

The Research Director
Transport, Housing and Local Government Committee
Parliament House
George Street
Brisbane QLD 4000

Submitted via email to: thlgc@parliament.qld.gov.au

SUBMISSION TO INQUIRY INTO CYCLING ISSUES

Introduction

I provide this submission which is generated from my use and experience of roads from a number of perspectives. As an athlete who has completed triathlon to Ironman distance and a coach of many beginners, I frequently cycle on local roads and highways. As a driver I use these same roads for business and private travel. In my professional employment as a Chartered Professional Engineer and project manager, I engage in road infrastructure projects. Hence I have experience of roads and road use from a range of perspectives.

My submission below addresses the following points:

- Background to Submission;
- Short and long term trends in bicycle injuries and fatalities involving motor vehicles;
- Evaluation, considering factors such as effectiveness, enforceability and impacts on other road users of existing and any other alternative road rules, such as the 1m rule, which govern interaction between cyclists and other road users;
- Current penalties and sanctions, including where there are differential fine rates for cyclists compared to other road users;
- The potential benefits and impacts of bicycle registration; and
- Summary

Background to Submission

I choose to live in Townsville, North Queensland. Part of the reason for this choice is that the weather conditions are highly suitable for outdoor training including running and cycling. The North Queensland and Far North Queensland regions host a large number of events involving cyclists ranging from social events to international events. Townsville has recently been chosen to host an international triathlon in 2014 and is home to many international-level cyclists and triathletes. Cairns hosts a number of events, including Ironman Cairns which attracts World Champion athletes and many participants from Australia and around the world. The annual Townsville to Cairns bike ride raises significant funds for Children's Cancer Institute of Australia¹. Participants for these events, including many beginner-level cyclists, cycle on roads in preparation. Unfortunately, Townsville and Cairns have both recently experienced tragic road deaths of cyclists, with significant emotional impacts on sporting clubs and the wider community.

Whilst the Queensland road rules clearly state that cyclists are legitimate road users², there would appear to be a significant lack of understanding of the road rules, in particular in relation to cyclists, based on the 'comments' posted in relation to many media articles in relation to cycling³⁴.

Cycling is one of many forms of exercise promoted by Government to provide benefits for health, the environment, infrastructure spending and the community. A brief summary of the benefits of cycling is provided in the Queensland Department of Transport and Main Roads (TMR) presentation to the inquiry⁵. Further benefits are detailed in the Tabled Papers 'Australian National Cycling Strategy 2011-16'⁶ and Queensland Cycle Strategy 2011-2021'⁷ and the TMR website⁸. Further information in relation to the benefits of cycling is available from the Cycling Promotion fund website⁹.

Passing of appropriate laws, supported by education, information and, where required, enforcement has the potential to significantly improve road safety for cyclists. This provides benefit not only for the cycling participants, but also for the wider community. Passing of these laws will assist in achieving the the Queensland Government's cycling vision of:

"more cycling more often on safe, direct and connected routes" 10

My submission below addresses the specific Terms of Reference of the Inquiry.

http://tcbr.org.au/t2c/index.php?option=com_content&view=article&id=75&Itemid=114

http://www.tmr.qld.gov.au/Travel-and-transport/Cycling/Bike-user-guide/Road-rules-for-cyclists.aspx

http://www.goldcoast.com.au/article/2013/05/13/451753_gold-coast-lead-story.html

http://www.tmr.qld.gov.au/Travel-and-transport/Cycling/Benefits.aspx

http://www.tmr.qld.gov.au/Travel-and-transport/Cycling/Strategy.aspx

¹ Townsville to Cairns Bike Ride

² Ricycle Road Rules

³ Cairns Post website http://www.cairns.com.au/article/2013/05/31/243169 local-news.html

⁴ goldcoast.com.au

⁵ Tabled Paper - Presentation by the Department of Transport and Main Roads, p 9

 $^{^{\}rm 6}$ Tabled Paper - Australian National Cycling Strategy 2011-16

⁷ Tabled Paper - Queensland Cycle Strategy 2011-2021

⁸ Cycling benefits

⁹ www.cyclingpromotion.com.au

¹⁰ Queensland Cycle Strategy 2011-2021

Short and long term trends in bicycle injuries and fatalities involving motor vehicles

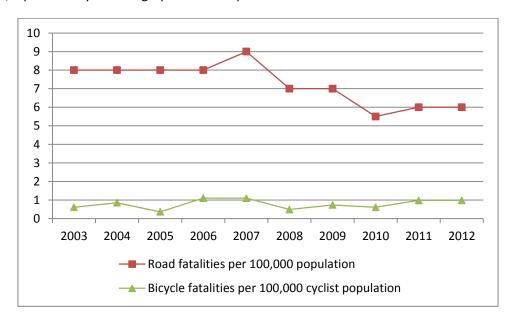
The statistics provided by the Queensland Department of Transport and Main Roads (TMR) show that while Queensland has the second-lowest cycling participation rate of Australian States and Territories¹¹, Queensland consistently has the second-highest number of annual cycling fatalities¹².

The 2011 National Cycling Participation Survey¹³ as reference in the TMR presentation shows that Queensland has the second-lowest cycling participation rate at 17.9%, with the third highest number of riders. The survey also shows that Queensland has the fourth-lowest rate of cycling for transport, with second highest number of riders for transport.

The graph provided by TMR for 'Bicycle Fatalities by Jurisdiction' shows fatality statistics from 2003-2012¹⁴. Queensland has the second highest number of fatalities in the years 2003, 2004, 2006, 2007, 2009 & 2011. Queensland has the third highest number of fatalities in the years 2005, 2008 & 2010. Queensland has the un-enviable statistic of the highest number of fatalities in 2012.

A detailed analysis of the statistics in terms of fatalities as a percentage of the Queensland population or as a percentage of numbers of participants is beyond the scope of this submission as additional information and statistics are required. However, from the information provided to the inquiry, some trends have been identified that warrant further investigation.

The graph shown on page 11 of the TMR presentation, 'Comparison of Queensland road toll and bicycle fatalities per 100,000 population', shows the number of road fatalities and the number of cycling fatalities per 100,000 people in the Queensland population. The number of cyclist fatalities would appear to be a small proportion. Given that <20% of the overall population are cyclists, it is appropriate to review the fatality rate of the cyclist population to provide a fair and valid statistic. To this end, a preliminary revised graph has been provided.



 $^{^{11}}$ Tabled Paper - Presentation by the Department of Transport and Main Roads,p 4

 $http://www.austroads.com.au/abc/images/pdf/NCP2011_National_2.pdf$

 $^{^{12}}$ Tabled Paper - Presentation by the Department of Transport and Main Roads,p 13

¹³ 2011 National Cycling Participation Survey

¹⁴ Tabled Paper - Presentation by the Department of Transport and Main Roads,p 13

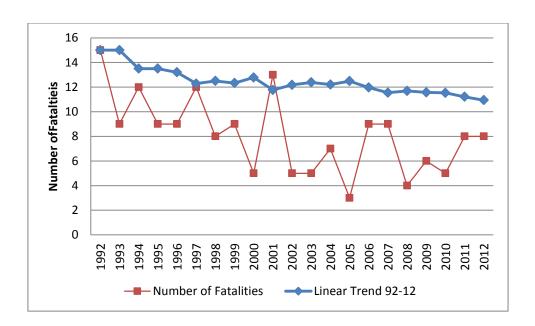
This revised graph shows that the number of cycle fatalities per 100,000 *of cyclist population* is much higher than when cyclist fatalities are considered in terms of the overall population. The preparation of this graph does include some limiting assumptions from the information provided¹⁵.

The Deputy Director-General, Customer Services, Safety and Regulation of the Department of Transport and Main Roads, Mr Graham Fraine, in his briefing information notes suggested that 'What we would ideally also show is a measure of exposure by vehicle kilometres travelled'¹⁶. To expand on this point, it is highly likely that there are many more trips and many more hours and kilometres travelled in motorised vehicles. Hence, when considering the usage of cycling, the fatality statistic as a function of kilometres travelled would likely be significantly higher for cyclists and lower for the overall road toll.

The other statistical graph of note for further analysis is the graph on page 10 of the TMR presentation 'Cycling: Fatality data'. This graph presents 'Bicyclist fatalities as a result of reported road traffic crashes involving motor vehicles, Queensland, 1 January 1986 to 30 April 2013'. In the briefing information, Mr Fraine states that:

"The figures there demonstrate a downward trend that certainly has been occurring over time in terms of those fatalities." 17

I submit that this assessment of the trend over time is flawed. Whilst the linear trend line from 1986-2012 is downward, this includes the time period preceding the implementation of compulsory helmet laws. A revised graph showing the statistics from 1992-2012 is provided.



¹⁵ Assumes constant cyclist population using 2011 figure. As cyclist population probably increases over time, possibly presents flatter line than may be available with more accurate stats. Assumes 100% of QLD population engage in road use. Has rounded figures for overall road toll per 100,000.

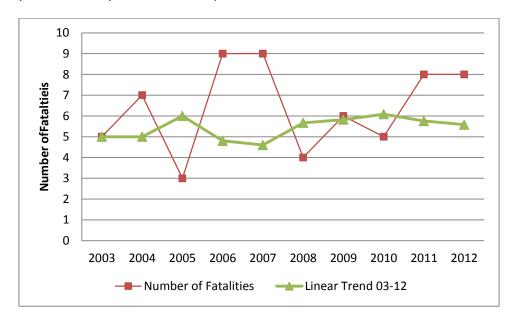
-

¹⁶ Fraine, Transcript - PROOF Transcript Public Departmental Briefing, p 5

¹⁷ Fraine, Transcript - PROOF Transcript Public Departmental Briefing, p5

From this revised graph, it can be seen that the trend line, whilst still downward, is much flatter. The trend line remains a relatively high number.

A further revised graph, showing the statistics from 2003-2012, to match the time period of the graph 'Bicycle fatalities by Jurisdiction' is provided.



This trend line is much flatter, with a slight increase in the later years. This analysis of the more recent information would appear to show that Queensland is actually experiencing in increase in cyclist fatalities.

Cycling crash statistics for Townsville from 2005-2009¹⁹ show that the majority of incidents occur during the commuting hours, with a relatively even spread of incidents on local and state-controlled roads. The statistics provided in the 'Response to Questions on Notice - Department of Transport and Main Roads' show few child fatalities²⁰. The National Cycle Survey statistics show that of those who cycle in Queensland, 69% are cycling for recreation and 18% for commuting²¹. There would seem to an uneven correlation between the purpose of cycling and the timing of incidents. Unfortunately these statistics do not include sufficient data to correlate the consequence of the incident with timing, location or cause.

Further, these statistics do not provide a violation for vehicles passing cyclists too close, so it is difficult to attribute consequences to close passing. The statistics provided in the 'Response to Questions on Notice - Department of Transport and Main Roads' show statistics for incidents with 'crash nature' descriptions including angle, rear-end, and sideswipe²². Any of these could be the result of close overtaking, and it is difficult to provide further analysis without better understanding of the definition of these terms.

http://www.austroads.com.au/abc/images/pdf/NCP2011 QLD.pdf

 $^{^{18}}$ Tabled Paper - Presentation by the Department of Transport and Main Roads,p 13

¹⁹ As provided by Townsville Bicycle User Group

 $^{^{20}}$ Response to Questions on Notice - Department of Transport and Main Roads, p 1

²¹ 2011 National Cycling Participation Survey

²² Response to Questions on Notice - Department of Transport and Main Roads, p 3

By contrast, the 2006 Australian Transport Safety Bureau (ATSB) Study 'Deaths of Cyclists Due to Road Crashes' demonstrates that there is research and research methodology available for the reporting of overtaking incidents. The ATSB report found that:

"The most common type of crash in which cyclists were fatally injured was the cyclist being hit from behind by a motor vehicle travelling in the same lane in the same direction."²³

North Queensland has had at least three cycling fatalities in 2012-2013, with these generally understood to be related to passing as opposed to an intersection violation. As some of these remain under investigation, no further comment shall be made on these particular incidents.

A specific analysis of the Queensland cycling fatality statistics shows that despite improvements in vehicle and road safety, the fatality rate for cyclists has remained fairly constant for the previous 10 years.

I request the following:

• Further analysis of the cyclist fatality statistics over the previous 10 year period; and

• That the committee request further clarification in relation to the nature of incidents as they relate to the potential for changes to road rules, with particular attention to incidents that may relate to overtaking.

6

²³ 2006, ATSB, 'Deaths of Cyclists Due to Road Crashes' http://www.infrastructure.gov.au/roads/safety/publications/2006/pdf/death_cyclists_road.pdf

Evaluation, considering factors such as effectiveness, enforceability and impacts on other road users of existing and any other alternative road rules, such as the 1m rule, which govern interaction between cyclists and other road users

I support the introduction of a road rule mandating a minimum 1 metre safe passing distance.

I support the introduction of appropriate laws and penalties for drivers who cause serious injury or death to cyclists through breach of safe passing distance. I also support this being incorporated into a 'vulnerable road user' law that also protects pedestrians and road construction workers. Being far from an expert in the field of law, I shall not speculate on the specifics, however I understand that proposals have been made in other submissions to the inquiry.

In relation to the current laws, the circumstances of the recent case where cement truck driver Luke Stevens was acquitted of the charge of dangerous driving causing death have been the subject of many media articles and much debate over the adequacy of the current laws. ²⁴²⁵²⁶ Indeed, this case may have been one of the main contributors to the establishment of the inquiry.

The information provided by Chief Superintendent Dale Pointon to the Public Briefing to the Transport, Housing and Local Government Committee, included as part of a response to a question from Ms J Trad MP:

"There certainly have been some difficulties in recent cases with sustaining prosecutions." 27

Whilst it is unknown whether Chief Superintendent Pointon was referring to the Stevens case, it is clear from the information provided that without a clear definition of a safe passing distance, there will be continual issues both on the road and in the courts. By contrast, with reference to the proposed 1 metre rule, Chief Superintendent Pointon's response includes:

"If you think about it, if there is a crash of some sort, clearly they impinged upon that one metre."²⁸

The enforcement of the law may still pose some challenges. Far from expecting Police members to be actively patrolling for breaches, the law provides for enforcement action for proven breaches, whether they be from police observation, video evidence or, in the worst case, from the investigation of a serious incident.

What the law does provide is further enhancement of the status of cyclists as legitimate road users and further awareness for motorists of the minimum safe passing distance. Again quoting Chief Superintendent Pointon:

²⁴ http://www.goldcoast.com.au/article/2013/05/13/451753_gold-coast-lead-story.html

²⁵ http://blogs.crikey.com.au/theurbanist/2013/07/20/are-cyclists-mere-obstacles-a-rejoinder/

²⁶ http://www.theaustralian.com.au/news/cement-truck-driver-luke-stevens-found-not-guilty-over-death-of-cyclist-richard-pollett/story-e6frg6n6-1226635894242

²⁷ Pointon, Transcript - PROOF Transcript Public Departmental Briefing, p 11

²⁸ Pointon, Transcript - PROOF Transcript Public Departmental Briefing, p 8

"Of course, at the same time you could say that the one-metre rule then does give a clear guideline to members of the public who drive motor vehicles of how far you should be away."²⁹

The enhancements to safety are further supported in the briefing information provided by the Deputy Director-General, Customer Services, Safety and Regulation of the Department of Transport and Main Roads, Mr Graham Fraine. Mr Fraine's briefing information includes a review of the Tabled Paper 'the 3 Ft Law', in which he notes that:

"What you will see when you look at that report is that it goes through and looks at some of the benefits and some of the perceived challenges in how they have introduced the rules in those particular areas. In terms of benefits, it seems to certainly demonstrate some benefits around providing an increased deterrence for unsafe overtaking. It certainly provided what seems to be an initial high level with some level of ongoing education for road users"³⁰

From review of comments provided in relation to articles promoting changes for cycling safety, the 'Comments' generally include many comments that demonstrate either a lack of understanding of the road rules and/or a deliberate malice towards cyclists³¹³²³³³⁴³⁵. Some of these comments are posted in relation to articles with respect to potential change in the law which is the subject of the inquiry³⁶.

Hence education and awareness must be a key element of introduction of any law changes. Government information to promote the new laws and confirm that cyclists are legitimate road users is required to provide education to current road users. The introduction of the 1 metre rule, coupled with information, education and awareness, will provide much improved road safety.

"I think, again, what you will see when you read the report is that those jurisdictions that have continued to promote the rule in a public education sense are those where it seems to have worked better, rather than an initial 'bang' and then not a lot. It also talks about a flow-on effect for review—that it increases the perception amongst the broader public that cyclists are legitimate road users. Those seem to be the three things that have come out of it in a positive sense."³⁷

The education process, as described by Mr Fraine, is essential for effective implementation of the 1 metre rule. The education process, in conjunction with the implementation of the 1 metre rule, will also lead to increasing acceptance of cyclists as legitimate road users, as described by Mr Fraine and

http://www.cairns.com.au/article/2013/05/31/243169 local-news.html

²⁹ Pointon, Transcript - PROOF Transcript Public Departmental Briefing, p 11

 $^{^{}m 30}$ Fraine, Transcript - PROOF Transcript Public Departmental Briefing, p 7

³¹ Cairns Post website

³² http://www.goldcoast.com.au/article/2013/05/13/451753_gold-coast-lead-story.html

³³ http://www.townsvillebulletin.com.au/article/2011/03/10/214111_news.html

³⁴ http://www.townsvillebulletin.com.au/article/2013/07/22/385891_news.html

³⁵ http://www.townsvillebulletin.com.au/article/2013/07/02/384691_news.html

³⁶ http://www.townsvillebulletin.com.au/article/2013/06/29/384580_news.html

³⁷ Fraine, Transcript - PROOF Transcript Public Departmental Briefing, p 7

Chief Superintendent Pointon. This increasing acceptance will provide improved road safety for cyclists and the potential for increased road courtesy for and from all road users.

Anecdotal evidence reports³⁸ that the Queensland Learner Driver test does not have any questions in relation to the road rules for interaction between drivers and cyclists. Providing additional driver education in relation to interaction with cyclists is required at the learner-driver stage to create generational change which will provide a sustainable future transport situation.

I note that the documents submitted to the inquiry by TMR³⁹ include an extract from the Austroads Guide to Road Design which shows that the recommended safe passing distance increases with speed to 2.0m for a truck travelling at 100 km/h when passing a cyclist⁴⁰. I also note that some other submissions to the inquiry have recommended a variable passing distance, based on road speed. I submit that the implementation of a 1 metre rule in the short term provides an immediate benefit and valuable enhancement to road safety. A constant distance is simpler to understand and implement. Further consideration in relation to variable passing distances, rolling stop laws and the like can be the subject of continuous improvement, rather than a delay to implementation of an effective rule.

I request the following:

- A 1 metre minimum safe passing distance between cyclists and vehicles be introduced as a road rule;
- The introduction of appropriate laws and penalties for drivers who cause serious injury or death to cyclists through breach of safe passing distances;
- That the committee review the specifics of the Pollet case and the potential for successful prosecution through the implementation of appropriate laws as part of their inquiry; and
- A comprehensive and permanent education and awareness campaign to both educate drivers on the legitimacy of cyclists as road users and the road rules regarding cyclists, as well as cyclists on safe cycling such as using lights, etc.

9

³⁸ From Facebook discussion pages

 $^{^{}m 39}$ Tabled Paper - Presentation by the Department of Transport and Main Roads,p 18

⁴⁰ Austroads Guide to Road Design Part 3

Current penalties and sanctions, including where there are differential fine rates for cyclists compared to other road users

I support the standardisation of fine rates for cyclists and drivers for the following reasons:

- It is fair and reasonable that if I expect the same rights and privileges as a legitimate road user to apply whether I am cycling or driving, that I accept the same fine rate to apply to offences
- Fines apply to those who commit offences. Fines are hence a disincentive to poor conduct, not a disincentive to road use.
- Standardising the fine rates will reduce the perceived differences between cyclists and drivers, hence reducing a point of tension and argument and aiding the potential for increased understanding of cyclists as legitimate road users.

I request the following:

- Fine rates for cyclists and motorists be standardised; and
- A comprehensive education and awareness campaign be development and implemented to ensure cyclist awareness of penalties.

The potential benefits and impacts of bicycle registration

I submit that the cost and administrative burden of bicycle registration will far outweigh the potential benefits. Bicycle registration would also provide a disincentive to cycling which runs counter to Government policy objectives for health and sustainable transport.

RACQ, Queensland's peak motoring body, does not support registration for cyclists. The Frequently Asked Question section of their website includes the below:

"As many children have bicycles and some adults have multiple bicycles, any registration scheme would be complex and costly to administer and enforce. The additional red tape would result in little if any revenue benefit."

Statistics published by the Cycling Promotion Fund⁴² reference research from 2001 showing that the annual Road System Cost was \$7.0 million⁴³ and the income derived from Annual Registration Fees was \$3.8 million⁴⁴. These statistics clearly show that there is a deficit between the income from registration fees and the cost of road infrastructure.

The statistics also show that additional income of \$8.5 million was derived from fuel excises 45. Fuel excise provides a user-pays model for generating income for road infrastructure.

Of note, it is common engineering knowledge that heavier vehicles provide the greatest load on roads and the greatest wear-and-tear damage. Cycling provides relatively insignificant wear-and-tear on roads and the Northern Territory Government Department of Transport website quotes Australian Bicycle Council research stating that:

"For every car trip replaced with a bike ride, it is estimated the community saves 60 cents per kilometre because of reduced road maintenance costs." 46

Some promoters of bicycle registration may point out that the additional cost for wider shoulders, bike lanes, road markings etc is attributable to cyclists and hence should be funded from bicycle registration fees. In response to this, the following engineering advice is provided:

- Stopping sight distance. Wider shoulders provide greater sight distance for drivers. This is
 especially relevant for rural roads where kangaroo and other fauna may cross the road.
 Better vision is good for all road users.
- Pull over areas. Wider shoulders provide greater safety for drivers required to pull over for tyre repairs or kangaroo/bird strikes which are common on rural roads and Highways.

-

⁴¹ RACO website

 $http://www.racq.com.au/about_us/community/road_safety/sharing_the_road_with_cyclists/cycling_frequent\\ Iy_asked_questions$

⁴² 2007, 'Cycling Issue Sheet 05, Bicycles belong on the road, Registration free' www.cyclingpromotion.com.au ⁴³ 2007, 'Cycling Issue Sheet 05, Bicycles belong on the road, Registration free' www.cyclingpromotion.com.au

^{44 2007, &#}x27;Cycling Issue Sheet 05, Bicycles belong on the road, Registration free' www.cyclingpromotion.com.au

⁴⁵ 2007, 'Cycling Issue Sheet 05, Bicycles belong on the road, Registration free' www.cyclingpromotion.com.au

⁴⁶ NT Government Department of Transport website

- Predictable riding. General courtesy calls for cyclists to ride in a predictable manner. Wide, defect-free road shoulders and bicycle lanes enable greater predictability from cyclists, enhancing safety for all road users.
- Reduced maintenance over the long term. Wider shoulders provide a wider wearing course
 of pavement, which provides greater protection for the road base, subbase and subgrade in
 the main traffic lanes. Wider shoulders hence provide reduced maintenance costs over the
 life of the pavement, enabling greater spending on safety upgrades
- Traffic congestion. Opponents of the 1 metre rule include the comment that on narrow roads vehicles will have to slow to overtake, particularly if there are vehicles travelling in the opposite direction. Provision of bicycle infrastructure would reduce this congestion, again providing benefit for all road users.

The marginal additional cost for wider shoulders, bike lanes, bikeways etc provides for less congestion when driving and hence provides a better transport experience for all road users. Costs for bikeways and other infrastructure should also be assessed in terms of health policy and benefits, for which there is sufficient research elsewhere.

Hence it is submitted that the additional revenue derived from bicycle registration, if any remains after administrative costs, would be insufficient for road infrastructure costs, and the current user-pays model whereby fuel excise contributes the majority of the revenue for road infrastructure should remain.

I request the following:

- Bicycle registration is not considered further; and
- The current user-pays model whereby fuel excise contributes the majority of the revenue for road infrastructure should remain.

Summary

The statistics provided by TMR show that while Queensland has the second-lowest cycling participation rate of Australian States and Territories, Queensland frequently has the second-highest number of annual cycling fatalities. The statistics also show that the fatality rate has remained fairly constant over the previous 10 years.

In summary:

- 1. I request further analysis of the cyclist fatality statistics over the previous 10 year period.
- I suggest that the committee request further clarification in relation to the nature of
 incidents as they relate to the potential for changes to road rules, with particular attention
 to incidents that may relate to overtaking.
- I support the introduction of a road rule mandating a minimum 1 metre safe passing distance.
- 4. I support the introduction of appropriate laws and penalties for drivers who cause serious injury or death to cyclists through breach of safe passing distance. I also support this being incorporated into a 'vulnerable road user' law that also protects pedestrians and road construction workers.
- 5. I submit that education and awareness must be a key element of introduction of any law changes. Providing additional driver education in relation to interaction with cyclists is required at the learner-driver stage to create generational change and additional Government information to promote the new laws and confirm that cyclists are legitimate road users is required to provide education to current road users.
- I support the standardisation of fines as part of a larger process for increased understanding
 of cyclists as legitimate road users. This process will require further education and
 awareness as noted above in relation to road rules.
- I submit that the cost and administrative burden of bicycle registration will far outweigh the
 potential benefits. Bicycle registration would also provide a disincentive to cycling which
 runs counter to Government policy objectives for health and sustainable transport.
- 8. I submit that the additional revenue derived from bicycle registration, if any remains after administrative costs, would be insufficient for road infrastructure costs, and the current user-pays model whereby fuel excise contributes the majority of the revenue for road infrastructure should remain.

Thank you for taking the time to read my submission,

Stuart Munro

MBA BE (Civil) (Hons) MIEAust CPEng