

# COLLECTING PLACE OF DRINKING DATA FROM ACROSS POLICING – A TRIAL IN RURAL VICTORIA

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## ABSTRACT

The Victoria Police and the Transport Accident Commission undertook a trial project (Project ARID) in which place of drinking data were collected from across all Police activities over a six-month period in a rural area of Victoria. Police in Division 4 of Region 4 (including the population centres of Seymour and Benalla, and the area east of the Hume Highway as far east as Mt Buller and as far south as Marysville) agreed to complete a small form (provided as an A6 tear-off pad) each time they attended or came across an incident that appeared to involve alcohol. The forms were returned to the author on a weekly basis by each Police Station in the Division. Data concerning a total of 395 alcohol-related incidents were returned by Police, with 36.5% of these relating to drink driving and the remainder relating to incidents and offences in other areas of policing including domestic incidents, drinking or being intoxicated in public places, and assaults. Data were analysed in terms of the time and day of week of the incident, location, place of drinking, and offence type. The project demonstrated that data of this type could be an important additional source of information for Police when planning enforcement strategies targeting drink driving and other alcohol-related problems in the community.

## INTRODUCTION

### Background

The Transport Accident Commission and the Victoria Police agreed to conduct a data-collection study on a trial basis to assess the potential benefits of collecting place-of-drinking data across Policing. This report presents an analysis of the data collected during this study and discusses some of the problems that arose and their implications. The project was called project ARID, an acronym for Alcohol Related Incident Data.

### Place of Drinking Data

Drink driving continues to be a significant road safety problem in Victoria, with the TAC and the Victoria Police devoting substantial resources to deter potential offenders. Alcohol misuse also has wider community effects and is widely seen as a significant contributor to crimes against people and property.

Deterring drink driving relies primarily on the effects of public education programs undertaken by the TAC and enforcement activities undertaken by the Victoria Police. Both benefit from an improved understanding of the characteristics of potential offenders and the factors associated with drink-driving decisions.

Community-based approaches to alcohol misuse also benefit from an understanding of the characteristics of alcohol users and the factors associated with the negative consequences of alcohol use. It may be possible, given better information about alcohol misuse, to implement community-based countermeasures that could, for example, include actions focusing on alcohol outlets that contribute more than others to the number of alcohol-related problems in the community. Encouraging better use of Responsible Service of Alcohol procedures in hotels identified as contributing to alcohol-related problems could, for example, reduce the number of alcohol-related incidents in the community and the amount of drink driving.

A reduction in the number of alcohol-related incidents in the general community would reduce the workload on Police and the community costs associated with their consequences, and a reduction in the amount of drink driving would have obvious effects on safety and the community costs associated with crash involvement.

There is a good argument, therefore, for the collection of information about where alcohol is consumed by people whose behaviour is influenced negatively by alcohol consumption. Data of this type could help in the targeting of drink-driving enforcement operations, the targeting of public education programs, and the targeting of community-based interventions.

The Victoria Police currently collect place-of-drinking data for drink-driving offenders but it might be useful to have data concerning the places of drinking for all people in the community whose alcohol-related behaviour comes to the attention of Police. This would provide a larger pool of data, and would be more broadly relevant to alcohol-related problems across the community. The TAC and the Victoria Police therefore decided to trial the collection of place-of-drinking data from across all operational areas of Policing in a defined geographical area of Victoria. The aim of the trial was to determine if it would be possible to collect these data from Police, and if it would then be possible to make use of the data for enforcement purposes – both in the traffic area and in relation to liquor licensing for high-risk alcohol outlets.

## **METHOD**

Senior management in Region 4 of the Victoria Police agreed to a proposal to trial a data collection exercise in which Police members across all areas of active Policing in Division 4 of that region would complete a small data form every time they dealt with an incident or person and they considered that alcohol had played a role in the situation. These forms would be collated at the Station level and returned to Eastern Professional Services Pty Ltd for collation and analysis.

Figure 1 shows the data collection form (reduced size) completed by Police members. These forms were provided in pads of 100 with a hard cardboard backing and a card protective cover

Members were asked to record the date and time of the incident, to describe it briefly, to indicate the last place-of-drinking for the person involved, and to provide the Response Zone (the Division is divided into Response Zones that coincide with population centres) and their own Registration Number. Each week, these forms were collected and mailed to Eastern Professional Services Pty Ltd, where they were collated and the data entered into a database for analysis.

**ALCOHOL-RELATED INCIDENT REPORT**

For every alcohol-related incident you attend, complete one page for every person you think was influenced by alcohol

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**Date:**  /  / 2004

**Time:**  (24-hr clock)

**Incident:**

**Last drink (venue name and town):**

**Response Zone:**

**Your Reg. No.**

*Figure 1: Data collection form*

The results of data analyses were reported to the Police in Division 4 twice during the project, and then once in the same detail reported here at the end of the trial. The trial data collection commenced in April 2004 and ceased in December 2004 – giving data for at least seven months, although the data for April and December were not complete for the whole month as the project started and ended in these months respectively.

## DATA ANALYSES

### Basic Analyses

Police members returned a total of 395 data forms – an average of between 50 and 60 forms per month across the whole Division. Table 1 shows the number of incident forms returned from each Response Zone, sorted in decreasing order. Eight forms were returned without a response zone.

*Table 1: Incident response zones*

Response Zone	Count	Percent
BN - Benalla	107	27.1
SY - Seymour	102	25.8
KM - Kilmore	31	7.8
WA - Wallan	27	6.8
EU - Euroa	25	6.3
YA - Yea	17	4.3
KL - Kinglake	15	3.8
MS - Mansfield	13	3.3
AL - Alexandra	12	3.0
NI - Nagambie	10	2.5
EN - Eildon	8	2.0
MR	8	2.0
BF - Broadford	7	1.8
VT - Violet Town	4	1.0
MN - Murchison	1	0.3

Forms were returned most often from the Benalla and Seymour response zones (53% between them) and while this may be in part due to a high level of alcohol misuse or higher levels of targeted enforcement (Benalla and Seymour are the largest towns in the Division), it may also be related in part to the motivation of members to complete and return the data forms. This issue is important. The data described here were collected by individual Police members in addition to undertaking their ongoing operational and data collation responsibilities. Despite the support of senior Police within the Division and Region, the workload of Police members is such that the data set should be expected to be incomplete as a result of the likely failure of Police members to complete and return incident forms for every alcohol-related incident. The effects of this are discussed later.

It is not possible, however, to determine how the data set compares to the actual situation in Division 4 because there is no other source of similar data. It is possible, however, to make some general comments based on AREA Form summary data. Police are required to complete this data collection form at the end of each shift, detailing the outcomes of their work in terms of the numbers of offenders and contacts of different types, and the amount of time spent on different activities.

The AREA data for this period included 152 drink-driving or alcohol-related driving offences. The ARID data set included information about 132 incidents labelled as drink-driving or similar. This means that data for about 20 incidents, or 13 percent of all AREA-form offences, were not reported using the ARID forms.

The ARID program is likely to have been perceived as having a traffic enforcement focus given its sponsorship by the Transport Accident Commission. It is possible, therefore, that the 87 percent reporting rate for drink-driving offences represents the highest reporting rate across the incident types. This means that the data need to be interpreted with some care.

Table 2 shows the number of incidents reported by Police disaggregated by the type of drinking location. Almost forty percent of incidents occurred after drinking in a hotel, and about a quarter of incidents occurred after drinking at home. Forty-seven incident reports did not list a place of drinking.

Table 3 shows the pattern of incident types recorded by Police members. Drink-driving offences accounted for about thirty-six percent of reported incidents, underscoring the potential value of extending the place-of-drinking data collection beyond traffic enforcement. Domestic incidents accounted for almost nine percent of incident reports, and underage drinking was also a significant contributor to the data.

Figure 3 shows the pattern of incidents by time of day. Reports of alcohol-related incidents were much more likely to show the time of the incident as during the night than during the day, with the peak times being between 8 pm and 2 am.

*Table 2: Place of drinking*

Place of Drinking	Count	Percent
Home	96	24.3
Hotel	156	39.5
Resturant	1	0.3
Sporting club	12	3.0
Public place	60	15.2
Other club	4	1.0
Friends / relatives home	18	4.6
Night club	1	0.3

*Table 3: Types of incidents reported*

Offence Type	Count	Percent
Drink drive / Exceed PCA	144	36.5
Drunk in public place	72	18.2
Domestic incident	34	8.6
Underage drinking/posession	32	8.1
Drinking in public place	20	5.1
Refusal to leave premises	19	4.8
Assault	18	4.6
Other Offence - not traffic	12	3.0
Fighting	10	2.5
Collision	9	2.3
Damage / vandalism	8	2.0
Theft / Burglary	4	1.0
Party related	3	0.8
Offensive behaviour	3	0.8
Intervention order	2	0.5
Other Offence - traffic	1	0.3

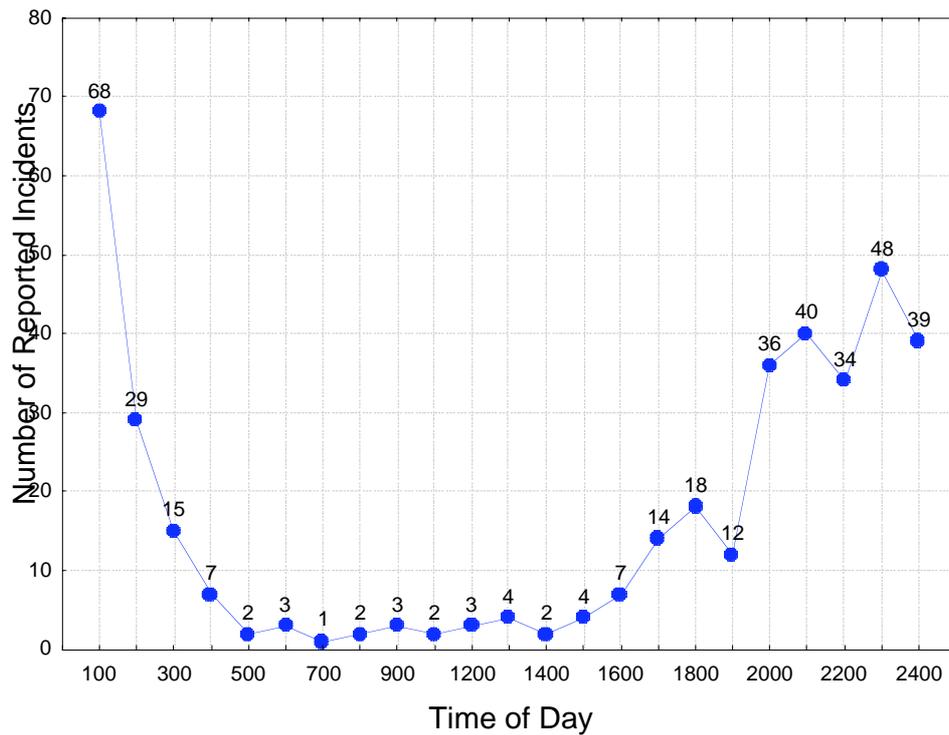


Figure 2: Time of day of reported incidents

It was possible to identify a small number of hotels in Division 4 that were mentioned as the last place of drinking in many incidents. One hotel in Seymour, for example, was mentioned on fourteen percent of the ARID forms, and two hotels (one in Seymour and one in Benalla) were each mentioned on ten percent of forms. The hotels in this list may be potential targets for enforcement and community-based programs, although more data, collected over a longer time period, would increase the reliability of information about specific hotels.

### Complex Analyses

The main reason for collecting data of the type collected in the ARID project is to help target enforcement and other measures that can influence drink driving and broader alcohol misuse problems. From an enforcement perspective, the data could provide information about the place and time of drinking to allow better targeting of enforcement operations that attempt to deter drink driving at the source, and could provide information about the time offences occur as a way to target high-risk times when planning on-road operations such as RBT. From broader community and liquor-licensing perspective, the data could provide information about problem alcohol outlets and problem times that could then be used to motivate better RSA practices. Meeting these aims requires a more-detailed discussion of the data.

Figure 3 shows the time of the week of alcohol-related incidents across the Division.

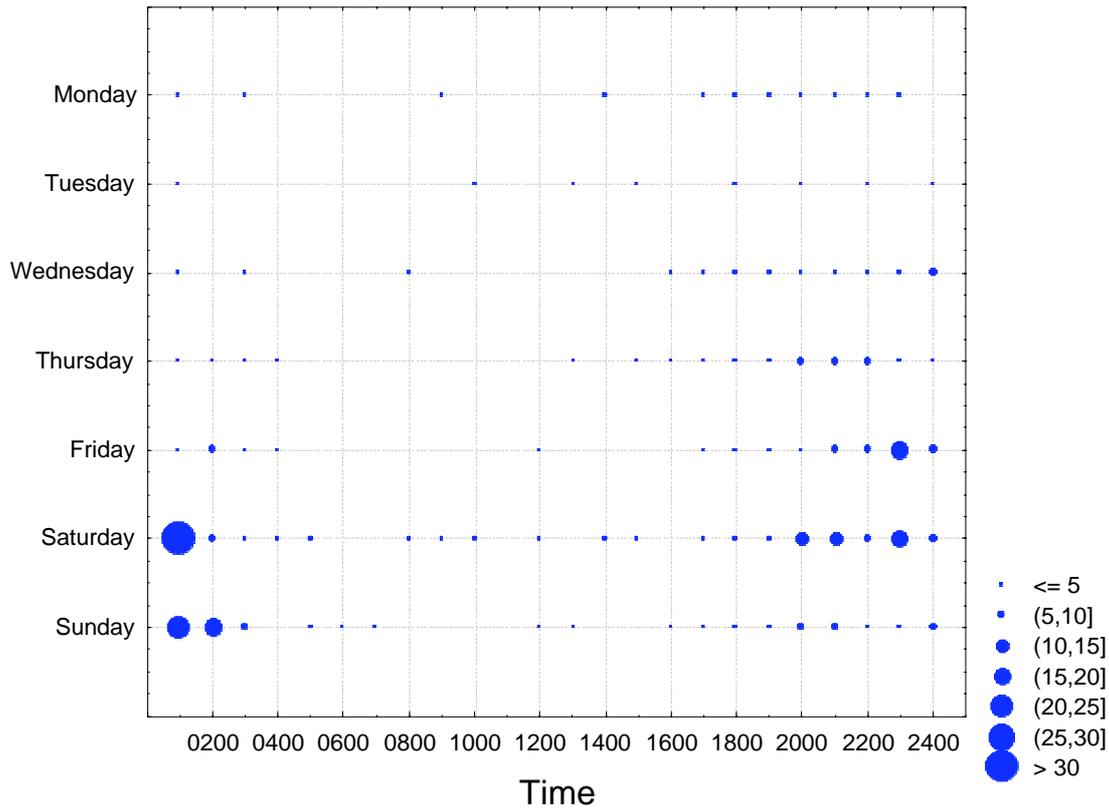


Figure 3: The “time of the week” of alcohol-related incidents

At a Divisional level the ARID data indicate that alcohol-related incidents were much more common on weekends than they were during the week, and that they were especially common on Saturday nights (through to early Sunday) and on Friday nights (through to early Saturday). The distribution of drink-driving and non-drink-driving incidents offences over the week did not differ substantially. Both types of incident were more likely towards the end of the week and at night.

The distribution of incidents across the week was related to whether the drinking had occurred in a hotel or elsewhere. Incidents resulting from drinking alcohol in a hotel were strongly clustered early on Saturday mornings and, to a lesser extent, early on Sunday mornings. Incidents resulting from drinking at other places were also clustered around these times, but were also frequent earlier on Saturday nights, and to a lesser extent on Thursday and Friday nights.

From a road safety point of view, these results suggest that drink-driving enforcement operations are more likely to detect offenders if conducted at night, and towards the weekend. They also suggest that operations targeting hotels may be more successful if they focus on night-times towards the end of the week and especially on the period from late Friday night to early Saturday morning.

Figure 4 shows the times of week of reported alcohol-related incidents for the two largest population centres (Benalla and Seymour), and the rest of the Division. There are some subtle differences that could have implications for enforcement operations and other alcohol-related

programs. In Benalla and Seymour, alcohol related incidents are strongly clustered on Friday night and early Saturday morning, and on Saturday night and early Sunday morning. On each of those weekend nights it appears that alcohol problems occur slightly later in Seymour than they do in Benalla. Seymour also appears to have a higher proportion of its alcohol-related incidents during the week (mostly at night) than Benalla.

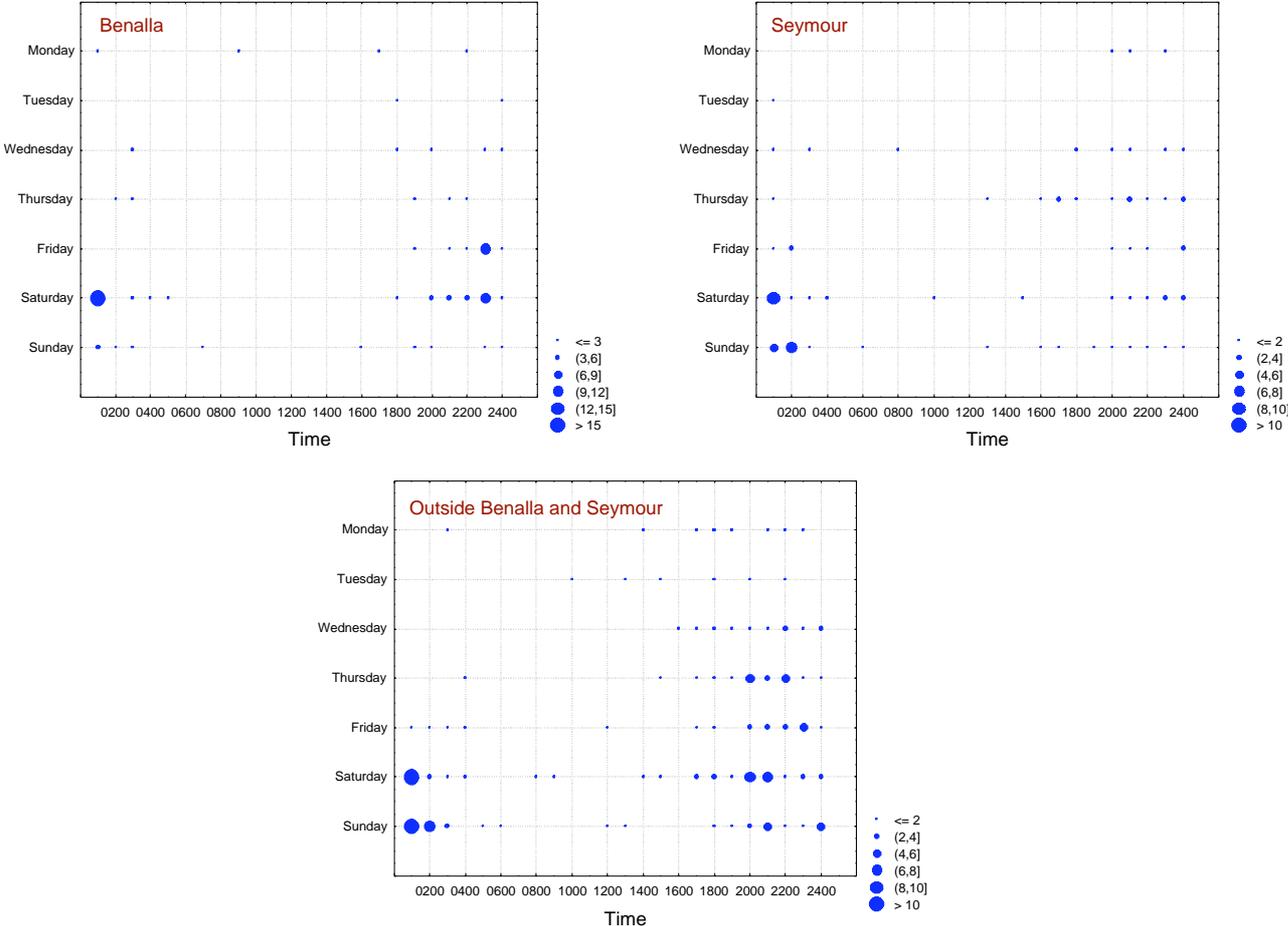


Figure 4: Time of week of incidents disaggregated by location

The pattern for the rest of the Division is different to the pattern in Seymour and Benalla. Although there is still a strong clustering on weekend nights, alcohol-related incidents outside Benalla and Seymour appear to be more common on weeknights than they are in the two towns. This suggests a slightly different pattern of alcohol misuse in the smaller towns in Division 4, which in turn suggests the need for enforcement strategies that are less closely tied to weekends and for community-based or licensing interventions that influence alcohol consumption throughout the week.

Places of Alcohol Consumption

About 60% of incidents were associated with places other than hotels as the last place of drinking. Table 4 shows the number of each incident type disaggregated by the last place of drinking, for the four most common places of drinking.

*Table 4: Incident type and place of drinking*

Incident	Own or Other's Home	Unknown	Hotel	Public place
Drink drive / Exceed PCA	54	10	57	11
Drunk in public place	13	12	36	9
Damage / vandalism	4	1	3	0
Domestic violence	24	0	1	0
Refusal to leave premises	0	0	18	1
Party	3	0	0	0
Offensive behaviour	1	0	2	0
Collision	1	2	4	1
Intervention order	0	0	1	1
Domestic - not violence	3	0	4	0
Underage drinking	1	11	2	18
Drinking in public place	0	3	2	15
Assault	2	3	12	1
Theft / Burglary	3	0	1	0
Other Offence - not traffic	2	4	4	2
Fighting	1	0	8	1
Other Offence - traffic	1	0	0	0
All Grps	114	46	156	60

Drink driving offences were as likely to arise from alcohol consumption in the offender's or another person's home as they were to arise from drinking at a hotel. Domestic violence incidents, where they were thought to involve alcohol, almost always resulted from drinking at the person's or someone else's home, whereas other assaults were much more likely to result from drinking at a hotel.

Table 5 shows the relationship between Response Zone and place of drinking, for the most common places of drinking and limited to those Response Zones that reported ten incidents or more. Drinking in a public place was associated with more incidents than any other type of drinking in Benalla, but was less common in all the other Response Zones. Incidents associated with drinking in a hotel were most common in the Seymour Response Zone, suggesting that Hotels in Seymour may be an appropriate target for enforcement-related and liquor-licence-related interventions.

Eighteen percent of incident reports associated with drinking in a public place indicated that Bridge St, Benalla was the last place of drinking, and an additional five percent gave the location as the Rose Gardens in Benalla. These locations are close together, suggesting either that there is a significant problem in this part of Benalla or that enforcement activity focuses on this area. Alcohol problems related to these locations in Benalla occurred only on weekends, late at night or early in the morning.

*Table 5: Response zone and place of drinking*

Zone	Own or Other's Home	Unknown	Hotel	Public place
BN - Benalla	26	18	25	34
SY - Seymour	25	13	50	11
KM - Kilmore	9	2	14	3
WA - Wallan	12	2	8	4
EU - Euroa	9	0	13	1
YA - Yea	4	2	9	2
KL - Kinglake	10	2	3	0
MS - Mansfield	7	0	5	0
AL - Alexandra	4	3	5	0
NI - Nagambie	1	0	6	2

## DISCUSSION

Project ARID was designed to trial a data collection technique whereby place-of-drinking information was collected from across Policing with a view to using this information to guide enforcement strategies and programs targeting the alcohol-serving policies of specific alcohol outlets.

The basis for this approach was that members from different operational areas of the Victoria Police come into contact with the broader community problems associated with alcohol use in addition to the drink driving problems normally targeted by road-safety-related programs. It was considered that access to information about the drinking locations of people involved in other alcohol-related incidents and offences would provide additional targeting information for the development of drink-driving enforcement strategies. It was also expected that information confirming that some alcohol outlets contribute more strongly to the community-wide problems resulting from alcohol misuse might be useful information for Police members responsible for enforcing liquor-licensing provisions.

With support from Police management, the Police members in Division 4 (Region 4) were asked to collect the data as detailed earlier. It was made clear when requesting this that the data arising from the project would then be made available to assist members in their work.

The study therefore required the collection of a large data set, and that the data set be as complete as possible given the actual level of alcohol-related incidents across the Division and within each Response Zone. The comparison between the drink driving incident data and the AREA form data concerning drink driving offenders raises some limitations – it was apparent there that 13 percent of the drink driving incident data was likely to be missing, and that it was likely that the under-reporting would be greater for other offences.

The consequence of these doubts is that the current data set cannot be relied on as an accurate source of information about alcohol-related incidents in Division 4. Despite this, it is clear that there are some features of the data that are likely to reflect real patterns of alcohol-related incidents and that could therefore have some use in planning enforcement strategies and community-based interventions.

It is clear that alcohol-related incidents are much more likely to occur on weekends and at night, and that this is especially so for those people consuming alcohol in hotels. This result was consistent across the Division with only minor variations, and it argues strongly for a targeted enforcement strategy focusing on patrons leaving hotels on Friday and Saturday nights (and especially in the early hours of the following mornings). The size of the trend towards weekend night-time incidents amongst hotel-patrons was surprising and is unlikely to be due to any bias in incident reporting. In addition to its consistency across localities, all incident types, where hotels were listed as the last place of drinking, showed the same tendency towards night-time on weekends. Drink-driving incidents shared this bias, but appeared to start building up earlier in the evening than some other offences, suggesting that a drink-driving enforcement strategy targeting hotels that commences early in the evening and ends at 2 or 3am may be worth considering.

Drink driving incidents were equally likely to result from drinking at a hotel and drinking at home or another's home. This suggests that targeted enforcement strategies can at best affect less than half of drink-driving incidents in this Division, and that a more-general strategy (with associated publicity) needs to be implemented along-side the targeted strategy. This may involve a combination of RBT conducted from cars at night (mostly on the weekends, but at-home drinking-related incidents were also frequent on Thursday nights) combined with operations targeted at specific hotels using more-covert methods.

Strategies targeting hotels are probably more important in Seymour than other centres – one hotel in particular appears to contribute strongly to local alcohol-related incidents (twice as many incidents listed this hotel than any other as the last place of drinking). Seymour had the largest proportion of its incidents listing a hotel as the last place of drinking compared to other Response Zones, and there is sufficient information to suggest that targeted enforcement operations on weekends (at night) focusing on hotels in Seymour may be a useful deterrent.