Regulatory Impact Statement Reducing Road Trauma: Random Drug Testing for Drivers

Agency Disclosure Statement

- The Ministry of Transport (the Ministry) has prepared this Regulatory Impact Statement (RIS). It follows a recent review of New Zealand's drug-driving enforcement regime and analyses options that might offer improved road safety through changes to the enforcement regime.
- The review provided an opportunity to examine how to reduce the harm resulting from drug-driving in New Zealand at a reasonable cost, through changes to the enforcement regime.
- 3. The origin of the review is the Safer Journeys Action Plan 2013-15, which includes an action for investigating opportunities to strengthen the existing drug-driving enforcement model in New Zealand.

Limitations of the review

- 4. Data on the issue of drug-driving in New Zealand is limited, as no study clearly shows the extent of drug-driving in New Zealand. Instead, the Ministry estimated the size of New Zealand's drug-driving problem using an independently peer reviewed cost-benefit analysis. This analysis took into account several data sources, such as international research, and crash data. These sources included data from New Zealand's crash analysis system (CAS)¹, data from an Environmental Science and Research (ESR) study of drivers who died in road crashes in New Zealand² and data from the United Kingdom. These data sources were used, respectively, to provide low, central and high estimates of the social cost of New Zealand's drug-driving problem.
- 5. Where possible, the Ministry has sought to estimate the impact of the proposed changes on offenders and the Justice sector, including the NZ Police, the courts and the prison system. The Ministry's data on the costs of different options came from several sources including the NZ Police, the New Zealand Transport Agency (NZTA), the Department of Corrections and the Ministry of Justice. The Ministry's cost-benefit analysis was dependent on this data.
- 6. The cost-benefit analysis report can be found on the Ministry's website:

 http://www.transport.govt.nz/Drug-Driving-CBA. The report canvasses in detail the methodology employed to estimate the size of the drug-driving problem in New Zealand, and determine the costs and benefits of various enforcement options. The key findings in that analysis are summarised in this RIS.

Out of scope of the review

7. The review did not look directly at drug-driving penalties, as this was addressed as part of the drink-driving sanctions review. However, the penalty regime is an intrinsic component of some options, as the nature of those options raise issues about whether criminal penalties can be justified given the nature of the evidence able to be collected.

¹ In New Zealand all traffic crashes data reported by police are recorded in CAS.

² In New Zealand, all toxicological analyses are carried out by one laboratory, ESR, in Wellington. When a driver is killed in a crash, a blood sample may be sent for analysis.

8. New Zealand's approach to drug-driving has so far been to reduce the harm resulting from impaired driving at a reasonable cost, rather than to design regimes as a drug control strategy designed to punish drivers for using illicit substances.

Withheld under section 9(2)(a)

Adviser Ministry of Transport

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Status Quo

New Zealand's current drug-driving regime

- 9. New Zealand's current drug-driving regime was introduced in 2009. The approach to drug-driving enforcement is based on both proving a person is impaired and cannot drive safely, and has drugs present in their blood.
- 10. The current drug-driving enforcement regime identifies drug impairment using a behavioural test. This helps to improve road safety, ensuring impaired drivers are taken off the road and prosecuted. However, this is only the case if Police are able to identify impaired drivers and establish good cause to suspect they have used a drug. Good cause to suspect can be established by a Police officer through a driver's personal demeanour, or if they witness behaviours such as erratic driving or swerving across lanes. This approach is set out in the Land Transport Act 1998.
- 11. A Police officer must have good cause to suspect a driver has used a drug or drugs before that driver can be tested. Good cause may be formed based on a driver's manner of driving or demeanour when they are stopped and spoken to by Police.
- 12. If a Police officer can determine good cause, a driver can be required to undergo a behavioural test called a Compulsory Impairment Test (CIT). The CIT is designed to determine whether a driver's capacity to drive a motor vehicle is impaired. A trained Police officer carries out the test, which comprises eye, walk and turn, and one-leg-stand assessments. For safety reasons CITs cannot be done by the roadside, so drivers are usually brought back to a Police station to be tested for impairment.
- 13. The CIT is useful because there is a less predictable relationship between the amount of drugs in a driver's body and the effect on their driving ability. These relationships are much better understood for alcohol. There is also a wide range of drugs that are used that can act on different neural pathways in the central nervous system and are metabolised in different ways and over different lengths of time. Further, the wide range of potentially impairing drugs, including many prescription drugs, means that screening technology can only test for a limited range of drugs. The CIT is also able to address when drivers have used multiple drugs at once.
- 14. However, the CIT can be quite demanding on Police resources and on drivers, taking on average around 52 minutes to complete including transportation time. Police officers also need special training to be able to conduct the test. Stakeholders have expressed concern about the subjective nature of the CIT; however, a high proportion (90 percent) of blood samples taken after a CIT has not been completed satisfactorily test positive for the presence of a qualifying drug or drugs. From November 2009 to December 2013, 1004 blood tests were taken, of which 903 tested positive for qualifying drugs.
- The NZ Police advise that each year around 200 blood samples are analysed following drivers completing a CIT unsatisfactorily. While the Police do not have data on how many drivers satisfactorily complete CITs, or how many CITs are conducted overall, the number of drivers is likely to be low given the high threshold required for determining good cause to suspect.
- As there are limits to the number of tests that can be practically carried out, New Zealand's regime is successful in prosecuting and removing visibly impaired drivers from the roads, but does not provide the conditions for general deterrence.

- 17. If a driver's performance on this test is unsatisfactory, a Police officer can require the driver to undergo a blood test for a qualifying drug. These are drugs categorised under Schedule 1, 2, and parts of Schedule 3 of the Misuse of Drugs Act 1975, as well as prescription medicines.
- 18. Section 57A of the Land Transport Act (the Act) states it is an offence to drive while impaired, with evidence in the blood of a qualifying drug. Both illegal drugs and prescription medicines can impair a person's ability to drive safely. Therefore, New Zealand's current drug-driving regime relies on two elements unsatisfactory performance on a CIT and a subsequent blood specimen that indicates the presence of at least one qualifying drug in the driver's blood.
- 19. However, the law provides a defence for a person who can prove that they have a current and valid prescription for the drug from a health practitioner and were using the drug in accordance with the health practitioner's or manufacturer's instructions.
- 20. The regime also includes a presence-based offence. Section 58(1)(b) of the Act applies to drivers who are hospitalised because of a crash. Because of their injuries, these drivers cannot undergo a CIT. If the driver's blood test, taken in a hospital, shows the presence of a Class A drug (for example, methamphetamine), they can be prosecuted. Drivers can be prosecuted for a wider range of qualifying drugs under the impairment offence.

Problem definition

- 21. Specific data on the issue of drug-driving in New Zealand is limited, as studies do not clearly show the extent of the issue. Instead, the Ministry assessed the size of the drug-driving problem by using several data sources, including New Zealand crash data, which has been compiled in a cost-benefit analysis.
- 22. The method involved three different data sources to estimate the scale of New Zealand's drug-driving problem. These sources included data from New Zealand's crash analysis system (CAS) that includes all traffic crash data reported by the Police, data from the United Kingdom, and a 2014 New Zealand Environmental Science and Research (ESR) study of drivers killed in road crashes.
- 23. In order to build up the estimates of social cost, estimates of the numbers of crashes with drug-driving needed to be prepared. The approach assumes that the factors that formulate trends in drink driving accidents (where costs can be relatively easily estimated) are similar to the factors that formulate trends in drug-driving accidents. The analysis uses a ratio of drug related fatal crashes to alcohol related fatal crashes to estimate the number of crashes with drug-driving.
- The ratios used were obtained based on the data from the CAS, the studies in the UK, and the ESR study in New Zealand. This allowed, low, medium and high estimates of the social cost to be prepared. The accompanying independently reviewed cost benefit analysis report sets out the methodology in detail, and identifies the research on which it was based.
- 25. Unlike alcohol, there is no comprehensive data showing the relationship between the dosages of various drugs, the level of impairment and crash risk. The World Health Organisation notes a meta-analysis that compiled information from 66 studies showed an increase in the risk of crashes for 11 different drugs³. However, it is not possible to disaggregate the social cost and attribute it to particular drugs and dosages, when taken on their own or in combination with others.

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³ Global Status Report on Road Safety 2015; World Health Organization: p.40

26. The Ministry's cost-benefit analysis estimates the social cost of drug-driving at between \$96.8 million and \$731.4 million per annum, with a central estimate of \$250.5 million. This is equivalent to 23 people dying, 112 serious crashes, and 304 minor crashes per year. The cost-benefit analysis only provides indicative estimates of the costs and benefits of potential policy changes. The analysis is subject to a range of unknowns and uncertainties. Simulation analysis has been carried out to provide a more robust picture of the likely range of benefits and costs of the policy proposals.

More about the New Zealand data used in the cost benefit analysis

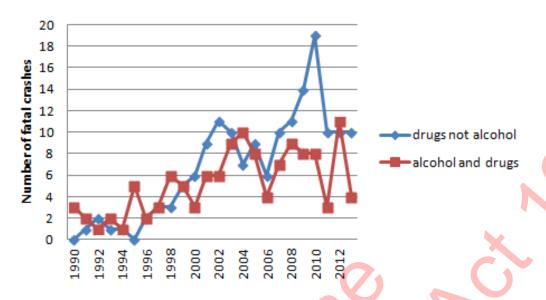
- 27. ESR study of deceased drivers analysed the blood samples of 1,046 drivers, who died in motor vehicle crashes between 2004 and 2009, for alcohol and drugs. 48 percent of those drivers tested positive for alcohol, drugs, or both.
- 28. The study found that of the 500 drivers who tested positive:
 - 27 percent⁴ had just alcohol in their system
 - 19 percent had just cannabis in their system
 - 28 percent had used both alcohol and cannabis
 - 25 percent had used a combination of drugs, which may have included alcohol and/or cannabis.
- 29. The level of drug-use found in the blood samples taken from dead drivers is not comparable to the level of drug-use found in the general population, as impaired drivers are more likely to have a road crash resulting in a fatality. The data also does not indicate whether a driver with drugs in their system was impaired. The type of drug, the size of the dosage and the length of time a drug has been in a driver's body and their physiology all have a bearing on the degree to which a driver is affected. That a driver is found to have consumed a drug is not necessarily an indication that their driving was impaired.
- 30. In addition, the Ministry does not have data on the number of people who may be driving while impaired by prescription drugs, or the number of people who may use drugs at the same time as alcohol. The impairment caused by some combinations of drugs, or the mixing of drugs and alcohol (such as cannabis and alcohol) can be much greater than each on their own.

CAS data

Using CAS data, the Ministry was able to examine a number of fatal crashes occurring where a driver had consumed drugs. Although the numbers are small and subject to fluctuation, we can see that the number of fatal crashes occurring where drivers have consumed drugs is now higher than in the 1990s (see below).

⁴ The percentages in this list do not add up to 100 percent, due to rounding.

Figure 1: Fatal crashes with qualifying drugs (or combined with alcohol) 1990-2013



31. In comparison, the numbers of fatal crashes per annum, where drivers have consumed alcohol, is now less than in the 1990s (see Figure 2 below). It is important to note that the numbers of crashes involving alcohol are much higher than the numbers of crashes recorded where drivers had consumed drugs.

Figure 2: Fatal crashes with alcohol (no drugs) 1990-2013



The numbers of drug-related crashes recorded in the CAS are probably underreported, due to drugs not being routinely tested for. Current operational practice is that if alcohol is observed at a high level over the limit, other tests are not carried out. On the other hand, those that are recorded may not have been caused by drugs.

Other data that indicates the level of drug-driving in New Zealand

- 33. There are several studies pointing to the prevalence of the use of certain drugs generally and in driving. The Ministry of Health's 2007/08 New Zealand Alcohol and Drug Use survey found the most commonly used recreational drugs in the 12 months before the survey were cannabis (14.6 percent), BZP party pills (5.6 percent), MDMA (2.6 percent), and amphetamines (2.1 percent). In that year, buying BZP party pills was legal, so the number of people using BZP has likely dropped since then.
- A new question about driving while affected by drugs with or without alcohol was introduced in 2014 to the Ministry's Public Attitudes to Road Safety survey. Nine percent of participants said they had driven while affected by prescription or pharmacy drugs, including two percent combined with alcohol. Four percent said they had driven while affected by other drugs (whether legal or not), including two percent combined with alcohol.
- 35. This was a self-report survey. As self-report surveys are voluntary and based on self-reported drug use. The survey sample may not represent real drug use. A driver may also be objectively impaired, without feeling that this is the case, or vice versa. In addition, the question asked whether drivers felt 'affected' by drugs, rather than 'impaired'. While we cannot be certain about how drivers interpreted the question, being 'affected' by drugs does not mean that one is impaired.
- 36. The Ministry of Health's Cannabis Use 2012/13: New Zealand Health survey found that 11 percent of adults reported using cannabis in the 12 months before the survey. Of this 11 percent, 36 percent of cannabis users reported driving under the influence of cannabis in the last 12 months. This equates to around 133,000 adults. Men were 1.5 times more likely than women to have driven under the influence of cannabis in the last 12 months.

Problems with New Zealand's current drug-driving enforcement regime

- 37. The current regime does take some drug-impaired drivers off the road after the fact, but does not appear to be deterring the behaviour in the first place. As outlined by social costs estimated in the cost-benefit analysis, it is apparent that a drug-driving problem exists in New Zealand and that this problem is causing a cost to New Zealanders and to society in general. New Zealand's drug-driving enforcement regime does not create the conditions for general deterrence as compared, for example, to New Zealand's random drink-driving testing regime. General deterrence involves deterring the general motoring population from driving while drugged. General deterrence relies on highly visible Police enforcement and the perceived likelihood of being caught, as well as the consequences that follow for a drugged driver. Random breath testing has been found to be very effective in deterring and, therefore, reducing drink-driving.
- 38. Establishing good cause to suspect can be difficult for the Police. A Police officer must explicitly identify a reason to suspect a driver. CITs also involve a degree of subjectivity and, therefore, require well-trained officers, and are time consuming. For these reasons, the number of impairment tests are low. NZ Police advise that around 200 tests are unsatisfactorily completed per annum, but do not hold data on how many CITs are conducted overall. So, while the sanctions facing a drugged driver are severe, there is neither sufficiently visible enforcement nor enough tests to have a significant deterrence effect.

39. Given the limitations inherent in New Zealand's current drug-driving regime, coupled with the prevalence of fatal crashes which involved drug-driving in New Zealand, it appears there is an opportunity to improve the drug-driving enforcement regime in New Zealand.

Objectives

- 40. In March 2010, the Government released Safer Journeys New Zealand's Road Safety Strategy 2010-2020. Safer Journeys established a vision of a "safe road system increasingly free of death and serious injury" and adopted the 'Safe System' approach to achieve this.
- 41. A Safe System approach looks across the road system to achieve safe roads and road sides, safe vehicles, safe speeds and safe road use. A Safe System approach to road safety recognises that even responsible people sometimes make mistakes and poor decisions when travelling on the roads. It therefore looks to institute policies that proactively mitigate the risk of a crash and reduce the severity of consequences in the event of a crash.
- 42. Safer Journeys identified alcohol and drug-impaired driving as an area of high concern. Safer Journeys included an action for investigating opportunities to strengthen the existing drug-driving enforcement model in New Zealand, through a review.
- 43. The main objective of a drug-driving enforcement regime is to reduce the harms caused by drug-driving. To be successful, a drug-driving enforcement regime, needs to:
 - remove impaired drivers from the road
 - prosecute and sanction drugged drivers
 - deter drivers from driving drugged.
- 44. It is also desirable, as in any regulatory regime, that it should:
 - apply best practice enforcement techniques and technologies
 - achieve a net benefit from any changes and avoid unintended consequences.

Options and impact analysis

International regimes

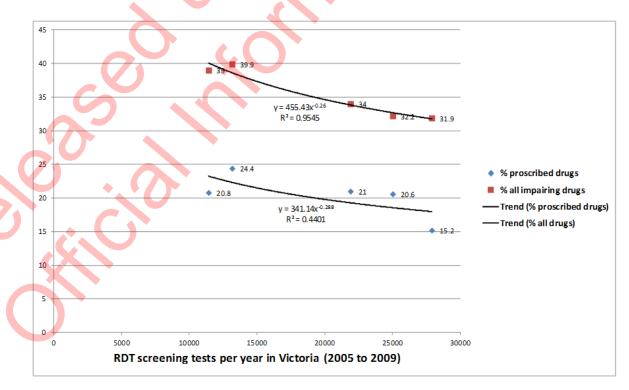
- 45. The Ministry investigated drug-driving regimes in a number of countries. The Ministry's review found countries consistently use impairment-based regimes, often in parallel with other approaches. One of the main reasons for this is the very large range of impairing drugs, both illegal and prescription, which cannot be identified easily through the roadside testing of body fluids. However, the Ministry also found that several countries have an impairment-based regime similar to that of New Zealand's regime but also make use of a presence-based approach. A presence based approach uses screening devices to test for the presence of drugs using bodily fluids.
- The Ministry then identified the United Kingdom's and Victoria, Australia's regimes as regimes that should be examined in more depth. Both regimes are quite different from each other, but both use a presence-based approach, in parallel with a regime similar to New Zealand's.

Victoria's drug-driving regime

- 47. Victoria's regime consists of two separate testing regimes that run in parallel. In addition to running a good-cause, impairment-testing regime, Victoria uses another regime that is a random presence based drug testing model.
- 48. The regime tests for at least one of three drugs in an oral fluid sample and this alone is sufficient evidence of an offence. The strategic principle behind this type of operation is general deterrence of drug-driving, to raise the perceived risk of an illegal drug-driver being caught for this offence, not necessarily to detect illegal drug-driving on a larger scale than could be achieved by targeted drug-driving enforcement operations. While this is a random testing regime, it is applied in a targeted way, with operations set up on arterial routes for long-haul truck drivers, near nightclubs for all drivers, and in areas associated with high levels of drug-use.
- 49. Testing is conducted by randomly intercepting small groups of drivers passing through Police alcohol checkpoints. All drivers intercepted are first screened for alcohol. If the driver fails this test, the officer then follows their alcohol enforcement process.
- 50. If the driver passes the alcohol-screening test, a preliminary oral fluid test is conducted to detect the presence of cannabis, methamphetamines or ecstasy. A device called DrugWipe II is used to detect the presence of the three drugs in an oral fluid sample obtained by the driver swiping the top of their tongue against a test pad on the device.
- 51. If the device shows the presence of any one of the three drugs, then a second, different, oral fluid test is taken. The driver places a swab attached to a stick under their tongue and collects an oral fluid sample. It is then swiped against the test pad on the testing device. If the device shows the presence of any one of three drugs, the oral fluid sample is sent away to a forensic laboratory for confirmatory analysis.
- 52. Victoria was the first jurisdiction to introduce roadside drug testing of drivers, and has provided the blueprint for the legislation and enforcement methods in other Australian jurisdictions.
- 53. As outlined in an article by Dr Baldock (Centre for Automotive Safety Research, University of Adelaide) a number of Australian jurisdictions have undertaken reviews of their roadside drug testing programs. These reviews have focussed on process evaluations (training, equipment, relationships between stakeholders etc) and analysis of data relating to enforcement and detection. Key variables have included the number of screening tests, the number of confirmed positives for different drugs, and the overall detection rate. However, the overall detection rates are difficult to determine, given the use of targeted operations and the discretion to choose particular drivers from a line of vehicles at checkpoint sites. This means that detection rates would be affected by operational factors to a greater degree than any changes in the rate of offending among the driving population.
- Surveys of drivers have been used to measure deterrence. Variables measured have included perceived likelihood of detection for drug-driving, social disapproval of drug-driving, anxiety about drug-driving, and self reported frequency of drug-driving.
- 55. Reviews of Victoria's roadside drug testing regime have been uniformly positive and supportive.

- The best measure of effectiveness would be the reduction in the number of drug related road crashes; however no reviews that the Ministry is aware of have included crashbased data analysis, which is unfortunate. To undertake such an evaluation, it would be necessary to compare rates of crash-involved drivers testing positive to the prescribed drugs before and after the introduction of random roadside drug testing. Such an evaluation would pose a number of methodological challenges.
- 57. The major implication of the lack of crash-based evaluation of Victoria's random roadside drug testing regime is that there is no concrete indicator of the road safety benefit of this form of enforcement.
- 58. However, a paper written by Professor Max Cameron of Monash University's Accident Research Centre has aimed to develop an analogy between random drug testing and the early years of random breath testing in Australia. This analogy is used to predict the likely effects on drug-driving among killed drivers as the number of random drug tests is increased.
- 59. Relationships between the annual number of random drug tests conducted in Victoria between 2005 and 2009 and the percentage of killed drivers with drugs in their blood stream were able to be calibrated. The calibrated relationships were then used in conjunction with an estimate of the cost per random drug test to determine the cost effectiveness of random drug testing.
- 60. The relationship between the annual number of random oral fluid tests and the annual percentage of killed drivers with at least one of the proscribed drugs is shown in the figure below. An even stronger relationship is apparent between the number of random oral fluid tests and the percentage of killed drivers with any impairing drug (including the three proscribed drugs). This suggests an association between random drug testing and the deterrence of both proscribed and non-proscribed impairing drugs taken by drivers.

Figure 3: Relationships between percentage of killed drivers with proscribed drugs, or any impairing drug, versus number of drivers screened by random oral fluid tests at random drug testing in Victoria



61. The study concluded that there was a reasonable analogy between random drug testing and random breath testing. From this, the researchers considered it appropriate to use the relationships illustrated in Figure 3 above to predict the likely effects on driver fatalities as random drug testing levels are increased. The conclusion of the paper suggests that best-practice random drug testing has the potential to achieve significant general deterrence of drug-driving.

United Kingdom's drug-driving regime

- 62. The United Kingdom has two drug-driving enforcement regimes running in parallel. The first regime is very similar to New Zealand's current impairment-based regime.
- 63. In March 2015, the United Kingdom introduced a new regime that allowed Police officers to test drivers for drug use, using an oral fluid test, as well as setting specific limits for eight illegal, and nine medicinal drugs. The limits apply both when Police officers perform a field impairment test, and when they perform an oral fluid test.
- 64. The limits for the eight illegal drugs are extremely low and are effectively zero tolerance limits. The limits for the nine medicinal drugs are set at levels where drivers would be expected to be impaired, and are well above the therapeutic levels for these drugs.
- The drug-driving regime used by the United Kingdom requires Police officers to have belief that a driver has used drugs. If a Police officer believes a driver has used drugs, they are able to use an oral fluid test to test for cannabis and cocaine. The UK is currently only doing roadside oral fluid tests for those two drugs. Even if a driver passes this test, if a Police officer still believes they are impaired, they can require the driver to undergo a field impairment test.
- 66. If either the oral fluid screening test or the field impairment test indicates a driver has used drugs, or is impaired, the Police officer can then take a blood or urine sample to test for drugs.
- 67. For the other illegal drugs and for the medicinal drugs, the United Kingdom currently uses an impairment-based regime.
- 68. The Ministry's analysis of other countries regimes led us to believe there were two questions that needed to be answered when designing a drug-driving enforcement regime:
 - Is a behavioural impairment-based approach or a presence-based approach preferable?
 - Should presence alone be sanctioned?
 - Should a regime have a good-cause to suspect (non-random) or a random testing approach?

Different methods of testing drivers for drugs

69. The most plausible mechanism for drug-driving enforcement to reduce societal costs is through a deterrent effect from increased law enforcement. It is assumed that individuals' behaviour could be affected by increased testing at the roadside and by word of mouth of people who have been tested. The reduced prevalence of impairment due to the change in individuals' behaviour would lead to reduced injury and non-injury crashes and, therefore, lower social costs.

- 70. The Ministry investigated two drug-driving testing methods behavioural impairment-based testing and presence-based testing:
 - A behavioural impairment-based approach involves a behavioural test to identify that a driver is impaired. In New Zealand, this test is the CIT.
 - A presence-based approach requires a Police officer to determine whether a
 driver had used drugs through bodily fluid testing (i.e. urine, oral fluids including
 saliva, or blood).
- 71. In practice, drug enforcement regimes use a combination of these methods, placing weight on one or the other depending on the policy objectives of the regime. The reason for this is that each of the methods have advantages and disadvantages. Behavioural impairment testing works well to identify visibly impaired drivers, but there are limitations in the number of tests that can be conducted. Further, it is possible for drivers to be affected by drugs without visible impairment. Drug use can affect drivers and the ability to drive safely by:
 - Slowing down reaction time this can be crucial in an emergency situation
 - Dulling the thinking process making it difficult to multi-task an essential skill necessary for safe driving
 - Causing a distorted view of time and distance reducing a drivers ability to drive safely and identify driving hazards
 - Stimulating the nervous system leading to:
 - reduced attention span
 - over-confidence in driving skills that is not supported by an actual improvement in driving ability
 - the sudden onset of fatigue as the stimulant effects wear off
 - altering a driver's view and experience of reality, with their actions and responses quite different to what is actually needed. They may be unaware of how much their driving skills are impaired.
- 72. Presence based testing through oral fluid screening tests presents a more practical method of identifying a larger group of drivers who have taken drugs and consequently may be impaired. However, presence alone does not necessarily prove that driving ability is impaired.

Behavioural impairment-based testing regimes

- 73. The focus of New Zealand's current drug-driving enforcement regime is to identify drug impairment using a behavioural test. This helps improve road safety, by ensuring visibly impaired drivers are taken off the road and successfully prosecuted, provided the Police can identify them and establish good cause to suspect a driver has used a drug or drugs.
- 74. The behavioural test is useful because it is difficult to link the presence or amount of drugs in a person's body with their fitness to drive. Further, a behavioural test does not rely on identifying a specific drug impairing a driver before a blood sample is taken for evidential purposes.

- 75. CITs consist of a number of tests, including an eye assessment, a walk and turn assessment and a one-leg stand assessment. As those being tested are likely to be impaired, these tests cannot be done at the roadside safely, so drivers are usually brought back to a Police station to be tested for impairment. In addition, distractions at the roadside could result in a Police officer incorrectly determining a person is impaired.
- 76. The CIT, as conducted in New Zealand, appears to be effective in identifying impairment in drivers. Around 90 percent of those who unsatisfactorily complete the CIT are found to have qualifying drugs in their blood which suggests, but does not prove, that the impairment was caused by the drugs present.
- 77. However, a CIT can take a long time and thus impose costs on both drivers and on Police time and resources. Further, not all Police officers are trained to carry out a CIT and so are not able to perform a CIT. The option of redesigning the CIT has not been considered, as the current process is considered best practice.
- 78. Blood testing remains the most accurate method for identifying a broad range of drugs, including prescription drugs, but is not feasible at the roadside.

Presence-based testing regimes

- 79. The main alternative to impairment-based testing is to test for the presence of drugs using roadside screening devices. Relying solely on presence-based testing would be a departure from New Zealand's current impairment-based approach (although there is a presence-based offence for hospitalised drivers who cannot undergo the CIT).
- 80. A screening test of a driver's oral fluids is the most practical and least invasive roadside drug screening method available. Oral fluid testing devices are available, and used in other countries, but do have limitations. These devices work by detecting the presence of a drug in an oral fluid sample obtained by the driver swiping the top of their tongue against a test pad on the device. Using such a device requires a driver to be stopped for around five minutes. This is much longer than the time taken to administer a passive breath alcohol test, which generally only takes a few seconds.
- 81. In 2009, Cabinet agreed that New Zealand should not consider moving to a random roadside drug testing regime until performance-based issues with oral fluid screening devices (in terms of the limited range of drugs that they are able to detect, their lack of accuracy, and the slow time to produce a result) have been satisfactorily resolved.

Reliability of oral fluid screening devices

- 82. Roadside screening devices used to test for the presence of drugs can only identify a limited number of drugs. The devices are relatively slow and expensive compared to alcohol testing devices and cannot determine the amount of drugs in a person's body. As more drugs are tested for using oral fluid testing devices, the time needed for testing and the cost increases. The number of drugs that can be tested for is currently limited. The devices used by the Australian State of Victoria take around five minutes and tests for methamphetamine, THC (the active ingredient in cannabis) and MDMA (ecstasy) only.
- 83. Roadside drug testing can detect THC for several hours after use. The exact time can vary, depending on the amount and potency of the cannabis used and the individual's metabolism. Inactive THC residue in the body of a driver from use in previous days or weeks is not detected by the oral fluid screening tests.

- 84. ESR has indicated that blood samples taken from drivers who do not satisfactorily perform the CIT show the drugs most commonly used by impaired drivers are cannabis and methamphetamine. While drivers sometimes report taking MDMA, blood samples indicate that drivers will think they have taken ecstasy, when actually taking a different type of drug.
- 85. Some oral fluid screening devices can also be susceptible to temperature and humidity fluctuation. In addition, while the accuracy of oral fluid screening devices has improved over recent years, the oral fluid screening devices that are currently available can produce false positive results. This is when the device incorrectly indicates the presence of a drug in an oral fluid sample when it is absent. Part of the reason false positives can occur is due to operator error, for example if a Police officer does not follow the device's operating instructions precisely.
- 86. Nevertheless, over the last 3-4 years oral fluid screening devices have improved in sensitivity, in particular, their ability to detect THC (the active ingredient of cannabis). The availability of devices has also increased, with a number of different testing options now available. Police anticipates that there will continue to be developments in the drug testing space, which will deliver quicker and more effective technology in the future.
- 87. While most drug screening devices still take around 3-4 minutes to produce a result for a small number of drugs (between 3-5), technology is improving. Already, there are more sensitive testing options becoming readily available. For example, the Drager DrugCheck 3000 can detect THC and offers two measurement options: fast or sensitive. The fast mode displays a quantity of 40 ng/ml or more after just one minute. The sensitive model permits detection of 15 ng/ml THC after three minutes. Given that cannabis use is still higher than any other drug, the fast mode does offer some benefit.
- 88. Police advise that these new devices reduce the risk of operator error, thereby mitigating some of the risk of returning a false positive result.
- 89. Compared to breath alcohol screening, the cost of oral fluid screening remains high (currently at around \$35-\$45 per test for a disposable device) depending on the device used. While the unit cost per oral fluid test is high, disposable devices can be used at the roadside without the need for an external power source. They do not incur any on-going servicing costs such as those associated with calibration, or any down-time while the device is being serviced.
- 90. If the trends relating to improvements in screening devices continue, there may be better and more cost effective devices available by the time the Police would be tendering for devices (if proposals are endorsed by the Government and Parliament). Furthermore, any improvements in screening devices will be closely monitored by Police, to ensure the greatest operational efficiency.
- 91. Officer training in the correct use of the device and careful monitoring of false positive rates in the administration of roadside screening tests is critically important. This is to reduce the risk of detaining innocent drivers for further evidential testing, and to maintain public perception of integrity and fairness of the testing process.
- 92. Accurate up-to-date data on the rate of false positive in other jurisdictions and on particular testing devices has been difficult to obtain. An Australian study conducted prior to 2009 noted that overall drug positive rate was 1 in 50 drivers tested in the State of Victoria. Of the samples tested positive at the roadside, only two percent were found not to contain drugs in the laboratory (false positives). However, this was some time ago and testing procedures have since improved. Another study in Victoria has quoted a false positive rate of 0.8% for the oral fluid testing devices employed there.

- 93. Other jurisdictions have addressed the issue of false positives by improving the handling of testing equipment, and subsequently the rate of false positives has declined.
- 94. To provide further reassurance on testing accuracy, a two-step testing process could be used, like in Victoria, Australia. In addition, blood tests also have the ability to confirm presence of drugs.
- 95. Blood specimens can be used to detect the presence of drugs and do not produce false positive test results. In New Zealand, blood samples could continue to be collected using the same process and equipment that is currently used to collect blood specimens from drivers for alcohol or drug analysis. It would be analysed by ESR using the same equipment, processes and standards of accuracy that currently apply to the analysis of evidential blood specimens for drugs under the current drug-driving enforcement regime. Blood results will not produce false positive results.

Tolerance limits

- 96. Many countries operate a zero tolerance policy in presence-based regimes because it is difficult to link driving impairment with the level of drug or combinations of a drug found in a driver's system, and there is a wide range of drugs to be addressed.
- 97. A small number of jurisdictions are setting per se limits⁵ for some drugs. However, there is debate on the validity of such limits in terms of whether they reflect levels of impairment or crash risk. Testing for compliance with a range of drug limits would be complex and very expensive. Blood tests would need to be conducted, as there are no current drug screening devices capable of establishing the amount of drugs in a person's body.
- 98. A benefit of presence-based regimes using screening devices is that it makes large-scale roadside testing possible, which helps with general deterrence. Presence-based testing can remove impaired drivers from the road and sanction them for presenting a danger to other road users. However, it is a blunter tool than impairment-based testing, and there is a risk that drivers who are not road safety risks are sanctioned. This is unlikely to happen under a behavioural impairment-based regime, such as New Zealand's current regime.

Criminal-based sanctions or infringement penalties?

- 99. If a presence-based regime is introduced, a question exists about whether drivers found to be driving with drugs in their system only which is currently not an offence receive criminal sanctions or infringement penalties. Criminal sanctions would involve a driver being prosecuted in court and facing serious penalties similar to those that apply to serious drink-driving offences. An infringement does not result in a criminal conviction.
- 100. Criminal sanctions would act as a strong deterrent to drug-driving. However, a presence-based regime would not indicate whether a driver was impaired, and as such would not show conclusively whether that driver was a road safety risk.
- The current drug-driving laws focus on the harm caused by driving whilst impaired by a drug. Without conclusive evidence that the presence of a drug has affected a person's ability to drive, the imposition of a criminal sanction is likely to be unjustified. Therefore, the imposition of an infringement rather than a criminal offence appears more appropriate where the focus is purely on the presence of drugs.

⁵ the limit above which driving is illegal

- 102. A disadvantage of criminal-based sanctions is the workload and cost they will place on the Justice sector. Infringement penalties would result in much lower costs to the Justice sector, as infringements do not generally result in a court hearing unless the driver requests a defended hearing.
- 103. However, having an infringement regime could lead to a risk of this offence being perceived as minor. This would depend on the infringement penalties applied. An infringement fee coupled with demerit points could offer a reasonable deterrent, commensurate with the nature of the offence. Infringement penalties would also not put as much pressure on the justice sector as criminal-based sanctions. Infringements also offer a swifter way of sanctioning drivers than a court prosecution.

Random or non-random testing

- 104. The Ministry investigated random and non-random approaches to testing drivers for drugs:
 - A non-random (good cause to suspect) approach requires Police officers to
 determine that they have good cause to believe a driver has used a drug or drugs
 before conducting any further drug tests. Non-random testing has the benefit of
 removing drivers who are obviously impaired from the road.
 - Random testing involves stopping cars randomly such as at a booze bus random testing checkpoint and, for practical reasons, typically requires using an oral fluid testing device to test drivers for the presence of drugs. Random testing has the benefit of deterring the general population from drug-driving.

Non-random (good cause to suspect) drug testing

- 105. Non-random testing is reliant on a Police officer first having good cause to suspect the use of a drug before they can begin any testing process. Under this type of regime, Police officers are not permitted to detain and test drivers who are not yet suspected of having committed an offence. This type of regime therefore carries a reduced risk of subjecting innocent drivers to unnecessary testing. When Police are able to determine good cause to suspect, this regime is effective in removing drug-impaired drivers from the road.
- 106. Regimes based on good cause to suspect do have weaknesses. NZ Police state there is a high evidentiary threshold for establishing good cause to suspect. This threshold means it is likely there are a number of drug-impaired drivers who are not being tested.
- 107. Reliance on good cause to suspect has a limited effect on deterring people who take drugs from driving, particularly when compared to random drug testing regimes. This is because a good-cause to suspect approach is unlikely to test sufficient numbers of people from the general driving population to be a deterrent from using drugs and driving.

Random drug testing

108. Random drug-driving testing is a regime where a Police officer can stop any driver who is driving a motor vehicle on a public road and drug test them, without first needing good cause to suspect the driver has used a qualifying drug or drugs. New Zealand already operates a random testing regime for alcohol known as Compulsory Breath Testing (CBT).

- 109. The best conditions for deterrence involve Police officers carrying out significant numbers of tests on a random basis. This creates an effect known as general deterrence, and is an important feature of New Zealand's current drink-driving regime.
- 110. General deterrence would apply when the mere threat of being caught and sanctioned deters the majority of drivers from committing an offence. High levels of general deterrence are achieved only if the roadside testing of drivers is conducted at sufficiently intense levels, and in a sufficiently visible manner such as at checkpoints, to increase public perception of the risk that they will be caught if they drive after having used drugs. Currently, New Zealand's drug-driving enforcement regime does not benefit from a general deterrence effect, as drivers are not being tested for drugs in sufficiently high numbers. International evidence shows that when drivers know they are unlikely to 'get away with it', they are much less likely to risk drug-driving.
- 111. While random testing has been used in New Zealand for drink-driving enforcement for many years, cost and practicality are a major issue for random drug testing. Selecting drivers randomly and requiring them to undergo a CIT would be impractical due to the length of time a driver would be stopped while being tested (around 52 minutes, including travel time to a Police station).
- 112. Random-testing regimes usually determine who should undergo evidential testing using a roadside screening test. This test replaces the need for a Police officer to have good cause to suspect a driver has used a drug or drugs. As noted above, roadside drug screening devices have limitations.

Options considered and criteria assessed against

Six options considered

- 113. The Ministry considered six options to improve the drug-driving enforcement regime, as well as retaining the status quo. These options are variations on both random, or non-random testing, and presence-based, or impairment-based approaches. Many of the options build on New Zealand's current drug-driving enforcement regime, and take into account regimes used in other countries.
- 114. The six options were designed after consideration of the strengths and weaknesses of different approaches to enforcement and how various regimes, if implemented in a New Zealand setting, might reduce the harm caused by drug-driving; feedback from engagement with various stakeholder groups; and whether it would be practical to implement the various regimes in New Zealand.
- 115. Random behavioural testing has not been included as an option, as it would be impractical and unjustified, due to the length of time a driver would need to be stopped for testing. According to NZ Police data, a CIT takes approximately 52 minutes per test (including travel time).
- All options, except for option 3, assume that the Police would retain the power to conduct CITs with good cause to suspect, as drivers may be impaired by drugs that cannot be tested for with an oral fluid screening device.

Feasible number of tests

117. Each option was assessed using the feasible number of tests the Police would be able to conduct under that option. For non-random regimes, where the Police must have good cause to suspect a driver has used drugs, the number chosen was 1000 tests. This number is five times the current tests undertaken. We believe this number is attainable with extra resourcing. While a higher number of tests would be preferable, these regimes are based on Police identifying sufficient numbers of people to put through the testing process. Random testing regimes enable a larger number of drivers to be screened. The feasible number used was 45,000 tests. This is seen as a credible number of tests to create deterrence and therefore achieve road safety benefits. In 2013, Victoria conducted 42,000 screening tests, although there are plans to increase the number of screening tests to 100,000 by 2016.

Criteria assessed against

- 118. The analysis considers the options below against the following criteria:
 - Meets the objectives of drug-driving enforcement meets the objectives as set out in the objectives section of this RIS
 - Impacts on drivers the impacts on the freedom and private benefits of individuals
 - Public acceptability whether the public is likely to accept and adhere to a particular policy option
 - Impacts on the Courts and Corrections the impacts on the integrity, cost and efficiency of the justice system when processing drivers
 - Operational feasibility the practicality for the NZ Police to implement the regime in a way that is consistent with the intention of the regime.

Trade offs to be considered

- The analysis in this RIS is designed to allow decision makers to consider the trade offs that need to be made when deciding to change the drug driving enforcement regime.

 The key trade offs are between:
 - estimated road safety benefits
 - the impacts on drivers including potential inconsistencies with the New Zealand Bill of Rights Act 1990 and
 - the practicalities of implementing any new enforcement regime.
- 120. Decision makers will need to weigh up the road safety benefits of particular options and the potential impacts on drivers.

Education option not considered further

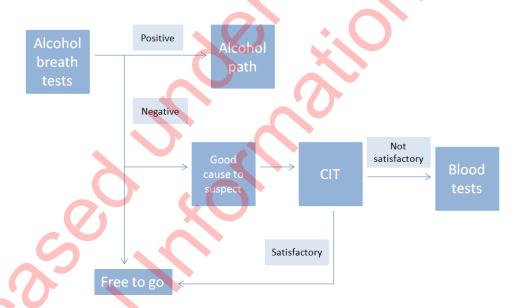
Public education is an alternative to enforcement. The NZTA currently uses public education through a range of communications media, including YouTube, Facebook and Twitter, to converse with drivers about driving while under the influence of drugs. While the Ministry recognises that outcomes of the drug-driving enforcement regime overlap with the NZTA's focus on promoting road safety, it considers public education to be a tool that gives effect to the drug-driving policies in place. It is likely to be more effective when it accompanies changes to the drug-driving regime. As such, we do not consider

- that additional investment in education will be effective in addressing drug-driving, except as an adjunct to any change in enforcement approach.
- The Ministry of Transport and other relevant agencies (in particular the NZTA) will continue to work on non-legislative enhancements to the drug-driving regime [EGI Min (12) 7/2].

Option 1: Status quo (with increased testing)

- 123. Option 1 would maintain the compulsory drug-driving impairment tests under the current regime, but increase the number of tests undertaken. This option would also maintain the blood test for evidence. While more Police resources would be deployed to help ensure drug-drivers are taken off the road, it is difficult to determine the number of increased tests that would be undertaken as this option does require a Police officer to have good cause to suspect a driver has used a drug, or drugs. Under option 1, the drug-driving enforcement regime remains unchanged from the status quo.
- 124. Under this option, if good cause to suspect exists, the officer will require the driver to undergo a CIT. If a driver's performance on the CIT is unsatisfactory, a Police officer can require the driver to undergo a blood test for a qualifying drug.
- 125. The following diagram outlines the testing process under option 1.

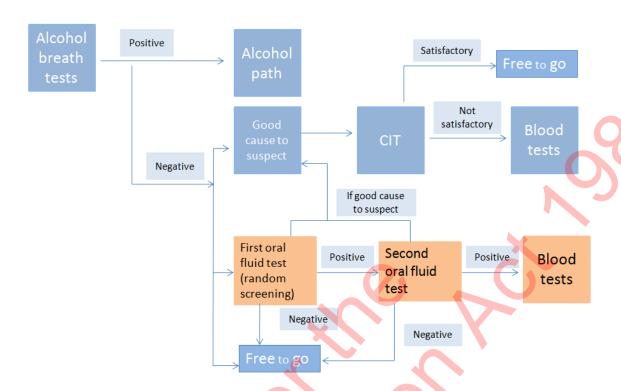
Diagram 1: Testing process under option 1



- 126. Assuming 1000 tests were completed, option 1 has a central BCR of 0.27. This option would have some road safety benefits, through removing drivers who are obviously impaired from the road.
- Option 2: Existing model for CIT in addition to random oral fluid testing (preferred option and similar to that used in Victoria, Australia)
- 127. Option 2 would introduce a random oral fluid testing approach. This model is based largely on the approach used in the Australian State of Victoria since 2004.

- 128. Random testing would most likely be applied by intercepting small groups of drivers passing through Police alcohol checkpoints. First, drivers would be screened for alcohol. If the driver failed this test, the officer would then follow the drink-driving enforcement process. If the driver passed the alcohol screening test, a preliminary oral fluid test for drugs may follow.
- 129. While subject to further investigation and procurement procedures, it is likely that Police would use an oral fluid screening device designed to detect the presence of three qualifying drugs (cannabis, methamphetamine or MDMA). This test requires a driver to swipe the top of their tongue against a test pad on the device.
- 130. A positive result on the first oral fluid test would result in a second oral fluid test on a different device. The second oral fluid testing device would have a higher rate of accuracy than the initial test, at an increased cost and time. If this device shows the presence of any one of three drugs, then a blood test would follow. The blood sample would be sent to a forensic laboratory for confirmatory analysis.
- 131. The random component of this regime has no requirement for Police to prove impairment. The presence of any specified drug detected in the evidential analysis would be sufficient proof of an offence.
- There is the risk that drivers are prosecuted whether impaired or not, and some of whom may not be a road safety risk. In Australia, the State of Victoria deals with this by only issuing infringement offences for presence-based tests if it is a driver's first offence. Criminal offences apply if drivers are found drug-driving a second time. Similar to the Victorian regime, option 2 assumes an infringement offence for those who fail the blood test following the random screening pathway.
- The following diagram outlines the process that would be followed under option 2. The diagram below assumes that a Police officer would first undertake an alcohol screening test before undertaking an oral fluid test for drugs. This is because in an operational setting, this is the most likely path that would be followed. However, a Police officer would have the ability to take an oral fluid test without first having taken an alcohol breath test.

Diagram 2: Testing process under option 2



- 134. Assuming 45,000 tests were done, option 2 has a central BCR of 5.15. This option has positive road safety benefits, and is cost effective and practical. Unlike non-random options, it creates deterrence without the need to prosecute a large number of drivers. However, because it is a random testing regime it will have negative impacts on private freedoms, as drivers who have not taken drugs will undergo drug screening, which requires them to provide an oral fluid sample. In comparison to alcohol screening, the initial screening drug test is considerably more time consuming.
- The two parallel regimes (oral fluid testing and the CIT) could produce quite different outcomes for a driver depending on which testing method the officer used. For example, a driver subjected to the oral fluid test could receive a much lesser penalty than if they went through the impairment regime and received a criminal conviction. In addition, the availability of two different drug testing processes could lead to two drivers, both impaired, facing different legal consequences. The testing process would depend on which testing process the Police officer chose at the time. However, there is a higher evidentiary threshold for the impairment testing process because a Police officer must first have good cause to suspect a driver has used a drug and prove impairment through the CIT. Such a potential inconsistency is difficult to reconcile if it is considered desirable to introduce a random testing regime, which results in the need to run parallel regimes.
- A possible mitigation to this concern is to allow the Police, under certain conditions, to switch from the random testing process to the impairment testing process. This would apply, if after starting the random testing process, a Police officer formed good cause to suspect a driver had used drugs. For example, a driver passes the first oral fluid testing process but admits to Police they have taken drugs or they appear to be under the influence of drugs. This mitigation would create an opportunity for a driver to face the more serious criminal penalty if they are impaired, regardless of which testing process the officer started with. This approach would also reduce the risk of an impaired driver avoiding a sanction if they had used a drug that the oral fluid screening device was unable to detect.

- 137. To avoid allegations that the drug testing process is capricious or unreasonable, the law could require the Police officer to complete the process for the infringement offence once a driver had failed two oral fluid screening tests, rather than permitting a switch to occur to the impairment process. In addition, once a switch to the impairment process had taken place, the Police officer should not be allowed to switch back to the oral fluid testing process.
- 138. The switching approach provides an opportunity for a driver to face the more serious impairment offence if they are impaired regardless of which testing process the officer started with. It would also reduce the risk of an impaired driver avoiding a sanction if they had used a drug that the oral fluid screening device was unable to detect.
- 139. There are two possible approaches to sanctioning those drivers who commit a presencebased offence under this option:
 - Infringement offence with an infringement fee and demerit points (and no criminal conviction results)
 - Criminal offence with criminal penalties equivalent to existing criminal penalties for the current impairment offence.

Advantages and disadvantages of an infringement offence

- Applying an approach where there is no conclusive evidence of impairment required, runs a risk of directing road traffic enforcement and court resources to dealing with drivers who do not necessarily present a road safety risk. There is the risk that drivers are prosecuted whether impaired or not, and some of whom may not be a road safety risk. This risk would be mitigated by using an infringement regime, rather than criminal prosecution. An infringement does not result in a criminal conviction.
- 141. Infringement penalties would offer much lower costs to the Justice sector than criminal penalties, as infringements do not generally result in a court hearing unless the driver requests a defended hearing. Infringements also offer a swifter way of sanctioning drivers than a court prosecution.
- 142. Introducing an infringement regime could lead to a risk of drug-driving being perceived as a minor offence. This would depend, in part on the infringement penalties applied. An infringement fee coupled with demerit points could offer a reasonable deterrent, commensurate with the nature of the offence and the social harm caused. In New Zealand's random alcohol testing regime, infringement penalties are applied to drivers under the age of 20 who are between 0 and 150 micrograms (mcg) of alcohol per litre of breath. Infringement penalties are also issued to drivers aged 20 and over who have breath alcohol levels between 250 and 400mcg of alcohol per litre of breath. In both cases, the penalty is a \$200 infringement fee and 50 demerit points. Because driver licences are suspended for three months after 100 or more demerit points have been accumulated within a 2-year period, 50 demerit points is a strong deterrent. It would be sensible to apply these penalties to sanction drivers found to have drugs in their system.

Advantages and disadvantages of a criminal offence

- 143. As described above, criminal sanctions would act as a strong deterrent to drug-driving. However, a presence-based approach would not indicate whether a driver was impaired, and as such would not show conclusively whether that a driver was a road safety risk.
- The current drug-driving laws focus on harm caused by driving whilst impaired by a drug. Without conclusive evidence that the presence of a drug has affected a person's ability to drive, an infringement offence is preferred over a criminal offence.

145. A disadvantage of the criminal-based sanctions is the workload and cost they will place on the court system. Based on Police screening 45,000 drivers a year, the Ministry estimates the cost to the Ministry of Justice would be around \$560,000 per year. There will also be a cost to the Department of Corrections for handling more community home detention and related sentences, which would be around \$6.22 million per year.

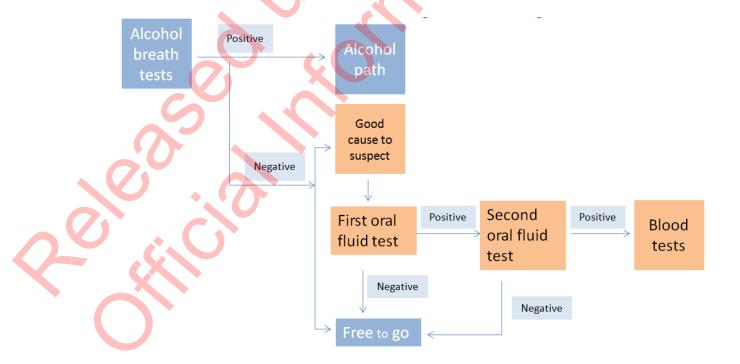
Preferred approach for offences

146. The Ministry's cost-benefit analysis looked at criminal-based sanctions and infringement sanctions for option 2. The BCR for an infringement offence is 5.15, while the BCR of the criminal offence is 2.01. This reflects the added cost involved with a criminal offence to the Justice Sector and Department of Corrections. On balance, the Ministry prefers setting the level of penalty at an infringement while noting Police officer would have the ability to switch to the impairment process, which involves criminal penalties. Option 2 is compared to other options on this basis.

Option 3: Non-random roadside testing (replacing current CITs with oral fluid testing)

- 147. Option 3 would replace the CIT with non-random roadside oral fluid testing. If a Police officer found good cause to suspect that a driver had used a drug an oral fluid testing process would follow. If there was a positive result on the initial oral fluid test, the driver would be required to undertake a second oral fluid test. The oral fluid tests used in option 3 would be the same as those used in option 2, and would be subject to a competitive procurement process.
- 148. Police would take a blood sample if a driver failed both the screening tests, and would send the sample to a laboratory for evidential testing. If a driver had evidence of a specifying drug in their bloodstream, they would be prosecuted. The following diagram outlines the process for testing under option 3.

Diagram 3: Testing process under option 3

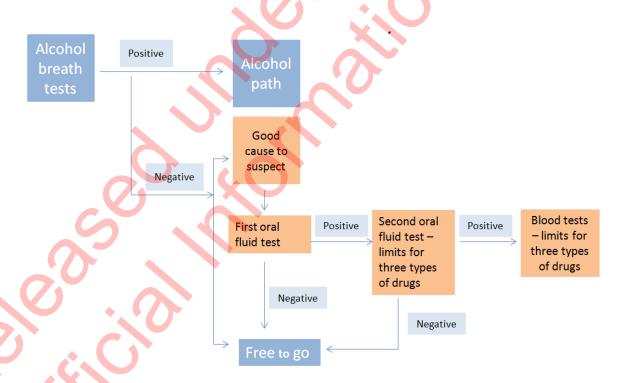


- 149. Assuming 1000 tests were carried out, option 3 has a central BCR of 0.29. This option would have some road safety benefits, through removing drivers who are obviously impaired from the road.
- 150. A major problem with this option is that due to the limited number of drugs an oral fluid device can test for, if the driver passes a screening test but is still visibly impaired, they would be free to go. In this instance, an impaired driver who poses a safety threat could potentially not be removed from the road.
- 151. Testing which relies on good cause to suspect is appropriate from a New Zealand Bill of Rights Act 1990 perspective. This is due to testing being limited to drivers who are potentially impaired, with impairment identified before prosecution. Option 3 is a presence-based regime, which means that drivers who are not impaired may be prosecuted.

Option 4: Non-random roadside testing but with limits (similar to UK model)

- 152. Option 4 would introduce non-random roadside oral fluid testing, similar to option 3. Under this option, a blood sample would be taken if a driver failed the oral fluid tests. However, the blood sample sent to a laboratory would be tested to determine if the amount of drugs identified by the oral fluid test exceeds a specified limit.
- 153. The following diagram outlines the process for testing under option 4.

Diagram 4: Testing process under option 4



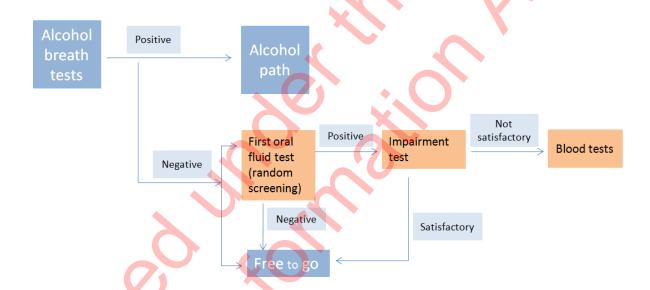
Assuming 1000 tests were carried out, option 4 has a central BCR of 0.27. The benefits and disadvantages of this option are similar to option 3. However, it presupposes an ability to link the amount of drugs in a person's body with their level of impairment. If this could be done, it would mitigate the risk of drivers being prosecuted who were not impaired. In the Ministry's view, this is not yet possible. Further, the evidential testing of blood to test whether the amount of the drug exceeds the legal limit would be prohibitively expensive.

- 155. Like option 3, the problem with this option is that due to the limited number of drugs an oral fluid device can test for, if the driver passes a screening test but is still visibly impaired, they could not be taken off the road.
- 156. Like all other non-random options, testing which relies on good cause to suspect is valid from a Bill of Rights Act 1990 perspective. This is due to testing being limited to drivers who are potentially impaired, with impairment being identified before prosecution can proceed.

Option 5: Random roadside oral fluid testing in conjunction with CIT

- 157. Option 5 would introduce a random roadside oral fluid testing regime. However, unlike option 2, a CIT would be undertaken rather than a second oral fluid test, following a positive result on an initial oral fluid test. Blood tests would also be required following an unsatisfactory result from the CIT.
- 158. The following diagram outlines the process for testing under option 5.

Diagram 5: Testing process under option 5



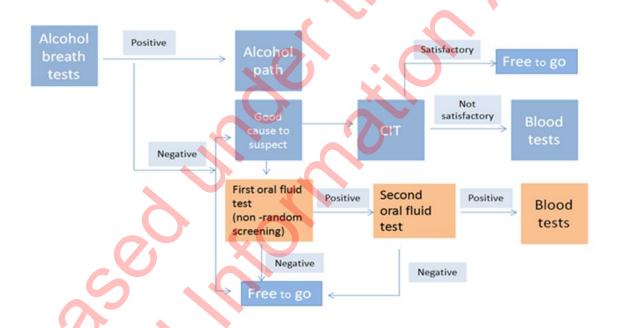
- 159. Assuming 45,000 random tests were undertaken, option 5 has a central BCR of 2.16. This option potentially couples the benefits of a random testing regime with the benefits of the existing good cause to suspect regime. It has positive road safety benefits, as it does not require a second, more expensive evidential oral fluid test to confirm a person has taken drugs. It also ensures those who are a risk to others' safety are correctly identified and stopped from driving.
- The Ministry believes that this option would be less difficult to justify than option 2 from a Bill of Rights Act 1990 perspective, as drivers are being shown to be impaired before being prosecuted.

161. Police do not support this option, due to operational feasibility of the regime. This is due to a number of factors, such as the real potential for oral fluid screening tests to lead to a bias in the administration of the CIT, and the considerable resource requirements associated with the proposal. It would take an average of one hour for drivers who fail the first oral test to complete the CIT before a decision is made to progress the blood sample. This has considerable implications for Police, involving the removal of an officer from the frontline for at least an hour, with no definable outcome. Police does not believe that the policy objective of delivering high levels of testing can be achieved through this regime, and therefore the benefits will not be fully realised.

Option 6: Non-random roadside testing without limits

- 162. Option 6 would allow Police to either require a driver to undergo a CIT or alternatively, a roadside oral fluid test once forming good cause to suspect. If the first oral fluid test indicates a positive result, a second oral fluid test would follow. If a positive result were obtained for a second time, a blood test would follow.
- 163. The following diagram outlines the process for testing under option 6.

Diagram 6: Testing process under option 6



- 164. Assuming 1000 tests were carried out, option 6 has a central BCR of 0.24. This option has similar benefits to options 3 and 4, with some road safety benefits, through removing drivers who are obviously impaired from the road.
- In addition, there is likely to be a bias in favour of using an oral fluid screening pathway, given the complexities inherent in the CIT and the resources required. However, a CIT gives Police a way of testing for many drugs that oral fluid testing would not identify.
- 166. Like all other non-random testing options, which rely on good cause to suspect, this option is valid from a Bill of Rights Act 1990 perspective. This is due to testing being limited to drivers who are potentially impaired, with impairment being identified before prosecution can proceed.

- 167. There is the risk that drivers are prosecuted whether impaired or not, some of whom may not be a road safety risk. This risk could be mitigated to some extent by using an infringement regime, rather than criminal prosecution.
- 168. Table 1 below compares the options against the assessment criteria. Option 2, followed closely by option 5, offers the best fit against the criteria.

Table 1: Multi criteria analysis - options to amend drug-driving enforcement regime assessed against criteria⁶

Option (√ =preferred)	Objectives of drug-driving enforcement (to reduce harms caused by drug-driving; provide deterrence effect; and remove impaired drivers from road and sanction them)	Impacts on drivers	Public acceptability (assessment based on limited information due to lack of a full public consultation)	Impacts on the Courts & Corrections	Operational feasibility	Benefit cost ratio
1: Current enforcement approach with increased testing. Testing process outlined in diagram 1.	Small reduction in harms caused by drug-driving. Deterrent effect limited. Removes visibly impaired drivers from the road, if identified, and sanctions them.	Same as status quo.	Will affect very few drivers as it relies on good cause to suspect. Unlikely to cause concern as it is involves the same enforcement regime.	Court time increased –impact on justice system.	Current system but would require additional trained officers.	0.27
2: Existing model for CIT in addition to random oral fluid testing (similar to Victorian model) . Testing process outlined in diagram 2.	Significant reduction in harms caused by drug-driving. Deters drug drivers. Removes potentially impaired drivers from the road provided they prove positive for a drug screened by the testing device Drivers are sanctioned but at a lower level than criminal offending.	Negative impact on private freedom by detaining people not yet suspected of committing an offence. Risk of sanctioning people who are not impaired.	Will affect a significant number of drivers, as any driver may be tested. Oral fluid testing may be considered invasive. Presence-based offence may cause concern.	Infringement offence means there will be a limited impact on court time or processing. Police will face costs.	Police have indicated their support of random oral fluid testing alongside the current CIT regime. Police would need to change operational practices, including training.	5.15
3: Non-random roadside testing (replacing current CIT). Testing process outlined in diagram 3.	Small reduction in harms caused by drug-driving. Deterrent effect limited. It would not remove visibly impaired drivers but would remove potentially impaired drivers from the road provided they prove positive for a drug screened by the testing device.	Risk of sanctioning those who are not visibly impaired.	Will affect very few drivers as it relies on good cause to suspect. Testing method may be considered more invasive than CIT, however the time taken for the test will be significantly improved (5 minutes compared to 52 minutes).	Court and processing time increased –impact on justice system.	Police would need to change operational practices, including training.	0.28

⁶ A benefit cost ratio has been provided in addition to the multi criteria analysis table for comprehensiveness. Each of the criteria may or may not be monetised in the cost benefit analysis.

Option (✓=preferred)	Objectives of drug driving enforcement (to reduce harms caused by drugdriving; provide deterrence effect; and remove impaired drivers from road and sanction them)	Impacts on drivers	Public acceptability (assessment based on limited information due to lack of a full public consultation)	Impacts on the Courts & Corrections	Operational feasibility	Benefit cost ratio
4: Existing model for CIT in addition to non-random roadside testing with limits (similar to UK model). Testing process outlined in diagram 4.	Small reduction in harms caused by drug-driving. Deterrent effect limited. As well as removing visibly impaired drivers, removes potentially impaired drivers from the road if they prove positive for a drug screened by the testing device and sanctions them.	There is a risk of sanctioning people who are not impaired as different people are affected differently by drugs.	Will affect very few drivers as it relies on good cause to suspect. Testing method may be considered more invasive than CIT.	Court and processing time increased –impact on justice system.	Setting of limits is problematic and testing devices expensive. Police would need to change operational practices, including training.	0.27
5: Existing model for CIT in addition to random roadside screening followed by a CIT. Testing process outlined in diagram 5.	Significant reduction in harms caused by drug-driving. Deters drug drivers. Removes impaired drivers from the road if they prove positive for a drug screened by the testing device and do not perform a satisfactory CIT. Drivers are sanctioned at a criminal level.	Negative impact on private freedom by detaining people not yet suspected of committing an offence.	Will affect a significant number of drivers, as any driver may be tested.	Court and processing time increased – medium impact on justice system.	Police have indicated this option is operationally unsound. Police would need to change operational practices, including training.	2.16
6: Existing model for CIT in addition to non- random roadside testing without limits. Testing process outlined in diagram 6.	Some reduction in harms caused by drug-driving. Deterrent effect limited. As well as removing visibly impaired drivers, removes potentially impaired drivers from the road if they prove positive for a drug screened by the testing device, and sanctions them.	Risk of sanctioning those who are not impaired.	Will affect very few drivers as it relies on good cause to suspect. Testing method may be considered more invasive than CIT.	Court and processing time increased –impact on justice system.	Police would need to change operational practices, including training.	0.25

Key:

Significantly better than status quo

Negligible difference, or no change from status quo, or unknown

Significantly worse than status quo

Cost benefit analysis

169. A cost benefit analysis has been prepared for the six policy options using studies and data from both New Zealand and overseas. The costs and benefits are estimated over 10 years, which are stated as present values of the sums of the incremental costs and benefits respectively, in comparison to the status quo.

Benefits and costs analysed through the cost benefit analysis

- 170. The benefits captured through the cost benefit analysis are as follows:
 - Safety benefits. The relationship between the drug-driver testing rate per 1000 licensed drivers and the percentage of drivers that are killed because of drug-driving has been used to estimate the reduction in social costs of road crashes, therefore the benefits. It is assumed the same level of benefits will be seen regardless of the testing method used. Therefore, the savings in social costs is the same for all options regardless of the testing method used.
 - Other benefits not estimated/included and likely limitations. Due to limited
 information available, the cost benefit analysis does not include health effects
 from changes in enforcement level. However, we do not believe that this impact
 would be large enough to alter the conclusion of the analysis. Higher level of
 enforcement is expected to reduce drug impaired driving but not necessarily drug
 consumption. However, the costs of achieving this benefit vary markedly between
 options.
- 171. The costs captured through the cost benefit analysis are as follows:
 - Unit test costs. These unit costs are costs per test mainly covering the Police's time on testing, the cost of the devices for oral fluid tests and the lab analysis for evidence.
 - Cost to enforcement-related agencies Police, Ministry of Justice, NZTA, Department of Corrections. This includes the resource costs to departments. Apart from costs to the Ministry of Justice and Department of Corrections, there could also be impacts on the legal aid system. Due to a lack of information, the impact on legal aid has not been included in this analysis.
 - Costs to individuals. In addition to travel time costs, there are the time costs related to appearances at court and time taken for disqualified drivers to apply for limited licences. Further, there would be resource costs for individuals related to vehicle impoundment.
 - Cost of changing testing methods. Under some of the proposed options below, the current impairment tests would be replaced by roadside oral fluid tests. The related costs differences are mainly due to the difference in the unit costs for Police and time costs for individuals.
 - Other costs not estimated/included (including costs to wider society). Other costs not included in the cost benefit analysis are economic impacts of traffic delays resulting from road crashes, reduced travel and costs to businesses. They have not been included in the analysis, either due to a lack of information, or because they are not expected to be significant.

172. Table 2 below outlines the results of the cost benefit analysis for each of the six options considered. It summarises the estimated net present value (NPV) and BCR of each option, assuming 45,000 tests take place each year for each of the random testing options, and 1000 tests take place each year for the good cause to suspect options.

Table 2: Summary of BCR results for each option

	Option 1000 tests	Option 45,000 tests	Option 1000 tests	Option 1000 tests	Option 45000 tests	Option 1000 tests
Net present value						
High estimates	-8.42	839.30	-6.48	-7.74	756.70	-9.41
Central estimates	-28.10	248.10	-26.16	-27.42	165.51	-27.22
Low estimates	-34.82	46.21	-32.87	-34.14	-36.38	-33.30
Benefit - cost ratio						
High estimates	0.78	15.03	0.82	0.79	6.31	0.74
Central estimates	0.27	5.15	0.28	0.27	2.16	0.25
Low estimates	0.09	1.77	0.10	0.09	0.74	0.09

- 173. If the net present value (i.e. present value of benefits minus present value of costs) is positive, and subsequently the BCR (i.e. present value of benefits divided by present value of costs) is greater than one, the associated option is deemed to deliver net benefits to the nation.
- 174. Further detail on the cost benefit analysis can be found in the document Safety impairment project: Increase the level of drug-driving enforcement in New Zealand Cost benefit analysis.

Results of the cost benefit analysis

- These results indicate the benefits from a reduction in the number of deaths and injuries will outweigh the increased resource costs to departments and individual costs for options 2 and 5. This holds under all high and central estimates, and low estimates for option 2. The central estimate BCRs for options 2 and 5 are 5.15 and 2.16 respectively.
- Under options 1, 3, 4 and 6, while the benefits are larger than the costs under high estimates, this does not hold true under central and low estimates, with BCRs lower than 1, and negative net present values.
- 177. This implies that when considering uncertainties, options 2 and 5 would deliver net benefits to society, but the others would not.

Preferred option

- 178. Based on the results of the multi criteria analysis and cost benefit analysis, option 2 and option 5 were scrutinised in more detail by the Ministry.
- 179. Table 3 below outlines the strengths and weaknesses of the two drug-driving testing models, when considered side-by-side.

Table 3: Strengths and weaknesses of each random testing option

	Option 2 (preferred option) -	Option 5 - Impairment-based random
	Presence-based random drug	drug testing model (45,000 tests)
	testing model (45,000 tests)	drug testing model (43,000 tests)
	testing moder (43,000 tests)	
Road safety impact	Estimated reduction of 10.8 alcohol- related fatalities per annum	Estimated reduction of 10.8 alcohol- related fatalities per annum
	Good impact on road safety through deterring drug-users from drug-driving	Good impact on road safety, through deterring drug-users from drug-driving
BCR – Central estimate	5.15	2.16
Cost for 45,000 tests	\$52.65 million over 10 years	\$142.41 million over 10 years
Operational acceptability	NZ Police have stated they support this regime. This is due to:	NZ Police have stated this regime would have considerable operational risks. This is due to:
	Ability to deliver higher levels of testing across the general driving behaviour, delivering greater general deterrent value in line with policy objectives Still have the option to pursue impairment offences through the current CIT process The time taken to process a driver to the point of having a blood sample taken is expected to be around 15 minutes representing less impact on motorists and Police resources	 Potential for first oral fluid testing result to bias the administration of the CIT The time taken to process a driver to the point of having a blood sample taken is expected to be at least one hour. Officers are removed from the frontline environment during this time. Concern regarding undue detention due to the first oral fluid screening test returning an inaccurate test result. Because of the resources required to support this regime, Police may not be able to deliver the higher level of testing the proposal assumes, therefore undermining the assumed benefits of the BCR, which are based on 45,000 tests per annum
Impacts on private benefits and freedoms	The regime would impact these sections of the Bill of Rights Act 1990: unreasonable search and	The regime would impact these sections of the Bill of Rights Act 1990: unreasonable search and
	unreasonable search and seizure	unreasonable search and seizure

	 arbitrary arrest or detainment 	arbitrary arrest or detainment
	 the right to be presumed innocent until proved guilty according to law. 	 the right to be presumed innocent until proved guilty according to law.
	The Ministry of Justice is particularly concerned with this regime in relation to the right to be presumed innocent, as presence of a drug would not necessarily indicate impairment.	The Ministry of Justice is particularly concerned with this regime, in relation to arbitrary detainment, as a false positive on oral fluid screening test could lead to a driver being detained for an unduly long amount of time (an average CIT takes 52 minutes).
Public acceptability	The public may be in favour of this policy given feedback from representative groups, however open public consultation has not been undertaken. There may be some risks due to the presence of drugs being tested for, rather than impairment, as drivers may be sanctioned when not impaired and presence-based testing may be considered more invasive than the current regime.	The public may be in favour of this policy given feedback from representative groups, however open public consultation has not been undertaken. Presence-based testing may be considered more invasive than the current regime. The length of time taken as a result of the CIT stage may be seen as undesirable.
Impacts on Justice sector	If a criminal offence is used for prosecution, this regime would result in a larger increase in drivers processed by the Justice sector than an impairment regime. This is because there may be drivers identified who have drugs in their system but who are not impaired. They would not be prosecuted in an impairment regime.	This regime would result in an increase in drivers processed by the Justice sector.

- 180. Both options provide similar road safety impacts. Police has advised that option 5 has considerable operational risks and is operationally unsound, and may explain why it is not used in any other jurisdiction.
- 181. A major concern of the Police is that the oral fluid analysis could pre-empt the outcome of the CIT, whereby a positive oral fluid test could lead some officers negatively assessing the performance of the CIT. The risk here is that the impartiality of the CIT may be undermined by the positive test result that precedes it. This could lead to significant legal challenges, which may undermine the robustness of the whole system.
- Another problem with option 5 is a scenario where the initial fluid test may test positive for the active ingredient of cannabis (THC), which may pre-empt an unsatisfactory CIT. The subsequent blood sample analysis may test negative for THC, but may test positive for other qualifying drugs. This brings about a question that could be raised in court: where if the oral fluid test constitutes the good cause to suspect that the driver is operating a motor vehicle while under the influence of THC, but this is not supported by the evidence (the blood sample), is there good cause to suspect and prosecute for other qualifying drugs?

- 183. Police is also concerned about the resource implication for option 5. Every time a driver fails the first oral fluid test, the officer must transport the driver to an accessible station (or any such appropriate place), administer the test, and then transport the driver back. For the duration of this process, the officer is removed from the frontline, and therefore cannot administer any further random oral fluid tests. This will impact on the delivery of the proposed testing levels, and consequently, impact on the assumed benefits of the option.
- 184. Given the Police are the key implementing agency for drug-driving enforcement, weight must be given to its concerns. For the reasons outlined above, in addition to the results of the multi criteria analysis and cost benefit analysis, option 2 is the preferred option.
- 185. In order to implement the preferred option, the Land Transport Act 1998 will need to be amended to introduce random drug testing.

Risks associated with the preferred option

- 186. The following concerns have been expressed in relation to the Bill of Rights Act 1990 about the proposal to introduce a presence based random testing regime.
 - Section 21 the right to be secure against unreasonable search and seizure.
 Random testing removes the need for reasonable grounds to be established before a person is tested for drugs.
 - Section 22 the right not to be arbitrarily arrested or detained. Detention is considered arbitrary if it is capricious, unreasoned or without good cause. A preliminary oral fluid test taking around five minutes is likely to constitute a detention and the removal of the need for good cause would likely make such a detention arbitrary.
 - Section 25 (c) the right to be presumed innocent until proved guilty according to law. The prosecution bears the legal burden of proving every element of an offence to the required standard of proof, and disproving any potentially available defence. Shifting the onus of proof onto the defendant will limit section 25(c) of the Bill of Rights Act 1990.
- 187. The Ministry of Justice has stated it is unlikely that the limits to section 21 and 22 are justified under section 5 of the Bill of Rights Act. It believes the limits on rights are more than reasonably necessary, as the proposals do not include an appropriate threshold to meet before detaining and undertaking an invasive search of potentially innocent people.
- The Ministry of Justice has also stated that the proposed drug testing regime appears to shift the burden of proof to the defendant to demonstrate an offence has not been committed. It believes it is unlikely the limit on section 25(c) is justified under section 5 of the Bill of Rights Act 1990, stating that punishing people who are not impaired is not rationally connected to the objective of the policy and the lack of any per se limit from which to infer impairment also means that rights are not minimally impaired.

Ministry of Transport comment

These are similar to human rights issues which have arisen for random alcohol testing, which was found to be inconsistent with the Bill of Rights Act by the then Attorney-General when it was introduced in 1991.

- 190. The human rights implications of the preferred option are significant and must be considered in detail by decision makers. These are summarised below:
 - Under the preferred option in this paper, any driver may be required to undergo a
 presence based bodily fluid test, irrespective of whether they are presumed to be
 driving while impaired. Many people in New Zealand may consider this is a more
 invasive method of testing than the current behavioural impairment test, which
 does not require any sampling of bodily fluids.
 - The preferred option will take away individual freedoms in the form of time.
 Current oral fluid testing devices take up to 5 minutes to produce a result, which may be considered a significant amount of time detain a driver when they are not yet suspected of committing an offence.
 - While the technology used in presence based drug testing devices has improved and continues to improve, the possibility of false positive results does exist. While a blood test can correctly identify for the presence of drugs, the possibility of putting an innocent person through a number of confirmatory tests does exist under the preferred option.
- 191. The false positive rate of the proposed regime is unknown and will only be identified if the regime is implemented and the appropriate data recorded. The cost benefit analysis completed for the proposed regime estimated a total false positive rate of 1.5 percent. This includes all false positive results that would occur along the testing process. A smaller number of the total false positive tests would arise at the evidential blood testing stage. This rate is based off data from Victoria about the current rate of false positive results on oral fluid testing devices, in conjunction with some assumptions made on the likely analogy between New Zealand's current CIT regime and proposed regime.
- 192. Of the total random oral fluid tests administered in Victoria, 6.2% result in a positive result. On the second oral fluid test, 5.4% of the total number of tests initially administered result in a positive result (here some false positive test results have already been picked up 0.8 percent). The cost benefit analysis prepared by the Ministry assumes the same level of false positives just mentioned. Drivers whose tests show a positive result on the second oral fluid test will go to an evidential blood test. The cost benefit analysis also estimates that 87 percent of these blood tests return a positive result. This is based on the expected analogy between the current CIT regime (where blood tests have a 90 percent positive rate) and the proposed regime. Another way of looking at this, is that the cost benefit analysis assumes that two oral fluid tests will be about as effective as a CIT in determining impairment, or the presence of drugs.
- 193. Like other outputs of the cost benefit analysis, the estimated total false positive rate is based on assumptions that cannot be validated. There is a danger in using an analogy between the current CIT regime and the proposed regime for a level of false positive results, as there are significant differences between the two regimes.
- In addition to the human rights implications mentioned above, there are constitutional concerns with the introduction of the preferred presence-based infringement regime, given that the infringement regime is not calibrated against evidence of any impairment and therefore conclusive evidence of road safety risk. The concern is that the introduction of an infringement offence which will sit alongside the current criminal offence for drug-driving could lead to unequal treatment of individuals before the law.

- 195. The proposed changes may result in unequal treatment before the law in two situations; firstly where Police discretion is exercised in requiring an individual to undertake the behavioural impairment based test and face a criminal sanction, and secondly where Police discretion is exercised to require a driver to undergo the presence-based test and face an infringement offence without the ability to demonstrate they are not impaired.
- 196. Where a person passes a CIT, they would not then be required to undertake an oral fluid screening test, and therefore cannot be found to have committed an infringement offence, even though they may have consumed drugs.
- 197. This could also lead to a situation where two people, both impaired, may face different legal consequences based on the test administered by the Police officer at the time. There is a concern that the oral fluid test will be considered an easy option and that Police may use even when a person appears to be impaired.
- 198. The introduction of an infringement offence which runs alongside a similar criminal offence is not unfamiliar in New Zealand law. There are two drink-driving infringement offences within the Land Transport Act 1998 that run alongside similar criminal offences, these apply in the following situations:
 - For drivers under the age of 20 who are detected as having between 0 and 150 micrograms (mcg) of alcohol per litre of breath; and
 - For drivers aged 20 and over who are detected as having a breath alcohol level between 250 and 400 mcg of alcohol per litre of breath.
- 199. The penalty for both offences is a \$200 infringement fee and 50 demerit points. Where a driver is found to be over the upper limit in both instances, they will instead face a criminal sanction, which may include a period of imprisonment or a fine, and disqualification from holding or obtaining a driver's licence for a period of time. However, comparing the preferred drug-driving regime with these infringement regimes does have limitations.
- 200. The final assessment of the consistency of the proposals with the Bill of Rights Act will be undertaken by the Attorney-General when a Bill to implement the random testing regime is available.

Consultation

- 201. The Ministry undertook a targeted consultation process rather than a general public consultation. The Ministry held a Stakeholder Workshop on 12 May 2015. Attendees included a range of government departments, treatment providers, and several interest groups such the NZ Automobile Association and the NZ Drug Foundation. Thirty stakeholder groups were invited to this workshop, and four took the opportunity to provide written feedback on the proposals.
- 202. Stakeholders felt drug-driving affects all ages, and involves both prescription and illicit drugs. They were also concerned by the low number of drug tests being done under New Zealand's current regime. Some stakeholders were concerned about presence-based testing, as the mere presence of a drug or drugs in a specimen does not mean a person is impaired.
- 203. There was no consensus on the best way forward. Some stakeholders favoured adopting the Australian regime while others were opposed due to inconsistencies of this regime with the Bill of Rights Act 1990.

- 204. Police have been consulted on the review and have provided significant feedback over the course of the drug-driving review. Police support the Ministry's preferred option. Police has indicated that it believes as technology continues to improve, the Ministry's preferred option may be even more cost effective in the future.
- 205. The Ministry of Justice has provided feedback on the drug-driving review, particularly on its human rights implications. This feedback has been incorporated into this regulatory impact statement. It also noted that additional costs will add to existing Ministry of Justice budget pressures and could affect the provision of existing services unless additional funding is secured.
- 206. The NZ Automobile Association did a survey of around 2500 of its members in 2009. This survey found that 89 percent of members surveyed supported introducing roadside saliva testing for drugs. However, this survey did not explain the process that is involved with oral fluid drug-screening tests or the time it would take to screen a driver's oral fluid for drugs. The NZ Automobile Association advises that his level of support remains consistent with a rolling survey that the Association conducts quarterly, where members are asked if they support or oppose introducing a saliva based drug test to detect drugdriving. In the last survey, of around 900 members, 83.9 percent expressed support.

Conclusion and recommendation

- 207. A review was undertaken by the Ministry to determine how to minimise harm resulting from drug-driving in New Zealand at a reasonable cost through changes to the enforcement regime. The key tasks of the review were to identify the extent of New Zealand's drug-driving problem and to determine whether New Zealand's current drug-driving enforcement model should remain as the Government's preferred model.
- 208. The drug-driving review process involved analysing the existing regime, studying international regimes, gathering data, holding discussions with stakeholders, developing options and undertaking a cost benefit analysis.
- 209. A cost benefit analysis prepared for the review found that drug-driving in New Zealand imposes an estimated social cost of between \$96.8 million and \$731.4 million per annum, with a central estimate of \$250.5 million. This translates to approximately 23 people dying, 112 serious crashes, and 304 minor crashes per year.
- 210. A number of potential enforcement models have been scrutinised. These models included New Zealand's current regime, three regimes based on good cause to suspect, and two random testing regimes.
- 211. While the analysis of these potential regimes is subject to a range of unknowns and uncertainties, the cost benefit analysis prepared has used best practice methods to provide a more robust picture of the likely range of benefits and costs of the various regimes. Under current operational practices and data collection methods, it is not possible to further analyse the extent of the drug-driving problem in New Zealand and its associated harms. The operational cost and ethical issues that come along with collecting the types and volume of data needed to more fully realise the extent of the drug-driving problem in New Zealand, means that this is not possible.
- 212. Having estimated the likely scale of the social cost of drug-driving in New Zealand, a further investment in drug-driving enforcement is justified. A benefit-cost analysis indicates that a random drug testing regime is the most cost-effective method of reducing the cost of drug-driving. One the reasons that random drug testing is cost effective, is the deterrent effect it has on the driving population. There were two possible approaches to random testing considered. The first approach modelled on Victoria, Australia. The second approach involves a random roadside oral fluid screening test followed by a CIT.

- 213. The most cost effective approach is the Victoria model. This has been employed successfully in Australia since 2004. While many factors contribute to road safety, Victoria has a superior road safety record to New Zealand. The Victorian model has been adopted by most Australian states, with some variations.
- 214. The human rights implications of the Ministry's preferred option are significant and must be considered fully by decision makers. Under the preferred option, a drug-screening device that uses bodily fluid testing will be used on drivers not yet suspected of driving while impaired, or under the influence of drugs. These drug testing devices take longer (up to five minutes) to produce a test result, when compared against current roadside alcohol testing devices (30 seconds), which will result in a driver being detained for longer. As well as the time required, the need to take an oral fluid sample may also be considered more invasive than a passive alcohol screening test.
- 215. In addition, oral fluid screening devices can be susceptible to producing false positive results, largely as a result of operator error. To mitigate the risk of false positive test results, the preferred option will use a second oral fluid test. Furthermore, an evidential blood test would correct any false positives on presence-based tests. This would enable an individual to establish that they are not impaired before facing any sanction. However, false positive results may subject innocent drivers to unnecessary confirmatory tests, if the preferred option is implemented. This includes the possibility of an innocent driver having to undergo a blood test and wait several days, or longer, for the results to be confirmed by a laboratory.
- 216. As it is difficult to link driving impairment with the level of drug or combinations of a drug found in a driver's system the preferred option will operate a zero tolerance policy. This approach is a shift from the status quo enforcement regime, which is based on proving a person is impaired and cannot drive safely, and has drugs present in their blood.
- 217. This approach will sanction people without any consideration given as to whether they are in fact visibly impaired or conclusively pose a safety risk. However, given that there is difficulty in establishing limits relating to an individual's fitness to drive, in the absence of evidence of behavioural impairment, by virtue of the presence of the particular drug or drugs, it will be considered that the driver presents a risk to road safety, although less of a risk than a driver who is conclusively impaired. The recommended approach seeks to mitigate this risk by creating an infringement offence rather than a criminal offence, i.e. the offence would not result in a criminal conviction. Nonetheless, it is still a sanction.
- 218. The other random drug testing option considered would have similar road safety benefits. It would also mitigate some of the human rights issues associated with the preferred option because it includes a CIT. However, the Police do not support this option because, in its view, it is not operationally feasible, and would not deliver against the policy objectives because of this. Given the Police's responsibility for implementing any regime, considerable weight must be placed on the Police's view. This option would also be significantly more expensive. As a result, this option is not recommended
- 219. In summary, there is a trade-off that needs to be made by decision makers when deciding whether to change the drug-driving enforcement regime in New Zealand to a presence based random drug driving regime. This trade-offs involves:
 - estimated road safety benefits
 - inconsistencies with the New Zealand Bill of Rights Act 1990 and
 - the practicalities of implementing any new enforcement regime.

- 220. If decision makers decide to place an emphasis on estimated road safety benefits, the Ministry recommends choosing the preferred option in this paper. However, if decision makers decide that the preferred option in this paper will imping too greatly on drivers' rights, they may choose not to implement the preferred option in this paper.
- 221. If decision makers decide to implement the Ministry's preferred enforcement regime, it is recommended that 45,000 random tests are administered annually. The Ministry's independently reviewed cost benefit analysis estimates that 45,000 random tests could prevent 10.8 drug-related fatalities per annum at a cost of around \$7 million per annum.
- 222. The recommended option in this paper will ensure that drivers are deterred from using drugs and then driving, therefore reducing the harms caused by drug-driving. While the Ministry and the NZ Police have considered other options, the Ministry considers that they do not offer the level of benefit that the preferred option will offer.

Implementation plan and risks

- 223. A random drug testing regime requires visible enforcement, publicity, and a much larger number of tests than a non-random regime, particularly if the regime is designed to create a deterrence effect.
- 224. The preferred option proposes beginning a new drug-driving regime with 15,000 random drug tests in the first year. This number would increase to 30,000 tests in the second year and 45,000 tests in the third year of the regime. A measured roll out of the regime will help to ensure the new regime integrates smoothly with New Zealand's current drink-driving and drug-driving enforcement regimes.
- 225. It may take some time to begin the regime. The Police would need to identify and make provision for any additional operational requirements. They would also need to develop and implement an appropriate training programme for Police officers in the use of the device and identify a suitable oral fluid screening device via a competitive tendering process. The Minister of Police would need to approve any new devices by Notice in the Gazette. The implementation process would take at least six months.
- 226. There will also be implications for the NZTA, which would need to promote and explain any changes.
- 227. The proposals set out in this paper will have financial implications for the Crown. Changes to the testing regime for drug-driving will result in higher costs for the NZ Police and the Justice sector to allow further tests to be undertaken. This may require new funding or funding to be diverted from elsewhere.
- The additional government costs and savings were estimated as part of the Ministry's cost benefit analysis. Assuming a random regime comprising of an oral-fluid screening test and a CIT is used, total net government costs were estimated at \$2.4 million in the first year, assuming 15,000 random drug-tests were used in the first year. This would rise to \$4.7 million in the second year for 30,000 tests, and \$7 million in the third year for 45,000 tests. These costs include Police training.
- Over 65 percent of the additional costs fall on the NZ Police, and result from the random drug screening process, including the cost of purchasing drug screening devices. Drugdriving and drunk-driving enforcement costs are met from the National Land Transport Fund under the Road Policing Programme of the National Land Transport Programme. The Road Policing Programme of around \$300 million per annum would need to be varied to accommodate this expenditure. The NZ Police currently spend around \$42 million per annum on alcohol and drug enforcement.

- 230. However, there will also additional costs for the NZTA, Ministry of Justice (Courts) and Department of Corrections due to a larger number of drug-driving offences. These costs would normally be met through departmental appropriations. The Department of Corrections advises any increase in costs cannot be met out of its baseline funding.
- 231. Table 4 sets out the potential financial implications.

Table 4: Potential financial implications

Potential financial implications	Cost (\$m) (GST excl) Year 1 (15000 tests)	Cost (\$m) (GST excl) Year 2 (30000 tests)	Cost (\$m) (GST excl) Year 3 (45000 tests)
NZ Police	2.65	4.91	6.83
NZTA	0.00	0.00	0.01
Ministry of Justice	0.04	0.07	0.10
Department of Corrections	0.00	0.01	0.01
One-off costs	1.85	-	-
Total financial implications	4.55	5.00	6.95

Arrangements for monitoring, evaluation and review

- 232. The Ministry recommends that it, the NZ Police and the NZTA closely monitor the impacts of any changes to drug-testing policy. While the NZ Police record data on the number of blood samples analysed following drivers completing a CIT unsatisfactorily, it does not record how many drivers satisfactorily complete CITs, or how many CITs are conducted overall.
- 233. In order to examine the effectiveness of the preferred policy option in this paper, the Ministry believes the following data, on New Zealand's good cause to suspect regime and random testing regime would be helpful for evaluating the new regime. Further discussion with NZ Police on the feasibility of collecting this data and prioritising them will be required:

Good cause to suspect

- Number of compulsory impairment tests
- Number of blood tests
- Number of positive drug tests
- The types of drugs being found
- Number of Police with up to date training
- Number of Police trained
- Number of defended hearings
- Types of offences and numbers

Random testing

- Number of individuals being tested
- Number of false positives on first and second oral fluid screening tests
- Number of blood tests
- Number of positive blood tests
- The types of drugs being found
- Number of offence notices issued
- Number of defended hearings
- Number of Police trained
- Public perception of likelihood of being stopped and tested
- Public perception of dangers of drugdriving
- 234. After the legislation has come into force and 3 years of data are available, the Ministry will provide a report to the Minister of Transport on the effectiveness of proposed measures.
- 235. Effectiveness will be evaluated through the public's perception of the likelihood of being stopped and tested for drug-driving, and their perception of the dangers of drug-driving. Overtime, success would involve a decline in detection rates of drug-driving. However, three years is unlikely to be a sufficient length of time to realise the full benefits of the regime, especially as this period coincides with the implementation phase of the policy.
- 236. Due to the high level of interest in these proposed changes, their impact will also be scrutinised by stakeholders, the public and the media.