

## **Regulatory Impact Statement:**

### **Safer Journeys – New Zealand’s Road Safety Strategy 2010 to 2020: Increasing the safety of young drivers**

#### **Agency disclosure statement**

1. This Regulatory Impact Statement (RIS) has been prepared by the Ministry of Transport (the Ministry).
2. It provides an analysis of options to increase the safety of young drivers. Young drivers (aged 15–24) in New Zealand comprise 16 percent of all licensed drivers but in 2008 they were involved in around 37 percent of all fatal crashes and 38 percent of all serious injury crashes. This led to 122 deaths and 800 serious injuries at a social cost of \$1.1 billion.
3. This impact analysis informs the regulatory decisions to:
  - 3.1. raise the driving age to 16
  - 3.2. make the restricted licence test more difficult to encourage 120 hours of supervised driving practice.
4. Raising public awareness of young driver crash risk and improving the road safety education available to young drivers will improve the effectiveness of these regulatory initiatives by helping people understand the reasons for the change. Together they form the *Safer Journeys* young drivers package.
5. Further detail is to be provided to the Minister of Transport on a number of other initiatives that could enhance the effectiveness of the young drivers package. These are introducing a zero drink drive limit for under 20 year olds (to be included in the *Safer Journeys* Alcohol package), investigation of vehicle power restrictions and further evaluation of compulsory third party vehicle insurance and extending the learner licence period to twelve months.
6. The analysis includes an examination of the potential costs, benefits and risks of these recommended initiatives as well as for a number of alternative options that were examined during the policy process. It is estimated that raising the minimum driving age (includes motorcyclists) to 16 years will save 4 lives and prevent 25 serious injuries and 148 minor injuries each year. This equates to an annual social cost saving of \$39 million.
7. In calculating this benefit we have looked at the effects on all drivers under 20 years of age. This includes the safety benefits of moving some drivers from unsupervised driving on restricted or full licence to supervised driving on a learner licence, and the negative safety effect of a loss of driving experience for those drivers who would have started driving at age 15 under the current scheme. We have also made allowances for a slight increase in unlicensed driving and a transfer of some of the current trips taken by a 15 or 16 year old to an older more experienced driver. We have been conservative by treating crash involved drivers under 20 with an unknown licence class as unlicensed -

so claimed no benefits for that group - many of those drivers will in fact be licensed.

8. Benefits in terms of lives saved and injuries prevented were unable to be calculated for a number of the initiatives due to insufficient research evidence. In terms of increasing levels of supervised driving practice, this is current recommended best practice (OECD, 2006). A number of Australian jurisdictions have recently either mandated or encourage 120 hours of supervised driving practice in the learner licence phase.
9. In terms of raising the driving age, mobility loss is difficult to estimate and so a number of assumptions have had to be made: These are listed below:
  - i. The three types of costs<sup>1</sup> that are likely to be considered by young drivers include (a) cost of licensing and the time cost associated with sitting licensing tests; (b) vehicle ownership (if applicable); and (c) vehicle operating costs.
  - ii. Not all young drivers own a vehicle of their own, this analysis assumed only 20 percent do<sup>2</sup>.
  - iii. This analysis excludes the mobility effects of driving unlicensed or GDL breach offences.
  - iv. Cost elasticity of demand for driving does not change with age (currently it is set to be -0.25).
  - v. The average time (including travel time) required to sit the theory or practical tests is assumed to be one hour per test, except for a full licence test which will be 1.5 hours.
  - vi. Value of time is based on the average of the current minimum wage of \$12.75 per hour and the value of non-work travel time of \$8.2 per hour (Based on NZTA's Economic Evaluation Manual).
  - vii. The average annual vehicle kilometres<sup>3</sup> driven by young drivers (aged 15 to 19 years) are assumed to be 1,100 km for learner licence holders, 7,600 km for restricted licence holders and 8,400 km for full licence holders.
  - viii. The average vehicle ownership and running costs<sup>4</sup> per kilometre is assumed to be \$0.5 per km (including car running costs of \$0.17 per kilometre).
  - ix. The licence application and test fees are as below (see Table one):

Table one: Licence application and test fees

	<b>Application fee</b>	<b>Test fee</b>
<b>Learner</b>	\$39.30	Theory \$39.70
<b>Restricted</b>	\$39.30	Practical \$48.90
<b>Full</b>	\$44.30	Practical \$70.80

<sup>1</sup> For safety conscious drivers, they may also consider the risk of injury from road crashes. But this has not been included in this analysis.

<sup>2</sup> Provisional results from the New Zealand Drivers Study found 18 percent of young drivers (out of a sample of almost 2000) own a vehicle themselves.

<sup>3</sup> Based on New Zealand Travel survey (unpublished information).

<sup>4</sup> New Zealand Automobile Association estimated that the average car ownership and running cost for a small car is \$0.5 per kilometre.

- x. The assumed licensing test failure rates are: 53 percent for learner theory test; 24 percent for restricted practical test; and 40 percent for full licence practical test<sup>5</sup>.
10. Analysis by the Ministry shows that the overall effects on mobility results for raising the driving age to 16 is an estimated cost of \$0.7 million in the first year, \$0.8 million in the second year and \$1.1 million in each of the subsequent years following. However, due to the number of unknown parameters involved, the estimate for year 3 can increase to \$3.2 million even when only one assumption is changed. Therefore, the estimates mentioned in this paper are for illustrative purposes only.
  11. For comparison, the overall effects on mobility of raising the driving age to 17 are estimated at \$13.4 million in the first year, \$28.8 million in the second year and \$49.9 million in the third year, and \$50.1m in each of the subsequent years following. Again due to the number of unknown parameters involved, the estimate for year 4 onwards could increase to \$81 million when one assumption is changed.
  12. The IT system development costs outlined in this impact analysis are based on a simplified set of transitional requirements and some key assumptions. The transitional requirements are designed to minimise the cost of IT system development and so any changes will have an impact on the estimates. They include making overseas conversion applicants, existing GDLS applicants and future GDLS applicants all subject to the same age/time requirements.
  13. It has also been assumed that the increase in the cost to the public of the new extended restricted licence test will be offset by the reduction in cost of the new shortened full licence test.
  14. Some assumptions have also been made in terms of the effect the proposed changes will have on offending rates (detected offences), and therefore the impact on Police and Justice. Changes to increase the focus on young drivers by adjusting Police tactics could see increased offending detected, but this level is difficult to determine.
  15. In order for these policy decisions to be implemented IT system changes to the NZ Transport Agency's (NZTA) Driver Licence Register are required, as well as redeveloping the restricted and full licence tests, amending publications and notifying the public of the changes.
  16. Any additional cost to business of raising the driving age to 16 and making the restricted licence test more difficult to encourage 120 hours of supervised driving practice are likely to be fairly small.

---

<sup>5</sup> Source: The NZTA

17. A full cost benefit analysis has been prepared for the proposed increase in minimum driving age to 16 years of age and it shows this initiative has a potential benefit-to-cost ratio (BCR) of 21:1. This compares with a BCR of 2.7:1 for increasing the minimum driving age to 17 years of age. The assumptions made in relation to these BCR's are outlined in the RIS.

Michael Woodside  
Senior Adviser  
**Ministry of Transport**

March 2010

## Status quo

18. Young drivers are defined as drivers in the 15 to 24 year old age group. The main initiatives to currently manage the high crash risk of this road user group are centred on driver licensing and training.

### *Graduated Driver Licensing System (GDLS)*

19. New Zealand was the first country to introduce a GDLS in 1987. The GDLS forms a major part of the tools currently available to deal with the risks associated with young drivers. It does this by placing restrictions on novice drivers whilst they gain driving skills and experience.
20. Since its introduction, the GDLS has been shown to have contributed to a reduction in crashes among novice drivers of at least eight percent<sup>6</sup>. Many other jurisdictions around the world have now introduced such schemes with the aim of improving the safety record of young drivers. In addition to specifying training stages and duration, the GDLS has incorporated driving restrictions to address the elevated risk of particular situations to young drivers.
21. The GDLS in New Zealand consists of three stages; learner licence (supervised driving only), restricted licence (unsupervised or solo driving with restrictions) and full licence (no restrictions). At each stage drivers must pass an assessment (theory test for learners, practical tests for restricted and full) before they earn a new licence with fewer restrictions and more responsibilities. The current conditions for learner and restricted car licence holders are outlined in table two below.

Table two: Learner car licence and restricted car licence conditions

<b>Learner Car Licence Conditions (minimum time period 6 months)</b>	<b>Restricted Car Licence Conditions (minimum time period 18* months if under 25, 6* months if 25 or over)</b>
<ul style="list-style-type: none"><li>You must drive with a supervisor (a person who has held a full NZ drivers licence for two years); and</li><li>You must display 'L' plates.</li></ul>	<ul style="list-style-type: none"><li>You can drive on your own, except between 10pm and 5am when you must be accompanied by a supervisor;</li><li>You can't drive with passengers unless you have a supervisor with you (there are a couple of exceptions to this condition, for example you can carry your spouse or someone you look after as the primary caregiver); and</li><li>If you sat the test in an automatic transmission vehicle, you can only drive automatic vehicles, unless accompanied by a supervisor.</li></ul>

<sup>6</sup> 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

(\* = The standard 18 and 6 month minimum periods can be further reduced to 12 and 3 months respectively where the applicant successfully completes an approved advanced driving course).

22. The learner licence period is the least risky phase of driving for young drivers. This phase is intended to delay solo driving until satisfactory competence and experience has been gained before a person drives unsupervised. The first six months of the restricted licence period is the most risky phase of driving. The highest risk situations for novice drivers include driving at night and driving with passengers, which is why the GDLS currently imposes night time driving restrictions and does not allow passengers without a supervisor.
23. The penalties for breaching the restricted licence conditions have recently been revised through the Land Transport (Enforcement Powers) Amendment Act. To increase compliance the infringement fee was reduced from \$400 to \$100 whilst the demerit points were increased from 25 to 35. Licences are suspended for three months if drivers get 100 or more demerit points within any two-year period.
24. The Land Transport (Enforcement Powers) Amendment Act and the Sentencing (Vehicle Confiscation) Amendment Act came into effect on 1 December 2009 to help reduce illegal street racing and the anti-social use of vehicles. Young drivers are over-represented in the activities these laws enforce, so these changes should have a beneficial safety effect for this road user group. *Approved driver training courses*
25. In New Zealand young and novice drivers are encouraged to undertake approved driver training courses during their restricted licence phase. Successful completion of these courses, which are user pays, earns the driver a time reduction of 6 months in the period between gaining a restricted driver licence and attempting the full licence practical test.
26. The two approved courses currently on offer are Street Talk and the Defensive Driving Course (DDC). Both courses consist of four class room based sessions and one practical on-road session. Street Talk is provided by a number of organisations, including the New Zealand Institute of Driving Instructors, and has an optional NZQA qualification. DDC is provided by the New Zealand Automobile Association (NZAA).
27. Uptake is low, with about 10 percent of all restricted licence holders undertaking one of the courses.

#### *Other young driver safety initiatives*

28. Other current initiatives designed to help improve road safety outcomes of young drivers include:
  - 28.1. Practice: this is a learner driver programme developed by the NZTA and the Accident Compensation Corporation (ACC). It is designed to encourage supervised driving practice in progressively complex situations (including wet weather, at night, and in reduced visibility) before young drivers attempt the restricted practical licence test. This

programme is not compulsory and to date has an uptake of around 20 percent of learner licence applicants.

- 28.2. Advertising: the road safety advertising campaign in New Zealand is led by the NZTA in partnership with the New Zealand Police (Police) and it focuses on five key priorities; speed, drink-driving, failure to give way at intersections, fatigue and safety belts. In some of these areas specific advertisements have been developed that target the high risk young driver group.
- 28.3. Road safety education programmes: the Police deliver a number of road safety programmes in schools across New Zealand (the *RoadSafe* series). The *Safe Wheels* programme from the *RoadSafe* series is for school years 11-13 (those aged 15 and above). It aims to encourage and empower young people to develop responsible attitudes and behaviour with regard to driving and travelling in cars.
- 28.4. If you are under 20 the legal alcohol limit is 30 micrograms per 100 ml of blood.

#### *Safer Journeys: New Zealand's Road Safety Strategy 2010 to 2020*

29. On 15 February 2010 Cabinet approved *Safer Journeys: New Zealand's Road Safety Strategy 2010 to 2020* [CAB MIN (10) 5/9]. *Safer Journeys* outlines the approach to road safety over the next decade. Research and the experience of other countries such as Australia<sup>7</sup> were carefully examined in the development of the strategy.
30. The strategy was developed following public consultation on the *Safer Journeys discussion document* from 18 August to 2 October 2009. More than 1500 submissions were received with the feedback also used in the development of *Safer Journeys*.
31. The strategy represents a 'step change' in the approach to road safety in New Zealand. *Safer Journeys* differs from the current *Road Safety to 2010* strategy in three key ways.
  - 31.1. It has a long-term vision for road safety: *A safe road system that is increasingly free of road deaths and serious injuries.*
  - 31.2. It adopts a Safe System approach to improving road safety (Safer roads and roadsides, Safer speeds, Safer vehicles, Safer road users) which recognises that even law abiding road users make mistakes and there are limits to the crash forces a human body can tolerate before serious injury or death occurs.
  - 31.3. It sets fewer, stronger and more specific priorities for where the road safety effort should be focused. One of the five areas of high concern in the strategy is increasing the safety of young drivers.

---

<sup>7</sup> A report that compares the Safer Journeys' proposals with the Australian interventions is available at [www.saferjourneys.govt.nz](http://www.saferjourneys.govt.nz)

32. This new approach follows best practice as indicated in the OECD publication “Towards Zero: Ambitious Road Safety Targets and the Safe System approach”.

### **Problem definition**

33. Road crashes place a substantial burden on the economy and the health sector, and lower the quality of life of many New Zealanders. The social cost<sup>8</sup> of road crashes in New Zealand is approximately \$3.8 billion dollars per annum. 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.
34. 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, the society (e.g. the health sector and ACC) also suffers a sizeable part of such cost.
35. In 2008/09 ACC motor vehicle-related claims accounted for 15 percent of all ACC costs, or \$452 million, with the average cost for each road injury \$75,000. Further to this, injuries sustained on public roads account for \$6.8 billion (29 percent) of the \$23.8 billion in outstanding ACC claim liability as of 30 June 2009. Road crashes also have a detrimental effect on elective and non-emergency surgery waiting lists (the cost has not been quantified) and this clearly impacts on the quality of life of many New Zealanders.
36. Road crashes also reduce the productivity of the workforce. ACC advises that in 2008/09 it paid out over \$143 million for lost earnings as a result of road injuries. This figure does not factor in the cost to businesses of employees taking time off work due to road crashes.
37. A further cost to the economy is the impact of congestion caused by road crashes. This can be large, particularly where heavy vehicles are involved and key routes are closed for an extended period.
38. Young New Zealanders aged 15–24 years are a major contributor to this road crash problem. In 2008 young drivers were involved in around 37 percent of all fatal crashes and 38 percent of all serious injury crashes. This is despite only making up 14.5 percent of New Zealand’s population and 16 percent of all licensed drivers. Crashes where young drivers were deemed at fault resulted in 122 deaths and 800 serious injuries in 2008. The social cost of these crashes was \$1.1 billion (out of a total of \$3.8 billion for all road crashes).
39. In terms of ACC claim costs for young drivers, there are significantly more new motor vehicle related claims per 1,000 licence holders for the 15-24 age group than any other age group. In the last three financial years there were

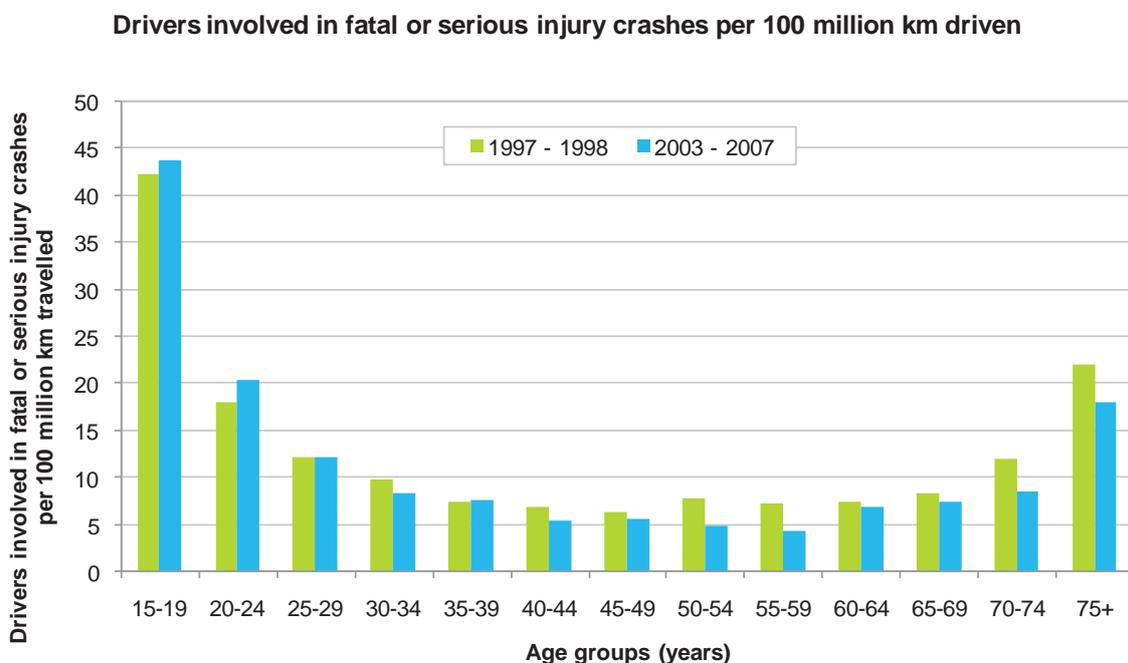
---

<sup>8</sup> The social cost of a road crash, or a road injury, includes the following: loss of life and life quality, loss of output due to temporary incapacitation, medical costs, legal costs and property damage costs. The 2008 social cost estimates are \$3,374,000 for a death, \$591,000 for a serious injury and \$62,000 for a minor injury.

4,970 new ACC entitlement claims for this age group in the motor vehicle account. This compares with 3,334 new entitlement claims for 40-49 year olds over the same time period. The total amount ACC paid out in young driver claims over these three years was over \$284m. This figure excludes claims made by other road users that were injured as a result of a crash where a 15-24 year old driver was at fault.

40. Another cost of road trauma, that is particularly important to take into account for this road user group, is years of life lost. There is a significant cost from a 15-24 year old being killed or maimed in a road crash in terms of the loss in productivity of that individual to society over their lifetime.
41. Road crashes are the single greatest killer of 15–24 year olds, and the leading cause of their permanent injury. Our 15–17 year olds have the highest road death rate in the OECD and our 18–20 year olds have the fourth highest. In addition, for each young at-fault driver killed, 1.3 other road users also die. The comparable figure for alcohol/drug impaired drivers is 0.9 other road users.
42. Young Australians have a road fatality rate of 13 per 100,000 population, while young New Zealanders have a fatality rate of 21 per 100,000 population. If New Zealand had the same road fatality rate for 15 to 24 year olds as Australia, then in 2009 25 lives would have been saved.
43. Figure one shows that young drivers appear to be less safe now than they were a decade ago. This is not the case for the rest of the population.

Figure one:



44. Although there has been a significant reduction in the level of death and injury for young and novice drivers since 1985, from 2000 we have made no further progress in increasing the safety of young drivers. From 2000–2008 the

number of people killed or seriously injured in crashes where a young driver was at fault increased by about 17 percent. This compares with a 6 percent increase across all road users over the same time period.

45. The key reasons why young drivers in New Zealand have lower levels of road safety are:
- 45.1. *Low driving age*: the crash risk is higher for those aged under 18<sup>9</sup> and tends to decrease as age increases. The greatest risk period for young drivers is in the first six months of driving solo (ie the first six months of gaining a restricted licence).
  - 45.2. *Risk taking/maturity*: this is not simply a New Zealand problem. International research shows young drivers underestimate risk, tend to drive in higher risk situations (for example at night and with peer passengers) and incorrectly perceive hazards. In part this reflects the fact that the parts of the brain that assess risk and control emotions and impulses are still developing into a person's twenties. Gender also plays a role with young males being significantly over represented in crash statistics.
  - 45.3. *Driving inexperience*: driving experience reduces crash risk over time. However, the combination of driving inexperience and immaturity makes the crash risk higher for young novice drivers than for older novice drivers.
  - 45.4. *Alcohol/drugs*: young drivers are overrepresented in crashes where alcohol/drugs are a contributing factor. They are also more susceptible to the effects of any alcohol/drugs they consume<sup>10</sup>.
  - 45.5. *Speed*: young drivers are more than two and a half times more likely to have speed as a contributing factor in a fatal crash than drivers over the age of 25.
  - 45.6. *Distractions*: younger drivers have the highest rate of distraction related fatal and serious crashes.

## Objectives

46. The overall aim of *Safer Journeys* is to reduce the number of New Zealanders killed and injured as a result of road crashes and make a significant step towards a 'Safe System'.
47. The aim of this young driver package is to reduce the road fatality rate of our young people from 21 per 100,000 population to a rate similar to that of young Australians of 13 per 100,000.

## Regulatory impact analysis

48. As outlined in the status quo and problem definition sections it is clear that the current response to young driver crash risk needs to be strengthened in order for the above objectives to be achieved. The general framework of the GDLS

---

<sup>9</sup> OECD (2006) *Young Drivers: The Road to Safety* p. 127

<sup>10</sup> *Ibid*, pg 49

has been evaluated as being effective. However, it was introduced in 1987 and there are improvements that could be made to further reduce the crash risk of young drivers and bring New Zealand into line with international best practice.

49. Actions to improve the safety of young drivers will be supplemented by initiatives in the other areas of *Safer Journeys* such as improving the safety of roads and roadsides and improving the safety of the vehicle fleet.

## **Options**

### Status quo

50. Over the period 2000-2008 there was a 17 percent increase in the number of people killed or seriously injured in crashes where a young driver was at fault. The government's desired objectives in this area will not be achieved if the status quo is retained.

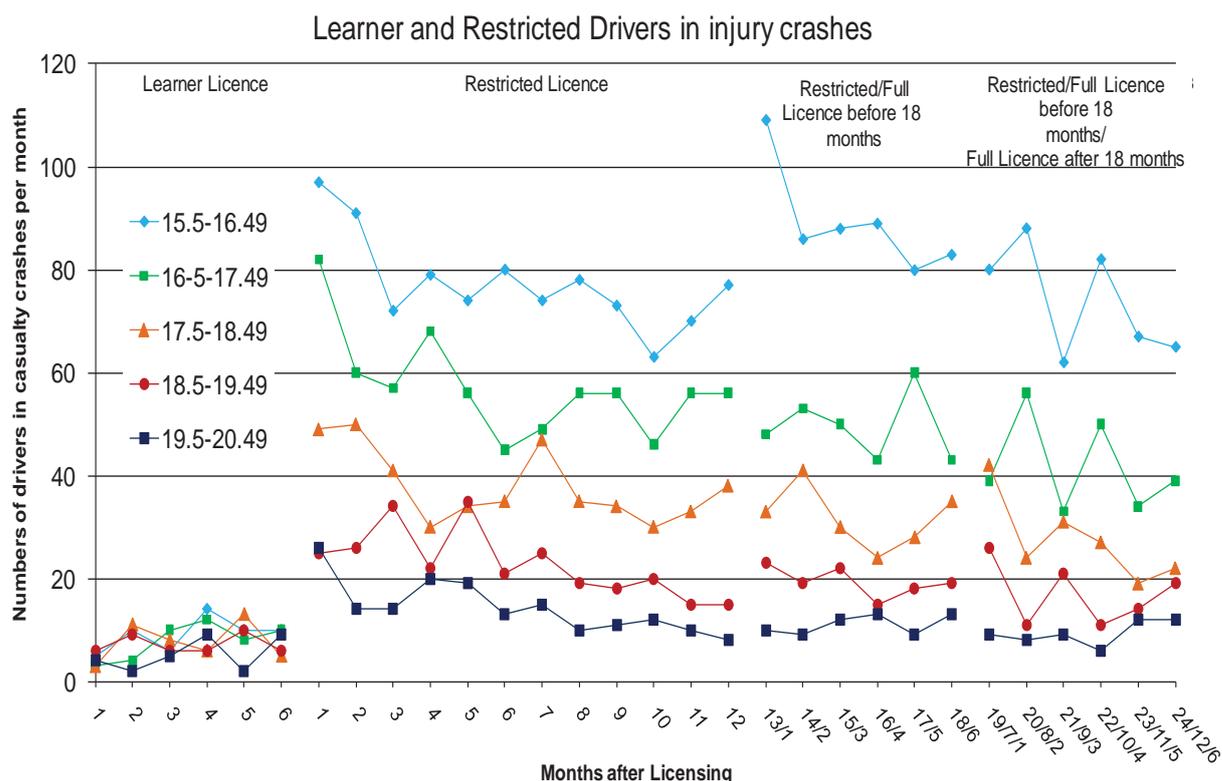
### Raise the minimum driving age

51. At age 15, New Zealand's age of access to the driver licensing system is one of the lowest in the OECD. This was originally set to match the school leaving age, which has since been raised to 16. Our young drivers can currently commence driving unsupervised at 15.5 years of age, by obtaining a restricted licence after six months of learning to drive.
52. International research indicates that, particularly before the age of 18, crash risk is inversely correlated with the age at which a driver starts solo driving: the lower the age, the higher the crash risk<sup>11</sup>. Although increases in crash risk at the onset of unsupervised driving are evident regardless of age, this heightened crash risk is most pronounced for those aged 15 to 16 years.
53. Figure two, over the page, shows the relationship between age, licence stage and number of crashes for young drivers in New Zealand. This graph clearly illustrates the initial increase in crashes when young drivers obtain their restricted licence and drive unaccompanied for the first time. Although this increase is apparent for all age groups, it is most pronounced for those aged 15.5 to 16.5.
54. This graph has been criticised for not taking into account exposure, that is, the amount of travel undertaken by each age group. However, when distance-driven information from the New Zealand Household Travel Survey (using data collected 2003 – 2009) is combined with crash information, we find that 15 and 16 year olds have a higher crash risk. Fifteen and 16 year olds have 2.3 crashes per million kilometres travelled. This compares with a rate of 1.8 for 17 year olds and 1.5 for 18 year olds.

---

<sup>11</sup> OECD (2006). *Young Drivers: The Road to Safety*, p. 127

Figure two:



55. An older minimum driving age helps compensate for the late maturing of young people’s cognitive abilities, which include visual scanning and hazard detection<sup>12</sup>. This will reduce the high crash risk of young and novice drivers and so reduce the level of death and injury caused by this road user group. This is in line with international best practice. Better performing OECD countries have a higher minimum driving age. Great Britain has a minimum driving age of 17 years and the Netherlands 18 years. The mean minimum driving age in the OECD is 17 years of age.
56. An increase in the driving age is consistent with the Department of Labour’s proposed changes to part V of the 1995 Regulations regarding the minimum age of employment in hazardous workplaces.
57. In July 2009, around 35 percent of all people aged 15 in New Zealand had either a learner or restricted car or motorcycle licence<sup>13</sup>. This percentage increases to 55 and 70 percent for people aged 16 and 17 respectively<sup>14</sup>. A rough picture of how young drivers progress through to the full licence status is summarised in Table three over the page.

<sup>12</sup> Jeanne Breen et al, *Review of the Road Safety to 2010 Strategy*, November 2004.

<sup>13</sup> Figures obtained by from the Driver Licence Register

<sup>14</sup> The percentages for July 2008 are broadly similar to those for July 2009.

Table three: Licensing status for young drivers (including motorcycle riders)

Age (years)	Average population for 2005 to 2009	% of population in the age group				
		% start the driver licensing process	% remain at the learner licence status	% move on to restricted licence status	% move on to full licence status	Total % with a learner, restricted or full licence
15	63,600	35%	30%	5%		35%
16	64,300	20%	28%	25%	2%	55%
17	64,300	15%	25%	30%	15%	70%
18	63,700	10%	25%	30%	25%	80%
19	62,700	5%	25%	30%	30%	85%

58. Two options have been examined to determine the optimal driving age. These are raising the driving age to 16 or 17 years old. Analysis of each of these options is provided below.

Raise the minimum driving age to 16 years of age (includes motorcyclists)

59. Benefit cost analysis has been completed that indicates a potential benefit-to-cost ratio (BCR) of raising the minimum driving age to 16 of 21:1. The costs and benefits included in this analysis are outlined in table four.

Table four: Costs and benefits summary of raising the driving age to 16

\$ 000	2010/11 <sup>15</sup>	2011/12	2012/13	2013/14	2014/15	Outyears
<b>BENEFITS</b>						
Total safety benefits		39,209	39,209	39,209	39,209	39,209
<b>COSTS</b>						
Costs to NZTA	910	2,856	0	0	0	0
Costs to Police		39	39	39	39	39
Mobility effects (note)		657	844	1,093	1,093	1,093
<b>Total costs</b>	<b>910</b>	<b>3,552</b>	<b>883</b>	<b>1,132</b>	<b>1,132</b>	<b>1,132</b>
<b>Estimated benefit to cost ratio (based on an annual discount rate of 8% and evaluation period of 5 years)</b>					<b>21:1</b>	

Note: Estimates of mobility effects are for illustrative purpose and are subject to revision when better information becomes available.

<sup>15</sup> Assumes legislation passed at the end of 2010

## Costs

60. The key costs arising from the proposal include:
- 60.1. IT system changes and related costs to the NZTA
  - 60.2. Publicity campaign costs to the NZTA
  - 60.3. Potential compensation to driver licensing agents
  - 60.4. Potential compensation to driver testing agents
  - 60.5. NZTA retained portion of revenue loss<sup>16</sup>
  - 60.6. Likely increase in the costs of handling extra driving unlicensed offences to New Zealand Police (NZ Police)
  - 60.7. Likely increase in the costs of handling extra Graduate Driver Licence (GDL) breach offences to NZ Police
  - 60.8. Potential mobility loss to prospective young drivers.

### Costs to the NZTA

61. Table five illustrates the impact to the NZTA of increasing the driving age to 16 years old.

Table five: Summary of costs to the NZTA from raising the driving age to 16

<b>Additional costs to the NZTA</b>	<b>12 months before implementation</b>	<b>12 months after implementation</b>	<b>Total</b>
IT change costs	\$160,000		\$160,000
Publicity	\$750,000		\$750,000
<b>Total estimated additional costs</b>	<b>\$910,000</b>		<b>\$910,000</b>
Potential compensation to agents			
- Driver licence		\$568,000	\$568,000
- Driver test		\$2,288,000	\$2,288,000
<b>Total potential compensation to agents</b>		<b>\$2,856,000</b>	<b>\$2,856,000</b>
NZTA retained portion of revenue loss		\$2,439,000	\$2,439,000
<b>Total financial implications</b>	<b>\$910,000</b>	<b>\$5,295,000</b>	<b>\$6,205,000</b>

<sup>16</sup> The cost and benefit analysis has not included revenue loss as a cost because this is classified as a transfer payment rather than as an incremental cost.

62. It is estimated that the direct IT system implementation cost incurred by NZTA will be \$160,000. This cost estimate of \$160,000 is based on a simplified set of transitional requirements.
63. Complex transitional and ongoing legislative requirements would require a significant amount of time to implement and intensive resource changes to the driver licensing IT system. Therefore a simplified set of requirements is proposed, where all licence applicants will be subject to the same time and age requirements. These will be:
- 63.1. a new class 1 (car) or class 6 (motorcycle) learner licence cannot be applied for until age 16
  - 63.2. a new class 1 or class 6 restricted licence cannot be applied for until a learner licence has been held for six months and the applicant is aged 16 year and six months
  - 63.3. for those under 25 years, a class 1 or class 6 full licence cannot be applied for until a restricted licence has been held for 18 months and the applicant is aged 18 years, or for 12 months if aged 17 years and six months and an approved advanced driver training course (Defensive Driving or Street Talk) has been completed.
64. The cost estimates assume all licence applicants will be subject to the same age and time requirements, including overseas licence holders wishing to convert their current licence to a New Zealand Driver Licence<sup>17</sup>.
65. The cost estimates would likely increase significantly if, for example:
- a combined time and age criteria is not used
  - overseas conversion applicants are subject to different criteria than New Zealand applicants
  - the GDLS for a motorcycle licence is different than for a car licence
  - the criteria for those who enter the system prior to the legislative changes are different than for those entering after the changes.
66. In addition to IT costs, there will also be direct costs to publicise the change. These costs have been estimated at \$750,000 for the driving age component of the overall awareness raising and publicity for the *Safer Journeys* young drivers package. This cost will be allocated through reprioritisation within the National Land Transport Programme (NLTP). This reprioritisation will occur within the new 'road user safety' activity class. *Safer Journeys* is to become one of the investment priorities of this activity class, focused on transport user behaviour, in the 2010/2011 financial year.
67. During the transition period, the NZTA will face a loss of driver licensing and driver testing fee revenue caused by a cohort of learner licence applications entering the system one year later. This will only be partially offset by reduced

---

<sup>17</sup> It is currently possible for a young person to convert an overseas licence from a country with a lower driving age and, in doing so, gain a New Zealand full licence as young as 15 years. This advantage will be removed as part of the changes made to the Land Transport (Driver Licensing) Amendment Rule. Previously agreed by Cabinet (POL Min (07) 28/11 refers).

variable costs). Estimates of revenue loss are detailed in table six. Application and testing volumes should at least return to current levels over 2 - 3 years.

Table six: Estimated revenue loss for the NZTA from raising the driving age to 16

	<b>Total revenue (based on 10/11 projected)</b>	<b>Estimated first year revenue loss</b>	<b>Relative impact on DL / DT business</b>
Driver Licensing	\$30,850,000	\$2,256,000	7.3 percent reduction
Driver Testing	\$18,060,000	\$3,344,000	18.5 percent reduction
<b>Total:</b>	<b>\$48,910,000</b>	<b>\$5,600,000</b>	<b>11.4 percent reduction</b>

[Note: These estimates have been calculated using the proposed fees from the recent fees consultation paper. They assume that people at various ages (16 years and over) apply for and progress through the GDLS at the same ages that they do currently, that the proposed improved restricted licence test is one hour in duration, that the full licence test will become 30 minutes duration, and that there is a 10 percent increase in the rate at which people move from restricted to full licences as a result of changes as part of further *Safer Journeys* initiatives.]

68. The portion of the revenue contributing towards funding the NZTA's fixed costs is detailed in table seven. These costs relate to the running of the whole DL and DT business. When DL and DT fees are fixed, they are set using expected transaction volumes. Fixed costs are apportioned across all relevant DL and DT fees according to the relative contribution of the activities associated with those costs. Therefore, if NZTA encounters revenue loss the corresponding portion of fixed costs will have no funding.

Table seven: Revenue loss impact on the NZTA's fixed costs

<b>NZTA loss of revenues</b>	<b>%</b>	<b>\$</b>
<b>Admin Costs</b>		<b>\$991,000</b>
Personnel costs (staff time associated with the support of the DL business, limited opportunity to reduce staff as volume decrease is temporary)	80.7%	800,000
Phones & call centre (need to maintain a high level of service as previous experience has shown that during periods of change there is usually an increase in calls)	4.6%	46,000
Office accommodation (office accommodation requirements will remain throughout the period of the change so savings are not possible)	6.3%	62,000
Forms and fact sheets (Small savings can be made in the area of the volumes of forms required for transactions, however within the context of the wider DL business the savings are minimal)	2.7%	26,000
Professional services (as above)	0.5%	5,000
Audit functions (will need to be maintained throughout the implementation period and will not be affected by the young driver changes)	5.2%	51,000
<b>Information Technology Costs</b>		<b>\$954,000</b>
DL system operation management & support (the cost of running, maintaining and paying for the driver licensing IT system, which is not volume based and will need to be maintained throughout the period of change)	53.6%	511,000

Depreciation	41.0%	391,000
Capital Charge	5.5%	52,000
<b>Allocated share of Corporate Costs</b> (the share of the "corporate overhead" (incl administration support, corporate IT systems and support, finance support, facilities management, human resources, etc.) attributed to supporting the DL/DT business of the NZTA)		<b>\$494,000</b>
<b>Total compensation to NZTA for loss of revenues</b>		<b>\$2,439,000</b>

69. Some costs will not be incurred due to the lower volumes of testing undertaken. For example, there will be savings due to lower volumes of application forms and licence card production and the possibility of reduced commission costs payable to testing and licensing agencies. However, these cost savings are expected to be small compared to the loss of revenue as a large portion of costs are fixed.
70. NZTA has contractual relationships with driver testing and licensing providers<sup>18</sup>. Raising the driving age may require compensation payments to these providers because of the decrease in testing and licensing. If compensation is to be paid, the potential costs for this are up to \$2.856 million in the first year of implementation.
71. However, it may be possible to negotiate a lower figure. The final figure will only be determined once legislation is passed and negotiations have been had with the agents. This maximum amount provides for renegotiating commission rates, recompensing agents for the costs they are no longer able to recover, or establishing an alternative practical driver testing delivery service should the agent choose to terminate the agreement.
72. The NZTA has estimated the cost of compensation to agents based on the process used for compensation of agents when the Older Driver Test (ODT) was discontinued several years ago. When the ODT was removed, an agreement was reached with the agent whereby the cost of the reduction in demand (the difference between the level of commissions paid prior to test removal and an agreed baseline) was shared between the NZTA and the agent for the period between the change and the next scheduled negotiation of commissions.
73. Compensation for revenue losses were not included in the cost benefit analysis as this expense is classified as a transfer payment (as the cost burden is transferred from the drivers to the NZTA or the government).
74. Loss of testing capability during the transition period as demand for practical driving tests will drop, through loss of testing officers and/or agents due to decreased demand. Smaller centres, in particular, may not be able to support a local testing officer or retain regular testing services during that period. Following this period, demand is likely to return to previous levels within 2-3

---

<sup>18</sup> Agents manage the licence application and testing process on behalf of NZTA, for example the Automobile Association.

years, and potentially increase temporarily during that time. These costs have not been quantified.

### Costs to NZ Police

75. There is likely to be a cost to Police of handling extra driving unlicensed offences and extra Graduate Driver Licence (GDL) breach offences. These costs are outlined below. Based on \$7.53 per offence<sup>19</sup>, the additional total costs to Police of handling extra offences are estimated at \$39,000 per year.
76. The Police have indicated this estimate does not factor in the cost of a change in Police tactics to increase their focus on young drivers, increased vehicle impoundments, and more roadside demerit point letters served. The Ministry believes these costs to be fairly minor.
77. In addition to this there are also other potential cost implications for Police. Due to the age of this group there is a dual process in dealing with them. The first part of the process involves issuing of infringement notices. However, depending if there are multiple offences involved, or if the offending is of a recidivist nature, Youth Aid will become involved, and this will often lead to the use of family group conferences. Transaction costs across this sector are expensive, both in time and resources, and this is a key area where there is the potential for increasing costs for Police.
78. Due to the difficulty in predicting changes in offending levels the Police have not been able to quantify what the total impact of raising the driving age to 16 will have on their budget. There would also be some additional costs incurred by Justice for collection of unpaid infringements.

### Driving unlicensed

79. Table eight summarises the number of driving unlicensed offences for drivers aged 15, 16 and 17 (offence numbers provided by New Zealand Police – Note: 2009 figures provisional).

Table eight: Driving unlicensed offences

Year	Driving unlicensed		
	Age 15	Age 16	Age 17
2005	923	1,540	1,405
2006	880	1,366	1,440
2007	757	1,279	1,373
2008	610	1,128	1,241
2009	490	828	1,115
Average population (2005-2009)	63,600	64,300	64,300
% licensed (either learner, restricted or full licence) in July 2009	35%	55%	70%

<sup>19</sup> Processing cost provided by NZ Police

80. Effects on people aged 15 years – The average number of detected offences per unlicensed population aged 15 years, for the five years to 2009, was 1.75 per 100 people. If the same level of offence detection continues to apply, this means the increase in the number of detected driving unlicensed offences committed by people aged 15 years would be around 390 (being 1.75% x 63,600 x 35%). Furthermore, there is a possibility that drivers aged 15 years who would breach GDLS offences under the current regime could commit driving while unlicensed offences. Hence, there is possible increase of around 2,200 of driving unlicensed offences being detected. This give a total of 2,590 additional offences for people aged 15 years.
81. Effects on people aged 16 years – If the proportion of young people aged 16 with a licence remains at 55 percent under the new regime, there is no reason to expect an increase in the level of driving unlicensed by this age group. In this case, there would be no increase in driving unlicensed for people aged 16 years.
82. If there is no change in the detection rate, an increase in such offences detected would be expected only if their level of licensing reduces or if the level of violation increases. The average number of detected offences per unlicensed population aged 16 years, for the five years to 2009, is around 4.25 per 100 people. For the purpose of the analysis, a 20 percent increase (either due to an increase in the level of offending or an increase in the detection rate or both) in the number of unlicensed drivers by people aged 16 years was assumed. This will entail an increase in the number of driving unlicensed by people aged 16 years of around 550 (being 4.25% x 64,300 x 20%).
83. In summary, the total number of driving unlicensed offences for people aged 15 and 16 years could increase by around 3,140. Based on \$7.53 per offence<sup>20</sup>, the additional back-office infringement processing costs to New Zealand Police of handling extra offences are therefore estimated at \$23,700 per annum.

#### GD L breach offences

84. Table nine summarises the number of GD L breach offences (offence numbers provided by New Zealand Police – Note: 2009 figures provisional) for people aged between 15 and 18 years, by licence type.

**Table nine: Driving unlicensed offences (Source: New Zealand Police)**

Year	GD L breach offences							
	Learner licence conditions				Restricted licence conditions			
	15	16	17	18	15	16	17	18
2005	2,358	5,827	6,923	7,591	917	5,341	6,009	5,173
2006	2,446	5,818	7,390	7,909	1,009	5,559	6,417	5,412
2007	2,232	5,688	7,412	8,345	836	5,524	6,346	5,466
2008	1,955	5,389	7,216	7,842	843	4,964	6,567	5,509
2009	1,656	4,446	6,548	7,938	729	4,682	5,972	5,461

<sup>20</sup> Source: New Zealand Police

85. As mentioned earlier, the penalties for breaching the restricted licence conditions have recently been revised to increase compliance. This may have an impact on the above trends but it is too early to determine what that impact might be.
86. It is difficult to estimate any change in the number of GDL breach offences from raising the driving age to 16. There are three likely effects of the new regime:
- The number of GDL breach offences by people aged 15 years should reduce to zero (as they are no longer eligible to apply for a driver or motorcycle licence). However the number of those driving without the appropriate license may increase, which was analysed above.
  - The number of offences by people aged 16 years may increase if there is an increase in the number of 16 year old learner licence holders.
  - The number of offences by people aged 17 years may increase since we would expect more people aged 17 years to remain at the learner or restricted licence stage under the new regime.
87. We can expect the three effects to more or less cancel each other out. For illustrative purposes, a 20 percent increase in the level of offending by drivers aged 16 and 17 years of age has (based on the average level of offending for the last 5 years to 2009) been used in this analysis.
88. Based on \$7.53 per offence, the additional costs to Police of handling extra GDL breach offences are therefore estimated at \$15,100 per annum.

#### School transport implications

89. There may also be implications for school transport systems. About 96,800 students (out of a total student population of 760,859 in 2009) receive mainstream school transport assistance. Data from the Household Travel Survey shows approximately the same number again rely on public passenger transport services.
90. The Ministry of Education stated that 15 year olds make up 7.9 percent of the student population. Therefore it could be broadly estimated that around 7,600 students use Ministry-funded transport and a further 7,600 use public passenger transport services to travel to school. However, it is also important to note that just over a third of 15 years olds have a licence, around 85 percent of which have a learner licence. This would suggest the numbers affected are likely to be small.
91. The Ministry of Education suggests the impact will be minimal for services that are contracted and funded directly by it. This is because a place on the bus is provided whether or not a student drives to school, as the bus service routes and capacity are determined on the basis of eligible student numbers.
92. In some cases, services are funded by the Ministry of Education but contracted or provided directly by schools. There may be an implication for these services, as schools are likely to organise bus services based on the actual demand by eligible students. However, the Ministry of Education advise

funding is still provided for these students, it just may be currently used elsewhere in the school. Based on the proportion of the student population that is 15 years old, it is thought there are around 2,700 15 year old students eligible for such services. The Ministry of Education does not have information on how many students take up this service currently and how many drive or use an alternative mode of transport.

93. The biggest impact would likely be on public passenger transport services, operated by regional councils. Results from the household travel survey show a total of 24 percent of school students aged 13-17 years used some form of bus transport to get to school. However, based on the small percentage of students that drive themselves to school (and bearing in mind this includes 16 and 17 years olds as well), the number that would have moved from bus to self-driven, private car transport at age 15 years and 6 months is not likely to be a large. Therefore, while some adjustment may be necessary to bus services in some areas or regions, the overall impact is still expected to be relatively small.

#### Potential mobility loss for young people

94. Increasing the driving age may result in some mobility loss for all youth. Research has shown links between access to transport and social exclusion, especially in rural areas where the availability of transport alternatives is limited.
95. Mobility loss is difficult to calculate with certainty and a number of assumptions have been made (these were outlined in the agency disclosure statement). However, table ten shows that the overall effects on mobility results in an estimated cost of \$0.7 million in the first year, \$0.8 million in the second year and \$1.1 million in each of the subsequent years following. This information has been used in the benefit-to-cost ratio (BCR) calculation.

Table ten: Estimated mobility loss from raising the driving age to 16

<b>Effects</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14<sup>21</sup> onwards</b>
Effects on 15 years old	\$264,000	\$451,000	\$700,000
Effects on 16 years old	\$393,000	\$393,000	\$393,000
<b>Estimated total value of reduced mobility effects</b>	<b>\$657,000</b>	<b>\$844,000</b>	<b>\$1,093,000</b>

96. These estimations are based on the mobility loss to:
- 96.1. those 15 year old drivers who would otherwise advance through the licensing process to a full licence, taking the minimum amount of time required at each licence stage<sup>22</sup>

<sup>21</sup> Assumes legislation passed by the end of 2010

<sup>22</sup> Note that there is no mobility loss to 15 year olds holding a learner licence, as they would be required to be supervised at all times. Therefore, it is assumed that the supervisor can be the driver instead, once the driving age rises.

- 96.2. those young drivers who would have proceeded to a restricted licence at 16 years of age, as there would be some mobility loss due to not being allowed to progress to a restricted licence until age 16 year and 6 months<sup>23</sup>.
97. Research by University of Canterbury in 2004<sup>24</sup> into the travel behaviour of high school students from the Canterbury region, found that the safety benefits of raising the minimum driving age are likely to outweigh costs from mobility loss. This is because very few essential trips were dependant on youth acquisition of a driver licence.
98. The research found that the rural respondents showed “no greater perceived need to have access to drive cars at ages under 17 years than their urban counterparts”. So overall there is a mobility effect but it is not large in comparison to the safety benefits. Further information is provided in the benefit costs analysis (Annex B).
99. In terms of the impact on rural youth, crash data shows that the risk is much higher for youths travelling on open roads. From 2004 to 2008, 26 percent of all fatal crashes on open roads involved young drivers (15 – 24 years). This compares with 11 percent of all fatal crashes on urban roads involving young drivers. With regards to serious injuries, 18 percent of all serious injury crashes on open roads involved young drivers (15 – 24 years). This compares with 20 percent of all serious injury crashes on urban roads involving young drivers. This highlights the higher cost to young people when they are involved in crashes on open roads.

### Costs to Business

100. There is a potential cost to business if young people are unable to undertake employment due to an increase in the minimum driving age.
101. This impact is predicted to be fairly small based on the low number of 15 and 16 year olds driving themselves to work currently and the assumption that the majority of these young drivers do not require a drivers licence to carry out their duties.
102. The 2006 Census data shows that 26 percent of 15 year olds were employed (either part- or full-time), however only 6 percent of 15 year old workers – or 1,005 people – drove to work on the day of the Census. For 16 year olds, 40 percent were employed and, of these, 19 percent – or 4,692 people – drove to work that day.
103. More recent research by the Injury Prevention Research Unit at University of Otago (in 2009) confirms that relatively few 15 or 16 year olds (both urban and rural) were employed and of those relatively few drove themselves to work.

---

<sup>23</sup> The mobility loss for this group could be for anywhere between zero and six months, as it is uncertain when a 16 year old driver would have successfully upgraded their licence status.

<sup>24</sup> Simon Kingham, Tessa Zant, Doug Johnston, *The impact of the minimum driver licensing age on mobility in New Zealand*, 2004.

Travel for work was of most relevance to those aged 18 and over<sup>25</sup>. Following the changes proposed here, young drivers will be able to gain a full licence as early as 18 years of age, or 17 years and 6 months with the 'time discount' available on completion of an approved advanced driver training course.

104. With regards to rural young people in particular, the 2006 Census data showed little extra need amongst rural young drivers to drive for work. Among 15 year olds, 25 percent in urban areas and 33 percent in rural were in full-time or part-time work. The comparable figures for 16 year olds were 39 percent (urban) and 45 percent (rural). Among 15 year olds who were employed in 2006, 6 percent of those living in urban areas and 7 percent of those in rural areas drove themselves to work. The comparable figures for employed 16 year olds were 18 percent (urban) and 24 percent (rural).
105. For the small number of 15 or 16 year old employees who do require a drivers licence, in most cases, businesses should be able to employ people from older age groups (with a drivers licence) at little or no extra cost, as the economy is not at a level of full employment.

### *Benefits*

106. It is estimated that raising the minimum driving age (includes motorcyclists) to 16 years will save 4 lives and prevent 25 serious injuries and 148 minor injuries each year. This equates to an annual social cost saving of \$39 million.
107. In calculating these benefits we have looked at the effects on all drivers under 20 years of age. This includes both the safety benefits of moving some drivers from unsupervised driving on restricted or full licences to supervised driving on a learner licence, and the negative safety effect of a loss of driving experience for those drivers who would have started driving at age 15 under the current scheme.
108. We have also made allowances for the impact of:
  - 108.1. an assumed 15% rise in illegal (eg unlicensed) driving for those 16 years old
  - 108.2. an assumed transfer of 20% of current 15 and 16 year old trips to an older more experienced driver.
109. We have been conservative by treating drivers with an unknown licence class as unlicensed - so claimed no benefits for that group – but many of those drivers will in fact be licensed.
110. We have not allowed for drivers taking a specific amount of time at a given licence phase rather than wanting to reach the next phase at a specific age - for instance anyone over 16.5 years currently on a restricted licence we have treated as though they would still be on a restricted licence in the new regime. However, in reality some in the current scheme may have started at 15.5 and spent 12 months on learner licence and they may still choose to take that long

---

<sup>25</sup> Begg et al. *The opinions of newly licensed drivers in New Zealand on the minimum car driver licensing age and reasons for getting a licence*, May 2009

at the learner phase even though the driving age will be 16. This would represent a safety benefit as under the new regime they will be safer by the time they drive unaccompanied. So in this respect the estimates are conservative.

111. Finally, we have assumed there will be no acceleration through the system as a result of the driving age change for those who under the current system take longer than the required minimum time at each stage or any change to the proportion of those who start the process later than the minimum age.
112. ACC indicate that this initiative could save the ACC Motor Vehicle Account \$15.3 million per year in claims with a potential reduction in Outstanding Claims Liability of \$3.4 million. This equates to a reduction in the ACC levy for each registered vehicle of \$1.20.

### *Risks*

113. There is a belief that raising the age simply transfers the problem to an older age group. However, evidence suggests that age is a separate risk factor, which does not simply transfer to the older age group. There is a noticeable crash reduction with the higher licensing age. A study in Nova Scotia, Canada, showed that in the first two months of driving, the crash rate (per 10,000 novice drivers) for 16 year olds was 241, compared with 178 for 17 year olds.
114. A 2007 study in New Zealand<sup>26</sup> supports Canada's findings. The key findings in New Zealand were that crash risk increases substantially from the learner to the restricted phase and that the younger the driver, the higher the change in risk. For 15.5 to 16.5 year olds, the increase in risk from the learner to the restricted phase is about 30 percent greater than the increase for 16.5 to 17.5 year olds, and about 90 percent greater than for 17.5 to 18.5 year olds. However, for all ages the risk decreases with increasing experience.
115. There is also a risk that 15 and 16 year-old drivers may refuse to comply with the new requirements. Particularly in the short term as those who had been expecting to drive at 15 are no longer able to (ie current 14 year olds). This can be mitigated by educating the public on the reasons for the change. It links with another of the proposals in the *Safer Journeys* young driver package, which is to raise public awareness of young driver crash risk.
116. This argument was also raised when the GDLS was first introduced, but the crash data has shown no increase in the number of unlicensed drivers involved in crashes. Further, there are now strong penalties for unlicensed drivers, and there has been a significant reduction in the number of 15 and 16 year olds ticketed by Police for driving without in a licence in the last 5 years – from 2,463 in 2005 to 1,318 in 2009<sup>27</sup>.

---

<sup>26</sup> Lewis-Evans Ben, *The crash profile of novice drivers in New Zealand*, 2009, p. 29.

<sup>27</sup> The 2009 figure is provisional at this stage.

Raise the minimum driving age to 17 (includes motorcyclists)

117. Benefit cost analysis has been completed that indicates a potential benefit-to-cost ratio (BCR) of raising the minimum driving age to 17 of 2.7:1. The costs and benefits included in this analysis are outlined below. Given the uncertainties with a number of parameters, if the costs of the proposal are higher and/or the benefits are lower than estimated, the overall BCR could be less than one.

Table eleven: Costs and benefits summary of raising the driving age to 16

\$ 000	2010/11 <sup>28</sup>	2011/12	2012/13	2013/14	2014/15	Outyears
<b>BENEFITS</b>						
<b>Total safety benefits</b>		<b>105,737</b>	<b>105,737</b>	<b>105,737</b>	<b>105,737</b>	<b>105,737</b>
<b>COSTS</b>						
Costs to NZTA	910	4,933	2,234	0	0	0
Costs to Police		60	60	60	60	60
Mobility effects (note)		13,431	28,829	49,886	50,135	50,135
<b>Total costs</b>	<b>910</b>	<b>18,424</b>	<b>31,123</b>	<b>49,946</b>	<b>50,195</b>	<b>50,195</b>
<b>Estimated benefit to cost ratio (based on an annual discount rate of 8% and evaluation period of 5 years)</b>					<b>2.7:1</b>	

Note: Estimates of mobility effects are for illustrative purpose and are subject to revision when better information becomes available.

118. This initiative would delay solo driving to 17 and a half years old and full licensure until at least 19 years (reducible to 18 and a half years where an approved advanced driving course has been completed). While the positive impact on safety outcomes is greater, there are also more substantial costs in terms of loss of mobility for young people, particularly in rural areas, and impacts in terms of casual employment.

*Costs*

119. The types of costs included in this analysis (ie IT system change, publicity, increased offending) are the same as for those for increasing the minimum driving age to 16. However, the level of cost is different in a number of areas. These differences are explained under each sub-section below.

Costs to the NZTA

120. Table twelve, over the page, illustrates the impact to the NZTA of increasing the driving age to 17 years old.

<sup>28</sup> Assumes legislation passed by the end of 2010

Table twelve: Summary of costs to the NZTA from raising the driving age to 17

<b>Additional costs</b>	<b>12 months before implementation</b>	<b>12 months after implementation</b>	<b>Total</b>
IT change costs	\$160,000		\$160,000
Publicity	\$750,000		\$750,000
<b>Total estimated additional costs</b>	<b>\$910,000</b>		<b>\$910,000</b>
Potential compensation to agents			
- Driver licence		\$866,000	\$492,000
- Driver test		\$4,068,000	\$1,742,000
<b>Total potential compensation to agents</b>		<b>\$4,933,000</b>	<b>\$2,234,000</b>
NZTA retained portion of revenue loss		\$3,973,000	\$2,007,000
<b>Total financial implications</b>	<b>\$910,000</b>	<b>\$8,907,000</b>	<b>\$4,241,000</b>

121. The IT system change costs and publicity costs are the same as for raising the driving age to 16. In terms of the potential compensation to agents and compensation to the NZTA for loss of revenues, like the driving age to 16 estimates these costs are based on the reduction in driver licence and driver test volumes. These figures are greater as raising the driving age to 17 will have a larger impact on testing volumes than raising the driving age to 16. This initiative would also pose a bigger risk to ongoing testing capability.

#### Costs to the NZ Police

122. As per raising the driving age to 16 there is likely to be a cost to Police of handling extra driving unlicensed offences and extra Graduate Driver Licence (GDL) breach offences. Based on \$7.53 per offence, the additional total costs to Police of handling extra offences are estimated at \$60,000 per year. This is based on a 20 percent increase in offending.

123. The Police have indicated this estimate does not factor in the cost of a change in Police tactics to increase their focus on young drivers, increased vehicle impoundments, and more roadside demerit point letters served.

124. In addition to this there are also other potential cost implications for Police. Due to the age of this group there is a dual process in dealing with them. The first part of the process involves issuing of infringement notices. However,

depending if there are multiple offences involved, or if the offending is of a recidivist nature, Youth Aid will become involved, and this will often lead to the use of family group conferences. Transaction costs across this sector are expensive, both in time and resources, and this is a key area where there is the potential for increasing costs for Police.

125. Due to the difficulty in predicting changes in offending levels the Police have not been able to quantify what the total impact of raising the driving age to 17 will have on their budget. There would also be some additional costs incurred by Justice for collection of unpaid infringements.

#### Driving unlicensed

126. Table eight summarised the number of driving unlicensed offences for 15, 16 and 17 year olds.
127. Effects on people aged 15 years – same as for raising the driving age to 16 (i.e. an increase in 2,590 additional offences).
128. Effects on people aged 16 years – The average number of detected offences per unlicensed population aged 16 years, for the five years to 2009, was 4.25 per 100 people. If the same level of offence detection continues to apply, this means the increase in the number of detected driving unlicensed offences committed by people aged 16 years would be around 1,500 (being  $4.25\% \times 64,300 \times 55\%$ ). Furthermore, there is a possibility that drivers aged 16 years who would breach GDLS offences under the current regime could commit driving while unlicensed offences. Hence, there is possible increase of around 8,800 of driving unlicensed offences being detected. This give a total of 10,300 additional offences for people aged 16 years.
129. Effects on people aged 17 years – If the proportion of young people aged 17 with a licence remains at 70 percent under the new regime, there is no reason to expect an increase in the level of driving unlicensed by this age group. In this case, there would be no increase in driving unlicensed for people aged 17 years. An increase in such offences would be expected only if their level of licensing reduces.
130. If there is no change in the detection rate, an increase in such offences detected would be expected only if their level of licensing reduces or if the level of violation increases. The average number of detected offences per unlicensed population aged 17 years, for the five years to 2009, is around 6.82 per 100 people. For the purpose of the analysis, a 20 percent increase (either due to an increase in the level of offending or an increase in the detection rate or both) in the number of unlicensed drivers by people aged 16 years was assumed. This will entail an increase in the number of driving unlicensed by people aged 17 years of around 880 (being  $6.82\% \times 64,300 \times 20\%$ ).
131. In summary, the total number of driving unlicensed offences for people aged 15 to 17 years could increase by around 13,770. Based on \$7.53 per offence the additional back-office infringement processing costs to New Zealand

Police of handling these extra offences are therefore estimated at \$103,700 per annum.

#### GDLS breaches

132. It is difficult to estimate any change in the number of GDL breach offences from raising the driving age to 17. But it is conceivable that the number of GDL breach offences for population aged 15 and 16 years would reduce to zero (as they will no longer be licensed), with a possible increase for population aged 17 and 18 years.
133. For illustrative purposes, a 20 percent increase in the level of offending by drivers aged 17 and 18 years of age (based on the average level of offending for the last 5 years to 2009) has been used in this analysis.
134. Based on \$7.53 per offence, there could be a reduction in the costs of handling GDLS offences of around -\$43,700 per annum.

#### Other costs

135. The costs to business outlined in the driving age to 16 section are likely to be higher for increasing the driving age to 17. This is due to the fact there are more 17 and 18 year olds in paid employment that will be impacted by the change.
136. The school transport implications are also likely to be greater for the driving age to 17 option than for the 16 option. This is due to the fact more students (around 15 to 20 percent) will be impacted by the proposal.

#### Potential mobility loss for young people

137. Increasing the driving age to 17 will result in some mobility loss for all youth. Table thirteen shows that the overall effects on mobility results in an estimated cost of \$13.4 million in the first year, \$28.8 million in the second year, \$49.9m in the third year and \$50.1 million in each of the subsequent years. This information has been used in the benefit-to-cost ratio (BCR) calculation.

Table thirteen: Estimated mobility loss from raising the driving age to 17

<b>Effects (\$000)</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14 onwards</b>
Effects on 15 years old	264	792	1,343	1,592
Effects on 16 years old	11,457	26,327	46,833	46,833
Effects on 17 years old	1,710	1,710	1,710	1,710
<b>Estimated total value of reduced mobility effects</b>	<b>13,431</b>	<b>28,829</b>	<b>49,886</b>	<b>50,135</b>

#### *Benefits*

138. It has been estimated that raising the minimum driving age to 17, without any further interventions, would save 11 lives and prevent 65 serious injuries and

411 minor injuries each year. This equates to an annual social cost saving of \$106 million.

139. This calculation has been derived using the same methodology and set of assumptions that were used for estimating the benefits of increasing the minimum driving age to 16. This is a conservative estimate as we have not allowed benefits for those who would start at 16 under the current system, but now cannot start until 17.

### *Risks*

140. The risks are largely the same as those for raising the driving age to 16. One risk that is not included under the driving age to 16 section is the potentially reduced influence of parents or caregivers on the learning to drive process. This may have implications for the quality and quantity of supervised driving practice in the learner phase and monitoring of compliance with the GDLS conditions. The publicity campaign supporting the change would need to ensure young drivers themselves were clear on the reasons for the change to support compliance.

### Allow approved courses (currently the Defensive Driving Course and Street Talk) to be undertaken in the learner licence phase

141. The regulatory impact analysis to support allowing approved courses to be undertaken in the learner phase was provided when Cabinet approved this proposal in December 2007 [CAB Min (07) 45/11].
142. If the approved courses are undertaken earlier, this will help learners develop the key skills that are required for solo driving before the first 6 months of solo driving, when an elevated crash risk occurs. The Ministry's previous regulatory impact analysis concluded that this low cost change is likely to further reduce the crash risk of young drivers. This will bring young drivers into line with novice drivers over the age of 25, who are already entitled to complete an approved course during the learner phase.

### Make the restricted licence test more difficult to encourage 120 hours of supervised driving practice

143. Figure two (in the previous driving age section) shows the relationship between age, licence stage and number of crashes for young drivers in New Zealand. This graph clearly illustrates the initial increase in crashes when young drivers obtain their restricted licence and drive unaccompanied for the first time. Although this increase is apparent for all age groups, it is most pronounced for those aged 15.5 to 16.5.
144. While young drivers can learn road rules and how to control a car fairly quickly, it takes a lot longer to develop the cognitive and perceptual skills necessary to drive in complex situations. Young novice drivers are likely to overestimate their own skills and abilities, while underestimating the risk of various situations and behaviours.

145. While inexperience will affect all novice drivers, young drivers are particularly vulnerable to the risk of driving in certain conditions (eg at night or in wet weather) and driving while impaired (by alcohol, drugs or fatigue)<sup>29</sup>. Therefore, it makes sense for young drivers to develop key competencies and attitudes prior to the highest risk period of the first six months of solo driving.
146. Supervised driving practice in the learner licence phase reduces this risk by helping young drivers gain driving experience in a range of conditions (eg at night, in the rain) with the support of an experienced driver. Supervised driving practice has an important role to help develop safe driving skills and responsible attitudes.
147. New Zealand's level of supervised practice for learner drivers is estimated at around 50 hours on average<sup>30</sup>. Experience overseas suggests that, when compared to drivers with between 40 and 50 hours of driving experience, there could be up to a 40 percent reduction in crash risk for those young drivers that undertake 120 hours of supervised practice in all conditions before driving solo<sup>31</sup>.
148. A technical review of the New Zealand restricted licence (practical) test<sup>32</sup> carried out by an independent researcher in 2008 concluded that increasing supervised, on-road experience among learner drivers to at least 120 hours before applying for their restricted licence is likely to have crash reduction effects and therefore lead to savings in young driver-related deaths and injuries.
149. It is not proposed to mandate the 120 hours of supervised driving practice as is the case in some Australian states. The Australian experience suggests a significant number of young drivers and their supervisors admitting to falsifying records.
150. The recommended option is to make the restricted driver licence test more difficult. Strengthening the restricted licence test creates an incentive to complete more supervised practice in order to obtain a full licence.
151. The restricted licence test will be made more difficult by increasing the levels of competencies that individuals must demonstrate, such as hazard perception and anticipation. This is a shift away from the current focus of the restricted licence test which assesses the more traditional skills of vehicle control and manoeuvring. The intention is that to be able to pass the test, novice drivers will need to have completed around 120 hours of supervised practice in a range of conditions. The provisional (restricted) licence test in Victoria, Australia, has been amended in a similar way.

---

<sup>29</sup> Joel, A. *Young novice driver education and supervised driving: a review of international literature, programmes and trends*. May 2008.

<sup>30</sup> NZDS

<sup>31</sup> Nils Petter Gregersen, *Evaluation of 16-years age limit for driver training – first report*, 1997, Swedish National Road and Transport Research Institute

<sup>32</sup> *Technical Review of Restricted Licence Test*: RCSC Services Pty Ltd 25 June 2008

152. To increase the effectiveness of this initiative a public awareness campaign will be carried out to explain why supervised practice is important, and why we have licence conditions for novice drivers (eg restrictions on night time driving and carrying peer passengers). The focus of this campaign will be young drivers and their supervisors (in most cases these are parents). A review and improvement of the road safety education available to young people is also linked to this initiative.
153. Support and encouragement will be provided to young drivers and their supervisors through resources such as the 'Practice' programme (*Practice* is a learner driver programme developed by the NZTA and ACC to help learner drivers pass the restricted licence test). Professional driving instruction will also be encouraged.

### Costs

154. The NZTA has estimated that it will cost \$320,000 to redevelop the restricted licence test so it is in line with best practice and achieves the objective of encouraging 120 hours supervised driving practice. This estimate includes the cost of also redeveloping the full licence test, as some of the material from this test is now likely to be incorporated into the new restricted licence test.
155. It is likely that the current 30 minute restricted licence test duration will not be sufficient, and that a 60 minute test will be required. On the other hand it is expected the full licence test will be reduced from 60 minutes to 30 minutes. It is anticipated that by aligning the proposed 60 minute restricted test fee with the current 60 minute full licence test fee, and the proposed 30 minute full licence test fee with the current 30 minute restricted licence test fee, no extra funding of additional testing officer time will be required.
156. Therefore, the fee changes will be cost-neutral for licence applicants, as the increase in the cost of the new extended restricted licence test will be offset by the reduction in cost of the new full licence test.
157. The eventual effect of changing the duration of the tests will result in a gain in revenue after a three year period due to more people sitting their restricted licence tests than full licence tests. However, as outlined in the driving age section, in the short term there will be a cost to the NZTA of maintaining testing services due to reduced volume.
158. Making the restricted licence test more demanding will mean that some locations for restricted licence tests will no longer be suitable. This is because the roading types and traffic density at those locations will not be adequate to meet the new test requirements. It is anticipated, however, that restricted licence testing could be provided at locations at which full licence testing is currently provided.
159. IT changes will also be required to amend the driver licence test booking system so that a longer appointment time can be scheduled when the restricted practical test is booked. It is estimated that the IT development cost will be \$300,000.

160. There will also be the cost of publicity regarding the reasons for the testing changes. This is estimated to be \$150,000. Updating of the road code, forms, fact sheets and the NZTA website can be done as part of business as usual, thus incurring little additional cost.
161. People who wish to progress to their restricted licence after the minimum time period on a learner licence (6 months) will need to undertake an average of 4.6 hours of supervised practice per week. There will be some costs to young people and their supervisors in terms of this time commitment to practising driving. These costs can be minimised by incorporating supervised driving practice into daily routines such as commuting.
162. In the short term, as people get used to the new higher standard of the restricted licence test, there is likely to be an increase in the number of failures. The level of this increase will be dependent on the level of supervised practice that has been undertaken, so it is important that the changes are clearly communicated to the public through a range of channels. There also needs to be a reasonable lead in so current learner drivers are given enough time to be able to undertake the expected 120 hours of supervised driving practice.
163. The experience with the change to computer theory testing for learner licences has shown that the fail rate increases immediately after the introduction of the test, but that this rate reduces over time as people adapt to the new requirements.
164. As a result of more test failures there may be an increase in the number of people not adhering to their licence conditions. This would lead to increased processing costs for Police and Justice in terms of the number of fines imposed and the impact on the courts. A 5 percent increase in licence breaches for all novice drivers would equate to approximately \$50,000 extra in processing costs to the Police each year.

### *Benefits*

165. The focus of this initiative is to ensure our younger drivers have more driving experience when they first drive solo - the highest crash risk period.
166. Providing supervised driving at the learner phase is current recommended best practice (OECD, 2006). An increased emphasis on the actual skill level required for safe driving (through the awareness campaign and new testing requirements) is expected to contribute to improved driver attitudes to safety and therefore improved road safety outcomes.
167. A number of other jurisdictions (including most Australian states) have recently either mandated or encourage 120 hours of supervised driving practice in the learner licence phase. Their initial experience suggests a reduction in crashes but currently there is insufficient research evidence to provide an estimate of lives saved and injuries prevented.

## *Risks*

168. There is a risk that young drivers will not receive adequate support from supervisors to gain 120 hours. This risk will be reduced by undertaking a public awareness campaign to explain why supervised practice is important and providing supporting material. However, consideration could be given to having designated community supervisors available for tuition.
169. There could also be an increase in the number of people flouting the conditions of their learner licence (ie driving unsupervised) if the restricted licence test is made more difficult. This could be minimised by including better opportunities for accessing professional driving lessons for people from varying demographics. The pass rates of the new test will be monitored by the NZTA with the course content evaluated to ensure those with 120 hours supervised driving practice are able to pass.

### Mandate 120 hours of supervised driving practice in the learner licence phase with the introduction of log-books

170. As mentioned above, the Australian experience suggests there are enforcement difficulties from mandating practice with a significant number of young drivers and their supervisors admitting to falsifying records. This would undermine the effectiveness of efforts to increase levels of supervised driving.
171. The ongoing enforcement and administrative costs as a result of mandating would be much greater than the cost of encouraging people to undertake 120 hours of supervised driving practice by increasing the difficulty of the restricted licence test.
172. If the 120 hours are made mandatory IT development may be required to record the achievement of 120 hours on each persons driving record. This would ensure the novice driver cannot progress to the full licence phase without completing the mandated level of supervised driving practice.

### Extend the learner licence period from six to twelve months

173. International best practice recommends a longer period of supervised learner driving as well as an older minimum age to compensate for the late development of young driver cognitive abilities including visual scanning and hazard detection<sup>33</sup>.
174. Extending the minimum learner licence period from six to twelve months is estimated to save 3 lives, and prevent 18 serious injuries and 106 minor injuries per year. This equates to an annual social cost saving of \$28 million.
175. The costs of changes to the driver licensing IT systems, administered by NZTA, from this initiative are estimated to be \$54,000 to \$58,000.
176. The proposal is to monitor the effectiveness of the driving age increase and increased supervised practice requirement before determining whether this

---

<sup>33</sup> Jeanne Breen et al, *Review of the Road Safety to 2010 Strategy*, November 2004.

initiative should be introduced. This will involve assessing the impact of these changes on the amount of time young drivers spend on their learner licences and whether there would be additional benefits from an increase in the learner period.

#### Vehicle power restrictions

177. Victoria, New South Wales, and Queensland have a high power vehicle restrictions in place for probationary (New Zealand's restricted) licence holders. These restrictions aim to reduce the number of crashes involving inappropriate or excessive speed and reckless driving.
178. In New Zealand learner and restricted motorcyclists are currently restricted to riding motorcycles under 250cc<sup>34</sup>. However, there is no such restriction for novice car drivers.
179. Introducing vehicle power restrictions for young drivers was the fourth-ranked initiative from public submissions on the *Safer Journey's* discussion document.
180. An evaluation of the effectiveness of vehicle power restrictions in reducing the crash risk of young drivers in Australia is currently being undertaken by Monash University. The Ministry recommends waiting on the results of this evaluation (due later in 2010) before determining whether or not to implement vehicle restrictions in New Zealand.

#### Encourage young drivers to undertake professional driver training

181. Increased driver training was a popular initiative in the consultation with many submitters calling for the government to either subsidise or mandate training for young drivers.
182. Driver training means either individual or group tuition by a professional driving instructor. As mentioned previously, research indicates that increased hours of supervised driving practice is likely to reduce young driver crash risk. However, international research results vary on the benefits of professional driver training for young drivers.
183. The impact of professional driver training is different according to when the training is carried out (linked to age and experience factors) and the type of training that is provided. Ideally training needs to develop young driver skills without leading to overconfidence, which can increase young driver crash risk. Therefore, a focus on making young drivers aware of their limitations (for example by teaching hazard perception skills) is an important component of young driver training.
184. Elvik and Vaa<sup>35</sup> have completed the most comprehensive review of driver training programmes. Overall their studies show drivers with formal training had 1.9 percent fewer crashes than drivers with no training. This figure is not statistically significant. Therefore, they conclude that although driver training is

---

<sup>34</sup> Safer Journeys includes a proposal to change the 250cc restriction for motorcyclists to a power-to-weight restriction due to advances in motorcycle power and performance.

<sup>35</sup> Elvik R. And Vaa T. 2004. The handbook of road safety measures. Elsevier, Oxford UK

unlikely to increase crash risk it does not appear to provide significant safety benefits. This needs to be weighed up against the costs of professional driver training, which are not insignificant.

185. Officials will continue to monitor the effectiveness of various professional driver training courses to determine if something similar should be piloted here. One such course is an Australian scheme called *Keys-2-Drive*. This 5-year programme is a partnership between the Australian Government and Australian Automobile Association. It provides one free driving lesson to each learner driver and their supervisor by an accredited driving instructor. It aims to reduce the crash risk of young drivers in the restricted licence period as well as equip supervisors with a practical coaching approach they can use throughout the learning-to-drive journey.

#### Compulsory third party vehicle insurance

186. Compulsory third party insurance is another very popular option amongst the public. The main reasons for support is that people think it will prevent young people from owning or driving a high powered car (as the cost to insure will be prohibitive), and that it will ensure parties in a crash with an otherwise uninsured driver can receive compensation for the damage caused to their own vehicle.
187. Initial investigations by the Ministry has shown that third party vehicle insurance is unlikely to result in any further safety benefit, and will have limited effect on the level of insurance uptake. New Zealand has a high level of vehicle insurance uptake, with around only 7.6 percent of vehicles uninsured. In the United Kingdom, where insurance is compulsory, it is estimated that about 6 percent of registered vehicles are uninsured. This has not changed with increased enforcement and more severe penalties for those caught uninsured.
188. In other countries, third party vehicle insurance covers the cost of personal injury cover, as well as insurance for property damage, making it more expensive. In New Zealand, because of the ACC scheme levies are already being paid for injury cover through motor vehicle registrations (and other avenues), so it is unlikely that the cost of third party insurance would be prohibitive to young car owners. AMI estimates that a young driver with a poor traffic offence history would be able to obtain third party vehicle insurance for around \$500 per year.
189. The research also showed that while vehicle owners aged between 15-24 years were more likely than other age groups to own an uninsured vehicle, vehicle non-insurance is not a characteristic of young owners only. In terms of actual numbers of uninsured vehicles owned by survey participants, seventy percent of all uninsured vehicles are owned by people under the age of 40, with a fairly even split between those aged below 25 years, and those aged between 25 and 40 years. The incidence of owning an uninsured vehicle reduced significantly for those vehicle owners surveyed aged over 40 years, and was almost non-existent amongst those aged over 60 years.

190. In terms of insurance claims, AMI has stated that, in 2008, the 25-39 year age group dominated the uninsured motorist claims, representing over 50 percent of all motorists indebted to AMI.
191. Further evaluation of a compulsory third party vehicle insurance scheme would determine if the initial investigations undertaken by the Ministry of Transport are accurate. If there is found to be a road safety benefit this would need to be compared to the ongoing administrative costs.

#### Introduce a zero drink drive limit for drivers under 20

192. The crash risk for young drivers rises significantly even at very low Blood Alcohol Concentration (BAC) levels. At the existing BAC of 0.03 the risk of a 15 to 19 year-old driver being involved in a fatal crash increases by 15 times compared with a sober driver aged over 30.
193. Currently the legal alcohol limit for drivers under 20 is 30 micrograms per 100 ml of blood. Reducing this limit to zero is predicted to save at least two lives and prevent 43 injuries each year at an annual social cost saving of \$16.5 million.
194. The major costs of this initiative relate to Police and Justice costs. The level of cost is dependent on how the proposed offence would be dealt with (ie as an infringement or summary offence). There would also be the cost of publicising the change and amending publications.
195. Full regulatory impact analysis to support introducing a zero drink drive limit for drivers under 20 will be provided in the *Safer Journeys* Alcohol package regulatory impact statement.

#### Secondary school road safety education

196. Currently in New Zealand, the provision of road safety education in schools is inconsistent due to resource constraints and the nature of the curriculum. However, a number of overseas countries with good road safety records have comprehensive school road safety education programmes in place.
197. An alternative proposal would be to develop a specific road safety programme for secondary school students that focuses on issues particularly affecting young drivers, such as drink/drugged driving, consequences of driving too fast and driving while fatigued and distracted.
198. There are a number of programmes already in place across the age ranges up to pre-driver age, which are delivered in some schools in conjunction with NZ Police. Some of these are official, and some are of a more ad hoc nature. However, these programs have not been fully evaluated.
199. A review of the educational opportunities for young drivers would identify any necessary changes from the current delivery approaches. What road safety education programs should be delivered in schools could then be determined.

## Consultation

200. 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.
201. 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
202. 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. This is a much higher number of submissions than was received on the *Road Safety to 2010* strategy (about 800).
203. The Ministry of Youth Development (MYD) also received 310 submissions on the *Safer Journeys* youth document (264 from individuals and 46 from groups).

### *Feedback received on proposed young drivers initiatives in the discussion document*

#### Driving age

204. Overall, raising the driving age to 17 was the third highest ranked initiative (out of the 62 initiatives in the *Safer Journeys* discussion document) as a result of the *Safer Journeys* consultation process. Raising the driving age to 16 was ranked 26<sup>th</sup>. If these results are combined into one initiative, raising the driving age would have been the highest ranked initiative overall.
205. The number of people (from all submissions) who supported raising the driving age to 16 or higher far outweighed the number of people who opposed raising the age (by about 3 to 1). Of those who supported a change, almost twice as many thought 17 is a better age than 16. There was also a reasonable number who supported a driving age of 18 years or higher.
206. Reasons for supporting an increase included that 16 or 17 year olds are more mature and can therefore make better decisions; 15 and 16 year olds are too young to be driving a car; and brain development is not advanced enough at a younger age.

207. Those who preferred the driver licence age stay at 15 often stated that education was more important than age. Some concerns with raising the driving age included that raising the age may lead to less parental involvement in supervised driving and influence on driving behaviour, and more involvement of other young drivers as supervisors and models of driving behaviour. Also mentioned was the impact on those leaving school at age 16 to work or pursue an apprenticeship and the impact on rural youth mobility.
208. Most key stakeholders supported the initiative to raise the driving age, with even wider support for extending the learner licence period to 12 months. However, the Automobile Association, Federated Farmers and NZ Institute of Driver Educators all opposed raising the driving age, but supported extending the learner licence period. This reflects their belief that the amount of experience is more important than the age at which a person starts driving.
209. Responses from local authorities, received through Local Government New Zealand, showed mixed support in rural areas for an increased driving age. Some members supported the increase, while others were concerned for the mobility and safety, in terms of using alternative modes such as walking and cycling, of rural young people.
210. The report from MYD showed the majority (56.6 percent) were against raising the driving age. Interestingly though, when youth participants were asked which initiative they felt was most important for increasing the safety of young drivers, raising the driving age to 17 was ranked as the most important initiative overall.
211. MYD note that this is a 'snapshot of some youth views and opinions'. However, the results of the consultation are not significantly out of line with the preliminary results of the NZ Drivers Study, where 51 percent of young drivers support the current licensing age of 15 years.

#### Strengthened restricted test to encourage 120 hours supervised practice

212. This initiative ranked 9<sup>th</sup> out of the 62 initiatives in the discussion document. It was well supported by both the general public and stakeholders. A few submitters questioned the expense this may impose on young drivers and their supervisors.
213. The report from MYD showed the majority of respondents (57 percent) supported strengthening the restricted licence test to encourage greater levels of supervised driving practice. This was ranked as the third most important initiative out of all of the young driver initiatives, behind raising the driving age and increasing the benefit of professional driver education.

#### *Other consultation*

214. The *Safer Journeys* strategy, which included these initiatives, was endorsed by the members of the National Road Safety Committee (NRSC). The NRSC comprises the Secretary for Transport, the Commissioner of Police, and the Chief Executives of the NZTA, ACC, and Local Government New Zealand.

The Chief Executives of the Ministries of Health, Education, Justice and the Department of Labour are associate members.

215. The following government agencies were consulted in the development of this paper: New Zealand Police, Ministry of Justice, Ministry of Health, Ministry of Education, the Department of Labour, Ministry of Agriculture and Fisheries, Department of Internal Affairs, Office for Senior Citizens, Office for Disability Issues, Ministry of Economic Development, Ministry of Pacific Island Affairs, Ministry of Youth Development, Ministry of Social Development, Te Puni Kōkiri, Ministry of Tourism, ACC, Local Government New Zealand, NZTA and The Treasury. The Department of the Prime Minister and Cabinet was informed.

## **Conclusions and recommendations**

216. Increasing productivity is a major Government objective. Road crashes place a substantial burden on the economy and young New Zealanders aged 15–24 years are a significant contributor to this problem.
217. Increasing the safety of young drivers is an area of high concern in the *Safer Journeys* strategy. It is clear that the current approach to young driver safety will not achieve the government’s objective of reducing the road fatality rate of our young people from 21 per 100,000 population to a rate similar to that of young Australians of 13 per 100,000 by 2020.
218. The Ministry recommends the following package of changes be implemented. This addresses some of the key reasons why our young drivers have lower levels of road safety compared to their counterparts in other comparable countries. It takes into account public feedback, research and evidence.
- 218.1. Raise the minimum driving age to 16
- 218.2. Make the restricted licence test more difficult to encourage 120 hours of supervised driving practice
- 218.3. Raise public awareness of young driver crash risk
- 218.4. Improve the road safety education available to young people and increase access to it
- 218.5. Allow approved courses (currently the Defensive Driving Course and Street Talk) to be undertaken in the learner licence phase.
219. Raising public awareness of young driver crash risk and improving the road safety available to young drivers will support the regulatory elements of this package. These initiatives help improve the effectiveness of a driving age increase by helping people understand the reasons for the change and reinforce the importance of 120 hours of supervised driving practice in the learner licence phase.
220. Overall this package will bring New Zealand closer to Australia in terms of 15-24 year old deaths and injuries per 100,000 population. The Ministry of Transport research and evaluation and monitoring teams have estimated that the safety benefits from the proposal would prevent four fatalities, 25 serious

injuries and 148 minor injuries per year. The corresponding reduction in the social cost of road crashes and injuries is estimated at \$39 million per annum (in June 2009 dollars).

221. Table fourteen summarises the potential costs of the *Safer Journeys* young drivers package. These cost estimates are based on a number of assumptions, as outlined in the relevant sections of the RIS. Compensation and Police costs may in fact be much lower and the mobility estimate is for illustrative purposes only.

Table fourteen: Potential overall cost of the *Safer Journeys* young drivers package.

Potential financial implications	2010/11 <sup>36</sup>	2011/12	2012/13	Outyears
IT change costs (raising driving age to 16, extending the length of the restricted licence test [RLT], reducing the length of the full licence test [FLT], allowing approved courses in the learner phase)	\$460,000			
Develop and introduce new RLT and FLT	\$320,000			
Publicity (Raise public awareness of young driver crash risk)	\$900,000	\$1,000,000		
Police costs (handling extra offences from raising driving age to 16, and making the restricted licence test more difficult)		\$89,000	\$89,000	\$89,000
Potential compensation to agents				
- Driver licence		\$568,000		
- Driver test		\$2,288,000		
NZTA retained portion of revenue loss		\$2,439,000		
Mobility effects (from raising the driving age to 16)		\$657,000	\$844,000	\$1,093,000
<b>Total financial implications</b>	<b>\$1,680,000</b>	<b>\$7,041,000</b>	<b>\$933,000</b>	<b>\$1,182,000</b>

222. As outlined under the regulatory impact analysis section, further detail is to be provided to the Minister of Transport on a number of initiatives that could enhance the effectiveness of the above *Safer Journeys* young drivers package. These are:

<sup>36</sup> Assumes legislation passed by the end of 2010

222.1. A zero drink drive limit for drivers under 20 (further detail to be provided in the *Safer Journeys* alcohol package due to Cabinet in April 2010)

222.2. Vehicle power restrictions for young drivers

222.3. Compulsory third party vehicle insurance

222.4. Extending the learner licence period from six to twelve months

### Implementation issues

223. Table fifteen provides information on the legislative vehicle, tasks, recommended timing and responsible agency for each of the regulatory initiatives within this package.

224. The Land Transport (Driver Licensing) Amendment Bill (which was introduced on 21 September 2007) to amend the Land Transport Act 1998 includes the proposal to increase the minimum driving age to 16 years. It is suggested that this proposal instead be incorporated in a new Land Transport Amendment Bill, scheduled for introduction towards the middle of 2010, which will give effect to Government's decisions on *Safer Journeys*.

Table fifteen: Implementation of the regulatory initiatives within the recommended *Safer Journeys* Young Drivers package

Action	Legislative Vehicle	Task and timing	Responsibility
<i>Raise the minimum driving age to 16</i>	Land Transport Amendment Bill and an amendment to the Land Transport (Driver Licensing) Rule 1999	Bill to be introduced June 2010 and Rule on the rules programme for 2010  Publicity regarding the change (linked to wider awareness raising initiative)  IT changes – minimum 6 months required	Ministry of Transport and the NZTA  NZTA, Police, ACC  NZTA
<i>Make the restricted licence test more difficult to encourage 120 hours of supervised driving practice in the learner licence phase</i>	Will either be included in the new Land Transport Amendment Bill or a separate amendment to the Land Transport (Driver Licensing)	Bill to be introduced June 2010 and Rule on the rules programme for 2010  Publicity regarding the change (linked to wider awareness	Ministry of Transport and the NZTA  NZTA, Police, ACC

	Rule 1999	raising initiative)  IT changes - minimum 6 months required  Redeveloping the restricted and full licence tests – minimum 9-12 months required	NZTA  NZTA
<i>Introduce a zero drink drive limit for drivers under 20</i>	Land Transport Amendment Bill and an amendment to the Land Transport (Driver Licensing) Rule 1999	Alcohol package Cabinet paper and Regulatory Impact Analysis – April 2010  Bill to be introduced June 2010 and Rule on the rules programme for 2010	Ministry of Transport  Ministry of Transport and the NZTA
<i>Allow approved courses (currently the Defensive Driving Course and Street Talk), for which a six-month reduction in the restricted phase is permitted, to be undertaken in the learner licence phase</i>	Will either be included in the new Land Transport Amendment Bill or a separate amendment to the Land Transport (Driver Licensing) Rule 1999	Bill to be introduced June 2010 and Rule on the rules programme for 2010  Linked to driving age IT changes (minimum 6 months required)	Ministry of Transport and the NZTA  NZTA

225. This table illustrates a number of agencies will be involved in the implementation of the *Safer Journeys* young drivers initiatives and so there is a risk of duplicated effort across agencies. To ensure effective coordination the National Road Safety Committee (NRSC) will be setting up cross agency working groups to monitor the implementation of these actions. These working groups are likely to be based around the Safe System concept that is at the centre of the *Safer Journeys* strategy. The young driver initiatives will be monitored by the Safe Road User working group.

226. Another implementation risk relates to IT system change. There are significant financial and timing risks if driver licensing system IT changes commence before legislation is passed. This is because any slight changes to the legislation, for example adding special transitional arrangements, can have a

major impact on the final IT system requirements. This will need to be carefully managed by closely involving NZTA technical staff in the legislative working group.

### **Monitoring, evaluation and review**

227. The effectiveness of these initiatives will be monitored as part of reviewing the *Safer Journeys* action plans. This function will be carried out by the NRSC, who will provide regular progress reports to the Minister of Transport

## **ANNEX: Source documents**

TOWARDS ZERO: AMBITIOUS ROAD SAFETY TARGETS AND THE SAFE SYSTEM APPROACH - ISBN 978-92-821-0195-7 c OECD/ITF, 2008

*Report on Road Safety Progress Since 2000*, Ministry of Transport, December 2009

*Comparing Safer Journeys proposals with Australian road safety initiatives*, Ministry of Transport, December 2009

*Summary of submissions on the Safer Journeys discussion document*, Ministry of Transport, November 2009

*Youth version of Ministry of Transport Safer Journeys consultation report*, Ministry of Youth Development, October 2009

*Safer Journeys Discussion Document* – ISBN 978-0-478-07243-3, Ministry of Transport, August 2009.

*Safer Journeys, New Zealand's Road Safety Strategy 2010 – 2020*, Ministry of Transport, March 2010

*Road Safety Strategy to 2010* – ISBN 0-478-24142-9, October 2003

*Compulsory Third Party Vehicle Insurance Discussion Document*, Ministry of Transport

D.J Begg, J.D. Langley, R.L. Brookland, J. R. Broughton, S. Ameratunga, A.J. McDowell. *New Zealand Drivers Study: a follow-up study of newly licensed drivers*. Injury Prevention Research Unit, Dunedin School of Medicine, University of Otago

D.J Begg, J.D. Langley. *The opinions of newly licensed drivers in New Zealand on the minimum car driver licensing age and reasons for getting a licence*, May 2009

D.J Begg, J.D. Langley. *A critical examination of the arguments against raising the car driving licensing age in New Zealand*, Injury Prevention Research Unit, Otago University, Traffic Injury Prevention, 10:1-8, 2009

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

Elvik R. And Vaa T. 2004. *The handbook of road safety measures*. Elsevier, Oxford UK

Joel, A. *Young novice driver education and supervised driving: a review of international literature, programmes and trends*. May 2008

Jeanne Breen et al, *Review of the Road Safety to 2010 Strategy*, November 2004

Lewis-Evans Ben, *The crash profile of novice drivers in New Zealand*, 2009

Leung Joanne, *Costs and benefits of raising the minimum driving age to 16 years of age*, Ministry of Transport, March 2010

Nils Petter Gregersen, *Evaluation of 16-years age limit for driver training – first report*, 1997, Swedish National Road and Transport Research Institute

OECD (2006) *Young Drivers: The Road to Safety*

Simon Kingham, Tessa Zant, Doug Johnston, *The impact of the minimum driver licensing age on mobility in New Zealand*, 2004

*Technical Review of Restricted Licence Test*: RCSC Services Pty Ltd 25 June 2008

Bjorner, T. (1999). *Demand for car ownership and car use in Denmark: a Microeconomic model*, International Journal of Transport Economics and Policy, 26 pp. 377-395.

Bureau of Infrastructure, *Transport & Regional Economics Elasticities Database*  
<http://dynamic.dotars.gov.au/bte/tedb/pdf/table1B01.pdf>

Litman, T (2005). *Transportation Elasticities: How Prices and Other Factors Affect Travel Behaviour*. Victoria Transport Policy Institute.