

Rural drink-drive enforcement in the Southern Police District July 2009

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Contributors

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Abbreviations and acronyms

ACC	Accident Compensation Corporation	MBT	Mobile breath test(ing)
BAC	Blood alcohol concentration	MoT	Ministry of Transport
CAS	Crash Analysis System	NSC	National Safety Council (United States)
CBT	Compulsory breath test(ing)	NZTA	New Zealand Transport Agency
CS	Case-study	RBT	Random breath test(ing)
EBA	Excess breath alcohol	SD	Southern District
GDB	General Duties Branch	STU	Strategic Traffic Unit
HP	Highway Patrol	TAG	Traffic alcohol group
LTA	Land Transport Act 1998	TLA	Territorial local authority

Contents

Executive summary	7
Abstract	8
1 Introduction	9
1.1 The legal definition of drink-driving in New Zealand.....	9
1.2 The drink-drive testing procedure	9
1.3 Drink-driving: the problem in New Zealand.....	10
1.4 Rural drink-driving: the problem in New Zealand.....	11
1.5 The rural drink-drive problem in the Southern Police District.....	12
1.6 The current study.....	13
1.7 Structure of the report	13
2 Methodology	14
2.1 Introduction	14
2.2 A case-study approach to rural drink-driving	14
2.3 Study participants	15
2.4 Data collection methods.....	15
2.4.1 Interviews	16
2.4.2 Focus groups.....	16
2.4.3 Questionnaires	16
2.5 Data analysis.....	17
2.6 Ethics	17
2.7 Methodological issue: defining the rural.....	17
3 The nature of the rural drink-driving issue	19
3.1 Introduction	19
3.2 Rural drink-driving in Southland – district practitioner perspectives	19
3.3 Rural drink-driving in the case-study area – community perspectives.....	20
3.4 The limits of community knowledge.....	22
3.5 Who is the drink-driver?.....	23
3.6 Explaining the incidence of rural drink-driving	23
3.7 Explaining the rural drink-drive picture – community perspectives	24
4 Policing rural drink-driving	28
4.1 Introduction	28
4.2 Responding to the incidence of drink-driving	28
4.3 General deterrence enforcement	28
4.4 Drink-drive enforcement in New Zealand	29
4.5 Enforcing against rural drink-driving in the Southern Police District	29
4.6 Local police resources and drink-drive enforcement	30
4.7 Road policing versus general policing: expending limited resources	33
4.8 Living and policing in a rural community.....	34
4.9 Competing styles: can community and deterrence policing co-exist?.....	36
4.10 External police resources and drink-drive enforcement	37
4.11 The effects of drink-drive enforcement strategies on external policing.....	38

4.12	Policing as a deterrent for rural drink-drivers	40
4.13	Policing rural drink-driving: what works?	42
5	Conclusions	44
5.1	The nature of the rural drink-drive issue.....	44
5.2	Policing rural drink-driving	45
5.3	Future directions for policing rural drink-driving: improved enforcement?.....	47
5.4	Future directions for policing rural drink-driving: improved partnerships?.....	48
5.5	The way ahead	49
6	References	50

Executive summary

In 2008, the New Zealand Police (NZ Police) conducted research within a rural community in the Southern Police District, to examine the issue of rural drink-driving. This study had two primary objectives. First, the study sought to consider the problem of rural drink-driving, as understood by a number of local community and district-level stakeholders in a case-study location within the Southern Police District. Second, the study sought to examine stakeholder perceptions of the effectiveness of police countermeasures in responding to the problem of rural drink-driving in the case-study area. To address the above issues, a mixed method qualitative case-study approach was adopted.

The current study builds upon a previous study conducted by NZ Police, *The influence of rural drink-drive enforcement in Southern Town* (Cross et al 2009). This previous study also examined the influence of enforcement on the incidence of rural drink-driving, focusing on a specific rural community – referred to as *Southern Town* – also in the Southern Police District. Collectively, these reports will help provide a more comprehensive evidence-base on which to improve rural road user safety, through more effective rural drink-drive enforcement.

While district-level statistics indicate that there is a rural drink-drive problem in the Southern Police District, at the case-study level there were variable levels of understanding as to whether there was a rural drink-drive problem. For instance, respondents reported minimal levels of drink-driving and associated drink-drive crashes within the case-study area over the last few years. Any recognised rural drink-drive problem within this area was understood in terms of 'outsiders' and/or with small numbers of local offenders who were well known to local officers.

Although there was evidence to suggest that the local drink-drive problem went beyond a small handful of individuals, this reluctance to accept rural drink-driving as a problem had a number of implications for enforcement efforts. For instance, respondents believed that limited local police resources should be directed to more important 'crime' issues, rather than to the enforcement of a small drink-drive problem. Thus, there were generally low levels of community support for significant drink-drive enforcement in the area (and local officers afforded it a low priority). Therefore, attempts to increase this enforcement (in line with the broader NZ Police strategy of increasing the focus on rural drink-driving) is unlikely to immediately meet with considerable support from local residents in this area.

According to respondents, numerous factors limited the effectiveness of current drink-drive enforcement in reducing any rural drink-drive problem. Issues of limited resourcing (particularly at the local level), together with the large geographical areas of coverage, were reported to reduce the extent and effectiveness of both local and external enforcement. Similarly, an over-reliance on a compulsory breath testing (CBT) enforcement style in rural areas was considered problematic, given the lack of traffic volumes in rural areas and the associated inattention to more remote areas outside of rural townships. Certainly, respondents expressed a preference for a more community-policing oriented response to drink-driving, such as talking with hotel patrons rather than sitting outside waiting to detect offenders.

Alongside the problems identified above, a common observation made by participants in this study (however accurate) was the lack of sustained or concerted enforcement efforts, by both local and external police. When enforcement was conducted in the case-study area, it tended to follow a predictable pattern in terms of when, where and for how long it was conducted. This noticeable lack of consistent and effective enforcement served to reduce residents' overall perceived detection risk within the case-study area, particularly in areas outside the main township.

This study has identified a number of areas where NZ Police response to drink-driving could be improved. One possible area is the need for more effective working practices and communication between different policing groups. In particular, the study suggests that there is considerable room for enhancing the relationship between local and external officers, which may serve to increase the effectiveness of enforcement in the case-study area. Similarly, respondents expressed the need for police to move beyond their enforcement mandate, and become more involved in collaborative efforts with community groups and broader educational and promotional initiatives. However, it is important to recognise that the rural drink-driving issue is not solely a police problem, and that other agencies and rural communities themselves (including publicans) play an equally important role in addressing the issue.

While there are certainly opportunities for improving the current police response to rural drink-driving – both in the case-study area and more broadly – it is important to recognise that police constantly seek to take advantage of opportunities to build on their knowledge, and engage in assessing the efficiency and effectiveness of what they do at practitioner levels. A key finding of this report is the need to ensure that rigorous evaluation of any new NZ Police initiatives occurs, in order to determine their effectiveness. Such evaluations should consider a number of factors, including the influence of enforcement on drivers' risk perceptions and trends in detection rates. Most importantly, any enforcement initiative should be evaluated in terms of its potential influence on crash rates, given that this is the primary purpose of drink-drive enforcement.

Abstract

Drink-driving is a serious road safety issue, particularly in the rural environment, with a significant number of road users killed or injured on rural roads annually. However, up until recently, the issue of rural drink-driving has been overlooked, by both practitioners and researchers alike. In order to begin addressing this knowledge gap, in 2008, the New Zealand Police carried out a qualitative case-study within a rural community in the Southern Police District. The main purpose of this study was to consider the problem of rural drink-driving, as understood by various local and district-level stakeholders. The study also examined stakeholder perceptions around the effectiveness of police countermeasures in responding to this problem. This study found that stakeholders had diverse understandings of the drink-drive problem within the case-study area. While police enforcement was understood to play an important role in addressing rural drink-driving, for some stakeholders there was no community-wide problem that warranted the investment of significant police resources. In terms of this enforcement's effectiveness, stakeholders identified numerous barriers which reduced the ability of enforcement to change drink-driving behaviours. In particular, local police resourcing, enforcement predictability and the need for a more holistic approach to the problem, were identified as key issues.

1 Introduction

1.1 The legal definition of drink-driving in New Zealand

Under Section 11 of the 1998 Land Transport Act (LTA), all drivers are prohibited from exceeding the legal breath/blood alcohol limits. For drivers over the age of 20, the legal limit is 400 micrograms of alcohol per litre of breath. This is ascertained by an evidential breath test undertaken under section 69 of the LTA, or 80 milligrams of alcohol per 100 millilitres of blood undertaken under section 72 or 73 of the LTA.

If the person is under the age of 20, they must not exceed 150 micrograms of alcohol per litre of breath. This is ascertained by an evidential breath test undertaken under section 69 of the LTA, or 30 milligrams of alcohol per 100 millilitres of blood undertaken under section 72 or 73 of the LTA.

1.2 The drink-drive testing procedure

All drivers (and riders) in New Zealand can be subjected to a breath test, either through mobile stops or checkpoint operations. Irrespective of how drivers are initially subjected to the drink-drive testing procedure, the process remains the same.

First, all drivers are required to undergo a passive breath test, using a 'sniffer' device, which tests whether *any* alcohol is present in the driver's system. If the sniffer returns a positive test for the presence of alcohol, the driver is then required to undergo a further test. This subsequent test involves blowing into the same sniffer device (which now has a plastic mouthpiece attached), and a breath alcohol concentration (BAC) level is determined. If the BAC level is above the legal limit for the driver ('fail general' or 'fail youth' for drivers under 20), they are then required to accompany¹ the officer(s) for the purpose of undergoing an evidential breath or blood test (or both)².

The evidential breath test involves the driver providing two separate samples of breath into the machine, with the lowest recorded sample used as the evidential test result in court (if the recorded level is above the legal BAC limit). Once advised of a positive test result, drivers are then given 10 minutes to decide whether they want to request a blood test. If a blood test is requested³ and the analysed blood records a BAC level over the legal limit, that result then constitutes the evidence for

¹ It is important to note the significant distances rural officers sometimes have to travel to get to a station with the necessary testing equipment. This can have practical implications for BAC testing levels (as well as police resources required). For instance, according to Environmental Science and Research (ESR), the research indicates that in the majority of cases, the blood alcohol level will fall from the time of apprehension to the time of blood sampling. Although the rate will vary according to the individual, it is likely to be approximately within the range of 15 to 25 milligrams per 100 millilitres of blood per hour. There are, however, exceptions to this rule. If for instance, the offender has been recently consuming alcohol, the alcohol is still likely to be absorbed from the stomach into the blood at the time of apprehension. However, the data strongly suggest that these cases constitute a small proportion of the total number of cases – see for example, Jones 1990 (ESR, pers comms).

² If an offender returns a positive evidential breath test, he/she is subject to either a forbidden to drive order, or a mandatory suspension order, depending on the BAC level and/or past convictions.

³ If an evidential breath test cannot be taken because a device is not readily available at the place to which the person has accompanied the officer, under section 69 of the LTA 1998, the officer can require a blood specimen to be taken. This is particularly relevant in some rural areas where no evidential device is available.

court. If a blood sample is not requested following a positive breath test, then the offender is issued a summons to appear in court for an excess breath alcohol (EBA) offence.

1.3 Drink-driving: the problem in New Zealand

Research has consistently demonstrated that alcohol detrimentally affects driving performance, and is one of the major contributing factors associated with road crashes (MoT 2008c). From the 1960s onwards, a large body of research has shown that alcohol consumption (even at levels well below current New Zealand limits) impairs a person's driving ability, and that essential skills (such as vision, alertness, steering, braking and processing of information) are adversely affected by alcohol consumption (Moskowitz and Fiorentino 2000; Chamberlain and Soloman 2002; Fell and Voas 2006; Global Road Safety Partnership 2007; Institute of Alcohol Studies 2007). The presence of alcohol, even at very minimal levels, can impair a driver's ability to navigate the road system safely, and significantly increases the risk of a motor vehicle crash. Indeed, this is borne out by the fact that approximately 30 percent of all fatal crashes in New Zealand record alcohol as a contributing factor⁴ (for example, see MoT 2008c). Thus, drink-driving is one of the 'fatal five'⁵ contributors to road trauma, which requires an ongoing concerted effort by the NZ Police to deter and detect drink-drivers on New Zealand roads.

When crashes of all severities are considered, the involvement of alcohol is even more significant. For instance, the Ministry of Transport's Crash Analysis System (CAS) records that between 2004–2006, there were 4494 alcohol-related crashes⁶, which resulted in 363 deaths, 1605 serious injuries and 4724 minor injuries⁷. When the social cost⁸ of these crashes is considered, it is worth noting that in

⁴ Alcohol/drugs is listed as a contributing factor when a driver's blood or breath alcohol level is above the legal limit, if drugs are proved to be in the driver's blood, or when the attending officer suspects that alcohol/drug consumption contributed to the crash (MoT 2008c).

⁵ The 'fatal five' are: speeding, drink/drugged driving, (lack of) restraints (safety belts), dangerous/careless driving, and high-risk drivers (*New Zealand Police Road Policing Strategy to 2010*).

⁶ Alcohol-related crashes refer to crashes where the attending officer suspects that the driver has consumed alcohol. Accordingly, these crashes do not necessarily involve drivers with illegal blood alcohol levels. However, in over half of these crashes, a BAC value (either blood alcohol or breath alcohol converted to a blood alcohol equivalent) is subsequently recorded. For instance, between 2004–2006, of the 1815 fatal, serious and minor injury crashes that involved a suspected drink-driver who was at fault, 964 (53 percent) of those drivers recorded an illegal BAC or refused to provide a test sample. With respect to drivers killed in fatal crashes, in the majority of cases a blood test is taken to ascertain a BAC level (if any). In 2007, 81% of drivers/riders who were killed in road crashes were given a blood test, with 29 percent of those tested recording a blood alcohol level above the legal limit. It is important to note, however, that while drivers may not record an illegal BAC level, it does not preclude the involvement of alcohol as a contributory factor to the crash. For example, a number of studies which have evaluated the benefits of reducing legal BAC limits from 0.08 to 0.05, have concluded that reducing the legal BAC level can lead to significant reductions in crashes (see for example, Fell and Voas 2006). This is because even at low concentrations, alcohol can adversely affect driving performance. As Chamberlain and Solomon (2002, p4) comment, 'Both laboratory and field studies indicate that important driving related skills are adversely affected by relatively small amounts of alcohol. The affected skills include vision, steering, braking, vigilance and, more importantly, information processing and divided attention tasks. These studies have never been seriously challenged, suggesting a reasonable consensus among experts about the adverse effects of small and moderate amounts of alcohol on driving-related skills and abilities'.

⁷ Fatal, serious, and minor injury crashes are officially defined as follows: Fatal: Injuries that result in death within 30 days of a crash. Serious: Fractures, concussion, internal injuries, crushing, severe cuts and lacerations, severe general shock necessitating medical treatment, and any injury involving removal to and detention in hospital. Minor:

2006 alone, alcohol-related crashes were associated with \$725 million in social costs. This accounted for about 20 percent of all social costs associated with injury crashes in 2006 (MoT 2008a).

While the number of drivers detected for drink-driving is clearly a problem for police – in that it gives some indication of the extent of this dangerous (and illegal) driving behaviour occurring on New Zealand roads – from a road safety perspective, it is the associated crash risk (and accompanying social cost) that makes drink-driving a significant social problem.

1.4 Rural drink-driving: the problem in New Zealand

While drink-driving is a significant road safety issue across the entire road network, it is a particular problem on rural roads (any road over 70km/h), given the frequency and severity of these crashes. For example, between 2004–2006, 66 percent of all fatalities resulting from alcohol-related crashes⁹ were sustained on rural roads. Similarly, a 1992 Land Transport Safety Authority study (cited in Blyth et al 1995) found that 66 percent of fatalities and 39 percent of alcohol-related injury crashes occurred in rural areas (with a speed limit of 100km/h).

Alcohol-related crashes which occur on rural roads contribute significantly to deaths and injuries sustained annually. For instance, despite urban alcohol-related crashes accounting for 25 percent more crashes than rural alcohol-related crashes between 2004–2006, the outcomes of rural crashes are often more significant. For example, of the 2568 urban alcohol-related crashes which occurred between 2004–2006, 120 deaths and 771 serious injuries were sustained. In comparison (and despite lower crash rates), of the 1926 alcohol-related crashes which occurred on rural roads, there were 242 fatalities and 834 serious injuries sustained.¹⁰ In short, between 2004–2006, 4.7 percent of all urban alcohol-related crashes resulted in a fatality, whereas 13 percent of all rural alcohol-related crashes resulted in a death.

When social costs incurred as a result of alcohol-related crashes are compared for both urban and rural roads, this differentiation remains marked. For instance, the social cost of an urban fatal crash is estimated to be \$3,635,000, compared to \$4,199,000 for a rural fatal crash (MoT 2008b). Therefore, on this basis, between 2004–2006, alcohol-related crashes which occurred on rural roads cost the taxpayer over \$1 billion in social costs.

Injuries which are not serious but which require first aid, or cause discomfort or pain to the person injured, eg sprains and bruises (LTNZ 2008c).

⁸ According to MoT, the social cost of a road crash or a road injury is defined as 'the total cost that occurs as a result of the road crash or the injury'. This includes the following components: loss of life and life quality, loss of output due to temporary incapacitation, medical costs, legal costs and property damage costs (MoT 2008c). See *The social cost of road crashes and injuries, June 2004 update* (MoT 2008b) for details on how these costs are calculated. It is important to note that there have been some methodological critiques about how social costs are calculated, particularly in terms of the variables considered. As a starting point, see Risbey et al 2007.

⁹ Between 2004–2006, alcohol-related crashes resulted in 335 fatalities, with 220 fatalities recorded in crashes which occurred on rural roads. Of the 188 fatal alcohol-related crashes which occurred on rural roads during this period, 122 (65 percent) involved an at-fault driver who was either over the legal BAC limit, or refused to provide a test sample. It is also worth noting, that 72 percent of all fatal crashes between 2004–2006 were recorded as having occurred on rural roads, illustrating that rural roads are problematic in terms of crashes.

¹⁰ CAS statistics 2008.

There are a number of factors which make drink-driving on rural roads particularly problematic. It is widely acknowledged that the rural road system typically has poorer road design and reduced engineering features, which combined with greater vehicle speeds (typically 100km/h open road conditions), means less room for driver error. When crashes do occur on such roads, there is a greater potential for deaths and serious injuries to be sustained, particularly given the greater overall vehicle speeds. Alongside this, the limited availability of medical and emergency services in rural areas may increase the risk of fatalities, due to factors such as response times.

While there has been a significant body of research developed around urban drink-driving, the issue of rural drink-driving has been traditionally overlooked – by both researchers and practitioners alike. As Barclay et al argue (2004, p7), scholarly interest has traditionally focused on urban areas and issues to the exclusion of research on crime in rural communities. This is clearly observable within the field of road safety research, where interest in rural issues is relatively new (CARRS-Q 2008, p1), and is therefore in need of further development (Buttle 2006, p5). This is also true in relation to drink-driving research. For instance, as Fogarty (1995 p9) has stated, 'there is a paucity of published or researched information available on drink-driving in rural New Zealand'. More than 10 years on from these comments, this gap in knowledge remains evident, although it is currently being addressed by NZ Police among others.

In more recent years a growing body of international research and data has identified rural areas as key risk sites for driver crashes, particularly for more serious road trauma (Martz 1994, p16). For instance, in June 2008 the United States National Safety Council (NSC) noted that rural road safety was 'a significant national problem', accounting for 55 percent of annual highway fatalities. Moreover, the fatality rate for rural crashes was reported to be twice that of urban crashes (NSC 2008). Likewise, Henderson (2004) observed that six out of 10 fatal crashes took place in 'rural regions' of Australia, and that rural dwellers in New South Wales were, on average, 50 percent more likely to be involved in a fatal collision than their urban counterparts. A similar picture emerges from within the New Zealand context, where various scholars have observed the higher levels of crash risk associated with rural roads.

As statistical accounts suggest, proportionally high crash and injury rates make rural areas of New Zealand problematic from a road safety and policing perspective. Consequently, these locations are a particular area of concern for the NZ Police. These concerns are exacerbated by the fact that rural communities have traditionally been difficult places to police for a variety of reasons, including the allocation of staff resources to lower population areas, or the environment in which this policing takes place. Nevertheless, enforcement plays a crucial role in targeting and responding to illegal road-user behaviours and in promoting compliance. Indeed, on rural sections of the road network, where speeds are comparatively high and engineering countermeasures typically less developed compared with urban areas, it is particularly important to ensure that enforcement strategies are well directed and effective.

1.5 The rural drink-drive problem in the Southern Police District

At the level of Southern Police District¹¹ specifically, where this study is based, the majority of vehicle crashes occur on roads defined as rural. In 2006 for example, 83 percent of all reported crashes in Southland territorial local authority (TLA) took place on rural roads, leading to six fatalities (all of the fatalities in this region), 49 serious injuries (80 percent of the total), and 190 minor injuries (89 percent

¹¹This district is comprised of the territorial local authorities of Southland and Central Otago.

of all minor injuries) (LTNZ 2007b). Similarly, within the Central Otago TLA the majority of reported crashes (68 percent) occurred on rural roads, accounting for one fatal crash (100 percent of the total number), 22 serious injury crashes (or 79 percent) and 71 minor injuries (82 percent) (LTNZ 2007a). Within this picture, rural alcohol-related crashes are notable. For instance, in 2006, within the Central Otago District TLA, 23 percent of injury crashes on local rural roads and nine percent on rural transit roads involved drivers over the alcohol limit (LTNZ 2007a). Furthermore, in Southland District TLA these proportions were 10 percent and nine percent respectively (LTNZ 2007b).

Consequently, drink-driving and rural drink-driving remain central facets of road policing concern; indeed, as set out in the *Road Policing Strategy to 2010*, rural drink-driving is considered to be in need of an *increasing focus* by police in its efforts to reduce the proportion of alcohol-related road trauma (NZ Police 2008a, p11).

1.6 The current study

The main purpose of this study, which was conducted in 2008, is two-fold: first, to consider the problem of rural drink-driving, as understood by a number of local community and police stakeholders in a case-study location within the Southern Police District, and; second, to examine stakeholder perceptions of the effectiveness of police countermeasures in responding to this problem. In addressing these issues, this study contributes to the New Zealand Transport Agency's (NZTA) objectives and goals of improving public safety and personal security through improvements to the land transport environment. This is achieved through understanding and addressing behaviour, and improving enforcement strategies.

The current study builds upon a previous study conducted by NZ Police, *The influence of rural drink-drive enforcement in Southern Town* (Cross et al 2009). This study examined the influence that enforcement had had on the incidence of drink-driving in a specific rural community within the Southern Police District, referred to as *Southern Town*. Alongside this earlier report, the current study will provide a more comprehensive evidence base from which to develop enforcement initiatives and policies. It will also assist in improving road user safety through more effective policing of rural drink-driving.

1.7 Structure of the report¹²

This report is structured as follows:

- Chapter two provides an outline of the methodology, including the approach taken, and data collection methods used.
- Chapter three outlines the findings on perceptions about the nature and extent of rural drink-driving within the case-study area.
- Chapter four examines the research findings on police responses to rural drink-driving.
- Chapter five summarises the main conclusions of the study.

¹² Please note that there is no specific literature review section in this report. Rather, both national and international literature has been referred to within chapters three and four.

2 Methodology

2.1 Introduction

Current knowledge of the rural drink-drive issue within New Zealand is heavily informed by quantitative data. For instance, within the New Zealand public sector and road safety environments, frequently made claims about 'the rural drink-drive problem' are predominantly founded on statistical data. Leaving aside definitional problems with this data – including its use of network speed limits to define the rural (any road with a speed limit over 70km/h) and urban (any road with a speed limit less than 70km/h) – this provides only a partial and outcome-focused picture of the issue of rural drink-driving and responses to it.

Beneath this quantitative data is a wealth of important qualitative learnings that, as yet, have only been lightly explored by researchers. Such qualitative information has the potential to considerably illuminate this subject and provide deeper understandings on which future responses might be built. Recognising this knowledge deficit, the current study builds on the small amount of existing qualitative knowledge on the issue of rural drink-driving and responses (such as enforcement) to it (for example, see Cross et al 2009).

2.2 A case-study approach to rural drink-driving

The current project was framed around a case-study approach and involved undertaking detailed research within a localised context.

The research can be understood as a case-study at two levels: geographically and demographically. The research focused on a specific location (in this case a rural locality) and research contacts were drawn from this wider geographical area. This helped ensure that key stakeholders and individuals involved (in various ways) in responding to rural drink-driving, but who were not necessarily based within that area, were included. For example, alongside local enforcement efforts, district-level staff from various specialist teams contribute to the enforcement picture as well. Similarly, educative efforts to respond to rural drink-driving (including those that specifically target the local level) are often driven from groups outside of the immediate local area.

The adoption of this approach had a number of advantages. In particular, it provided a grounded and defined context, allowing the research to explore people's experiences of rural drink-driving and responses to it. Furthermore, by focusing in detail on a small area, the approach enabled deep and diverse understandings of rural drink-driving issues to be ascertained. The study also provided a testing ground for examining broader research findings on rural drink-driving with a specific local New Zealand context. Finally, for practical reasons (associated with time and resources) a case-study approach provided a defined set of parameters in which the research could be achieved.

The case-study site was based in the Southern Police District, because it is a predominantly rural area, and one in which a high proportion of drink-drive crashes are associated with the rural locale. Furthermore, this district has been proactive in responding more broadly to rural drink-driving, through mechanisms such as host responsibility and licensing arrangements, alongside enhanced enforcement efforts. Consequently, this district provided a good context in which to situate the present study, and one where public and practitioner experience would generate useful knowledge of the issues. Finally, the study was an attempt to expand knowledge gained through previous research

conducted by the NZ Police on rural drink-drive enforcement within another area of the Southern Police District (Cross et al 2009). As such, it was necessary to locate the research in this district.

With respect to the specific site within Southern District, this area was selected for several reasons, including its 'rural' nature – defined through its reliance on agrarian industry, and small and dispersed population of fewer than 5000 residents. Additionally, the chosen locale had sufficient facilities, local services and community groups to support a study of this nature; and finally, the site was selected partly due to its relative proximity to the area of the abovementioned previous case-study, on which this research sought to build on.

2.3 Study participants

As noted above, the purpose of this study was to explore (through qualitative research) the issue and problem of drink-driving as understood by stakeholder and interest groups. It also sought to ascertain stakeholder's perceptions about the effectiveness of current strategies (particularly police enforcement) in responding to this issue.

In order to gather information for this study, key stakeholders (groups and individuals) from across the case-study community were invited to participate. Respondents included a number of local publicans and hotel staff, local police, emergency services teams and residents. Participants also included local community officials, as well as social groups and clubs, who were actively involved in the locale, and who drew members from within (and beyond) the case-study area. Collectively, the study included a wide range of individuals drawn from across the community and with a variety of perspectives on drink-driving.

In addition to those within the case-study area, a range of district-level police and practitioners involved in road safety and/or alcohol and drink-driving issues, were included. Despite not living in the selected case-study area, the work of many of these individuals brought them into the study area in one way or another – such as external enforcement teams and educational programmes.

Together these district and local-level respondents comprised a diverse range of perspectives through which to examine issues around the nature and extent of rural drink-driving, and responses to it. In total, approximately 75 individuals were involved in the study.

In representing the views of respondents within the findings, and to protect the anonymity of individuals, they have been grouped into generic categories, such as 'publican', 'police', 'official', or 'resident' to denote the nature of their background. Individuals from the various social and sports clubs have been labelled simply as residents, as this was the basis upon which they participated in the research. Furthermore, in order to distinguish between those permanently and temporarily located within the case-study area, the comments of the former have been premised with a CS (case study) prefix within the report, while the latter have been labelled with a SD (Southern District) prefix.

2.4 Data collection methods

The research utilised numerous qualitative methods of data collection, in order to provide detailed and diverse knowledge of the rural drink-driving issue. Focus groups and one-to-one interviews were the primary methods adopted by this study, although these were supplemented by other information sources, which are briefly outlined below.

2.4.1 Interviews

Interviews constituted one of the main data collection tools used within this research. Once the case-study area had been selected, key stakeholder groups were identified using a snowballing technique, and were invited to participate in the study. In total, 13 interviews were conducted with publicans and those working in the alcohol industry, local police and individuals involved in local emergency services. Additionally, interviews were undertaken with a small number of district-level practitioners whose work focused on road safety or alcohol issues, and who had some association with rural drink-driving issues.

Interviews were semi-structured in nature. The principal advantage of this design was that it enabled a number of key issues (identified through the research questions and informed by the conclusions of other studies), to be explored. Semi-structured interviews were also flexible enough to encourage dialogue and allow discussion to be driven by the comments of respondents (Noakes and Wincup 2004). In order to maximise opportunities for interviewees to discuss issues that they considered important, interview schedules were loosely structured around a set of questions, and the comments of respondents were then followed up through further probing. To capture the varying types of knowledge held by different stakeholders, interview schedules differed slightly.

2.4.2 Focus groups

Alongside the interviews, six focus groups were conducted with various community organisations and committees within the case-study area. Respondents included rural community organisations, emergency services, police, sports clubs and educative bodies. The membership of these groups incorporated a wide range of rural residents of various ages, as well as public employees and officials representing organisations with an interest in alcohol and road safety issues.

As with the interviews, focus groups were loosely structured around key issues, but were allowed to flow according to the comments and views of respondents. Three of the sessions were conducted at various locations within the case-study area, and involved those who lived and worked in and around this area. The remaining three involved district-level groups of practitioners and were conducted outside of the case-study location.

2.4.3 Questionnaires

In addition to the interviews and focus groups, open-ended questionnaires (essentially a condensed version of the interview schedules) were distributed to respondents on two occasions. First, some members of an organisation were unable to attend a focus group and so were given questionnaires. On the second occasion, the size of the community group (about 70 individuals) precluded individual interviewing or focus group work to be conducted. Instead, the researcher was invited to speak to members in an informal environment and questionnaires (provided with stamped self-addressed envelopes) were distributed.

In total, approximately 75 surveys were distributed to local residents within the case-study area, with approximately 20 completed and returned. This low response rate was partly associated with the need to rely on gatekeepers¹³ to distribute the survey to all members (which was found to be problematic). Additionally, low response rates are not untypical, with even well-administered surveys often only

¹³ Gatekeepers are those individuals who control access to the information which the researcher seeks (May 2001), such as community leaders or those with significant influence within the community (Stringer 2007).

getting a response rate in the region of 60–75 percent (Bartley 2003). However, given the focus of qualitative research on examining a range of opinions rather than gauging their representativeness, this low response rate is not as problematic as would be the case in a quantitative study. Consequently, the returned surveys were valuable insofar as they provided further qualitative views from local residents that may have been otherwise overlooked.

2.5 Data analysis

During the fieldwork process, research respondents were asked whether they would consent to the recording of interviews and focus groups and in most cases this consent was given. One respondent did not wish to have his/her interview recorded, so notes were taken throughout and typed up shortly after the meeting. Following the completion of the fieldwork, all recorded data was transcribed and the data was thematically analysed with the aid of NVivo 8 software.

2.6 Ethics

This study followed good ethical practice guidelines. Involvement in the project was voluntary and participants were informed about the nature of the work and subsequent use of collected data prior to any data collection. Respondents were provided with a brief summary of the project, and asked to read and sign a consent form agreeing to participate in the research. Respondents were also assured anonymity and this has been complied with throughout the report, with names identifying places and individuals removed.

2.7 Methodological issue: defining the rural

An important (but small) part of the debate around rural research has focused on definitional issues as to what constitutes 'rural'. Attempts to differentiate between urban and rural through simple numerical calculations associated with population size or demographics, have been criticised for being urban-centric and/or shallow in their ability to capture the true meaning of rural. As Buttle (2006) argues, terms such as 'rural' or 'countryside' are complex socially constructed concepts that defy neat or universal classification. They may also change across time and space, and are often influenced by stereotypes. Thus, some scholars have argued that an acceptable universal definition of 'rural' is not achievable (partly because there is no universal rural community). Consequently, areas of study should instead be considered and explained on a case-by-case basis, or at least augmented with detailed descriptions of the local rural area under consideration.

Criticisms about unclear or unhelpful definitions of 'rural' are certainly not unwarranted, and such definitional limitations are clearly highlighted in relation to the conceptualisation of, and knowledge about, rural and urban crashes within current New Zealand road-safety debates. Here, rural areas are officially defined through the characteristics of the road system, with a speed limit above 70km/h being considered a rural road. As Fogarty (1995, pp 2–3) has argued, this classification confuses the rural/urban divide, since under this definition:

Roads in the middle of urban centres can be classified as rural, and vice versa ... there are many stretches of road within cities that have speed limits higher than 70km/h. In the Wellington area, for example, crashes occurring on the Ngauranga Gorge, on the Wainuiomata hill, or on the road to the airport would all be defined as rural. None of these

roads could be described as rural in the more commonly used sense of the word [whatever this may be].

Given this official definition of rural areas, and the known relationship between speed and crash severity, it should not be surprising that rural roads are more likely to be responsible for higher proportions of fatality and serious injury crashes (including those which are alcohol-related). However, whether this information can present an accurate picture of 'the rural area', and therefore of the rural drink-driving environment, is questionable. Furthermore, this, in turn, may mean that local understandings and perceptions of rural drink-driving, which are based on more commonsense or everyday conceptions of the 'rural', may differ markedly from the official picture.

3 The nature of the rural drink-driving issue

3.1 Introduction

Up until 2001, the case-study area – among other rural towns in the Southern Police District (and across New Zealand more generally) – traditionally received low levels of drink-drive enforcement. Any enforcement that did occur in the area was often conducted by local officers on an ad hoc and intermittent basis. Consequently, case-study residents (like residents in other rural areas) have traditionally perceived a low risk of being detected for drink-driving, which in turn has been reinforced by low detection rates. A key strength of increased enforcement, therefore, is its ability to increase the perceived and actual risk of being caught drink-driving.

From 2002 onwards, the Southern Police District introduced a specialised rural alcohol enforcement programme across the district. The purpose of this programme was to increase levels of drink-drive enforcement in rural areas, and to sustain this enforcement over time. In turn, it was anticipated that increased enforcement activity would increase residents' perceptions of the detection risk, thereby discouraging the incidence of drink-driving, both within the case-study area, and across the district more widely.

The purpose of this chapter is to explore the nature of rural drink-driving in the case-study area (and the Southern Police District more widely), from the perspective of both district practitioners and case-study residents. This discussion includes an examination of what factors inform such perceptions, commonly identified characteristics of the rural drink-driver, and understandings of why rural people do and do not drink and drive.

3.2 Rural drink-driving in Southland – district practitioner perspectives

This study incorporated a number of Southland district/TLA-level practitioners, whose work in the fields of alcohol misuse, public health and road safety made them key stakeholders. Drawing on a mixture of personal knowledge and alcohol-related crash statistics from across Southland TLAs, these practitioners universally stated that drink-driving was a particular problem within the district's rural areas. Furthermore, they argued that this problem had been long standing and was resistant to change efforts.

As one practitioner noted, 'There wouldn't be a hotel in Southland that we could go to on any given night [where] you wouldn't see someone leave the pub after drinking and get into his vehicle and drive' (SD practitioner). This respondent stated that in light of the continued persistence of drink-driving in and around rural areas (as represented within statistical accounts), serious and fatal alcohol-related crashes were historically more notable on rural roads. These, in turn, demonstrated that rural areas were a key part of the Southland drink-drive picture.

This situation was also reiterated by a number of Southern Police District staff, working in the areas of alcohol and road policing. These participants stated that despite organisational efforts to increase and improve enforcement delivery, the presence of drink-driving in rural areas remained. As one officer argued, while there is a drink-drive problem in the Southland rural area, increased enforcement has not resulted in a subsequent decrease in apprehensions (SD police). Similarly, as another stated, 'I do

think we have a problem with drink-driving in the south. As a rural cop in [X area] for the last six years, I have never had a problem getting a drink-driver every weekend (SD police).¹⁴

3.3 Rural drink-driving in the case-study area – community perspectives

While district-level practitioners universally perceived a rural drink-drive problem within the Southland district, at a community level, respondents perceived the extent and nature of rural drink-driving differently. While some of these perceptions were informed by actual observations, others were not.

A number of respondents claimed that there was evidence of drink-driving within the case-study area. For example, some respondents claimed that the existence of drink-driving was apparent within local court notices and newspaper reports, which published the names of known offenders from the area. Additionally, it was pointed out that the small and close-knit nature of the case-study community environment made drink-driving practices obvious. As one respondent commented, 'By living in this small community and knowing most people you soon get to know their habits' (CS resident). Other respondents, particularly publicans, also claimed to have directly observed cases of drink-driving within the case-study area. As one stated, 'There is an element of it [drink-driving] ... you see a fair bit of it in here [in this hotel]. You try to stop it ... [but] a lot of the time it doesn't actually work that well' (CS publican).

Most case-study respondents recognised the existence of some drink-driving in and around the area. Nevertheless, many community groups and individuals argued that drink-driving was either not a particularly significant problem within the area, was less of an issue than it was perceived to be, and/or was something that had declined over time. For example, in commenting on their knowledge of local drink-driving, a number of respondents claimed that there was 'not much, but some', or 'nothing in excess', that they were 'not aware of it', or that they were 'not sure it is a problem' (CS residents).

For many respondents, the degree to which a significant or serious drink-drive problem existed was questionable. In justifying these claims, locals typically argued that there were very few alcohol-related crashes and fatalities in the area – a sign that any perceived problem was overstated. For instance, as a local official commented, 'I've probably been here as long as anybody [33 years], and I know of about four or five deaths in [the case-study area] over that time. And that's a long time. And you could go two years without anything happening really' (CS official). Indeed, such claims had broad resonance within the case-study area. Thus, despite recognising the incidence of some drink-driving, a number of local publicans similarly stated that there were 'not a lot of accidents' (CS publican) attributable to it and it was not therefore a significant issue for concern. As one publican emphasised, 'You don't hear of the major crashes; the odd one might run off into a fence or something, but nothing actually happens, so it's fine' (CS publican).

Such claims were also supported by local experts involved in responding to drink-drive crashes, such as police and emergency services teams. For example, in terms of offending levels, one officer stated, 'there are not many drink-drivers processed out of [the case-study area]' (SD police). Similarly, commenting on whether there were many alcohol-related crashes in or around the locale, one officer responded, 'No, I don't think so. We have fits and starts ... Touch wood, we haven't had one of those

¹⁴ That does not mean, however, that apprehensions for drink-driving were made on a regular basis. Indeed, as discussed further within the report, any drink-drive enforcement conducted at the case-study level by local officers is minimal at best.

[fatal] crashes for a while... Our last fatal was in November last year [2007] and it had nothing to do with alcohol ... but we do have alcohol-related crashes' (CS police).

Likewise, local ambulance and fire crews noted the limited number of alcohol-related crashes responded to, as evident in their attendance registers, which record details of response to these events. Reporting from these records for the previous year, one ambulance officer stated that alcohol-related crashes had comprised only a very small proportion of their work:

In the last 12-month period there's been five RTAs [road traffic accidents] that have been attended [by us]. That's out of about 300 plus jobs...[Only] five out of 300 calls were road traffic crashes, and we know at least two of those didn't involve alcohol; so three¹⁵ out of 300 (CS ambulance officer).

In common with the claims of some community members, longer-serving ambulance staff emphasised that over time, there had been a gradual reduction in the number of drink-drive crashes they had attended. Thus, commenting on the prevalence of drink-driving in or around the area, one ambulance officer stated:

I don't think so. From what I've seen over the years definitely not ... the reduction in accidents since I've been here is just incredible. It's hard to believe the change... I have really noticed it in the last 20 years, how the accident rate's just dropped and dropped, and dropped. [The problem of drink-driving has] just gone, it's not happening; the change has been tremendous (CS ambulance officer).

Similar claims were made by a local fire service officer, who mentioned both the limited numbers of alcohol-related crashes to which the fire service were called, as well as the notable reduction in such calls in more recent years.

The MVA (motor vehicle accident) rate has dropped right off ... the crash rate that we attend has dropped right off. We probably get half a dozen a year I suppose. And the severity of those is getting less and less ... the last couple of years it's just been cars falling off the road. Probably just speed for the conditions. We haven't had any fatalities here for motor vehicle accidents [and] that's out from the town as well... We're not getting them... I had a quick look through the occurrence book [for drink-drive crashes during the last three or four years], and, no, there's nothing that stands out (CS fire service).

Although there are some discrepancies between official accounts of alcohol-related crashes in the case-study area, for many respondents drink-driving was perceived to be a small problem, which resulted in very little actual harm (measured through crashes, injuries and fatalities). Its significance as a local issue was further reduced when discussed in the wider context of local harm. For example, as a number of respondents claimed, drink-driving was a much lower priority issue than some other incident types. As one local ambulance officer argued, the main alcohol-related problem in the area was not drink-driving, but domestic violence. The main driving problems identified were not simply about alcohol, but incorporated a wider range of issues including drugs and fatigue-related incidents. For some respondents in particular, drinking, driving, or drink-driving, were less of a local priority than a number of recent minor public disorder incidents. For instance, one publican cited the problem of young people loitering on the main street late at night, as a more pressing issue than that of drink-driving in and around the case-study area.

¹⁵ Although not statistically significant, it is worth noting that three of the five road crashes reported in the case-study area involved alcohol.

Even more broadly, in comparison with their experiences and knowledge of urban areas – such as Invercargill – respondents perceived their rural drink-drive problem to be minimal. For example, commenting on alcohol-related harms requiring medical assistance, one emergency services worker who lived in the case-study area stated, ‘alcohol-related incidents [in the case-study area are a] small proportion. But [if] you look at Invercargill on Saturday night, there were two ambulances there that worked full-time [with] no break. And that’s all alcohol-related’ (CS ambulance officer).

3.4 The limits of community knowledge

Discussions about the nature and extent of drink-driving within the area often drew out uncertainties around the pragmatics of current drink-drive limits. Many respondents had little informed knowledge of the relationship between drinking, intoxication and relative BAC limits. For instance, in a typical comment, one respondent pointed out, ‘I don’t think it’s very well known how many drinks [a person can consume]’ (SD respondent). Similarly a local publican stated, ‘I could honestly say a lot of people do not know [how much they can drink]’ (CS publican).

Estimates about how much alcohol was required to exceed the 80mg adult limit varied, but (in comparison with some official estimates) were generally conservative. As one publican suggested, ‘you don’t need much to be over the limit’ (CS publican). Similarly, a number of respondents believed that the limit could be reached with only one or two drinks, ‘80’s [80mg] not very much beer for a young male or female: it’s two stubbies isn’t it?’ (SD respondent). However, whether this perception translated into reduced incidence of drink-driving is unknown.

It was suggested that for many individuals, this degree of uncertainty translated into caution and, at best, reportedly low levels of drinking when driving. For instance, as one local publican suggested, for those dropping into the hotel for a drink on the drive home from work, ‘all they can have is that one beer’ (CS publican). Of course, whether or not this was what happened in practice is unknown. However, when respondents perceived that they were only able to consume small amounts of alcohol before reaching the legal adult BAC limit, it played an important role in working against the perceived legitimacy of that limit. It also served to mitigate the behaviours of some lower-end drink-drivers. Thus, for some respondents, those drivers just over the limit were not perceived to be a major risk, not intoxicated, or merely people who had made a simple error. For example, one publican suggested that those over the legal limit were not always drunk-drivers (CS publican), while another similarly stated, ‘just because somebody blows the bag, they are not necessarily an intoxicated person’ (CS publican). Indeed, the view that those marginally over the limit were not always intoxicated, informed this publican’s view that greater discretion was required when dealing with offenders who were not far above the 80mg limit.

Overall, these perceptions about what the legal BAC limit practically translated into, meant that incidences involving illegal drink-driving may not have been considered as such. Given the importance of public attitudes to change efforts, such notions are unhelpful for working towards reductions in drink-driving and safer roads. Therefore, at the very least, the findings from this case-study suggest that there are further educative opportunities in this area to promote greater awareness of the effects of drink-driving at (below and above) current BAC limits. However, how to achieve this in light of different alcohol tolerances is somewhat problematic, given that there is no fixed formula to determine how an illegal BAC is reached.

3.5 Who is the drink-driver?

While there was disagreement about the extent of a rural drink-drive problem, participants generally accepted that there was at least some level of drink-driving within the case-study area. However, respondents perceived this problem to be specific to certain individuals, rather than a community-wide behaviour.

For some respondents, a key part of any problem was thought to reside with outsiders – such as tourists or those passing through the area – who did not know the road system and were unfamiliar with driving on rural gravel roads. As a number of publicans stated, those coming into the area for events or tourism were the most pressing drink-driving problem, 'It's mainly the out-of-towners, those who don't come from [the case-study area]' who are the key problem drinkers (CS publican). This problem was also said to be reflected in subsequent crashes associated with dangerous driving practices. Thus, in drawing on their experience of attending crashes, one local ambulance officer stated, 'Some of the accidents we've attended ... have occurred in the community, but they're not necessarily local people. There's been a couple of accidents, I know, that have been from migrant workers as well' (CS ambulance officer).

While outsiders were perceived as part of the rural drink-driving problem, respondents acknowledged that locals were a part of the problem as well. However, these local drivers were typically labelled as deviant individuals, outside the respectable elements of the community. As one respondent argued, 'There's always going to be your idiots out there that'll do it [drink-driving], and there's a couple here. You can say to them "you're not driving". You can say that six times, but they'll drive' (CS publican). Similarly, as another stated, 'there's the odd accident, but I think a lot of it is ... that really bad drunk driver ... it's got to the stage where 100 percent of the responsible people know their limit, but you're just talking about that one or two [that] run the gauntlet' (CS publican).

As the above statements suggest, in outlining these 'deviants' within the respectable rural community, residents were at pains to explain that any problem was associated only with 'a small minority' (CS official) or a few irresponsible individuals. In defining who these people were, recidivists were regularly singled out for censure. Thus, respondents argued that any drink-driving problem within the rural case-study community was associated with a small number of 'hardcore' or 'habitual ones' (CS fire chief). Indeed, local police also agreed that it involved 'the ones who have done it for years ... it's probably a group of people here – maybe 10 or 15 of them' (CS police).

Furthermore, in contrast to the 'respectable' drinker, these offenders were further set apart as being alcohol addicts. Thus, in explaining the rationale of those involved, one community official stated that some of these individuals 'are alcoholics...[who'll even] be turning out to work drunk' (CS official). Likewise, as one ambulance officer noted, 'what I've found now is the ones who are drinking and driving, 90 percent of the time, have an alcohol problem, because they're regular attendees at the pub' (CS ambulance officer).

In summary, within these discourses, local recidivist drink-drive offenders were labelled the main road safety risk, and charged with causing 'the bad accidents' that occurred on rural roads (SD resident).

3.6 Explaining the incidence of rural drink-driving

Putting aside definitional issues in explaining the existence of a rural drink-drive problem, researchers have typically highlighted a number of explanatory factors, particularly those associated with the rural environment. For example, while it has been noted that public acceptance of drink-driving has

changed over time (Harrison 2003; McCreanor et al 1998), it has been suggested that rural beliefs have been more resistant to change (Bristow 1998, p6). As reported within one New Zealand study, drink-driving had 'deep roots' within the rural community and was linked to 'a long established drinking culture' (UMR 2007, p1). Indeed, it has been argued by some researchers that communal drinking venues, such as hotels, have occupied a central place in the life of rural communities (Blyth et al 1995), and have been a key meeting place for residents. As Bull (2007, p76) notes, within the rural area, 'life is enmeshed with drinking opportunities where licensed venues are frequently the focus of social interaction'. In fact, even more than this, Fogarty (1995) has suggested that these venues have traditionally been key sites for conducting a wide range of community business and have served a broad social function.

In addition to the central place of drinking and hotels within rural communities, scholars have further highlighted the influence of geographical features of the rural environment that encourage and legitimise drink-driving practices. In particular, the comparatively large travel distances associated with rural areas, together with a limited transport infrastructure, have frequently been noted to increase rural residents' reliance on personal vehicles¹⁶ (UMR 2007; Harrison 2003; Blyth 1995). Together with the drinking culture of such areas, these factors have historically been seen to play a central role in encouraging the mixing of drinking and driving in the rural context.

3.7 Explaining the rural drink-drive picture – community perspectives

Within the case-study area, respondents not only disagreed about the nature of rural drink-driving, but the extent of the problem as well. Nevertheless, despite competing claims, participants' understandings were typically situated within discussions around rural cultures, the reliance on private transport in rural areas and policing.

For those seeking to explain why drink-driving remained a rural problem, what one respondent called 'the rural mentality', was of central importance. It was well observed that drink-driving had historically been a more accepted and ingrained practice within rural (as well as other) areas. As a respondent argued, 'That sort of behaviour has been commonplace in those [rural] communities for many years' (SD police). In accounting for this situation, respondents referred to issues such as the central place of hotels within rural life (particularly as a male meeting place), and the dominant masculine cultures associated with being able to 'hold your beer'. This was coupled with the need to travel from hotels to places of residence. Thus, as stated by one rural resident:

A lot of the men rark [sic] each other up ... and they're like, 'you'll be right mate. Are you gonna call the wife in? What are you gonna do that for?' But that's the way it happens down here ... if you do get your wife, it's like 'ah, you're getting the wife to get you? You're alright; you're a man; you can get home okay' (SD resident).

Furthermore, as a number of respondents argued, the particular characteristics of the rural area – such as travelling distances, transport infrastructure, the persistence of patriarchal values, as well as the limited reach of enforcement and educative resources – continued to justify the acceptability of drink-

¹⁶ Because of their greater reliance on private transport, any penalties resulting from a drink-drive conviction is likely to have greater consequences for rural residents, compared with their urban counterparts, who generally have some access to public transport.

driving. Indeed, even those who perceived rural drink-driving as a declining problem, acknowledged that those who persisted with drink-driving still believed it was an acceptable practice in the country. In particular, respondents believed that the modern drink-drive problem was most persistent amongst older residents, whose values were the most heavily ingrained. This was used as further evidence of the relevance of culture to the drink-driving picture.

No respondents denied the existence of a longstanding cultural acceptance of drink-driving within rural communities. However, for those who claimed to have observed recent reductions in rural drink-driving in and around the case-study area, changing attitudes were seen as central to this movement. For example, particularly notable in respondents' accounts were comments about the positive effects of exposure to national and district-level drink-driving educational campaigns. Commenting on this issue, one respondent stated, 'I think society as a whole is not so accepting of drunk-driving' (SD resident). In highlighting this changing nature of rural culture, respondents noted the greater prevalence in the use of sober drivers, particularly by younger people. Additionally, a number of research participants commented on the development of school-based initiatives, such as Students Against Drink-Driving (including within the case-study area), as further evidence of a more responsible, proactive and modern community attitude towards drink-driving. However, as the *Southern Town* study highlighted, although rural attitudes towards drink-driving may have changed, this does not necessarily translate into changed behaviours.

Finally, some respondents highlighted the effectiveness of other strategies as well – such as the introduction and promotion of alternative transport solutions – in challenging longstanding justifications for rural drink-driving. This in turn has helped promote a more responsible culture of drinking and driving in rural areas.

Practical issues, particularly distances to travel and limited transport options, were regularly cited as important factors in rural people's decisions (and for some, the reported 'need') to drink and drive. As one rural respondent vehemently argued:

For our area it's very awkward because we're ten minutes from [named] tavern. There's no taxis. What do you do? The average Joe Bloggs wants a couple of drinks, perhaps a bottle of wine with his meal on a Saturday night. What does he do? You're not going to get a taxi home (SD resident).

Similarly, as another respondent pointed out, due to a lack of alternative transport options, rural residents heavily relied on their own private vehicles, 'Rural people have to use a car to go to the pub and get home ... unfortunately, rural people do not have the same choices as city people' (SD resident). Such explanations were widely noted and understood by respondents from across the case-study area, and by those beyond it too. Indeed, as one district-level road-safety practitioner suggested, these rationales were widespread amongst rural people, 'You can go to probably any community in Southland and they'll give you an excuse [that] they have to travel, or that they don't have a bus system or taxis, and things like that' (SD practitioner).¹⁷

While the geographies and infrastructures of rural environments gave some resonance to claims about a reliance on private transport, respondents were divided as to whether this justified drink-driving. Such explanations could be and were used to warrant drink-driving. For example, as one practitioner

¹⁷ Interestingly, however, even in urban areas with effective public transport systems, drink-driving still occurs. This suggests that the lack of public transport is but one 'motivating' factor in the drink-drive decision, with preparedness to pay for this transport another significant one.

argued, these explanations were partly convenient excuses, used to normalise and justify socially harmful practices in rural areas. In short, such arguments perpetuated discourses of 'drink-driving as necessity' (at least on some occasions) and helped to legitimise that behaviour where it occurred. Indeed, as implicitly suggested by many respondents, these justifications were underpinned and reinforced by a host of additional mitigating strategies, which served to downplay the significance of drink-driving by rural people. For example, despite the higher speed limits typically surrounding rural towns, some respondents commented that driving (and drink-driving) on rural roads was actually less dangerous because of 'open spaces', 'fewer vehicles on the roads', and 'less obstacles in the way' (SD resident). Additionally, as one local publican commented, people justified drink-driving on the basis that it was only a short distance, or that they had been doing it for years without any adverse consequences (CS publican). Similarly, another publican observed that some drivers claimed that it was not harmful as long as they did not speed, 'A lot of the ones that drink and drive think it's okay if they go slow; as long as they're not speeding, they're not going to have a crash. I [knew one] ... he used to be continually drink-driving, [saying] "but it's okay, I only go slow"' (CS publican).

While the heavy reliance on private transport in rural areas was widely referred to, for some respondents this did not necessitate drink-driving. Instead, a large number of respondents suggested that there had been an increasing adoption and widespread use of alternative strategies, such as having sober drivers, or utilising courtesy coaches. Given the significance of transport-related problems within the rural drink-drive picture, alternative transport options were practical strategies to address the conditions which encouraged drink-driving. However, respondents did express mixed feelings about the value or practical utility of such options.

Respondents believed the provision of courtesy coaches was an important strategy to address some of the practical issues that have undermined the promotion of safer driving practices. However, it was suggested by many that there were various problems or limitations with their use, which reduced their applicability or user-friendliness (see also Cross et al 2009). Beyond the fact that such strategies were only available through licensed premises and did not feature in the (more invisible) residential drinking culture, research participants highlighted other issues. In particular, some respondents suggested that the courtesy coach system differed between licensed premises, with some licensees more proactive than others in promoting its use. As one local resident argued, while 'some [hotels] offer courtesy coaches, their use is not encouraged, or availability widely publicised' (CS resident). Likewise, another respondent suggested that their availability was more prevalent when events were scheduled, such as bands or karaoke evenings, 'when there's a function there's definitely a courtesy van' (CS resident). Such differences were clearly visible in discussions with a number of publicans in the case-study area. For example, in describing the courtesy coach service at their premises, one publican stated, 'I don't believe we should be going in there acting like a taxi service ... the way we look at it is, you get yourself here, we'll get you home ... we don't advertise it as a service, as a courtesy coach, but we look after people' (CS publican).

In stark contrast, a publican at a nearby premise stated that they were active in promoting and encouraging patrons to use the courtesy coach, to travel both to and from the premise. This message was reinforced by a large chalked blackboard message behind the bar which advertised 'courtesy coach available'. Similarly, another local licensee stated that their courtesy coach operated throughout opening hours, as required, and would both pick up and drop off local patrons, 'we have a courtesy coach, and we quite insist on taking people home actually... If they ring us we can go and pick them up and take them home again' (CS publican). A similar situation was reported in *Southern Town*, whereby one hotel's courtesy coach was available for patrons to be picked up, as well as dropped off. The

strength of this, as one publican pointed out, is that 'if they haven't got a car here [at the hotel], there's no option for them to drive' (Cross et al 2009, p19).

Courtesy coaches were often perceived as an alternative transport solution for locals and/or regular patrons and while some publicans reported ferrying drinkers longer distances, the coaches were predominantly used for small journeys. For example, one publican located in the central township of the case-study area stated, 'we don't go far out of town' (CS publican). In fact, most publicans suggested that the maximum distance most were prepared to travel was about a 10km radius of the premises. Although this captured most local residents, it was most effective for those living in close proximity to the hotel. For instance, one local who lived further out from the local township, but whose work and social life brought them into the case-study area, iterated that this situation created problems for some drinkers, 'I come from out in the country, and there is a certain limit to where courtesy coaches'll go' (CS resident). Once again, a similar situation was found in *Southern Town*, with courtesy coaches generally operating within a 15km radius around the township (Cross et al 2009, p18).

Finally, particularly in the smaller rural pubs and during quiet evenings, limited staff numbers were perceived to make the effective operation of the courtesy coach system difficult. As one publican stated, in a rural environment where hotels struggled for trade and margins were tight, there was real difficulty associated with employing additional staff to operate an ad hoc, on-demand courtesy coach, which for much of the week was rarely used. This problem was additionally noted by a district practitioner, who stated, 'They've really got to have another full-time person that just does [the courtesy coach]; and then some nights they don't do anything' (SD practitioner). Similarly, in *Southern Town*, for example, both publicans spoken to within the study said their courtesy coaches usually only operated Thursday to Sunday, when patronage at their hotels was at the greatest (Cross et al 2009).

In addition to the problems faced by some publicans in operating this system, there were also customer-centred limitations which restricted the effectiveness of courtesy coach operation. These included a reluctance to leave vehicles in the hotel carpark overnight because of fears of vandalism/theft, or the inconvenience of having to find transport to the carpark the next day. On the other hand, some patrons were unwilling to wait for this transport, or even accept the need to use it.

Lastly, in debating the nature and extent of rural drink-driving, all respondents referred to the influence (or lack of influence) of enforcement on this picture. The views, perceptions, experiences and knowledge of local residents around this issue are of key importance to this study, and are discussed in detail in the next chapter.

4 Policing rural drink-driving

4.1 Introduction

Traditionally, the rural environment has been perceived as a problem area for drink-drive activity, as well as a particularly difficult place to police this behaviour. Factors such as resource levels, the need for generalist, community-oriented styles of policing, together with historically embedded attitudes, have contributed to difficulties associated with responding to rural drink-driving. In this environment, limited resources and the applicability of general deterrence alcohol enforcement to the rural context, remain central to debates about police responses to rural drink-driving. In the context of NZ Police perceiving the need to place an *increasing focus* (NZ Police 2008a, p11) on rural drink-driving, this chapter examines local and district-level issues which impact on the delivery of drink-drive policing within and around the case-study area.

4.2 Responding to the incidence of drink-driving

In debating what strategies might work when responding to rural drink-driving, researchers have discussed a range of local and national solutions, such as: host responsibility and alternative transport solutions, education and publicity campaigns, local action groups, treatment options, improved information resources, better road conditions, increasing drinking and/or driving ages, higher alcohol prices and enforcement strategies (see for example, Blyth et al 1995).

Police enforcement is one of the key responses to drink-driving in both rural and urban areas. However, as researchers have variously observed, the role and effectiveness of local and external enforcement in responding to rural drink-driving has been limited by a number of important factors, in particular, the applicability of existing enforcement strategies, resourcing and policing styles. These issues are discussed in turn below.

4.3 General deterrence enforcement

The general deterrence enforcement model is premised on the principle that large numbers of potential offenders within the general driving population can be deterred from traffic offending (including drink-driving). This is achieved through high-visibility enforcement which targets high volumes of road users and which is unpredictable but consistent, and accompanied by widespread publicity and sufficient penalties (Homel 1988). This type of enforcement activity seeks to increase drivers' perceptions of the detection risk, thereby deterring them from engaging in offending behaviour (Homel 1988). The key point, however, is that such deterrent measures are not simply about increasing drivers' perceptions of detection risk. Rather, the purpose of such measures is to maintain a high level of uncertainty about what the real chances of detection are. If drivers are uncertain about the real risk of detection, they tend to act in a risk-averse manner, particularly if the enforcement is accompanied by other deterrent measures such as media publicity which emphasises the consequences of drink-driving and the chances of getting caught (R Homel, pers comm).

In New Zealand, drink-drive enforcement which seeks to achieve a general deterrent effect is characterised by compulsory breath testing (CBT)¹⁸ checkpoints. The primary objective of CBT is to stop everyone, so that drivers cannot expect to avoid enforcement. Checkpoints are typically conducted in areas where there are continuous traffic volumes and high visibility, as their primary purpose is to subject large numbers of drivers to the testing procedure(s). The use of marked vehicles and signage serves to increase the visibility of police presence, thereby escalating the perceived costs and risks associated with drink-driving (and the likelihood of apprehension). In this way, the enforcement is designed to create an expectation among the general driving public and potential drink-drivers that if they do engage in drink-driving, the likelihood of detection (and its associated penalties) is high. However, in order to ensure any deterrent effect produced is not short-lived, this exposure to enforcement needs to be ongoing (Homel 1988).

As a general deterrence model, the main purpose of drink-drive enforcement is not to detect actual incidents of drink-driving, but to increase risk perceptions and deterrence – thereby maximising driver compliance. Therefore, the effectiveness of this model is not measurable through its success in apprehending drink-drivers, but rather through levels of driver exposure to CBT operations. As such, a successful CBT enforcement model is typically characterised by high numbers of drivers processed and low numbers of drink-drivers apprehended (although some are inevitably detected).

4.4 Drink-drive enforcement in New Zealand

Within New Zealand, drink-drive enforcement is carried out by a variety of operational staff, including Traffic Alcohol Groups (TAG), Strategic Traffic Units (STU), Highway Patrol (HP), and General Duties Branch (GDB). Collectively, the activities of these groups are designed to maximise the detection risk for drink-drivers across the road network. Although CBT enforcement can be carried out by practically any operational police group, in practice it is primarily conducted by TAG, which specialises in drink-drive enforcement. TAG teams operate in both the urban and rural environment, but are predominantly involved in operating high-profile CBT campaigns in urban areas. TAG teams operate within all 12 police districts (Cross 2008).

4.5 Enforcing against rural drink-driving in the Southern Police District

Drink-driving is a significant road safety issue for the Southern Police District, with alcohol-related crashes accounting for 36 fatalities and 254 serious injuries between 2003–2007 (recorded in CAS 2009). Due to the predominance of rural road systems which characterise this district, it is inevitable that a considerable proportion of these alcohol-related crashes occur on rural roads. For example, between 2003–2007, 76 percent of all alcohol-related crashes in the Clutha TLA, occurred in rural areas (LTNZ 2008a). Similarly, 64 percent of alcohol-related crashes in the Central Otago TLA occurred in rural areas (LTNZ 2008b).

In 2002, in an effort to address the deficiencies of rural drink-drive enforcement, the Southern Police District implemented an enhanced alcohol enforcement programme. The main objective of this enforcement was to create an expectation that a 'driver is just as likely to be stopped and tested on a

¹⁸ CBT enforcement is based upon the Australian random breath test (RBT) model, first developed in Victoria in the late 1980s.

country back road or leaving a rural hotel, as they are on a city street' (Southern Police District, Internal Operation Order). This programme utilised four unmarked police vehicles and a booze bus (funded by the Accident Compensation Corporation (ACC)), and drew a temporary and changing team of officers from across the district. Although the programme initially targeted drink-driving in both urban and rural environments, from 2002 onwards (with the introduction of an urban-based TAG), the programme increasingly targeted rural areas during these operations. The overall purpose of this enhanced enforcement was to increase the perceived likelihood of being detected for drink-driving, with particular emphasis on increasing risk perceptions in rural areas.

In 2008, these operations were finally replaced by a second permanent district TAG group based in Alexandra, Central Otago. This group covers the Otago rural police area, including Oamaru and Balclutha. It complements the existing TAG group situated in Invercargill, which covers the Clutha–Southland and Dunedin City areas. Both groups operate with marked and unmarked police vehicles and a booze bus, conducting both high-visibility CBT and low-visibility mobile breath testing (MBT) operations.

4.6 Local police resources and drink-drive enforcement

One of the prevailing issues identified through discussions about rural drink-drive enforcement in the case-study area (and more widely) was police resources. At the local level, the limited policing presence was widely observed, by both police and community respondents. For instance, in a typical comment about the efforts of local police in responding to drink-driving, one resident stated, 'with two against approximately [a few thousand] people they can only do their best, and they do' (CS respondent). Furthermore, local officers pointed out that, in addition to their general policing duties in the central township, their remit also involved delivering policing services to small populations dispersed over a very large geographical area. This situation was observed to have numerous consequences for local policing and more specifically the nature of drink-drive enforcement.

Furthermore, local officers within the case-study area (as is the case with all rural officers) are expected to deal with a wide range of policing issues within their locale.¹⁹ These officers reported that the area was busier than other surrounding rural stations, and that the volume of work and demands on their time (from the organisation and their public) was in excess of the time available to complete all tasks. As a result, staff resources were allocated according to public need, measured largely through the reporting of events to police. Reported events were given highest priority, and as local staff stressed, most of their time was taken up reacting to these calls from the local public (as well as with the subsequent paperwork involved).

Importantly, this reduced the amount of time spent on more proactive and preventive forms of policing – such as drink-drive enforcement (among other road policing duties) – which were among the first to be sidelined. This ultimately meant that levels of proactive drink-drive enforcement varied over time according to the level of reactive calls for service. However, in practice this meant that road policing was often given a low priority, with proactive, deterrence-based modes of drink-drive enforcement at best intermittent and very often minimal. As one local officer commented, 'we have enough trouble keeping our head above water with the day-to-day. We just don't have time to go out and do the road policing' (CS police). And, as another argued, 'I think the traffic stuff's very, very important; but given

¹⁹ While rural officers are classified as General Duties Branch (GDB), because of their relative geographical isolation, they are expected to carry out a wide range of duties, including the delivery of road policing services.

what else is happening, what they expect is unrealistic ... certainly not without sacrificing all the other stuff we do' (CS police).

This situation is not new. One officer who had previously worked in the case-study area for a decade, suggested that drink-drive enforcement had traditionally not been at the forefront of local policing. This was largely due to 'other workload' issues (SD police). Likewise, another officer who had previously worked in the area stated, 'you're attending what's happening and you're going from incident to incident; and therefore the proactive sitting on the side of the road, you haven't got time for that' (SD police). Similar comments were made in a broader rural context, by district-level police whose background and experience gave them knowledge of this policing environment. For example, one district-level officer stated, 'we could do more, but rostering dedicated time to drink-drive operations is hard due to the wide range of responsibilities staff have' (SD police). Similarly, as one senior officer highlighted, 'my rural staff have increased their apprehensions considerably over the last couple of years, but their time is divided between GDB and road policing, and all the social needs of their communities... [they have a] wide range of responsibilities' (SD police).

When drink-drive enforcement was conducted, staffing issues affected its nature and extent in a number of important respects. First, limited time available meant that drink-driving was often policed in a reactive and ad hoc manner, rather than in a planned and strategic way. Furthermore, such styles favoured a *specific* rather than *general* deterrence approach. For instance, suspected drink-drivers would be stopped and tested if they were observed by staff who were out conducting other business, rather than through a more proactive and broad-based tactic. Thus, in discussing how drink-driving was currently policed in the case-study area, one officer said:

Of late, only if I see something on the way to another job. I wouldn't actively be going out there looking for drunk drivers at the moment... This year's been very difficult: everything so far has been reactive paperwork. And if you trip over a drink-driver, you trip over them while you're probably doing something else or going somewhere else. But it's not actively up and down the street, stopping cars as they're driving around. You've got other stuff to do (CS police).

Second, in addition to this problem, even when time was available for proactive, general deterrence styles of CBT, it was argued that there were insufficient staff numbers in the town to safely or effectively carry it out.²⁰ Although staff from other areas could occasionally be co-opted in to assist with CBT enforcement, this simply removed staff from other rural environments. Consequently, where conducted, proactive drink-drive enforcement by local officers was typically viewed and described simply as 'sitting on the road' waiting to pull over a vehicle that passed by.

Despite difficulties associated with undertaking CBT checkpoints in the case-study area, such enforcement was occasionally conducted by local police staff (with the aid of out-of-town support).²¹ On such occasions, it was implicitly and explicitly noted by police and local residents that this enforcement was centred in the township area. This is unsurprising, since general deterrence policing

²⁰As noted in its strategic documents, in the area of drink-drive policing, NZ Police favour a general deterrence based form of enforcement, carried out through highly visible CBT operations that target the driving population per se, rather than targeting particular drivers, or suspected individuals. Furthermore, as emphasised in the Road Policing Programme 2008-09, this enforcement style is considered relevant to both urban and rural areas of New Zealand (NZ Police, 2008b).

²¹Indeed, during the researcher's first visit to the area, a number of residents noted that police had been observed around the central township doing checkpoints.

relies on traffic volumes and visibility and many of the licensed premises were located in this area. Nevertheless, these strategies tended to focus mainly on certain areas of the rural environment while largely ignoring more outlying areas and their drinking establishments. Indeed, this point was made by one publican, whose premise was located a few kilometres outside of the township, on the edge of a 100km/h main road. This publican professed to having rarely seen or heard about local police enforcement in that area during the number of years they had been there.

The focus on the main town area was not solely about population density. The geographical distances and travel involved in reaching certain parts of the station area, were additionally considered prohibitive in providing more consistent drink-drive enforcement coverage. Commenting on this issue, one officer stated, 'If I was out at [named place] I'd certainly be looking for drunks, but I'd be reticent, because I know that if I get one I've got 70km back to [the station] to get the ball rolling... [and that's] three or four hours gone' (CS police). Thus, issues of time, resource and geographical distance played a central role in limiting drink-drive enforcement within this rural area.

Third and finally, limited police numbers also meant that there was often no on-site police presence within the town, particularly during late evening or early morning (high-alcohol hours). Thus, unless an external enforcement team or patrol car was in the area, there would be no active police presence to carry out drink-drive enforcement. As one officer stated, 'We're only here eight hours a day ... it's unmanned for two-thirds of the day [and] generally the two-thirds when people will be [doing stupid things]' (CS police). This limited active police presence was not perceived to be fixable within existing resource levels. Although changing shift patterns could provide better police coverage during high-alcohol hours, it would subsequently reduce the availability of local staff at other times to respond to reactive calls from the public.

Additionally, even in the event of reorientation of shift patterns, the ability of local rural police to respond more effectively to drink-driving was made problematic by the widespread provision of 24-hour licences (including within the case-study area). The flexibility provided by such licences was argued to make drinking hours (potentially) longer and/or more uncertain. Furthermore, they stretched police resources, and reduced the ability to deploy effectively around specific places and times. As a result of this, 24-hour licences potentially aided drink-drivers in outwitting police, thereby increasing their chances of avoiding detection. As observed by one practitioner, 'The district council give[s] everybody 24-hour licences: they're stock standard ... which makes it very difficult for the police, particularly in the smaller rural communities like [case-study area] where they might have two or three police' (SD practitioner).²²

This situation was reiterated by a variety of individuals from within the case-study area. For example, as one officer stated, 'we could finish at 12, and the drink-drivers will leave the pubs at half past 12'

²² It is worth noting however, the increasing trend across the Southern Police District for contesting the renewal of 24-hour liquor licence applications. For example, on 9 September 2008, the Queenstown-Lakes District Council supported a proposal to cut 24-hour bars back to a 4am closing time (Harding 2009). Similarly, on 7 April 2009, the Invercargill District Licensing Agency proposed reducing bar opening hours from 4.30am to 3am, which was 'pushed by police as a tool to reduce public disorder and violence' (Otago Daily Times 9 April 2009. Available at www.odt.co.nz/your-town/invercargill/50644/invercargill-proposal-may-close-bars-earlier). Similarly, the current Sale and Supply of Liquor and Liquor Enforcement Bill is considering increasing restrictions on the sale and supply of alcohol to reduce liquor abuse and its associated costs to society. The Bill amends the Sale of Liquor Act 1989, the Summary Offences Act 1981 and the Land Transport Act 1998, to implement recommendations arising from recent reviews of the sale and supply of liquor to minors, and sale of liquor and liquor enforcement issues. It also introduces a new system of enforced self-regulation of alcohol advertising (see www.parliament.govt.nz).

(CS police). Likewise, as a local publican observed, 'I know [in the case-study area] you could keep drinking past two in the morning; and [people think] "the cops will be home, so we can just go now". They've finished their shift by then' (CS publican).

4.7 Road policing versus general policing: expending limited resources

One of the key problems associated with drink-drive enforcement in the case-study area (and more broadly), was the tension between organisational expectations and the realities of rural policing. In particular, local police stated that within their limited resources, the nature and extent of public calls for service dictated the degree to which proactive policing – such as drink-drive enforcement – was conducted. While local officers suggested that community expectations (viewed through claims on police time) played a key role in determining how that time was spent, these expectations were not always consensual. Within such debates, issues about road policing and its place within the broader framework of rural policing were noted.

Importantly, these debates drew out tensions between 'traffic' and other types of policing, with some respondents making distinctions between road policing and general policing. For example, as one argued, 'an awful lot of community policing now is being hijacked with traffic. We complain a bit, don't we, that they're slow to come because they're so busy patrolling the highways' (SD resident). Likewise, one respondent commented on the need to 'keep the transport part separate, leaving police to do their work' (SD resident). Another respondent stated, '[I] didn't like the fact [that] they were given targets, because I thought they were out there trying to get people that were speeding instead of doing the work they probably should have been doing' (SD resident).

Interestingly, as outlined earlier, such comments reflected police suggestions about the limited nature of road policing services within the case-study area (and other rural locales). Nevertheless, despite such comments, community views were generally less clear-cut about the place of road policing within the rural policing picture. On the one hand, most respondents saw some role for road policing within the remit of rural police duties, and many stipulated that there was a need for more drink-drive enforcement (although not necessarily local enforcement). However, as previously discussed, it was also widely believed that drink-driving was not seen to be a significant or widespread problem; it was confined to a small number of hardcore individuals, and other alcohol, crime and general disorder issues were perceived as more pressing concerns within the area.

Viewed in the broader context of local policing – with limited resources and a variety of needs and expectations – support for road policing was not unequivocal. Conversely, it was similarly highlighted that the community were unlikely to support *too much* additional drink-drive enforcement, particularly if this was seen to interfere with other aspects of the local police role:

The thought amongst the community would be, if the police have got that much time and resources to do checkpoints all day, then why can't they attend a burglary; why can't they do the other jobs as well?... Road traffic definitely needs enforcing; but what's difficult to see is when you've got a [police car] sitting by the side of the road just doing checks, and you've had a burglary and there's no person available ... it's frustrating when something's happened and there's a patrol car sitting on the side of the road and you haven't got a policeman. There's one sitting there, but he can't attend your burglary or your assault (CS fire service officer).

Thus, while accepting the need for some road policing, respondents within the case-study area did not always value this aspect of policing as highly as other duties. This may be because traffic offences are generally regarded as less serious crimes, and unlike other types of criminal offending, traffic offenders come from all spectrums of the social strata (Corbett 2003).

4.8 Living and policing in a rural community

These tensions were further highlighted within broader debates about the difficulties associated with rural policing, and the particular styles of enforcement that were supported and expected by the community. Unlike the urban policing environment – with its greater populations to police, more task division and specialisation, and more formal ad hoc relationships with the community – the rural policing environment was believed to be quite different. Here, in a setting characterised by a relatively small and close-knit population, and a small number of local GDB staff, the relationship between police and the public was considered more personal. Indeed, this expectation was clearly visible in the comments of respondents. Furthermore, the nature of this relationship had particular implications for the types and styles of policing that were most valued, and subsequently for the way that local policing services were viewed.

Both community and police respondents pointed out that for police officers, living and working in a small community presented distinct challenges. These were perceived to be associated with balancing participation in community life with maintaining personal and professional support in the face of having to regularly respond to various local crime and disorder problems. In commenting on this issue, one respondent stated, 'it's hard for them to be part of [the community] and to be an authority [figure] when things happen or go wrong' (SD resident). Similarly, another observed:

We have one resident cop, and it's really hard for him to enforce because he lives with these people, day in day out; we've had a big turnaround of cops in the 20 years I've lived here, and some of it's been around enforcement, and how people have treated him after he has done enforcement ... he's living with these people: he's coaching their kids for rugby, he's on the volunteer fire brigade with them; and then he's having to pull them up at two o'clock in the morning and do them for drink-driving (SD resident).

Local police also stressed the importance of recognising the particular nature of rural policing and the need to carefully manage this environment. For instance, one officer commented that the implications of getting this balance wrong could be significant and could affect the ability of staff to live or work effectively in the community:

If we were [heavy handed], targeting our locals, we wouldn't have the information coming to us ... you've got to fit in, you've got to live here. You've got kids at the school ... you like to be able to send your kids to the shop on their own ... and [make sure] your partner's not getting hassled in the supermarket ... and that's what'll happen. That's happened in the past ... there's more than just enforcing (CS police).

Within the remit of local police duties, an enforcement issue that was seen to have the potential to disrupt police/community relationships and reduce public support for police, was road policing. The variance between traffic and general policing was at the centre of such issues. As local officers observed, dealing with a constant variety of disputes and public order incidents required that rural police were equipped with a much broader set of solutions 'than just enforcing' the law. For instance, police relied heavily upon tactics such as careful handling, commonsense and discretion, in order to resolve problems and to ensure that they were seen to be working *with* rather than *against* the

community. Indeed, the use of such strategies was noted to be fundamentally important in aiding police in their work and in maintaining community support.

Yet, in contrast to many other areas of policing, traffic enforcement is characterised by low officer discretion, and a 'zero tolerance' approach to specific types of offending, such as drink-driving. In the rural context, however, this enforcement approach was considered to have negative implications for public perceptions of policing, and support of road policing. For instance, one local publican referred to one resident officer as more of a 'Nazi' than another, and as having a 'bad name', on the basis that this officer was seen to be the more proactive of the two in undertaking traffic duties (CS publican).

Alongside observations about the more draconian nature of road policing, there was very little understanding of the rationale for this differentiation in enforcement style, between what was roughly characterised as 'traffic' and 'community' policing. As highlighted earlier in the report, many respondents perceived only a limited problem of drink-driving in the area, attributable to small pockets of well-known, easily identifiable individuals. Thus, a road policing approach that targeted the whole population was perceived as severe and incongruent with more valued community-oriented styles. Public judgements about road policing were also compounded by fundamental misunderstandings about the rationales underpinning such enforcement practices. Thus, although practical differences in the type of enforcement adopted for road policing business were very clear to locals, the reasons for them were not well (if at all) understood. Instead, such modes of enforcement were viewed through wider popular public discourses about quotas and targets, or revenue gathering. This served to undermine road policing's position as an activity designed to increase the community's road safety. Such criticisms were raised in relation to various road-policing activities, particularly speed enforcement. For example, as one respondent argued:

I think the police have lost the respect in a certain way when you see them parked in the street behind a tree with a camera, just stopping car after car, like they do on [named] street. And I think people think, well, they're down on their tallies this month. And that's where they lose their respect (CS official).

However, while drink-driving was believed to be more problematic than speeding, similar arguments were made with respect to the policing of this activity, and its possible impact on police/community relations:

You've got to have a relationship between the community and your police; and if your local policeman's seen as being a bit of a dick – if he's seen sitting on the main street in the dead of night trying to catch someone [who's drink-driving] – people'll think of him as the enemy. Whereas the policeman's got to be seen as part of the community, and assisting the community, rather than getting his points up (CS official).

As highlighted above, styles of drink-drive policing which involved sitting on the road and waiting to pull over drivers (which, incidentally, due to resource constraints, was a method of proactive enforcement adopted by local staff), could be seen as overbearing, or policing *against* rather than *with* the community. Various respondents highlighted the need for more community-oriented styles of drink-drive enforcement, such as police attempting to interact with and deter drinkers before driving. Thus, some suggested that delivering the drink-drive message via regular visits to licensed premises, would be a useful method of engagement and relationship building between local police and the community: 'sitting outside pubs is not a good thing. Come in and meet [drinkers]; then there's face-to-face interaction. It's better because it's getting to know your local police' (CS publican). However, the duration of any deterrent effect generated through this enforcement style is a matter of considerable debate.

Finally, the perception that drink-drive enforcement could damage police/community relations was shared by local police as well, and was believed to discourage some rural officers from engaging in this type of enforcement. As one officer argued, 'from a personal view I have actively targeted [drink-drivers] in the past, whereas other officers don't due to the rural community aspect of their job' (SD police). Essentially, this officer suggested that because of a lack of flexibility in dealing with drink-drive offenders, some officers exercised their discretion by not engaging in any drink-drive enforcement at all. However, it is equally important to acknowledge that such claims can often be used to justify the lack of road policing enforcement. As Cross (2008, p26) argues:

There is, however, considerable debate about the extent to which rural officers' willingness to engage in drink-drive enforcement is contingent on community support, or whether it simply reflects a general unwillingness to engage in road policing duties. Similarly, organisational pressures (such as the prioritisation of crime, resource levels, or training) are also likely to influence the willingness of rural officers to perform road policing duties (including drink-drive enforcement).

Partly this can be attributed to a lack of understanding of the importance of road policing work (with some officers associating road policing with performance targets), and placing community priorities ahead of (and sometimes in conflict with) organisational priorities.

Alternatively, when officers were expected to conduct drink-drive enforcement (and required to report on it through performance measures), some respondents believed that officers would conduct road policing and drink-drive enforcement within one another's communities to avoid community conflict. 'I think the local cops actually go elsewhere to do the drink-driving [enforcement]. My perception is that [named area] guys come over here, and this is to save any embarrassment or favouritism' (CS publican).

4.9 Competing styles: can community and deterrence policing co-exist?

Rather than looking to simply fine-tune urban-based models for the rural context, numerous researchers have stressed the need for a different style of policing altogether in rural areas (Winfree and Taylor 2004; Fogarty 1995). This in turn needs to be considered when responding to rural crime problems.

As researchers have noted, good police/community relationships are extremely important to effective policing (Bowling and Foster 2002, p989). Indeed, police officers 'develop working personalities that are systematically adapted to the locations [and communities] they serve' (Scott and Jobes 2007, p127). Within the rural context (and in comparison with many urban communities) it is argued that this relationship and working personality is premised upon a community-oriented, people-focused model. As Scott and Jobes (2007, p127) note, 'while crimes are policed in the city, people are policed in the country'. This policing model, they suggest, has enabled officers to become more enmeshed in the social fabric of rural communities. This has accordingly been beneficial in providing a better policing service, greater opportunities for responding effectively to crime, and most importantly, in shaping the nature of rural policing. For instance, the rural policing environment has often been strongly influenced by the views and values of local residents, with the community playing a significant role in the definition of 'real police work'. Within this context, community relations have often been at the forefront of policing efforts, with law enforcement used as a measure of last resort, or viewed as secondary to maintaining peace. Scott and Jobes (2007, p132) refer to this as a 'localistic' rather than 'legalistic' approach to policing (see also Bristow 1982, p7).

Despite its benefits, this style of policing has created a number of difficulties for rural police. In particular, research has highlighted that rural police officers have often found themselves in conflict between community and organisational expectations (see also Cross 2008). In such situations, the community has exerted a strong influence on police practices at the local level. Thus, when the community shows sympathy towards particular types of offending, officers have been expected to tolerate activities, or look for alternative policing solutions. This has been noted with respect to drink-driving activity. For instance, one study found that local police were required to bring in officers from other areas to conduct operations. This need arose from sympathetic local attitudes towards this behaviour and a detrimental impact of local-level enforcement on police/community relations (Scott and Jobes 2007, p134).

Where rural officers have delivered drink-drive enforcement within their communities, some research has highlighted the detrimental effect that this approach has had on police/community relationships. For instance, Bristow's (1998) study of a number of rural communities suggested that efforts by South Australian Police to intensify responses to drink-driving were met with considerable resistance. Here, within the context of a system of community-oriented policing, such efforts were viewed as 'inappropriate', 'oppressive', 'intimidating', and out of tune with community expectations and the usual standard of policing in rural areas. More broadly, in commenting on the styles of traffic policing, Sims (1988) points out:

The impossibility of policing from inside a car presents a problem ... if the person with the uniform expects to police, he must exit the car and enter the community. The introduction of the police car placed a previously unknown strain on communication between the officer and citizen (Sims 1988, p98).

Thus, by virtue of its nature, road policing placed officers in vehicles. This in turn placed officers at a distance from their rural public, reducing the community focus of their role.

4.10 External police resources and drink-drive enforcement

The observed difficulties associated with local drink-drive enforcement, places police and community attention on the importance of additional police resources – such as TAG, STU and HP groups – in supporting efforts to combat rural drink-driving. However, while these groups are exempt from some of the difficulties experienced by local staff (such as living in and policing the same area), they are nevertheless considered to experience many of the same practical problems with drink-drive enforcement. Thus, as pointed out by local officers, problems associated with policing large rural areas (and therefore the frequency of external operations around the case-study locale) and with enforcement styles (highlighted through issues such as predictability) are key factors commented upon by respondents.

In relation to the frequency of external operations, respondents' perceptions varied considerably, from estimates of once every few weeks to never. Most commonly, respondents claimed either to have had little or limited experience of this enforcement. For instance, as one respondent noted, 'I have only seen them twice in the last five years' (SD resident); or, as another stated, '[I] have only seen the drink-driving bus once, about three years ago' (SD respondent). Within the case-study area specifically, similar comments were made. Thus, as a resident observed, 'you see them here from time to time, but not a lot' (CS fire service officer). Another resident who had lived in the area for over 20 years, claimed to have been stopped and breath tested only two or three times in that period (CS resident). Local

police similarly commented on the infrequency with which external enforcement teams were seen in the case-study area.²³ As one officer observed, while these groups were useful in offering support for the drink-drive enforcement effort, they did not come into the locale 'very often', possibly 'biannually' (CS police). In addition to their infrequency, it was also argued that, when external teams were in town, they only stayed for short periods of time – 'half an hour' – before moving on to another rural area (CS police).

However, it is important to recognise that unless residents encounter this enforcement directly, or happen to hear about it indirectly from other residents, then their knowledge will be limited. For instance, although many respondents reported limited experience of this enforcement, during 2008 alone there were six separate external operations conducted within the case-study area.

While short bursts of drink-drive enforcement in rural towns is to some extent a strategic tactic, for the most part issues of infrequency and limited enforcement are products of resource constraints. Arguably, these issues affected external teams to a greater degree than rural officers, since their area of responsibility was even wider than that of stationed staff. For example, in the case of the Southern TAG team (based in Invercargill), it was noted that because the group was expected to police both urban and rural areas, its sphere of activity was considerable. Thus, as one senior district-level officer commented, 'Southern TAG covers Dunedin, Invercargill, the Gore area and Western Districts. [That's] a big area to cover and we can't be everywhere at the same time' (SD police).

This issue was exacerbated by the shift patterns of certain support groups. For example, while units such as TAG operated during high-alcohol hours, other teams such as HP – which provided a more roaming brief within the road system – did not. Thus, as one district practitioner claimed, 'with traffic and highway they have an eight-to-five job. Everybody knows that ... the community knows that. The doors are shut and they've gone home for tea. And that's when the problems are beginning' (SD practitioner). Likewise, as another officer claimed, 'In my position we do not focus enough on drink-driving, mainly due to the hours we work – an 11 pm finish at the latest' (SD police).

In summary, both local and district-level police staff, with responsibilities for rural drink-driving, commented that future improvements in enforcement were heavily reliant on additional resourcing. On the one hand, local officers argued that 'the number one bugbear would be sufficient staff to do the day-to-day stuff so that we have the time to go out and be proactive about drink-driving' (CS police). On the other, external officers similarly commented that there was a need for 'more drink-drive teams' on the basis that 'resource is the only way round it [better enforcement]' (SD police). However, police, practitioners and members of the public highlighted a variety of other ways in which policing efforts could be further improved. These are highlighted in the following sections.

4.11 The effects of drink-drive enforcement strategies on external policing

While it was argued that (for a variety of practical and ideological reasons) there was a heavy reliance on external drink-drive enforcement, numerous issues associated with current police enforcement strategies were seen to further impede these efforts. Indeed, as highlighted by various police respondents, a key problem associated with rural drink-drive enforcement related to the application of broader alcohol enforcement strategies to this specific environment.

²³ However, it is important to note that local officers are not always informed of external enforcement, pre- or post-operations.

In outlining the effectiveness of deterrent-based strategies, a number of road safety experts have noted their success, both in a New Zealand and overseas context, in contributing to reductions in drink-driving (Vulcan et al 2003). Importantly, as pointed out earlier, NZ Police apply these strategies to both urban and rural areas. However, despite their clear relevance to urban areas – where higher population densities and traffic volumes provide sufficient driver exposure to enforcement – their appropriateness for many rural areas remains more questionable. Thus, while local police often could not even implement such enforcement approaches (due to insufficient staff numbers), a number of respondents raised further questions about the appropriateness of this approach for rural drink-drive enforcement.

In particular, it was argued that target-based performance (as an underpinning of general deterrence) pushed TAG groups more heavily into urbanised areas in order to maintain high levels of testing. Indeed, this issue was a central theme within the comments of district-level police staff who worked in the area of drink-drive enforcement.

Road policing staff have more of a responsibility to target offending in more productive areas to meet with our required outputs. For example, in order to ensure my staff meet the required contact rate of around 1500 tickets a year, I have to plan more urban-based operations, away from rural areas, to ensure contact rates are achieved... TAG staff are becoming more CBT-oriented, having to target areas where there are higher traffic volumes, in order to meet the required 65,000 CBTs they have to deliver (SD police).

Furthermore, similar claims were reiterated by other district staff. For example, as one stated, 'The TAG groups have certain targets to achieve in relation to CBTs, and as a result, because of this pressure, do not see rural areas – with sparse traffic flows – as the place of necessity to patrol' (SD police). Similarly, others argued, '[CBT benchmarks have] driven all road policing staff into urban areas to the detriment of rural road policing' (SD police), and 'we can't get out to the rural areas as much as we would like to. We have specific CBT requirements put on us by our bosses. We can't get out [in] rural [areas], so probably stay around the city more than we should' (SD police). It is important to acknowledge, however, that this pattern is shifting, with greater emphasis on mobile patrolling in rural areas, alongside CBT enforcement in more urbanised areas.

Respondents also argued that when external enforcement – such as TAG – came into the case-study area, operations were mainly focused on the township itself. A similar finding was observed in the *Southern Town* study, whereby the greatest detection risk was perceived to be around the township, and particularly around licensed premises (Cross et al 2009). In contrast, for the same reasons, teams were less likely to target outlying areas and licensed premises (often on the edge of high-speed roads). Consequently, the activities of some drink-drivers who used establishments outside of the main township, were observed to be largely unaffected by police enforcement. For example, one publican, located outside of the immediate township, claimed to have never seen or heard of the external teams in and around the area of his/her premises. The publican attributed this to the low traffic volumes in that vicinity, compared with the larger volumes in the immediate township area. This lack of policing presence prompted some patrons to risk driving home from the hotel since 'the chances of a cop being out here is pretty slim. So they [drinkers] take the risk' (CS publican). Similarly, the *Southern Town* study reported that respondents perceived a minimal risk of detection on the back roads around the township (Cross et al 2009).

4.12 Policing as a deterrent for rural drink-drivers

As set out in a variety of organisational strategic documents, the purpose of police enforcement efforts is to deter the incidence of drink-driving. Due to limited resources, police have attempted to maximise public risk perceptions of detection, by targeting high-volume and visibility sites with unpredictable enforcement. For police (within this deployment framework), community perceptions of enforcement are crucial factors in determining the success of drink-driving strategies. Consequently, such views were actively sought in discussions with respondents from the case-study area.

As several scholars have argued, the typically lower (and often minimal) levels of drink-drive enforcement in rural areas have undermined public experiences and perceptions of a high likelihood of detection (for example, see Cross et al 2009). Stewart and Conway (1998; 2000) suggested that while CBT could potentially deter rural people, its impact wore off when they realised that they were not very likely to be stopped by police operations. Thus, following the logic of deterrence-based policing strategies, models which rely on ongoing and high levels of population exposure, are unlikely to be effective in rural areas where that exposure is minimal. This point has also been made by Bull, who has argued that rural areas are exposed to insufficient levels of enforcement to be effective from a general deterrent perspective, 'regional and remote areas are not subject to the same intensity of drink-drive campaigns. When roadside breath testing of drivers is below 25 percent of the driver population it is not an effective deterrent' (2007, p77).

This argument has also been reiterated in a specifically New Zealand context. For instance, Blyth et al's (1995, p6) study reported that there were 'insufficient police resources in most locations for [CBT] to work effectively'. Indeed, despite ongoing attempts to utilise CBT models within rural areas, there are problems associated with its use in this environment. Almost a decade ago a report on the Waikato drink-drive operation noted that, 'police breath testing had low public visibility', that 'CBT had not been as successful in rural areas as in provincial towns or cities', and that rural 'people would drink after driving, as they did not see the risk of being caught as high' (NZ Police 1999, p7).

Indeed, there has been some suggestion that the preference for CBT models by NZ Police has compounded the neglect of rural areas, since these models are believed to be more appropriate for urban areas. As Fogarty (1995, p17-18) has stated, 'In order to attain the large numbers of stops necessary to promote deterrence amongst the road using population, this style of policing has, it is argued, pushed enforcement towards urban and away from rural areas'. It is important to note, however, that in more recent times there has been an increasing focus on MBT in rural areas, albeit sometimes accompanied by short periods of CBT enforcement as well.

In addition to comparatively lower levels of drink-drive enforcement in rural areas, the effectiveness of these deterrence-based strategies has often been undermined by the small and often close-knit nature of these communities. In particular, it has been widely accepted that information networks – often referred to as 'word of mouth', 'grapevines', or 'the bush telegraph' – have served to increase local knowledge of the existence of police operations within an area, and more specifically, the precise location of checkpoints. This knowledge can be transmitted in a number of ways, including person-to-person contact, landline telephones, and increasingly, through cell phone communications, including text messages. This, in turn, has aided locals in avoiding apprehension, for instance, by outwitting the police presence, or by alerting drivers of the need to use alternative routes (see Cross et al 2009). For example, as one NZ Police (1999, p7) study found, 'the bush telegraph would soon warn licensed premises that a CBT checkpoint was in place and patrons could wait until police staff left the area or went off duty, before driving home'. Similarly, as the *Southern Town* study reported, knowledge of enforcement activity, particularly covert enforcement, was often widely circulated, particularly around

hotel patrons: '...this knowledge constituted an important countermeasure against the enforcement activity, in the sense that information about the unmarked police vehicles and their locations were quickly and quite widely circulated to others within the community' (Cross et al 2009, p24).

The effectiveness of police efforts to deter rural drink-drivers was undermined by the presence of these strong social networks and grapevines. These grapevines were said to quickly alert drinkers to the presence of enforcement within the town and therefore enable them to respond. As one local stated, 'The word soon gets out in the pub that someone's down the street waiting for you to go home' (CS official). Similarly as others observed, 'the grapevine works pretty good. If it's parked at the corner it's back in the pubs after the second or third car's gone through it. Everybody knows it's there ... it doesn't take long to get round. You'll have half a dozen [people] in here, and the next thing you know, beep, beep and there'll be cell phones going everywhere; you know, text messages' (CS publican). As outlined earlier, in some instances, this response was positive in discouraging drink-driving for short periods of time. However, in other cases, locals stated that by increasing awareness and reducing the unpredictability, invisibility and risk of apprehension, it could be, and was, used to avoid enforcement. As one respondent commented, 'if there's a road block [TAG checkpoint] someone'll text you and say, "there's a detour, just go round this way instead of that way". That's basically what happens' (SD resident). Alternatively, drinkers were observed to simply stay at the premises and wait the short period required for police to leave the area. It was well known that external teams would only stay in town for a short period of time and would, most likely, pass back through later in the evening. Such knowledge made it easy for drinkers to outlast or simply ignore enforcement efforts. Respondents emphasised that any deterrent effect from the enforcement was short-term, and usually associated with the period in which police were in town, or at most during that evening, and that 'as soon as they're gone, everyone's back' (SD resident – see also Cross et al 2009).

There was, however, some recognition amongst respondents that enforcement efforts could have a (typically short-term) effect. For example, as a local publican argued, knowledge that police were around 'is a good thing. It'll keep people off the road ... in a lot of cases it stops that person who thinks they'll drive home' (CS publican). Similarly, another respondent stated 'when they have a drink-drive bus night [TAG operation], it reduces the number of people who drive home under the influence' (SD resident). Others claimed that a police presence in and around the town had a short-term effect in making drinkers more careful. Factors such as increased use of the hotel's courtesy coach, or greater numbers of vehicles left overnight at hotel carparks, was seen as evidence of the enforcement's immediate impact.

Even though police operations were perceived to have some positive effects in deterring drink-drivers (at least for short periods of time), one of the most persistent issues raised by local residents was the infrequency and limited nature of local and external rural drink-drive enforcement within the case-study area. Thus, it was well noted by respondents that based on past experiences, the chances of being caught drink-driving were minimal. For instance, in a typical statement one commented, 'A lot of us think, "I won't get caught"' (CS official), while another similarly argued, 'I think the chances of getting away with [drink-driving] would be high' (SD resident).

Additionally, even when there was an enforcement presence in the area, the nature of that enforcement and of the local environment, were said to make avoidance relatively easy for locals. For example, while some individuals acknowledged they could not accurately determine when police would be in town, many respondents (accurately) predicted that it was most likely to be during the weekend, in the evening and within the vicinity of the central township. A presence was also believed to be more likely at times of public holidays, big local functions, or events at one of the licensed premises. Although external teams were more difficult to predict, in respect of local drink-drive enforcement, the

likelihood of a policing presence was easily determined. As one local publican observed, 'it's not hard to tell, not hard to see. You just look down [the street] and see what's happening at the police station' (CS publican). Issues of enforcement predictability, in terms of place, time and duration, were similarly reported in the *Southern Town* study (Cross et al 2009).

A number of respondents also commented that police operations were made more predictable (and therefore easier to avoid) by their overuse of certain locations. As one local pointed out, 'the funniest thing ... is that when police do come into town they park in the same place. It's kinda [sic] like they have a spot on the main street or something like that in the rural area. Even the unmarked car will sit there, sort of undercover, in the same spot' (CS ambulance officer). Indeed, this frequent use of particular locations was especially noted with the external teams, whose local knowledge of the area was more limited (compared with the local officers), and therefore, 'end up being in prominent spots' (SD practitioner).

Overall, these factors meant that for many, the risk of being apprehended for drink-driving was perceived to be low. Clearly many of the problems associated with this low risk are partial products of resourcing levels and strategies used to enforce against rural drink-driving. As such, these issues should be considered in planning around future police responses to this issue.

4.13 Policing rural drink-driving: what works?

Despite perceptions that the rural environment is a problem area for drink-driving, enforcement efforts and research literatures have focused mainly on urban areas and issues. Consequently, knowledge and debate about rural drink-drive enforcement is limited, although is currently being addressed through research conducted by the NZ Police, among others.

One of the overriding claims of this research literature has been the noted difficulties associated with effective enforcement responses to rural drink-driving. For example, Harrison (2003) has stressed that there is no single or simple solution to the question of 'what works' in rural areas. While different approaches have been trialled (both in New Zealand and elsewhere), a lack of formal evaluation of these trials has not helped to clarify this issue. Furthermore, as Buttle (2006) has argued, the question of 'what works' is made more complex by the fact that rural communities are diverse entities. Thus, prevention programmes need to be sensitive to this diversity, as opposed to simply trying to implement a universal approach. In short, what works in one community may be shown to be ineffective elsewhere. The same principle applies for the urban environment as well.

For Harrison (2003), improved responses to current rural drink-drive enforcement problems can be conceived in one of two ways: more resources, so as to bolster and improve current practices; or better use of existing resources to deliver greater effectiveness. Either way, owing to the particular challenges of this environment, Harrison (2003) has suggested the need for creative enforcement techniques within the rural context.

Attempts to improve responses to rural drink-drive enforcement have typically targeted those features of the rural environment believed to undermine policing effectiveness. These include the early and widespread²⁴ knowledge of police operations through rural grapevines, or strategies used by drink-drivers to avoid detection. Indeed, researchers have highlighted the importance of police counteracting such practices. The *Southern Town* study, for example, found that the effective use of avoidance

²⁴ How widespread these rural grapevines (or word of mouth effect) are, is unknown.

strategies (such as using back roads) considerably reduced the effectiveness of any drink-drive enforcement in the area (Cross et al 2009). Thus, as Delaney et al (2006, p9) argue, 'there is a need to minimise the success of avoidance behaviours in the presence of known enforcement activity, as this type of behaviour is likely to be self-perpetuating'.

Researchers have suggested a number of strategies to respond to the rural drink-drive enforcement problem, including: the need for expanded programmes and resourcing through the use of overtime; supplementing high-visibility stationary breath testing (CBT) operations with mobile patrols which target back roads, in order to increase the perceived risk of apprehension and reduce avoidance strategies; the use of covert enforcement to counteract rural grapevines; targeting enforcement to earlier periods of the day, to try and discourage some drinkers from driving to the hotel; and visits to licensed premises by uniformed staff (Harrison 2003 p14-15).

While such strategies have been labelled as useful by some researchers, others have highlighted a number of problems inherent within them. For example, in the New Zealand context, Cross et al (2009) found that covert patrols could be highly predictable, clearly observable and easily avoidable to local residents owing to a familiarity with the makes and models used by police. Alternatively, responses such as blitz-style enforcement have been argued to be of limited value to rural areas, since this approach is often a token act with limited follow-ups. As such it has the potential to accentuate the lack of operational drink-drive enforcement in the area (Harrison 2003).

Other research has further attempted to assess the outcomes of different programmes. For instance, in the late 1990s Stewart and Conway (1998) evaluated a Waikato drink-drive policing operation. In order to target rural drink-driving more effectively, this operation utilised highly visible booze buses, frequently moved checkpoints, blocked off back road escape routes, and conducted inspections of licensed premises. By doing so they found that this approach had a beneficial effect in encouraging more drink-drivers to stay off the roads. This was noted through a considerable decrease in the proportion of tested drivers who were found to be impaired. Alternatively, in assessing the value of different types of operational response to rural drink-driving in Victoria, Australia, Delaney et al (2006) studied the effects of car and bus-based RBT operations (alone and in combination) on the crash rate within provincial and rural Victoria. From their studies, they concluded that only car-based RBT operations were shown to be effective at reducing crashes in less built up areas of rural Victoria. Conversely, there was no evidence of crash reductions associated with either booze bus or booze bus/car-based RBT operations in these areas (Delaney et al 2006, p9).

Despite attempts by police to respond more creatively to the problem of rural drink-driving, the effectiveness of these various responses has been far less clear cut. On the whole, district staff are continually assessing their current methods of drink-drive enforcement in rural areas, seeking to improve on current practice. While this practitioner level evaluation is an important process, there has been limited formal evaluative work around many of the programmes implemented. The importance of this more formal evaluation, however, should not be overlooked. While some formal evaluation is currently being addressed at the national level (see for example Cross et al 2009), it is important that this evaluation is ongoing and provides the necessary learning opportunities for increasing the effectiveness of rural drink-drive enforcement.

5 Conclusions

This study has explored issues of rural drink-driving, and responses to it, within a case-study area of the Southern Police District. While many of its findings have resonances with the broader research literatures on rural policing, rural drink-driving and its enforcement, they relate only to the context of the study. Consequently, care should be taken in making general statements based on this research alone. While noting this caveat, a number of important observations can be drawn from the study.

5.1 The nature of the rural drink-drive issue

First, in reference to the nature and extent of rural drink-driving, this research suggests that there is no universal understanding of the rural drink-driving problem. Indeed, district and local-level understandings of, and concerns about, rural drink-driving differed. District-level stakeholders in this study typically made their judgements based on a district-level picture of rural drink-driving, drawing on district-wide statistics, which indicate the existence of a rural drink-drive problem. In contrast, at the local case-study level, the small number of alcohol-related crashes (within a mix of other policing-related issues) was not perceived as a problem which necessitated significant police resources. Thus, while at the district level, rural drink-driving is a significant issue, this risk does not always make sense to those at the local community level.

As highlighted within the report, any perceived rural drink-drive problem in the case-study area was predominantly equated with a specific minority, consisting of outsiders (including tourists) and a small number of local habitual offenders. However, how the rural drink-drive problem is defined by these residents (for example, in terms of whether drivers are legally over the limit or the number of crashes), and the consequences of drink-driving in this area, are clearly important in this defining process. Nevertheless, if these perceptions are accurate, then perhaps a general deterrence model is not entirely appropriate within an environment where the vast majority of people are already reportedly willingly compliant (on the basis that they believe drink-driving is wrong, rather than through fear of apprehension). If the rural drink-drive problem in the case-study area is confined to a small minority, then more targeted enforcement may be more appropriate. However, before any significant changes are made to the current enforcement approach, further research is clearly warranted.

While attributing a problem to an identifiable minority, such views are likely to downplay the true extent of the rural drink-drive problem within the case-study area. For example, the use of community countermeasures – such as the increased use of courtesy coaches during an enforcement presence, or the use of grapevines warning those in hotels – suggested a wider experience of drink-driving than that associated with very small numbers of problem drinkers. Furthermore, local residents' access to knowledge about enforcement predictability could be effectively used to avoid detection. Given that outsiders did not have similar opportunities for observing enforcement patterns, it may have increased their likelihood of being detected for drink-driving in the case-study area. Any increased detection rate for outsiders was likely to feed into local perceptions about the rural drink-drive problem.

Consequently, respondents may have underestimated the frequency of drink-driving in their particular community. Similarly, for many respondents in this study, the problematic nature of the drink-drive problem in their community was understood in terms of corresponding crashes, not the associated increased risk of, or potential for, crashing. Thus, at the local community level, where drink-driving and alcohol-related road trauma are less visible or perceived to be less noteworthy, claims about 'the rural drink-drive problem' made less sense. Indeed, many case-study respondents deemed rural

drink-driving to be less significant than a range of other issues. In this context, attempts to place additional police (or other) drink-driving countermeasures into rural areas, such as this one, may not immediately meet with considerable public support.

It was also clear that popular misunderstandings about the association between drinks consumed and BAC limits also informed residents' perceptions of whether there was a rural drink-drive problem. It was clear in this study that many respondents had little informed knowledge of the relationship between drinking, intoxication and BAC limits. Numerous respondents demonstrated little understanding of how an illegal BAC could be reached, or the effects of BAC levels on crash risk. In some cases such claims were used to argue that those at (or over) the limit were not intoxicated, and even to suggest that laws (and non-discretionary policing) were unfair. Consequently, it is not difficult to understand why residents did not perceive there to be a drink-drive problem within the general community. It could also explain why drink-driving might still be tolerated or justified in these rural communities and why small numbers of the most highly intoxicated or regular offenders were scapegoated as the main problem. Clearly there are opportunities for increasing drivers' awareness of drink-driving limits and the associated intoxication levels. What is more problematic, however, is how to achieve this in light of differing alcohol tolerances. Similarly, greater awareness of the effects of both legal and illegal BAC levels on driving performance could also be beneficial.

These observations have particular relevance when viewed in the broader, national context. In recent years, there have been increasing efforts by police (including Southern Police District) to target rural areas. Despite the discrepancies in understandings of the rural drink-drive problem in the current case-study area, if such policies are to be understood and supported by rural residents, further efforts need to be made to promote a better understanding of the requirement for such enforcement at a local level. At the very least, this issue indicates the need for police and partners to deliver carefully designed educative messages in conjunction with enforcement activities. Further research on this issue is therefore recommended.

5.2 Policing rural drink-driving

A number of observations can be made about rural drink-drive enforcement within the case-study area, similar to findings highlighted in a variety of other research literatures, including the *Southern Town* study. At both local and district levels, the reported resources available for responding to this issue are limited, and certainly inadequate to provide the types of ongoing CBT-style enforcement that is a central component of general deterrence policing.

Issues of limited resourcing (and the implications of this limitation for the nature of policing), together with large geographical areas of coverage, were believed to reduce the extent and effectiveness of both local and external drink-drive enforcement. For instance, within the case-study area, local staff time was said to be mainly spent responding to calls for service from the public. Consequently, proactive elements of the enforcement role (such as road and drink-drive policing) were often given a low priority. When such enforcement was conducted, it was often not during peak alcohol hours, was predictable and well known to locals and tended to focus on the township, rather than surrounding areas.

While local officers reported significant barriers to engaging in proactive drink-drive enforcement, limited resources means prioritising work tasks is a constant requirement. When it comes to drink-drive enforcement, there may be a host of motivations for not engaging in it, or engaging in it in an ad hoc, reactive way. Such factors can include a preference for working during the daytime (being available for the community during working hours) rather than late at night, or a lack of commitment

to road policing duties. Similarly a lack of community support may decrease officer willingness to engage in drink-drive enforcement.

When external alcohol enforcement groups, such as TAG, came into the case-study area to undertake drink-drive enforcement, it was also generally on an infrequent basis (owing to the large urban/rural areas covered by these teams). When they did conduct enforcement in the case-study area, they were said to locate in particular areas of the central township (in order to undertake CBT-styles of general deterrence policing) and only lasted for a short duration. Additionally, other factors associated with the rural area, such as the word of mouth effect or local grapevines, further undermined policing efforts, increased the visibility of operations and improved public avoidance strategies.

This enforcement predictability, however, should not be underestimated. If this enforcement cannot maintain a high level of uncertainty about what the real chances of detection are, then this is likely to affect drivers' decisions about whether to act in a risk-averse manner. In practice, in order to reduce road casualties the fundamental goal of enforcement should be to aim for unpredictability in order to keep people guessing (R Homel, pers comm). Given that many case-study residents perceived a high degree of predictability in police operations, there is clearly a need to try to reduce this²⁵. As Homel pointed out, there were a number of creative ways in which high levels of uncertainty about the risk of detection could be maintained in rural communities – such as articles in the local newspaper about the risks of drink-driving and offenders detected, and local billboards advertising drink-drive enforcement. Thus, the issue is not solely about maintaining ever-present, high-visibility, drink-drive enforcement, but looking for other initiatives which may help increase the unpredictability of detection risk. By doing so, it is likely to increase the deterrent effect of this drink-drive enforcement.

Alongside resourcing issues, other local factors were also believed to hamper rural drink-drive enforcement efforts. In particular, styles of drink-drive (and road) enforcement were seen to be more draconian than other community-oriented types of rural policing, and were thus generally less popular. While this perception was partly premised on a lack of understanding of low-discretion modes of road policing, locals often utilised popular explanations – couched in terms of revenue gathering, or quotas – to explain these policing styles. This in turn further undermined support for drink-drive enforcement, and road policing activities more broadly. Indeed, respondents suggested that as a small rural community, the case-study area required particular, people-centred, community-oriented styles of policing. However, such styles were not seen to be observable in the area of drink-drive enforcement, which was criticised as being out of sync with the needs of the community.

On the other hand, it is important to recognise the low priority members of the public generally give to road policing activities. Indeed, as alluded above, many respondents considered road policing to be a form of revenue gathering, rather than serving a road safety function. Furthermore, road traffic offences are generally regarded as less serious by the public, since they are considered less morally reprehensible. Furthermore, there is no financial gain from the offending and any crashes that do occur are considered 'accidents', which serve to absolve offenders of their actions. Additionally, unlike other areas of criminal offending – such as burglary – traffic offenders come from all spectrums of the social strata (Cross 2008). As Corbett contends, speeders and drink-drivers 'do not fit traditional pictures of

²⁵ In Queensland, Australia, for instance, there has been noted success with the Random Road Watch programme, which involves utilising a randomised enforcement schedule. According to Homel (pers comm), the 'real virtue of Random Road Watch is that it is "intelligence-based", and involves a sophisticated management system that can be controlled by the police, while maintaining through rigorous, scientific means the random selection of times and places at which enforcement can be done'.

deviants, including as they do middle-class, middle-aged and “average” citizens’ (2003, p33). Consequently, any traffic enforcement that targets the entire driving population – such as CBT – is likely to be met with variable levels of community support. In contrast, enforcement that targets a specific minority – such as outsiders or habitual drink-drivers – is more likely to have public support. It is equally unsurprising that enforcement styles which focus predominantly on deterrence (such as walking through hotels advertising a police presence) rather than detection (catching drink-drivers) have more support from the community.

5.3 Future directions for policing rural drink-driving: improved enforcement?

To improve the current police approach to rural drink-driving, a number of individuals referred to the need for more effective joint working practices and improved communication between different policing groups. For example, a number of individuals discussed the need for police enforcement efforts to be more coordinated at a local level:

I've felt more recently [there's a need for] departments talking to each other: they're quite isolated. You have your dedicated traffic team and your highway patrol team; and they're not communicating quite often. And then your community police... If you talk to your local community policeman he won't really know what the highway patrol is doing on a day to day basis. Then you talk to dedicated traffic, who also aren't really talking... There's definitely a split between units (SD practitioner).

Indeed, this issue was reiterated by local officers within the case-study site. For example, they commented on the lack of communication between themselves and TAG (and other road policing groups). These officers claimed that they often did not have prior or subsequent knowledge of external teams coming into their area. When they did hear about external enforcement, it often came from local residents:

The next day someone might come up to you in the street and [tell you] ... or we might find a printout on our machine, or a strange car in front of the station. They could have been here last night; they could have been here every night [for] the last week, I don't know (CS police).

A district-level officer also recognised this problem and advised that in responding more effectively to rural drink-driving, a coordinated and concerted effort was required, ‘we need a strategic approach with some long-term planning and buy-in from other units working in my [geographical] area’ (SD police).

While in theory, a more cooperative relationship between local and external officers can have considerable benefits, in practice, this may be difficult. For instance, a lack of trust between external and local officers can make cooperative relationships difficult to sustain. Anecdotal evidence suggests that sometimes local officers may forewarn the community of the presence of an external enforcement team in the area. Although this may result in local drivers being deterred for that particular night, any long-term benefits of the external enforcement are likely to be lost. Not only does knowledge of enforcement activity reduce detection rates, any long-term deterrent effect generated through this enforcement is limited by residents’ successful experiences of avoiding enforcement (which reinforces the importance of community countermeasures, rather than abstaining from drink-driving).

Drink-drive enforcement within this rural case-study area currently comprises a mixture of ad hoc and reactive local enforcement, involving single police members working from individual vehicles and

targeting small numbers of drivers. This in turn, is supplemented by intermittent external enforcement, which tends to apply predominantly CBT styles of enforcement to the case-study area. Therefore, current enforcement practices are viewed by many local respondents as having limited value (at least as anything more than a very short-term measure) in deterring drink-drivers. Consequently, there are opportunities for increasing the effectiveness of current practices in this particular rural area and other rural areas more broadly. This may require additional resources, or a change in the way current resources are allocated. Although external enforcement is an important component of any rural drink-drive enforcement, it is vital that enforcement is conducted by local officers in a proactive and ongoing manner. Similarly, local officers need to ensure that they are consistent with their treatment of drink-drive offenders in the area. Targeting specific individuals may be warranted in some cases (and supported by members of the wider community), but in order to deter the greater driving population (who do engage in some level of drink-driving), the risk needs to be distributed as evenly as possible.

5.4 Future directions for policing rural drink-driving: improved partnerships?

In addition to debates about police groups working together more effectively, many respondents considered the police focused too much on enforcement issues and too little on partnership-orientated strategies. In its recently published *Staying safe in rural New Zealand* pamphlet, NZ Police emphasised the need for an effective partnership approach to crime prevention:

Preventing crime in rural areas and minimising its impact will be most effective when it is in partnership between rural people, police, local authorities and local organisations.

This message was echoed by a variety of respondents in this study. For example, in discussing the success of police responses to drink-drive enforcement, one local commented, 'just using police deployment to try and fix it, I can't see changing it in the long term. It needs more than that. It needs more of a behavioural change; acceptance, public acceptance' (CS official). Likewise, a district-level police officer argued that 'there is a need for a whole-of-community approach to this. The main problem is a very deeply ingrained alcohol abuse problem in Southland. Many locals believe they have the right [to drink and drive], and enforcement alone will not change this' (SD police). Similarly, reaching a common understanding of the rural drink-drive problem is important for establishing effective partnerships. This report suggests that currently there is a lack of consensus about whether there is a problem, which clearly needs to be addressed if a coordinated approach is to be adopted in this area.

While multi-agency partnerships were considered the most useful and effective approach to local issues – including alcohol and rural drink-driving – some respondents noted a lack of sufficient police involvement in, or commitment to, partnership and community-oriented approaches. For example, in an educational context, one group of rural students representing schools from across the district, commented that police 'rarely' went into schools to speak to young people about issues such as drink-driving. Similarly, a district-level alcohol-concern group, comprising practitioners from various health, road safety and public sector organisations, stated that police attendance on the committee was sporadic, and that there was often limited commitment from police to the group's work. Indeed, one member of this group perceived that the primary police focus was on alcohol enforcement issues, rather than collaborative working partnerships, 'what I'd like to see more of from police is them coming into groups that are wanting to do that education bit as well, and really supporting that change in culture. Sometimes it does feel like [they think] "we'll go out in the van one night and we'll do a whole RAID (Reduce Alcohol-Impaired Driving), and that's our job done"' (SD practitioner).

Respondents stated that local police had limited involvement with a number of important local community groups. However, given the reported shortages in police resources at the case-study level, it is unsurprising that there are limited opportunities for local officers to engage in such activities. Furthermore, it is important to recognise that unlike these specialist stakeholder groups, the police have an extensive mandate that may sometimes preclude them from involvement with every stakeholder group.

Furthermore, case-study respondents were critical of the police emphasis on enforcement at the expense of more collaborative strategies. For example, some respondents suggested that by focusing on the 'road' and 'drivers', as opposed to the 'hotel' and 'drinkers', police tactics were too impersonal and reactionary. In short, rather than sitting outside licensed premises waiting to detect drink-drivers, it was argued that local police could and should be more proactive – such as going into hotels and talking to drinkers about the need to find safe modes of transport home. One respondent described this approach as 'being involved with the people in the community and actually listening to what they're talking about rather than just telling people off all the time' (SD resident). Indeed, some respondents saw this type of approach as a more positive engagement with the alcohol issue (at least as a first step), particularly in small rural communities where the relationship between police and community differs to that of urban areas.

However, it is also important to recognise both the limited deterrent effect of such an approach and residents' motivation for wanting police to engage in this enforcement style. While walking through local hotels can have general deterrent value, it needs to be reinforced by an actual risk of detection. As Zaal (1994, p9) comments, the effectiveness of general deterrence strategies is contingent on 'having a level of enforcement that is sufficiently high and/or visible enough to create a perception among road users that there is a real possibility that a traffic offence will be detected'. Consequently, if the enforcement consists only of hotel walk-throughs, it is unlikely to effectively deter local residents from drink-driving.

5.5 The way ahead

There are certainly opportunities for improving the current police response to rural drink-driving, both in the case-study area and more broadly. However, it is equally important to recognise that the NZ Police are constantly seeking to do things 'better' and to take advantage of learning opportunities. Indeed, at the national level, Road Policing Support are building on their knowledge of rural drink-driving and its enforcement through a number of studies. It is anticipated that this study, alongside the previous report (Cross et al 2009) and another study currently underway, will help improve the efficiency and effectiveness of rural drink-drive enforcement delivery in New Zealand. Similarly, it is equally important to acknowledge once again the ongoing efforts of district staff, who are continuously assessing the way that they carry out rural drink-drive enforcement at the practitioner level. In saying this, however, this report recommends that when the NZ Police engage in new initiatives to do things 'better', these initiatives are effectively evaluated – not only in terms of drivers' perceptions of the detection risk and detection rates associated with specific enforcement initiatives, but most importantly, in terms of the impact that enforcement can have on crash rates.

6 References

- Barclay, E, JF Donnermeyer and PC Jobes (2004) The dark side of gemeinschaft: Criminality within rural communities. *Crime Prevention and Community Safety: An International Journal* 6, no. 3: 7–22.
- Bartley, A (2003) Survey research: mail surveys. Pp188–205 in *Social science research in New Zealand: Many paths to understanding*. 2nd ed. C Davidson and M Tolich (Eds). Auckland: Pearson Education.
- Blyth, A, L Stewart and C Maskill (1995) *Perceptions of drink-driving and alcohol-related crashes in rural areas of New Zealand*. Auckland: Alcohol and Public Health Research Unit.
- Bowling, B and J Foster (2002) Policing and the Police. Pp980–1033 in *The Oxford handbook of criminology*. 3rd ed. M Maguire, R Morgan and R Reiner (Eds). Oxford: Oxford University Press.
- Bristow, AP (1982) *Rural law enforcement*. Boston: Allyn and Bacon.
- Bristow, WD (1998) Rural policing: Time to listen. South Australia Police internal report.
- Bull, M (2007) Alcohol and drug problems in rural and regional Australia. Pp72–86 in *Crime in rural Australia*. J Barclay, JF Donnermeyer, J Scott and R Hogg (Eds). Sydney: Federation Press.
- Buttle, J (2006) What is known about policing rural crime? Reviewing the contemporary literature. Unpublished internal report. New Zealand Police Rural Liaison.
- Centre for Accident Research and Road Safety (Queensland CARRS-Q) (2008) *Rural and remote road safety research programme: Major recommendations*, Carseldine: Queensland University of Technology.
- Chamberlain, E and R Solomon (2002) The case for a 0.05 percent criminal law blood alcohol concentration limit for driving. *Injury Prevention* 8: 1–17.
- Corbett, C (2003) *Car crime*. Collumpton: Willan Publishing.
- Cross, J (2008) Enforcing against rural drink-driving: A literature review. Wellington: Research and Evaluation Unit, Road Policing Support, New Zealand Police internal report.
- Cross, J, JP Locker and A McClure (2009) *The influence of rural drink drive enforcement in Southern Town*. ACC commissioned report. Wellington: Research and Evaluation Unit, Road Policing Support, New Zealand Police.
- Delaney, A, K Diamantopoulou and M Cameron (2006) *Strategic principles of drink driving enforcement*. Melbourne: Monash University Accident Research Centre.
- Fell, JC and RB Voas (2006) The effectiveness of reducing illegal blood alcohol concentration (BAC) limits for driving: Evidence for lowering the limit to .05 BAC. *Journal of Safety Research* 37: 233–243.
- Fogarty, R (1995) Alcohol-related rural road crashes. Unpublished report prepared for the Alcohol Advisory Council of New Zealand.
- Global Road Safety Partnership (2007) *Drinking and driving: A road safety manual for decision-makers and practitioners*. Geneva: Global Road Safety Partnership.
- Harding, E (2009) 3am bar closing opposed. Accessed 6 July 2009. www.stuff.co.nz/southland-times/news/2463176/3am-bar-closing-opposed
- Harrison, W (2003) *Drink driving enforcement - issues in developing best practice*. Sydney: Austroads.

- Henderson, M (2004) Country drivers on country roads: The importance of rural road safety. In *Road Safety Towards 2010*. Australian College of Road Safety (Ed). Available at www.acrs.org.au/srcfiles/2004yearbook.pdf
- Homel, R (1988) *Policing and punishing the drink driver*. New York: Springer.
- Institute of Alcohol Studies (2007) Drinking and driving. *IAS factsheet*. Available at www.ias.org.uk
- Jones, AW (1990) Status of alcohol absorption among drinking drivers. *Journal of Analytical Toxicology*, 14: 198–200.
- Land Transport New Zealand (LTNZ) (2007a) Briefing notes, road safety issues, Central Otago District 2002–2006. Available at www.landtransport.govt.nz/performance/2007/docs/safety-central-otago-district.pdf
- Land Transport New Zealand (LTNZ) (2007b) Briefing notes, road safety issues, Southland District 2002–2006. Available at www.landtransport.govt.nz/performance/2007/docs/safety-southland-district.pdf
- Land Transport New Zealand (LTNZ) (2008a) Briefing notes, road safety issues, Clutha District 2002–06. Available at www.landtransport.govt.nz/performance/2008/docs/safety-clutha-district.pdf
- Land Transport New Zealand (LTNZ) (2008b) Briefing notes, road safety issues, Central Otago District 2002–06. Available at www.landtransport.govt.nz/performance/2008/docs/safety-central-otago-district.pdf
- Land Transport New Zealand (LTNZ) (2008c) Southland District road safety report, 2003 to 2007, April. Available at www.landtransport.govt.nz/performance/2008/docs/data-southland-district.pdf
- Martz, E (1994) Beware of rural roads. *Traffic Safety* 94, no. 5: 16–19.
- May, T (2001) *Social research: issues, methods and process*. 2nd ed. Buckingham: Open University Press.
- McCreanor, T, H Moewaka Barnes and T Mathews (1998) *Limited impact evaluation for the Waikato rural drink drive project*. Auckland: Alcohol and Public Health Research Unit.
- Ministry of Transport (MoT) (2008a) *Motor vehicle crashes in New Zealand 2007*. Wellington: Ministry of Transport.
- Ministry of Transport (MoT) (2008b) *The social cost of road crashes and injuries. June 2008 update*. Wellington: Transport Monitoring, Strategy and Sustainability, Ministry of Transport.
- Ministry of Transport (MoT) (2008c) *Alcohol/drugs crash factsheet for the year ended 31 December 2007*. Wellington: Ministry of Transport.
- Moskowitz, H and D Fiorentino (2000) *A review of the literature on the effects of low doses of alcohol on driving-related skills*, Washington: National Highway Traffic Safety Administration.
- National Safety Council (NSC) (2008) Rural road safety a national problem. *Traffic Safety* 8, no. 6: 1.
- Noakes, L and E Wincup (2004) *Criminological research*. London: Sage.
- New Zealand Police (1999) *Doing something about rural drink drive: The Waikato experience*. Wellington: Partnerships Project, New Zealand Police.
- New Zealand Police (2008a) *Road policing strategy to 2010*. Wellington: New Zealand Police.
- New Zealand Police (2008b) *Road policing programme 2008–2009*. Wellington: New Zealand Police.

- Risbey, T, H de Silva and A Tong (2007) *Road crash cost estimation: A proposal incorporating a decade of conceptual and empirical development*. Australia: Department of Transport and Regional Services.
- Scott, J and PC Jobes (2007) Policing in rural Australia: The country cop as law enforcer and local resident. Pp 127–137 in *Crime in rural Australia*. J Barclay, JF Donnermeyer, J Scott and R Hogg (Eds). Sydney: Federation Press.
- Sims, VH (1988) *Small town and rural police*. Illinois: Charles C Thomas.
- Stewart, L and K Conway (1998) *Community action on rural drink driving: The Waikato Rural Drink Drive Pilot Project 1996–1998 Formative evaluation report*. Auckland: Alcohol and Public Health Research Unit.
- Stewart, L and K Conway (2000) Community action to reduce rural drink and drive crashes in New Zealand: Adapting approaches in dynamic environment. *Substance Use & Misuse* 35: 141–155.
- Stringer, ET (2007) *Action research*, 3rd ed. California: Sage Publications.
- UMR (2007) *An evaluation of operation culture shock – a qualitative and quantitative study*. Wellington: Accident Compensation Corporation.
- Vulcan, P, H Hayes, N Haworth and J McLean (2003) *Assessment of strategies, policies and programmes affecting road safety*. Report to Land Transport Safety Authority, New Zealand.
- Winfrey, T and T Taylor (2004) Rural, small town, and metropolitan police in New Zealand: Differential outlooks on policing within a unified organisation. *Policing: An International Journal of Police Strategies & Management* 27, no. 2: 241–263.
- Zaal, D (1994) *Traffic law enforcement: A review of the literature*. Melbourne: Monash University Accident Research Centre.