Review of Western Australian Drug Driving Laws

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Abstract

In 2007, the Western Australian Road Traffic Act 1974 was amended to allow for new police enforcement practices designed to reduce the incidence of drug driving. The Road Traffic Amendment (Drugs) Act 2007 made provision for two new offences: driving with the presence of a prescribed illicit drug in oral fluid or blood, and driving while impaired by a drug. The prescribed drugs were methamphetamine, methylenedioxymethamphetamine (MDMA or ecstasy) and delta-9-tetrahydrocannabinol (THC, the psychoactive compound in cannabis). As part of the new laws, statute 72A was inserted into the Act requiring that the Western Australian State Government undertake a review of the amended legislation after 12 months of operation. This report provides a review of the amended legislation and the associated drug driving law enforcement. It includes a process review of the roadside oral fluid testing and drug impaired driving enforcement programs; an analysis of testing, offence detection and legal penalty data pertaining to the first year of operation of the new drug enforcement measures; and a report on consultations with various stakeholders. These form the basis for recommendations on possible improvements to the processes and legislation related to the deterrence of driving after drug use among Western Australian drivers.

KeyWords

Enforcement, Road Safety, Roadside Drug Testing, Drug Impaired Driving, Random Oral Fluid Testing
Summary

In 2007 the Western Australian Road Traffic Act 1974 was amended to allow for new police enforcement practices designed to reduce the incidence of drug driving. The Road Traffic Amendment (Drugs) Act 2007 made provision for two new offences: driving with the presence of a prescribed illicit drug in oral fluid or blood, and driving while impaired by a drug. The prescribed drugs were methamphetamine, methylenedioxymethamphetamine (MDMA or ecstasy) and delta-9-tetrahydrocannabinol (THC, the psychoactive compound in cannabis). As part of the new laws, statute 72A was inserted into the Act requiring that the Western Australian State Government undertake a review of the amended legislation after 12 months of operation.

A process review of the WA Police (WAPOL) program has shown that the implementation of Roadside Oral Fluid Testing (ROFT) has been successfully achieved with only minor changes being made during the initial period. The Breath and Drugs Section (BaD) tasked with conducting ROFT are well equipped and the purpose built bus is performing as well as intended. Much of the operational integrity and success of the program is due to the controlled testing and higher than usual supervisory environment that exists within BaD. Occasional personnel resourcing issues have been highlighted and care needs to be taken to ensure that these do not undermine ROFT capabilities. The introduction of ROFT has actually led to an increase in numbers of Random Breath Tests (RBT) conducted however its impact on other traffic enforcement activities remains unquantified.

Data related to the implementation of the new legislation and associated enforcement were available for the period from 15/10/2007 to 27/11/2008. In this time, there were 9,716 roadside tests conducted during 989 hours of enforcement. Both of these are just below the first year targets. However, the aim of 30 percent of testing being conducted in rural areas was met, with the final proportion being 34.4 percent. Just over five percent of the initial Securatec Drugwipe roadside screening tests produced positive results but 20 percent of these drivers were assessed as drug negative by the secondary screening test, the Cozart Drug Detection System (DDS). The most common confirmed drug cases involved methamphetamine alone (40 percent of all cases) and methamphetamine combined with THC (23 percent).

All oral fluid samples collected during the secondary screening test, whether they were positive or negative according to the Cozart DDS, were analysed at the Chemistry Centre WA (CCWA) as part of the initial implementation. It was found that only 11 percent of these samples were drug negative (compared to 20 percent on the Cozart DDS), revealing that the Cozart apparatus was failing to detect the presence of drugs in a sizeable proportion of cases. Further analysis of the data revealed that the Cozart performed especially poorly with regard to detecting the presence of THC (a sensitivity of 34 percent, or 41 percent taking into account the published cut-off concentrations for the Cozart DDS). The CCWA staff have been in contact with the manufacturers of the Cozart DDS and new testing kits have been made available that will hopefully improve the sensitivity of the tests. It is proposed that all oral fluid samples, both positive and negative on the Cozart DDS, continue to be analysed by the CCWA for a further 12 months in order to evaluate the performance of the Cozart test. Decisions regarding its retention in the ROFT process should be made at that time.

Some legislative changes have been proposed by stakeholders and mainly relate to inequities and loopholes identified during the initial period. These are discussed in detail in the report.

The adoption of Drug Impaired Driving (DID) enforcement across WAPOL has been disappointing with only five court cases resulting in the first year. Despite the considerable effort that has been put into awareness and training there is no application of the legislation in practice. Much of this can be attributed to a lack of promotion to apply the legislation in group environments and a lack of resources to assist groups and individuals to use the legislation. As a minimum, the various groups involved with traffic enforcement should be
proficient in its use. The program is at risk of stalling if adequate resources are not allocated to support it.

As a result of the review, the following recommendations are suggested:

R1 **ROFT continue in its current format**

Overall, ROFT testing has been successfully implemented within WAPOL. Only fine tuning of processes has occurred over the initial period and the integrity of the program has been maintained.

R2 **Monitoring of the performance of the Cozart equipment continue**

Although problems have been identified in the performance of the Cozart DDS, it does provide a useful apparatus for collecting oral fluid samples suitable for confirmatory laboratory analyses. Furthermore, Cozart are working with the CCWA to address the problems observed in this initial period. Therefore, it is recommended that WAPOL continue using the Cozart DDS subject to the outcome of another review of its performance in 12 months. During this 12 month period, it is recommended that oral fluid samples found to be negative for drugs on the Cozart DDS be analysed by the CCWA. If the new collection kit solves the problem, then there should only be a negligible number of cases in which the Cozart apparatus fails to detect drugs in oral fluid samples that are subsequently found by the CCWA to be positive for drugs above the published Cozart cut-off limits. If the Cozart DDS continues to perform poorly, then its use as a screening instrument will need to be re-assessed.

The nature of the implementation of roadside drug testing was such that it was not possible to assess the accuracy of the initial Securatec Drugwipe screening test, meaning that we do not know the proportion of drug positive drivers that were not detected in the first part of the roadside drug testing process. If the (unknown) proportion of drug positive drivers not detected by the initial screening test is further increased by detection failures of the second screening test, then the ability of the roadside drug testing program to deter drug using drivers may be compromised significantly.

R3 **There be a review of all penalties applied to impaired driving offences**

Although the penalties for driving with a prescribed drug in oral fluid in WA are aligned with low level drink driving offences, as in other states, the fine amounts are comparatively small and a review might be considered. However, it is still appropriate for the penalties to be aligned with those for drink driving, so any increase in fines for drug driving offences should occur within an overall impaired driving penalty review, with drink driving fine amounts also being increased.

There is no evidence to indicate whether the system of court imposed fines imposed by WA or the expiation fee system used in some other states is the preferable means of applying penalties for first offences. The WA system has worked efficiently thus far, so there is no compelling reason for it to be changed. Many would argue that the expiation based systems may diminish the perceived seriousness of the offence when compared to the need to appear in court.

R4 **Regular educational briefings should be provided to Magistrates and Prosectors on a regular basis**

Regular educational briefings should be provided to Magistrates and Prosectors on a regular basis to ensure that they are familiar with new legislation under the Road Traffic Act.

R5 **Additional variables be added to the Drug testing database**

There are a small number of additional variables that could be recorded that would significantly aid the evaluation of the enforcement and planning for future operations. These
include gender, vehicle type and if possible age. It would be preferable if data collection could commence with the initial roadside screening test.

**R6 Opportunities for enhanced enforcement activities with Main Roads WA Heavy Vehicle Compliance be explored further**

There are synergies between MRWA heavy vehicle compliance activities and ROFT. Opportunities to conduct ROFT at regular Main Roads roadblocks should be explored.

**R7 Opportunities for enhanced enforcement activities with the use of a smaller drug bus be explored further**

An additional smaller drug testing vehicle would deliver a certain amount of flexibility and efficiency that is otherwise not possible with the current large bus. Such a vehicle would allow more targeted ROFT operations and complement activities of the larger ROFT bus.

**R8 The current list of prescribed drugs remain unchanged**

As roadside drug testing technology is still in its infancy, there are many good reasons to persist with the current three prescribed illicit drugs specified in the legislation. There is also a certain level of consistency across Australia at present in relation to the drugs being tested for. Monitoring of research literature and testing technology should be performed in light of other drugs that are shown to impact upon road safety.

**R9 That a general rollout not be performed at this point in time**

There are expectations by many that drug testing will be rolled out across the Agency. This review has identified many issues that suggest that a general rollout at this point in time would not be beneficial.

In the first instance, the ability to maintain the integrity of the drug testing would be compromised. There are legitimate concerns about the transportation and storage of test kits and evidentiary samples. Furthermore, the range of environmental and climatic conditions throughout the state increases the risk of sample contamination. It is conceivable that with a general rollout, the rate of operator error will increase as will the risk of inaccurate test results. The database systems that are currently in place are also not capable of supporting the management of a State-wide program.

It is evident that the current program has maintained its integrity due to the controlled environment and high levels of supervision maintained by the BaD Section of WAPOL. Should these be compromised, the integrity of the entire program could be placed in jeopardy.

If a rollout be insisted upon, it should be performed in a controlled manner with small groups that receive a high level of supervision and regular consultation with the BaD Section. It would be critical in this case that BaD be adequately resourced to perform this role effectively.

**R10 The legislative changes raised by stakeholders be reviewed**

Stakeholders have suggested a number of legislative changes that are highlighted in the report. These should be given consideration but, in some cases, there may be alternatives to changing legislation. Further investigation may be needed to identify the most appropriate solution.

**R11 DID be more adequately promoted and resourced within the agency**

Drug Impaired Driving has not performed as expected and requires additional committed support to prevent it from stalling. The enhancements suggested for the DID training course and mentioned in this report should be considered. Adequate resources need to be
allocated to support the implementation of DID across the agency for officers undertaking the training and middle managers promoting its use in their sections or groups. A focus needs to be made on promoting the legislation in group environments rather than at an individual officer level. A logical starting point for this would be any groups associated with traffic enforcement activities and especially the TEG and BaD.

**R12 Address confusion between Random Oral Fluid Testing and Drug Impaired Driving**

Associated with the previous recommendation, confusion between the application of ROFT and DID needs to be addressed across WAPOL. ROFT and the three drugs it may detect should not be perceived as the only source of drug assessment available for enforcement purposes.

The extent to which the general public perceive a difference between ROFT and DID is unknown. More research would be required to determine whether the distinction was important as it could be that the general deterrence delivered by ROFT is adequate in any case. However, unless DID is applied more in practice, there is a risk that general deterrence may only be effective with the three prescribed illicit drugs rather than any other drugs that could contribute to driving impairment. There may be a case for mass communication strategies to address this should future monitoring highlight this scenario.

**R13 That regular communication be formalised with other jurisdictions**

There would be considerable benefit in formalising communication and meetings between interstate police agencies to discuss experiences with drug testing for road safety. The formalisation is seen as necessary to provide commitment and sustainability to the activity.

**R14 A future crash based evaluation be conducted**

It is still too early to evaluate the impact of the drug testing legislation on road crash outcomes, as sufficient data are not yet available for valid statistical analysis. However, when sufficient time has passed and sufficient data are available, a crash based evaluation should be attempted.
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Introduction

In 2007, the Western Australian Road Traffic Act 1974 was amended to allow for new police enforcement practices designed to reduce the incidence of drug driving. The Road Traffic Amendment (Drugs) Act 2007 made provision for two new offences: driving with the presence of a prescribed illicit drug in oral fluid or blood, and driving while impaired by a drug. As part of the new laws, statute 72A was inserted into the Act requiring that the Western Australian State Government undertake a review of the amended legislation after 12 months of operation. The components of the review include: examination of all data pertaining to roadside drug testing and drug impaired driving enforcement, a review of the processes and operating procedures for all agencies involved in identifying and prosecuting drivers with a prescribed illicit drug present or impaired by drugs, and a review of the penalties imposed for drug driving offences. This report presents the outcome of this review.

The remainder of this first section provides a background to the issues of drug driving in Australia and the reasoning behind introducing new drug driving enforcement practices in Western Australia. Details of the new procedures are given for both the roadside drug testing and drug impaired driving components of the amended legislation. Section 2 discusses the processes and resources that exist for drug testing with the Western Australian Police (WAPO). Section 3 of the report provides an analysis of data pertaining to the first year or so of operation of the new enforcement practices. Section 4 presents issues raised in relation to drug testing from consultation with stakeholders, without comment from the authors. The report ends with a discussion and recommendations in Section 5 and 6 respectively.

1.1 Background: roadside drug testing of drivers

The use of alcohol has long been known to increase the risk of being involved in a road crash and so random breath testing (RBT) was introduced in Victoria in the mid 1970s, with other Australian states introducing it in the 1980s. The contributory role of impairment by other drugs in road crashes has taken much longer to establish, and so roadside drug testing of drivers did not begin until December 2004, again practised first in Victoria, with other Australian states introducing it in following years.

The main impetus for roadside drug testing of drivers was the toxicological analysis of body fluid samples of drivers fatally injured on Australian roads. In 2003 in Victoria, 31 percent of drivers killed in road crashes tested positive to drugs other than alcohol. Similar findings were reported for other states in which drug testing was introduced early. In Tasmania, drugs other than alcohol were present in the blood of 22.4 percent of drivers killed in 1999-2003, while in South Australia cannabis or methamphetamine was present in 28 percent of fatally injured drivers in 2004. Data for Western Australian driver and motorcyclist fatalities from 2003 to 2006 are provided in Table 1.1.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number drug positive</th>
<th>Total fatalities</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>35</td>
<td>105</td>
<td>33.3</td>
</tr>
<tr>
<td>2004</td>
<td>29</td>
<td>107</td>
<td>27.1</td>
</tr>
<tr>
<td>2005</td>
<td>33</td>
<td>108</td>
<td>30.6</td>
</tr>
<tr>
<td>2006</td>
<td>27</td>
<td>124</td>
<td>21.8</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
<td>444</td>
<td>27.9</td>
</tr>
</tbody>
</table>

Source: Chemistry Centre of Western Australia

Drug testing was also given impetus by a series of papers published by Drummer and colleagues. Drummer et al. (2003) analysed blood samples from 3,398 fatally injured drivers
in three states (Victoria, New South Wales and Western Australia) in the years 1990 to 1999. The ability to test for delta-9-tetrahydrocannabinol (THC), the psychoactive compound in cannabis, was only possible later in the study, so that the analysis of THC occurred for a sub-sample of 1,420 drivers. It was found that 121 drivers (8.5 percent) were positive for THC, with blood concentrations ranging from 0.0001 to 0.228 mg/l. Fifty eight drivers were positive for THC only, 43 for THC and alcohol, and 20 for THC in combination with other drugs. Cannabis was detected most frequently among motorcyclists, rather than car or truck drivers, and more frequently in single vehicle, rather than multi-vehicle, crashes. Stimulants were present in 138 of the 3,398 drivers (4.1 percent) but in 23 percent of truck drivers. Methamphetamine was found in 51 drivers, with a blood concentration range from 0.01 to 3.6 mg/l, while methylenedioxymethamphetamine (MDMA, or ecstasy) was found in six drivers. By comparison, alcohol above the legal limit of 0.05 g/100ml was found in 29.1 percent of drivers, with a median BAC among them of 0.17 g/100ml (Drummer et al., 2003).

Drummer et al. (2004) also conducted a culpability analysis on this set of fatally injured drivers. Culpability analyses involve dividing the drivers into those who were, and those who were not, culpable for the crash and comparing the two groups on variables of interest, in this case the presence or absence of drugs. Effectively, the non-culpable drivers provide a proxy for a control group. Culpability analyses are thus a useful approximation for a case-control study. Case control studies into drugs and driving had produced mixed results (Dussault et al., 2002; Movig et al., 2004; Mura et al., 2003) and were beset by methodological difficulties (Baldock, 2007). Culpability in the Drummer et al. (2004) study was determined on the basis of police reports, with adjustments made for eight mitigating factors according to a method developed by Robertson and Drummer (1994). Drummer et al. (2004) determined that 79 percent of fatally injured drivers were culpable, 15 percent were not culpable and 6 percent were ‘contributory’. A summary of relevant culpability results, expressed in terms of odds ratios compared to alcohol and drug free drivers, are shown in Table 1.2.

<table>
<thead>
<tr>
<th>Drug</th>
<th>N</th>
<th>Odds ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>THC alone</td>
<td>58</td>
<td>2.7</td>
</tr>
<tr>
<td>THC alone &gt; 5 ng/ml</td>
<td>49</td>
<td>6.6</td>
</tr>
<tr>
<td>Stimulants</td>
<td>53</td>
<td>2.3*</td>
</tr>
<tr>
<td>Stimulants (truck drivers only)</td>
<td>22</td>
<td>8.8</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* not statistically significant

On the basis of these results and associated advocacy, plus the finding that many drivers killed in road crashes tested positive to drugs other than alcohol, Victoria was the first jurisdiction in the world to introduce roadside driver drug testing in late 2004. The drugs tested for were THC (cannabis) and methamphetamine. There were no legal limits set for these two drugs, with any detected presence of either being declared illegal. Effectively, the legal limits for these two drugs became the limits of quantitation, that is, the lowest levels at which the drug could be detected. There was no evidence available to identify a level above which drivers were markedly more at risk compared to drivers below that level of drug concentration. The pharmacokinetics of alcohol are unusual in that the degree of impairment is related directly to the level of alcohol in the blood. This is not the case with other drugs. In the case of cannabis, for example, a meta-analysis of experimental drug studies by Berghaus, Grass and Sticht (2000) demonstrated that for drugs with short resorption times, such as cannabis, the time of maximum concentration in the blood occurs before the time of maximum impairment of abilities necessary for driving. For a 20 mg dose of cannabis, the time to maximum concentration is 0.3 hours, whereas the time to the highest decrement in task performance is 0.6 hours (Berghaus et al, 2000). Papafotiou, Carter and Stough (2005) tested driving ability on a simulator 30 minutes and 80 minutes
after participants smoked cannabis. It was found that impairment from cannabis was greater 80 minutes after smoking, when THC levels in blood were 5 to 10 percent of their peak.

Testing of oral fluid was chosen for roadside drug testing in Victoria because the presence of the drugs in oral fluid indicates recent use (Kalant, 2004). Drugs were tested for in oral fluid using a two-tiered process, with a screening test by the roadside taking an average of six minutes, and the taking of an evidentiary sample only if the screening test was positive, a process taking up to 30 minutes. If the analysis by the police of the evidentiary sample was positive for one of the prescribed drugs, the sample was sent to a forensic laboratory, and charges laid on the basis of the subsequent laboratory analyses (Boorman, 2007).

This mode of operation has been replicated in a number of other jurisdictions since its successful implementation in Victoria. An independent review of the testing in Victoria led to the addition of MDMA to the list of prescribed drugs for which driving under the influence was a punishable offence. Note that this addition of MDMA did not require expansion of the testing process, as MDMA is detected in both the initial screening test and the laboratory analyses used to detect methamphetamine. This addition of MDMA has been replicated in other states.

The aim of roadside drug testing is similar to that of random breath testing. It allows for the detection of drivers whose impairment may pose a risk to themselves and others, and who can be prevented from driving for a period of time by the intervention of the authorities. However, its chief aim is to deter members of the public from driving after the use of drugs. This ‘general deterrence’, whereby members of the public perceive a high risk of detection for the illegal activity, is best achieved through high volume and high visibility enforcement operations, with reinforcement from accompanying publicity (Homel, 1990).

Penalties associated with drug driving offences in Australia detected using roadside testing have generally been commensurate with ‘low level’ alcohol offences. That is, penalties have been equivalent for those administered for drivers detected with blood alcohol concentrations between 0.05 and 0.08 g/100ml.

1.2 Roadside drug testing in Western Australia

Roadside drug testing of drivers in Western Australia, introduced in October 2007, was modelled on the Victorian method, utilising samples of oral fluid to test for three prescribed drugs: THC, methamphetamine and MDMA. Police were granted the power to randomly stop drivers and request a sample of oral fluid (or blood) to test for the presence of these three drugs. The presence of any of the three prescribed drugs in oral fluid is taken to be indicative of recent use, which is sufficient for a charge to be laid. There is no need to establish that the driver was impaired by the drug.

The process of a random roadside drug testing is preceded by an alcohol breath test. If the driver records an illegal BAC, the driver is detained and processed as for a drink driving charge. If the driver’s breath test is negative, roadside drug screening commences.

The first step of roadside drug testing involves the driver providing a small oral fluid sample for screening with a Securtec Drugwipe II device. This device returns a result in approximately six minutes. If the result is negative, the driver is not detained any further.

If the result of the initial drug screen is positive, the driver is taken to a Breath and Drug Bus to provide an evidentiary oral fluid sample. This may take up to 30 minutes. A blood sample can be taken if an oral fluid sample is not possible. This sample is screened using the Cozart Drug Detection System. If this screening test produces a negative result, the driver is detained no further.

If the second screening test is positive for at least one of the prescribed drugs, the sample is sent to the Chemistry Centre of Western Australia (CCWA) for laboratory analysis using liquid chromatography/mass spectrometry. The driver is given part of the sample to obtain
an independent laboratory analysis if they wish. The driver is advised not to drive for 24 hours.

In the event that the laboratory analysis identifies the presence of at least one of the prescribed drugs in the oral fluid sample, the driver is charged with driving with the presence of a prescribed illicit drug in saliva or blood and summoned to appear in court. The penalties are aligned with the lowest drink driving offence (driving with a BAC between 0.05 and 0.06 g/100ml). Penalties also apply if drivers refuse to undertake a drug test when required to do so by a police officer.

1.3 Background: Drug Impaired Driving

The goal of strengthening Western Australian laws relating to drug impaired driving was encapsulated in a report by the Working Group on Drug Impaired Driving completed in mid 2003. The Working Group noted the declining numbers of drivers apprehended in Western Australia for drug driving despite increasing incidence of drugs detected in fatally injured drivers. It therefore recommended major improvements to enforcement practices that would aid the detection of drivers impaired by drugs. A central component of the recommendations was the development of a new roadside assessment procedure. This procedure included observation of the vehicle in motion and manner of driving; a driver interview concerned with health, medication and drug use; and detailed observations of the driver’s appearance and behaviour. Further recommendations by the Working Group included a broad-based training initiative to increase police officer’s awareness, knowledge and skills in relation to drug impaired driving, and the establishment of an expert panel to review police and toxicological reports, thus providing a safeguard against potential unintended consequences, such as incorrect assessment of driver impairment (Working Group on Drug Impaired Driving, 2003).

Significantly, the Working Group had also recommended that legislation and procedures developed in Western Australia should also have the capacity to “incorporate roadside testing technologies as they are validated and become available” (Working Group on Drug Impaired Driving, 2003 p4). The introduction of roadside drug testing in other Australian states provided the opportunity to assess the feasibility of such an approach in Australia and indicated the possibility for its adoption within the new legislative frameworks being considered in Western Australia.

It was, however, recognised that the general deterrence of roadside drug testing of drivers still needed to be supplemented with enforcement that explicitly targeted, apprehended and prosecuted drivers visibly impaired by drugs when driving. Thus, the recommendations of the Working Group regarding drug impaired driving formed a key component of the Road Traffic Amendment (Drugs) Act 2007 that is the focus of this report.

1.4 Drug Impaired Driving in Western Australia

The procedure specified in the amended Act begins with visual evidence of possible driver impairment by a police officer, followed by a standardised roadside assessment of the driver’s demeanour and appearance. If the assessment suggests impairment, blood and urine samples are collected for laboratory analysis. An approved expert then reviews the police report and toxicological analysis to arrive at a decision regarding drug impairment.

Drivers charged with drug impaired driving may be sentenced to a mandatory treatment or programme order. Police also have the right to confiscate the driver’s keys if that driver is at risk of continuing to drive in an impaired state.

It was estimated that approximately 200 DID cases would result annually as a result of this legislation.
Penalties for drug impaired driving are aligned with the more serious drink driving offence of driving while under the influence (DUI). There are also penalties associated with refusing to undertake a roadside assessment or provide body fluid samples.

1.5 Traffic Injured Program

Reference is made in this report to proposed legislative changes in relation to the “Traffic Injured Program” which involves a strategy for the compulsory blood testing of all drivers admitted to hospital from serious and fatal traffic crashes. The program is discussed in the context of the impact that the additional resources may have on drug testing both for WAPOL and CCWA.
2 Police Drug Testing Process Evaluation

The following section outlines the drug testing capabilities and processes that exist with WAPOL.

2.1 Roadside Oral Fluid Testing (ROFT)

2.1.1 Background to alcohol and drug testing in WAPOL

The Western Australian Police have a long history of using “Booze Bus” type operations for RBT. With the advent of Roadside Oral Fluid Testing (ROFT) a brief discussion of organisational changes over time is relevant.

The Breath Analysis Section (BAS) was an independent unit that provided RBT and technical support for operations throughout the Metropolitan area and administration of the technical requirements for alcohol breath and blood testing for the whole state. In 2003, the Section comprised of:

- 1 Senior sergeant Officer in Charge (OIC)
- 1 Reserve/Administration sergeant
- 3 Booze bus teams
- 1 Training Officer
- 1 Logistics Officer (civilian Full Time Equivalent (FTE))
- 1 Person to deal with blood sampling (civilian temporary position)

The reason for the training officer was that personnel for the RBT operations have always traditionally been sourced from fresh graduates of the Police Academy who spend time with the section prior to moving on to their next posting. In September 2003 the Section was downsized to two bus teams.

In 2004, under the direction of the Commissioner, a Traffic Enforcement Group (TEG) was formed consisting of:

- 1 Senior Sergeant OIC (position 204637)
- 2 Sergeant Level Patrol supervisors
- 22 Constable level traffic patrol staff

The rationale behind TEG was to have a high profile specialised group that conducted traffic enforcement up to 400km from Perth covering the 6 metropolitan police districts. It soon became apparent that there were synergies between TEG and BAS and the two were combined in 2005. This led to increases in productivity of up to 30 percent and improvement in flexibility for breath testing operations. For example, the presence of a highway patrol vehicle to accompany the bus could be guaranteed on a more frequent basis. At the direction of the commissioner, the group was further expanded in September 2006 by another 35 sworn staff consisting of:

- 3 Sergeant Supervisors
- 32 Constables

With impending cabinet submissions on ROFT and as well as the Traffic Injured Program (see Section 1) it was evident that further resources would be required. Of the $1.45 million allocated for drug testing, personnel had to be resourced internally from within WAPOL and...
ultimately TEG. Two further FTE civilian positions were added for administrative support and in May 2007 a third bus team was created for ROFT. The BAS Section became Breath and Drug Operations (BaD) within TEG to reflect its drug testing role and a third bus dedicated to ROFT was acquired. The bus that performs the ROFT is known as the BaD bus.

Although traffic policing was also conducted by the police districts, TEG performed the bulk of RBT testing for the state. TEG operates autonomously from the police districts but does respond to requests to conduct operations on a case by case basis. With some exceptions, there is generally no traffic support provided by the districts for TEG operations. A secondary role for the bus teams is a tactical response group for public order which can be equipped with riot gear and deployed to trouble spots at short notice.

It should be noted that as of November 2008, the Traffic Enforcement Group (Highway Patrol) and Breath Analysis Section (Breath and Drug Operations) were separated. Further discussions in this report relate to the period preceding November 2008 when both TEG and BaD Operations were combined.

### 2.1.2 Use of probationary constables

Historically, probationary constables have always been used as a source of personnel for booze bus and consequent BaD bus testing in WAPOL. TEG requires a full complement of 40 probationers to operate its three buses. These are obtained from groups of 20 graduates from the Police Academy who remain with TEG for approximately 20 weeks. There is usually an overlap of 10 weeks between the two groups. During periods where there are no graduations, probationers are sourced from those who have previously graduated and been assigned to duties in the Metropolitan Region.

For their first 10 weeks, the probationers are divided into two groups of 10 and assigned to a mobile breath testing breath testing team for the purpose of random breath testing operations. After this 10 week period, eight are selected to move to the Breath and Drug bus and are trained to undertake random drug testing, and are then assigned to the Breath and Drug bus for the remaining 10 weeks. The remaining 12 are then assigned to the five traffic patrol teams and receive training on speed enforcement (mobile radar and laser guns) and traffic duties.

### 2.1.3 Shift structure

The Breath Analysis and Drugs Section of TEG have three teams performing 10 hour shifts per day. These consist of a day shift and two afternoon shifts that are staggered by an hour to avoid bottlenecks (for example at the armoury) at the beginning and end of the shift. The day shift usually runs from 7am to 3pm or 8am to 4pm. The afternoon shifts can vary considerably but usually commence at 5pm or 6pm. Officers will perform one week on day shift then two weeks on an afternoon shift.

In practice this means that each bus team is deployed on four nights per week (Wednesday to Saturday) and generally operate at two sites in the one night (3.5 hours at each site). The latest operations tend to terminate at 2:30am so the bus can be brought back to base and equipment packed up. On day shifts there are usually two deployments per week in addition to the night time deployments.
2.1.4 Staffing structure for drug testing operations

Core staff for the BaD bus includes:

- 1 sergeant
- 3 senior constables
- 2 civilian FTE administration support
- 1 training officer (sworn)
- 1 reserve officer
- 10 probationary constables

A registered nurse also accompanies the bus on most operations to take blood samples when required.

As with all police operations, actual numbers of personnel that accompany a bus deployment will vary depending on the nature of the exercise, sickness and leave rosters. The minimum staff required for a bus deployment includes:

- 3 supervisory staff (Sergeants and Senior Constables)
- 6 probationary constables

A high level of supervision is necessary for the probationary constables. The entire team is trained in ROFT and at least one of the supervisory staff is an accredited drug tester trained to use the Cozart secondary tester.

The other two RBT bus teams are also trained in oral fluid drug testing on an ongoing basis. This means that all three bus teams are capable of conducting roadside oral fluid testing should the need arise.

2.1.5 Equipment

The BaD bus was purpose designed and built for ROFT operations. The other two buses in the BaD Operations section are more traditional booze buses equipped for RBT testing. All three buses have the same markings and the BaD bus is not distinguished as a specialised drug testing vehicle. This is to give the perception that any of the RBT activities conducted with the buses can involve ROFT.

The current equipment used for drug testing includes:

- Securatec Drugwipe II preliminary oral fluid tester
- Cozart DDS secondary oral fluid tester
- The CCWA testing equipment (a LCMS mass spectrometer)

The environment on the BaD bus is temperature controlled via an air conditioner and testing kits are stored in temperature controlled fridges. Evidential samples are stored in secure fridges and simple equipment such as test tube holders and flat tables are utilised as part of the drug testing procedure (see Section 2.1.8). The bus has a permanent power supply either via a mains connection (when available) or via the onboard generator. Onboard access to advanced communications networks (such as “Next G”) exists for linking with licensing and criminal databases in both regional and metropolitan areas. A video camera has been installed to record testing operations.
The bus contains five main sections:

- A seating area used for interviewing motorists when they have tested positive on the alcohol or drug screening tests;
- A radio communications and computer terminal station
- A station for evidentiary Breath Alcohol Testing
- A station for secondary oral fluid drug testing
- An area where the registered nurse may obtain blood samples

TEG also has an Automatic Number Plate Recognition (ANPR) camera that can be used to check for unregistered vehicles and associated unlicensed drivers and arrest warrants. This tends to be used during daytime operations only.

ROFT operations require a requisite amount of traffic control on site and a 4WD is used to tow an electronic Variable Message Sign (VMS) and carry other static warning signs and traffic cones.

### 2.1.6 Operational benchmarks and performance

In the first year of operation, the following internal benchmarks were set:

- 10,000 Oral Fluid Tests
- 1,000 hours of operational bus use
- 30 percent of testing conducted in regional areas

In trying to achieve these benchmarks, there were 238 deployments of the bus. It should be noted that the bus was forced off the road for about a month following some initial teething problems. The data relating to the drug testing is presented in Section 3.

In addition to the drug testing, BaD bus operations yielded 73,582 Random Breath Tests compared to 250,000 for the whole of TEG. Detection ratios were 1:91 for the BaD bus and 1:68 for the whole of TEG. In addition, the following offences were detected:

- 812 drink driving charges
- 5 reckless driving charges
- 294 unlicensed drivers
- 108 for driving whilst under a fine suspension
- 96 for driving whilst under a court suspension
- 180 unlicensed vehicles
- 858 vehicle defect notices
2.1.7 Operating costs

The largest operating costs for the BaD Section are listed below; significant costs are incurred in regional deployments:

- Bus operating costs (scheduled and unscheduled maintenance, fuel, tyres, oil and leasing costs)
- Travel allowances (accommodation and meals)
- Staff overtime

Current costs for drug testing activities are as follows:

- Drug Wipe II preliminary OFT tester $37.80 per test
- Cozart secondary OFT tester $35.00 per test
- CCWA analysis (Oral Fluid) $160.00 per sample
- CCWA analysis (Blood for BAC) $160.00 per sample
- CCWA analysis (Blood when refuse OFT) $960 for a battery of tests

The final test is conducted when the motorist chooses a blood test in lieu of an oral fluid test. A total of 5 tests are performed on the blood sample for a much broader range of drugs than the three prescribed illicit drugs. At present, this is the only test where it is regular practice for WAPOL to recover the costs of testing.

2.1.8 Process and chain of evidence considerations

The following outlines the ROFT testing procedure. It should be noted that apart from alcohol and drug testing, checks are also made for vehicle compliance, registration and driver licences. Sometimes an Automatic Number Plate Recognition camera is used to complement these checks during daytime operations.

A breath alcohol screening test is administered to every motorist that is stopped. Oral fluid drug testing takes considerably more time than a breath test and therefore not all motorists are requested to submit to a drug test. For such tests, the site must contain areas where motorists can safely park their vehicles and accompany the officer to the preliminary drug testing area (usually a table with chairs in front of the bus).

**Preliminary OFT**

a) Motorist is stopped and a breath test performed

b) If negative, the motorist’s vehicle is parked by the police officer and the motorist is requested to undergo a preliminary OFT

c) The preliminary OFT is administered in the open at a table in front of the bus; screening devices are stored in an esky

d) The testing officer wears latex gloves and checks the tamperproof seal and expiry date prior to using the screening device

e) Following swabbing, the device is laid flat on a level table for six minutes which is timed with a dedicated stopwatch

f) If positive, the motorist is required to undergo a secondary test inside the bus
g) Preliminary screening kits are disposed into a bio-hazard back along with the latex gloves

The officer accompanies the motorist at all times during the test. Swabbing is encouraged for both the top of the tongue and the sides of the mouth to ensure an adequate sample.

**Secondary OFT**

h) The motorist is taken into the bus and interviewed

i) The officer, a supervisor and the motorist then proceed to the secondary drug testing station

j) The supervisor uses a swab to obtain a saliva sample which is then split into several test tubes and mixed with a buffer solution

k) The supervisor tests one of the samples on the Cozart tester

l) If positive, another sample is placed in a tamper-proof biohazard bag, sealed, labelled with a bar code sticker, paperwork is also barcoded and attached, and the sample is finally placed in a secure fridge on the bus; another sample is given to the motorist for independent testing should they desire

m) Upon return to base, the samples are conveyed in an esky to a secure temperature controlled storage room and paperwork checked and completed. The samples are then conveyed to a second more secure room.

**CCWA Analysis**

n) The samples are then transported by hand to the CCWA (Usually the next day)

o) The CCWA completes a “P69” conveyance form and checks that all barcodes match and that the paperwork is in order

The following are taken into account to maintain the integrity of drug testing operations:

- All drug testing kits are pre-packed in-house by TEG and stored in a temperature controlled room
- 5 percent of new drug testing kits are batch tested and only released for use once advised by the CCWA
- All drug testing kits are transported in an esky and placed in a refrigerated container on the bus – temperature sensitive stickers on the storage boxes alert the users if the kits have strayed outside their recommended storage temperature of 15 to 25°C
- Paperwork that accompanies the evidentiary saliva sample includes a copy of the Cozart printout, a Form “5” and a Form “P158D”.
- Evidentiary Samples are placed in secure storage on the bus and back at the police base
- Evidentiary samples are hand delivered and are transported in an esky and accompanied at all times
- Tamperproof bags are used to seal the samples
- The samples and all paperwork are bar-coded
• The bus is always powered so that temperature and refrigeration can be maintained; there is also an onboard generator which takes over when mains power is not available.

• During the Cozart test, both the supervisor and the motorist wear latex gloves to prevent the possibility of contamination.

• Samples in regional areas are sometimes securely packed in foam containers and sent in by air courier.

2.1.9 Targeting

ROFT has been an evolving area within WAPOL and there was a fair degree of experimentation to begin with. Initially, locations and times for operations were selected on the basis of known drink driving prevalence. With time and accumulated experience, BaD supervisors are capable of making increasingly better judgements in relation to where it is worthwhile deploying the BaD bus. Approximately 30 percent of operations are targeted on the basis of intelligence that may have come to light for an area or the fact there is a public event likely to be attended by drug users. The two large operations on the State border were also specifically targeted at heavy vehicle drivers. Apart from these examples, there appears to be no rigorous structure to targeting and as discussed in Section 5.7, current databases have not yet been refined to assist with strategic targeting or intelligence gathering. Although GPS data is obtained for bus deployments, the current databases do not support its use.

One of the rationales for BaD is to conduct high profile alcohol and drug testing. In this regard, exposure of the activity to a large number of motorists is more important than specific targeting per se. It should be noted that the internal benchmarks aim for 30 percent of testing to be conducted in regional areas.

A weekly meeting for supervisors to discuss tasking was established within BaD but was later abandoned as it was found not to increase overall effectiveness in terms of testing outcomes.

Site constraints also influence where the bus may be deployed. Site safety and areas for motorists submitting to the drug tests to park their vehicles influence the selection of sites. With current bus operations, it is not efficient to set up on low volume roads or in smaller regional towns.

The two user groups targeted by the BaD bus activity are recreational drug users and heavy vehicle drivers. Most activity is focussed on the recreational drug user within the general driving population. The bus is often deployed on connector roads between areas where it is known that the three illicit drugs are commonly used.

It should be noted that the metropolitan demographics of Perth has been changing rapidly and whole areas have received urban regeneration or changed due to the effects of the resource boom.

There have been some successful and high profile operations targeting the heavy vehicle industry but such operations have been infrequent. Although Main Roads WA (MRWA) conducts regular heavy vehicle compliance activities (sometimes in coordination with WAPOL), it is understood that the BaD bus has not been deployed in support of these. Two significant considerations are the physical space required for the heavy vehicles to park when conducting the drug testing and the “grapevine” effect of heavy vehicles warning each other of the testing activity and location via their radios.

Queries were made about cross border links and the sharing of intelligence. It would be fair to say that intelligence was being shared between jurisdictions but this tended to be on an informal and ad hoc basis.
A further group that has been targeted are motorcycle gangs involved in organised crime. Members of the “Gang Crime” unit of WAPOG were trained in the use of the drug testing equipment and performed highly targeted enforcement activity under Operation “Jupiter”. It is understood that the activity has been successful in forcing behavioural change amongst the motorcycle gangs however it is unlikely that this is due to the drug testing activity alone. Detection rates for the unit are presented in Section 3.

2.1.10 Data

At this early stage of implementation, the drug testing activity has not been formally integrated into the corporate reporting system. At present, BaD is storing a range of variables in an Excel spreadsheet that include:

<table>
<thead>
<tr>
<th>For roadside screening</th>
<th>For Cozas testing</th>
<th>Chemistry centre testing</th>
<th>Legal Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Police Unit</td>
<td>Barcode</td>
<td>Barcode</td>
<td>Brief case</td>
</tr>
<tr>
<td>Start date for testing session</td>
<td>Instrument serial number</td>
<td>Date to CCWA</td>
<td>Offence date</td>
</tr>
<tr>
<td>Start time for testing session</td>
<td>Test date</td>
<td>Conveying officer PD</td>
<td>Sentence date</td>
</tr>
<tr>
<td>End date for testing session</td>
<td>Day of week</td>
<td>Date returned</td>
<td>Court</td>
</tr>
<tr>
<td>End time for testing session</td>
<td>Date of birth of driver</td>
<td>Test result</td>
<td>Convicted (Y/N)</td>
</tr>
<tr>
<td>Road</td>
<td>Sex of driver</td>
<td></td>
<td>Fine</td>
</tr>
<tr>
<td>Suburb</td>
<td>Operator rank</td>
<td></td>
<td>Court costs</td>
</tr>
<tr>
<td>Metro or rural</td>
<td>Operator PD</td>
<td></td>
<td>Non-monetary penalty</td>
</tr>
<tr>
<td>Number of roadside screenings</td>
<td>Stationed at (i.e. TEG or Gang Crime)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time in location</td>
<td>Apprehending officer PD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse presence start date</td>
<td>Apprehending officer stationed at</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse presence start time</td>
<td>Time of occurrence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse presence end date</td>
<td>Date of occurrence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse presence end date</td>
<td>Suburb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse presence time in location</td>
<td>Vehicle type</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sample provided?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test time</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cozas result</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test number</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Work is currently underway to improve the Breath Alcohol Concentration (BAC) form of the Traffic Intelligence Database. This opportunity is also being used to include some drug testing information within the same database relating to oral testing results for the Cozas, the oral test kit number and results from CCWA analysis.

There is also the ability to add a spatial element to the data as the location of BaD operations is recorded on GPS. This data has yet to be utilised or integrated with any other data.
2.2 Drug Impaired Driving (DID)

Unlike ROFT, which requires specialised training and approved drug testing officers (for the Cozart), Drug Impaired Driving is an option for any sworn officer and no specialised training or qualification is necessary. This of course assumes that the officer can comply with the legislation and regulations.

Drug Impaired Driving has had a more difficult implementation within the Agency when compared to ROFT and only five cases have gone to court. Immediately, the legislation was brought into the public limelight on the 19th October 2007 with a case that received a high level of media attention. Ryan (2008) explains that:

“From the events of this case the Commissioner of Police (CoP) requested the Director of Public Prosecutions (DPP) to review the case. The recommendations from the DPP advised the CoP the case would possibly fail in court because the police officers who attended the incident failed in applying the law. Section 66A (3) of the Road Traffic Act 1974 states ‘a member of the Police Force may require a person who is required to undergo a driver assessment to wait at the place at which the requirement was made; In essence police officers conducting this process cannot take a person anywhere to undergo a driver assessment and to do so breaches the law. The CoP after reviewing the DPP reply to his request advised the case to be withdrawn.”

This led to a review of DID procedures and the following shortcomings were identified (Ryan, 2008):

1. There was no training available for frontline officers to learn the new processes.

2. Training that was to have been in place was not available before the introduction of the legislation.

3. What managers had interpreted as a ‘simple’ form to fill out was more challenging than first impressions suggested.

4. The DA when reviewed was not as easy to interpret as a stand alone document.”

Following on from this, approximately 1000 lectures on DID were delivered across the Agency and an e-learning online course introduced on the WAPOE “Blackboard” teaching system. Completion of the course was voluntary and involved three steps:

- Online enrolment in the course
- Completion of the study program
- Completion of an assessment

On successful completion the course manager updates individual personal records showing that the course has been satisfactorily completed.

An aide memoir for alcohol and drug driving was also produced for general circulation and is attached in Appendix A.
3 Data Analysis

This section of the report is concerned with analysis of data relating to the operation of Western Australian drug driving laws since their introduction in October, 2007. Evaluating the relative success of a law enforcement program requires ongoing monitoring of the extent of the enforcement and the levels of offences being detected. Although the new laws have not been in effect for long enough to assess whether they have been successful in reducing the likelihood of drivers offending, the data related to enforcement of the new laws can still be analysed to provide a baseline for future comparisons and to identify patterns that can be used to guide ongoing enforcement strategies.

The variables analysed in this section include those related to the extent of enforcement; specifically, the initial roadside screening tests, the secondary Cozart screening tests, and the evidentiary tests conducted at the Chemistry Centre laboratory. Data are also analysed pertaining to the legal and licensing outcomes of the enforcement. Another section describes the outcomes of the enforcement of WA’s new drug driving impairment laws. Finally, in order to examine whether the new drug driving law enforcement activities are reducing resources being allocated to drink driving law enforcement, a section devoted to the analysis of RBT data is included.

3.1 Extent of enforcement

The total time spent on roadside drug testing in Western Australia since the implementation of the new legislation (from 15/10/2007 to 27/11/2008) has been 989 hours, with 649 of these hours of enforcement (65.6 percent) being conducted in metropolitan locations and the remaining 340 hours (34.4 percent) being conducted in rural locations. A nurse has been present for 751 of the total hours (75.9 percent). A breakdown of the division between Break and Drug (BaD) Bus operations and Gang Crime operations by location type is given in Table 3.1. It can be seen that BaD bus operations were used for the vast majority of roadside drug testing but that non-bus operations (Gang Crime) were preferred more often in rural regions. The nurse was present only during BaD operations, and for 84 percent of the time.

<table>
<thead>
<tr>
<th>Type of operation</th>
<th>Hours of enforcement</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>BaD bus</td>
<td>895</td>
<td>90.5</td>
</tr>
<tr>
<td>Gang Crime</td>
<td>104</td>
<td>9.5</td>
</tr>
<tr>
<td>Total</td>
<td>989</td>
<td>100.0</td>
</tr>
<tr>
<td>Metropolitan BaD bus</td>
<td>642</td>
<td>98.9</td>
</tr>
<tr>
<td>Metropolitan Gang Crime</td>
<td>7</td>
<td>1.1</td>
</tr>
<tr>
<td>Total metropolitan</td>
<td>649</td>
<td>100.0</td>
</tr>
<tr>
<td>Rural BaD bus</td>
<td>252</td>
<td>74.1</td>
</tr>
<tr>
<td>Rural Gang Crime</td>
<td>88</td>
<td>25.9</td>
</tr>
<tr>
<td>Rural Total</td>
<td>340</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In this time, there were 9,716 roadside screening tests. It is not possible to report how many of these were in metropolitan or rural locations. It is known, however, that 9,443 of these (97.2 percent) occurred with BaD Bus operations and the remaining 273 (2.8 percent) were administered by Crime Gang personnel. The testing rates per hour were 10.6 for BaD Bus operations and 2.9 for Crime Gang testing.
3.2 Results of initial screening tests (Drugwipe)

The initial screening tests of drivers are conducted using a Securetec Drugwipe II Twin device. These screening tests were found to be positive for one or more prescribed drugs in 517 of the 9,716 tests (5.3 percent). There were 12 drivers who were not able to provide a saliva sample sufficient for the screening test and instead provided a blood sample for laboratory analysis. There were another 12 drivers who refused to provide a sample. These drivers were charged with failure to comply with the requirement as to the provision of oral fluid or blood sample for testing or analysis (Road Traffic Act, s. 67(AB)). This offence carries the same penalties as testing positive to the prescribed drugs (see Section 2.6).

When analysed in terms of BaD Bus and Crime Gang testing operations, the former accounted for 485 (93.8 percent) of the positive results on the Drugwipe screen, while the latter accounted for the remaining 32 (6.2 percent). This equates to a detection rate of 5.1 percent for BaD operations and 11.7 percent for the Crime Gang operations.

These detection rates are high compared to those reported interstate, based on data provided to CASR. In South Australia in 2007, 2.0 percent of drivers were found to be positive to drugs on the initial screening test, while in New South Wales it was 2.6 percent. In Victoria, the number of charges laid in 2007 was 1.7 percent of the total number of screening tests, suggestive also of a lower figure than in Western Australia. As it is difficult to separate enforcement practices from screening test ‘hit’ rates, it is not possible to say whether the higher ‘hit’ rates in Western Australia are due to a higher level of drug driving or more targeted or effectively targeted enforcement.

3.3 Results of the secondary screening tests (Cozart)

The secondary screening tests are conducted using the Cozart Drug Detection System device. This device is capable of detecting the presence of THC and methamphetamine-based drugs (methamphetamine or MDMA). In the case of a positive result for methamphetamine-based drugs, a laboratory analysis is necessary to determine whether it is methamphetamine, MDMA or both. The results of the 517 Cozart tests are summarised in Table 3.2. The most common outcome of a secondary screening test was the confirmation of the presence of a methamphetamine. Samples positive for THC only were comparatively rare, occurring in only six percent of cases. Approximately one in every five secondary screening tests contradicted the positive result of the initial screening test. That is, in one in every five cases for which the initial Securetec Drugwipe test detected the presence of a drug, the subsequent Cozart Drug Detection System test did not.

<table>
<thead>
<tr>
<th>Cozart test outcome</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methamphetamine positive*</td>
<td>342</td>
<td>66.2</td>
</tr>
<tr>
<td>THC positive</td>
<td>30</td>
<td>5.8</td>
</tr>
<tr>
<td>Positive for both</td>
<td>35</td>
<td>6.8</td>
</tr>
<tr>
<td>Negative</td>
<td>109</td>
<td>21.1</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Total</td>
<td>517</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* This refers to positive results for a screen that detects the presence of methamphetamine or MDMA.

The data in Table 3.2 are separated into their BaD Bus and Gang Crime operations in Tables 3.3 and 3.4 below. The two sets of data are broadly consistent with one another.
### Table 3.3
Results of Cozart secondary screening tests (BaD Bus data)

<table>
<thead>
<tr>
<th>Cozart test outcome</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methamphetamine positive*</td>
<td>322</td>
<td>66.4</td>
</tr>
<tr>
<td>THC positive</td>
<td>26</td>
<td>5.4</td>
</tr>
<tr>
<td>Positive for both</td>
<td>33</td>
<td>6.8</td>
</tr>
<tr>
<td>Negative</td>
<td>104</td>
<td>21.4</td>
</tr>
<tr>
<td>Unknown</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>485</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* This refers to positive results for a screen that detects the presence of methamphetamine or MDMA.

### Table 3.4
Results of Cozart secondary screening tests (Gang Crime data)

<table>
<thead>
<tr>
<th>Cozart test outcome</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methamphetamine positive*</td>
<td>20</td>
<td>62.5</td>
</tr>
<tr>
<td>THC positive</td>
<td>4</td>
<td>12.5</td>
</tr>
<tr>
<td>Positive for both</td>
<td>2</td>
<td>6.3</td>
</tr>
<tr>
<td>Negative</td>
<td>5</td>
<td>15.6</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>3.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>32</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* This refers to positive results for a screen that detects the presence of methamphetamine or MDMA.

The data in Table 3.2 can also be analysed according to vehicle type. This is provided in Table 3.5. It can be seen that 95 percent of Cozart screening tests were conducted on drivers of motor cars. For all vehicle types, the majority of drivers testing positive were detected with the presence of a methamphetamine based drug.

### Table 3.5
Results of Cozart Drug Detection System secondary screening tests by vehicle type

<table>
<thead>
<tr>
<th>Cozart test outcome by vehicle type</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Motor car</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methamphetamine positive*</td>
<td>325</td>
<td>62.9</td>
</tr>
<tr>
<td>THC positive</td>
<td>28</td>
<td>5.4</td>
</tr>
<tr>
<td>Positive for both</td>
<td>34</td>
<td>6.6</td>
</tr>
<tr>
<td>Negative</td>
<td>107</td>
<td>20.7</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Semi-trailer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methamphetamine positive*</td>
<td>13</td>
<td>2.5</td>
</tr>
<tr>
<td>THC positive</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Positive for both</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Negative</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Other truck</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THC positive</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Motorcycle</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methamphetamine positive*</td>
<td>4</td>
<td>0.8</td>
</tr>
<tr>
<td>THC positive</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Positive for both</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Negative</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>517</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* This refers to positive results for a screen that detects the presence of methamphetamine or MDMA.
3.4 Chemistry Centre evidentiary analyses

The legislation requires that only samples positive for drugs on the Cozart test must be sent to the Chemistry Centre of Western Australia (CCWA) for laboratory analysis, the results of which can be used to prosecute the driver. During this initial period, all samples tested using the Cozart apparatus were analysed by the Chemistry Centre regardless of whether they were positive or negative for drugs. This enabled an assessment of the sensitivity of the Cozart testing. It is important to point out that only drivers whose samples were positive on the Cozart test were eligible for prosecution if the laboratory analysis detected the presence of prescribed drugs. For drivers whose oral fluid samples were positive for drugs according to the laboratory analysis but whose samples were negative according to the Cozart test, no offence was recorded. These were noted as ‘false negatives’ for the Cozart apparatus. Those in charge of this initial implementation of roadside drug testing in WA are to be commended for taking the opportunity to assess the performance of the testing apparatus in this way.

The results of the CCWA testing of the 517 samples collected during Cozart tests are presented in Table 3.6. The most common test result was the presence of methamphetamine by itself (over 40 percent of the samples), followed by methamphetamine in combination with cannabis (over 20 percent of the samples). Cannabis by itself was found in less than 10 percent of samples, while just over 10 percent were negative.

<table>
<thead>
<tr>
<th>CCWA analysis outcome</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Meth only</td>
<td>219</td>
<td>42.5</td>
</tr>
<tr>
<td>Positive MDMA only</td>
<td>15</td>
<td>2.9</td>
</tr>
<tr>
<td>Positive THC only</td>
<td>45</td>
<td>8.7</td>
</tr>
<tr>
<td>Positive Meth + MDMA</td>
<td>36</td>
<td>7.0</td>
</tr>
<tr>
<td>Positive Meth + THC</td>
<td>117</td>
<td>22.7</td>
</tr>
<tr>
<td>Positive MDMA + THC</td>
<td>6</td>
<td>1.2</td>
</tr>
<tr>
<td>Positive Meth + MDMA + THC</td>
<td>20</td>
<td>3.9</td>
</tr>
<tr>
<td>Negative</td>
<td>57</td>
<td>11.1</td>
</tr>
<tr>
<td><strong>Total completed</strong></td>
<td><strong>515</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Table 3.6**

Results of CCWA evidentiary tests

NB This table includes a positive methamphetamine only case for which the Cozart test result was unknown.

3.5 Discrepancies between Cozart screens and CCWA tests

A comparison of the results in Table 3.6 for laboratory analyses with those in Table 3.2 for Cozart screening tests reveals some clear discrepancies. The most obvious difference is that over 20 percent of Cozart screens were negative, compared with only 11 percent of CCWA tests. Therefore, it appears that CCWA testing is identifying the presence of drugs not detected in the Cozart screens. A methamphetamine-based drug (methamphetamine or MDMA) was found in 72.9 percent of Cozart screens but in 80.2 percent of CCWA tests, while THC was found in 12.6 percent of Cozart screens but in 36.5 percent of CCWA tests. On this basis, it is clear that Cozart screens are failing to detect some of the methamphetamine or MDMA cases and a significant portion of THC cases.

It was possible to analyse the data more closely and look specifically at discrepancies between Cozart screens and CCWA analyses. Of the 514 cases for which the Cozart and CCWA test results were available, there were 153 cases in which the outcome of the
CCWA test contradicted that of the Cozart screen. In 151 of these cases, the discrepancy was a false negative, with the other two being false positives. One of the false positives was the false detection by a Cozart screen of THC and the other was the false detection of a methamphetamine-based drug.

The 151 false negatives corresponds to a rate of 29.4 percent of Cozart screens that failed to detect the presence of a drug. Note that this includes cases in which the Cozart screening test detected the presence of one drug but not others that were present (e.g. detected methamphetamine but not cannabis that was also present). It can be seen that the drug most commonly not detected was THC, which accounted for 82.1 percent of detection failures, including combinations with other drugs. These differences are summarised in Table 3.7.

<table>
<thead>
<tr>
<th>Drugs not detected</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>THC only</td>
<td>113</td>
<td>74.8</td>
</tr>
<tr>
<td>Meth only</td>
<td>18</td>
<td>11.9</td>
</tr>
<tr>
<td>MDMA only</td>
<td>6</td>
<td>4.0</td>
</tr>
<tr>
<td>THC + meth</td>
<td>9</td>
<td>6.0</td>
</tr>
<tr>
<td>THC + MDMA</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Meth + MDMA</td>
<td>3</td>
<td>2.0</td>
</tr>
<tr>
<td>All three drugs</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>100.0</td>
</tr>
</tbody>
</table>

It is also important to consider only those cases in which the Cozart screening test did not detect any drugs (i.e. negative for both the THC and methamphetamine screens). This is important because these drivers could not be charged under the current legislation, which requires a positive Cozart result for a laboratory analysis to provide evidence for prosecution. The CCWA outcomes for these 109 negative Cozart screens are summarised in Table 3.8. Of the 109 negative screens for which a CCWA analysis has been conducted, approximately half were positive for drugs. Again, detection failures were most common for THC. This means that, based on the 514 samples which were analysed by the Chemistry Centre and had a known Cozart result, the use of the Cozart screen eliminated 10.5 percent of potential prosecutions for the offence of driving with a prescribed drug in oral fluid (54 out of 514 cases).

<table>
<thead>
<tr>
<th>CCWA analysis outcome</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Meth only</td>
<td>13</td>
<td>11.9</td>
</tr>
<tr>
<td>Positive MDMA only</td>
<td>6</td>
<td>5.5</td>
</tr>
<tr>
<td>Positive THC only</td>
<td>21</td>
<td>19.3</td>
</tr>
<tr>
<td>Positive Meth + MDMA</td>
<td>3</td>
<td>2.8</td>
</tr>
<tr>
<td>Positive Meth + THC</td>
<td>9</td>
<td>8.3</td>
</tr>
<tr>
<td>Positive MDMA + THC</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Positive Meth + MDMA + THC</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Negative</td>
<td>55</td>
<td>50.5</td>
</tr>
<tr>
<td>Total completed</td>
<td>109</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 3.9 provides the medians and ranges of concentrations in nanograms per millilitre of the three drugs that were found in CCWA analyses for samples that were screened as negative by the Cozart apparatus.

<table>
<thead>
<tr>
<th>Drug type</th>
<th>Drug concentration (ng/ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
</tr>
<tr>
<td>THC (N=124)</td>
<td>89.5</td>
</tr>
<tr>
<td>Methamphetamine (N=31)</td>
<td>139</td>
</tr>
<tr>
<td>MDMA (N=11)</td>
<td>323</td>
</tr>
</tbody>
</table>

The cut-off concentrations listed in the specifications for the Cozart Drug Detection system are 31 ng/ml for THC, 50 ng/ml for methamphetamine and 150 ng/ml for MDMA (www.cozart.co.uk/download/cozartdds805.pdf - accessed January 21, 2009). Table 3.10 shows the number of drug positives above and below the cut-off concentrations for the three different drug types. It can be seen that a large majority of the drug positives were above the reported cut-off limits of the Cozart test.

<table>
<thead>
<tr>
<th>Drug type</th>
<th>Below</th>
<th>Above</th>
<th>Percent above</th>
</tr>
</thead>
<tbody>
<tr>
<td>THC (N=124)</td>
<td>30</td>
<td>94</td>
<td>75.8</td>
</tr>
<tr>
<td>Methamphetamine (N=31)</td>
<td>6</td>
<td>25</td>
<td>80.6</td>
</tr>
<tr>
<td>MDMA (N=11)</td>
<td>3</td>
<td>8</td>
<td>72.7</td>
</tr>
</tbody>
</table>

It was also possible to look at all the Cozart screen results and CCWA analysis results and determine the sensitivity and specificity of the Cozart screen results. Sensitivity refers to the ability of a screening test to successfully identify the presence of a condition (in this case, the presence of a drug), and specificity refers to the ability of the screening test to avoid falsely identifying the presence of a condition (drug) when it is not there. Sensitivity in this case is important for catching drivers who have recently used the prescribed drugs, while specificity is important for not wasting laboratory testing resources and causing unnecessary concern to law abiding motorists. As the Cozart test identifies either THC or a methamphetamine-based drug (could be methamphetamine or MDMA), sensitivity and specificity were calculated on this basis: detection of THC and detection of a methamphetamine-based drug.

For THC, the sensitivity of the Cozart test (i.e. detected THC when it was there according to the CCWA analysis) was only 34.0 percent, while the specificity (assessing THC to be absent when it was absent according to the CCWA analysis) was 99.7 percent. For the methamphetamine-based drugs, the sensitivity of the Cozart test was 90.8 percent and the specificity was 99.0 percent. Overall, the Cozart screen was correct with regard to THC in 75.7 percent of cases and was correct with regard to the methamphetamines in 92.4 percent of cases. If the published cut-off limits of the Cozart DDS are taken into account, the figures become 40.5 percent sensitivity for THC, 99.7 percent specificity for THC, 91.9 percent sensitivity for methamphetamine-based drugs, 99.1 percent specificity for methamphetamines, the correct result for THC in 81.6 percent of cases and for methamphetamines in 93.4 percent of cases.
3.6 Penalties

Penalties for the offence of driving with a prescribed drug in oral fluid or blood have been aligned in WA with penalties for driving with a low level illegal blood alcohol concentration (a BAC between 0.05 and 0.06 g/100ml). This means a fine of $200 at most for a first offence, with a fine of $250 to $500 and three month licence suspension for a subsequent offence. This is a similar correspondence of penalties to that used in other Australian states with similar roadside drug testing enforcement programs (Victoria, NSW, South Australia).

In Victoria, drivers charged with a first offence of having a prescribed drug in their oral fluid or blood receive a fine of $330 and ten demerit points, the same as drivers with a BAC in the range of 0.05 to 0.079 g/100ml. Subsequent offences for both drugs and alcohol attract year long licence disqualifications and more substantial court-imposed fines.

In South Australia, first offences for both prescribed drugs and alcohol attract fines of $420 and four demerit points. The fine for alcohol offences increases to $700 for subsequent offences, with progressively longer periods of licence disqualification. The situation is similar for drug offences but with larger fines.

In New South Wales, penalties for drug offences exactly match those for drink driving offences for a BAC between 0.05 and 0.079 g/100ml. A first offence results in a $1,100 fine and six months’ licence disqualification, while subsequent offences result in a $2,200 fine and disqualification of 12 months.

Similarly, in Queensland and Tasmania, driving when positive for drugs also attracts penalties in line with low level drink driving offences.

The penalties imposed on drivers in Western Australia found to have committed the offence of driving with a prescribed drug in oral fluid or blood have been determined in 252 cases. Fines were issued to 250 of these drivers, with the fine amount ranging from $50 to $1200. Fines over $200 usually involved drivers being charged with a number of road traffic offences. The frequencies for the different fine amounts are shown in Table 3.11. Fines of $100, $150 and $200 comprised 95 percent of the total. One driver was not prosecuted while another was ordered to perform 24 hours of community service.

<table>
<thead>
<tr>
<th>Fine amount ($)</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>75</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>100</td>
<td>68</td>
<td>27.2</td>
</tr>
<tr>
<td>150</td>
<td>83</td>
<td>33.2</td>
</tr>
<tr>
<td>200</td>
<td>87</td>
<td>34.8</td>
</tr>
<tr>
<td>250</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>300</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>350</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>400</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>600</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>1100</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>1200</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Total</td>
<td>250</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Once court costs were added to the fines, the amount of money payable for the offence ranged from $100 to $1310, with a median of $264.

Licensing suspensions were administered in 17 cases. Twelve of these were for three months and five were for nine months.
Although the penalties for driving with a prescribed drug in oral fluid in WA are aligned with low level drink driving offences, as in other states, the fine amounts are comparatively small and may need review. However, it is still appropriate for the penalties to be aligned with those for drink driving, so any increase in fines for drug driving offences should occur within an overall impaired driving penalty review, with drink driving fine amounts also being increased.

WA penalties also contrast with some states (e.g. Victoria, South Australia) in that they are administered through the court system rather than through an expiation fee for first offences. One possible effect of using the court system is that it may indicate to the driver that the offence is a more serious one than would be suggested by an expiation fee. There is no evidence available to determine the best system for administering penalties but, as the WA system has worked efficiently thus far, there is no compelling reason to change.

3.7 Drug Impaired Driving

In addition to the introduction of random roadside drug testing of drivers, the legislation introduced in WA in October 2007 included new procedures for the identification and apprehension of drivers impaired by drugs. As noted in the introduction, the new procedures related to drug impaired driving involve visual detection by the police of the likelihood of driver impairment, followed by a standardised roadside assessment of the driver’s appearance and demeanour. When the assessment suggests impairment, the police collect blood and urine samples for toxicological analysis. Agreement between the evidence given by the police and the toxicology findings results in a drug impaired driving conviction.

The offence of driving while impaired by a drug attracts more severe penalties than the offence of driving when positive to a prescribed drug. In Western Australia, the first offence attracts a fine between $800 and $2,500, and a licence disqualification of six months. For a second offence, the fine can range between $1,500 and $3,500 and the licence is disqualified for two years. A third offence results in a fine between $2,000 and $5,000, and the driver’s licence is permanently disqualified.

A comparison with Victoria, South Australia and New South Wales shows that there is a fair degree of variation between jurisdictions in fine amounts and lengths of licence disqualification but a similar overall pattern of penalties. The one major difference is that a third drug impaired driving offence in Western Australia entails the permanent loss of a driver’s licence.

In Victoria, for a first offence, there is a fine of approximately $1,320 and a 12 month licence disqualification. For a second offence the fine is around $13,200 and there is a two year disqualification. Subsequent offences also attract two year licence disqualifications but a larger fine near $20,000.

In South Australia, a first drug impaired driving offence leads to a fine of between $700 and $1,200, six demerit points and a licence disqualification of 12 months. Subsequent offences lead to a fine of between $1,500 and $12,500, eight demerit points and a three year licence disqualification.

In New South Wales, the first offence fine is $2,200 and the licence disqualification is of 12 months’ duration. For subsequent offences, the fine is $3,300 and the disqualification lasts for three years.

Thus far, there have only been five drivers who have been charged with the offence of driving while impaired by drugs in Western Australia since the new legislation came into effect. Three were driving cars in the metropolitan region, one was driving a car in a rural region and one was driving a van in a rural region. Four of them were apprehended on the weekend. The drugs used varied between the drivers, comprising one case of methamphetamine combined with cannabis; one of methamphetamine and MDMA; one of methamphetamine, MDMA and cannabis; and two cases of drivers positive to an array of
drugs, including opiates and benzodiazepines. Only one of these five drivers has appeared before a court. This driver was given the minimum fine of $800, required to pay court costs of $370 and was disqualified from driving for nine months.

3.8 Drink driving enforcement

One possible negative outcome of directing police resources toward drug driving enforcement is that there will be a related decrease in resources allocated to the key enforcement area of drink driving. If drug driving enforcement leads to fewer random breath tests being conducted, drivers may perceive a lower likelihood of detection for drink driving. This could mean that drivers will be less deterred from drink driving and the overall effect of drug driving enforcement could have a negative road safety impact. Therefore, it is important to look at random breath testing levels before and after the introduction of roadside drug testing.

Data were obtained for the hours of operation of random breath testing buses and the number of random breath tests conducted from October 15, 2004 through to November 30, 2008, with separate figures for the period from October 15, 2007 to November 30, 2008. A three year average was calculated for the period of October 2004 to October 2007 and this was compared to the period since the start of drug driving legislation. Data for this period (October 2007 to the end of November 2008) was scaled down to equate to a yearly testing level. The comparison of RBT enforcement levels is provided in Table 3.12.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours of alcohol bus operation</td>
<td>1,819</td>
<td>2,458</td>
</tr>
<tr>
<td>Number of random breath tests</td>
<td>255,404</td>
<td>290,366</td>
</tr>
<tr>
<td>Number of drivers charged</td>
<td>3,845</td>
<td>4,373</td>
</tr>
<tr>
<td>Percentage of tests leading to charges</td>
<td>1.19</td>
<td>1.26</td>
</tr>
</tbody>
</table>

As can be seen in Table 3.12, based on alcohol bus operations only, there has been no decline in the extent of drink driving enforcement since the introduction of random roadside drug testing. Since October 2007, there have been apparent increases in the number of hours of bus operation, the number of random breath tests conducted (although at a somewhat slower rate of testing), and the number of drivers charged with drink driving. The percentage of tested drivers ultimately charged with a drink driving offence remained relatively steady.

In addition to looking at bus operations in isolation, data were provided for all random breath tests conducted in the first 11 months of 2008. According to these data, there were 833,998 random breath tests conducted in this period, including 260,854 using a Breath and Drug Operations bus. Comparisons with previous years can be made with inspection of data provided to CASR for the years 2005 to 2007 (Wunderstiz & Baldock, 2008a, 2008b; Wunderstiz, Hirinandani & Baldock, 2009). These data are provided in Table 3.13, with separate figures for ‘boozie bus’ operations. There is no evidence of any decline in 2008 in the extent of random breath testing. On the contrary, total RBT numbers in 2008 will be markedly higher than those reported for previous years.
### Table 3.13
Annual numbers of random breath tests 2005 to 2007 and breath test numbers for the first 11 months of 2008

<table>
<thead>
<tr>
<th>Year</th>
<th>RBT total</th>
<th>Bus operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>711,768</td>
<td>250,701</td>
</tr>
<tr>
<td>2006</td>
<td>766,238</td>
<td>270,561</td>
</tr>
<tr>
<td>2007</td>
<td>749,340</td>
<td>249,472</td>
</tr>
<tr>
<td>2008 (up to Nov 30)</td>
<td>833,998</td>
<td>260,854</td>
</tr>
</tbody>
</table>
4 Stakeholder Consultation

The following section documents issues raised in discussions with various stakeholders. The content of this section reflects solely the opinions of the stakeholders and is presented without comment.

4.1 Process changes

Overall, only minor changes within BAS have occurred since the drug testing was introduced. These relate to adopting practices to enhance the integrity of the testing procedure and improving management and training of the probationary constables. Some examples include:

- A better sample is obtained if the tongue is rolled and swabbed on its sides in addition to the top whereas previously only the top of the tongue was swabbed
- Following the initial screening test, the device is laid horizontal on a table to eliminate the possibility of flooding channels by accidentally tilting the device

4.2 Admissibility in court

In August 2008, in response to a court challenge, evidence had to be presented outlining the drug testing process. A representative from the CCWA attended court to outline the reliability of the testing processes. Following this a WAPOL officer arranged for an informal conference on the new legislation which was attended by eight magistrates. This has proved to be useful as the officer reported subsequently attending court and observing a magistrate making a correction in relation to drug testing procedures during proceedings.

There appears to be no issues thus far in relation to the integrity of the testing or the police processes involved. It is understood that to date, nobody has challenged the charge using the results of independent testing.

From an efficiency perspective, notes in relation to prima facie evidence are made in Section 4.7.

It should be noted that there are circumstances under which the Western Australian Drug and Alcohol Office (DAO) may be called upon to deliver an individual assessment of drug dependency for consideration by the courts. To date the DAO has not been involved with any assessments.

4.3 Chemistry Centre of WA

The Chemistry Centre of WA performs the third phase of oral fluid testing on behalf of WAPOL using an LCMS mass spectrometer machine. Positive results from this test will lead to charges laid for Driving with Prescribed Illicit Drug in Oral Fluid or Blood.

The CCWA currently has a capacity of 10,000 such tests per year but it was felt that there was capacity to increase this should the need arise. With the impending Traffic Injured Program there will be an estimated 10 fold increase in the number of tests performed (on blood samples). As a result, the CCWA is making a business case to double its analysts from two to four and purchase a second mass spectrometer. This will mean added flexibility when it comes to oral fluid testing and a considerable increase in testing capacity. At present, the single mass spectrometer is shared between two departments.

As noted in Section 3, CCWA has been testing negative Cozart samples and have been dealing directly with the manufacturer in an effort to reduce the number of false negative testing outcomes.
The CCWA regard their relationship with the police as very good and communication and troubleshooting is considered effective. Excluding the issues that have been discussed in relation to the Cozart, the CCWA are satisfied with WAPOL equipment, procedures and sample handling practices.

4.4 Public communication

The Office of Road Safety has conducted some low key media activities in relation to the new drug testing legislation on behalf of WAPOL. A study of the media schedule shows that these generally consisted of advertisements in newspapers and internet sites informing the public of the ability of Police to test motorists for drug driving and the associated penalties. Some notices were targeted at specific groups such as the heavy vehicle industry. Placements included:

- Statewide Press: The Sunday Times and The West Australian
- Street Press: Perth Now, X-Press, Fully Loaded and Owner Driver
- Informative Material: Press Advertisements, Booklet, Brochure and a Poster

An example of a press advertisement is included in Appendix B. Placements spanned September to November 2007 with the bulk of advertisements appearing in publications in September.

By mass media standards overall publicity levels were small but general media interest and coverage made up for this. An initial unsuccessful case attracted a large amount of media attention at the onset of the legislation and it is known that television news crews accompanied police on at least two deployments of the BaD bus to run a major news story.

4.5 Heavy vehicle compliance

Part of the scope of this review was to consider issues relating to heavy vehicles. Discussions were held with representatives from the Main Roads WA (MRWA) and the SA Police in relation to cross border links and heavy vehicle compliance in WA.

The MRWA has 30 inspectors and supervisors dedicated to heavy vehicle compliance. Activities have moved away from random patrols to intelligence led operations and it was acknowledged that intelligence is shared with WAPOL. There is a preference for roadblock type operations as this is the way in which most breaches can be detected. Many of these operations have assistance from a TEG highway patrol or regional police. The roadblocks are usually conducted about two to three times per month and are focussed on vehicle size, dimension and weight checking using portable scales and weight in motion devices. Occasionally WorkSafe officers accompany the MRWA personnel to enforce fatigue provisions and have the power to order a driver off the road for a period of time.

It was noted that Perth is well suited to roadblock type activities as approximately 70 percent of heavy vehicle traffic can be captured on the four major routes into the city. It was also noted that, to be most effective, it is desirable that a roadblock be of at least 24 hours’ duration so that heavy vehicles that stop to “wait it out” are forced to move again. This, however, requires a high level of resources to conduct. Intelligence is shared with other jurisdictions but coordinated events are rare.
4.6 Issue of a general rollout across the police agency

There were serious concerns raised about the possibility of a general rollout of ROFT drug testing across the Agency. The major points included:

- The ability to conduct the testing in a controlled environment free of contamination (something which the BaD bus provides)
- The need for the drug test kits to be stored between 15-25°C at all times and monitored for deviations from this temperature range
- The specialised nature of the testing (requires practice and must be performed regularly to be proficient); there are many things that can go wrong if not performed correctly

In some environments within the State, there was concern about the extremes of temperature, humidity and dust contamination that could occur. The storage and transportation of test kits and evidentiary samples was also of major concern and it is likely that poor attention to this aspect may result in an increase in false positives. There is even a recommended technique for swabbing a mouth for saliva that enhances the collected sample, which is likely to be overlooked. The logistics of taking blood samples also needs further consideration as it is unlikely that a nurse will be present at the roadside.

4.7 Suggested legislative changes

Some fine tuning of the legislation has been suggested to improve equity, efficiency and address potential loopholes. These are discussed in detail below.

4.7.1 Young offenders

There is a lack of parity between drug related charges and blood alcohol concentration. Currently, young offenders (17 years and younger) who are subject to a positive oral fluid test are subject to the provisions of the Young Offenders Act 1994 and therefore may be dealt with by attending a Juvenile Justice Team. Attendance at the Juvenile Justice Team precludes the young offender from having a conviction recorded, which in turn effects the determination of an offender committing second or more offences.

To have a charge of “Driving with Prescribed Illicit Drug in Oral Fluid or Blood” (S. 64AC Road Traffic Act 1974) better aligned with current legislation, consideration should be given to having S. 64AC included in Schedule 1 of the Young Offenders Act 1994.

Currently, possession of a prohibited drug (Misuse of Drugs Act 1981) is subject to Schedule 1, but when the taking of the prohibited drug is combined with the driving of a motor vehicle with little driving experience, this act should be considered more serious than mere possession.

By having S. 64AC listed within Schedule 1, this offence would be aligned with similar offences such as Excess 0.02, Excess 0.05 and Excess 0.08 Blood Alcohol Content.

All of the above mentioned alcohol driving related offences also have a mandatory cancellation of a provisional drivers licence by virtue of S. 51 of the Road Traffic Act 1974.
4.7.2 Use of the Cozart as an evidentiary device

As noted in Section 3, there are three separate detection methods which must all indicate a positive test for a charge to be laid for Driving with Prescribed Illicit Drug in Oral Fluid or Blood:

- A preliminary roadside oral fluid tester (Securatec Drugwipe II)
- A secondary roadside oral fluid tester (Cozart DDS)
- A LCMS Mass Spectrometer operated by CCWA

As discussed in detail in Section 3, samples that tested negative on the Cozart were analysed by the CCWA. This represented 20 percent of all tests that were conducted on the Cozart. Of these, it was found that approximately half of the samples (ie 10 percent of all tests conducted on the Cozart) actually did contain the presence of an illicit drug but under the provisions of the legislation the motorist could not be charged.

There is a suggestion that the Cozart DDS not be used as an evidentiary device. Instead, the decision to proceed with a charge would be based only upon a positive screening test with the Drugwipe II and a positive test from CCWA analysis. The Cozart DDS equipment should still be used as an oral fluid collection device. Its ability to screen samples for the presence of drugs could still be monitored and, if its accuracy improves, it could be reinstated into the evidentiary process.

4.7.3 Driving prohibition for motorists

At present, the police have the power to confiscate keys from a motorist if, following a Cozart test, they form a reasonable belief the driver has ingested an amount of an illicit drug. This authority by virtue of S. 71 B of the Road Traffic Act 1974 may be used to prevent the use of a vehicle by a suspected offender only within circumstances where the use of alcohol or drug driving impairment alone has been established. This process may be restrictive for enforcement officers travelling throughout the state as operational issues may occur with the recording, storing and the later collection of property from the owner. In addition, there is nothing to prevent the motorist from obtaining a second set of keys or obtaining another vehicle and driving again.

It is noted that Western Australia’s Worksafe Officers may issue a prohibition notice for the drivers of heavy vehicles. These notices are issued by virtue of Occupational Health and Safety legislation and are predominantly based on fatigue related issues due to the suspected consumption of amphetamines.

Changes need to be made to the legislation to allow police the powers to impose a driving sanction on the motorist for a period of time following detection. Models in other jurisdictions for example adopt an enforceable 24 hour prohibition on driving.

4.7.4 Equity in blood drug testing

Currently, when a driver is detected with the presence of an illicit drug via a blood test, that driver cannot be charged with a drug presence offence, unless the presence of the drug was detected via a blood test conducted in accordance with the legislative requirements of the Road Traffic (Drug Driving) Regulations 2007.

To ensure a better holistic legislative approach, it should be considered that when a drug presence offence is detected from a sample of blood, the driver shall be subject to the penalties for such offence when the sample has been taken and analysed in accordance with any of the applicable legislative processes, including the Road Traffic (Blood Sampling and Analysis) Regulations 1975. This process will result in drivers who are involved in a traffic crash where drugs are involved, being charged when it is deemed the level of drugs detected falls short of Driving Whilst Impaired.
4.7.5 Refuse oral fluid test

An anomaly has appeared in relation to the penalties for the refusal of a preliminary oral fluid test and the refusal of a secondary oral fluid drug test. Where a person refuses a preliminary oral fluid drug test their driver’s licence shall be disqualified by virtue of S. 67 of the Road Traffic Act 1974, but where a person complies with the preliminary test but refuses the secondary test, a disqualification period does not result.

The necessity for the secondary test overrides the need for a preliminary test as the oral fluid collected from the secondary test is utilised to substantiate a charge. If the current legislation remains unchanged there is a very high likelihood that offenders will submit to the preliminary test, knowing that it alone cannot be used as evidence and then not submit to the secondary test knowing that there are only repercussions at law for a second or subsequent offence by virtue of S. 67A Road Traffic Act 1974.

4.7.6 Continuity and prima facie evidence

Court challenges to drug presence offences can tie up police personnel to attend court to justify the processes and methods used to obtain and test a sample of oral fluid from a driver. Invariably, the processes and methods utilised are the same for every test conducted and there appears to be very little legal gain from having every person involved in the evidentiary chain attend to provide evidence of process and continuity.

It is suggested that an amendment be made to S. 70 of the Road Traffic Act 1974 in order to allow the regulatory forms contained within the Road Traffic (Drug Driving) Regulations 2007 to be prima facie evidence. It is suggested that wording similar to S. 38 of the Misuse of Drugs Act 1981 be utilised. Additionally, it is suggested that where a regulatory form is to be challenged, the defence counsel must deliver an objection to a certificate in writing by a specified time. It is suggested that wording similar to S. 38B of the Misuse of Drugs Act 1981 be utilised.

These processes would allow both parties to successfully resolve any legal arguments and reduce the necessity for many people to attend court in order to provide evidence of continuity and matters of process unless otherwise required.

4.7.7 Low level drug driving penalty

It is suggested that the penalty for a drug presence offence be reviewed in order to better deter drivers from offending. Currently, a first offence of driving with a prescribed illicit drug in oral fluid is subject to a penalty of no more than $200.

Although driving whilst drug impaired is acknowledged as a more serious offence due to the incapability to drive a motor vehicle, a penalty against such offence appears adequate and allows for a minimum of an $800 fine and a minimum of 6 months driver’s licence disqualification.

In order to benefit road safety and deter drivers from driving with a prescribed illicit drug in their oral fluid, it is suggested that a first offence penalty be inline with the second or subsequent penalty contained within S. 64AC (2)(b) of the Road Traffic Act 1974. This suggested penalty appears better aligned with the penalty for the offence of Driving while Impaired by Drugs.
### 4.7.8 A minor change to regulated testing procedure

Following evaluations for oral fluid drug testing, it has been identified that in most cases the procedure of moving the collector containing a sample of oral fluid in a figure 8 motion does not release the residue for tetrahydrocannabinol in sufficient quantities to be effectively detected by the Cozart apparatus.

It is therefore recommended that R. 6(2)(c) of the Road Traffic (Drug Driving) Regulations 2007 be amended so as not to include the figure 8 motion.

### 4.7.9 Police powers to move a vehicle from a roadway

When a motorist has requested to undergo an OFT, following a negative breath alcohol test, the practice has been for the police officer administering the test to move the vehicle to a safe parked position. In such circumstances, the officer has the power to call upon the driver of the vehicle to stop the vehicle and the power to direct the driver to wait at a place indicated in order to conduct the OFT. Unless permission is obtained from the owner of the motor vehicle, the officer does not have the power to move the vehicle. To date, this has not been challenged in court.

Police officers do have the powers to move a motor vehicle without the permission of the owner if they reasonably suspect that an offence has been committed (under Section 86A of the RTA). This does not apply when random roadside drug testing (or breath testing) is being conducted.

The reason why police officers have been instructed to park the vehicle on behalf of motorists stems from a recent court case in which back calculations for blood alcohol concentration were requested in order to exclude time spent queuing and parking the vehicle at an RBT operation.

There is a need to clarify what the appropriate practice should be in relation to parking vehicles during RBT and ROFT operations. A review of the legislation may be required to determine if there is a loophole and if so identified, a case made for legislative change.
5 Discussion

5.1 Effectiveness

It is still too early to evaluate an impact of the drug testing legislation on road crash outcomes as sufficient data are not yet available for valid statistical analysis. Therefore, only anecdotal evidence exists in relation to the testing as an effective road safety measure.

Two major operations have been held targeting the heavy vehicle sector. These operations involved the testing of all heavy vehicle drivers at roadblocks set up on the State’s eastern border. The first operation had a duration of two days and the second operation a duration of four days. In each case, it was observed that heavy vehicle traffic volumes decreased dramatically and that many such vehicles parked in an attempt to wait out the operation.

WAPOL have noted that the number of positive screenings in two areas they regularly frequent has declined considerably, either suggesting that the drug users have ceased using any of the three prescribed illicit drugs, are taking the drugs but electing not to drive or have switched to other types of drugs.

5.2 Impacts of drug testing on other traffic enforcement activities

As supported by the data in Section 2, total numbers of RBT tests have actually increased as a result of ROFT activity. However, given that personnel had to be resourced from within TEG when the drug testing bus team was created, a sergeant supervisor position from the traffic patrol was taken and not replaced for some time. The situation was eventually resolved by eliminating a constable patrol position within TEG.

Given that the vacant supervisory position has now been filled and overall numbers of breath tests have not declined there is no evidence to suggest that overall Breath Testing capabilities have been compromised due to the introduction of ROFT. However, further scrutiny would be necessary to determine if the missing patrol constable has meant less enforcement activity in other traffic enforcement areas.

It is difficult to identify any other negative impacts that the drug testing has had on other traffic enforcement operations. Confounding any interpretation of enforcement data is the fact that the group was relocated from central Perth to Midlands, which has had implications for patrol coverage and transit times between operations.

5.3 Resources for roadside drug testing

BaD is well resourced in terms of it’s equipment. The benefit of a second vehicle to accompany the bus on site is discussed elsewhere (Section 5.3.2 as are the opportunities by using a smaller drug testing vehicle.

As ROFT is labour intensive, the adequate staffing of the section has been a challenge at times. Fresh graduates from the Academy provide a convenient solution but the trade-off is a higher than normal level of supervision. While all supervisory levels have been filled the impact of the loss of the patrol constable in TEG to fill one of these positions with the BaD bus team has not been quantified.

The aim of maintaining integrity and transparency in ROFT appears to have been achieved thus far due to the controlled testing and supervisory environment maintained by BaD.

5.3.1 Permanent versus non-permanent teams

Western Australia has a long tradition of utilising fresh graduates from its police academy to be involved with booze bus operations. It appears a logical progression that the same personnel should also be assigned to ROFT operations.
There are many positive and negative aspects to using probationary constables. On the positive side:

- They tend to be highly motivated, keen and eager to learn (it is likely that other types of deployees would quickly become bored with the posting)
- With time, an increasing number of officers within the agency will have background knowledge in traffic, alcohol and drug testing
- Provide a regular source of personnel without putting a strain on the police districts
- Approximately half volunteer for the position
- Most lack the prejudice that more experienced officers may have developed against traffic duties

The negative aspects include:

- Need for higher than usual supervision levels
- Experience is limited and the probationary constables will not do things until told to do so
- Most of the personnel move on to other postings and very few remain with TEG
- Cycles of varying productivity and efficiency exist

In this context, the management of team dynamics is very important and, because the bus operations represent the first posting for the graduates, TEG is tasked with performing much more than just traffic training. For example, the manner in which the graduate interacts with the public, radio etiquette and the hazards of working on the road also have to be taught.

During their 10 week period on the BaD bus, graduates increase in proficiency peaking in about the eighth week at which time they learn of their next posting and efficiency levels begin to decline.

There is no doubt that a dedicated and more permanent team (such as those used in other States) could be more productive and efficient but the use of probationary constables is a tradition in Western Australia that seems to work well within the agency and provides a convenient resourcing solution to a labour intensive and specialised activity.

5.3.2 Vehicles

WAPOL appear to be satisfied with the performance of their current buses and could only suggest minor modifications to their interior layout if they were to obtain new ones. The buses have proved highly effective in regional deployments.

While the current BaD bus serves its purpose with distinction, the size of the bus lends itself to operations of a large scale and makes certain types of deployments inefficient. There is potential for the adoption of an additional smaller vehicle for certain types of operations. These would be of benefit on low volume roads or small rural townships where it would be difficult to justify the deployment of a large bus and many personnel. The Winnebago style vehicles used by the NSW police were frequently cited as a good example of such a vehicle.

Although the 4WD that tows the electronic Variable Message Sign accompanies the bus during deployments, it is not unusual for the bus team to be isolated as the 4WD is frequently absent running offenders to the watch-house or performing necessary errands.
This problem tends to be exacerbated during regional operations. A second vehicle would enhance the bus operations.

5.4 Drug testing equipment

As part of the initial implementation of WA roadside drug testing, the oral fluid samples taken as part of the operation of the secondary screening test, the Cozart Drug Detection System, were all analysed by the WA Chemistry Centre, regardless of whether the Cozart DDS showed a positive or negative result. This analysis of negative samples, in addition to the positive samples, was not required by the legislation but has been a very useful and important part of the initial implementation. It has enabled the determination of the accuracy of the Cozart apparatus for detecting the presence of drugs known to be present in oral fluid samples on the basis of the CCWA analyses. The authorities responsible for the initial implementation of roadside drug testing in WA are to be commended for approving this use of the CCWA resources.

The comparison of the Cozart Drug Detection System results and those of the WA Chemistry Centre (Section 2.5) reveals that the performance of the Cozart DDS has been disappointing. The Cozart DDS failed to detect a proportion of the methamphetamine-based drugs and a significant proportion of the THC positive samples. In nearly 30 percent of Cozart screens, at least one drug type that was present was not detected. The sensitivity of the apparatus for detecting THC was only 34 percent (it was 91 percent for the methamphetamine-based drugs). Furthermore, use of the Cozart DDS as a screening instrument resulted in the elimination of over 10 percent of possible prosecutions for the offence of driving with a prescribed drug in oral fluid. Although it should be noted that this includes cases in which the drug concentrations were below the published cut-off limits for the Cozart DDS, it is also the case that the great majority of failed detections were for drug concentrations above these cut-off concentrations (75.8 percent of the THC detection failures, 80.6 percent for methamphetamine, 72.7 percent for MDMA). On the basis of these results, there is a very clear problem with the use of the Cozart DDS as a screening instrument.

Discussions with the CCWA revealed a likely explanation for the poor results of the Cozart DDS testing. The cotton tip of the Cozart DDS collection device may contain active sites to which the drugs being tested for can bind. This would slow down the effective desorption of the drugs from the cotton tip into the buffer solution. This would result in a negative result in the Cozart DDS reader. By the time the solution is analysed at the WA Chemistry Centre, considerably more desorption of the drugs into the solution may have occurred, resulting in a higher likelihood of a positive result that contradicts the earlier negative Cozart DDS result.

These findings have been reported by the CCWA to Cozart, and a new collection kit has been prepared by Cozart to address this apparent problem. This new kit has yet to be evaluated. The CCWA is also planning to use the Cozart DDS to re-analyse the samples that were associated with earlier false negative results to see if the Cozart apparatus detects the drugs now that they may have undergone greater desorption into the buffer solution. Again, the results of these analyses are unavailable at this time.

5.5 Penalties

Although the penalties for driving with a prescribed drug in oral fluid in WA are aligned with low level drink driving offences, as in other states, the fine amounts are comparatively small and may need review. However, it is still appropriate for the penalties to be aligned with those for drink driving, so any increase in fines for drug driving offences should occur within an overall impaired driving penalty review, with drink driving fine amounts also being increased.
WA penalties also contrast with some states (e.g. Victoria, South Australia) in that they are administered through the court system rather than through an expiation fee for first offences. One possible effect of using the court system is that it may indicate to the driver that the offence is a more serious one than would be suggested by an expiation fee. There is no evidence available to determine the best system for administering penalties but, as the WA system has worked efficiently thus far, there is no compelling reason to change.

5.6 Cost recovery

There is no evidence to suggest that costs are recovered by WAPOL for its drug testing activity. An exception is where the motorist has chosen a blood test in lieu of an oral fluid test where the test fee of $960 must be paid by the motorist. Of the court imposed fines and fees that were scrutinised, none specified if they included the cost of drug testing by WAPOL but this is thought to be unlikely. It is also understood that all the fines and fees are channelled into general revenue and WAPOL would not recover the costs directly in any case.

5.7 Magistrates and prosecutors

Initial experiences suggest that it would be beneficial to provide regular briefing of new legislation under the Road Traffic Act to magistrates and prosecutors.

5.8 Targeting

Targeting is performed for approximately 30 percent of the ROFT operations. This is predominantly done on the basis of intelligence that has come to light or major public events where drug use is likely. All deployments are subject to judgements about whether the chosen site is suitable from a safety perspective and is often backed up by accumulated knowledge of which locations are likely to be beneficial for drug testing. General random testing is aimed at recreational drug users within the general driving population. The heavy vehicle sector is also occasionally targeted although such operations tend to be infrequent.

Given that the rationale for the BaD bus is high profile alcohol and drug testing, exposure of the activity to motorists is probably more important than specific targeting per se. It is evident that over time BAS supervisors have built up knowledge of areas of the city and rural locations where certain drug types are prevalent.

As no spatial data relating to BaD bus deployment or road traffic volumes was obtained, no comment can be made about general exposure to the population. However, there appears to be no reason to suggest that this is not satisfactory on the basis of numbers of tests performed.

5.9 Data collection

WAPOL collect a range of data about their roadside drug testing enforcement. These variables are listed in Section 3.7. Although the data collected are detailed and useful, there are a small number of additional variables that could be recorded that would aid significantly in the evaluation of the enforcement and planning for future operations. Specifically, it would be useful if the driver sex and the vehicle type could be recorded for the initial roadside screening tests (the Securetec Drugwipe tests), as they are for the secondary Cozart DDS tests. An indication of driver age would also be useful if considered practicable to record. Such data would provide an indication of the nature of the population of drivers tested and, therefore, a measure against which to assess the nature of the drivers found to be guilty of driving after using drugs. This could aid future planning, targeting and education or media campaigns. Similarly, a count of different vehicle types would provide the basis for calculating drug driving detection rates by vehicle type, which, again, would aid future planning, targeting and the design of anti-drug driving campaigns.
5.10 Opportunities for enhanced testing

Some opportunities for enhanced testing were identified. As discussed in Section 5.3.2, an additional smaller vehicle would allow more flexibility with certain types of regional deployments and targeted metropolitan activities.

There appear to be synergies between MRWA heavy vehicle compliance activities and ROFT. These should be explored further and although testing could be performed with the current bus, a smaller vehicle may also permit more efficiency.

Another possible means of enhancing ROFT activities is to expand the range of drugs for which testing is conducted. The decision whether or not to add to the list of drugs prescribed in the legislation needs to be based on the extent to which the drug in question is a problem for road safety in WA, weighed against the cost of adding the drug to the current drug testing processes.

Currently, the prescribed drugs in WA match those prescribed in Victoria, New South Wales, South Australia and Queensland. Such consistency across jurisdictions is useful for reinforcing a consistent message to motorists and additions to the list of prescribed drugs would ideally occur nationally. There are drugs that are likely to increase the risk of a road crash, such as cocaine (Raes, Van de Neste & Verstraete, 2008), but before testing for such drugs is introduced, it would be necessary to demonstrate their role in a substantial proportion of road crashes. At this point, inspection of data for fatalities does not make for a compelling case for expanding drug testing. From 2004 to 2006, there were four fatalities involving drugs other than cannabis or amphetamines. This is out of a total of 124 drug-related fatalities. Nonetheless, there should be ongoing monitoring of the role of drugs in serious and fatal road crashes in WA, in addition to ongoing monitoring of world drug driving research literature.

Furthermore, there should be ongoing monitoring of the development of roadside drug testing technology. Currently, there would be considerable costs associated with increasing the types of drugs tested for in the ROFT testing process. The initial expansion of the drug testing to include MDMA in Victoria, subsequently adopted elsewhere, was easy to achieve once testing was already being undertaken for methamphetamine. The screening tests and the laboratory analyses undertaken to test for methamphetamine already detected the presence of MDMA and so adding MDMA to the list of prescribed drugs made little difference to testing procedures or resources. The addition of any drug unrelated to amphetamine to the list of prescribed drugs would involve additional screening tests and laboratory analyses.

On the basis of these considerations, it is not recommended that the list of prescribed drugs in WA be expanded beyond the current list of THC, methamphetamine and MDMA. However, it is recommended that there be ongoing monitoring of the role of different drugs in road crashes in WA, and the ongoing monitoring of research literature and testing technology in order to enable informed choices about the future of ROFT.

A final opportunity exists to benefit from the experiences in other jurisdictions. Much of the system of drug testing in WA is based on models currently in operation in other states. In setting up the program in WA, many fact finding visits were made by WAPOL representatives to interstate police agencies to clarify operational practices and legislation. Informal communication continues to exist with the contacts made during these visits but this has diminished over time as personnel move on.

There would be considerable benefit in increasing communication and meetings between interstate police agencies to discuss drug testing practices in relation to road safety. Some formalisation of this process from police hierarchy between the States will ensure that there is commitment for meetings to be frequent and sustained into the future.
5.11 General rollout of the testing

There were many concerns that the integrity of testing could not be maintained if a general rollout across the agency were to occur. Given these concerns and current performance of the equipment it is preferable that monitoring of the whole process proceed for another year before rollout is considered.

If expansion is required, it would be better to perform an intermediate rollout involving a few highly supervised units. In such a case, it would be essential that BaD is resourced to maintain involvement in training, supervision and general consultation. Database systems would need to be upgraded and made operational so that State-wide drug testing could be properly monitored and managed. The lessons from the Gang Crime use of the equipment would be a good starting point for identifying issues in relation to supervision, training and in-field use of the equipment.

5.12 Legislative changes

Support should be given to most of the changes to legislation suggested by WAPOL. Many of these address inequities or loopholes in the current program. The three following changes would require further scrutiny.

There is a case for reviewing the $200 oral fluid penalty but it is suggested that the low level drug driving penalty should not be changed in isolation and should be the same as the low level BAC penalty. If the low level penalty for one is changed, the other should also be changed. The oral fluid penalty should not match the higher level drug impaired driving penalty. This is also consistent with the situation in the other States.

The prohibition of motorists from driving based on suspicion of impairment is a complex matter that requires further investigation. It is agreed that police should be given the power to prevent motorists from driving when under the suspicion of impairment. As a starting point, a review of practices in other States may reveal a suitable model for use in WA.

The police practice of parking the vehicle of motorists who are requested to undergo ROFT requires further review. Should a motorist not provide consent for this activity, police do not have the power to move the vehicle under the current legislation.

5.13 Drug Impaired Driving

There are several reasons why DID has not had a successful adoption within the agency. The simultaneous initiation of both DID and ROFT has led to confusion. Discussions with officers at various levels revealed a misunderstanding of the differences between ROFT and DID. This is evident even within TEG, the group where one would expect the most proficiency with the new legislation.

To their credit, WAPOL made a significant effort to increase awareness and training in relation to the DID legislation but this has failed to deliver expected outcomes. This appears to be due to the combination of four factors:

- The nature of the training (e-learning)
- A lack of ongoing support to officers once training has been commenced or completed
- Inadequate group support of DID within the Agency - a lack of promotion of the legislation by middle management and team leaders (eg Inspectors and shift Sergeants)
- The lack of a “champion” to lead by example
Each of these in isolation may not be a problem in its own right but in combination leads to a situation where DID is unlikely to find widespread adoption within the Agency.

The training and capacity for drug testing within WAPOL (both ROFT and DID) was the subject of a Masters thesis by Ryan (2008) who was one of the officers involved with the initial implementation of the program. The thesis broadly concluded that the training and capacity to perform drug testing was adequate but made several recommendations for improvement:

“1. that the identified groups be approached to allow information sessions to be conducted with a view of highlighting the benefits of the DID programme for the detection and processing of drug affected drivers.

2. that the WAPOL e-learning section be approached to produce a video clip showing the DID process in an operational setting that can be attached to the learning programme.

3. that the time and resources to fully build and support the site be provided by the WAPOL State Traffic Co-ordination & Enforcement (STC&E) Division.

4. that the sequence of training roadside drug testing follow the training for breath testing allowing for a logical training sequence for the two processes.

5. that the course remains the same with drug, Cozart and Legal information being included as information comes to hand. For example as cases get dealt with in Court the outcomes can be included for discussion during future courses.

6. that a dedicated folder be setup on the TIR site for Drug Testers. The site is to present answers to Drug Testing FAQ’s, information on court outcomes, changes to Cozart and updating any legal issues.

7. in the long term that the WAPOL begin negotiations with the suppliers to approach the manufacturers to modify the cut off levels to come into line with the Australian Standard.”

Whilst some of these were acted upon and completed to some degree it is clear that the further development and support of the DID component of the program has stagnated.

Some criticisms of the e-learning delivery method from within WAPOL highlight the following:

- The lack of face to face contact means that there is no feedback loop other than the final assessment

- Officers need to make approximately 5 hours available free of distractions to perform the online training – this contrasts with a course where participants attend and are committed to the lesson

Based on his small sample of participants, Ryan (2008) found that the e-learning delivery method was satisfactory. While e-learning may be blamed by many for much of the failure of the adoption of DID within the Agency, it is more important to note that it is the lack of ongoing support that has contributed most to this situation. This would be true of any learning system regardless of the delivery method. Tangible evidence which supports this is highlighted in the figure below.
Figure 1 - Status of online Drug Impaired Driving enrolments (as of 19th February 2009)

Note: SAT = Satisfactorily Completed, NYS = Not Yet Started, Incomplete – course not finalised and assessed

The figure shows officers who have enrolled for the online course. The different modules represent a different group of enrolments; when one module fills up another is created. Trainees in each module receive exactly the same training.

The figure highlights that:

- the numbers satisfactorily completing the course are declining (first column – SAT)
- the numbers starting the course but not finishing it are increasing (third column – Incomplete)
- The middle column represents those who have enrolled but not yet started the course (NYS).

Often there will be a concentration of enrolments following an information session on DID but two thirds of trainees do not complete the training. The lack of incentive to complete the course may relate to the lack of promotion to use the legislation amongst group supervisors and leaders and the consequent perception that knowledge of the legislation is unlikely to be required for daily operational activities.

It is noteworthy that TEG and other traffic police units are not setting a strong example by actively applying this legislation. The encouragement of the use of this legislation amongst these groups will lead to a few successes which should serve to promote the legislation across the agency. Although the negative publicity surrounding one of the early cases may have undermined confidence in the procedure, with adequate support and training there is no reason why the case could not be used as an effective training case study.
6 Conclusions and Recommendations

As a result of the review, the following recommendations are suggested:

R1 ROFT continue in its current format

Overall, ROFT testing has been successfully implemented within WAPOL. Only fine tuning of processes has occurred over the initial period and the integrity of the program has been maintained.

R2 Monitoring of the performance of the Cozart equipment continue

Although problems have been identified in the performance of the Cozart DDS, it does provide a useful apparatus for collecting oral fluid samples suitable for confirmatory laboratory analyses. Furthermore, Cozart are working with the CCWA to address the problems observed in this initial period. Therefore, it is recommended that WAPOL continue using the Cozart DDS subject to the outcome of another review of its performance in 12 months. During this 12 month period, it is recommended that oral fluid samples found to be negative for drugs on the Cozart DDS be analysed by the CCWA. If the new collection kit solves the problem, then there should only be a negligible number of cases in which the Cozart apparatus fails to detect drugs in oral fluid samples that are subsequently found by the CCWA to be positive for drugs above the published Cozart cut-off limits. If the Cozart DDS continues to perform poorly, then its use as a screening instrument will need to be reassessed.

The nature of the implementation of roadside drug testing was such that it was not possible to assess the accuracy of the initial Securac test, meaning that we do not know the proportion of drug positive drivers that were not detected in the first part of the roadside drug testing process. If the (unknown) proportion of drug positive drivers not detected by the initial screening test is further increased by detection failures of the second screening test, then the ability of the roadside drug testing program to deter drug using drivers may be compromised significantly.

R3 There be a review of all penalties applied to impaired driving offences

Although the penalties for driving with a prescribed drug in oral fluid in WA are aligned with low level drink driving offences, as in other states, the fine amounts are comparatively small and a review might be considered. However, it is still appropriate for the penalties to be aligned with those for drink driving, so any increase in fines for drug driving offences should occur within an overall impaired driving penalty review, with drink driving fine amounts also being increased.

There is no evidence to indicate whether the system of court imposed fines imposed by WA or the expiation fee system used in some other states is the preferable means of applying penalties for first offences. The WA system has worked efficiently thus far, so there is no compelling reason for it to be changed. Many would argue that the expiation based systems may diminish the perceived seriousness of the offence when compared to the need to appear in court.

R4 Regular educational briefings should be provided to Magistrates and Prosectors on a regular basis

Regular educational briefings should be provided to Magistrates and Prosectors on a regular basis to ensure that they are familiar with new legislation under the Road Traffic Act.

R5 Additional variables be added to the Drug testing database

There are a small number of additional variables that could be recorded that would significantly aid the evaluation of the enforcement and planning for future operations. These
include gender, vehicle type and if possible age. It would be preferable if data collection could commence with the initial roadside screening test.

R6 Opportunities for enhanced enforcement activities with Main Roads WA Heavy Vehicle Compliance be explored further

There are synergies between MRWA heavy vehicle compliance activities and ROFT. Opportunities to conduct ROFT at regular Main Roads roadblocks should be explored.

R7 Opportunities for enhanced enforcement activities with the use of a smaller drug bus be explored further

An additional smaller drug testing vehicle would deliver a certain amount of flexibility and efficiency that is otherwise not possible with the current large bus. Such a vehicle would allow more targeted ROFT operations and complement activities of the larger ROFT bus.

R8 The current list of prescribed drugs remain unchanged

As roadside drug testing technology is still in its infancy, there are many good reasons to persist with the current three prescribed illicit drugs specified in the legislation. There is also a certain level of consistency across Australia at present in relation to the drugs being tested for. Monitoring of research literature and testing technology should be performed in light of other drugs that are shown to impact upon road safety.

R9 That a general rollout not be performed at this point in time

There are expectations by many that drug testing will be rolled out across the Agency. This review has identified many issues that suggest that a general rollout at this point in time would not be beneficial.

In the first instance, the ability to maintain the integrity of the drug testing would be compromised. There are legitimate concerns about the transportation and storage of test kits and evidentiary samples. Furthermore, the range of environmental and climatic conditions throughout the state increases the risk of sample contamination. It is conceivable that with a general rollout, the rate of operator error will increase as will the risk of inaccurate test results. The database systems that are currently in place are also not capable of supporting the management of a State-wide program.

It is evident that the current program has maintained its integrity due to the controlled environment and high levels of supervision maintained by the BaD Section of WA POL. Should these be compromised, the integrity of the entire program could be placed in jeopardy.

If a rollout be insisted upon, it should be performed in a controlled manner with small groups that receive a high level of supervision and regular consultation with the BaD Section. It would be critical in this case that BaD be adequately resourced to perform this role effectively.

R10 The legislative changes raised by stakeholders be reviewed

Stakeholders have suggested a number of legislative changes that are highlighted in the report. These should be given consideration but, in some cases, there may be alternatives to changing legislation. Further investigation may be needed to identify the most appropriate solution.

R11 DID be more adequately promoted and resourced within the agency

Drug Impaired Driving has not performed as expected and requires additional committed support to prevent it from stalling. The enhancements suggested for the DID training course and mentioned in this report should be considered. Adequate resources need to be
allocated to support the implementation of DID across the agency for officers undertaking the training and middle managers promoting its use in their sections or groups. A focus needs to be made on promoting the legislation in group environments rather than at an individual officer level. A logical starting point for this would be any groups associated with traffic enforcement activities and especially the TEG and BaD.

**R12  Address confusion between Random Oral Fluid Testing and Drug Impaired Driving**

Associated with the previous recommendation, confusion between the application of ROFT and DID needs to be addressed across WAPOL. ROFT and the three drugs it may detect should not be perceived as the only source of drug assessment available for enforcement purposes.

The extent to which the general public perceive a difference between ROFT and DID is unknown. More research would be required to determine whether the distinction was important as it could be that the general deterrence delivered by ROFT is adequate in any case. However, unless DID is applied more in practice, there is a risk that general deterrence may only be effective with the three prescribed illicit drugs rather than any other drugs that could contribute to driving impairment. There may be a case for mass communication strategies to address this should future monitoring highlight this scenario.

**R13  That regular communication be formalised with other jurisdictions**

There would be considerable benefit in formalising communication and meetings between interstate police agencies to discuss experiences with drug testing for road safety. The formalisation is seen as necessary to provide commitment and sustainability to the activity.

**R14  A future crash based evaluation be conducted**

It is still too early to evaluate the impact of the drug testing legislation on road crash outcomes, as sufficient data are not yet available for valid statistical analysis. However, when sufficient time has passed and sufficient data are available, a crash based evaluation should be attempted.
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References


Appendix A – Aide Memoir for Alcohol and Drug Driving
Appendix B – Example of a newspaper advertisement

POLICE WILL SOON TEST FOR DRUG DRIVING.

From 12 October 2007, WA’s drug driving laws will change. The changes are aimed at increasing the detection of drivers that drive after using illicit drugs in order to help reduce the number of people killed and seriously injured on our roads.

Under the new laws WA Police will be able to randomly drug test all drivers for the presence of THC (the active ingredient in cannabis), methamphetamine (‘speed’ or ‘ice’) and MDMA (‘ecstasy’). Police operations will be carried out from the new Alcohol and Drug Bus and will require drivers to provide a saliva sample for drug testing. Anyone testing positive to THC or methamphetamine, including MDMA, will then be charged and prosecuted through the courts.

WA Police will also have the ability to stop any driver suspected of driving while impaired by any drug and request that the driver undergo assessment and provide a blood sample for further testing. Drivers found to be impaired by drugs will be charged and prosecuted through the courts.

For full details on the new drug driving laws and drug testing procedures visit www.officeofroadsafety.wa.gov.au