SAFER JOURNEYS – LOWERING THE LEGAL ALCOHOL LIMITS FOR ADULT DRIVERS

Proposal

- 1. The Land Transport Act 1998 specifies the drink-driving offences in New Zealand that apply to adult drivers aged 20 years and over. There is a limit for blood of 80 milligrams (mg) of alcohol per 100 millilitres (ml) of blood and an equivalent limit for breath of 400 micrograms of alcohol (mcg) per litre of breath.
- 2. This paper recommends that Cabinet agrees to lower these limits to 50mg of alcohol per 100ml of blood and 250mcg of alcohol per litre of breath.
- 3. For simplicity, this paper refers to the BAC limit as shorthand for both the legal blood and breath alcohol limits.

Executive summary

Lowering the adult BAC limit

- 4. For the three years to 2012, there was an average of 61 fatalities, 244 serious injuries and 761 minor injuries each year caused by at-fault drivers (aged 20 years and over) with some level of BAC¹. The total social cost² for these fatalities and injuries was about \$446 million (in 2013 dollars).
- 5. To help address this problem, I recommend that the legal blood alcohol concentration (BAC) limit be lowered to 50mg per 100ml of blood (250mcg per litre of breath) for adult drivers aged 20 years and over.
- 6. Lowering the limit would reflect that drivers put themselves and other road users at risk when driving in the 51 to 80mg per 100ml range because their cognitive and driving abilities are impaired.
- 7. The provisional results of the cost-benefit analysis that is being undertaken on the option to lower the adult BAC limit show that there is a clear net benefit in reducing the limit. The analysis indicates that an average of 3.4 fatalities and 64 injuries per year could be saved and that the policy would have a positive net present value of \$200 million over 10 years with a national benefit-cost ratio of 10:1. Road safety benefits contribute a large share to this value. This is a conservative estimate.

This excludes crashes where drugs were also a contributing factor and crashes where alcohol was suspected but not confirmed as a contributing factor.

Social cost is a measure of the total cost that occurs as the result of crash or injury. It includes loss of life and life quality, loss of economic output, medical costs, legal costs and vehicle damage costs.

8. Recent surveys suggest that there is a high level of support among the public for lowering the legal adult BAC limit. It is unlikely that this change will result in serious adverse impacts for either the hospitality industry or the ability of New Zealanders to socialise in a responsible manner.

Enforcing the new limit

- 9. In this paper, I propose breath alcohol offences in the 251 to 400mcg per litre of breath range be dealt with under an infringement regime. The infringement penalties would be a \$200 infringement fee and 50 demerit points. An infringement offence does not result in a criminal conviction. Criminal-based sanctions may provide a strong deterrent but would also result in considerable extra costs for the justice sector relative to an infringement regime. There could be an estimated 19,100 new offences. The Ministry of Transport estimates that these extra costs would significantly reduce the net present value of lowering the legal adult BAC limit.
- 10. The paper asks Cabinet to decide whether drivers who elect a blood test and fail it, should also be subject to the same infringement regime and penalties or whether criminal-based sanctions should apply. Criminal-based sanctions might discourage them from electing a blood test. Such an approach raises issues of consistency with the New Zealand Bill of Rights Act 1990, general legal principles and other related drink-driving provisions. Because electing a blood test is the only legal means by which a driver can challenge their evidential breath test result, any decision that impacts on this right needs to be carefully considered.

Recovering the cost of blood tests

- 11. The court has the discretion to order recovery of the costs associated with the blood test. If Cabinet decides to implement an infringement regime for all drivers in the 51 to 80mg BAC range, it will also need to decide whether the costs of a failed blood test should be recovered from a driver through the infringement fee or absorbed by the Crown.
- 12. Where there is cost recovery, I recommend that the New Zealand Police (the Police) be empowered to inform drivers of the cost before electing to take the test. This will ensure that drivers are fully informed of the cost consequences of electing a blood test.

Dealing with higher risk and recidivist drivers

- 13. While there is a case for lowering the adult BAC limit, the crash data in this paper shows that drivers who drive with a BAC level well in excess of the current limit are responsible for a higher proportion of the alcohol-related fatalities. Repeat drink-driving offenders also pose a problem on New Zealand roads.
- 14. There is work on the next year's work programme for the Safer Journeys Action Plan 2013-2015 to review the alcohol interlock programme which has now been in force for just over a year. I propose that this work should be extended to

consider whether penalties for offences over 80mg per 100ml should be increased both for first time offenders and repeat offenders or whether other measures, such as enhancements to rehabilitation and monitoring of offenders, would better address the reoffending problem. I propose that officials report back to me by 31 July 2015.

15. There are current powers to impound and confiscate the vehicles of repeat offenders. There are risks with changing these regimes without analysing any potential impacts, for example stimulating more legal challenges to impoundments, or creating extra demand for storage facilities for impounded vehicles. This leaves Cabinet with a choice of either leaving the regimes unchanged or reviewing the regimes as part of the review of penalties. It does appear that the confiscation regime is under-used by the judiciary although there may be good reasons for this.

Financial implications

16. Implementing the new limits will have impacts on government agencies. Depending on the enforcement regime chosen, the net present value of these costs over 10 years is estimated to range from around \$5.82 million to \$212 million. I recommend that the Minister of Transport be invited to report back to Cabinet by 30 April 2014 on funding those costs.

Legislative implications

17. This change will need to be put in place through an amendment to the Land Transport Act 1998. A Bill is being prepared which I intend to present for Cabinet approval at its meeting on 18 November 2013 and receive its first reading before the House rises.

Background

- 18. On 26 July 2010, Cabinet considered a proposal to lower the legal adult BAC limit from 80 to 50mg per 100ml.
- 19. A proposal was also considered to lower the BAC limit that applies to youth (drivers under the age of 20), from 30mg per 100ml to zero. Cabinet agreed to lower the youth limit to zero. This law change was progressed via the Land Transport (Road Safety and Other Matters) Amendment Act which received Royal Assent in May 2011. The zero youth BAC limit came into force on 7 August 2011.
- 20. Cabinet decided to maintain the adult BAC limit at 80mg per 100ml until further New Zealand-based research was completed. It agreed to the following:
 - 20.1. that overseas studies that look at how driving performance is affected as BAC levels rise be replicated using New Zealand drivers
 - 20.2. a legislative amendment to enable the Police to obtain the actual alcohol level of any driver who they believe has been drinking and involved in a serious injury or fatal accident

- 20.3. all the data of those found to have in excess of a BAC level of 0.05³ or breath level (between 250 and 400 micrograms of alcohol per litre of breath) to be retained for research purposes [CAB Min (10) 26/9 refers].
- 21. In March 2013, I provided an interim report to Cabinet on the research underway in relation to the adult BAC limit. Cabinet noted the interim report and invited me to report back before the end of 2013 with the results of the completed research, and recommendations on the need for changes to the legal adult BAC limit [EGI Min (13) 5/3 refers].

Comment

Alcohol-impaired driving and road safety

- 22. Safer Journeys, the government's Road Safety Strategy to 2020, identified reducing alcohol and drug-impaired driving as an area of high concern. There are a range of indicators⁴ about the prevalence of drink-driving and the extent of harm and social cost it contributes to. Many of these indicators show improvement over time, particularly since 2011. In 2011, New Zealand recorded 19 alcohol and drug-related deaths per million people, ahead of the 2020 goal set in Safer Journeys of 22 alcohol and drug-related deaths per million people⁵.
- 23. While road safety trends in relation to drink-driving have been improving, alcohol remains the most frequent contributing factor (alongside speed) to road deaths and serious injuries in New Zealand and the cause of significant social cost. For the three years to 2012, there was an average of 61 fatalities, 244 serious injuries and 761 minor injuries each year caused by at-fault drivers (aged 20 years and over) with some level of BAC⁶. The total social cost for these fatalities and injuries was about \$446 million (in 2013 dollars). Graph 1 below shows the trend in both overall road deaths and alcohol-related deaths for drivers aged 20 years and over since 2000.

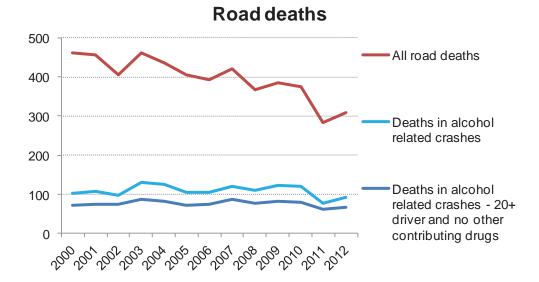
Number of drivers over the limit, breath tests, drink-driving convictions, alcohol-related casualties, public attitudes to drink-driving.

This is the same as 50 mg per 100ml.

Safer Journeys does not separately identify targets for alcohol in isolation from drugs.

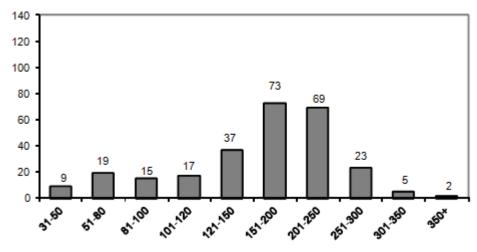
This excludes data from drug-related crashes and where alcohol was suspected but not confirmed as a contributing factor.

Graph 1 - Overall road deaths and alcohol-related deaths since 2000



- 24. From 2008 to 2012, 1042 at-fault drivers were killed in road crashes⁷. Graph 2 shows the distribution of recorded BAC levels for approximately 80 percent of these drivers where the BAC level is known. Of the tested drivers:
 - 24.1. 540 had a BAC level below 30mg per 100ml (below 30mg per 100ml, alcohol is less likely to be a determining factor in road crashes)
 - 24.2. 269 had a BAC level exceeding 30mg per 100ml of which 19 drivers were in the range of 51 to 80mg

Graph 2 – Distribution of BAC levels of drink drivers killed in road crashes 2008 - 2012



Blood Alcohol (mg / 100ml of blood)

25. Since 2011, the Police have been collecting crash data, including the BAC level of any driver involved in a fatal or serious injury crash. Over the 22 month

This data only records driver fatalities.

research period (from 7 August 2011 to 31 May 2013); the Police tested 723 drivers where alcohol was a suspected factor in fatal and serious injury crashes. Of these:

- 25.1. 440 drivers were recorded with a BAC level of 81mg per 100ml or more
- 25.2. 53 drivers were recorded with a BAC level in the 51 to 80mg per 100ml
- 25.3. 230 drivers were recorded with a BAC level below 50mg per 100ml
- 25.4. The blood alcohol concentrations of another 242 suspect drivers who were not tested by the Police remain unknown.
- 26. The data shows that there is a significant number of people killed or seriously injured at levels below the current adult BAC limit. However, the majority of alcohol-related deaths and serious injuries occur beyond the current adult BAC limit.

Role of legal alcohol limits

- 27. The legal adult BAC limit provides a threshold that allows the Police to determine when to remove impaired drivers from the road and apply sanctions through court and administrative processes to deter drink-driving.
- 28. The prescribed BAC limit also establishes a clear line between driving behaviour that the community considers acceptable and that which is not. A change to the legal BAC limit can reset public expectations about the level of safety to which all road users are entitled when they use the public road network.
- 29. The key question asked by this paper is whether the current BAC limit for adult drivers is set at an appropriate level that minimises harm at a reasonable cost; and without unnecessarily infringing on the freedom of individuals to consume alcohol in a moderate and socially responsible way.

Impact of alcohol on cognitive and driving abilities

- 30. It is widely established that alcohol impairs cognitive and driving abilities. These impacts have been confirmed in research that Cabinet requested in 2010 to replicate overseas studies on how driving performance is affected as BAC levels rise using New Zealand drivers. The main findings from this study, undertaken by Waikato University, are summarised below:
 - 30.1. At a BAC of 80mg per 100ml, there was significant impairment across a broad range of cognitive and driving measures relative to 'sober' participants (who consumed a very modest amount of alcohol). Participants with a BAC of 80mg per 100ml tended to exaggerate their steering responses, were less able to control their reactions to false alarm vehicles at intersections, and had much higher peak driving speeds. At a BAC level of 50mg per 100ml, participants showed performance impairment on some behavioural measures.

- 30.2. Participants at BAC levels of 50 and 80mg per 100ml were able to recognise that they were affected but were unable to accurately determine by how much. Both sets of participants also underestimated the amount of alcohol they had consumed. The amounts they estimated were similar, which meant that participants receiving the high dose were more inaccurate. Participants at a BAC of 80mg per 100ml made errors of up to half their actual level of consumption. Both groups had similar responses regarding their willingness to drive, despite one group having consumed significantly more alcohol (80mg per 100ml) than the other (50mg per 100ml).
- 31. The impact of alcohol on cognitive and driving abilities is reflected in the risk of being involved in a crash. Measuring the actual risk of drink-driving is complicated as it will vary markedly by driver, vehicle and driving conditions. Relative risk estimates can give a closer proxy of drink-driving risk. The relative risk of being killed in New Zealand while driving with different BAC levels was estimated in a 2004 study using data on drivers involved in fatal crashes⁸ (see Table 1).

Table 1 – Relative risk of fatal crash by blood alcohol level and age

BAC (mg per 100ml)	30+ years	20-29 years	15-19 years
0	1	3	5.3
30	2.9	8.7	15
50	5.8	17.5	30.3
80	16.5	50.2	86.6

32. A reduction in the BAC limit could encourage drivers to consume less alcohol before they drive, pre-empting the adverse impact on their cognitive and driving abilities, which becomes apparent at relatively low levels, and their chances of being involved in a fatal crash.

Reducing deaths and crashes by lowering the BAC limit

- 33. As well as saving lives in the 51 to 80mg per 100ml range, one rationale for lowering the legal adult BAC limit is the potential to save lives beyond the 80mg per 100ml limit, especially the lives of those who are marginally over the 80mg per 100ml limit. Because crash risk increases exponentially with higher BAC levels, even a small reduction in the level of offending by drivers over 80mg per 100ml can result in significant road safety benefits.
- 34. Reviews of international policy interventions have shown that there are significant road safety benefits to lowering BAC limits, and these are not limited to drink-drivers falling within the range that is targeted. This effect has been studied extensively in parts of Canada, the United States, Australia, Denmark,

Keall, M.D, Frith, W.J and Patterson, T.L. (2004). The influence of alcohol, age and the number of passengers on the night-time risk of driver injury in New Zealand. *Accident Analysis and Prevention*, 36(1), 49-61.

Austria, France, Japan and the United Kingdom. The findings consistently show that when BAC limits are lowered, there is a reduction in the number of crashes occurring across all levels of alcohol.

- 35. These findings do come with several qualifications:
 - 35.1. The main impact of lowering BAC limits may be limited to certain high risk groups such as males in urban areas and drivers between 18 and 49 years of age.
 - 35.2. Changes in BAC limits on their own are likely to produce modest benefits in road safety if not accompanied by good infrastructure and concurrent measures such as a minimum legal driving age, points based licensing system and random breath tests.
 - 35.3. There may be a time lag between the implementation of a new BAC limit and the realisation of road safety benefits.
- 36. New Zealand is better placed than some other countries to capitalise on reduced BAC limits as the identified groups above are problem drivers and concurrent measures are already in place. Unlike the United Kingdom and the USA, which have the same BAC limits as we do, New Zealand operates a robust and extensive random breath testing regime⁹.
- 37. An example of how a lower BAC limit could be effective in New Zealand is witnessed by the experience of the zero youth BAC limit that aligns with the international experience. This provides some evidence that imposing a lower limit can have impacts on the behaviour of the general population. After the zero youth limit was introduced in August 2011, drink-drive offences within that age group have reduced markedly as shown in Table 2 below.

Table 2: Drink driving offences detected for youth

Offences (% change from 2010/11)	Under 30mg per	30-80mg per	Over 80mg per
	100ml	100ml	100ml
September 2010 to August 2011	Not an offence	2,940	3,352
September 2011 to August 2012	1,177	1,992 (-32%)	2,418 (-28%)
September 2012 to August 2013	878	1,581 (-46%)	1,914 (-43%)

Benefits of lowering the adult BAC limit in New Zealand

38. A detailed cost-benefit analysis is being undertaken on the proposal to reduce the BAC to 50mg per 100ml. The cost-benefit analysis takes into account the number of lives that might be saved in the 50 to 80mg per 100ml range but also analyses the potential effects for drivers over 80mg per 100ml. The analysis takes into account the costs that might be imposed on drivers and on enforcement authorities.

In New Zealand, this is known as Compulsory Breath Testing.

- 39. The provisional result (see Appendix A) of the cost-benefit analysis shows that there is a clear net benefit in reducing the legal adult BAC limit. The analysis indicates that an average of 3.4 fatalities and 64 injuries per year could be saved and that the policy would have a positive net present value. Based on a 10-year evaluation period, the estimated net present value of this policy is approximately \$200 million with a national benefit-cost ratio of 10:1. Road safety benefits contribute a large share to this value.
- 40. This is a lower estimated reduction in lives saved than officials advised when Cabinet considered this issue in 2010 (between 15 and 30 fatalities a year). The key reasons for the differences are that:
 - 40.1. The 2010 analysis used crash and injury data from 2006-2008, whereas the current analysis uses data from 2010-2012, where there has been a significant reduction in alcohol-related crashes.
 - 40.2. The current analysis uses crash and injury data that excludes drivers under 20 years of age due to the youth BAC limit implemented in 2011 and also excludes data from drug-related crashes and crashes where alcohol was suspected but not confirmed as a contributing factor (inclusion of these groups would result in higher estimates of road safety benefits).
 - 40.3. More conservative assumptions of behaviour change have been used in the current analysis. In 2010, the Ministry of Transport's analysis drew on the French and Australian experiences of changing their BAC limits due to the lack of New Zealand-based data. The current analysis uses the behaviour change observed since the youth BAC limit was changed in New Zealand as an upper range estimate.

Costs on the hospitality industry

41. The cost-benefit analysis also considered the possible impacts on the hospitality industry. Lowering the adult BAC limit would be expected to have some impact on the level of alcohol consumed and the places where it is consumed. While it is not possible to predict the impact on individual premises, the cost-benefit analysis showed that the overall impact on the hospitality industry would be small (expressed as a loss of producer surplus of \$0.93 million over 10 years). This is because only small impacts on alcohol consumption are expected.

Costs on individual consumers

42. Consumers can be expected to face some costs from a change in the adult BAC limit. These come from the possibility that some consumers would reduce their alcohol consumption (measured in loss of consumer surplus) or may need to make alternative travel arrangements. There would also be additional compliance costs for offenders in the 51 to 80mg per 100ml range. These costs were factored in the cost-benefit analysis but overall are small at \$3.15 million over 10 years relative to the benefits.

Costs on the justice sector

- 43. One impact from lowering the adult BAC limit would be the need to process more offenders. The number has been estimated at 19,100 in the first year. This figure is likely to reduce to around 15,000 per year once the full effects of the change are felt from the second year. This volume has the potential to overload the courts and create considerable expense. The cost-benefit analysis assumes these costs would be controlled by implementing an infringement regime for breaches of the adult BAC limit between 51 and 80mg per 100ml. An infringement regime would mean most offences in the 51 to 80mg per 100ml range will be handled outside of the court system 10. However, an infringement regime raises policy considerations which are discussed further below.
- 44. An infringement regime would need to be administered and there would still be some infringements that would end up in criminal-based processes. However, there would also be savings if the number of high-end offenders is reduced. The net increase in government administrative costs is estimated at \$5.82 million over 10 years. These costs are discussed further under the heading "Financial Implications" later in this paper.

Criminal-based sanctions or an infringement regime

- 45. Should the adult BAC limit be lowered, there is a question about whether breaches of the new limit should be dealt with by the criminal-based sanctions that currently apply to BAC offences over 80mg per 100ml, or an infringement regime.
- 46. Arguably, criminal-based sanctions would be a strong deterrent to breaching the new limit, enhancing the credibility of the change, and sending a clear message about the acceptability of driving with BAC levels in excess of 50mg per 100ml.
- 47. On the other hand criminal-based sanctions may be seen as disproportionate given the lower number of fatal and serious injury crashes associated with drivers who have BAC levels in the range of 51 to 80mg per 100ml.
- 48. A disadvantage of criminal-based sanctions is the pressure and cost they will place on the court system because of the volume of offences that can be expected, at least in the short term. The Ministry of Transport estimates the costs to the Ministry of Justice would be around \$5 million for the first year. There will also be cost pressure on the Department for Corrections for handling additional community, home detention and related sentences. The Ministry of Transport estimates that total costs to the Ministry of Justice and the Department of Corrections could be \$45 million for the first year. These costs would fall in subsequent years as offences reduce.
- 49. Infringement offences, which do not result in a criminal conviction, are an alternative to criminal-based sanctions. Infringements provide a swifter way of sanctioning drivers than the courts can. However, they may create a risk that drink-driving over the new adult BAC limit, but below the current limit, is perceived as a minor offence. This may depend on the infringement penalties

Cases that would be dealt with by the courts would be those where the driver wishes to challenge the infringement offence and requests a defended hearing in the court.

- applied. For example, coupling a modest infringement fee with a reasonable number of demerit points could provide both a deterrent and a fairer penalty, which is commensurate with the nature of the offence.
- 50. Currently, infringements are issued to drivers who breach the zero youth BAC limit (up to 30mg per 100ml). The penalty consists of a \$200 infringement fee plus 50 demerit points. Because driver licences are suspended for three months after 100 or more demerit points have been accumulated within a two year period, 50 demerit points represents a strong deterrent. It would be sensible to apply these penalties to an infringement regime put in place to sanction BAC offences in the 51 to 80mg per 100ml range.
- 51. A benefit of an infringement regime is that it would limit the additional pressure of a large number of new offenders on the justice sector. The estimated cost on the justice sector is \$0.4 million to \$0.6 million per annum. However, this cost increase will be offset by the savings from a reduction in drink-driving offences with a BAC greater than 80mg per 100ml.
- 52. Recently, the New Zealand Automobile Association announced that it now supports lowering the legal BAC limit. However, the Association's support is contingent on an infringement regime being put in place for offences in the 51 to 80mg per 100ml range.
- 53. I recommend an infringement regime is introduced for breath alcohol offences in the range of 251mcg to 400mcg per litre of breath.
- 54. There is an additional question of whether an infringement regime should apply when a driver, who has previously failed an evidential breath test in the range 251mcg to 400mcg per litre of breath, elects to undertake a blood test. Due to the anticipated increase in volume of offenders, the election of blood tests by drivers in this range could significantly increase the time involved at the roadside processing drivers.
- 55. An alternative approach would be to escalate the offence and penalty to a criminal sanction in instances where the driver elects a blood test. This would deter drivers from electing the blood test when the evidential breath test is in the 251mcg to 400mcg per litre of breath range.
- 56. Introducing a differential offences and penalties regime will raise issues, including:
 - 56.1. consistency with the New Zealand Bill of Rights Act 1990, such as the right to the presumption of innocence [s.25(c)], the right to adequate facilities to prepare a defence [s.24(d)], the right not to be compelled to confess guilt [s.25(d)] and the operation of s.28 (which preserves other rights not included in whole or part in the Bill of Rights.
 - 56.2. consistency, with general legal principles, for example an uplift in penalty for the same offence that applies only where a driver challenges the evidence is objectionable as a matter of general criminal justice principle relating to fairness.

- 56.3. a possible loss of confidence in the integrity of the regime by the general public and the legal profession on the grounds of perceived unfairness.
- 57. Because electing a blood test is the only legal means by which a driver can challenge their evidential breath test result, any decision that impacts on this right needs to be carefully considered.
- 58. If Cabinet opts for an infringement regime, I would suggest the Ministry of Transport, along with justice sector agencies, be directed to review the adequacy of the infringement regime in deterring offending once three years of data about the regime is available.

Recovery of costs for electing a blood test

- 59. One of the implications of lowering the limit is that there will be increased costs arising from drivers electing a blood test after failing the evidential breath test. Under the criminal-based regime, these costs can be recovered from the individual at the discretion of the court.
- 60. If Cabinet were to opt for an infringement regime, there would be no equivalent method to recover the costs of the blood test. There is no cost recovery in the infringement regime that applies to youth. To enable cost recovery, both for adults and youth, explicit provision would need to be made to collect this cost as part of the infringement fee. Officials estimate that this would add around \$100 to any infringement fee if the driver elects and fails a blood test. In a situation where a driver is successful in proving their innocence via the blood test, costs would not be recovered. Otherwise, the option is for the Crown to absorb the cost of blood tests where infringements are involved. The Ministry of Transport estimates the number of additional blood tests to be between 3,000and 4,000 a year.

Informing drivers of the cost of electing a blood test

- 61. One of the features of the current system is that the Police do not inform drivers that the courts can order the recovery of the costs associated with the blood test. There are concerns that this could be seen as attempting to dissuade a driver from exercising their right to elect a blood test. However, this prevents a fully informed decision being made by the driver.
- 62. I recommend that, for criminal-based sanctions where the court is already provided with the discretion to recover costs associated with the blood test, the legislation should explicitly permit the Police to inform drivers of the potential recovery of costs associated with a failed blood test. If Cabinet decides that cost recovery should be a feature of an infringement regime, whether youth or adult, the Police should also be able to inform the driver of the cost in advance of him or her electing a blood test. In either or both cases, the legislation should also make it clear that failure to inform a driver of these potential costs should not constitute a defence.

Dealing with higher risk and recidivist drivers

Penalties

- 63. While there is a case for lowering the BAC, the crash data in this paper shows that drivers who drive with a BAC level well in excess of the current adult BAC limit are responsible for a higher proportion of alcohol-related road deaths and serious injuries. Repeat drink-driving offenders also pose a problem on New Zealand roads. International research estimates a recidivist offender is 36 times more likely to be involved in an alcohol-related fatal crash¹¹.
- 64. There is work on next year's work programme for the Safer Journeys Action Plan 2013-2015 to review the alcohol interlock programme which has now been in force for just over a year. I propose that this work should be extended to consider whether penalties for offences over 80mg per 100ml should be increased both for first time offenders and repeat offenders or whether other measures, such as enhancements to rehabilitation and monitoring of offenders, would better address the reoffending problem. I propose that officials report back to me by 31 July 2015.

Vehicle impoundment and confiscation

- 65. Under the Land Transport Act 1998, vehicles must be impounded for 28 days for specified third or subsequent drink-driving offences within four years. This is an administrative sanction that is applied by the Police at the roadside. The owner of the vehicle is liable for the towage and storage fees which are paid to the towage and storage operator at the end of the impoundment.
- 66. As impoundment is mandatory for third or subsequent offences, the only option to strengthen the sanction for those offenders would be to extend the period of impoundment. However, this carries a number of potential risks, such as a higher number of appeals against an impoundment and increased costs for towage and storage operators especially if the vehicles are not claimed at the end of the impoundment period. An alternative option would be to lower the threshold for impoundment to a second or subsequent offence within four years rather than waiting for a third or subsequent offence. This has similar risks to the earlier options but it would also place additional demands on storage capacity for impounded vehicles. Officials have not fully assessed the impacts of such changes.
- 67. Under the Sentencing Act 2002, which is administered by the Ministry of Justice, the courts have a power to permanently confiscate a vehicle used in the commission of a serious traffic offence, including drink-driving. This is discretionary for a first time offence and mandatory for a second or subsequent offence within four years. Vehicles subject to a confiscation order are seized by the courts and sold at public auction. There is limited scope to amend this legislation because the power is already mandatory for second or subsequent offences.

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Brewer, R. D., Morris, P. D., Cole, T. B., Watkins, S., Patetta, M. J., & Popkin, C. (1994). The risk of dying in alcohol-related automobile crashes among habitual drunk drivers. *New England Journal of Medicine*, *331*(8), 513-517.

68. About 1,000 vehicles are confiscated by the courts each year. This suggests that this power is under-utilised by the judiciary, relative to the number of offenders who are convicted of the qualifying offences.

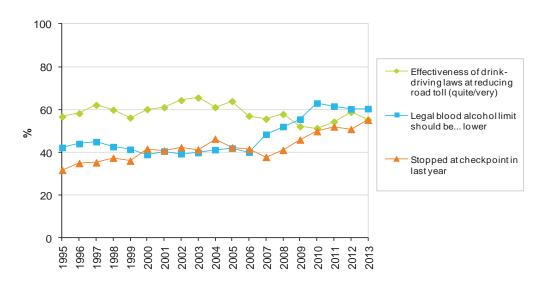
Other relevant factors

69. Cabinet may wish to consider a number of other relevant factors in coming to any decision on the future BAC limit.

Public acceptability of a lower adult BAC limit

- 70. A 2013 Ministry of Transport survey of public attitudes to road safety ¹² in New Zealand showed:
 - 70.1. 60 percent of survey participants favour a lower adult BAC limit, up from 40 percent in 2006 but the same as 2012
 - 70.2. of the 60 percent who favoured a lower limit, 43 percent thought the limit should be lowered to 50mg per 100ml and 18 percent wanted the limit lowered to zero
 - 70.3. 31 percent of the participants thought the limit should be left as it is, and only 2 percent were in favour of raising the legal limit.
- 71. Graph 3 below shows how public attitudes have changed since 1995.

Graph 3 – Public Attitudes to drink-driving



72. A New Zealand Automobile Association survey of members found that 63 percent thought that the 80mg per 100ml adult BAC limit is too high. The survey also found that there was little difference between urban and rural areas, for example, 62 percent in the Auckland region thought the adult BAC limit was too high compared to 59 percent in rural or small country townships.

Ministry of Transport. (2013). New Zealand survey of public attitudes to road safety.

Reduce alcohol-related harm in society in general

- Targeting the problem of drink-driving may also help to reduce the harm to society caused by excess or unhealthy alcohol consumption. Estimates of direct costs to government arising from New Zealand's alcohol consumption range from \$500 million to \$1200 million per annum¹³.
- The government has taken steps to reduce the harm resulting from unhealthy alcohol consumption, investing in alcohol and other drug assessments and interventions designed to enable better access to treatment for hazardous drinkers, young people, drink-drivers and other criminal offenders in prisons and communities. Parliament passed the Sale and Supply of Alcohol Act 2012 to place stronger controls around the sale and supply of alcohol.
- Further interventions to target drink-driving would complement these alcoholrelated reforms.

International comparisons

76. The World Health Organisation¹⁴ recommends that countries adopt a BAC limit of 50mg per 100ml (or less) for drivers. Eighty-nine countries have adopted the BAC recommendation with Norway and Sweden applying an even lower BAC limit of 20mg per 100ml.

Impacts, risks and issues

Targeting the 'wrong' offenders

- 77. Information from Traffic Crash Reports suggests that it is drivers with higher BAC levels and repeat offenders who pose a more significant road safety risk. The question follows as to why a policy intervention should target lower risk drivers (at lower BAC levels).
- 78. The New Zealand experience from reducing the youth BAC limit to zero and international studies suggest that reducing BAC limits has a wider effect on reducing alcohol levels of drivers at all BAC levels.
- Lowering the adult BAC limit on its own will not solve all of the issues associated with alcohol-impaired driving. It is one approach, which sits within a range of others, aiming to address drink-driving on a wider front.
- As I noted previously in this paper, the alcohol interlock programme will be reviewed next year and I propose adding penalties for offences over 80mg per 100ml and treatment and monitoring measures to that review.

Imposing unreasonable restrictions on socialising

¹³ Ministry of Justice. (2010). Alcohol Law Reform Cabinet Paper. Ministry of Justice, Wellington. 14 World Health Organisation (2013). Global status report on road safety 2013: Supporting a decade of action. World Health Organisation, Geneva.

- 81. Concerns have been raised that a reduction in the adult BAC limit would impose unreasonable restrictions on the ability of people to engage in normal social activities (eg having wine with a meal). Various claims that often appear to be based on anecdotal reports have been reported in the media as to how much alcohol a person can drink before exceeding the current adult BAC limit and what would apply if this limit was reduced.
- 82. The Ministry of Transport commissioned the Institute of Environmental Science and Research Ltd¹⁵ to provide scientific advice on what a reduced adult BAC limit would mean for an individual. The advice is in terms of the amount of alcohol that could be consumed by males and females of varying heights and body weights according to the current 80mg per 100ml adult BAC limit and that which would apply to a 50mg per 100ml adult BAC limit.
- 83. Table 3 below shows, for males and females, the relationship between the numbers of standard drinks consumed over a two hour period and compliance with the 50 and 80mg per 100ml adult BAC limit.

Table 3 - The relationship between the number of drinks consumed over a two hour period and potential compliance with the 50 and 80mg per 100ml limits for males and females

Male drinking	BAC Limit	Safe ²	Possibly safe ³	Probably unsafe ⁴		
over a 2 hour period ¹		(standard drinks) ⁵				
55kg, 160cm	50mg	up to 2.5	up to 2.5 up to 4.5			
	80mg	up to 3.5	up to 6	more than 6		
85kg, 175cm	50mg	up to 3.5	up to 6	more than 6		
	80mg	up to 5	up to 8	more than 8		
125kg,	50mg	up to 4.5	up to 8	more than 8		
195cm	80mg	up to 6.5	up to 10.5	more than 10.5		
Female	BAC	Safe ² Possibly Probably				
drinking	Limit	safe ³		unsafe ⁴		
over a 2		(standard drinks) ⁵				
hour period ¹		·				
40kg, 145cm	50mg	up to 1.5	up to 3	more than 3		
	80mg	up to 2	up to 4	more than 4		
70kg, 160cm	50mg	up to 2.5	up to 4	more than 4		
	80mg	up to 3	up to 5.5	more than 5.5		
110kg,	50mg	up to 2.5	up to 4.5	more than 4.5		
180cm	80mg	up to 3.5	up to 6	more than 6		

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The ESR is the government's official scientific adviser on alcohol and drug related testing issues.

- ¹ Plus an extra half hour following drinking, to allow for full absorption of the alcohol dose. Therefore, calculation of the number of standard drinks is based on a total of 2.5 hours between the time drinking starts and the time of the blood test.
- ² Driver in this category will not exceed the legal limit.
- ³ Approximately 50% of drivers in this category would not exceed the limit.
- A small proportion of drivers in this category would not exceed the limit.
- ⁵ A standard drink is equivalent to 330ml of beer, 100ml of wine or 32ml of spirits, containing 4, 13 and 40% alcohol respectively.
- *These calculations assume that drinking occurs at an even pace, on an empty stomach and the driver does not have serious liver disease.

Impacts on rural communities

84. A lowered adult BAC limit is likely to have more impact on rural communities where there is less access to alternative forms of transport than urban communities. However, given that the expected overall impacts on the hospitality industry as a whole and consumers will be small overall, the impact is unlikely to result in a major change for rural communities. Australia and Ireland both have substantial rural communities but maintain a 50mg per 100ml BAC limit. As noted previously, a survey carried out by the New Zealand Automobile Association this year showed there was little difference in the view of urban and rural communities that the current adult BAC limit is too high.

Implementation timetable of a reduced adult BAC limit

- 85. Subject to Cabinet's endorsement of a reduced adult BAC limit, a Bill will be introduced into the House forthwith. My aim is to allow the new adult BAC limit to take effect three months from when the Act receives Royal Assent.
- 86. There would need to be a comprehensive publicity campaign prior to the new adult BAC limit being introduced, which would be conducted by the New Zealand Transport Agency. The Police would need time to put in place new procedures, conduct training for officers, re-programme the breath screening devices, reprint forms and make IT changes. The Police estimate they would need at least three months to prepare for implementation.

Improvements to the enforcement regime

Rebuttable presumption

87. There is a Member's Bill being considered by the Transport and Industrial Relations Committee seeking to address a loophole in the enforcement regime which allows a small number of offenders to escape penalties because it is not possible to draw blood from them: the Land Transport (Admissibility of Evidential Breath Tests) Amendment Bill. I recommend that this problem be addressed through the legislation that will lower the BAC limit. A rebuttable presumption would be introduced. This presumption would be applicable to a driver who, having previously escaped prosecution due to a medical/physical inability to provide a blood specimen, elects a blood test on a subsequent occasion and is again unable to provide a blood specimen; the presumption

- being that the driver, having foreknowledge of that probable outcome, had in effect refused the blood test.
- 88. The rebuttable presumption would close a loophole in the current regime for repeat drink-drivers who, knowing their inability to provide a blood specimen, elect a blood test when apprehended by a police officer and therefore escape prosecution. While the loophole remains for first time offenders, I consider this a necessary acquittal in order to deal with the more high risk repeat offender group.

Private analysis of blood specimens

89. Section 74 of the Land Transport Act 1998 provides for how blood specimens are to be dealt with. Where a driver wishes to have the reserve specimen analysed by a private analyst, an application must be made within a prescribed time. The wording of the provision is not wide enough to include infringement offences, either the existing youth offences or any new adult offences. If no provision is made, there would be no time limit on applications made for private analysis for infringement offences. Provision needs to be made so that the situation cannot be exploited to hinder successful prosecutions.

Conclusive presumption about the level of alcohol indicated by an evidential breath test

90. Section 77 of the Land Transport Act 1998 provides for the conclusive presumption that the level of alcohol indicated by an evidential breath test is the same as the level of alcohol at the time of the alleged offence. In specified circumstances, the evidential breath test result is not admissible in evidence. One such circumstance is where an enforcement officer has not given advice to the person tested about the consequences of not electing a blood test, namely that the evidential breath test result will be conclusive of itself. The advice required includes specification of the relevant threshold (400 mcg; 150 mcg). The introduction of adult infringement offences would require that the provision be extended to include such offences. However, it has been noted that the provision does not presently extend to youth infringement offences. This omission needs to be remedied at the same time.

Police powers to forbid drivers to drive for up to 12 hours and immobilise vehicles

91. Under the current law the Police have the power to forbid adult drivers who have failed an evidential breath test from driving for up to 12 hours. This is intended to allow time for the driver to sober up. The provision does not cover youth and should do so.

Financial Implications

92. The proposals set out in this paper have financial implications for the Crown. Reducing the legal adult BAC limit will result in new offences to process. On the other hand, these costs may be offset to some degree by a reduction in the number of offences over 80mg per 100ml.

93. The additional government costs and savings were estimated as part of the cost-benefit analysis. Assuming that an infringement regime is used, total net government costs were estimated at \$2.21 million in the first year with a 10-year net present value of \$5.82 million. The bulk of these costs result from the processing involved with infringement offences that falls on the Police (\$1.88 million for the Police in the first year for a 10-year net present value of \$6.26 million). Table 4 below sets out the costs for the various government agencies that would be affected.

Table 4: Estimated changes in government administrative cost under an infringement regime

\$ million	Year 1	Year 2	Year 3	10-year totals (Present value)			
				,			
Reduction in administrative cost due to a reduction in the number of offenders with BAC > 80mg per 100ml							
Police	-\$0.66	-\$1.01	-\$1.02	-\$7.21			
Justice sector	-\$0.49	-\$0.75	-\$0.76	-\$5.39			
Total	-\$1.15	-\$1.76	-\$1.78	-\$12.60			
Estimated increase in administrative cost due to a new offence category (BAC 51-80mg per 100ml)							
Police	\$2.54	\$1.73	\$1.76	\$13.47			
NZTA	\$0.23	\$0.10	\$0.10	\$0.77			
Justice sector	\$0.60	\$0.48	\$0.48	\$3.71			
Total	\$3.37	\$2.31	\$2.34	\$18.41			
Net Govt Costs	\$2.21	\$0.55	\$0.56	\$5.82			

94. Under criminal-based sanctions, as noted earlier, the costs could be substantially higher. A high level estimate of the net present value of these costs is \$212 million over 10 years compared to a net present value of \$5.82 million over 10 years for the costs of the infringement regime. I recommend that Cabinet invite me to report back on how any extra costs would be funded by 30 April 2014.

Consultation

- 95. There has been extensive consultation on whether to lower the adult BAC limit in recent years, particularly as part of the development of Safer Journeys in 2009. The majority of key stakeholders were in favour of lowering the adult BAC limit. However, the New Zealand Automobile Association, the New Zealand Hospitality Association and some rural members of Local Government New Zealand opposed the proposed change. The latter submitted that a lowering of the adult BAC limit would result in a reduction in mobility and social connectedness in rural communities. Since then, the New Zealand Automobile Association has changed its position and now supports a reduction in the BAC limit to 50mg per 100ml, provided it is accompanied by an infringement regime for offences between 51 to 80mg per 100ml.
- 96. The Police, Ministry of Justice, New Zealand Transport Agency, Department of Corrections, the Accident Compensation Corporation, the Institute of

- Environmental Science and Research Ltd and Crown Law were involved in aspects of the policy underpinning this paper as part of the work of an officials' working party on alcohol-impaired driving.
- 97. The following government agencies have been informed of this paper: the Police, Ministry of Justice, New Zealand Transport Agency, Department of Corrections, the Accident Compensation Corporation and the Treasury. The Department of the Prime Minister and Cabinet was also informed.

Human rights implications

98. This paper has no human rights implications.

Legislative implications

The Land Transport Amendment Bill 2013

- 99. The Land Transport Act 1998 will need to be amended to lower the adult BAC limit to 50mg per 100ml. The Land Transport (Offences and Penalties) Regulations 1999 will also need to be amended if an infringement regime is adopted.
- 100. To make these amendments, the Parliamentary Counsel Office is preparing the Land Transport Amendment Bill 2013 (the Bill) which needs to be added to the 2013 Legislative Programme. To meet the timetable for introducing the change to the adult BAC limit set out in this paper, I propose that the Bill be given a category 4 priority (to be referred to select committee this year).

Binding on the Crown

101. The Bill amends the Land Transport Act 1998 (the principal Act). Because the principal Act binds the Crown, it is appropriate for the Bill to bind the Crown.

Parliamentary stages

102. I propose that the Bill be introduced on 21 November 2013, and be referred to the Transport and Industrial Relations Committee.

Regulatory impact analysis

103. The regulatory impact analysis requirements apply to these policy proposals and a regulatory impact statement is being prepared. Cabinet will have the opportunity to consider the regulatory impact statement when the Bill is submitted to Cabinet for approval on 18 November 2013. As noted earlier, I have attached a one page summary of the provisional results of the cost-benefit analysis that is being undertaken as part of the regulatory impact statement development (see Appendix A).

Gender implications

104. This paper has no gender implications.

Disability perspective

105. This paper has no disability implications.

Publicity

Announcement

106. I intend to issue a media statement when the Bill is introduced. I also intend that relevant documents including this paper, research commissioned by Cabinet in 2010 and the Ministry of Transport's cost-benefit analysis be publicly released once the announcement has been made.

Implementation communications plan

107. A communications plan will be developed by the New Zealand Transport Agency in consultation with the Police to ensure the public is aware of the changes and the reasons for them. The Police and the New Zealand Transport Agency will also revise all relevant material including the *Official New Zealand Road Code*, fact sheets and website information.

Recommendations

108. The Minister of Transport recommends that Cabinet:

Legal alcohol concentration limit for driving

1. **agree** the legal blood alcohol concentration (BAC) limit be reduced from 80 milligrams (mg) of alcohol per 100 millilitres (ml) of blood to 50mg of alcohol per 100ml of blood; and the legal breath alcohol limit be reduced from 400 micrograms (mcg) of alcohol per litre of breath to 250mcg of alcohol per litre of breath

Penalty regime for alcohol offences in the range of 51mg to 80mg per 100 ml of blood (251mcg to 400mcg per litre of breath)

- 2. **agree** an infringement regime be put in place for breath alcohol offences in the range of 251 to 400mcg of alcohol per litre of breath (inclusive)
- agree the infringement penalty for breath alcohol offences in the range of 251 to 400mcg of alcohol per litre of breath be a \$200 infringement fee and 50 demerit points

4. EITHER

- 4.1. **agree** an infringement regime be put in place for blood alcohol offences in the range of 51 to 80mg of alcohol per 100ml of blood (inclusive), and
- 4.2. **agree** the infringement penalty for blood alcohol offences in the range of 51 to 80mg of alcohol per 100ml of blood be a \$200 infringement fee and 50 demerit points

OR

- 4.3. **agree** a criminal-based regime be put in place for offences in the range of 51 to 80mg of alcohol per 100ml of blood (inclusive) where a driver elects a blood test after failing an evidential breath test, and
- 4.4. **agree** the level of the criminal-based sanctions be consistent with the current sanctions that apply to blood alcohol offences that exceed 80mg of alcohol per 100ml of blood (for example, a first time offence carries a maximum of three months imprisonment, a maximum fine of \$4,500, and a mandatory disqualification of at least six months)

5. **agree** officials from the Ministry of Transport and New Zealand Police, in consultation with the Ministry of Justice, review the adequacy of the BAC infringement regime in deterring offending once three years of data is available about the regime

Cost recovery of blood tests and medical expenses

Criminal-based sanctions

- 6. **note** that under the current criminal-based sanctions that apply to blood or breath alcohol offences, the court has the discretion to recover the prescribed blood test fee from the person and the actual and reasonable expenses associated with the taking of a blood specimen
- 7. **note** the driver, prior to electing to take the test, is not currently informed that the cost of the blood test may be recovered from them
- 8. **agree** where criminal-based sanctions apply, that drivers be informed of the cost of the test and that failure to be so informed would not constitute a defence

Infringements

9. **EITHER**

- 9.1. **agree** where drivers, either adult or youth, elect an evidential blood test under the infringement regime, that they be informed of the cost of the test and that failure to be so informed would not constitute a defence, and
- 9.2. **agree** that the cost of a failed blood test becomes recoverable as part of the infringement fee

OR

- 9.3. **agree** that the cost of a blood test for an infringement offence, where it is elected by a driver, would not be recoverable, and
- 9.4. **note** that the court would still have the discretion to recover the prescribed blood test fee and the actual and reasonable expenses associated with the taking of a blood specimen where criminal-based sanctions apply

Review of penalties for blood alcohol offences over 80mg per 100ml of blood

- 10. agree that Ministry of Transport, in consultation with justice sector agencies, review the maximum penalties for offences over 80mg of alcohol per 100ml of blood (or 400mcg of alcohol per litre of breath) in 2014, along with other measures such as rehabilitation and monitoring of offenders
- direct the Ministry of Transport to report back to the Minister of Transport by 31 July 2015

Impoundment and confiscation of vehicles

- note under the Land Transport Act 1998, vehicles must be impounded for 28 days for specified third or subsequent drink-driving offences within four years
- 13. **note** under the Sentencing Act 2002, the courts have a power to permanently confiscate a vehicle used in the commission of a serious traffic offence, including blood and breath alcohol offences, discretionary for a first offence and mandatory for a second or subsequent offence within four years
- 14. **note** the power to confiscate appears to be under-utilised by the judiciary, relative to the number of offenders who are convicted of the qualifying offences

15. **EITHER**

15.1. **agree** the existing impoundment and confiscation provisions remain unchanged

OR

15.2. **agree** that the Ministry of Transport and Ministry of Justice, in consultation with the New Zealand Police, review the vehicle impoundment and confiscation provisions for blood or breath alcohol offences in 2014 as part of the wider penalties' review referred to in recommendation 7

Implementation date

16. agree that the reduction in the legal blood and breath alcohol limits come into force three months after the Land Transport Amendment Act receives Royal Assent

Improvements to the blood alcohol enforcement regime

- 17. agree to introduce a rebuttable presumption applicable to a driver who having previously escaped prosecution due to a medical or physical inability to provide a blood specimen, elects a blood test on a subsequent occasion and is again unable to provide a blood specimen; the presumption being that the driver, having foreknowledge of that probable outcome, had in effect refused the blood test
- 18. **agree** the rectification of existing provisions relating to applications for private analysis of blood specimens, the advice to be given about the conclusiveness of an evidential blood test, and the prohibition of driving for up to 12 hours, be amended so that the provisions adequately address the existing regime as well as the proposals in this paper

Financial implications

- 19. **note** that the financial implications for the Crown are estimated to range from a net \$2.21 million in the first year under an infringement regime (net present value of \$5.82 million over 10 years) to a net \$50 million in the first year under a criminal-based regime (net present value of \$212 million over 10 years)
- 20. **invite** the Minister of Transport to report back to Cabinet with recommendations on funding the implementation costs by 30 April 2014

Publicity

- 21. **note** subject to Cabinet's confirmation, the Minister of Transport will release a media statement announcing the change to the adult blood and breath alcohol limits as soon as practicable after the Bill is introduced
- 22. **note** that the Minister of Transport intends that relevant documents including this paper, research commissioned by Cabinet in 2010 and the Ministry of Transport's cost-benefit analysis be publicly released once the announcement has been made

Land Transport Amendment Bill 2013

- 23. **note** that an Amendment Bill is required to reduce the legal adult blood and breath alcohol limits
- 24. **note** an Amendment Bill would amend the Land Transport Act 1998 and, if required, the Land Transport (Offences and Penalties) Regulations 1999
- 25. **note** it is appropriate for the Amendment Bill to be binding on the Crown because the principal Act is binding on the Crown
- 26. **note** any implications for government departments of the Amendment Bill binding the Crown will be minor
- 27. **note** the Parliamentary Counsel Office is preparing the Land Transport Amendment Bill (the Bill)
- 28. **agree** the Parliamentary Counsel Office continue drafting the Bill to give effect to the decisions above, including any necessary consequential, savings and transitional provisions
- 29. **authorise** the Parliamentary Counsel Office to make editorial and minor technical changes to the Bill that are consistent with the overall policy decisions
- 30. **agree** the Bill be added to the 2013 Legislation Programme and given a category 4 priority (must be referred to select committee in 2013)
- 31. **agree** the Bill be introduced on or as soon as possible after 18 November 2013

32.	authorise the Minister of Transport to determine any secondary policy matters that arise in the course of the preparation and passage of the Bill.
Mini	Gerry Brownlee ster of Transport d:

Appendix A

Provisional results of the 2013 cost-benefit analysis (compared to the 2010 results)

2010 analysis		s	2013 analysis				
Crash	Time period	2006-2008		2010-2012			
and injury data	Average annual death and injuries with BAC > zero	110 fatalities 2,287 injuries \$793m (social cost in 2009 dollars)		61 fatalities 1,005 injuries \$446m (social cost in 2013 dollars)			
	Key differences in the statistics	 include drivers of all ages include drugs and alcohol (co-factors) include suspected alcohol but no BAC reading 		 include drivers over 20 years only exclude drugs and alcohol (co-factors) exclude suspected alcohol but no BAC reading 			
Safety benefit estimates	Low and high scenarios	Low: 14% (based on experience in Australia) High: 30% (based on experience in France) % reduction in all alcohol related injury crashes with BAC > 0		Low:3.5% Mid-range:6.5% High: 10.1% % reduction in at-fault injury crashes where the driver was over 20 years and had a BAC > 0			
	Estimated annual reduction in	Low:	High:	Low:	Mid-range	High:	
	Fatalities	15	30	1.9	3.4	5.2	
	Injuries	320	686	33	64	102	
Results	Net present value	\$740m 173:1		Low:	Mid-range	High:	
	Benefit-cost ratio			\$98m 5.3:1	\$200m 9.9:1	\$329m 22.9:1	