

Regulatory Impact Statement

Completing Safer Journeys First Actions

Agency disclosure statement

1. This Regulatory Impact Statement (RIS) has been prepared by the Ministry of Transport (the Ministry). It provides an analysis of options to complete the first actions of *Safer Journeys – New Zealand’s Road Safety Strategy 2010-2020* (*Safer Journeys*). The initiatives recommended in this paper address three areas of high concern: increasing the safety of motorcycles, and improving the safety of roads and roadsides.
2. This impact analysis informs the regulatory decisions to:
 - 2.1. introduce a package of measures to improve motorcycle and moped safety (section one)
 - 2.2. change the give way rules at intersections (section three).
3. The analysis in this statement includes an examination of the likely costs, benefits and risks of these actions. It also outlines alternative options that were considered during the policy process, but not recommended to Cabinet.
4. The analysis in this paper follows on from the analysis in *Safer Journeys*. The strategy identified motorcycles, and roads as areas of high safety concern. This paper looks at introducing some of the initiatives proposed in *Safer Journeys*.
5. The main constraint is that the benefits for the motorcycle proposals have not been quantified. Benefits are expected because they are based on Monash University’s best practice model, which is set up to reduce crash risk. It is difficult to test the effectiveness of licensing and testing interventions, and research shows a lack of empirical evidence on the effectiveness of these measures. However, research has identified components of licensing systems that appear to best reduce crash risk.
6. However, the costs of these proposals are low, so would require a low level of crash reduction for the benefits to outweigh the costs.

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| Fiona Warren, Adviser Road & Rail Group Ministry of Transport | 09/08/2010 |
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SECTION ONE: Improving motorcycle and moped safety

Background

Graduated Driver Licensing System

7. The crash risk of novice motorcyclists is currently managed through the graduated driver licensing system (GDLS). Novice drivers and riders graduate from one stage of the system (learner licence, restricted licence, full licence) to the next as experience and skills are gained and then demonstrated and assessed.
8. Studies show the GDLS has been associated with an ongoing reduction of 8 percent in novice driver crashes¹. However, its effectiveness for novice motorcyclists has not been determined. The GDLS is largely car focused and research suggests it is unlikely to be as effective in reducing novice motorcyclist crash risk as it is for novice drivers.
9. The penalties for breaching the restricted licence conditions have recently been revised through the Land Transport (Enforcement Powers) Amendment Act 2009. The infringement fee was reduced from \$400 to \$100, whilst the demerit points were increased from 25 to 35. Licences are suspended for 3 months if riders get 100 or more demerit points within any 2-year period.
10. The assessments that must be passed to gain a full motorcycle licence are:
 - 10.1. a basic handling skills test (BHST)—this shows that a novice rider has mastered the basic skills (such as performing routine and quick stops) to keep them safe on the road while working towards their restricted licence
 - 10.2. a learner licence theory test—this is the same road rules theory test undertaken by learner car licence applicants except for ten specific motorcycle questions
 - 10.3. a restricted licence practical test—this is currently the same practical test undertaken by restricted car licence applicants
 - 10.4. a full licence practical test—this is currently the same practical test undertaken by full car licence applicants.
11. Mopeds can be ridden on either a learner car licence or learner motorcycle licence. If they are ridden on a learner car licence there is no requirement for moped riders to demonstrate they have mastered basic riding skills before going on the road.

¹ DJ Begg, S Stephenson, J Alsop, J Langley. *Impact of graduated driver licensing restrictions on crashes involving young drivers in New Zealand*, Injury Prevention 2001; 7:292-296

ACC injury prevention activity

12. The Accident Compensation Corporation (ACC) undertakes a number of initiatives designed to help improve motorcycle safety, including awareness-raising campaigns to promote safer riding and encourage motorists to look out for motorcyclists. ACC has websites designed to provide motorcyclists with key safety information. Ride Forever (www.rideforever.co.nz) includes information on riding gear, training and maintenance. Scooter Survival (www.scootersurvival.co.nz) is focused on scooter/moped safety.
13. ACC recently announced the introduction of a Motorcycle Safety Levy (MSL). The Accident Compensation Amendment Act 2010 allows ACC to use a proportion of the recent ACC levy increase for motorcyclists (\$30 per registered motorcycle) to be used for the sole purpose of financing programmes to improve the safety of moped and motorcycle riders. ACC has set up a MSL Establishment Group to help determine how the levy should be spent.

Problem definition

Motorcycle crash risk

14. The latest New Zealand Travel Survey (2010) results indicate that, on average, the risk of being involved in a fatal or injury crash has increased to 20 times higher for a motorcyclist than for a car driver over the same distance travelled (2005–2009 data).

Figure 1: Motorcyclist deaths, 1980–2009

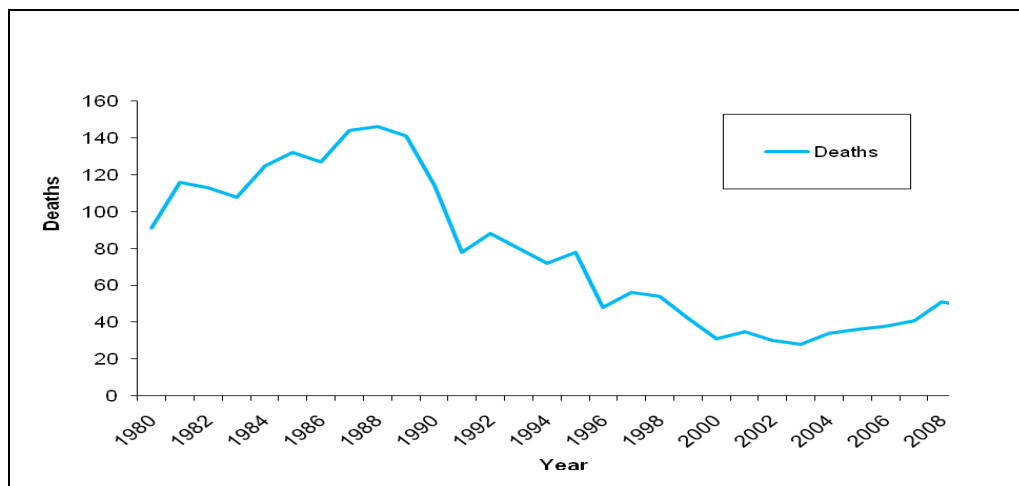
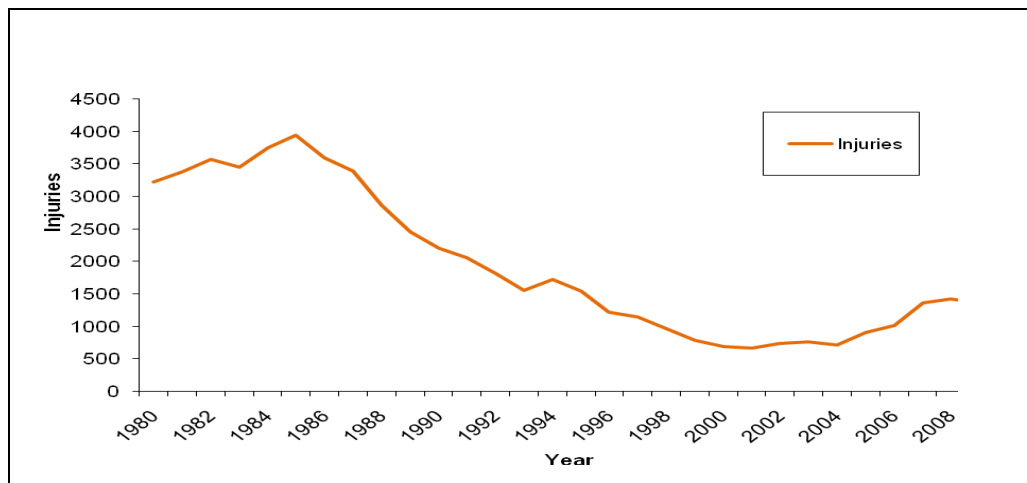


Figure 2: Motorcyclist injuries, 1980–2009

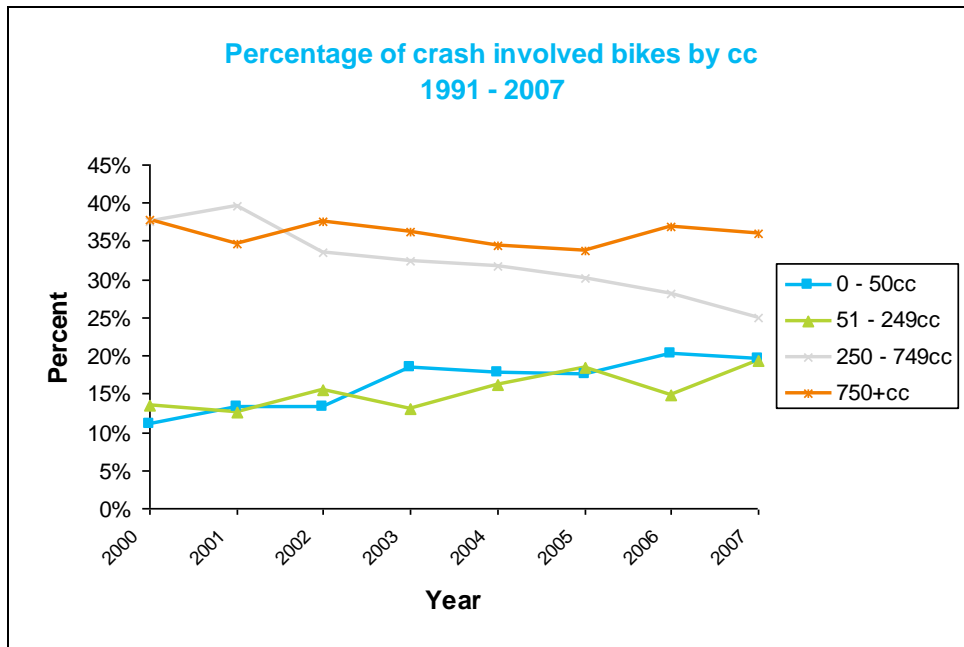


15. Since 2004 deaths and serious injuries from motorcycle crashes have risen by 68 percent, as indicated in figure 1 and 2 above. This coincides with a quadrupling of motorcycle registrations since 2000.
16. Motorcyclists are over-represented in crash statistics. In 2009, 48 motorcyclists were killed, 460 were seriously injured and a further 909 suffered minor injuries. The social cost of these crashes was \$595 million². Despite motorcycles only making up approximately 3 percent of the vehicle fleet, in 2009 they comprised almost 13 percent of all road deaths and 19 percent of all serious injuries.
17. While the social cost of road crashes and injuries is borne largely by the individuals in terms of the victims' loss of life and life quality, society (through the health sector and ACC) also suffers a sizeable part of the cost.
18. ACC claims costs for motorcyclists continue to increase each year, and exceeded \$71 million in 2009/10 (up from \$38 million in 2001/02). Around 24 percent of all new entitlement claims are for motorcyclists and these are over ten times greater for motorcycles than cars on a cost-per-1000 registrations basis.
19. In terms of fault, in the period 2005–2009 motorcyclists were either at fault or had some level of responsibility for the crash in 61 percent of recorded crashes.
20. For more serious crashes, the motorcyclist was more likely to have the primary responsibility for the crash. Crash statistics for 2005–2009 show the motorcycle rider had the primary responsibility for nearly 70 percent of fatal motorcycle crashes, but the comparable figure for minor injury crashes was about 50 percent.

² Social cost is an internationally accepted measure for estimating the cost of road crashes to society. It is made up of a number of elements including loss of life and life quality, loss of output due to temporary incapacitation, medical costs, legal costs and property damage costs. The social cost estimates are \$3,528,000 for a death, \$625,000 for a serious injury, and \$64,000 for a minor injury. These figures are national averages, and the total social cost calculation takes into account urban, rural and regional differences.

21. Riders of low-powered motorcycles (mopeds) are becoming more prominent in the crash statistics. Motorcycles under 50cc have increased from about 11 percent of all reported crashes in 2001 to around 17 percent in 2009. ACC claim figures illustrate a similar pattern.

Figure 3: Percentage of crash involved motorcycles by cc rating, 2001–2007



22. Figure 3 above shows that motorcycles with a large engine capacity – which are generally more powerful and larger motorcycles – are involved in more crashes. At present, novice motorcyclists are restricted to riding motorcycles with an engine capacity of 250cc or less³.
23. A higher proportion of crashes involving large bikes (500cc or bigger) result in death rather than injury. Riders of large motorcycles make up 32 percent of all casualties but 52 percent of deaths.

Objective

24. The aim of these options is to reduce the number of New Zealanders killed and injured as a result of motorcycle, and moped, crashes.

Options

25. The options considered were:

- keeping the status quo
- improving the skill base of motorcycle riders
- improving the roads
- improving the motorcycles.

³ Engine size is currently not recorded for between 10 and 15 percent of crash-involved motorcycles. The graph above is based only on those motorcycles with recorded engine size.

26. Keeping the status quo was rejected because of the high motorcycle crash risk, the rising number of crashes and the rising number of new motorcycle registrations.
27. One of the *Safer Journeys* initiatives is to implement targeted programmes of treatments on popular motorcycle routes to address motorcycle 'black spots'. It is proposed that no further road improvement initiatives targeting motorcycling be commenced until those programmes have been completed.
28. Various improvements to motorcycles were also considered, such as mandating anti-lock braking systems. Most were rejected because of costs (but could be considered further when costs of such features come down).
29. The highest risk period is when motorcyclists first start riding. The proposal is therefore to lower that risk. A package of initiatives is proposed that move New Zealand toward the best practice guidelines from Monash University. The best practice model has been adopted in Australia, where jurisdictions have lower motorcycle crashes.
30. The proposals to improve motorcycle and moped safety are:
 - 30.1. initiatives to improve motorcycle rider training and licensing, by:
 - strengthening motorcycle licence tests
 - introducing competency based training and assessment (CBTA) as an alternative to the standard testing regime
 - 30.2. initiatives to improve moped rider training and licensing, by:
 - requiring all moped riders to complete a BHST along with a motorcycle learner theory test to obtain a new Class 6M (moped) licence.
 - 30.3. Other recommended safety initiatives include:
 - requiring all novice motorcyclists, regardless of age, to be subject to the same minimum time requirements at the restricted licence stage
 - developing optional refresher training for returning riders and encourage uptake (non-regulatory)
 - introducing a power-to-weight restriction for novice riders
 - promoting high visibility and protective clothing (non-regulatory).
31. The appendix compares the proposed new motorcycle graduated rider licensing system with the current system.

Regulatory impact analysis – motorcycle and moped safety proposals

Improve motorcycle rider training and licensing

32. The underlying principle of the rider training and licensing proposals, outlined further below, is based on a best practice model developed by Monash University in Australia in 2005⁴. This model is based on the premise that motorcycle riding requires higher levels of both vehicle control and cognitive skills than car driving; and that the potential outcomes of any failure on the part of the rider, other road users, or the road environment are severe.
33. New Zealand already has some aspects of the best practice model for training and licensing in place. The proposal is to include more elements to match practice in Australian states where crash rates are lower. For example, the New Zealand road fatality rate for motorcycle and moped riders is 12 per 1,000,000 population, whereas the rate in Victoria is 8 per 1,000,000.

Strengthen motorcycle licence tests

34. The crash risk for motorcyclists is highest when motorcyclists first start to ride. Therefore, key competencies and attitudes specific to motorcycling should be developed and assessed as soon as possible in the learner licence period, preferably before riders are allowed on the road.
35. Motorcyclists are currently required to complete a learner theory test, the BHST, and the restricted and full motorcycle licence practical tests. The learner theory test will be redeveloped with emphasis on motorcycle-specific requirements. The BHST will be strengthened and will take longer to complete, so that additional skills such as hazard detection and road craft can be better assessed. The restricted and full licence practical tests will also be strengthened and made more motorcycle-specific.

Benefits

36. Strengthening the theory test and BHST will help ensure that learner motorcyclists have a higher level of basic skills before they start riding by themselves. It is believed that increasing riders' competence, before permitting them to ride on public roads, will reduce the risk for novice riders. Strengthening the practical tests will encourage novice riders to gain more experience, and incentivise training programmes.

Costs

37. The one-off establishment costs of strengthening the tests will be met by the New Zealand Transport Agency (NZTA) from existing National Land Transport Fund (NLTF) funding. Ongoing operational costs resulting from longer and harder tests will be recovered from revised licensing and testing fees. This will

⁴ Narelle Haworth and Christine Mulvihill, *Review of motorcycle licensing and training*, Report Number 240, June 2005, Monash University, ISBN 07 326 2310 3.

maintain the policy of licence holders bearing the full cost of the services delivered.

38. More difficult tests will mean it is likely that more riders will fail, particularly in the short-term as they adjust to the new standard. Riders will meet the cost of re-sitting the tests and taking additional training (if necessary). The NZTA will monitor the failure rate to ensure the tests are performing as envisaged, and will make amendments where necessary.

Risks

39. Some novice motorcyclists might not be able to meet the new test requirements and may ride unlicensed or ignore their licence conditions. Routine enforcement of licence conditions and licensing requirements will detect some such offences. This risk will be reduced by a public awareness campaign to explain the reasons for the stricter motorcycle tests, providing supporting material, and encouraging the uptake of training.

Introduce competency based training and assessment

40. There is currently no approved learner motorcycle training course. Strengthening the restricted and full licence motorcycle tests and making them more motorcycle-specific will act as an incentive for novice riders to undertake training courses, to better equip them for the harder tests. CBTA would cover key on-road skills, including: hazard detection, advanced handling skills, urban road riding, open road riding, motorcycle safety checks, and emergency stopping. It would also provide a key opportunity to educate novice riders of other safety issues, such as the benefits of protective clothing.
41. Stage 1 CBTA will be available for riders in the learner phase. This would mean that key skills are taught when riders are most at risk (that is, in the first 12 months of riding). Successful completion of Stage 1 CBTA will mean that the rider does not need to sit the restricted licence test. Stage 2 CBTA will be available in the restricted phase. Successful completion of Stage 2 CBTA will reduce the minimum time spent on a restricted licence from 18 months to 12 months and the rider will not need to sit the full motorcycle test. Refer to the appendix for further details.
42. The NZTA will develop the CBTA, based on the popular competency based training pilot programme undertaken by Land Transport New Zealand a few years ago. It will include the latest research on motorcycle training best practice in New Zealand and Australia.

Benefits

43. As mentioned, it is not possible to readily quantify the road safety benefits of the rider training and licensing proposals. However, this initiative is in line with current best practice and will help reduce the high crash risk of novice motorcyclists.

Costs

44. CBTA will be developed as an approved course by the NZTA. The cost of course development is likely to be low due to the previous pilot programme. This cost, and the cost of ongoing administration, will be met from within existing NLTF funding. Individual providers will be approved by the NZTA to conduct the course. The course will be user pays, with the fee determined by the individual approved providers.
45. There will be some IT development cost, to build in an ability to recognise CBTA certificates as entitling the applicant to bypass the requirement to sit the restricted licence test and reduce the restricted licence period. The IT project that will include this change will cover a range of minor licensing changes, and has a total cost of \$100,000.

Risks

46. There might not be enough quality motorcycle-specific trainers to cope with the demand for training courses, particularly in the short term. The NZTA will be responsible for upskilling existing motorcycle trainers to provide the required CBTA training and assessment.
47. Training coverage will be monitored over time. Encouraging training, through strengthened tests, is likely to increase demand for training from novice riders, creating an incentive for motorcycle trainers to enter the market. However, it will be important that the approval standard for trainers is not lowered just to allow more providers in a certain area.

Remove the option for motorcyclists to complete an approved driving course (Defensive Driving or Street Talk)

48. Currently motorcyclists can complete an approved driving course (Defensive Driving or Street Talk) to reduce their time on a restricted motorcycle licence. The theory components of these courses are largely classroom and car focused.
49. As result of completing the CBTA, the motorcycle rider will receive a reduction in the minimum time period that they must hold a restricted licence. To support CBTA, the option to complete an approved driving course will be removed for motorcyclists.

Benefits

50. Training that reduces the minimum time spent on a restricted licence is attractive to novice riders. However, the potential benefits to motorcycle riders from completing a car-based driving course may be small or non-existent. Removing car driving courses as an option for motorcyclists will encourage riders to acquire motorcycle-specific skills through the CBTA.

Costs

51. The operational costs of this initiative, for example working with agents to publicise the change, will be met from within existing NLTF funding. These costs are estimated to be minor.

Risks

52. It should be noted that CBTA will not be compulsory, as it is a voluntary alternative training and assessment option. There is a risk that CBTA will not have the same level of coverage as there is for the currently available approved driving courses.
53. However, the standard option of completing the motorcycle GDLS by sitting the tests will remain available for those people who cannot access or choose not to undertake a CBTA course.

Remove the under 25 and over 25 distinction within the graduated licensing system for motorcyclists

54. Currently riders under 25 years old must spend longer on a restricted licence than a rider aged over 25 years. This distinction was introduced, when motorcycles were commonly used as entry into the licensing system by young people, as they were more affordable than cars. Therefore, young riders featured significantly in the licensing and crash statistics.
55. Transport availability for young people has changed, with more affordable cars, and there has been an increase in recreational motorcycling. Consequently, the age profile of novice riders has changed, with the average age of a learner motorcycle licence applicant now just over 30 years. The crash statistics illustrate a similar pattern, with the average age of motorcycle casualties increasing from 22 years in 1980 to 35 years in 2008.
56. It is no longer appropriate to maintain a lower restricted licence period for older motorcyclists. The same requirements should apply to all novice motorcyclists.

Benefits

57. Requiring novice drivers aged over 25 years to remain in the learner and restricted licence phases for a longer period of time will ensure that they gain experience while still subject to the relevant licence conditions. These conditions are specifically designed to reduce novice rider crash risk.
58. Removing the distinction will also help simplify the motorcycle graduated licensing system.

Costs

59. The IT development cost to implement this proposal, and range of other minor licensing changes, has a total cost of \$100,000.

Risks

60. There are no risks associated with this proposal.

Require all moped riders to complete a basic handling skills test (BHST) as well as a motorcycle learner theory test to obtain a new Class 6M licence

61. Riders of low-powered motorcycles (mopeds) are becoming more prominent in the crash statistics. The number of mopeds involved in crashes has increased from 11 percent of all reported crashes in 2000, to 20 percent in 2007. ACC figures show a similar pattern. At present, moped riders only need a learner car licence and are not required to pass any handling skills test before they can legally ride a moped on the road.
62. To improve the on-road safety of moped riders, it is proposed that they be required to display that they have the necessary riding skills to be able to safely operate a moped on the road. A new 6M (moped) licence will be introduced, and people who wish to ride a moped will be required to hold a 6M licence, or a learner, restricted or full motorcycle licence.
63. Therefore, new moped riders will need to obtain a 6M licence before they can ride their moped on the road, by passing the strengthened motorcycle learner theory test and strengthened BHST. This will ensure that moped riders have at least the basic skills required to safely ride a moped on the road, which is the same level of skill as required of a learner motorcycle rider.
64. It is proposed that the requirement to hold a 6M licence also apply to people who are currently allowed to ride a moped due to holding a Class 1 (car) licence. At present, any person who holds any level of car licence can legally ride a moped, even if they have never ridden a moped or motorcycle. There is no assurance that these people have the necessary skills to safely ride a moped on the road. This means that many moped riders will have to gain a 6M licence as well. There will be a transitional period of 18 months, by which time all moped riders will have to hold a 6M licence, or a motorcycle licence, in order to legally ride a moped. Moped owners will receive a reminder of the new requirement when they receive their vehicle licence renewal reminder letter.

Benefits

65. Requiring basic handling and skills for moped riders is likely to have a small road safety benefit. An Australian study⁵ found a 13 percent reduction in rider crashes from introducing compulsory driving tests combined with training for motorcycles. Unfortunately it is not clear whether this was due to a reduction in rider crash risk or in exposure to risk.
66. If we assume a 13 percent reduction to be the maximum achievable reduction in moped accidents, then this initiative could potentially avoid one fatality and between two and five serious injuries per year.

⁵ Elvik and Vaa (2006)

Costs

67. There will be some IT development cost to implement this proposal, estimated to be around \$150,000.

Risks

68. There is a risk that moped riders will not comply with the new test requirements and will continue to ride on a car licence. The risk will be reduced by a public awareness campaign to explain the change and by providing support material in relation to the BHST. Enforcement of licence conditions and licensing requirements will detect some non-compliance.

Introduce a power-to-weight restriction for novice riders

69. Currently holders of learner and restricted motorcycle licences are restricted to riding motorcycles of 250cc and less. This is because larger and more powerful bikes are more likely to be involved in fatal and serious injury crashes than lower powered motorcycles. However, high-performance 250cc motorcycles capable of high speeds and rapid acceleration are available on the market. These motorcycles are not suitable for novice riders due to their power, riding position and handling. The trend for increases in motorcycle power is likely to continue.
70. Instead of the 250cc limit, it is proposed that learner and restricted motorcycle licence holders be restricted to motorcycles that do not exceed a power-to-weight ratio of 150 kilowatts per tonne. An upper bound of 660cc is proposed to ensure that the approved motorcycles are not too physically large for novice riders. It is proposed there be an 18-month transitional period from the current restriction to the new one for current learner and restricted motorcycle licence holders.
71. Most Australian states have recognised the 250cc novice rider restriction as a safety issue and have replaced this with the proposed power-to-weight restriction through the introduction of a Learner Approved Motorcycle Scheme (LAMS). This includes a list of motorcycles that are LAMS-compliant, which has been researched thoroughly. LAMS has proved popular with the Australian motorcycling community, and could readily be adapted for use in New Zealand.

Benefits

72. This restriction will give novice riders access to a greater range of motorcycles appropriate for their level of experience, including more that have safety features like anti-lock braking systems. Evidence from overseas jurisdictions shows a power-to-weight restriction encourages novice riders to stay on a less powerful bike for longer than a 250cc restriction after their restriction period ends. This is positive for safety as familiarity with a motorcycle reduces crash risk.
73. A power-to-weight restriction on motorcycles is more effective at reducing novice rider crash risk than an engine capacity limit.

74. It will not be possible to determine the magnitude of benefit for this initiative until the implementation outcomes can be evaluated. However, as mentioned, this restriction is considered best practice and is in place in most Australian states.

Costs

75. The NZTA estimates that it will cost between \$286,000 and \$472,000 to make system changes to the Motor Vehicle Register in order to introduce a power-to-weight restriction for novice riders. There will be a further cost of approximately \$120,000 to include LAMS information on the registration label.
76. The cost of setting up and the ongoing administration of the power-to-weight novice motorcycle list will be met from within existing NLTF funding. This cost is estimated to be minor.
77. Police costs will depend on whether the number of detected offences increases. While offending levels cannot be readily predicted, Police estimate any additional cost is likely to be minor.
78. There may be a cost to some novice riders who must buy a new motorcycle if their current one does not comply with the new restriction. However, this will be limited by having an 18-month transitional period from the current 250cc restriction to the new power-to-weight restriction.

Risks

79. There is a risk that novice motorcyclists will continue to ride high-powered 250cc bikes. This risk will be managed by placing a code on the registration label to aid enforcement, and having the approved motorcycle list published on the internet to aid prospective buyers.

Total cost of recommended proposals

80. Many of the costs associated with introducing the full suite of motorcycle and moped safety proposals discussed above can be met within existing funding, particularly any operational costs to Police and the NZTA. Some ongoing operational costs to the NZTA may require amendment to the regulated licensing and testing fees, to ensure alignment between costs of services and the fees charged for those services.
81. There are some one-off costs to the NZTA, relating to IT development. The NZTA has estimated that these costs, in total, amount to \$0.8–\$1.15 million.

Total benefit of recommended proposals

82. As mentioned, it is not possible to provide an estimate of the exact road safety benefits of the rider training and licensing proposals. However, they are in line with best practice and are in place in jurisdictions with better motorcycle and moped crash statistics than New Zealand.
83. The total cost of introducing all the recommended proposals is likely to be less than \$1.15 million. Therefore, to achieve a break-even situation, these

proposals need only to result in between two and three fewer serious injuries per year.

84. The proposed change to introduce a specific moped licence, and require an applicant to pass a motorcycle learner theory test and the BHST before being legally able to ride a moped, is expected to deliver quantifiable benefits. It is estimated that this proposal alone will save one life and between two and five serious injuries per year. Implementing the rest of the recommended proposals will further enhance the safety benefits for motorcycle and moped riders. Given the break-even requirement is low, the Ministry believes that the package will produce a net benefit to society.

SECTION TWO: Changing the give way rules

Background

85. The current give way rules are that a turning vehicle must give way to all traffic not turning, and in all other situations give way to traffic crossing or approaching from the right. The driver of a vehicle turning left has to:
 - check if there are any right-turning vehicles to give way to
 - check if there is any traffic coming from behind that will delay a right-turning vehicle
 - check for cyclists alongside and pedestrians crossing the road they are entering.
86. This means that the driver has to check in three different directions: the situation opposite them, behind them, and on the road they are entering – all within seconds.
87. The 'T-junction' rules apply when there are conflicting right-turns at an uncontrolled T-junction. At present, the right-turning vehicle on the terminating road has priority over the right-turning vehicle on the through road. The T-junction is a very common intersection in New Zealand, and often the through road is the higher volume (or major) road. The current T-junction rule accords the vehicle entering from a minor road priority over a vehicle travelling on the major road.

Problem definition

88. Intersection crashes currently make up 21 percent of fatal crashes. The majority of fatal intersection crashes occur in rural areas, but the majority of serious injury crashes are in urban areas. The number of intersection crashes involving pedestrians has increased by 88 percent since 2000, and many of these pedestrians were hit by a turning vehicle.
89. The current left turn-right turn rules create crash risks:

- between left-turning vehicles and pedestrians crossing the road that the vehicle is turning into, or cyclists on the inside, because the driver of the vehicle has been watching for right-turning traffic
 - between right-turning vehicles and left-turning vehicles
 - between right-turning vehicles and vehicles overtaking the left-turning vehicles.
90. The current uncontrolled T-junction rule often gives rise to confusion as it is the reverse of the rule for intersections controlled by give way or stop signs. At controlled T-junctions, the vehicle approaching the intersection from the minor, or terminating road gives way to vehicles turning from the major road. However, if the T-junction is uncontrolled, the vehicle turning from the minor road has right of way.
91. The T-junction rule also requires the driver of the vehicle turning from the major road to establish whether the minor road is controlled or not.
92. The confusion and hesitation that can occur at an uncontrolled T-junction gives rise to risks between the two vehicles, and to pedestrians crossing the minor road.
93. Intersection crashes are often caused by poor judgement, due to the observation and decision making burden of the give way rules. Educational initiatives have been introduced in recent years to help reduce intersection crashes, but are limited in what they can achieve given the current give way rules.

Objective

94. To make intersection decisions easier, to reduce intersection crashes and improve cyclist and pedestrian safety.
95. The overall objective of *Safer Journeys* is to reduce the level of road trauma on New Zealand roads.

Options

Status quo

96. Retaining the current give way rules will not reduce the complexity of intersection situations governed by give way rules. The status quo will not assist actions to reduce the occurrence and severity of intersection crashes, and the success of efforts to reduce intersection crashes, injuries, and fatalities will be limited. The number of intersection crashes involving pedestrians has increased over recent years.
97. This option has been discounted as it does not contribute to the overall objective of *Safer Journeys*; indeed, as it may result in further increases to road trauma it could undermine the objective of *Safer Journeys*.

Proposed changes to give way rules

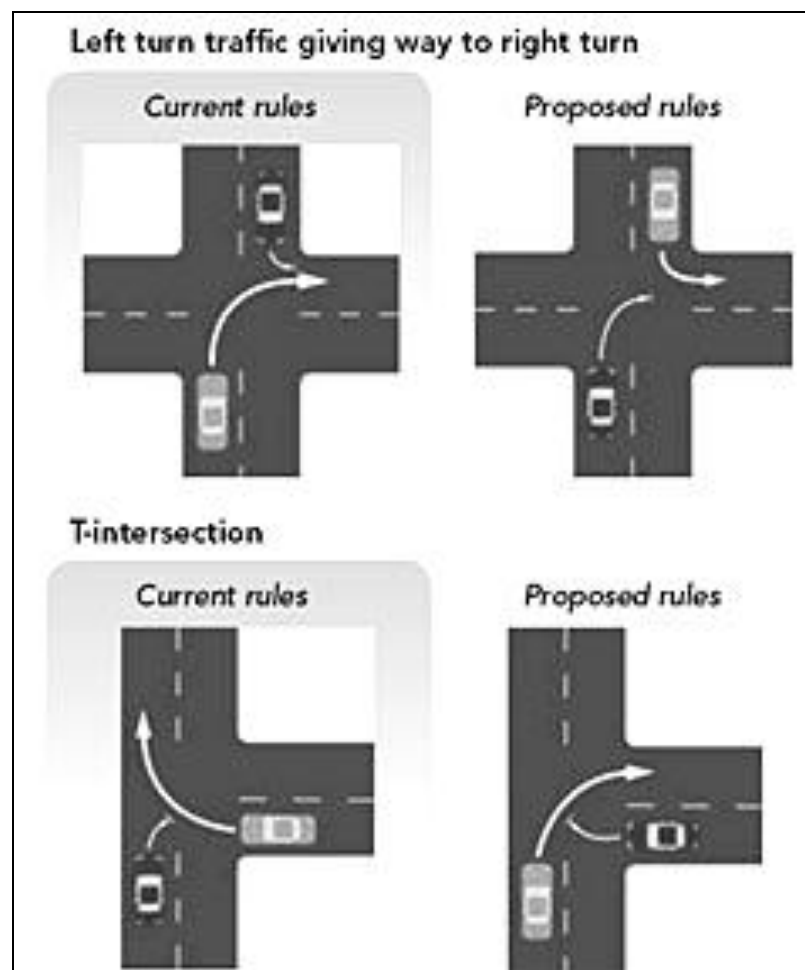
98. This option would:

98.1. require traffic turning right to give way to traffic turning left into the same road (see figure 4)

98.2. require traffic from an uncontrolled terminating road to give way to traffic on a continuing road (the T-junction rule) (see figure 4).

99. These changes would align New Zealand's give-way rules with those applying in almost all overseas jurisdictions.

Figure 4: Current and proposed give way rules



Regulatory impact analysis – changing the give way rules

Benefits

100. Several pieces of evidence indicate that changing the give way rules will reduce crashes at intersections. In 1995 a first principles review used basic traffic engineering principles to determine which give way rules would be optimal for safety and efficiency. It concluded that the proposed give way rules are

inherently safer, are expected to reduce the most common traffic conflicts that lead to crashes, and improve safety for pedestrians and cyclists.

101. Victoria used to have the give way rules that New Zealand currently has. In 1993 Victoria made a change similar to that proposed in this paper. This resulted in a 7.1 percent reduction in crashes between vehicles turning right and oncoming vehicles, and crashes involving left-turning vehicles hitting pedestrians and cyclists.
102. It is estimated that changing the give way rules will result in a reduction of about 7 percent of relevant intersection crashes. It is expected that this change will save one life and prevent 97 injuries (13 serious injuries and 84 minor injuries) each year. This translates into an annual social cost saving of about \$17 million.

Costs

103. Changing the give way rules will require an extensive publicity and education campaign, which would cost the NZTA up to \$2 million. This campaign would include education, publicity, and reprinting publications (*The official New Zealand road code*, licence tests, factsheets, and pamphlets targeting overseas visitors and new migrants).
104. Some road markings may be changed to improve the efficiency of roads, such as right-hand turn bays. These costs would be borne by road controlling authorities, and may cost up to \$1 million. Any ongoing costs for changing road markings would be part of road network improvement costs.
105. There may be additional costs to Police, if infringement offences for failing to give way increase following the implementation of the change in give way rules. However, it is likely that the transitional period would be managed by issuing warnings and educating drivers, as was the case when the mobile phone ban was introduced.

Figure 5: financial implications of proposed change to give way rules

| | One-off costs | Ongoing costs |
|-------------------|----------------------|------------------------------------------|
| NZTA | \$2 million (up to) | Will be met from within existing funding |
| Police | N/A | Negligible |
| Local authorities | \$1 million | Will be met from existing funding |
| TOTAL | \$3 million | Met by existing funding |

106. The proposal to change the give way rules has a benefit cost ratio of 41:1, with a net present value of \$111 million. This is based on a 10 year evaluation period and an annual discount rate of 8 percent, and assumes that there is no increase in failure to give way offences and no extra delay in traffic due to the change in rules.

Risks

107. A possible risk is that there is an increase in crashes at intersections following the implementation of the new give way rules. This risk was also considered

when Victoria made a similar change in 1993, but did not eventuate. It is therefore considered that this is a transitional risk that can be adequately mitigated by a good publicity campaign, as is proposed, which was identified as a key reason behind the successful transition in Victoria.

108. There is a possible safety risk, because vehicles waiting in the middle of the road are at a higher risk of a collision from behind than vehicles waiting towards the left of the road. This was one of the reasons for introducing the current rules in 1977. However, today's traffic environment is considerably different as there are now many right-turn bays on higher volume roads, which means that this risk is substantially lower than in 1977.
109. There may also be some short-term impacts on efficiency, as drivers adjust to the new rules. However, these impacts will reduce over time and the expected improvements will arise.

Consultation

***Safer Journeys* discussion document**

110. The *Safer Journeys* discussion document was launched on 18 August 2009. The consultation period closed on 2 October 2009. During the consultation period, Ministry officials attended over 40 meetings across New Zealand, including Regional Transport Committee meetings and meetings with road safety coordinators and specific interest groups like walking and cycling advocates. The *Safer Journeys* website contained an online forum, where people could exchange their views on the different priority areas and *Safer Journeys* in general. Almost 400 people joined the forum and posted more than 1,000 notes.
111. Key road safety stakeholders were consulted with before the development of the discussion document, and they received copies of the discussion document as soon as it was released. The Ministry's stakeholder engagement team worked with stakeholders across the country to highlight the consultation to ensure they were aware and prepared, should they want to make a submission. The consultation was promoted on the Ministry website and websites of other government agencies and some key stakeholders.
112. More than 1,500 submissions were received on the *Safer Journeys* discussion document (general public about 1,400 and stakeholders almost 130). In addition, more than 1,200 members of the general public and almost 20 key stakeholders ranked the 62 initiatives outlined in the discussion document. The Ministry of Youth Development also received 310 submissions on the *Safer Journeys* youth document (264 from individuals and 46 from groups).

Departmental consultation

150. This RIS was provided to the following government agencies for their comment: ACC, Department of Internal Affairs, Department of Labour, Ministry of Economic Development, Ministry of Justice, the NZTA, the New Zealand Police, the Treasury, Ministry of Social Development, Te Puni Kōkiri, and the Ministry

for Youth Development. The Department of the Prime Minister and Cabinet was informed.

Conclusions and recommendations

151. Road crashes place a significant burden on the economy and the health sector, and reduce the quality of life in New Zealand. Consequentially, increasing the safety of motorcyclists, young and novice riders, and of roads and roadsides, is a high priority in *Safer Journeys*. The current approach in these three areas will not be sufficient to achieve the aim of reducing road crash fatalities and injuries in New Zealand.

152. It is recommended that the following actions be implemented.

152.1. Introduce a package of measures to improve motorcycle and moped safety.

152.2. Change the give way rules at intersections.

153. Figure 6 below summarises the potential costs to the government of these proposals.

Figure 6: Potential costs of all recommended proposals

| | One-off implementation costs | Ongoing costs |
|--------------------------------------------------------------------------------|---------------------------------------|--------------------------------------------------------------------------------|
| <i>Motorcycle and moped safety package</i> - NZTA - ACC - Police | \$824,000 – \$1,152,000 N/A N/A | Yet to be determined Met from existing funding Met from existing funding |
| <i>Changing the give way rules</i> - NZTA - Road controlling authorities | \$2,000,000 \$1,000,000 | Met from existing funding Met from existing funding |

Implementation

154. Amendments will be required to the Land Transport (Road User) Rule 2004 to implement changes to the give way rules; and to the Land Transport (Driver Licensing) Rule 1999 to implement the proposals relating to motorcycle and moped safety. The current land transport Rules programme includes a Land Transport (Road User) Amendment Rule and a Land Transport (Driver Licensing) Amendment Rule. The Land Transport (Driver Licensing and Driver Testing Fees) Regulations 1999 may also need to be amended to ensure that the regulated fees for tests retain alignment with the costs of delivering the testing services.

155. The Land Transport (Offences and Penalties) Regulations 1999 will also need to be amended to ensure that existing offences remain accurate, and to introduce new offences. The Land Transport (Vehicle Registration and Licensing) Notice 1995 will need to be amended to provide for the LAMS additions to the licence label. The Land Transport (Driver Licensing and Driver Testing Fees) Regulations 1999 may also need to be amended to allow the NZTA to charge a fee for the new moped licence transactions.
156. The NZTA will be responsible for ensuring that the public is aware of the changes, with support from Police in their contacts with road users. The NZTA will also revise all relevant material, including *The official New Zealand road code*, fact sheets and website information.

Monitoring, evaluation and review

157. The NZTA will monitor test pass rates following the changes to the motorcycle theory test, the BHST, and the restricted and full practical tests.
158. The effectiveness of these initiatives will be evaluated and reviewed as part of the review process of the *Safer Journeys* action plans. This function will be carried out by the National Road Safety Committee⁶.

⁶ The National Road Safety Committee (NRSC) is comprised of the Secretary for Transport, the Commissioner of Police, and the Chief Executives of the NZTA, the ACC, and Local Government New Zealand. The Chief Executives of Justice, Health, Education and of the Department of Labour are associate members.

APPENDIX: Current and proposed motorcycle and moped licensing regimes

| | BHST | Motorcycle Learner theory test | Learner phase | Learner conditions | Restricted licence test | Restricted phase | Restricted conditions | Full licence test | Min. total time to full licence |
|-------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------|
| Current Regime: | | | | | | | | | |
| Under 25 (No Course) | YES | YES | Min 6 months | <ul style="list-style-type: none"> • 250cc • 70km/h • L plate • no passenger • no riding between 10pm and 5am | YES | Min 18 months | <ul style="list-style-type: none"> • 250cc • no passenger • no riding between 10pm and 5am | YES | 24 months |
| Under 25 (approved course, e.g. DDC) | YES | YES | Min 6 months | | YES | Min 12 months [Must wait 6 months to take course] | | YES | 18 months |
| Over 25 (No Course) | YES | YES | Min 6 months | | YES | Min 6 months | | YES | 12 months |
| Over 25 (approved course) | YES | YES | Min 6 months | | YES | Min 3 months [no wait to take course] | | YES | 9 months |
| Mopeds (need a car or motorcycle learner licence) | NO | YES (motorcycle or car learner theory test) | Min 6 months | Class 1L or 6L conditions apply | YES (but can ride on 6L/1L) | As above-age/course dependent | Class 1R or 6R conditions apply | Yes (but can ride on car or motorcycle learner licence) | As above-age/course dependent |
| Proposed Motorcycle Regime: | | | | | | | | | |
| Motorcyclists - CBTA | YES stronger test | YES strengthened test that emphasises motorcycle requirements | CBTA - no wait to take course and no minimum learner period once completed | <ul style="list-style-type: none"> • LAMs (size restriction) • L plate • no passenger • no riding between 10pm and 5am | NO [Present CBTA certificate] | Min 12 months | <ul style="list-style-type: none"> • LAMs (size restriction) • R plate • no passenger • no riding between 10pm and 5am | YES strengthened test that emphasises motorcycle requirements | 12 months |
| Motorcyclists – No CBTA | YES stronger test | YES strengthened test that emphasises motorcycle requirements | Min 6 months | | YES strengthened test that emphasises m/cycle requirements | Min 18 months | | YES strengthened test that emphasises motorcycle requirements | 24 months |
| Proposed Moped Regime: | | | | | | | | | |
| | BHST | | Theory test | | | Moped licence | | | |
| Moped riders (2 wheels, 50cc or less (if petrol) and designed for operation at 50 km/hr) | YES – a strengthened moped version | | YES (strengthened test that emphasises motorcycle requirements) | | | 6M - Can only ride a moped. If want to ride a motorcycle must obtain class 6L | | | |