



**ROAD TRANSPORT FORUM NEW ZEALAND INC
SUBMISSION ON:**

**Recommendations of New Zealand Cycling Safety
Panel**

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SUBMISSION BY ROAD TRANSPORT FORUM NEW ZEALAND ON SAFER CYCLING RECOMMENDATIONS

1.0 INTRODUCTION

- 1.1 Road Transport Forum (NZ) is the peak body representing the road freight industry in New Zealand.
- 1.2 Collectively our member Associations, National Road Carriers (NRC), Road Transport Associations N.Z. (RTANZ) and New Zealand Trucking (NZT) comprise some 80% of all road transport operators engaged in providing "hire and reward" freight services.
- 1.3 These services include the full range of freight activities and are carried out by commercial enterprises ranging from single truck, owner drivers to large multi-national logistics companies.
- 1.4 Road Transport Forum NZ actively promotes cycling safety initiatives. We continue to be involved with a wide range of cycling safety projects including:
 - Development and implementation of the Cycle Tour Operators of New Zealand cyclist/truck road protocol
 - Development and assistance with the Safety Tips for Cyclists, truck and bus drivers in conjunction with the New Zealand Transport Agency
 - The development and continued support of cycle and truck driver Road User workshops and demonstrations
- 1.5 Our objectives are to improve road safety for all road users and to optimise freight transport productivity and efficiency. These three goals can be balanced in a way that is realistic, achievable and measurable.

2.0 General Comments on the discussion document

- 2.1 The “Safer Journeys for People who Cycle” discussion document lacks balance. While the recommendations are intended to improve cyclist safety those relating to heavy freight transport are extremely biased and inappropriate. This reflects the panel’s composition with no input from an HMV perspective and an extremely cycle-centre focus.
- 2.2 Cyclists need guidance on measures that can be taken to improve their safety. The discussion document doesn’t deliver that. The discussion document is permeated with cyclist self-entitled doctrine and fails to recognise or promote a shared responsibility for improving safety. The discussion document’s biased focus invites polarised and antagonistic responses from other road users.
- 2.3 The industry takes extreme issue with the anti-trucking sentiment that is woven throughout the discussion document. Our concern is not that the road freight industry is targeted but rather that the panel has been distracted from their real task.
- 2.4 Flavouring the report with comments like; *“heavy vehicles, especially trucks, are over represented in cycling fatalities¹”* has been unhelpful to those that want to understand and address cycle safety concerns. The panel arrives at their incorrect assumption by comparing light and heavy vehicle fleet numbers to their respective travel distances.
- 2.5 The trouble with that reasoning is that it makes no consideration whatsoever of what a cyclist is confronted with when making a journey. Distances that other vehicles are travelling or how many of them there are on the road are irrelevant when assessing the hazards confronting a cyclist.
- 2.6 Crash statistics show that on any day at any time in any part of New Zealand any person embarking on a cycling journey has three times

¹ Page 3 of the discussion document. Bullet point 3.

more risk of being involved in a fatal accident with a car than a truck. That same person is 11 times more likely to suffer serious injury as a result of colliding with a light vehicle than a truck and 18 times more likely to suffer minor injuries through a collision with a light vehicle than a truck². That is the reality that cyclists must be made aware of.

- 2.7 Demonising trucks does nothing to increase cyclist safety. Highlighting where the true dangers lie does. A large amount of the discussion document is structured around the vehicles versus distance travelled argument which is very misleading.
- 2.8 Based on the "over representation" argument trains must be the greatest concern to road safety regulators. The train fleet size is minimal. The distance trains travel on the road is minimal. Trains are involved in a significant number of fatality, injury and near miss incidents with a wide range of road users and pedestrians. Trains must therefore be over represented in crashes. That must make trains the most dangerous transport mode in New Zealand. Similarly, the number of hours a chainsaw has run has no bearing on tree-felling accidents.
- 2.9 For some reason when a cyclist crashes with a heavy vehicle the media tend to put the spotlight on the heavy vehicle driver even when the driver's actions may not have created or led to the crash. The cyclist may be the casualty but the truck driver is often the victim.
- 2.10 Continuing to blame truck drivers for cyclist-related crashes is not aiding the cyclist safety agenda. If a train is involved in a crash with a motor vehicle rarely is blame placed on the train driver. The train driver has no control on how a motorist chooses to operate a vehicle while in the train's proximity. The same rationale should be applied to

² Appendix 1: Table 1

a number of heavy vehicle crashes. Cycle safety can only be improved if all parties involved are sufficiently educated and informed on how to share the road safely with other users.

- 2.11 A number of recommendations are based on international examples which we consider invalid. The panel's policy position is predicated on the concept that New Zealand and certain international jurisdictions are very similar in terms of road infrastructure and vehicle type. In reality the configurations and dimensional parameters of heavy vehicles in New Zealand are significantly different to those overseas jurisdictions. It is probable that the New Zealand cyclist profile also differs considerably from the international comparisons that were used.
- 2.12 The discussion document has a very strong focus on changing the environment surrounding cyclists. Very little is dedicated to implementing behavioural change in road users, including cyclists. Achieving behavioural change is the important goal to achieve. Changing behaviour reduces the likelihood of unsafe interaction between cyclists and other road users.
- 2.13 In the case of heavy vehicles the recommendations seek to impose a range of responsibilities on truck owners. Fitting heavy vehicles with additional equipment will not encourage behavioural change in cyclists or trucks drivers and may even increase risks by cultivating a false sense of security in danger spots thereby perpetuating unsafe behaviour.
- 2.14 The sensible proposition is to encourage all road users to act more responsibly towards each other's road sharing and safety needs before looking to impose heavy handed regulations.

Specific Areas of Focus

3.0 Share the road

"There is work needed in the "Share the road" space to ensure that all road users respect both the rules and other road users³."

- 3.1 The industry welcomes this piece of work and we are encouraged that the panel has not limited their vision to users of motorised vehicles but to "all road users". Cycles are defined in the Land Transport Act as "vehicles". As vehicle operators cyclists are required to obey the road rules.
- 3.2 There are a variety of rule dispensations in place to increase cyclist safety. In some places road infrastructure has been delineated to cater for cycle use. Cyclists do not have to sit the same tests that motorists do to operate their "vehicles" on the road. In most situations cyclists are travelling at speeds well below those designated for motorists.
- 3.3 In addition cyclists (particularly children) are not trained, educated or qualified to the same level of proficiency that other road users are. Given their comparative vulnerability and, in the case of children, their limited understanding of road rules, it is essential that those differences be recognised and provided for.
- 3.4 The difficulty facing society is whether to continue considering cyclists to be in the same realm as other "vehicles" and, if so, the extent to which the requirements applying to other road users should apply to cyclists. A sensible option may be to create a dedicated set of rules and provisions for cyclists.
- 3.5 We note the discussion on "e-bikes"⁴ and how they should be treated as part of the cycling safety discussion. The conundrum as we see it

³ Page ten of the discussion document

is whether to consider an electrically driven bike as a cycle or as a motorised form of transport. As we understand it there is a lot of discussion surrounding this issue. We have no clear position on this topic but do believe that any cycle modified to travel at average road speeds should be required to meet the requirements of any other powered vehicle - electric or fuel driven.

4.0 Freight Routes and Temporal Restrictions

"Consider where possible alternative routing for either freight or cycling⁵. Investigate the feasibility and cost benefit of introducing temporal restrictions⁶."

- 4.1 These two topics are discussed contemporaneously as they are inextricably linked. The intended investigations need to focus on ways to remove cyclists from the risk imposed by the entire vehicle fleet and not simply those associated with the movement of freight.
- 4.2 Cycles contribute little to economic productivity. High volume freight routes support freight hubs and distribution points. Towns and cities grow and evolve around those distribution points. Trucks are the primary freight mode that keeps the economy thriving. Imposing temporal restrictions or alternative routes on freight transport is absurd from an economic perspective.
- 4.3 The sensible solution is to impose temporal and route restrictions on cyclists and exclude them from situations of excessive risk. We fully support future investigations into the provision of cyclist specific infrastructure away from freight routes and are confident that intelligent cycle advocacy groups would also support the removal of cyclists from freight traffic streams. However, that does not address the greater concern of reducing cyclist interaction with light vehicle traffic which statistically is a much greater risk.

⁴ Page 16 of the discussion document

⁵ Page 22 of the discussion document

⁶ Page 23 of the discussion document

5.0 Passive Safety Intervention Technology

"Investigate the cost effectiveness of truck side under run protection, Blind spot mirrors and Technologies⁷."

- 5.1 A High Priority Action recommended by the panel is for investigation to be made of the cost-effectiveness of truck side under run and other technology improvements such as collision detection systems, additional mirrors or cameras.
- 5.2 Health and safety in employment practice is to isolate, eliminate and minimise risk of harm. In terms of cycling safety the fitment of side under run protection represents "minimisation" whereas the greatest benefit in terms of injury prevention are delivered by isolating and eliminating risk.
- 5.3 The discussion document does highlight some risk isolation propositions such as requiring motor vehicles and cyclists to be totally separated in their journeys. New Zealand is a very long way off from achieving cycle separation to desirable levels. Elimination of risk would require cyclists to change their behaviour around all motor vehicles.

6.0 Danger zones

- 6.1 The solution is not to fit trucks with devices to detect cyclists within truck blind spots or danger zones but rather to discourage cyclists from entering those danger zones in the first place. Perhaps it is time to mandate and enforce the requirement that all bicycles be fitted with warning devices and that high visibility clothing be worn.
- 6.2 It is claimed that side under run protection has improved cycle safety in other jurisdictions. The discussion document references the supposed benefits that London has received by fitting those devices to trucks. Those claims are supported by referencing TRL research

⁷ Page 35 of the discussion document

(Safer Lorries in London: Identifying the casualties associated with side guard rails and mirror exemptions). The TRL research is inconclusive. In their wrap up, researchers provide estimates on the benefits of side under run equipment. Estimates are open to a wide range of variability and the fact that estimates have been used in TRL's research confirms a lack of robust data available internationally to determine just how effective side under run protection actually is.

- 6.3 In order to reduce the risk of accidents involving blind spots, the European Union (EU) implemented Directive 2003/97/EC, which substantially increased the field of view available from the mirrors of new trucks and buses sold in the EU from January 2007. Recent assessments of their effect on cyclist safety improvements have revealed that blind spot mirrors have not appreciably increased cyclist safety. This is mentioned for two reasons. One is that significant expense was imposed on the road freight industry and no gain was derived from that. The second is that research reports on the advantages of side under run protection, as already mentioned, are inconclusive.
- 6.4 TRL as referenced in the discussion document⁸ is not the only entity that has reported on the failings of side under run, blind spot mirrors or other safety technologies.
- 6.5 Missing from these reports, but of equal consequence, is the impracticality of fitting passive devices to heavy vehicles. The disparity between New Zealand and overseas vehicle types suggests that it would be irrational to impose similar demands on the New Zealand heavy vehicle fleet. Other jurisdictions have provided a variety of vehicle types with exemptions from having to fit passive safety devices.
- 6.6 In regard to blind spot mirrors in their report "*on the implementation of Directive 2007/38/EC on the retrofitting of mirrors to heavy goods*

⁸ Their 2014 report

vehicles registered in the Community” the IRU observed⁹ a number of concerns. A brief summary of those findings is provided below:

- Further improvements should be focused on targeted measures based on reliable causal statistics.
- Human error is the main cause of 85.2% of the studied cases. However, out of those 85.2%, 75% are caused by other road users compared to 25% by truck drivers.
- Other existing systems to reduce the blind spot angle have to be investigated as they may be more cost-effective than the retrofitting of mirrors.

6.7 In regard to blind spot mirrors TRL noted that:

- It is not, therefore, possible to quantify the extent to which the overall fall in HGV-VRU¹⁰ fatalities was associated with the fitment of the mirrors.

Side under run

6.8 The National Research Council Canada reports the following:

- *In Canadian urban collisions involving heavy vehicles, bicyclists and pedestrians, the front of the heavy vehicle (front, right front and left front) was the initial point of impact in 42.9% of the cases.*
- *It is not clear if side guards will reduce deaths and serious injury or if the guards will simply alter the mode of death and serious injury. For example, VRUs may strike the guards and then be ejected or diverted into another lane of traffic to suffer a serious injury as part of secondary event with another vehicle or with the road/sidewalk surface.*

⁹ http://www.iru.org/index/dme-app/direct.on/id.CSR_anexG102088-1.pdf

¹⁰ Heavy Goods Vehicle-Vulnerable Road User

- *Since bicycles and pedestrians are not permitted to travel along divided highways, there is a lower risk of an incident involving a heavy truck and a VRU. Although tractor and trailer combination vehicles spend the vast majority of their time driving on divided highways, they do enter urban areas to deliver and pickup goods. Therefore, the addition of side guards that are principally intended to save lives may rarely come into contact with the VRUs they are intended to protect for the vast majority of the vehicle's intended duty cycle.*

6.9 The advent of electronic devices such as 360 degree sensing devices that are being trialled by European truck manufacturer, Volvo, is a positive step. European truck manufacturers led the implementation of electronic braking and stability controls. However, manufacturing countries were very slow to adopt those technologies and it is only recently that all truck manufacturers have begun including some of those technologies as standard fitment.

6.10 The most important piece of evidence supplied by researchers is that cyclist error was the main cause of 85.2%¹¹ of the studied cases. That data does not mention whether there were other circumstances involved that lead to cyclists crashing with trucks. One example that the industry is aware of in New Zealand relates to car drivers opening their doors into cyclist's paths causing them to swerve into traffic streams and be struck by other (secondary) vehicles.

6.11 The greatest benefit would be achieved by implementing the training and education plan outlined on Page 33¹². By educating and informing truck drivers and cyclists on how to operate their vehicles more safely when in proximity to each other risk would be significantly reduced. That training should not be limited to truck or professional drivers.

¹¹ Paragraph 6.6

¹² High priority action ii

Light vehicle drivers should also be required to undergo similar training given the risk that light vehicles impose on cyclists. The simplest way to encourage that is to include cycle specific knowledge requirements in the vehicle licensing regime. This should particularly apply to prospective learner drivers.

7.0 Minimum Passing Distance

This high priority recommendation suggests that legislation should be amended for a minimum space to be provided when drivers overtake cyclists- 1 metre is suggested for speed limits up to 60kph and 1.5 metres for more than 60kph roads.

7.1 The recommendation is taken further by suggesting that enforcement of minimum passing distance can be used as *"a tool that Police can use to send a message to motorists"*. The industry is uncertain why the panel would propose this when it significantly degrades what is already in legislation.

7.2 Section 2.6 of the Road User Rule prescribes the following conditions for overtaking another vehicle:

2.6 General requirements about passing other vehicles

(1) A driver must not pass or attempt to pass another vehicle moving in the same direction unless—

(a) The movement can be made with safety

(b) The movement is made with due consideration for other users of the road; and

(c) Sufficient clear road is visible to the driver for the passing movement to be completed without impeding or being likely to impede any possible opposing traffic; and

(d) Until the passing movement is completed, the driver has a clear view of the road and any traffic on the road for at least 100 m in the direction in which the driver is travelling.

- 7.3 All of the above clauses provide enforcement with sufficient opportunities to issue infringements for any overtaking behaviour that impinges cyclist (or any other motorist's) safety. Implementing an objective attitude to safe passing manoeuvres is likely to create unnecessary legislative burden. Police already have powers to cover any behaviour they consider to be dangerous. That is the simplest and most cost effective way to treat unsafe or dangerous behaviour.
- 7.4 In addition, stipulating a safe passing distance may actually reduce enforcement possibilities. For example, it is entirely possible that a cyclist may encounter difficulties when riding their bike and require more space than the minimum distances recommended. There may also be times when passing within 1 metre of a cyclist is entirely safe, especially at times when speed is significantly below 60kph - for example driving straight past a turning cyclist in slow traffic. Legislating in the manner suggested would likely have many adverse unintended consequences.
- 7.5 We suggest highlighting the guidelines within the road code and educating motorists of the consequences of non-compliance with current legislation. As mentioned earlier in our discussion the same cyclists should be similarly educated. The widespread practice of cyclists holding on to truck handles for added propulsion is unacceptable.
- 7.6 We are surprised that the panel did not recommend the simplest and most direct measure to reduce risk. The road code provides for cyclists to travel two abreast but frequently packs of cyclists travel three and four abreast on the open road. This is extremely dangerous behaviour and very frustrating for motorists. Consideration should be given to requiring that all cyclists travel in single file at all times unless passing another cyclist.

8.0 Training

The important part of the cycle safety issue that hasn't received adequate attention is self-induced cyclist crashes that are not a result of traffic or infrastructure interference (solo at-fault crash).

- 8.1 The discussion document gives no prominence to solo at-fault crash modes. The relevance of this to the cycle safety discussion is that poor cycle proficiency may be translating into crashes where other vehicles or infrastructure are blamed for the crash.
- 8.2 The cost to ACC of all cyclist incidents and accidents exceeded \$38.5 million from approximately 1,782 claims in 2013¹³. ACC data is the most accurate available to us. It does not account for the large number of injury and non-injury accidents and incidents that do not incur ACC compensation claims. It is recognised that cyclist injury and accident rates are significantly higher than those recorded by ACC. The data collected by other agencies is also under-reported.
- 8.3 Our point is that a substantial number of ACC claims are solo at-fault crashes. The high rates of solo at-fault crashes deserves further discussion as understanding those crashes and the reasons for them may assist with reducing all types of cyclist crashes.
- 8.4 No research has been conducted into the level of proficiency of cyclists involved in crashes, either with other vehicles or solo at-fault. Research and information gathering should take this into account. This also raises the question of whether cyclists that use the road regularly should undergo some form of assessment to determine their proficiency. Doing so could be helpful with reducing the risk profile of young or mature cyclists that do not have motor vehicle licenses. It would also confirm the proficiency of cyclists that hold motor vehicle licenses. All other road users are required to have adequate levels of operational and theoretical proficiency before being allowed to

¹³ Appendix 1: Table 4

operate a vehicle on the road. Perhaps the same requirement should apply to cyclists.

9.0 Funding Cyclist Initiatives

The National Land Transport Fund should not be used to fund cyclist aspirations. Like all other road users, cyclists should contribute to the building and maintenance of the infrastructure they use. The argument that cyclists pay their way through light vehicle registration and other levies¹⁴ is not valid. Based on that argument truck owners who also own cars should not be taxed for using their trucks on the road.

- 9.1 If the NLTF is not used for funding cycling initiatives the cycling sector could pay their way through similar tax or levy systems that apply to other road users. Motorcycle riders are required to pay a levy to the motorcycle council (MotoNZ) to fund motorcycle related initiatives. That system appears to have satisfied the Government's desire to have motorcyclists fund their own initiatives.
- 9.2 Motor vehicle operators pay their way through fuel excise tax, road user charges and registration fees. We note overseas discussions regarding cyclist registration and are interested in those discussions and thoughts.

¹⁴ "Cyclists don't pay". Page 42 of the discussion document

CONCLUSION

The release of the discussion document is a step in the right direction. It has initiated discussion on road user safety.

The recommendations that have been made are in need of reprioritisation. Recommendations to investigate freight paths and to fit passive safety devices should be put aside until sufficient evidence is available that supports their benefit to society.

To the detriment of cyclist safety the discussion document has demonised and victimised the road freight industry. Targeting the road freight industry has distracted attention away from where the true solutions to cyclist safety lie.

On any day at any time in any part of New Zealand any person embarking on a cycling journey has three times more risk of being involved in a fatal accident with a car than a truck. That same person is 11 times more likely to suffer serious injury as a result of colliding with a light vehicle than a truck and 18 times more likely to suffer minor injuries through a collision with a light vehicle than a truck. That is the message that should be presented to cyclists.

Training and assessment of cyclist proficiency should have been given higher prominence in the panel's recommendations. The purpose of the cycle safety discussion is to encourage an increase in cycling activity. Increased cycling activity will increase cyclist risk exposure rate. That increased exposure can be managed through improved training.

The discussion document's recommendations apply heavy handed regulatory and legislative responses. In terms of sharing the road safely with trucks and trailers what is needed is for cyclists to better understand heavy vehicle handling characteristics and danger zones. Putting safer road sharing techniques into practice would nullify the need for those regulatory and legislative approaches.

Since the discussion document's release the passing distance debate has received a large amount of public attention. Police have always had the ability to penalise motorists (and cyclists) for conduct that is unsafe. Legislating for minimum passing distance will not improve the current system. It is fallacious to advocate that the current system is inadequate. The simplest and most cost effective way to encourage safer passing practices is to inform and educate road users.

Appendix 1

Table 1

Injury crashes involving cyclists: 2008- 2012		
	Heavy vehicle	Light vehicle
Total injury crashes	238	3715
Deaths	12	32
Serious injuries	63	712
Minor injuries	173	3139

Source: NZTA

Table 2

New ACC Claims -- All cycling claims				
	Road Cycling* (sports activity)	General Cycling	All Cycling	Mountain Biking**
2005	2,671	14,422	17,093	<=3
2006	2,926	16,590	19,516	1,008
2007	3,490	16,232	19,722	3,008
2008	3,244	15,789	19,033	3,177
2009	2,789	17,599	20,388	3,212
2010	2,401	19,117	21,518	3,011
2011	2,625	18,106	20,731	3,060
2012	2,331	19,093	21,424	4,229
2013	2,725	20,640	23,365	5,511

Source: ACC

Table 3

New claims involving ambulance conveyance to emergency department/hospital				
	Road Cycling*	General Cycling	All Cycling	Mountain Biking**
2005	575	524	1,099	<=3
2006	595	605	1,200	40
2007	679	695	1,374	145
2008	702	797	1,499	139
2009	676	984	1,660	136
2010	636	1,085	1,721	154
2011	628	1,052	1,680	129
2012	605	1,020	1,625	195
2013	658	1,124	1,782	240

Source: ACC

Table 4

Active Cost				
	Road Cycling*	General Cycling	All Cycling	Mountain Biking**
2005	\$11,547,656	\$8,836,605	\$20,384,261	\$18,657
2006	\$13,598,749	\$12,449,232	\$26,047,981	\$675,118
2007	\$16,511,688	\$12,776,828	\$29,288,516	\$2,765,939
2008	\$18,285,079	\$14,600,151	\$32,885,230	\$4,655,003
2009	\$19,188,538	\$16,755,204	\$35,943,742	\$5,914,482
2010	\$16,474,540	\$15,682,933	\$32,157,473	\$5,450,148
2011	\$15,930,355	\$15,394,178	\$31,324,533	\$5,334,817
2012	\$19,081,631	\$17,428,021	\$36,509,652	\$6,279,596
2013	\$17,771,553	\$20,955,436	\$38,726,989	\$8,009,365

Source: ACC