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An Evaluation and Comparison of the Horowhenua and Tararua Community Alcohol Action Programmes (CAAP)

This Thesis is presented as partial fulfilment of the requirements for the
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ABSTRACT

In New Zealand, Community Alcohol Action Programmes (CAAP) have emerged to address the high number of alcohol-related road injuries and fatalities. The present study is an evaluation and comparison of the Horowhenua and Tararua CAAP programmes. Subjects (n=175) from several different groups within these communities were interviewed and observational studies of licensed premises (n=36) were used to collect data. Statistical analysis (chi-square) was conducted to see whether one programme had been more successful in meeting its aims and objectives than the other. Few statistically significant differences were found indicating that the programmes were on the whole similar. However, prior to the commencement of this piece of research, a number of potential problems concerning the evaluations were identified. These relate mainly to the fact that the evaluation of the programmes had not been planned for before they were implemented. It was concluded that the citizens involved in community action programmes often have little awareness of research design and evaluation. This can limit the utility of such programmes and make it difficult to draw valid or reliable conclusions concerning their efficacy.

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ABBREVIATIONS AND DEFINITIONS

The following definitions are derived from the work of Bailey and Carpinter (1991).

The Drinking Driver - In general, the term 'drinking driver' is used to refer to anyone who is over the legal limit of blood alcohol for driving. Sometimes it is used to refer to anyone who drinks before s/he drive irrespective of his/her level of intoxication. In the present study however, it is reserved for those drivers over the legal limit. Other terms describing a drinking driver include:

DWI - Driving While Intoxicated;
DUI - Driving Under the Influence.

Blood Alcohol Levels (BAL/BAC) - Alcohol in the blood is measured in milligrams of alcohol per 100 millilitres of blood. The legal limit for fully licensed drivers in New Zealand is 80 milligrams of alcohol per 100 millilitres of blood. This is written as 80mg%. This level varies from country to country.

Random Stopping (RS) - Random Stopping is where vehicles passing through a checkpoint are stopped at random. If a driver says s/he has been drinking when asked, or if the traffic officer has good reason to suspect the driver has been drinking, s/he is breath tested.

Compulsory/Random Breath Testing (CBT/RBT) - This is similar to random stopping except that all drivers passing through checkpoints are breath tested.

Server Intervention/Host Responsibility (SI/HR) - It should be noted that the term server intervention is a term used in the United States. In New Zealand, the equivalent term is host responsibility.

INTRODUCTION

Within the literature relating to road safety which spans most of Western society including New Zealand, a problem in common is drink driving (Bailey, 1986; Bailey & Carpinter, 1991; Donelson, 1988; Geller, & Russ, 1986; Jonah & Wilson, 1983; Kirk, 1990; Simons-Morton, Brink, Simons-Morton, McIntyre, Chapman, Longoria & Parcel, 1989; McLean, Parsons, Chesterman, Dineen, Jason & Davis, 1987; Vingilis, 1987). Long before the advent of the motor vehicle, alcohol was identified as playing a part in road accidents (Bailey & Bailey, 1982; Weller, Hansen, Stutts, & Popkin, 1986). Intoxicated pedestrians were run down by horses or horse-drawn vehicles, or intoxicated riders, drivers or passengers fell from or out of these (Bailey & Bailey, 1982; Weller, Hansen, Stutts, & Poplin, 1986). The introduction of the motor vehicle added a new dimension to the problem of the overuse of alcohol in relation to transport. In 1904, a study in the United States of 25 fatal accidents occurring to "horseless wagons" showed that in 19 of these accidents the drivers "had used spirits within an hour or more of the disaster" (Bailey & Bailey, 1982; Weller, Hansen, Stutts, & Popkin, 1986).

There was a gradual decline in what had been a strong temperance and prohibitionist movement from the 1920's onwards in New Zealand (Casswell & Stewart, 1989). From this time, there was an increase in per capita alcohol consumption, a development in liberal attitudes towards alcohol and alcohol controls, and an increase in alcoholism treatment facilities.

New Zealand today has a very mobile population with over two million vehicles serving 3.4 million people, many of whom have liberal views on the use of alcohol, and these factors have combined to produce a high incidence of alcohol-related fatal accidents (Bailey & Bailey, 1982; Evans, 1995). In 1994, 580 lives were lost through accidents on the road (Land Transport Safety Authority, 1994). Gary (1988) suggests that alcohol is involved in as many as 50% of all fatal accidents in New Zealand. In 1989, the cost of alcohol-related motor vehicle accidents was at least $1,000 million in New Zealand (Bailey & Carpinter, 1991). More specifically, fatal alcohol related accidents cost the Horowhenua District $32.4 million and the Tararua District $25.08 million in 1993 (Land Transport Safety Authority, 1994). These figures do not take into account the numbers of individuals who sustain non-fatal injuries but required extensive health resources, nor does it take into account the financial and emotional costs to family and friends (Kirk, 1990).

It is estimated that only 2-5% of the adult population are responsible for the drink driving accidents and that many drivers involved in fatal accidents have been charged as drinking drivers previously (Bailey, 1986; Bailey, 1995). According to Bailey (1995), males in the 18-28 year old age group form the core group of offenders. Other characteristics of the 'at risk' group include: the offender often drinks at hotels, drives on his own on Friday and Saturday nights, has a blood alcohol level in excess of 150mg%, which is nearly twice the legal limit for fully licensed drivers, and is 'ikely to be Maori (Bailey, 1995, 1995; Bailey & Carpinter, 1991).

Most drink driving fatalities occur at night, particularly between 8pm and 5am. This is the period when Police patrolling is at its lowest rate. Police officers tend not to be deployed to traffic duties at times which coincide with drinking and driving (Bailey & Carpinter, 1991). This is an important observation as alcohol is frequently involved with the more serious accidents (Bailey & Carpinter, 1991). According to Bailey and Carpinter (1991) accidents involving alcohol occur at high speed with consequently more severe injuries.

Numerous measures have been employed world-wide in an effort to counter drink driving. These generally come under the categories of: legal/legislation, rehabilitation, education, public awareness, technological and systems-oriented approaches (Geller & Russ, 1986; Liben, Vingilis & Blefgen, 1985). Although the measures vary from nation to nation, the majority of Western countries, including New Zealand, have utilised a large number of these approaches. The majority of these drink driving countermeasures can be categorised into three distinct types of intervention: primary, secondary and tertiary (Vingilis & Salutin, 1980).

Primary intervention attempts to reduce the incidence of *new* cases in the population (Vingilis & Salutin, 1980). This type of intervention aims to prevent potential drink drivers from engaging in the behaviour. Educational and media programmes are used to increase public awareness and influence public opinion about drink driving issues. As well as classroom teaching, driver education programmes, citizen activist groups, server intervention, technological advances, and legislation are all examples of primary intervention. Legislation also has a major role in secondary and tertiary interventions.

Secondary intervention aims to prevent a drunk driver already on the road from having a crash (Vingilis & Salutin, 1980). Intervention at this stage consists of enforcement of legislation by the police. Such legislation most commonly consists of pre set BAC limit and random breath testing.

Tertiary intervention is concerned with reducing recidivism (Vingilis & Salutin, 1980). This form of intervention is most frequently ordered by a court. In the majority of Western countries this is often a fine, accompanied by revocation of the offender's driver's licence, and may involve some type of rehabilitation as part of his or her sentence.

Legislation

The most common countermeasure is legislation (Perkins, 1992). Laws are generated to limit or prohibit, drink driving behaviour. Violation of the provisions of the legislation results in punishment as provided for under the laws. Through law generation, enforcement, adjudication and sanctioning, the traffic law system creates and maintains the deterrents to drink driving. Laws and regulations governing driver behaviour are designed to improve road safety. The sanctions or penalties applied against the violator are intended to deter drivers from breaking the laws and to discourage illegal behaviour. Road safety is improved to the extent that the deterrence is effective (Jonah & Wilson, 1983; Perkins, 1992).

The legal approach to countering drink driving is based largely on the theory of deterrence through the criminal justice system (Liben, Vingilis and Blefgen, 1985;

Vingilis, 1990). The deterrence model postulates that the effectiveness of the legal threat is a function of the perceived certainty, severity and celerity of punishment where an offence is committed. The greater the likelihood of arrest, prosecution, conviction and punishment, the more severe the eventual penalty; and the more quickly it is administered; the greater will be the effect of the legal threat (Jonah & Wilson, 1983; Vingilis, 1990). That is, "by increasing the driver's subjective perception of the risk of apprehension through the implementation of legislation designed to increase the *actual* likelihood or simply the *perceived* risk of apprehension, the potential drink driver should be deterred from engaging in such behaviour" (Liben, Vingilis & Blefgen, 1985, p. 3).

In relation to legislation, the Scandinavian countries of Finland, Denmark, Sweden and Norway, initially took a different approach to the enforcement of drink driving laws, which several Western countries have since followed (Voas & Lacey, 1990). This arose because the former legislation tended to exhaust the resources of their criminal justice systems, and "produced inequities among different kinds of offenders, failed to affect the behaviour of hard-core offenders, and was unnecessary for the balance of the population" (Ross, Klette & McCleary, 1984, p. 471). Thus, Scandinavian countries have seen a shift of emphasis within the deterrence-based approach from severity of punishment to certainty of punishment. It should be recognised that the punishment of drink driving offenders is still relatively harsh compared with other Western countries, with prison sentences being a common punishment.

In essence, the Scandinavian countries, primarily Norway and Sweden, have three key features in their approach: (1) Scandinavian countries have a consistent application of prison sentences for drunk driving. For example, it is estimated that up to 35% of prison admissions in Norway and Sweden are for drunk driving convictions, (2) the Scandinavian Model of legislation provides for blood alcohol tests to be given as conclusive evidence rather than just presumptive evidence of alcohol intoxication, and (3) Scandinavian countries have a very strict legal limit, BAC of .05%, of intoxication. This figure contrasts with .10% in most States in America, and .08% in New Zealand, England, Belgium, Austria, Germany, France, and Switzerland (Snortum, 1984).

Another feature distinguishing Scandinavia from other Western countries is the distinction between exceeding the limit (called driving when not sober) and driving in a state of intoxication (drink driving) (Anaenaes, 1984; Ross, Klette & McCleary, 1984). Here, a driver is convicted of the latter offence only if he or she was driving with a BAC of .15% for example. Normally the lesser offence will incur a fine, the more serious offence will result in a prison sentence (Anaenaes, 1984).

In the United States, drink driving was first recognised in scientific literature as a problem in 1904, approximately five years after the first highway fatality (Voas & Lacey, 1990). Soon thereafter, the United States and Norway were among the first industrialised nations to make impaired driving a criminal offence. In 1910 New York adopted an impaired driving law and in 1911 the State of California followed suit. This early criminalisation of the drink driving offence set it apart from other traffic infractions. Higher penalties were provided for this offence, including

incarceration and substantial periods of licence suspension (Voas & Lacey, 1990). Thus, these states represent the first legislative measures to counter drink driving in the United States. Since then, there has been a great deal of legislation to discourage the drinking driver.

In general, each United State formulates its own laws in relation to drinking driving. However, there have been several initiatives aimed at and co-ordinated for, the whole country by the Federal Government. For example, the 1970s saw the emergence of 35 Alcohol Safety Action Projects (ASAPs). These programmes were designed to provide an "integrated approach to the drinking driving problem" (Voas & Lacey, 1990, p. 122). The courts, prosecutors and police received additional funds and participated in a co-ordinated programme to increase drinking while intoxicated (DWI) arrests by simplifying police paperwork and by increasing the speed of prosecution and adjudication. According to Voas and Lacey (1990) these projects generally succeeded in increasing the number of DWI arrests. These increases were primarily achieved through the employment of special DWI patrols operating on weekend evenings. While the ASAP programmes came to an end by 1975, the patrol procedure has continued to be a feature of most communities in which drink driving enforcement is emphasised.

One of the most common pieces of legislation in America is dram shop liability. It was first introduced into American law "in the mid 1800s by temperance advocates in an attempt to close saloons and 'dram shops'" (Mosher, 1979, p. 773). Initially, these laws provided that tavern owners be financially responsible for the support of the families of patrons who had become 'habitual drunkards' (Mosher, 1979). Such laws

were originally used infrequently, however their application has become more common in recent times.

As used today, "a dram shop act is a statute under which one who furnishes alcohol to a drinker may be held liable for a third person's injured by the subsequent acts of the drinker" (Bedard, 1979, p. 725). Enforced at a State level, "a typical statute provides that a commercial server of alcoholic beverages be found liable for injuries caused by his patrons if the server sold or gave alcohol to the patron in violation of the law. A violation occurs if the patron is a minor, a habitual drunkard or someone 'already' or 'obviously' intoxicated when served" (Bedard, 1979, p. 725). It should be noted that the term 'habitual drunkard' is not usually used today. Instead, the emphasis is now on serving minors and intoxicated persons. Thus, to gain compensation, an injured person must show that the server did in fact serve one of the above mentioned people.

The most significant piece of legislation in the United Kingdom, in relation to drink driving, has been the Road Safety Act of 1967. This piece of legislation included elements of the Scandinavian Model (Voas & Lacey, 1990), in that the Act acknowledged the reliability of technology by permitting the use of blood alcohol evidence in drink driving cases.

The Road Safety Act of 1967 represented a revolutionary change in British law with its intent to apprehend and punish drunk drivers (Ross, 1988). The law rested on evidence from both laboratory and field studies demonstrating the impairing effect of Blood Alcohol Concentration (BAC) over 0.08%. The law proposed to authorise police officers to test any driver for evidence of alcohol consumption. However, "this

broad 'random' permission proved controversial, and was replaced by provisions allowing police to demand a test from a driver who was involved in an accident or a traffic-law violation, but not otherwise without reasonable cause to suspect that the driver had been drinking" (Ross, 1988, p. 66). This Act was very successful at its inception with a large reduction in injuries and fatalities (Ross, 1988). However, this reduction was short-lived with the numbers of injuries and fatalities returning close to pre-Act levels within a year.

In Canada, the basic criminal law is federal, but the level of enforcement is a matter for each State. As in many other Western countries, Canada has adopted a Scandinavian-type law (Ross, 1988). However, at the forefront of Canada's legislation related to drink driving is the Criminal Amendment Act of 1969, "which was directly inspired by the British Road Safety Act" (Ross, 1988, p. 49). Word of the impressive initial results of the Road Safety Act spread in English speaking countries, whereas its limitations were not generally evident. The Canadian law, like the British, prohibited driving with more than a 0.08% blood alcohol content. The police were authorised to take a breath test from someone who they had "reasonable and probable" cause to believe was violating the law. Unlike the British policy, they were not empowered to demand tests in the absence of such suspicion from those involved in violations or crashes. Moreover, the legislation did not mandate licence suspension but used fines as the main punishment (Ross, 1988).

"In terms of both certainty and severity of punishment the Canadian law appears weaker and less innovative than the British prototype" (Ross, 1988, p. 70). The official evaluation of the Canadian Criminal Amendment Act found evidence of a reduction in night time and weekend casualties, but it was much smaller than had been achieved in Britain, and it appeared to be very brief in duration.

"Although it is a federal country like Canada, Australia's drink driving law is entirely a matter for the state governments. Also, unlike the case in the United States, there is not strong leadership from the federal government for state action in the drink driving area. Hence, the laws and enforcement practices of the various states have been diverse" (Ross, 1988, p. 72).

Initially, many states adopted laws similar to the British Road Safety Act. For example, the British specification for the permitted BAC of .08% was followed. However, many states subsequently changed this to .05%, joining the Scandinavians in prohibiting driving after relatively moderate drinking. Although the Australian states were inspired by the laws of other countries, they accomplished what others dared not to do - Australia authorised random breath testing by police (Ross, 1988).

Checkpoints, where all vehicles are stopped by the police within a given piece of road, as a drink driving countermeasure have been employed in a number of countries including: Norway, Sweden, France, New Zealand and the United States. However, in none of these countries has the "mass breath testing of motorists, selected at random, become the centrepiece of social policy" (Homel, 1990, p. 161). Random breath testing (RBT), Australian-style, represented a distinctive approach to the

problem of alcohol-impaired drivers. Freedom for police in enforcing drink driving laws offered an important opportunity to raise the perceived risk of punishment for drinking drivers, by testing all drivers passing through checkpoints (Homel, 1990). In general, RBT involves capriciously selected checkpoints, often on main roads, varying from day to day, which are not announced publicly prior to the operation. Motorists passing a checkpoint, designed to be highly visible, are pulled over are asked to take a test, regardless of the type of vehicle or their manner of driving. No attempt is made to detect alcohol use, no record checks are run, and no equipment checks are conducted. Drivers returning a negative breath test result are not detained, usually driving away after a delay of about a minute. Drivers who are positive on the screening test are detained for an evidential breath test, with 50 mg % being the limit in most states (Homel, 1990).

Although RBT began in Victoria, in July 1976, the programmes having the greatest impact in reducing the alcohol-related road toll, have been the 'boots and all' New South Wales (NSW) and Tasmanian programmes (Homel, 1990). These programmes were introduced concurrently and adopted a similar approach from the beginning.

Although NSW has come to be associated with the success of RBT, Tasmania, with its small size, has "achieved an intensity of enforcement unmatched anywhere else in the world" (Homel, 1988, p.172). For example, in 1985 more than 200,000 roadside tests were conducted out of a driving population of 268,887. The outcome of this was that alcohol involvement in fatal accidents in the "three-year-post RBT period was

42% less than for the six years prior to RBT". The same figure for casualty accidents was a 29% reduction (Federal Office of Road Safety, 1986, cited in Homel, Carseldine, & Kearns, 1988).

At the cornerstone of Australian RBT is the NSW programme. In the first 12 months of RBT (17/12/82 - 31/12/83), 923,272 preliminary breath tests were conducted, representing approximately one test for every three licensed driver (Homel, 1988). To boost enforcement, when this programme was initiated, the state NSW employed an extra 200 police for highway patrol work.

Strategies of enforcement have changed over time. Initially, RBT was carried out using special vans and converted buses, but breakdowns and limitations in flexibility led to a revision of the operation.

In 1987, "mobile RBT patrols" were introduced to complement the work of the stationary test sites. The purpose of these was to monitor side roads within four kilometres of the main testing site, in order to deter motorists from attempting to evade RBT. To yield a higher "hit rate" and reduce police boredom, since 1988 mobile RBT patrols have had permission to essentially "roam free," although the bulk of random testing is still conducted from highly visible stationary vehicles (Homel, 1988).

RBT in NSW has been supported by a variety of media publicity including: television, radio and newspapers. For example, television publicity depicted police carrying out RBT in a friendly and efficient manner, and also carried the message that RBT could

not be evaded by such methods as turning into side roads. There was no attempt to emphasise the penalties - the entire emphasis was on the threat of arrest and on the humiliation for someone who "failed the test" (Homel, 1988).

The proportion of Sydney motorists who have been breath tested has increased steadily, from 25% prior to RBT to 53% in February 1987 (Homel, 1988). In a study conducted by Homel, Carseldine, & Kearns (1988), 83% of a sample of 600 Sydney motorists reported that they had seen RBT in operation in the last six months. Moreover, those actually tested drove more often at night, when RBT is more likely to be operating, and are the population most at risk for drinking and driving (Homel, Carseldine, & Kearns, 1988).

In sum, these programmes have elements which distinguish them from other RBT operations. The first thing that distinguishes them is the high level of exposure the general public has to RBT. Each year at least one random test is conducted for every three drivers. Both operations have had extensive publicity focusing specifically on RBT. Finally, RBT is highly visible and it is hard to predict where it will take place on any given night, and difficult to evade once it is in sight (Barnes, 1988; Homel, 1990).

Citizen Activist Groups: MADD and RID

In the United States, emerging from the late 1970s and early 1980s into the DWI enforcement picture were citizen activist groups, such as Mothers Against Driving Drunk (MADD) and Remove Intoxicated Drivers (RID) (Aiken, 1986; Gusfield, 1988; Ross & Hughes, 1986; Voas & Lacey, 1990). Basically, these groups have

succeeded in calling public attention to the issues of drink driving with the aim of bringing about changes in drink driving legislation (Ross & Hughes, 1986; Voas & Lacey, 1990). The efforts of these groups have enabled more police resources to be directed against drink drivers, roadblocks have become a common sight, penalties have been increased and plea-bargaining curtailed in drunk driving cases (Ross & Hughes, 1986).

One of the first movements to appear as a drunk driving force emerged in the late 1970s. This movement organised "a citizen's battle for the right to safe passage on American roads" (Aiken, 1986, p. 101). An acronym for Remove Intoxicated Driver, RID was sparked by a photograph of two mangled vehicles accompanied by the names of two dead teenage siblings in a local paper, in December 1977. The person responsible for the accident had a BAC well over the legal limit.

Doris Aiken, founder of RID-USA, waited for the newspaper to publish a picture and some details about the offender for a week. Aiken (1986) stated that if the deaths had been committed with a gun, the offender's whole life history would have covered the front page. Nothing happened. Emerging from this incident was "a citizen action group to help the victims of drink driving accidents, to change the lenient attitudes of judges and District Attorneys, and to close the loopholes in the DWI law" (Aiken, 1986, p. 102). RID has clarified the abuse of laws in a highly public manner in order to raise the community's awareness of how these laws are failing to be used to their maximum in reducing drink driving. For example, Aiken (1986) found that people drove while intoxicated for three and a half years before they received their first alcohol-related conviction because of plea bargaining. In addition, the average BAC

was .20, twice as high as the legal limit, which means that the driver had had 12 to 15 drinks in two hours before getting into his/her car (Aiken, 1986).

Mothers Against Drunk Driving (MADD) arose out of an unsuccessful attempt by Candy Lightner, in the USA, to arouse government action for new DWI legislation. This was sparked when in May 1980, her daughter, Cari (13 years), was struck and killed (as she walked on a footpath) by a drunk driver who had been arrested a few days previously on a drink driving charge. Although Candy was unsuccessful at first in gaining government support, she did gain the attention of journalists and by the end of 1980 had brought about a California Governor's Task Force on Drunk-Driving, and had launched a movement that captured the nation's attention. This organisation was called MADD, an acronym for Mothers Against Drunk Driving (Gusfield, 1988). MADD brought to the public's attention an image of the "killer drunk" and the "victim public." Membership of the movement grew with families of victims and injured people from alcohol-impaired crashes. These people have lobbied together for the enforcement of more severe DWI laws. "In California, for example, the DWI laws were changed in 1982 to make a blood alcohol level of .10 for motorists illegal. Prior to that, the BAL was evidence of DWI but was rebuttable" (Gusfield, 1988, p. 125). In addition, a mandatory 48 hour jail sentence is enforced on all convicted drink driver offenders. Following California, many other states now enforce such DWI laws.

MADD has acted as a catalyst for other organisations focusing on drink driving to emerge. "Together they have created a new movement to give dramatic form to an issue that had been dormant in American life" (Gusfield, 1988, p. 124). In moving the

issue of drink driving into a higher place of public concern, MADD and other such groups present the issue of alcohol-impaired driving as one of justice and retribution, of bringing drink driving to a deserved punishment and, through this, deterring others.

School-Based Education Programmes

To help counter the over-representation of young drivers in the drink driving fatality statistics (Cameron, 1982; Farrow, 1985; McKnight, 1986; Palmer, 1983; Vingilis, De Genova & Adlaf, 1986), countermeasures have been developed to specifically target this group. Such efforts, varying from school to school and country to country, are alcohol education programmes (McKnight, 1986). To reduce alcohol-related accidents, injuries, and fatalities among young people, the development and implementation of educational programmes aims at achieving more responsible use of alcohol by youth. Discussing programmes in the United States, McKnight (1986) classifies such efforts into four broad types of programmes: (1) drink driving programmes, (2) general alcohol education programmes, (3) peer intervention, and (4) environmental intervention.

Drink driving programmes are specifically designed to be drunk driving countermeasures. These programmes are frequently part of a high school driver education curriculum. According to McKnight (1986) the topics covered by these programmes vary from one course to another, but usually include: (1) the magnitude of the drink driving problem, (2) alcohol and its effects, (3) drink driving laws and penalties, (4) ways of limiting drinking before driving, and (5) ways of limiting driving after drinking.

General alcohol education programmes have a more general focus, looking at the issues related to alcohol, but lack a specific focus on drink driving. Here, alcohol is dealt with more as it relates to mental and physical health. These programmes are usually taught as part of a health curriculum or offered as an elective. Often, alcohol education is taught as part of a broad drug education programme (McKnight, 1986).

McKnight (1986) suggests that both of these types of programmes appear to be useful in increasing students' knowledge about alcohol and its effects. Most programmes have also shown at least short-term shifts in attitudes toward more responsible use of alcohol. Effects upon actual behaviour are, however, somewhat varied. Some studies have shown a decline in drinking, and drinking and driving as a result of these programmes. However, other programmes have not shown such a decline (Anastas, 1986). It is significant that a large number of young people have died in drink driving crashes despite school education programmes.

Peer intervention. The apparent inability of school-based education programmes to affect drink driving behaviour directly does not mean education is ineffective in helping to control the incidence of drink driving. An alternative to encouraging young people to be more responsible is to encourage those who are already responsible to intervene with peers who are not responsible (McKnight, 1986).

It is suggested that young people are willing to intervene in the drinking and driving of their peers to a greater extent than other age groups. Instructional programmes encouraging and giving practice in intervention, appear to increase the frequency and

intensity of intervention behaviour over periods in which it is declining among those not participating in peer intervention programmes.

One such peer intervention has emerged from within the school system in the United States to become a world-wide organisation. This organisation is known as SADD, Students Against Driving Drunk (Anastas, 1986; Blaylock, 1992; Laurenson, 1992). SADD emerged from the deaths of two high school students in two separate crashes involving alcohol in 1981. The organisation grew as a response of a school counsellor, who realised that adults 'preaching' about alcohol in health education class was not reaching his students. The students already had the information about drink driving, but continued to die anyway. In 1982, SADD was officially launched as an organisation "run by students, for students" (Anastas, 1986, p. 36). Its whole message is, "Don't drink or do drugs at all" (Anastas, 1986, p. 35)[1].

An important part of SADD is the Contract for Life. This is a formal written agreement signed by a high school student and his or her parents (Anastas, 1986). It states, "I will not drive when I have been drinking, or travel in a car with someone who has had too much to drink" (Anastas, 1986). Each party agrees that if s/he is called s/he would at any time, any place, collect the other person with no questions, and no arguments at that time, or they would organise safe and sober transport home (Blaylock, 1992). This basically ensures a safe ride home for both the student and parents, if necessary.

[1] It is important to emphasise that this information relates to SADD USA, which has fundamental differences from SADD New Zealand.

SADD has not been subjected to the same rigorous empirical evaluation as the other types of education programmes (Laurenson, 1992). Hence, its success or failure to reduce drink driving fatalities is not well documented. However, the SADD organisation must be having some positive effect on students because as of 1986, the organisation had spread across the United States into more than 8,000 schools (Anastas, 1986). In addition, the SADD message has spread overseas to countries including Canada, Australia and New Zealand. Clearly, SADD is having some effect on people, even if this effect is not well understood or documented.

Environmental intervention. A third set of school-based drink driving interventions are those achieved through the alteration of the environment in which youth drink and/or drive. This type of programme includes: alcohol-free events, alcohol-free centres for teenagers, alcohol-free dances and ride services. McKnight (1986) asserts that such programmes have been successful as far as patronage goes. However, it has not been reported how many of these patrons are from the problem drink driving population.

The one thing that is clear in relation to youth drinking and driving, regardless of the reported successes of different programmes, is that the "problem will not readily succumb to education and information alone" (McKnight, 1986, p. 25). This is clear from the disproportionate numbers of young people being killed and injured on the road in many Western countries. Education programmes may be successful in some cases, however, such programmes are not enough to resolve the drink driving problem alone (Laurenson, 1992). This is clearly reflected in the fatality statistics with young people being over-represented (Bailey & Carpinter, 1991; Cameron, 1982; Farrow, 1985; Mann, Vingilis, Leigh, Anglin & Blefgen, 1986; Palmer, 1983).

Technology

In the United States, for almost 20 years, researchers have attempted to develop an in-vehicle system which would "prevent an impaired driver from operating his or her vehicle" (Stein & Allen, 1986, p. 123). These systems have ranged from breath testers to psychomotor tests, and have prevented operation of the vehicle by starting or alerting drivers, and the police through alarm systems.

The lack of such systems in vehicles today indicates there are some serious problems with implementing a Drunk Driving Warning System (DDWS). One major problem is that the DDWS must be inexpensive and easily installed into a wide variety of vehicles. Stein and Allen (1986) point out that the prototype equipment used on such a project was designed in the mid-1970's and was crude and expensive compared to today's microelectronics.

Such systems must also be acceptable to all parties involved in their use. This includes the judiciary, lawyers, law enforcers and the general public (Stein & Allen, 1986). In addition, the DDWS must be configured in such a way that it cannot be beaten. That is, the person taking the test must be the person who intends driving the vehicle. The costs involved with setting up the DDWS, "including installation of the devices, changing the laws, and dealing with those vehicles without the devices etc..., would have to be weighed against spending the millions/billions of dollars on another countermeasure(s)" before a DDWS could be considered a viable option (Stein & Allen, 1986, p. 130).

Overall, although Stein and Allen (1986) assert that in-vehicle deterrents are a viable concept, the lack of such devices in vehicles at the present time suggests that the costs involved with setting-up such a system are not comparable to the costs of other drink driving countermeasures. This area maybe utilised more fully in the future as technology continues to advance.

Server Intervention

Based on information indicating that hotels play a significant role in drink driving crashes, a recent addition to the family of drink driving countermeasures is server intervention (SI) (Bailey, 1987). Peters (1986) says it was a recovering alcoholic bartender who first published a reference to the bartender as an agent to prevent alcohol abuse. Mosher (1983) expanded this idea and is the central figure behind server intervention which arose as a response to the lack of effectiveness of approaches such as criminal sanctions, alcoholism treatment and educational programmes.

Server intervention (SI), as conceptualised by Mosher, was aimed at complementing these other measures to produce a combined greater impact on drink driving. Most literature has focused on commercial vendor training (Chafetz, 1984; Mosher, 1983; Peters, 1986; Russ & Geller, 1989; Saltz, 1987, 1986, 1985; Waring & Sperr, 1982), and so emphasis is placed on this training here.

SI refers to a broad set of strategies for creating safer drinking environments by reducing the risk of intoxication and the risk that intoxicated patrons will harm themselves or others (Mosher, 1983; Saltz, 1986, 1987). SI involves developing a

coherent set of policies within the establishment and then training employees to meet the standards necessary to carry out those policies (Saltz, 1985). SI differs from many drink driving countermeasures in that previous approaches focus primarily on the individual. However, SI recognises that drinking environments include powerful and counteracting inducements to drink to excess. Altering the environment in conjunction with education, may reduce risks to a far greater degree than using either approach alone (Saltz, 1987). Hence, as originally conceptualised by Mosher (1983), SI can be divided into three basic components utilising a combination of measures to counter drinking driving. These components are: (1) training (educational programmes directed at servers), (2) legal (laws and regulation, dram shop liability and criminal laws), and (3) environmental (design of outlets, outlet location, and transportation facilities) (Mosher, 1983; Saltz, 1986).

Particular strategies of intervention will vary depending on the type of server, the type of outlet and the make up of the particular community where the outlet is located (Mosher, 1983). SI is about servers of alcoholic beverages being trained to intervene throughout the patron's entire drinking session, not just when s/he is about to leave an establishment (Russ & Geller, 1989; Waring & Sperr, 1982). Such programmes focus on the drinking setting which precedes drink driving events (Mosher, 1983). SIs utilise two strategies designed to prevent DWI casualties: (1) limiting the amount of alcohol served to a particular patron so that he or she does not become intoxicated; and (2) taking action to ensure that an intoxicated patron does not leave the premises in an automobile (Mosher, 1983; Saltz, 1985).

Measures a server will use include: preventing a patron from becoming intoxicated, not serving an already intoxicated or underaged patron, providing a means whereby an alcohol-impaired individual can "sober up" before driving, providing food and non-alcoholic beverages, ensuring availability of transportation for intoxicated customers, providing adequate numbers of staff and full management support for servers who limit their customers' consumption (Russ & Geller, 1989; Saltz, 1986, 1985; Waring & Sperr, 1982).

In the short time SI has been available, enough experience has been accumulated to indicate how important management policies and support are to the success of SI (Saltz, 1985). However, early evaluations of the differing individual programmes shows that this approach is an important influence for countering drink driving (Saltz, 1985).

Rehabilitation

Mann, Leigh, Vingilis and De Genova (1983) point out that the 1970s saw the introduction of alternative sentencing with the aim of rehabilitating the DWI offender as a tertiary intervention. Across the United States and other Western countries, there have been a large number of rehabilitation-type programmes for convicted drunk drivers. Each programme has unique components and as with all other drink driving countermeasures, evaluations of these programmes have had mixed results.

In a comprehensive review of the multitude of rehabilitation programmes, Mann et. al. (1983) found that such education and treatment programmes may yield beneficial effects on DWI offenders and their subsequent drinking and driving behaviour. The

review suggested that, "although some rehabilitation programmes had a beneficial impact on traffic safety measures, it is not possible to state with any certainty which types of programmes appear to be most effective" (Mann et. al., 1983, p. 458).

Overall, it appears that the countermeasures discussed above have had varying degrees of success.

New Zealand

In New Zealand, arising from the large number of alcohol related road fatalities, there have been a number of countermeasures designed to attempt to reduce the number and severity of drink driving accidents. The majority of these have been borrowed from overseas. New Zealand countermeasures have focused largely on enforcement and penalties through the justice system (Bailey, 1991; Kirk, 1990).

Since late 1983 and more particularly since late 1984, the main drink drive countermeasure introduced by the former Ministry of Transport (MOT) has been random stopping (Bailey, 1989, 1986). Here, drivers are stopped at random at checkpoints, asked if they have been drinking, and then at the discretion of the officer, breath tested (Bailey, 1989, 1986). Such a measure was employed in New South Wales, 1982 - 1983, and led to marked reductions in the road toll. For example, in the first 12 months of RBT, 923,272 preliminary breath tests were conducted, representing approximately one test for every three licensed drivers (Homel, 1990). Unfortunately, an evaluation of Random Stopping in New Zealand has shown that there have been no significant reductions in the number of drink-driving fatalities for any period of time since 1983. It appears that legal interventions, such as random

stopping, yield only a weak or temporary reduction in drink driving fatalities (Bailey, 1986; Liban, Vingilis & Blefgen, 1985; Paternoster & Iovanni, 1986; Ross, 1982, 1988; Snortum, 1988; Snortum & Berger, 1986). Indeed, Bailey (1986) says a drinking driver is likely to be detected by authorities only once in approximately 800 trips.

Mass media campaigns have increasingly been used to deliver messages to the public designed to weaken, reduce or eliminate health compromising behaviours (Breed, De Foe, & Wallack, 1984; Kirk, 1990). Drink driving has been one area targeted by extensive mass media efforts. A number of methods have been used to increase public awareness of the adverse consequences of drink driving. These have included television, radio and billboard advertising, distribution of written information, press kits, mall displays and organised public discussions (Kirk, 1990).

For mass media campaigns to be successful, message repetition is an important component. Such messages should be continuous and take place around the traditional campaign times of holiday, Christmas and the New Year periods (Kirk, 1990). When this happens, there appears to be a lowering of the road toll. However, such trends are short lived and disappear as soon as the campaign finishes (Vingilis, 1987).

A number of education-based programmes have been taken into New Zealand secondary schools (Kirk, 1990). One such programme called 'Roadshow' was evaluated by Harte (1984, cited in Bailey & Carpinter, 1991) who concluded that the

programme had no significant effect on car accidents or hospital admissions related to accidents.

Both in New Zealand and overseas, the impact on drink driving behaviour of most countermeasures has been limited and short-term (Geller, & Russ, 1986; Liban, Vingilis & Blefgen, 1985; Snortum & Berger, 1986). "The lack of effective countermeasures does not reflect a lack of effort on the part of legislators, law enforcement agencies, the public or media, but rather the inherent difficulty in attacking a problem that involves a small proportion of the total population who refuse to recognise the threat they present to the community and themselves when they drink and drive" (Bailey & Carpinter, 1991, p. 26).

Owing to this failing of any particular countermeasure to substantially and permanently impact on drinking drivers, and to lower the costs of alcohol related injuries and deaths, there has recently been a trend towards combining the traditional approaches (mentioned above) with community-based campaigns (Bailey & Carpinter, 1991). According to Kirk (1990), a central concept for the new public health is health promotion as developed by the World Health Organisation (WHO) in its Ottawa Charter for Health Promotion. The WHO definition of health promotion is based on the principle of enabling and empowering people to increase control over and improve their own health. The emphasis is on the enabling process, that is, the returning of power, skills, knowledge and resources to the community.

The WHO (1986) summed this process up by saying: *"Health promotion works through concrete and effective community action in setting priorities, making decisions, planning strategies and implementing them to achieve better health. At the heart of this process is the empowering of communities, their ownership and control of their own endeavours and destinies. Such an approach is seen as a 'bottoms up' approach where individuals and communities are seen as active collaborators in health promotion endeavours rather than as passive recipients of national initiatives"(p. 7).*

Such programmes are generally confined to a community living within a geographical area. Community action/responsibility encompasses a number of areas - drink driving is only one area utilising community-based programmes. Groups should be comprised of representatives of key agencies or interest groups to plan and manage the campaign so local and national resources can be utilized effectively (WHO, 1986). These concepts were important in New Zealand, and especially relevant to making Area Health Board driven community-based drink driving countermeasures and health promotion activities a success (Bailey & Carpinter, 1991). As other countermeasures had shown limited success there were indications of the need for some type of community-based initiatives. The community campaign approach aims to involve the community in action to reduce drinking and driving locally and is one of the most likely prospects for increasing disapproval of the practice (Bailey, 1986; Bailey & Carpinter, 1991; Donelson, 1988; Duignan & Casswell, 1989; Kirk, 1990). Such community-based programmes have been used in New Zealand over the last decade to reduce alcohol-related accidents.

According to Duignan and Casswell (1992) this has reflected the increasing interest in community strategies for promoting health in general and in specific problem areas such as alcohol-impaired driving. This interest has resulted in a range of programmes using different initiatives described as community programmes. Programmes are based on the belief that local problems can best be solved by local people who have the knowledge and commitment to find appropriate solutions (Making Community Action Work in the Environment, 1988). There have been several community initiated drink driving campaigns in recent years including Community Alcohol Action Programmes (CAAP) (Bailey & Carpinter, 1991). These programmes and the problems of evaluating them will be discussed at the end of the next section which deals with evaluation research.

Evaluation Research

There is a large body of literature highlighting the fact that evaluation/action research operates under differencet constraints than pure research (Rossi & Freeman, 1993; Patton, 1990). Rossi and Freeman (1993) state that evaluations need to be conducted so they are "good enough" to answer the question under study, whereas pure researchers typically strive for the "best" methodology that can be used in carrying out their research. They go on to identify other distinctions between these research types. For example, pure research typically is initiated to satisfy the intellectual curiosity of the investigator and to contribute to a knowledge base of interest to the researcher and his or her peers. In contrast, evaluation work is undertaken because it might contribute to solving a practical problem. Here the initial impetus for undertaking work comes from persons and groups who are concerned with a particular social problem (Rossi & Freeman, 1993). The audiences for pure and evaluation work also

differ greatly. Pure researchers are most concerned with their peers' responses to their studies whereas evaluators are judged both by their academic peers and by the sponsors of their studies, on how much of a contribution they make to the development and implementation of programmes (Rossi & Freeman, 1993).

Another factor differentiating evaluation from pure research is that evaluation research is carried out within a political context (Guba & Lincoln, 1981; Palumbo, 1987; Shadish, Cook, & Leviton, 1991; Stevens & Dial, 1994). "Evaluation of any programme that costs money and the allocation of valued services cannot escape becoming involved in politics" (Guba & Lincoln, 1981, pg. 237). Further, with evaluation work "ethical dilemmas feature in almost every evaluation because they involve people, their efforts, aspirations and self-interests" (McLaughlin, 1981, cited in Guba & Lincoln, 1981, pg. 236). It is necessary to tailor an evaluation to consider the range of stakeholders related to the programme (Franklin & Thrasher, 1976; Posavac & Carey, 1997). "In undertaking their work, evaluators usually find themselves confronted with individuals and groups who hold competing and sometimes combative views on the appropriateness of the programme or its evaluation, and whose interests will be affected by the outcome (Rossi & Freeman, 1993, pg. 110).

An additional strain in conducting evaluations compared with pure research, is the difference between political time and evaluation time. Political and programme worlds often move at a much faster pace than the evaluation world (Rossi & Freeman, 1993). As a result, there is frequently pressure to complete evaluations more quickly than the best methods permit, as well as to give first impressions and release

preliminary results. Finally, it must be noted that the external environment cannot be held constant in evaluation research, unlike in pure research where the environment can be carefully manipulated and controlled.

Evaluation is feedback to management and/or other interested parties of what is happening in respect of something they are involved in (Benton, 1983; Coup, de Joux & Higgs, 1990; Rossi, 1993). It involves following through to see that implementation of proposed programmes in fact, takes place and to assess what actually results compared to what was intended to happen. This feedback can then be used as a basis for reviewing the need to take additional action. Ideally evaluation should be planned for, from the outset and should commence before the campaign officially begins (Bailey & Carpinter, 1991; Land Transport Safety Authority, 1993). It is naive to expect that any programme will function either uniformly or exactly as it was designed to, and since the effects of programmes are often not known, programme evaluation offers a unique opportunity to learn about what works and what does not (Benton, 1983). By providing feedback to management, evaluation can point out potential areas of change in organisation policy, staffing or procedure. An organisation which does not change becomes increasingly irrelevant to its environment and the needs of the people it purports to serve (Benton, 1983).

According to Duignan & Casswell (1992) a programme needs to be carefully assessed to see exactly what type of evaluation is feasible and what type of information will be gained from the exercise. Rossi and Freeman (1989, cited in Duignan & Casswell, 1992) call this an evaluability assessment. Different types of programme are suited to different types of evaluation.

The literature identifies three types of evaluation which produce summative and formative information: formative, process and outcome (Benton, 1983; Duignan & Casswell, 1992; Fitz-Gibbon & Morris, 1978; Windsor, Baranowski, Clark & Cutter, 1984). "Formative evaluation uses evaluation input to constructively influence the way a programme develops, so that it is more likely to achieve its purpose" (Duignan & Casswell, 1992, p. 760). Such input is used in programme planning and decision making on an ongoing basis. This is usually achieved through the collection and feedback of relevant information to programme personnel. Process evaluation is directed at obtaining a description of exactly what the programme consisted of. Here, there is a need to communicate the details of what occurred in the programme to other parties interested in finding out about the programme. This type of evaluation can also be used to assist in the interpretation of outcome evaluations, to see what has led to a particular outcome. Finally, outcome evaluation covers the question of whether the objectives of the programme were achieved. According to Duignan & Casswell (1992), in the past, outcome evaluation has tended to receive the most attention within the evaluation field.

Evaluation of Previous CAAP Programmes in New Zealand

A number of CAAP evaluations have been carried out to examine the effectiveness of these initiatives in altering peoples attitudes and behaviour in relation to drinking excessive amounts of alcohol and then driving. The majority of these evaluations have had weak designs and have not demonstrated programme usefulness. To illustrate some of the problems inherent in previous programme evaluation, the Nelson/Tasman and Christchurch CAAPs and the Bay of Plenty project will be discussed.

Process evaluations were conducted at the end of the Nelson/Tasman CAAPs initial term of funding and after 8-9 months of the Christchurch CAAPs being in operation. In-depth interviews with ten Nelson/Tasman CAAP stakeholders were conducted. The interviewees were selected through a process of purposeful sampling to include a cross-section of people involved with the Executive Committee or Steering Group. Similarly, a total of 50 interviews were conducted with members of the Christchurch CAAP. Here, the researcher also participated in stakeholder update seminars and CAAP promotion seminars, attended working group meetings and had access to various CAAP reports, newsletters and strategy documents (Norton & Kirk, 1993). This part of the evaluation provided data concerning the various political processes involved in settling up CAAP programmes but did not provide outcome data evaluating whether the target audiences for the initiatives were aware of the programmes and had changed their behaviour as a result.

Both evaluations also entailed a survey to measure the level of community awareness about the programmes. Unfortunately, both outcome evaluations were conducted after the programmes had begun and no pre-measures could be taken. Therefore, any changes in behaviour and/or attitude could not be attributed directly to the CAAP initiatives. For example, confounding variables such as national anti-drink driving campaigns were operating at the same time as the CAAPs. Each evaluation used the same questionnaire for their telephone interviews. Similar results were obtained for the following questions: "When asked what drink driving campaign they had noticed", 16.7% of the sample said they had "noticed the lifesaver Drive-Sober/CAAP campaign (Nelson/Tasman CAAP) and 12% of the respondents mentioned the

Lifesaver/CAAP campaign (Christchurch CAAP)". When prompted, this figure rose to 58.5% and 58% respectively.

However, these figures should be read with caution because, (1) multiple responses were accepted for each question so the likelihood of the 'CAAP' answer being selected was increased, and (2) the respondent was provided with a list of campaigns to choose from, the CAAP campaigns being on the top of each list. If the respondents had had to name the campaigns themselves, a much lower percentage of respondents would have mentioned the CAAP. In addition, programme identification does not mean behaviour/attitude change by respondents.

Furthermore, the Nelson/Tasman CAAP evaluation states that the "public accepts and is aware of the Lifesaver/Drive Sober CAAP message" (Parfitt, 1994, p. iv). However, the evaluation did not produce any evidence to support this.

In relation to the Christchurch CAAP, statistic's from Land Transport, Emergency Department data from Christchurch Hospital and the Police Department, was also used to help evaluate the effectiveness of the CAAP. Although all of the Departments statistics showed a decrease in alcohol-related accidents, it is impossible to "tease out the factors producing such a result" (Norton, 1993, p.63). The above results most likely are the outcome of a number of factors interacting with each other.

With the Bay of Plenty project, data was gathered from two questionnaires designed by hospital staff, Accident and Emergency Department Statistics, MOT statistics and Bay of Plenty Power Board statistics (Bailey, Slade & Tustin, 1988). They were

designed to investigate public awareness of the campaign and people's drinking habits. The questionnaires were administered before and during the campaign to visitors and patients in the Accident & Emergency Department. Shortly after the campaign was finished, a 30 item questionnaire was administered to 172 people, being primarily school students and employees at the Whakatane Board Mill. Finally, Accident & Emergency staff completed a form for transport-related accidents.

This evaluation was better in design than the two CAAPs previously discussed because it had before and during measures. However, it should be noted that while the "Drive to Stay Alive" campaign was running, there were also two national drink driving campaigns being run. Therefore, it was impossible to separate the effect of the three programmes.

Bailey (1984) believes that a successful drink driving campaign would be expected to reduce the number of injury accidents at night, those involving young people and the number admitted to a ward, since the more serious accidents are those most likely to involve alcohol. LTSA statistics for the campaign period show a modest reduction in road accidents during the period, however this reduction is not statistically significant.

Bailey and Carpinter (1991) claim that a major weakness of all community campaigns for drink driving to date has been a lack of adequate evaluation, as illustrated above. As with other programmes, community-based drink driving programmes must show their benefits if they wish to receive any funding from the government or any other funding agency. If community-based countermeasures are not effective the government needs to know, so it can be decided whether to modify or discontinue

them (Bailey & Carpinter, 1991). As the three examples given reveal, previous evaluations of CAAP programmes within New Zealand have contained serious flaws which limit the reliability and validity of the outcome measures used.

The Current Research

The two evaluations described in the ensuing chapters of this project were commissioned by the Horowhenua and Tararua CAAP programmes. The research therefore lies firmly within the domain of action research. From the outset it was clear that any outcome evaluations would be less than ideal for various practical and political reasons outside the control of the researcher. A decision to accept the commission and carry out the requested research despite these problems was taken for three reasons: firstly, it was felt that process data describing the psychological issues which arise during the planning and implementation of community projects could make a contribution to our understanding of action research; secondly, it was felt that this represented a valuable opportunity to educate community activists in some of the more fundamental aspects of research design and hopefully encourage better planned evaluations in the future, and thirdly, it was felt that whilst any outcome data would have shortcomings some interesting findings concerning the knowledge and salience of such programmes within the community could still be obtained.

The aim of the present study is twofold. Firstly, as part of a funding requirement by the Land Transport Safety Authority, the researcher was commissioned to conduct an evaluation of two CAAP programmes running in the Horowhenua and Tararua Districts. Therefore, the first aim was to produce two evaluation reports for the committee members of the Horowhenua and Tararua CAAP programmes. These

evaluations use a combination of process and outcome techniques to produce summative information. Secondly, this study aims to compare the two programmes based on the data collected, to see whether there are differences in the levels at which they are achieving their aims and objectives.

Each evaluation was conducted separately, using identical questionnaires and checklists to enable the researcher to compare the data. This comparison was accomplished by separating out the common aims of the programmes and comparing the outcomes. In addition, subjective information gained from various sources was used where appropriate. These issues will be discussed in more detail in the following section which describes the social context and methodology of this research.

PART I

METHODOLOGY FOR REPORTS

THE SOCIAL CONTEXT

This project is based on commissioned evaluation research carried out on behalf of the Horowhenua and Tararua CAAPs. Ideally, evaluation should be designed into programmes at the planning stage rather than being added as an afterthought. However, in both districts the issue of evaluation was not considered until sometime after the programmes were implemented. In both cases this has meant that the goals which the committees set themselves were both unrealistic and difficult to evaluate. For example, one of the aims of both these CAAP programme was to reduce road deaths caused by drink driving within the district by at least 50% for a minimum of six months. Although this aim sounds very specific it is actually very difficult to measure for a number of reasons, such as the role other initiatives play in the reduction of road deaths, and the fact that out of district drivers may be causing some accidents.

Whilst both my supervisor and I recognised that the research design would be severely constrained by the failure of the CAAPs' to design evaluation into their programmes at the planning stage, we both felt that the social importance of any attempts at reducing alcohol related road accidents meant the research was worth attempting. We were also mindful of the fact that psychological research has been criticised for having little impact on social problems because psychologists tend to

avoid problematic real-world research such as this (Cassel & Symon, 1994; Hammersley, 1995; Stringer, 1996).

The two CAAP programmes to be evaluated will now be briefly described and the key methodological, political and social problems which arose will then be outlined.

COMMUNITY ALCOHOL ACTION PROGRAMME (CAAP)

A CAAP is a Community Alcohol Action Programme, which is a local initiative, jointly funded by the community, the Land Transport Safety Authority (LTSA) and the New Zealand Police, to address drinking and driving. The goal of all CAAPs is to produce a long-term reduction in alcohol-related road traffic crashes in a community. CAAPs vary according to the target population, but the essential features are common to all of the projects (Land Transport Safety Authority, 1994).

The Horowhenua CAAP

On the 28 January 1993 the inaugural meeting of the Horowhenua CAAP Committee was held. The meeting was attended by a wide range of organisations and individuals from the local Horowhenua District. Those groups represented at the meeting included: the Police, Land Transport Safety Authority, Levin Drug and Alcohol Centre, New Zealand Automobile Association, Horowhenua Branch of the Plunket Society, and Horowhenua District Council Staff.

Officially commencing on 1 April 1993, the Horowhenua CAAP Committee has targeted the drinking public who drive, with the intention to bring about a greater

awareness and understanding of the social costs borne by society through road accidents caused by drinking drivers.

More specifically, the committee aimed to:

1. Reduce alcohol-related road accidents within the Horowhenua community by at least 50% for a minimum of six months;
2. Evaluate the project to determine:
   i) the extent of any reduction in alcohol-related accidents; and
   ii) the lessons that can be learned on how to improve the CAAP;
3. Bring about initiatives district wide to assist in spreading the "Drink Wise - Drive Wise" principle at all licensed outlets; and to
4. Establish a working partnership between the Police, LTSA, road safety organisations and the community on the CAAP objective and to encourage wider support for road safety initiatives.

To met these aims, the Horowhenua CAAP has implemented several initiatives. These include: CAAP windbreaker jackets were given to various sports people and bar staff, a bumper sticker competition to win a mystery trip was held in conjunction with the local radio station, the running of Operation Peer Pressure, a Mocktail Competition was held twice, the organisation sponsored a float in the Christmas Parade, and a Student Night Club was run.

The Tararua CAAP

Officially launched in June 1994, the original Committee was comprised of representatives from: Mid Central Health, the Tararua Police, Tararua Consultancy, Rangitane Iwi, the Liquor Licensing agency, Community Services Group, and the Manawatu Road Safety Group.

The primary goal of this CAAP has been to reduce alcohol related crashes causing death and injury in accordance with the principle CAAP aim. To achieve this, the CAAP identified specific groups which would be targeted by the programme. These were: drinking drivers, high school students, and licensees and bar staff.

Initiatives for the Tararua CAAP have included: a competition to design the programmes' logo and slogan, the manufacture and display of road signs and banners, a Host Responsibility course, the sponsor of a free dance, posters and table coasters were manufactured, Cops & Kids was run, and a Best Host of the Year Competition was held.

INITIAL NEGOTIATION

An evaluation of CAAP is part of the funding expectation from the LTSA, the principle funding agent. Consequently, a founding member involved with each programme approached a Psychology Department lecturer to ascertain if a Masters student (researcher) would be interested in evaluating the programmes for their thesis. This student indicated her interest.

The lecturer and researcher attended a meeting together to discuss the likely format and time frame of the evaluation. Once this was decided upon, it was suggested the researcher attend committee meetings for both CAAPs and be given access to all CAAP documentation, correspondence and relevant programme material.

INITIAL PROBLEMS

The most obvious problem encountered by the researcher was that the evaluations had not been planned for even though such evaluation is written into the official CAAP manual provided by the LTSA. As a result no pre-measures of drink driving behaviour and attitudes in the Horowhenua and Tararua were available. Therefore, any improvements in drink driving behaviour and attitudes or reductions in injury or death in these areas while the CAAPs were operating could not be attributed to programme initiatives.

If community-based programmes are going to have any impact on their surrounding environment, the planners of such programmes should consult relevant research before their programmes are devised and implemented. In the present study, the CAAPs planners could have used their resources more profitably if they had have consulted the relevant literature regarding attitudes and behaviour relating to drunk driving. By doing this they would have found that they needed to target people's attitudes, which may lead to behaviour change, for example (Cialdini, Petty and Cacioppo; 1981). Secondly, they would have learned to focus more thoroughly on the problem population, that is young males (Archer, 1990; Beck & Summons, 1987; Clayton, 1986; Farrow, 1985; Guppy & Adams-Guppy, 1995; Harre, Field & Kirkwood, 1996; John & Raskin, 1989; Peek, Farnworth & Hollinger, 1987). While

young male offenders have been highlighted in several campaigns in New Zealand as a primary group of offenders, the present evaluations show the Horowhenua and Tararua CAAPs have completely missed this groups with their initiatives.

Another problem apparent from the outset of these evaluations was the limited time frame under which to complete the work. The researcher was given six months to complete both evaluations and submit a report to each committee. Although this deadline was extended twice, there was constant pressure from each committee to complete the work and give initial impressions as to how the evaluations were progressing.

A problem common to both CAAPs was the inconsistent attendance and dwindling numbers of members to the committee meetings. This meant the same few people did the majority of work and also held the balance of power.

A problem particular to the Tararua CAAP pertains to an appearance of a hidden agenda by one of the committee members. This person was involved with another anti-drink driving programme in the district. It was apparent she wanted to combine the two organisations. There was also an overt personality clash between at least two members of the Tararua CAAP Committee causing little to be accomplished at the committee meetings. The end result was the resignation of a valuable member from the Committee and ultimately from the organisation itself.

Being conscious of the fact that several problems were identified relating to this proposed piece of research, it was still considered a worthwhile piece of work to

attempt. Therefore, the decision was made to proceed with the evaluations. The following sections describe the process undertaken to complete the evaluations.

SUBJECTS

The present study consisted of a total of 175 subjects and 36 licensed premises. The sample comprised of six groups of subjects in two different geographical districts, the Horowhenua and Tararua. Table 1 illustrates how the samples were comprised.

Table 1

Composition of Sample

Sample Group	Horowhenua (no. of participants)	Tararua (no. of participants)
Committee Members	19	17
General Community	39	39
Young People	11	14
Students	16	20

In addition, a total of 36 licensed premises were visited as illustrated in Table 2.

Table 2

Licensed Premises Visited in the Sample

Sample Group	Horowhenua (no. of participants)	Tararua (no. of participants)
Hotels	9	11
Clubs	7	9

PROCEDURE FOR THE TWO REPORTS

The reports for the two CAAPs were based on the committee members identifying and ranking the main aims of their programmes. In order to determine the main aims and objectives of the two CAAPs, the most frequently mentioned aims were extracted from interview data obtained individually from the CAAP committee members. Both current and former members of the committees were asked to comment on what they thought the main aims of the CAAPs were. These aims were then ranked by committee members in terms of their importance to the CAAPs. A mean ranking for each aim was calculated. From these means, the overall order of the aims was derived. These ordered aims are contained in the results section this thesis.

Interview Procedure and Format

To evaluate how effective the CAAPs have been at meeting the aims, interviews and observations were made on a sample of five different groups in the District. The interviews were conducted by the researcher using a written questionnaire on which respondents replies were recorded immediately. Similarly, the observations were made using a written checklist to help standardise the data. Copies of the interview questionnaires and observation checklists are found in Appendix A.

Committee Members

The first group of individuals used in the present study were the committee members of each CAAP programme. All members of the committees, both former and current, who were contactable, were included in the sample. This part of the study was basically a process evaluation in which committee members were asked to prioritise

their goals for the organisation and describe the ways the organisation had attempted to operationalise them.

General Community and Young Persons Surveys

A standardised face-to-face interview was conducted on a random sample of people aged over 20 years throughout the Tararua and Horowhenua Districts for the general community survey. For the young persons survey, high school-aged people were selected. In relation to these interviews, a random selection of each area was made by surveying every sixth house on the right side of the road. If the person was not home, the next house was visited. The person who answered the door was asked who, of those at home, had the next birthday in the family who was at home, and that person was interviewed.

Students

For students who had participated in one of the programmes initiatives, specifically Operation Peer or Cops & Kids, their names were listed and every second person was contacted by telephone and interviewed, for those living in the Horowhenua. For those in Tararua, because the initiative was new, only 20 students had participated in the programme. Therefore, all students who were contactable by telephone were interviewed (n=20).

Hotel and Clubs Observation

For the hotels and clubs, a list was complied from the local telephone directory yellow pages of all establishments in each area. Every third hotel and every second club listed in the yellow pages was selected for observation by the researcher. A sample of hotels was visited by the researcher, on a Friday night, between 5 - 11pm, with a standardised checklist to obtain an indication of how responsible the hosts of the

licensed premises were. A random sample of clubs were visited by the researcher on a Saturday night, between 4.30 - 9.30 pm, using the same checklist as the hotel observation, to ascertain how responsible they were in their practices. To collect data about these samples, it was necessary to ask a few questions as observation did not yield the necessary information. For example, it was necessary to ask for a free non-alcoholic drink for a driver. The researcher was accompanied by one companion who was primarily used as a reliability check for the data gathered. In addition, this person accompanied the researcher for safety reasons.

Other Information

In addition to gathering information by way of interview and observation, the researcher had access to a variety of CAAP documents, publicity material and meeting minutes. The researcher also attended CAAP meetings and spoke with individual committee members to gain an insight into how the programmes were run.

ETHICAL CONSIDERATIONS

As well as all of the other ethical issues normally considered by researchers, the present study had some particular issues which needed special consideration. These include the following as outlined in the New Zealand Psychological Society's Code of Ethics (1986).

Confidentiality

This code states that *"a psychologist does not disclose information obtained professionally to any third party without the informed consent of the ... research participant" (NZPsS, 1986, p. 4).*

For the present study, special consideration was given to the fact that members of the CAAP committee are employed by the Alcohol Licensing Advisory Council (ALAC) or other licensing agencies. In both Districts, employees of such organisations approached the researcher after they had read the reports and asked for the names of the hotels and clubs visited by the researcher. As the researcher did not have the informed consent from the licensed premises to release any information gained from the observation, this situation was explained to the committee members. No problems emerged from this situation.

Research with Humans

Under section 6.2 of the Code of Ethics it states that *"psychologists take all possible steps to protect participants from ... mental discomfort, harm or danger. If the risk of such consequences exists and the participants give their informed consent to their*

involvement in the research, all possible steps must be taken to minimise any such risks. Psychologists do not use research procedures if they are likely to cause serious or lasting harm to participants" (NZPsS, 1986, p. 6).

Owing to the sensitive nature of this study, the researcher had to be prepared to deal with people who had had a negative experience with drunk driving. To assist in being prepared for such an experience, the researcher located the voluntary organisations in each area where a participant could be referred for counselling if this was necessary. In addition, the researcher did not rush her interviews and spent time talking with the participant about the issue or their own personal experiences with it. In this way, the researcher attempted to minimise any discomfort experienced by the participants.

Section 6.4 states "psychologists have a responsibility to ensure that research carried out by others under their supervision conforms to this Code" (NZPsS, 1986, p. 7).

For part of the present study, a person accompanied the researcher on her visits to the hotels and clubs for safety reasons. To ensure the person did not breach any of the Code of Ethics, the person was thoroughly briefed by the researcher about the procedure and shown the checklist to be used to gather the necessary data.

Publication and Public Statements

This Ethic states *"psychologists are accurate and objective in reporting data or information and do so in a manner that encourages responsible discussion. They restrict their public comments ... to information derived from research findings ..."*

section 8.1 goes on to say *"when presenting research data or information psychologists include relevant details of research findings that may modify or cast doubt upon the interpretation of evidence presented" (NZPsS, 1986, p. 8).*

This statement is particularly relevant to the current research where committee members were often highly invested in the programmes and eager to receive positive feedback on the programmes. This called for a good deal of diplomacy in reporting back findings in a manner which constructively highlighted the shortcomings of the two programmes.

In relation to section 8.1, the limitations of the reports were clearly recorded. At a discussion meeting with each of the committees, the limitations of the research were pointed out also.

RATIONALE FOR USING DIFFERENT DATA GATHERING TECHNIQUES

Interviewing face-to-face is known to possess many advantages. To begin, this research method yields a higher response rate than other methods such as postal surveys. The number of "don't knows" and "no answers" are minimised as the interviewer is able to probe for answers and additional information when respondents become stuck. Finally, interviewing face-to-face enables the interviewer to observe the respondent and their environment as well as ask questions, which is not possible with other methods of data collection (Babbie, 1992; Fowler & Mangione, 1990; Oppenheim, 1992).

To gauge the aims and objectives of the CAAP committee members, fact-to-face interviews were conducted. The main reason for this was to enable the researcher to pick up on the politics of the committees through what the members said and their facial expressions.

Interviewing was used for the general community and young persons' surveys. It was felt that this would be the best method of gaining an insight into what people thought about drink driving. Interviewing the general community yielded a very high response rate across the two districts with a total of three refusals out of 82 visits. Interviewing face-to-face enabled the researcher to get an idea of whether the respondents were telling the truth. This is particularly important when a sensitive issue such as whether a respondent has ever driven a vehicle while under the influence of alcohol, is being asked about. Finally, this method allowed the researcher to probe the respondents for information when their answers were not forthcoming.

Although face-to-face interviewing was ideal for the above samples, it was expensive in regard to travel and time. Therefore, because the students who had participated in Operation Peer Pressure and Cops & Kids were a relatively 'captive audience,' that is the researcher had their names and telephone numbers, it was not necessary to travel to each persons home for an interview. This sample was contacted by telephone and surveyed. These interviews were conducted over a period of a week, instead of several months as was the case with the other samples. In this way, the low cost and speed at which telephone surveys can be conducted were utilized (Oppenheim, 1992).

Observation of licensed premises were used because "one of the key strengths of field research is the comprehensiveness of perspective it gives the researcher" (Babbie, 1992, p. 286). It was felt that if bar staff were interviewed, that they would give socially desirable answers instead of truthful ones. Therefore, questions were only asked where necessary or to qualify something. Where a private club was selected from the list of clubs to be sampled, a letter from the CAAP committee chairperson was obtained which explained the purpose of the visit and asked for their co-operation. These letters from both districts are contained in Appendix B.

PILOT STUDY

To ensure the interviews worked as the researcher intended, a pilot study was conducted using the general community and young persons surveys. The purpose of pre-testing the surveys was fourfold: (1) to ensure the wording of the questions were easily understood by the respondent, (2) to time the interview, (3) to check the design of the introduction letter, and (4) to allow the researcher to familiarise herself with using the show cards (Morton-Williams, 1993; Babbie, 1992; Oppenheim, 1992).

Seven pilot interviews were conducted between the two districts using the general community survey. Four interviews were conducted using the young persons survey. For these interviews, the participants were told that they were taking part in a pilot study and that any feedback regarding the process/experience was welcome (Oppenheim, 1992). Resulting from these pilot interviews were some minor changes in the wording of certain questions.

The observation checklists were not piloted as they had been used in the evaluation of the Nelson/Tasman and Christchurch CAAP programmes (Parfitt, 1994; Norton & Kirk, 1993). However, a couple of items were added. The Operation Peer Pressure and Cops & Kids surveys were not specifically piloted.

STATISTICAL ANALYSIS

For the two reports, percentages and frequencies were the main types of analyses utilised. Chi-square were used to test whether certain groups within the districts, for example rural/urban, sex, income categories, household living arrangements, school, form at school and different age groups responded significantly differently within each geographical district. Those differences that were statistically significant are reported in the results section.

RELIABILITY & VALIDITY OF SURVEY QUESTIONNAIRES, & OBSERVATION CHECKLISTS

The reliability and validity of the questionnaires and checklists have not been established for the present study.

PART II

RESULTS FOR HOROWHENUA

BACKGROUND INFORMATION

The following is a description of the sample used in the general community survey compared to the actual population of the Horowhenua District. The figures quoted here are taken from the 1991 Census (Department of Statistics, 1992).

DEMOGRAPHICS

Table 3

Respondent Sex

Sex	% male	% female
Survey Sample	33.3	66.7
Census Population	48.9	51.1

Table 3 shows that the survey sample was not representative of the Horowhenua District population with regard to sex. This sample was over-represented with females.

Table 4

Respondent Age

Age	% in sample	% in population
20 - 29	7.7	18.0
30 - 39	20.5	17.5
40 - 49	15.4	14.7
50 - 59	23.1	12.3
60 & over	33.3	28.0

The age group 20-29 is under-represented. The age groups 30-39 and 40-49 is well represented. The 50-59 year age group is over-represented in the present sample. Finally, the 60+ age group is well represented (see Table 4).

Table 5

Respondent Ethnicity

Ethnicity	% in sample	% in population
European	84.6	79.1
Maori	10.3	12.5
Other	5.1	8.4

Table 5 shows that in this sample, the ethnicity groups were fairly representative of the actual Horowhenua population.

Table 6

Respondent Occupation

Occupation	% in sample
Unemployed	59.0
Professional	2.6
Skilled	20.5
Unskilled	15.4
Unknown	2.6

The figures in Table 6 cannot be compared to the Horowhenua population as the Census data is categorised differently from the present sample, but the high proportion of unemployed would suggest that the sample is under represented. However, one should note that 33% of the sample were over the age of 60.

Table 7

Respondent Households

Household	% in sample	% in population
Living alone	20.5	22.4
Living with partner/spouse and/or children	69.2	67.5
Other	10.3	10.1

Table 7 shows that the sample was representative of Horowhenua households.

Table 8

Respondent Income

Income	% in sample	% in population
Under $5,000	23.1	10.1
$5,000 - $10,000	17.9	26.7
$10,001 - $20,000	23.1	34.7
$20,001 - $30,000	2.6	17.4
$30,000 - $40,000	2.6	6.6
Not Known	30.7	4.5

In general, the sample may not be representative of the Horowhenua population in regard to income, given the large number whose income was not known (see Table 8).

Table 9

Respondent Income and Knowledge of the Programme

Income	Knowledge Yes	No	Don't Know	Total
Under $5,000	2	7	1	10
$5,000 - $10,000	5	1	0	6
$10,001 - $20,000	5	3	1	9
$20,001 - $30,000	0	0	1	1
$30,000 - $40,000	1	0	0	1
Not Known	13	11	3	27
Total	26	22	6	54

Table 9 indicates that the majority of people with an income of less than $10,000 per year said they had not seen the logo, whereas those in the $10,000-$30,000 income brackets were more likely to say that they had seen it. χ^2 (8, N = 34) = 16.12 p < .05.

Table 10

Respondent Location

Location	% in sample	% in New Zealand
Rural	41	15.1
Urban	59	84.9

According to Table 10, the sample is not representative of the national rural population but may be representative of the Horowhenua population.

Table 11

Respondents Who Drink

Question	% yes	% no
Have you had an alcoholic beverage within the last month?	66.7	33.3

Overall, the sample was fairly representative of the Horowhenua District in most areas. It would however, have been more desirable to have had more young males in the sample, as they are in the 'at risk' group.

KNOWLEDGE OF THE HOROWHENUA CAAP

The following discussion will describe information gained from the general community interviews about respondent knowledge of CAAP. A variety of questions were asked to see whether people in fact knew of the programme.

Table 12

Percentage of Respondents Knowing About CAAP

Question	% yes	%no	% don't know
Do you know what organisation is associated with this? (logo)	23.1	71.8	5.1
Do you know what the words "Drink Wise - Drive Wise" are associated with?	25.6	66.7	7.7
Have you seen this anywhere? (logo and slogan together)	46.2	41.0	12.8
Have you heard of an organisation called CAAP?	17.9	76.9	5.2

Overall, 17.9% of the sample had heard of an organisation called CAAP. A similar number of respondents had heard or seen the logo, 23.1%, and slogan, 25.6%. Finally, the greatest number of respondents said they had seen the logo and slogan together, 46.2%, but did not know that it was associated with CAAP (see Table 12).

The percentage of people knowing of the CAAP, 17.9%, compares favourably with other CAAP programmes. For example, when unprompted, 17% Nelson/Tasman CAAP, and 12% Christchurch CAAP knew of their local CAAP.

Of those who had seen the logo and slogan together, 40% had seen the car bumper stickers. Other responses to the questions in Table 12 include:

- Operation Peer Pressure
- Don't drink drive campaign
- A programme related to the Council
- Information sent to a Rugby Club
- Newspaper articles
- Road signs

If respondents had not heard of CAAP, they were not asked further questions relating to the CAAP.

Table 13

Ranking of Aims by the Horowhenua CAAP Committee Members

Ranking	Aim
1	To reduce alcohol related road accidents within the Horowhenua District.
2	To teach people to have more responsible attitudes towards alcohol.
3	To foster a greater awareness and understanding of the social costs borne by the community through road accidents involving drinking drivers.
4	To bring about initiatives District wide to assist in spreading the "Drink Wise - Drive Wise" principle involving all licensed outlets.
5	To target young people (teenagers) with the CAAP Programme.
6	To ensure that CAAP initiatives are ongoing and long term.
7	To reduce road deaths caused by drink driving in the Horowhenua District, by at least 50% for a minimum of six months.
8	To establish a working relationship among the Police, Land Transport Safety Authority, road safety organisations and the Community, on CAAP objectives.
9	To raise people's awareness of general road safety issues.
10	To encourage wider community support for road safety initiatives.

Table 13 shows the rank ordered aims as identified by the committee members.

AIM 1

TO REDUCE ALCOHOL RELATED ROAD ACCIDENTS WITHIN THE HOROWHENUA DISTRICT

This aim deals with non-fatal alcohol related accidents leading to injury. The statistics reported here are from the Land Transport Safety Authority (1995) and include only accidents where alcohol has been recorded as a factor involved in the accident.

Table 14

Accidents Involving Alcohol Resulting in Injury

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1993	3	1	3	3	1		3	2	1	2		3
1994	3	1	1	1		2	1	2		2	1	3

Table 14 shows that there has been a decrease of 23% in the number of alcohol related accidents resulting in injury between 1993 and 1994. It should be noted however, that the identified reduction in the number of alcohol related accidents cannot be necessarily attributed to CAAP initiatives. This is because, the Horowhenua has State Highway 1 running through it and so much of the traffic in the Horowhenua is not necessarily from the District. The alcohol related injury accidents may not involve people who live in the local District.

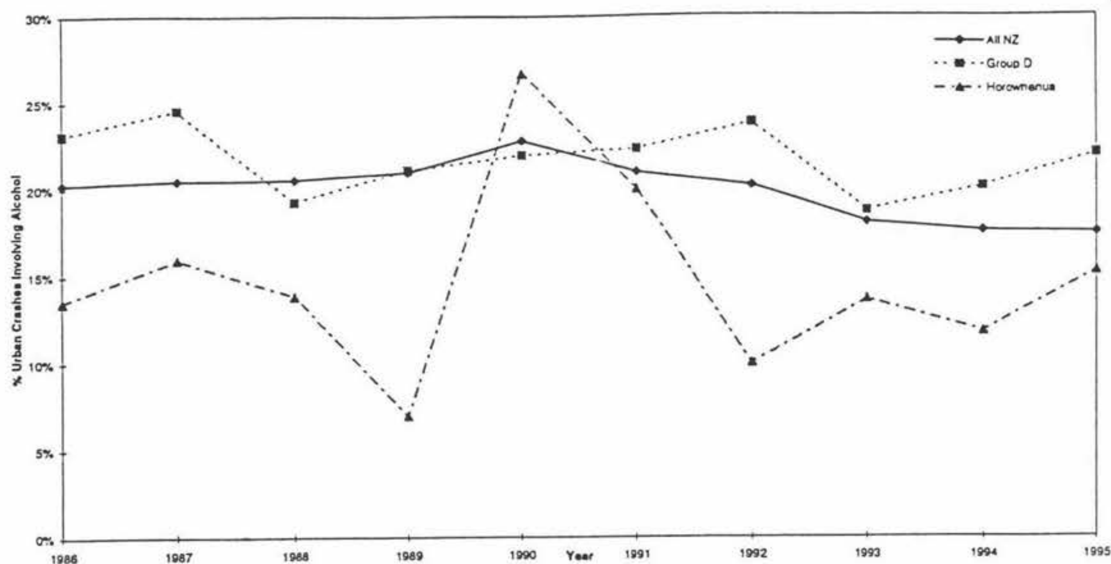

Figure 1: Alcohol Related Accidents in Rural Areas

Note: Group D is a peer group of Districts in similar size to the Horowhenua District. These Districts are compared to the Horowhenua to see how it compares to other locations of a similar size. Districts included in this group include: Masterton, Manawatu, South Taranaki, Matamata-Piako and Waimakariri for example.

Figure 1 shows a comparison of the Horowhenua District and the rest of New Zealand for urban alcohol related accidents including fatalities. Clearly, the Horowhenua's incidence of alcohol related accidents is well below the New Zealand average and well below the figures for similar sized towns. However, this situation has existed since 1991 and therefore may not be attributed to CAAP's efforts. In 1995 where the programme initiatives are not as numerous, the number of urban alcohol related accidents have begun to increase. Again, this may or may not relate to CAAP's efforts.

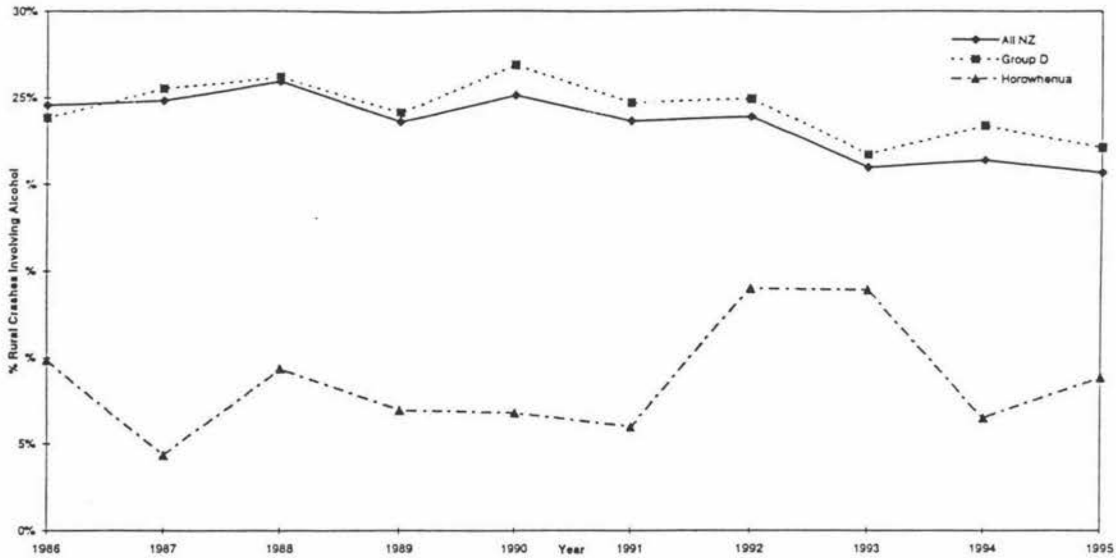

Figure 2: - Alcohol Related Accidents in Urban Areas

Figure 2 compares Horowhenua with the rest of New Zealand for incidence of rural accidents. This shows that, although it has a higher incidence of rural accidents involving alcohol than the New Zealand average, it has a lower rate than similar sized rural districts. There has been a notable decrease since the CAAP has been operating.

AIM 2

TO TEACH PEOPLE TO HAVE MORE RESPONSIBLE ATTITUDES TOWARDS ALCOHOL

Table 15

Ensuring a Safe Night Out

% designated driver	% courtesy van\taxi	% drink in moderation	% eat food\snacks	% stay for a long time	% unsure\did not answer
41.0	20.5	15.4	12.8	2.6	7.7

All respondents were asked what they can do to ensure a safe night out. All respondents were asked this question whether they drank or not. The vast majority of people, 92.3%, identified an initiative to help ensure a safe night out. Using a designated driver was the most frequently mentioned measure (see Table 15).

To see whether the CAAP had had any influence in teaching people to be responsible, the respondents were asked if they did such things before February 1993. 43.6% said they did, and 12.8% said they did not. It is difficult to determine whether these changes were a result of CAAP initiatives.

Table 16

Changes in Drinking Behaviour Since April 1993

Question	% yes	% no	% don't know
Have you lowered the amount of alcohol consumed when you are drinking?	40.0	56.0	4.0

Table 16 illustrates that of those who drink regularly, nearly half had changed their drinking behaviour since the inception of the CAAP programme. The change in behaviour is towards lowering the amount of drink consumed. This would indicate that people are being more responsible. Again, this change cannot necessarily be attributed to CAAP initiatives.

AIM 3

TO FOSTER A GREATER AWARENESS AND UNDERSTANDING OF THE SOCIAL COSTS BORNE BY THE COMMUNITY THROUGH ROAD ACCIDENTS INVOLVING DRINKING DRIVERS.

This aim was identified as the third most important by the Committee members. To tap this variable, respondents were first asked to identify the social costs to the community through drink driving.

Table 17

Social Costs Borne by the Community Through Drink Driving

Social costs	% mentioning this cost
Hospital/Medical Costs	15.4
Injury - both fatal and non-fatal	15.4
Family problems	10.3
Injury - other than those caused by car accidents	10.3
Drain on tax payers	2.6
ACC Costs	2.6
Loss of work, income, employment	2.6
Costs of the Courts and Justice System	2.6
Unsure/Did Not Answer	38.2

Table 17 indicates that the sample had a wide variety of views as to what they think the social costs to the community are when people drink and drive. The largest number were aware of the hospital/medical costs and injury to the people involved in the accidents, 15.4% each.

To see if people thought their awareness and understanding of such social costs had been fostered, they were asked, "Since February 1993, has your awareness of the social costs borne by the community through drink driving increased?" 43.6 % of the respondents stated that their awareness had increased, 33.3% said no, and 23.1% said they were unsure, or did not reply.

They were asked "Since February 1993" because this may have indicated a link with/influence of the CAAP programme. However, because the programme was not well known, this assumption cannot be made. So, even though 43.6% stated that their awareness had increased, this was not necessarily because of the CAAP initiatives.

AIM 4

TO BRING ABOUT INITIATIVES DISTRICT WIDE TO ASSIST IN SPREADING THE "DRINK WISE - DRIVE WISE" PRINCIPLE INVOLVING ALL LICENSED OUTLETS

HOROWHENUA LICENSEES' OBSERVATION

The researcher visited a sample of nine hotels in the Horowhenua on a Friday night between the hours of 5-11 pm. The researcher was accompanied by one other person. It should be noted that the information here is representative of the hotels visited by the researcher and may not necessarily represent all hotels in the Horowhenua District.

The first host responsibility measure to be observed was whether food was available. Of the hotels sampled in the Horowhenua District, all of the hotels had some type of food available to their patrons. Six hotels only had snacks (including, chippies, pies, peanuts). Three hotels served meals (such as wedges, steak, fish and chips). All of the hotels had non-alcoholic beverages for sale.

Only two hotels had a designated driver scheme in which they gave the designated driver a free drink. It should be noted that the researcher had to ask for a free drink, as no signs advertising free drinks were to be seen. Had the barperson not been asked, the drink would not have been offered. In the remaining seven hotels, even when asked, the barperson said s/he would not give a designated driver a free non-alcoholic drink.

In only four hotels, were there signs advertising the legal drinking age. Four of the hotels appeared to have underage patrons. Only four hotels displayed signs saying they would not serve intoxicated persons.

In only two of the hotels, was low-alcohol beer promoted by posters on the wall. Seven hotels did not have any form of low-alcohol beer promotion. In addition, only three of the hotels had any type of low-alcohol beer available to patrons.

In all of the hotels visited by the researcher, there was no use or promotion of a courtesy van for the patrons. No hotels in this area had promotion of taxi use or subsidies for taxi use.

It appeared that four hotels had intoxicated patrons on their premises. This figure is most likely to be under-representative as the hotels visited first were visited early in the evening, that is between 5-6 pm. It is possible that as the evening wore on, more patrons would have become intoxicated. It should be noted that the presence of intoxicated patrons was subjectively judged by the researcher. This was based on the behaviour of the patrons, that is, whether they were steady on their feet. It was also based on conversation with patrons. If the patron's speech was slurred, a judgement of intoxication was made.

Two hotels had either one poster about not serving drunk patrons, or an anti drink driving poster. Three hotels had more than one of these posters. The posters were primarily from ALAC.

It was observed that two bar staff were drinking an alcoholic beverage while serving. This figure may be under-representative as only obvious drinking was recorded.

Table 18

Summary of Licensees Observation

Observation	No. of licensees (n=9)
Food available	9
Non-alcoholic beverages for sale	9
Designated driver scheme	2
Signs advertising the legal drinking age	4
Underaged patrons	4
Signs about not serving intoxicated patrons	4
Promotion of low-alcohol beer	2
Low-alcohol beer for sale	3
Courtesy van promotion or use	0
Taxi promotion	0
Presence of intoxicated patrons	4
Anti drink driving posters	1
Bar staff drinking alcohol	2

HOROWHENUA CLUBS' OBSERVATION

The clubs that were visited included Rugby/Football Clubs, RSAs and The Cosmopolitan Club. Seven of these were visited by the researcher and one other person on a Saturday night, between 5 - 9 pm. Unfortunately, the Bowling Clubs, Golf Clubs and Squash Club were closed when the researcher called, resulting in a small sample of seven.

The first host responsibility measure to be observed was whether the clubs had food available. Of the clubs sampled for this evaluation, five had hot meals available, and one had snacks (pies, chippies, peanuts) for sale. One of the clubs visited had no food or snacks available. All of the clubs had non-alcoholic beverages for sale.

In two of the clubs visited there was a designated driver scheme, that is, free drinks for designated drivers when asked. In five, there was no such scheme.

In three of the clubs, there were signs about the legal drinking age, but in four there were no legal drinking age signs. In four of the clubs, there appeared to be underaged patrons present. (Only underagers present without parental supervision were counted).

In four clubs there were signs indicating that intoxicated patrons would not be served. In six of the clubs there appeared to be intoxicated patrons present. Again, the figures quoted here are based on the subjective judgement of the researcher.

Low-alcohol beer was promoted in three of the clubs visited, leaving four clubs not promoting it by way of posters or signs. However, in five clubs, low-alcohol beer was available. In addition, two of the clubs had more than one type of low-alcohol beer.

None of the clubs promoted the use of taxis or subsidies for them. Four clubs promoted and offered a courtesy van. In only two clubs was there signs about not drink driving. In only one club was the bar staff drinking alcohol.

Table 19

Summary of Clubs Observation

Observation	No. of clubs (n=7)
Food available	6
Non-alcoholic beverages for sale	7
Designated Driver Scheme	2
Signs advertising the legal drinking age	3
Underaged patrons	4
Signs about not serving intoxicated patrons	4
Promotion of low-alcohol beer	3
Low-alcohol beer for sale	5
Courtesy van promotion or use	4
Taxi promotion	0
Presence of intoxicated patrons	6
Anti drink driving posters	2
Bar staff drinking alcohol	1

AIM 5
TO TARGET YOUNG PEOPLE WITH THE CAAP PROGRAMME

OPERATION PEER PRESSURE SURVEY

One of the initiatives the Horowhenua CAAP instigated to target young people was Operation Peer Pressure. A survey was conducted to gauge people's experience of this initiative. A telephone survey was conducted on a random sample of high school students who had participated in Operation Peer Pressure. The sample (n=16) was comprised of nine males and seven females. This included thirteen European and three Maori students. The three high schools comprised Horowhenua College, four, Manawatu College, seven, and Waiopehu College, five. The largest number of students, six, were in the 7th form. In addition, the greatest number of students, eleven, lived in urban locations.

When asked if they found the experience positive, all respondents stated that they found the experience positive. When asked what specific parts were most positive, the greatest number of respondents, four, replied "Seeing what the Police do." Other things identified as positive include:

- Everything, 3 respondents
- Touring the police station, 2
- Police contact\being with the police, 2
- Stopping the cars, 2

Table 20

Learning From the Experience of Operation Peer Pressure

Learning	No. of respondents (n=16)
Don't drink and drive	8
What the police do when someone is pulled up\seeing what the police do	4
Seeing the positive influence on peers\teenagers	2
Unsure	2

The thing the students learned most commonly was not to drink and drive. All students said that they found everything on the programme useful (see Table 20). In fact, fifteen of the respondents indicated that they would have liked to go out more times.

Table 21

Preferred Number of Times to Participate in Operation Peer Pressure

No. of times	No. of respondents
Twice	2
More than twice	14

The majority of students, fourteen, would like to go out more than twice. In addition, all of the respondents said that more students should have the opportunity to participate in Operation Peer Pressure. The respondents were then asked to whom they thought Operation Peer Pressure should be available.

Table 22

Most Appropriate Age for Participating in Operation Peer Pressure

Age	No. of respondents
Forms 3 to 7	3
Forms 4 to 7	1
Forms 5 to 7	7
Forms 6 and 7	5

The largest number of respondents, seven, felt that Operation Peer Pressure should be opened to senior students at the high schools, particularly forms 5 to 7 (see Table 22). All of the students said that Operation Peer Pressure should continue.

Table 23

An Overall Rating of the Operation Peer Pressure Experience

Rating	No. of respondents
1 - A great waste of time	0
2 - A waste of time	0
3 - Average\Neutral	2
4 - Worth while	10
5 - Very worth while	4

Most students felt that the experience was worthwhile (see Table 23).

Table 24

Operation Peer Pressure Rating by Participants

Sex	Worth while	Very worth while	No answer	Total
Male	7		2	9
Female	3	4		7
Total	10	4	2	16

It was found that the females rated the programme more highly than the males. This is significant using chi-square, χ^2 (1, $\underline{N}$ = 16) = 7.47, $\underline{p}$ <. 05 (Table 24).

Finally, students were asked for suggestions which could help improve Operation Peer Pressure.

Only a few suggestions were made, the majority of students saying that nothing needed to be done to improve Operation Peer Pressure. Suggestions included: starting the programme later at night after 8.30 pm, seeing the equipment being used on a student, go out more often, drive around more, and go out for a longer period of time. It should be noted that with the relaunch of the programme in March 1995, some of these suggestions have been implemented (even before this report was completed). The programme has changed in that the organisers have tried to make the programme more interesting. For example, now half the night is spent at a stationary checkpoint and the other half is spent driving around stopping cars. In addition, there is a possibility that in the future some of the equipment used when an offender is caught may be demonstrated on the students.

Of all of the initiatives instigated by the Horowhenua CAAP, Operation Peer Pressure appears to be the most successful at reaching its target group, high school students. It is an initiative that has been very well received by the students. Not only has it promoted the anti-drink drive message, but it has also helped foster a positive relationship between the local youth and the Police.

YOUNG PERSONS' SURVEY

To help gauge whether the Horowhenua CAAP is reaching other teenagers in the community, that is, those who have not participated in Operation Peer Pressure, a random sample (n=11) of teenagers were interviewed. The sample was comprised of three males and eight females. The sample was comprised of seven European, three Maori and one in the other category. The majority of the sample were currently at high school and a small number were out working or at another school. The students had attended or were attending the following colleges: Manawatu College, six, Horowhenua College, one, and Waiopehu College, four. The forms were represented as, form 4, three students, form 5 and 6, two, and form 7, three. Three young people were no longer at school. Ages of the sample ranged from 15 to 19 years. The majority of this group lived in an urban location.

Table 25

Knowledge of the Horowhenua CAAP by Students

Question	No. yes	No. no
Do you know what organisation is associated with this? (show the Logo)	6	5
Have you heard of the slogan, "Drink Wise - Drive Wise?"	7	4
Have you seen this anywhere? (show the logo and slogan together)	8	3
Have you heard of the organisation called CAAP?	9	2

Of those students who had heard of CAAP, the most commonly known initiative was the bumper stickers, with four respondents having seen them. This was followed by the students knowing about Operation Peer Pressure or other initiatives at school, two each. Two respondents associated CAAP with the Police, but did not specify Operation Peer Pressure.

Other things the respondents associated with the CAAP include:

- Road signs
- A drink driving programme
- Degrees Nightclub

The students were then asked what the CAAP does for young people. The most common answers for this question were that the CAAP teaches young people about alcohol or teaches young people not to drink and drive. Four young people said the organisation was well known to them and their friends. Of those who had heard of the programme, all said the organisation had a positive image for them.

The respondents were asked if they drank alcohol, even though the entire sample was under the legal drinking age of 20 years. Of this sample, eight said that they drank. It should be noted, that to be included in the drinking category, the respondent had to drink regularly. Three students drank at parties, two at home. Some drank at friends' homes or at bars.

Five respondents said they had their driver's licence. Asking if they had driven a car after drinking alcohol, all of the sample said they had not, whether they had their drivers' licences or not.

Overall, students who have not participated in Operation Peer Pressure appear to have heard of CAAP. This has most commonly been through initiatives associated with their high schools.

AIM 6
TO ENSURE THAT CAAP INITIATIVES ARE ONGOING AND LONG TERM

This aim has certainly been met by the Horowhenua CAAP. The CAAP was begun in February 1993 and is still operating today. When compared to other CAAPs, such as the Waipa CAAP, the Horowhenua CAAP is long term. The Waipa CAAP continued over the March to June 1993 period, which was for a period of four months (Kennedy & Young, 1993). A second example of a shorter CAAP was the South Waikato CAAP. This operated in the District from 1 April 1991 to 30 June 1991 (Traffic Safety Service, 1991). It should be noted that although these CAAPs were of short duration, it was not because they failed. For example, the South Waikato CAAP focused on increased enforcement during this period, and the area showed a marked decrease in the number of accidents as compared to other years.

The Horowhenua CAAP is also ongoing, with initiatives planned for the future.

AIM 7

TO REDUCE ROAD DEATHS CAUSED BY DRINK DRIVING IN THE HOROWHENUA DISTRICT, BY AT LEAST 50% FOR A MINIMUM OF SIX MONTHS

Table 26

Number of Fatal Alcohol Related Road Deaths in the Horowhenua

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1990								1			1	1
1991												
1992	1		1					1		2		1
1993			1	1						1		2
1994							1	1				1

The programme was officially launched in April 1993, therefore there should have been a reduction of fatal road accidents for six months from this date. Although after the inception of the programme there were no fatalities for four months, one cannot necessarily attribute this to the programme.

AIM 8

TO ESTABLISH A WORKING RELATIONSHIP BETWEEN THE POLICE, LAND TRANSPORT SAFETY AUTHORITY, ROAD SAFETY ORGANISATIONS AND THE COMMUNITY, ON CAAP OBJECTIVES

In relation to this aim, there has certainly been a working relationship established between the Police, the Public Health Unit and the Horowhenua CAAP. The Police are always present at the CAAP Committee meetings and have been involved with various initiatives to a large extend. At least one member of the Public Health Unit has also attended the majority of CAAP meetings recently. However, these appear to be the only lasting relationships to be established. On page 167 there is a list of organisations who have an interest in road safety. Clearly, the initial interest and involvement of these groups has decreased. The CAAP Committee is currently trying to gain the support of such groups again and has been successful at regaining the support of the Automobile Association.

AIM 9

TO RAISE PEOPLE'S AWARENESS OF GENERAL ROAD SAFETY ISSUES

To see whether people have had their awareness of general road safety issues raised, respondents were asked if they had changed their behaviour on the roads in general, other than in relation to drink driving.

Table 27

Changes in General Road Behaviour

% yes	% no	% does not drive
43.6	51.3	5.1

Table 27 shows that 43.6% of the sample have changed their behaviour on the roads.

Table 28

Areas of Behaviour Change

% more aware of others	% slowed down	% wearing seatbelt	% more responsible
47.0	35.3	11.7	6.0

Of the 43.6% of respondents who said that they had changed their behaviour since February 1993, the majority said they were more aware of others, and were driving more defensively now. A smaller number of respondents said they had slowed down (see Table 28). Although respondents stated during the interview that they were driving better now, this change in behaviour cannot necessarily be attributed to CAAP initiatives.

AIM 10

TO ENCOURAGE WIDER SUPPORT FOR ROAD SAFETY INITIATIVES

The respondents were asked whether they thought reducing drink driving was important. Most said that it was a high priority to reduce drink driving, 77.5%. A smaller group, 12.5%, said it was not a high priority, and 10% were unsure.

To see whether the general community supports or is aware of road safety initiatives, respondents were asked what anti drink driving campaigns they had noted since February 1993.

Table 29

Other Anti Drink Driving Campaigns

Other campaigns	%
TV\Radio advertisements	43.6
CBT\Random Stopping	20.5
SADD\MADD\ALAC	10.3
Blitzes	5.1
Police activities	5.1
Speed Cameras	2.6
Booze Buses	2.6
Unsure\None	10.2

The most commonly cited anti drink driving measures were television and radio advertisements. This was followed by Compulsory Breath Testing or Random Stopping. A smaller number of respondents noticed the activities of organisations such as SADD, MADD, ALAC and DDD. Finally, respondents noted activities such as blitzes, Police activities, speed cameras and booze buses (see Table 29).

It should be noted that this information does not tell us whether people actually support these anti drink drive campaigns. In addition, this information does not indicate what influence the Horowhenua CAAP has had on people's opinions or awareness of these campaigns.

PART III

RESULTS FOR TARARUA

BACKGROUND INFORMATION

Before discussing whether the individual aims of the Tararua CAAP are being met, it is essential to put the general survey into perspective. The following is a description of the sample used in the general community survey compared to the actual population of the Tararua District. The figures quoted here are taken from the 1991 Census (Department of Statistics, 1992).

DEMOGRAPHICS

Table 30

Respondent Sex

Sex	% male	% female
Survey Sample	33.4	66.7
Census Population	50.3	49.7

Table 30 shows that the survey sample was not representative of the Tararua District population. This sample was over-represented with females.

Table 31

Respondent Age

Age	% in sample	% in population
20 - 29	12.8	19.0
30 - 39	17.9	21.3
40 - 49	23.1	16.2
50 - 59	20.5	12.5
60 & over	23.1	20.4
Did not answer	2.6	

As illustrated in Table 31, the age groups 20-29 and 30-39 are slightly under-represented. The age groups 40-49 and 50-59 are slightly over-represented. Finally, the age group 60-69 is well represented. Overall, it appears that the age groups in the sample are fairly representative of the Tararua population.

Table 32

Respondent Ethnicity

Ethnicity	% in sample	% in population
European	74.4	83.2
Maori	23.1	11.6
Other	2.5	5.2

Table 32 shows that in this sample, the ethnic groups were not representative of the actual Tararua population, with Maori being over-represented.

Table 33

Respondent Occupation

Occupation	% in sample
Unemployed	56.4
Professional	7.7
Skilled	28.2
Unskilled	5.1
Unknown	2.6

The above Table cannot be compared to the Tararua population as the Census data is categorised differently from the present sample.

Table 34

Respondent Households

Household	% in sample	% in population
Living alone	5.2	20.7
Living with partner\spouse and/or children	69.2	70.4
Living with children only	7.7	
Other	17.9	8.9

The sample was representative of Tararua households in some areas. However, people living alone were under-represented in the sample (see Table 34).

Table 35

Respondent Income

Income	% in sample	% in population
Under $5,000	10.3	10.5
$5,000 - $10,000	30.8	24.0
$10,001 - $20,000	12.8	31.0
$20,001 - $30,000	5.1	20.1
$30,000 - $40,000	5.1	8.54
Not Known	35.9	

Owing to the large percentage of respondents not specifying their income, it is impossible to state whether this sample is representative of the Tararua for income.

Table 36

Respondent Location

Location	% in sample	% in New Zealand
Rural	33.3	15.1
Urban	66.7	84.9

According to Table 36, the sample is over-representative of rural respondents nationally but is representative of the Tararua. It would however, have been desirable to have had more young males in the sample, because they are in the 'at risk' group.

Table 37

Respondents Who Drink

Question	% yes	% no
Have you had an alcoholic beverage within the last month?	69.2	30.8

Table 38

Location of Respondent and Whether They Drink Alcohol or Not

Location	Yes	No	Total
Rural	4	9	13
Urban	23	3	26
Total	27	11	39

It was found that people living in urban locations drink more than rural people. This difference is significant for chi-square, χ^2 (1, N = 39) = 13.54, $p < .05$.

KNOWLEDGE OF THE TARARUA CAAP

This section looks at information gained from the general community interviews relating to respondent knowledge of the Tararua CAAP. A variety of questions were asked to see whether people in fact knew of the programme. The following Table and information was identified by the Committee as Aim 11, "To have a CAAP which is visible and easily identified by members of the Tararua District." However, it has been placed first as the rest of the questions asked (relating to the other aims) were based on whether the respondents had heard of the organisation.

Table 39

Percentage of Respondents Knowing About CAAP

Question	% yes	% no	% don't know
Do you know what organisation is associated with this? (logo)	5.1	87.2	7.7
Do you know what the words "Have Pride - Don't Drink Drive" are associated with?	15.4	82.1	2.6
Have you seen this anywhere? (show logo and slogan together)	38.5	53.8	7.7
Have you heard of an organisation called CAAP?	30.8	64.1	5.1

Overall, 30.8% of the sample had heard of an organisation called CAAP. A similar percentage of respondents had heard or seen the slogan and logo together, 38.5% (see Table 39).

The percentage of people knowing of the CAAP, 30.8% is much higher than for other CAAP programmes. For example, when unprompted, 17% of Nelson/Tasman, and 12% of Christchurch knew of their local CAAP (Norton & Kirk, 1993; Parfitt, 1994). However, it should be noted that of those knowing of the logo and slogan, half could

not identify where they had seen or heard of it. Similarly, of the respondents who had heard of the CAAP, 66.7% could not say where they had heard of it or what it was. This calls into question whether the high percentage of those claiming to have heard of CAAP is an accurate representation of the situation.

Of those who had see the logo and slogan together, 10.3% had seen the road signs. Other places respondents had seen the logo and slogan were:

Banners (on the side of buildings)

Newspaper articles

Bumper stickers

Individual respondents had seen things such as:

- Cops & Kids (this initiative had only just begun when the interviews took place)
- Posters
- Coasters in a hotel
- Notice on the rates demand

Table 40

Ranking of Aims by the Tararua CAAP Committee Members

Ranking	Aim
1	To reduce the number of alcohol related road accidents occurring throughout the Tararua.
2	To raise community awareness of drink driving issues.
3	To encourage and improve licensed premises host responsibility practices.
4	To educate young people (teenagers) on drink driving issues.
5	To teach people about safe drinking alternatives and environments.
6	To reduce the road deaths in the Tararua District.
7	To raise awareness of alcohol and problems in conjunction with its use.
8	To educate people to drink responsibly.
9	To ensure that CAAPs initiatives are ongoing and long term.
10	To encourage media coverage of drink driving and alcohol related issues.
11	To have a CAAP which is visible and easily identified by members of the Tararua District.

Table 40 shows the aims of the Tararua CAAP in rank order.

AIM 1

TO REDUCE THE NUMBER OF ALCOHOL RELATED ROAD ACCIDENTS OCCURRING THROUGHOUT THE TARARUA

This deals with non-fatal alcohol related accidents leading to injury. The statistics reported here are from the Land Transport Safety Authority (LTSA) and include only accidents where alcohol has been recorded as a factor involved in an accident.

Table 41

Accidents Involving Alcohol Resulting in Injury

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1993	1		2			3	2	2		4	3	
1994	2	4	3	1	2	1	2	2	2	3	1	1
1995	2	2	2	3		1						

Only a proportion of crashes within the last three months have been reported to the LTSA.

In 1995, since CAAP was initiated, there has been a 23% decrease compared to the corresponding period in 1994.

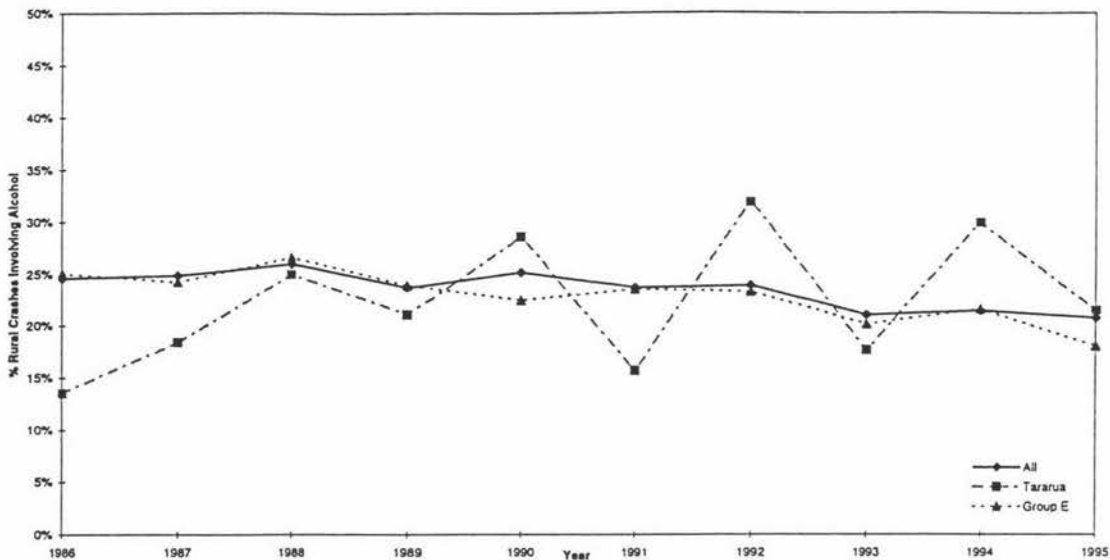

Figure 3: - Alcohol Related Accidents in Rural Areas

Note: Group E is a peer group of Districts similar in size to the Tararua District. These Districts are compared to the Tararua to see how it compares to other locations of a similar size. Districts included in this group include: Ruapehu, Kaipara, Hauraki, Clutha and Central Otago.

Figure 3 compares the Tararua with the rest of New Zealand for rural accidents. This shows that Tararua has a higher rate of rural road accidents when compared to the mean for the rest of New Zealand for 1995. The Tararua figures for the years preceding 1994, alternate between being higher and lower than the mean for the rest of New Zealand.

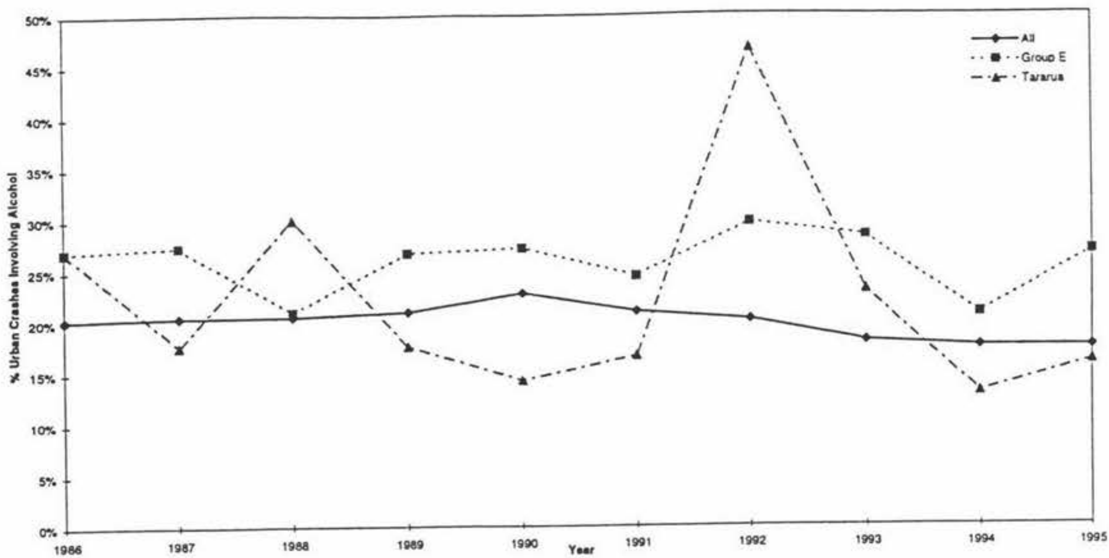

Figure 4: Alcohol Related Accidents in Urban Areas

Figure 4 shows a comparison of the Tararua District and the rest of New Zealand for urban alcohol related accidents including fatalities. For 1994, the Tararua figures are lower than the rest of New Zealand for urban accidents. 1995 sees the number of urban alcohol related accidents increasing from 1994. In the years preceding the CAAP (1992 and 1993) the figures are higher than the rest of New Zealand. This reduction in accidents cannot necessarily be attributed to CAAP initiatives.

AIM 2

TO RAISE COMMUNITY AWARENESS OF DRINK DRIVING ISSUES

Table 42

The Priority of Reducing Drink Driving in the Tararua

Question	% yes	% no	% don't know
Do you think reducing drink driving in the Tararua is high priority?	74.4	7.7	18

The majority of the sample, 74.4%, think that reducing drink driving is a high priority in the Tararua District (see Table 42).

All respondents were asked if they knew the amount of alcohol they could consume before they were over the legal limit for driving.

Table 43

Knowledge of the Legal Limit of Alcohol Able to be Consumed Before Driving

% yes	% no	% don't know
25.6	59	15.4

A quarter of the sample said they knew the limit. The people who said they knew the limit were then asked to specify exactly what the limit is.

Table 44

Number of Respondents Knowing the Legal Limit

Legal limit	No.
Correct Answer	7
More than the correct answer	8
Less than the correct answer	3
Did not know	21

Of those who said they know the legal limit, only seven in fact did know the correct amount.

Table 45

Changes in Drinking Behaviour Since November 1993

% yes	% no	% not applicable
7.7	53.8	38.5

In the Tararua, the majority of the sample have not changed their drinking behaviour since the inception of the CAAPs programme (see Table 45).

AIM 3
TO ENCOURAGE AND IMPROVE LICENSED PREMISES HOST RESPONSIBILITY PRACTICES

TARARUA LICENSEES' OBSERVATION

The researcher visited a sample of 11 hotels in the Tararua on a Friday night between the hours of 5 - 11 pm. The researcher was accompanied by one other person. It should be noted that the information here is representative of the hotels visited by the researcher and may not necessarily represent all hotels in the Tararua District.

The first host responsibility measure to be observed was whether food was available. Of the hotels sampled in the Tararua District, all hotels had some type of food available to their patrons. Seven hotels only had snacks (including, chippies, pies, peanuts). One hotel served meals (such as wedges, steak, fish and chips). Three hotels served hot food only on certain days (Friday and Saturday) or at certain hours (6.30 - 8.30 pm on a Friday night). All of the hotels had non-alcoholic beverages for sale.

Only one hotel had a designated driver scheme in which they gave the designated driver a free drink. This was the only hotel that had a sign advertising this service. When the researcher asked for a free drink, two of the hotels obliged. Here, had the barperson not been asked, the drink would not have been offered. In the remaining hotels, even when asked, the barperson said s/he would not give a designated driver a free non-alcoholic drink.

In six hotels, there were signs advertising the legal drinking age. Eight of the hotels appeared to have underage patrons. Seven hotels displayed signs saying they would not serve intoxicated persons.

In only two of the hotels, was low-alcohol beer promoted by posters on the wall. Nine hotels did not have any form of low-alcohol beer promotion. Six hotels had low-alcohol beer available to patrons.

In two of the hotels visited by the researcher, there was use or promotion of a courtesy van for the patrons.

From the observation, it appears that six hotels had intoxicated patrons on their premises. This figure is most likely to be under-representative as the hotels visited first were visited early in the evening, that is between 5 - 6 pm. It is possible that as the evening wore on, more patrons would have become intoxicated. It should be noted that the presence of intoxicated patrons was subjectively judged by the researcher. This was based on the behaviour of the patrons, that is, whether they were steady on their feet. It was also based on conversation with patrons. If the patron's speech was slurred, a judgement of intoxication was also made.

Four of the hotels had anti drink driving signs. These posters were primarily from ALAC.

It was observed that one of the bar staff was obviously drinking an alcoholic beverage while serving.

Table 46

Summary of Hotels Observation

Observation	No. of hotels (n=11)
Food available	11
Non-alcoholic beverages for sale	11
Designated driver scheme	1
Signs advertising the legal drinking age	6
Underaged patrons	8
Signs about not serving intoxicated patrons	7
Promotion of low-alcohol beer	2
Low-alcohol beer for sale	6
Courtesy van promotion or use	2
Taxi promotion	0
Presence of intoxicated patrons	6
Anti drink driving posters	4
Bar staff drinking alcohol	1

TARARUA CLUBS' OBSERVATION

The clubs that were visited included, Rugby/Football Clubs, Golf Club and Private Clubs (n=9). These were visited by the researcher and one other person on a Saturday night, between 4.30 - 9.30 pm.

Again, the first host responsibility measure to be observed was whether the clubs had food available. For the clubs sampled for this evaluation, five had hot meals served to the patrons or available, one had snacks (pies, chippies, peanuts) for sale. One of the clubs visited had no food or snacks available. All of the clubs had non-alcoholic beverages for sale.

In two of the clubs visited there was a designated driver scheme. That is, free drinks for designated drivers when asked. In five, there was no such scheme even when asked.

In three of the clubs there were signs about the legal drinking age. It was observed that in four of the clubs, there were underaged patrons present. (Only underagers present without parental supervision were counted).

In four clubs there were signs about not serving intoxicated patrons. In six of the clubs there appeared to be intoxicated patrons present. Again, the figures quoted here are based on the subjective judgement of the researcher.

Low-alcohol beer was promoted in three of the clubs visited, leaving four clubs not promoting it by way of posters or signs. However, in five clubs, low-alcohol beer was available. In addition, two of the clubs had more than one type of low-alcohol beer.

In relation to taxi promotion and use subsidies, none of the clubs promoted the use of taxis or subsidies for them. Four clubs promoted and offered a courtesy van. In two clubs there were anti drink driving signs. In one club the bar staff were drinking.

Table 47

Summary of Clubs Observation

Observation	No. of clubs (n=9)
Food available	6
Non-alcoholic beverages for sale	9
Designated driver scheme	2
Signs advertising the legal drinking age	3
Underaged patrons	4
Signs about not serving intoxicated patrons	4
Promotion of low-alcoholic beer	3
Low-alcoholic beer for sale	5
Courtesy van promotion or use	4
Taxi promotion	0
Presence of intoxicated patrons	6
Anti drink driving posters	2
Bar staff drinking alcohol	1

AIM 4
TO EDUCATE YOUNG PEOPLE (TEENAGERS) ON DRINK DRIVING ISSUES

YOUNG PERSONS' SURVEY

To help gauge whether the Tararua CAAP is reaching teenagers in the community, a random sample (n=14) of teenagers were interviewed. The sample was comprised of four males and ten females. The sample was comprised of thirteen European, and one Maori. The majority of the sample were currently at high school, and a small number were working or attending another high school out of the District. Ages of the sample ranged from 15 to 19 years and all were in Form four or a higher class. The majority of students lived in an urban location.

Table 48

Knowledge of the Tararua CAAP by Students (n=14)

Question	Yes	No	Unsure
Do you know what organisation is associated with this (show the Logo)?	9	5	-
Have you heard of the slogan, "Have Pride - Don't Drink Drive?"	14	0	-
Have you seen this anywhere?	10	3	1
Have you heard of the organisation called CAAP?	6	8	-

From the above Table, is should be noted that the majority of students had seen the logo and/or slogan, but did not know they were associated with the organisation CAAP.

The students were then asked what the CAAP does for young people. The most common answers for this question was that the CAAP teaches young people about alcohol or teaches young people not to drink and drive. When asked if the CAAP has done anything to teach young people in the Tararua about drinking and driving, four respondents said the CAAP had done so. Four said the organisation was well known to them and their friends. These students said the organisation had a positive image for them.

The respondents were asked if they drank alcohol, even though the entire sample was under the legal drinking age of 20 years. Of this sample, eight said they drank. It should be noted, that to be included in the drinking category, the respondent had to drink regularly. Most of students drank at parties or at home. Small numbers of the sample drank at friends' homes or at bars.

Five respondents said they had their driver's licence. When asked if they had driven a car after drinking alcohol, all of the sample said they had not, whether they had their driver's licence or not.

AIM 5
TO TEACH PEOPLE ABOUT SAFE DRINKING ALTERNATIVES AND ENVIRONMENTS

Table 49

Where the Respondents Drinks

Drinking place of respondents	%
Home	51.3
Clubs	7.7
Hotels\Bars	12.8
No answer	28.2

The largest percentage of respondents said they drink at home (see Table 49).

Table 50

Usual Means of Transport When Out Drinking

Transport	%
I drive	36.8
Designated driver	22.3
Walk	18.5
Car (did not specify who drives)	11.0
Friends car	3.8
Taxi	3.8
Stay the night	3.8

The majority of respondents use some other form of transport other than driving themselves when they drink outside the home.

The above two tables indicate that members of the Tararua Community are using safe drinking alternatives and environments.

Table 51

Ensuring a Safe Night Out

Safety measures	%
Use a designated driver\don't drive	38.5
Drink in moderation	17.9
Eat food	12.8
Use a courtesy van or taxi	12.8
Stay the night	5.1
Drink non-alcoholic drinks	2.6
Stay home and drink	2.6

This question was asked whether the respondent drank or not. The vast majority of people, 92.3%, identified an initiative to help ensure a safe night out. Using a designated driver was the most frequently mentioned measure (see Table 51).

To see whether the CAAP had had any influence in teaching people about safe drinking alternatives and environments, the respondents were asked whether they did such things before November 1993, 46.2% said they did. It is notable that 46% have started to take these measures since 1993.

AIM 6
TO REDUCE THE ROAD DEATHS IN THE TARARUA DISTRICT

Table 52

Number of Fatal Alcohol Related Road Deaths in the Tararua

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1990								2	2		1	
1991	1				2	2					2	
1992		1	6		1					2		1
1993						1				1		
1994								1				

The programme was initiated in November 1993, therefore one would expect a reduction of fatal road accidents for six months from this date. For the next six months there was a reduction in fatal road accidents. If the years since the CAAP has been running are viewed, there has been a reduction in the number of fatal accidents by 50%. From 1992 to 1994, there has been a reduction of 91% in fatal alcohol related accidents in the Tararua.

In the years preceding the CAAP, the fatality rate was much higher as the Table above illustrates. However, whether this decrease in fatal road accidents was due to the CAAP programme cannot be determined.

AIM 7

TO RAISE AWARENESS OF ALCOHOL AND PROBLEMS IN CONJUNCTION WITH ITS USE

Table 53

Problems Arising From Alcohol Abuse

Problems	%
Violence	59
Drunk Driving	15.4
Car Accident	7.7
Health	7.7
Crime	2.6
Decrease in Responsibility	2.6
Don't know	5.0

Table 53 indicates that the sample had a variety of views as to what they thought the problems in conjunction with alcohol use were. Most respondents (59%) identified violence as the main problem arising from alcohol abuse.

As CAAP specifically targets drink driving, the respondents were asked to name social costs borne by the community through drink driving.

Table 54

Social Costs Borne by the Community Through Drink Driving

Social costs	%
Hospital\Medical costs\Rehabilitation Costs	20.5
Family problems\Divorce	5.1
Drain on tax payers	5.1
Death	5.1
Crime\Violence	2.6
DSW	2.6
Insurance	2.6
Damage to property	2.6
Unsure	53.7

Of those who were aware of the social costs most referred to the hospital/medical costs involved with accidents, 20.5% (see Table 54).

To see if people thought their awareness of alcohol related problems had increased since the inception of the programme, the respondents were asked if their awareness of such problems had been raised since November 1993. Some said they had, 17.9%.

Overall, it appears that people are not aware of the problems accompanying the use of alcohol. In addition, their awareness of these things have not been raised since the initiation of CAAP.

AIM 8
TO EDUCATE PEOPLE TO DRINK RESPONSIBLY

Table 55

Changes in Drinking Behaviour Since November 1993

Question	% yes	% no	% don't know
Have you lowered the amount of alcohol consumed when you are drinking?	48.1	48.1	3.8
Have you changed your choice of alcoholic drink?	11.1	88.9	

Of those who drink regularly, 48.1% said they have changed their drinking behaviour since the inception of the CAAP programme. The change in behaviour is towards lowering the amount consumed when they are having a drink. This would indicate that some people are being more responsible towards drinking. However, this behaviour is not necessarily because of CAAP initiatives.

AIM 9

TO ENSURE THAT CAAP'S INITIATIVES ARE ONGOING AND LONG TERM

The CAAP was initiated in November 1993, and officially launched in June 1994, and is still operating today. When compared to other CAAPs, such as the Waipa CAAP, the Tararua CAAP is long term. The Waipa CAAP continued over the March to June 1993 period, which was for a period of four months. A second example of a shorter CAAP is the South Waikato CAAP. This operated in the District from 1 April 1991 to 30 June 1991 (Traffic Safety Service, 1991). It should be noted that although these CAAPs were short-lived, it was not because they failed. For example, the South Waikato CAAP focused on increased enforcement during this period, and showed a marked decrease in the number of accidents as compared to other years.

However, compared to some other CAAPs, Tararua has been long term. The Tararua CAAP is also ongoing with initiatives planned for the future.

AIM 10
TO ENCOURAGE MEDIA COVERAGE OF DRINK DRIVING AND ALCOHOL RELATED ISSUES

In relation to this aim, the Tararua CAAP has been successful in that it has used the media, primarily the press, to convey its anti drink drive message.

Table 56

Other Anti Drink Driving Campaigns

Other campaigns	%
TV advertisements	30.8
DARE/SADD/MADD/FADE	15.4
CBT/Random Stopping	12.8
Bumper stickers/Roadsigns	5.1
Booze Buses	5.1
Police activities	5.1
Magazines/Newspaper articles	2.6
School activities	2.6
None/Unsure	20.5

Table 54 shows other anti drink drive campaigns the respondents have noticed since the inception of the Tararua CAAP programme. Television advertisements have been noted by the largest percentage of respondents, 30.8%.

PART IV

METHODOLOGY FOR COMPARISON

PROCEDURE FOR A COMPARISON OF THE TWO PROGRAMMES

To make a statement about which programme has been more successful in fulfilling its aims and objectives, a comparison has been made where the aims identified by the committee members are the same, as illustrated in Table 57. The aims which varied between the programmes have also been taken into consideration as has subjective information gained from attending the CAAP committee meetings. These are considered in the Comparison Discussion.

Table 57

Aims in Common for the Horowhenua and Tararua CAAP Programmes

Aim rank ordering	Horowhenua	Tararua
1, 1	To reduce alcohol related road accidents within the Horowhenua District	To reduce the number of alcohol related road accidents occurring throughout the Tararua District
3, 4	To bring about initiatives District wide to assist in spreading the "Drink Wise - Drive Wise" principle involving all licensed outlets	To encourage and improve licensed premises host responsibility practices
4, 5	To target young people (teenagers) with the CAAP programme	To educate young people (teenagers) on drink driving issues
9, 6	To ensure that CAAPs initiatives are ongoing and long term	To ensure that CAAPs initiatives are ongoing and long term
6, 7	To reduce road deaths caused by drink driving in the Horowhenua District, by at least 50% for a minimum of six months	To reduce the road deaths in the Tararua District
8, 2	To teach people to have more responsible attitudes towards alcohol	To educate people to drink responsibly

STATISTICAL ANALYSIS

This results section reports chi-square analysis where a statistically significant result has been found between the two programmes.

RESULTS OF COMPARISON

Table 58

Knowledge of the Programmes in Each District

District	Bumper stickers	Student/Police checkpoint	Road signs	Total
Horowhenua	16		2	18
Tararua	2	1	4	7
Total	18	1	6	25

Chi-square analysis of this survey data found that there was a statistically significant difference between the two districts as to where people had seen the CAAP logo and slogan. In the Horowhenua, more people interviewed had seen the bumper stickers, whereas in the Tararua the community had associated the slogan and logo with a variety of initiatives. $\chi^2(2, N = 25) = 9.57$, $p < .05$ (see Table 58).

Table 59

Increase in Awareness of Social Costs Relating to the Inception of Each Programme

District	Yes	No	Don't know	Total
Horowhenua	17	12	2	31
Tararua	7	22	1	30
Total	24	34	3	61

When the respondents were asked whether their awareness of the social costs borne by the community through drink driving had increased since the inception of the CAAP programme, there was a significant difference between the two areas. χ^2 (2, $\underline{N}$ = 61) = 7.43, $\underline{p}$ < .05 (see Table 59). The Horowhenua respondents were much more likely to report an increase in awareness of social costs when compared to the Tararua respondents.

Table 60

Knowledge of Student Focused CAAP Initiatives

District	Yes	No	Total
Horowhenua	9	2	11
Tararua	6	8	14
Total	15	10	25

The Horowhenua young people were more likely to have heard of high school students going out with the police on Operation Peer Pressure than the Tararua youth. χ^2 (1, $\underline{N}$ = 23) = 3.99, $\underline{p}$ < .05 (see Table 60).

Table 61

Suggested Improvements for the Student Initiatives

District	Students making an improvement suggestion	Nothing	Total
Horowhenua	9	1	10
Tararua	2	15	17
Total	11	16	27

Horowhenua students who went on Operation Peer Pressure were more likely to have suggestions to improve the programme than did Tararua students who had participated in a similar initiative, Cops & Kids. χ^2 (1, N = 27) = 15.96, p < .05 (see Table 61).

Table 62

Courtesy Van Use Relating to Club Location

District	Yes	No	Total
Horowhenua	4	3	7
Tararua	1	8	9
Total	5	11	16

Horowhenua clubs were more likely to have a courtesy van than Tararua clubs. χ^2 (1, N = 16) = 3.88, p < .05 (see Table 62).

DISCUSSION

In New Zealand, alcohol is involved in as many as 50% of all fatal accidents (Bailey, 1986, 1980; Bailey & Carpinter, 1991; Gray, 1988; Kirk, 1990). However, the popular image of the innocent person being killed by a drunken driver appears to be ill-founded (Bailey, 1986). Bailey (1986) says that the fatality rate of innocent persons is only 4%. The most common scenario is that of a single intoxicated male occupant, or a male driver with a male passenger who is also heavily intoxicated has an accident and is killed (Bailey, 1986).

It is essential to put this figure, that is, 50% of fatal accidents involving alcohol, into perspective. In 1993, 517 fatal crashes were reported by the LTSA for the whole of New Zealand, 185 involving alcohol. Clearly, this figure is under 50%. However, in the Horowhenua district, it was reported that five of eight fatal accidents involved alcohol for the same period (Land Transport Safety Authority, 1994). Similarly, for the Tararua district, two of five fatal accidents involved alcohol. Therefore, when considering the percentage of accidents involving alcohol, one cannot generalise about the whole country because there are variations between districts. That is, overall the percentage of alcohol related accidents in New Zealand is under 50% however individual districts vary.

The LTSA (1994) reports that alcohol-related accidents cost the Horowhenua district \$32.4 million and the Tararua district \$25.08 million in 1993. It would appear that alcohol-related accidents cost the Horowhenua district much more than they did in the Tararua district. The Horowhenua CAAP Committee believe that there are many accidents on State Highway 1 which contribute to this high figure.

In addition, the LTSA statistics do not state where accident casualties are domiciled. Therefore, it is difficult to estimate with any certainty, the true dollar value of alcohol-related accidents in the Horowhenua involving Horowhenua district residents.

Urban accidents cost the Horowhenua district $6.1 million and rural accidents cost $26.3 million (Land Transport Safety Authority, 1994). According to the report of the LTSA, alcohol involvement in urban accidents was reduced over the 1989 to 1993 period. Conversely, alcohol involvement in rural accidents has increased, as has the incidence of rural accidents at night. In rural accidents, there is also an over representation of excessive speed for the conditions.

Urban accidents in the Tararua district, cost the community $3.94 million, and rural accidents cost the community $21.14 million (Land Transport Safety Authority, 1994). The LTSA report notes that accident numbers for this district have increased in 1993. Accidents occur more frequently on Friday and Saturday evenings. The higher speed limits in the rural areas of Tararua may contribute to the higher proportion of serious and fatal accidents than in urban areas.

Bailey (1986) suggests that police are not deployed during the times at which drink driving occurs most frequently, and also questions whether police patrolling is undertaken in the areas where the most serious accidents occur, that is, in rural areas. Owing to higher vehicle speeds, the most serious accidents frequently occur in rural areas and often at night. Because of these factors, one would presume that police

would patrol such areas, especially in places that are known to have a high accident rate. According to Bailey (1986), this has not been the case.

The two CAAP programmes have been identified as a form of primary intervention. Both programmes aimed to reduce the incidence of new cases of drink driving in their local communities. Each one utilised education and the media to increase public awareness and to try to influence the community's attitude towards drink driving. Both programmes focused attention on high school students, by involving the students in various programme initiatives and activities. The thinking behind targeting the students was that the Committees felt that high school students are at an age where they begin to drive and experiment with alcohol. Therefore, intervening before the students begin drinking and driving may help prevent the behaviour before it occurs.

Although the CAAP programmes did not make use of secondary intervention, that is legislation, per se, it has been used indirectly. Allowing students to accompany the police on their Checkpoints enables them to see how secondary intervention aims to prevent a drunk driver already on the road from having a crash, by enforcing legislation.

The two CAAP programmes were not designed to be school-based education programmes; however they have utilised the education system as a medium for their cause. In general, each programme has used parts of the four broad types of programmes, as identified by McKnight (1986), which are: (1) drink driving programmes, (2) general alcohol education programmes, (3) peer intervention, and (4)

environmental intervention. For example, in relation to drink driving programmes, both CAAPs showed the direct effect of alcohol and driving by displaying the wrecked car from the Takapau Plains accident at various locations across each district. In the Horowhenua, this message was taken directly to students at Waiopehu College, with the father of one of the victims speaking to the students. In addition, drink driving laws and penalties were publicised to high school students by way of pamphlets distributed to students explaining the purpose of CAAP and containing information about RBT. As part of a more general alcohol education programme, the Tararua CAAP sponsored the purchase of educational books and videos for use at the local high schools.

By way of peer intervention, each CAAP initiated a programme where the senior students of the high schools went out with the police on their checkpoints. Not only did Operation Peer Pressure and Cops & Kids enable students to learn what the police actually did, but it was also believed that if younger students saw their older peers from sports teams and the student council, for example, taking part in an anti-drink drive activity, their own behaviour would be influenced in a positive way. In addition, Students Against Driving Drunk (SADD), a type of peer intervention, was promoted and supported by both CAAPs. For example, the Horowhenua CAAP gave Waiopehu College $200 to initiate a SADD programme. Similarly, the Tararua CAAP helped to establish a SADD organisation at Tararua College[2].

[2] It should be noted that the other high schools in each District already had an established SADD organisation running. Therefore, they did not receive any financial assistance from the CAAPs.

The fourth type of programme discussed in the introduction is environmental intervention. Both CAAPs endeavoured to alter the environment in which young people drink and/or drive. For example, the Tararua CAAP sponsored a free dance in Dannevirke with no alcohol available. Attendance at this activity was 150. The Horowhenua CAAP attempted a similar alcohol free activity on a more permanent basis with a student nightclub, 23 Degrees. These dances were held every month, until decreasing attendance resulted in the Committee closing the nightclub to focus their resources in other areas.

Both programmes have taken advantage of school education to make contact with students. The Tararua CAAP has used this considerably. However the Horowhenua has used it even more extensively, as at the time of the evaluation, the Horowhenua CAAP had been running much longer than the Tararua CAAP.

Bailey (1987) says that licensed premises play a significant role in drink driving crashes. Both CAAP programmes targeted licensed premises with the aim of making hosts more responsible in their serving practices. In the Horowhenua, hotels were directly targeted by a Mocktail Competition where the first prize was $500. In addition, Cr Ryder visited Rugby Football Clubs and the Levin Car Club to describe the role of CAAP and speak about host responsibility. In the Tararua, a host responsibility course was conducted for alcohol servers, and posters and table coasters sporting an anti-drink drive message were distributed to licensed premises throughout the district. The Tararua CAAP also sponsored a Best Host of the Year Competition in which the winner received $500. However, there was a very poor response from licensed premises towards this initiative. It should be noted that the majority of

initiatives aimed at the licensed premises in each programme were done at the beginning of the programmes. At the time of the present evaluations there was very little evidence of the CAAPs having been to the clubs and hotels. Therefore, both programmes have not had an impact on creating safer drinking environments.

With regard to the mass media, it is suggested that message repetition is an important component in reaching a target group with an anti-drink drive message (Vingilis, 1987). However, the effects of media publicity appear to be short-lived and disappear as soon as a campaign stops (Vingilis, 1987). Both CAAP programmes have utilized a number of mass media including: radio, print, billboard advertising, mall displays, and pamphlets. Such efforts have been on-going, but the effects of these efforts appear to have been short-lived and limited judging by the small number of people who indicated an awareness of the organisations and what they stand for, in the present study.

The purpose of these evaluations was to investigate whether the Horowhenua and Tararua CAAPs have been meeting their aims as identified by the committee members. Overall, it appears that these CAAPs have met few of their aims. This evaluation did not established a direct link between CAAP initiatives and attitude/behaviour change. It is possible that CAAP initiatives had some influence in changing behaviour when combined with the many other anti drink driving campaigns and advertising. That is, people may have noticed the initiatives without consciously differentiating the initiative from any other drink driving campaign.

In the Horowhenua, although 17.5% of the respondents knew of CAAP, which compares favourably with other programmes, this figure does not indicate extensive knowledge of the programme. More people know of the initiatives, 47.5%. For example, the students spoken to in the young persons survey knew that Operation Peer Pressure is associated with the Police, but do not necessarily know it is a CAAP initiative. In the Tararua, although the figure 30.8% indicates extensive public knowledge of the programme, it should be viewed with caution. This is because a large number of respondents could not say where they had heard of it or what the organisation does. One explanation for this high figure may be related to social desirability (Weiten, 1992). Social desirability bias is the tendency to give socially approved answers to questions about oneself or one's knowledge about things. Therefore, the respondents may have said they knew of the organisation to show themselves in a favourable light.

In relation to the individual programmes, some differences were apparent. However, small numbers reduce the validity of these results, and in fact there were more similarities than differences. Firstly, as previously discussed, both districts identified licensed premises as a target group. At the time the evaluations were carried out, there appeared to have been no effect on Hotels or Clubs in the sample. That is, there were underaged patrons, drunk people and not many Host Responsibility promotional posters. In addition, ethnic minority groups such as Maori and Pacific Island people have not participated in either programme for any length of time. With limited resources, committee members need to reconsider who their target groups are and restate their aims and objectives. Clearly, focusing on the whole community requires much more financial assistance and time than the committees have available. Finally,

if the Horowhenua and Tararua CAAPs are going to continue in the future, it is essential to regain the support of relevant community groups and organisation. As stated in the introduction, in order for community-based drink driving countermeasures to be a success, key agencies or interest groups must be involved in the planning and management of such campaigns (Bailey & Carpinter, 1991). The Horowhenua and Tararua CAAPs first gained support by sending letters to all sports clubs, local groups and organisations, licensed premises, schools and colleges outlining the CAAPs programme, asking for their support. Making contact by letter or some other means could be utilised again. It is important to solicit new members onto these committees, as such people may bring new ideas to the group[3].

Although the overall results were similar for both programmes, a few significant differences were found between the programmes. It was found that more students in the Horowhenua knew about Operation Peer Pressure and CAAP than in the Tararua. It should be noted however, that the Horowhenua programme has been operating much longer than the Tararua one. In addition, the small sample size weakens the validity of these results.

Tararua students participating in Cops & Kids had suggestions for improving the programme initiative, whereas very few Horowhenua students said that anything needed to be done to improve their programme. Again, this difference should be viewed in light of the fact that Operation Peer Pressure is a much older initiative and has had more time to smooth out any problems. Cops & Kids is a new initiative in the

3 Appendix C contains the recommendations from the Committee Reports, resulting from the evaluations.

Tararua that was still at the development phase when the evaluation was carried out. Here, the students' suggestions were welcomed.

The results indicate that Horowhenua people are more aware of the social costs related to drink driving, than people in the Tararua. This would appear to have occurred since the inception of the programme, however, the evaluation did not produce any evidence that the increased awareness can be attributed to CAAP initiatives.

The comparison tends to indicate that the Horowhenua CAAP has been slightly better at meeting its aims and objectives than the Tararua CAAP. However, these results are confounded by a number of variables, including: the small samples sizes and the fact that the Horowhenua programme had been operating longer at the time of the evaluations, meaning that some of the activities were more well established in the community compared to the Tararua programme. However, the Horowhenua programme with a co-operative team Committee, is still operating at the present time, whereas, the Tararua Committee appeared to the researcher to be affected by personality conflicts between some members. It also appeared that at least one member was motivated by a desire to incorporate the CAAP with another road safety programme. It was notable that the Tararua CAAP did not list among its aims the establishment of a working relationship among the Police, LTSA, road safety organisations and the community as did the Horowhenua CAAP. The Tararua CAAP are currently talking about dissolving their programme.

If community-based programmes are to secure funding from the government for future projects, there are several points to consider. For example, a very important omission in the CAAP programmes, highlighted by the evaluation reports, was reaching the "at risk" group, that is 18-28 year old males (Bailey, 1995). The fact that this group has been missed by CAAP initiatives questions whether this type of programme is the best medium for reaching this group. Owing to the enormous peer pressure placed upon males in this age group. Casswell & Wyllie (1995) say that while education campaigns have their place, "legislation that is enforced" decreases the incidence of drink driving in this group. This suggests that stricter enforcement of legislation may help influence the behaviour of these people. For example, currently a police presence patrolling around licensed premises is minimal and needs to be increased.

Another important consideration is that "a large number of people drink and drive repeatedly" (Bailey & Carpinter, 1991, p. 52). "Even after they have been caught several times or have had serious accidents ... convicted drunk drivers often re-offend within three months of the previous offence" (Bailey & Carpinter, 1991, p. 54)[4]. It appears that a number of recidivists are in the "at risk" group (Bailey, 1979; Bailey & Winkel, 1981, cited in Carpinter & Bailey, 1991). It is also likely that a repeat offender will have been first involved with the authorities before the age of 20 years (Bailey, 1986). Recidivists seem to be substantially heavier drinkers than other convicted drinking drivers and are involved in fatal accidents more than twice as often as other drinking drivers.

[4] It should be noted that recidivism figures include only those offenders who have been caught. It is likely that re-offending occurs at a much higher rate than is reported here.

This evaluation has indicated that the general population is lacking an awareness of the CAAPs. Hotels and club managers showed little evidence of either awareness of host responsibility or willingness to implement such measures. A small select group of students has been involved in some initiatives. On the other hand, it does appear that in both districts alcohol-related accidents occur at a considerably lower incidence than the national average. Whether or not the CAAP programmes have had some affect is impossible to say.

Bailey & Carpinter (1991) point out that one purpose of evaluation is to see whether a programme should continue or be terminated with resources redistributed elsewhere. Based on the information presented in this study, the researcher would question the effectiveness and cost-benefit of continuing to fund such programmes, in view of the lack of evidence linking changes in behaviour/attitudes and decreases in injury/death caused by alcohol to CAAP initiatives.

Another issue to consider is the idealistic thinking behind these programmes. The National Road Safety Plan Workbook (1994) states, the desired condition be that "alcohol no longer is a contributing factor in road traffic accidents" (p. 10). Considering the level of drink driving, this view is currently unrealistic.

This researcher agrees with Bailey (1995) that the problem rests with a small number of drivers who drink large quantities of alcohol, and not people who drink moderately as targeted by the LTSA. In reality, it is the hard core of drinking drivers (5% of the adult population) who account for more than 50% of fatal accidents. If this is the case, the efforts of these CAAP programmes should be questioned. These

programmes appear to have failed to reach the 18-28 year old group with their initiatives, who comprise a large number of drunk driver offenders.

This evaluation fails to show any effect of the Horowhenua and Tararua CAAPs due to weaknesses in the evaluation design. This is primarily because the current study falls within the confines of action research. The limited timeframe, vested interests of stakeholders, politic's, and the fact that the research was commissioned, all effected the evaluations and were largely out of the control of the researcher. However, there are other limitations and shortcomings of this research which could have been more thoroughly controlled.

Although other evaluations of CAAP and community-based anti-drink driving campaigns, such as the Nelson/Tasman and the Christchurch CAAP programmes, have shown declines in the incidence of accidents involving alcohol, such evaluations have been limited, as the present ones have, by the fact that the majority of evaluations have been conducted after the programme has begun (Gordon, 1993; Parfitt, 1992; Norton & Kirk, 1993).

Bailey & Carpinter (1991) claim that a weakness in community-based programmes has been the lack of effective programme evaluation. One of the six key principles of the National Road Safety Plan 1995 (1994) states that "individual programmes should be evaluated to determine both their effectiveness and how to improve them" (p. 11). The LTSA (1993) tried to provide for this by stating that one of the prerequisites for CAAP funding, was that the programme had to be evaluated. Unfortunately, the

LTSA CAAP manual does not specify that such evaluation should be planned for, and initiated before the programme actually begins.

A problem with the present study is that an evaluation was not planned for. Therefore, the present evaluation had no pre-measures by which to evaluate whether any changes in attitudes and behaviour can be attributed to CAAP initiatives. If a future evaluation of the same or similar programmes is conducted, the shortcomings of the current programmes need to be borne in mind in order to ensure that future initiatives are more rigorously designed, implemented and evaluated.

This research is limited by its small sample size. For the general community survey, one of the reasons face-to-face interviewing was used was because the questionnaire required the participant to say whether they recognised a picture of the organisation's logo. However, this method was very time consuming owing to the large geographical area that had to be covered to ensure that a random sample of town and country was selected.

The small sample size may not be representative of the population within each district and therefore limits the ability to generalise to the wider Horowhenua and Tararua districts. The small number of respondents also limits the usefulness of the statistical analysis.

In future, either a longer duration for data collection should be set into the time framework or a telephone sample could be used to enlarge the sample. Either of these would have enabled a greater number of high school aged people to be located as subjects in the study. Similarly, more hotels and clubs could be visited.

In light of the fact that several road safety documents from New Zealand government departments place alcohol-related accidents high on the preventable list, efforts must continue to find a countermeasure, or combination of such measures to decrease the incidence of alcohol-related accidents (Toomath & Craig, 1992). The current evaluation would question whether CAAPs are an effective countermeasure for such a difficult task.

However, although this evaluation has not linked Operation Peer Pressure with a reduction of drunk driving among the local youth, perhaps it would be advantageous to take such individual initiatives, and use the CAAP funding ($40,000 per programme initially) to develop these initiatives so they can be used in more areas as stand-alone programmes, or as part of an educational programme in schools. As stated previously, a combination of the different types of countermeasures is probably the most successful way of reaching the largest number of people. A systems approach of Operation Peer Pressure could be used nation-wide. In this way, one could reach a group of people who are starting to drink and drive. Consequently, legislation, advertising, education, public awareness (by the participants telling other people about it), technology (seeing the machinery being used) could be utilized. This would have the added effect of developing more effective police/youth relationships. In addition, if evaluations are to be taken seriously, the LTSA needs to police this

process more thoroughly. The LTSA CAAP Manual (1993) states that evaluation is "not something that only happens after the project is launched" (p. 31). Clearly, the majority of evaluations have been undertaken well after the programme has begun. One recommendation for future evaluations of CAAP programmes would be to standardise the evaluations, that is, conduct the evaluations using the same survey questionnaires and checklists. This would allow a comparison between the different programmes to identify which initiatives are most successful. If a standardised evaluation procedure was followed; before, during and after measures could be planned for.

The LTSA CAAP manual contains a great deal of information about evaluation, but CAAP committees are left on their own, with no other real guidance as to how to conduct an evaluation. The LTSA needs to monitor what is going on during programme evaluation, especially where committee members are evaluating their own programme.

CAAP committees have access to information about high risk groups. LTSA needs to stress the importance of targeting appropriate groups. This is not to say that other groups should be forgotten. They should continue to be targeted, but to a lesser degree. Some very constructive initiatives to reach younger people have been developed, such as Operation Peer Pressure and should continue to be supported.

Evaluations can produce information which can be utilised by concurrent and future programmes. Access to such material should be made readily available. A centralised body would be advantageous, to co-ordinate and monitor programme initiatives and activities.

It is clear from the information gained from research that there is a group in society that needs to be targeted, 18-28 year olds (Bailey & Carpinter, 1991; Bailey, 1995, cited in Chamberlain, 1995). It appears that education and legislation may hold the key. Educating youth before they begin to combine drinking to excess with driving, through initiatives such as Operation Peer Pressure, may be part of the solution. Similarly, using legislation before they offend has shown a positive outcome. For example, the 25% decrease in youth deaths over 1994-1995 is likely to be related to the Graduated Licence Scheme introduced in 1987 (Bailey, 1995, cited in Chamberlain, 1995). This has resulted in fewer young drivers getting their licence until they are 17 or 18 years old, thereby decreasing the opportunity for young drinkers to drive. Finally, legislation that is enforced may deter younger drivers from drinking to excess and then driving.

While the CAAP programmes evaluated here have produced some worthwhile initiatives, the researcher feels that the resources would be better spent focusing on the initiatives that have appeared to have had an impact on their target groups, instead of spreading the resources too thinly trying to reach the whole community.

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APPENDIX A

COPIES OF THE QUESTIONNAIRES USED TO EVALUATE THE HOROWHENUA AND TARARUA CAAPS

ALCOHOL USE IN THE TARARUA

Informed Consent

Hi, my name is Gina Rickards and I am conducting a survey on the use of alcohol in the Tararua. This piece of research is part of my Psychology Masters Thesis at Massey University.

This interview asks questions about alcohol and also some general questions about yourself. The entire interview should take approximately 20 minutes to complete.

If you willing to take part, I assure you that all of the information you provide is in confidence, your name is not recorded, and will be used only for the purposes of this project. You are free to refuse to answer any question(s), and withdraw from the interview at any time.

If you have any queries about the research, you are welcome to call me, Gina, on (06) 357-8593.

Thank you

HOROWHENUA/TARARUA SURVEY FOR THE GENERAL COMMUNITY

1 Do you know what organisation is associated with this? (Show the logo)

Yes ☐

No ☐

Don't know ☐

2 If yes, what?

3 Do you know what the words "Drink Wise - Drive Wise"/ "Have Pride - Don't Drink Drive" are associated with?

Yes ☐

No ☐

Don't know ☐

4 If yes, what?

5 How many responses?

6 Have you seen this anywhere? (Show the logo with both)

Yes ☐

No ☐

Don't know ☐

7 If yes, where?

8 How many responses?

9 Have you heard of CAAP?

Yes ☐

No ☐

Don't know ☐

10 Do you know what the organisation does?

Yes ☐

No ☐

Don't know ☐

11 If yes, what?

12 Where have you seen or heard about the organisation?

13 How many responses?

14 Does the CAAP have a positive image for you?

Yes ☐

No ☐

Don't know ☐

15 If no, why not?

16 Have you had an alcoholic drink within the last month?

Yes ☐

No ☐

Don't know ☐

17 Where do you usually drink?

18 How many responses?

19 What do you usually drink?

20 How many responses?

21 What is your usual means of transport to and from the place you drink?

22 How many responses?

23 There is a legal limit of alcohol, a person can drink before driving. Do you know this limit?

Yes ☐

No ☐

Don't know ☐

24 If yes, what?

25 Without food, this limit would be reached after, ... (units of alcohol)?

26 With food, this limit would be reached after, ...(units of alcohol)?

27 Since February/November 1993, have you driven when you suspect you have been over the legal limit?

Yes ☐

No ☐

Don't know ☐

28 If yes, how often?

29 Since February/November 1993, have you lowered the amount of alcohol consumed when you are drinking?

Yes ☐

No ☐

Don't know ☐

30 Since February/November 1993, have your drinking patterns/behaviour changed?

Yes ☐

No ☐

Don't know ☐

31 If yes, in what way?

32 Number of responses?

33 Since February/November 1993, have you changed your choice of alcoholic drink?

Yes ☐

No ☐

Don't know ☐

34 If yes, from what to what?

35 When you are out drinking, what can you do to ensure a safe night out?

36 Number of responses?

37 Did you do these things before February/November 1993?

Yes ☐

No ☐

Don't know ☐

38 Do you think reducing drink driving in your District is a high priority?

Yes ☐

No ☐

Don't know ☐

39 Was reducing drunk driving a high priority before the CAAP began?

Yes ☐

No ☐

Don't know ☐

40 Can you name some of the problems arising from alcohol abuse?

41 Number of responses?

42 Were you aware of these problems before the CAAP began?

Yes ☐

No ☐

Don't know ☐

43 Has CAAP information/initiatives affected you?

Yes ☐

No ☐

Don't know ☐

44 If yes, in what way?

45 If no, is there any special reason why?

46 What other drink driving campaigns have you noticed since February/November 1993?

47 Number of responses?

48 Since February/November 1993, has your awareness of the social costs borne by the community through drink driving increased?

Yes ☐

No ☐

Don't know ☐

49 If yes, in what way?

50 Number of responses?

51 What are the social costs borne by the community through drink driving?

52 Number of responses?

53 Since February/November 1993, have you changed you behaviour on the roads in general?

Yes ☐

No ☐

Don't know ☐

54 If yes, in what way?

55 Number of responses?

56 What sorts of things can you do to prevent drink driving?

57 Number of responses?

58 Sex: Male/Female

59 Date of Birth:

60 Ethnicity:

61 Occupation:

62 Which of these describes your household:

☐ Living alone

☐ Living with partner/spouse

☐ Living with parent

☐ Living with a parent/spouse and children

☐ Living with children, but no partner

☐ Living with adults but no partner

63 What is your personal annual income?

☐ Under $5,000

☐ $5,001 - $10,000

☐ $10,001 - $20,000

☐ $20,001 - $30,000

☐ $30,001 - $40,000

- ☐ $40,001 - $50,000
- ☐ Over $50,001
- ☐ Over $100,000

64 Location:

- ☐ Rural
- ☐ Urban

Please send feedback on this study to:

Name: ____________________

Address: ____________________

Telephone: ____________________

District: ____________________

YOUNG PERSONS SURVEY
HOROWHENUA/TARARUA

1 Do you know what organisation is associated with this (Show the logo)?

Yes ☐

No ☐

Don't know ☐

2 If yes, what?

3 Have you heard of the of the slogan, "Drink Wise - Drive Wise"/"Have Pride - Don't Drink Drive?"

Yes ☐

No ☐

Don't know ☐

4 If yes, with what do you associate it with?

5 Have you seen this anywhere? (Show the logo with both)

Yes ☐

No ☐

Don't know ☐

6 If yes, where?

7 Have you heard of the organisation called CAAP?

Yes ☐

No ☐

Don't know ☐

8 Where have you seen/heard of it?

Prompts:

☐ Operation Peer Pressure/Cops & Kids

☐ school

☐ road signs

☐ media

☐ other, please specify

9 What types of things does CAAP do for young people?

Prompts:
- ☐ Operation Peer Pressure/Cops & Kids
- ☐ Student Nightclub
- ☐ tracksuits
- ☐ other, please specify

10 Have CAAP done anything to teach young people in your District about drinking and driving?

- Yes ☐
- No ☐
- Don't know ☐

11 If yes, what?

Prompts:
- ☐ guest speakers at school
- ☐ SADD
- ☐ Operation Peer Pressure/Cops & Kids

12 Is this organisation well known to you and your friends?

- Yes ☐
- No ☐
- Don't know ☐

13 Does it have a positive image for you?

- Yes ☐
- No ☐
- Don't know ☐

14 Do you drink alcohol?

- Yes ☐
- No ☐
- Don't know ☐

15 Where do you usually drink? Please specify:

16 Do you have a drivers' licence?

Yes ☐

No ☐

17 Since February/November 1993, have you driven a car after drinking alcohol?

Yes ☐

No ☐

Can't remember ☐

18 Date of Birth:

19 Ethnicity:

20 School:

21 Form:

22 Location: ☐ rural

☐ urban

Please send feedback on this study to:

Name: ____

Address: ____

Telephone: ____

District: ____

OPERATION PEER PRESSURE/COPS & KIDS SURVEY

1 How did you hear about Operation Peer Pressure/Cops & Kids?

Prompts: ☐ school

☐ the community

☐ friends

☐ family

2 Did you find the experience positive?

Yes ☐

No ☐

Don't know ☐

3 If yes, what parts?

4 What did you learn from the experience?

5 Was there anything you did not find useful?

Yes ☐

No ☐

Don't know ☐

6 If yes, what part(s)?

7 Would you like to have gone out more times?

Yes ☐

No ☐

Don't know ☐

8 How many times do you think is useful? Please specify

9 Do you think more students should have the opportunity to participate in Operation Peer Pressure/Cops & Kids?

Yes ☐

No ☐

Don't know ☐

10 What form do you think students should be able to go on Operation Peer Pressure/Cops & Kids?

11 Do you think Operation Peer Pressure/ Cops & Kids should continue in the future?

Yes ☐

No ☐

Don't know ☐

12 Overall, how would you rate Peer Pressure? (Please circle the appropriate one)

1 ..... 2 ..... 3 ..... 4 5

A waste of time Very worth while

13 Do you have any suggestions which may improve Operation Peer Pressure/Cops &

Kids?

14 Sex: Male/Female

15 Date of Birth:

16 Ethnicity

17 School:

18 Form:

19 Location: ☐ rural

☐ urban

Please send feedback on this study to:

Name: ____________________

Address: ____________________

Telephone: ____________________

District: ____________________

LICENSEES AND CLUBS SURVEY
HOROWHENUA/TARARUA

How many of the following things are available/present on the premises?

		Code
1	Food is available	☐
2	Non-alcoholic drinks are available	☐
3	A designated driver scheme is available, ie, drivers got free drinks	☐
4	There are signs about the legal drinking age	☐
5	There are signs about not serving intoxicated persons	☐
6	Promotion of low-alcoholic beer/beverages	☐
7	Promotion of taxi use	☐
8	Subsidies for taxi users	☐
9	Courtesy van	☐
10	Presence of intoxicated persons on the premises	☐
11	There were signs about free non-alcoholic drinks	☐
12	Posters about anti-drink driving	☐
13	Machines to test BAC	☐
14	Low alcohol beer available	☐
15	Underagers present	☐
16	Barperson drinking	☐
17	Number of posters	☐

APPENDIX B

Letters Used to Gain Entry into Private Clubs

Community Alcohol Action Programme

H O R O W H E N U A

KIA TUPATO TE INU ANA KIA TUPATO TE TARAIWA

MJFG*SH . 7 June 1995 R75-0338

To Whom It May Concern

This letter serves to introduce Miss GINA RICKARDS of Palmerston North who has been engaged by the Horowhenua Community Alcohol Action Programme Committee to carry out an evaluation of the CAAPs programme running in the Horowhenua District. CAAPs as it is more commonly known is a Road Safety Authority's sponsored programme and is operated by the Horowhenua District Council through a local committee made up of community volunteers, working with the following base objectives, namely:

(a) To reduce alcohol related road traffic accidents, within the community, by at least 50% for a minimum of six months,

(b) To evaluate the project to determine

- the extent of any reduction in alcohol related accidents, and
  the lessens which can be learnt on how to improve the CAAPs programme.

Miss Rickards, as part of her Masters Degree for Psychology, has been commissioned by the Horowhenua CAAPs Committee to evaluate the Horowhenua CAAPs programme running within the Horowhenua District, in order to meet a requirement from the Funding Agency, being the Land Transport Safety Authority. As part of her evaluation process Miss Rickards has been involved in telephone interviews and is now carrying out visits to licensed clubs within the Horowhenua District to ascertain their awareness (or otherwise) of CAAPs. This involves visits to bowling clubs, RSA clubs, rugby, football and rugby union clubrooms to complete her survey work.

As an Executive/Member of one of the abovementioned categorised clubs I would respectfully request that she be given permission to enter your clubrooms and carry out a brief interview of yourself or any other club member on a pre-prepared questionnaire. This would greatly assist her evaluation as well as providing the Horowhenua CAAPS Committee with a clear indication of its success in spreading its "Drink Wise/Drive Wise" message throughout this District.

I would like to thank you in anticipation for your assistance.

Malcolm Guy

M J F Guy
DISTRICT MAYOR

HOROWHENUA DISTRICT COUNCIL

13 BATH STREET, LEVIN. TELEPHONE (06) 368-7189 FAX (06) 367-9212

C/- Tararua Consultancy,
P.O.Box 155,
DANNEVIRKE.

To whom it may concern-

This letter of introduction for M/s Gina Rickards who has been commissioned by the Tararua Community Alcohol Action Programme for evaluation purposes. She is visiting your Club on our behalf.

Yours faithfully,

A.M.McDonald(Mrs)
Co-ordinator.

APPENDIX C

RECOMMENDATIONS FOR THE HOROWHENUA AND TARARUA CAAPS

RECOMMENDATIONS

- That evaluation be planned for in advance of future initiatives to enable before and after measures to be made.
- That for alcohol related injuries - consider focusing on the months which have the highest number of accidents, such as December.
- That for a comparison between rural and urban accidents - continue to monitor the separate statistics for rural and urban accidents. Obtain a monthly break-down of these figures to see whether specific months have more accidents than others in the rural and urban areas so that specific areas can be targeted at specific times.
- That hotels and clubs be encouraged to have a designated driver scheme, even if this scheme is only available when asked.
- That advertising be encouraged in hotels and clubs, in relation to low-alcoholic beer.
- That hotels and clubs be encouraged to promote or offer subsidies for taxi use. (This is not applicable to the whole district as taxis are not available in the majority of the smaller towns).
- That more police hours be allocated to the continuation of Operation Peer Pressure and Cops & Kids.
- That an initiative be formulated for the younger students (forms 3 and 4) at high school.

- Clearly this population is drinking alcoholic beverages at an early age. Although they may not have their drivers' licences yet, they do have the potential to drink and drive when they are older. This population needs to be targeted to teach them to be responsible in their drinking behaviour. Although Operation Peer Pressure and Cops & Kids appear to be reaching some of these students, the others need initiatives aimed at them. As there are already programmes in school to teach students about alcohol, perhaps the CAAP could sponsor such education. This could be in the form of printing the CAAP logo on material, or distributing the CAAP bumper stickers to the students. In addition, more speakers should be utilized at the schools, or displays, such as the Takapau Plains wreck which has been used previously.
- That the future of the Horowhenua CAAP be discussed by its Committee members. With a small core Committee, it is necessary to decide the fate of the CAAP. If the CAAP is going to continue to be ongoing and long term, new members must be found.
- Decide whether the CAAPs focus will remain on drink driving, or its focus expanded to include other road safety issues, as has been suggested.
- Compare the months in which fatal accidents are more likely to occur, for example over the Christmas holiday period, and see if there has been a monthly reduction. Continue to do this in the future, in order to concentrate more resources at these times.
- That the involvement of organisations who have an interest in road safety be solicited. That is, either send letters or call people who are involved in road safety and ask them to send a representative to a CAAP Committee meeting.