least 1.5 metres when the speed zone exceeds 70 kilometres per hour.*

This Law will provide a tangible cushion that cyclists can rely on, and acts as clear guidance to motorists on how they should pass a cyclist safely. The intended result is more cyclists on the roadways and an increased number of positive interactions between them and educated motorists.

#### **4. Vulnerable User Law**

We recommend that the QLD Parliament Transport, Housing and Local Government Committee opens community discussion on the desirability of a Vulnerable User Law.

The Rutgers Report recognised that the main benefit of a 3 ft. Law is in education and awareness, and not in enforcement. To support the 3 ft. Law, the report recommends that a Vulnerable User Law be considered to provide a wider context with a higher level of enforceability to complement the 3 ft. Law. The relevant section of the Rutgers Report is:

*The purpose of the Vulnerable User Law is to increase the legal penalties for drivers found guilty of inattentive driving that results in the injury or death of a vulnerable user. The Vulnerable User Law is designed to protect the safety and rights of bicyclists, as well as pedestrians. The Tri-State Transportation organization describes the Vulnerable User law as a middle ground between charges*

*of negligent homicide and a traffic citation. Implementing a Vulnerable User Law can create a new traffic offense (often termed Careless Driving) or stipulate other penalties such as the suspension of drivers' license. In states that have previously enacted a Careless Driving Law, the Vulnerable User Law could expand upon existing legislation.*

*The Vulnerable User Law was first passed in Oregon, taking effect January 1, 2008. Oregon House Bill 3314, titled Careless Driving Penalties, modified the existing Careless Driving statute (ORS 811.135) by expanding penalties and creating a new statute (ORS 801.608) that defined a vulnerable user. Under Oregon's statute, a vulnerable user is defined as "a pedestrian, a highway worker, a person riding an animal, the operator or user of a farm tractor, a skateboard, roller skates, in-line skates, a scooter, or a bicycle." The statute stipulates the following penalties: the completion of a traffic safety course, 100 to 200 hours of community service, a fine of up to \$12,500, and the suspension of driving privileges for one year.*

The Vulnerable User Law had been introduced in 5 US states at the time of the Rutgers Report, and was being considered in a further 10. We are not aware of any similar law being advocated or considered in Queensland, and we would like to introduce discussion, debate and awareness of the Vulnerable User Law.

## **5. Bicycle Registration Issues**

We advocate that bicycle registration not be introduced in Queensland. We submit that registration be retained for motorised vehicles or vehicles towed by a motorised vehicle, but not for human-powered vehicles and devices. Registration may include motor-assisted bicycles, segways and the like, but would exclude bicycles, skateboards, roller blades and pogo sticks by virtue of their being human powered. The simple criterion of human-power provides a clear demarcation for education, awareness and efficacy of legislation; and is in harmony with the community cost and effort being applied to fitness and health.

A second objection to registration of bicycles is that the administrative cost to implement and regulate bicycle registration would significantly reduce the real financial benefits towards roads and infrastructure.

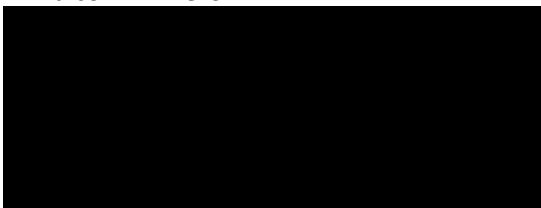
Thirdly, such legislation would most likely encounter community opposition with all cyclists including young children who are using bicycles in cul de sacs and urban bike tracks being affected.

The advantages of registration lie in the direct financial contribution that cyclists would make; and the ease of identification and reporting on cyclists who violate the laws. We advocate that these considerations are easily outweighed by the advantages of promoting an active and healthy community.

## **Appendix**

List of people who endorse this submission.

Malcolm L. Heron



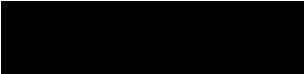
Scott F. Heron



Aaron Green



Desleigh Sinardi



Tania Bernhardt



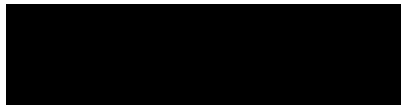
Bruce Shephard



Daniel Atwater,



Tracey O'Shea



Marianne Webb



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