



Evaluation of Auckland General Deterrence of Drink-Driving Partnership Operations

Executive Summary

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Background

Auckland Transport (AT) and the New Zealand Police, located in Auckland actively work together to reduce road trauma in the Auckland Region. This includes anti-drink driving operations. The aim of the operations is to bring together mass media messaging with enforcement activities to reduce drink driving. The mass-media campaigns are tailored to support the Police with general deterrence messaging. The enforcement tools used in the operations are compulsory breath testing at checkpoints (general deterrence) and officer testing when an officer in a patrol car had cause to suspect a driver of drink driving (specific deterrence). The enforcement is supported by accompanying publicity supplied by both AT and the Police. This report concerns two such operations, Drink Free Summer and Multiplier.

Drink Free Summer ran from Friday 24 November 2023 until the end of February 2024. The communications material was shared via organic media channels without any dedicated budget, which was a considerable constraint. A key learning from Drink Free Summer 23/24 was an inability to get the audience reach sought with only unpaid media.

Operation Multiplier ran from Monday 17 June 2024 to Sunday 4 August 2024. The campaign used some successful creative ideas from Drink Free Summer and further developed and improved them. A key difference was that following on from the Operation Drink Free Summer learnings, \$100,000 was spent on paid marketing.

The operations were monitored for their impacts and enforcement efforts. The impact of the campaigns was monitored by public attitude surveys and the amount of drink driving on the network. The enforcement effort was monitored by looking at the amount and distribution of breath tests undertaken.

The public attitude surveys monitored were computer assisted online surveys. An essential aspect of these surveys is the way the software navigates respondents through the questionnaire. Variations in the results of the surveys may stem from differences in the software's execution of these guiding functions.

Key metrics for success

The key metrics of success were obtained from the results of two public attitude surveys, the NZTA Public Attitudes to Road Safety Survey, and the AT Road Satisfaction Survey and the results of Police breath testing. It was decided that a key metric for success would be the public's agreement with the statement:

If someone drinks and drives, they are likely to get caught.

That question was asked using an 8-point Likert scale in both surveys.

A second key metric relates to the chances of a driver being tested in a year. A relevant question asked in both surveys is:

In the last 12 months have you been stopped at an alcohol checkpoint while you have been driving?

A third key metric was the percentage of drivers on the network who tested over the limit during the main weekend drinking hours. These are defined as the period between 10 PM and 2 AM, Friday evening to Saturday morning and Saturday evening to Sunday morning.



Mass Media Messaging

This was carried out via social media posts, billboards, bus back advertising, radio, press releases and media interviews.

During Operation Drink Free Summer there was one media interview, 16 social media posts, three media releases, two electronic newsletters (one public, one for AT staff), two news stories, and one media briefing. All of this activity was organically generated by AT and NZ Police, as there was no budget for contracting external parties. Most of the activity took place during December 2023.

Operation Multiplier included \$100,000 worth of paid advertising. The overall package included:

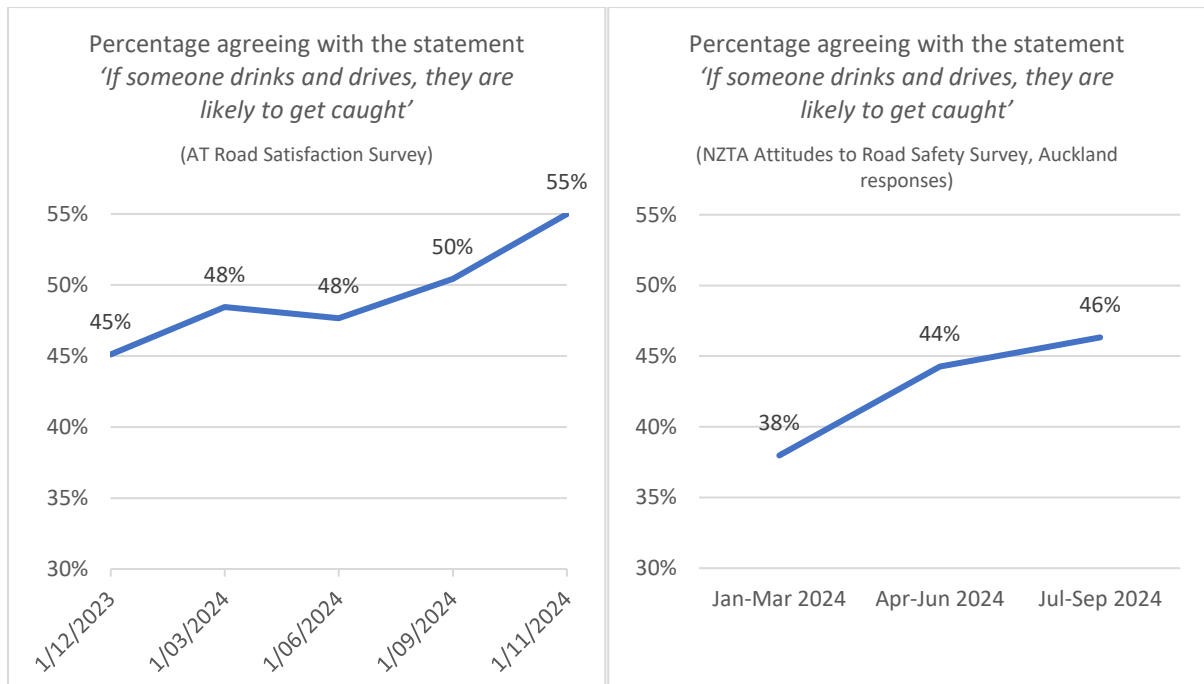
- Forty-one bus backs to target drivers east, south, central, north and west
- Digital billboards across the region in high drive zones
- Thirty second and 15 second radio ads, plus sponsorship of Time Saver Traffic reports on NZME stations. Sponsors received 8–10-word credits at the start of each report and 15-word credits at the end of each report. These sponsorships are skewed to Thursday–Sunday so that the message is top of mind as people are planning or heading out for their weekends / aligned to the lead up of high alcohol hours.
- Spotify 30 second audio ad — potential weekly reach is 152k Aucklanders 18+.
- Material for Meta & TikTok.

Auckland responses to the statement ‘If someone drinks and drives, they are likely to get caught’

This question was asked in both the AT Road Satisfaction Survey and the nationwide NZTA Attitudes to Road Safety Survey. The AT Road Satisfaction Survey operated in 4 waves:

- The first in December 2023, the first full month of the Drink Free Summer campaign
- In March 2024, after the campaign ended
- In June 2024,
- In September 2024 after the end of operation multiplier.
- In November 2024

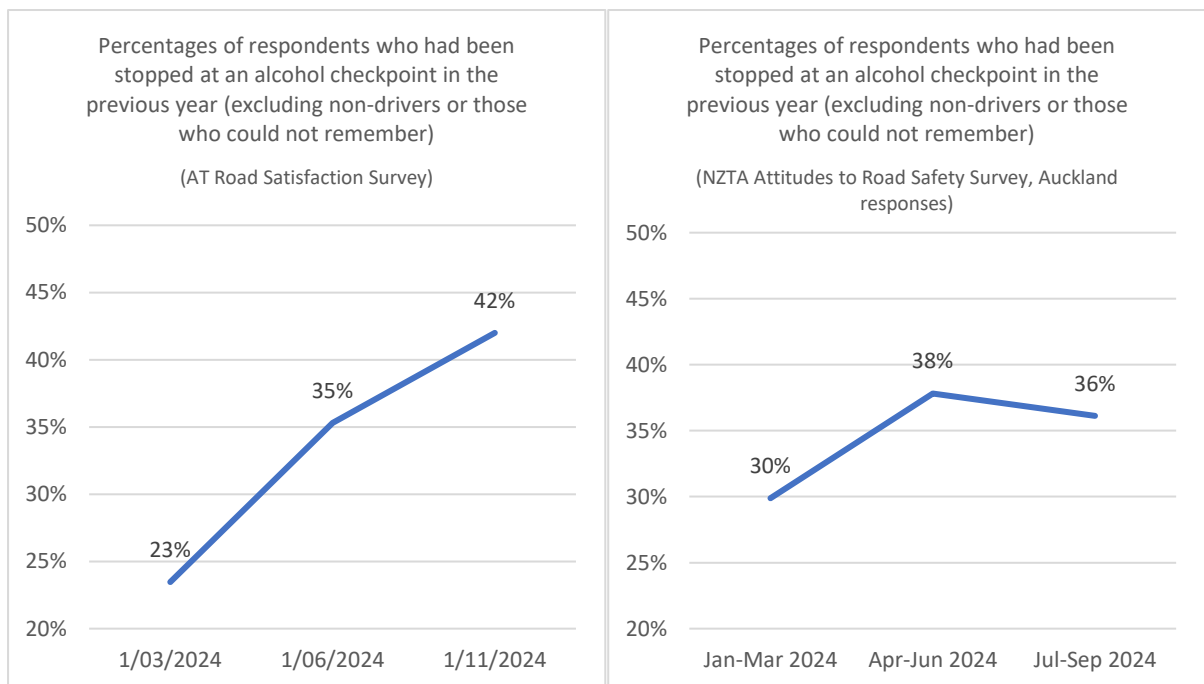
There was a movement over time towards greater agreement which was positive for both campaigns. For all waves, the agreeing percentage is well above the disagreeing percentage which is also a positive finding. The relevant waves of the NZTA Attitudes to Road Safety Survey which occurred in January to March 2024, April to June 2024 and July to September 2024 showed very similar results to those of the AT survey. The percentages of Aucklanders agreeing with the statement ‘If someone drinks and drives, they are likely to get caught’ from both surveys are shown in the charts below. Responses from the AT Road Satisfaction Survey are shown to the left and the NZTA Attitudes to Road Safety Survey to the right.



Auckland responses to the statement “In the last 12 months have you been stopped at an alcohol checkpoint while you have been driving?”

This statement relates to when the Police stop drivers at random to see if they have been drinking.

The charts below depict percentages of Auckland survey respondents who remembered being stopped at an alcohol checkpoint in the previous year, excluding responses from non-drivers AT survey responses are to the left and NZTA responses to the right.

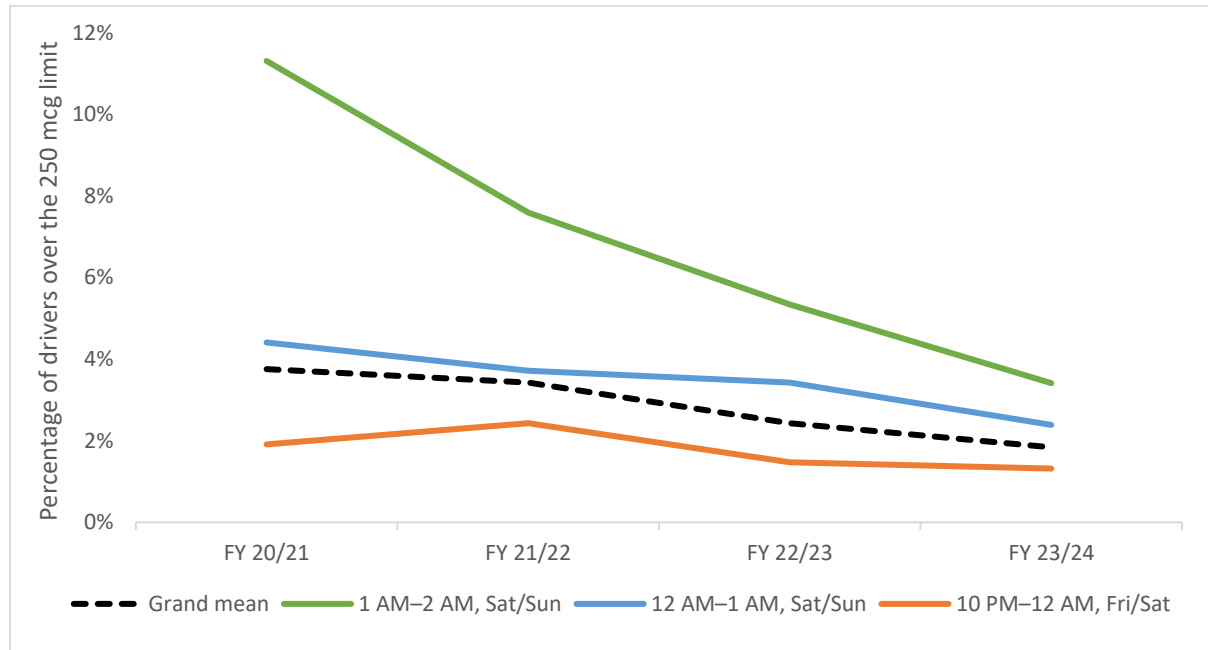


Between March 2024 and November 2024 the AT survey percentage has risen from 23% to 42%. while the NZTA survey percentage rose from 30% to 36% between January-March 2024 and July-September 2024. The AT November 2024 survey also asked the question “How many times have you

been stopped at an alcohol checkpoint while you have been driving?” Nineteen percent of drivers remembered being stopped 2 times or more in the last year.

Network drink driving during the main weekend drinking hours

Auckland’s percentage of drivers in Auckland with breath alcohol over the 250 mcg limit during different time periods of the main weekend drinking hours between 10 PM–2 AM on Fri/Sat evening & Sat/Sun morning is depicted in the chart below.



It is apparent that there has been a dip over the period in question with the grand mean (covering 10 PM to 2 AM) reducing from 3.8% over the limit in FY 20/21 to 1.8% in FY 23/24. Notable is a large drop from 11.3% in FY 20/21 to 3.4% in FY 23/24 for the later 1 AM–2 AM period.

In addition, it was also found that the breath alcohol levels of drivers on less trafficked roads were higher than that on the higher trafficked roads where the majority of the tests were carried out. This may indicate an element of over the limit drivers hiding from the Police. This finding could be factored by the Police into their enforcement tactics.

Overall, the percentage of drivers over the limit in the main weekend drinking hours had decreased over the last four financial years. The percentage over the limit increases as the level of traffic on the road decreases, and the amount of testing has increased drastically since FY 20/21.

Benefits to road safety

Drink Driving benefits

Over the period FY 20/21 to FY 23/24 increased breath testing combined with supportive publicity has been accompanied by very worthwhile drops in the amount of drink driving on the network. The overall drop in the percentage of drivers over the 250 mcg breath limit in Auckland during the main weekend drinking hours was from 3.8% in FY 20/21 to 1.8% in FY 23/24. Such drops have an important impact on road safety.

New Zealand research shows that the risk of crash increases sharply with increased alcohol levels. The table below derived from Keall, Frith, & Patterson (2004) indicates that, as an example, reducing a teenager's blood alcohol level from 80 mg/100ml (equivalent to 400 mcg/l of breath) would reduce their risk of fatal crash from 86.6 times that of a 30-year-old to 5.3 times that of a 30-year-old.

Table 1. Fatal crash risk by blood alcohol concentration and age (baseline at age 30 set at 1)

BAC (Mg/100ml)	30+ years	20-29 years	15-19 years
0	1	3	5.3
30	2.9	8.7	15
50	5.8	17.5	30.3
80	16.5	50.2	86.6

Therefore, reducing the breath alcohol of drivers who do not comply with the law to levels where they comply with the law will dramatically reduce their risk, and in turn reduce road trauma.

Drugged driving benefits

Drivers who are affected by both drugs and alcohol are a significant problem. The commonly used drugs cannabis, methamphetamine and MDMA (ecstasy) form more dangerous combinations with alcohol than on their own (Frith, 2020). Use of alcohol and cannabis together, while driving is widespread. Starkey et al (2017) report the results of both a telephone survey and an internet survey of drivers where respondents were asked whether they had driven within three hours of taking a combination of drugs (including alcohol). In the telephone survey, 16.6 percent answered in the affirmative. Of these people 15.4% combined alcohol with cannabis and 15.4% combined alcohol with other drugs. In the internet survey 10% answered in the affirmative. Of these people 36.8% combined alcohol with cannabis and 18.4% combined alcohol with other drugs. This means that if these drivers can be deterred from drink driving, the impact of their drug use will be lessened by the absence of alcohol, as the combination of alcohol and a drug is more dangerous than either by itself.

Benefits of increasing the amount of paid publicity

Operation Drink Free Summer was publicised using organic unpaid publicity initiated by AT and the Police. For Operation Multiplier, this was supplemented with \$100,000 of paid publicity. All the publicity used was in support of the Police breath testing operations and was directed specifically at achieving general deterrence.

Operation Drink Free Summer was associated with a 3% increase in the percentage agreeing with the statement 'If someone drinks and drives, they are likely to get caught', from AT Road Satisfaction Survey. Following Operation Multiplier this percentage increased by a further 2% in September, and a further 5% in November, adding up to a 7% increase.

These increases in the agreeing percentage indicate an improvement in general deterrence associated with an increase in general deterrence-based Police support advertising. Given that Police Operations are already at a high level, further improvements in general deterrence are best achieved by increasing the level of general deterrence targeted Police support advertising.

Independent of the improvements associated with the increase in advertising between Operation Drink Free Summer and Operation Multiplier there is a large amount of evidence that increasing General deterrence targeted Police support advertising works. A New Zealand example is a 5-year general deterrence based Supplementary Road Safety Package (SRSP) was developed in New Zealand



in 1995/1996 to supplement compulsory breath test (CBT) and speed camera programmes introduced in 1993. This campaign was in support of targeted enforcement to improve high risk driving attitudes and behaviours towards speeding and drink-driving and encourage the use of safety belts. An analysis by Guria and Leung (2003) showed that the package saved over 285 lives over the 5-year period. There was a significant negative relationship between road trauma and the general deterrence based advertising expenditure. This indicates that following increased general deterrence based advertising, road trauma decreased.

Considering the same package Tay (1999) was able to isolate the impact of the increase in advertising on drink driving specifically. His analysis indicates that following the increased general deterrence based advertising there was a significant reduction in the drink-driving behaviour

Implications for policy and/or practice

This work clearly shows that high numbers of compulsory breath tests in Auckland combined with general deterrence publicity targeted to support the testing were accompanied by a decrease in the breath alcohol levels in the driving population in the main weekend drinking hours.

At the same time the percentage of survey participants who agreed with the statement 'If someone drinks and drives, they are likely to get caught' increased after both operation Drink Free Summer and Operation Multiplier. This was in accord with research results suggesting that increases in general deterrence advertising, accompanying a comprehensive breath testing operation, will improve deterrence until a very high saturation level is reached.

The agreement increase which accompanied Operation Multiplier was associated with the allocation of \$100,000 of paid advertising to supplement the entirely organic advertising previously carried out by AT and the Police. This indicates that there is scope for improved deterrence with a higher level of publicity spend.

The network alcohol levels decreased as the numbers of tests taken increased which indicated a dose-response relationship to testing, as carried out by the Auckland Police.

It was also found that the breath alcohol levels of drivers on less trafficked roads were higher than that on the higher trafficked roads where the majority of the tests were carried out. This may indicate an element of over the limit drivers hiding from the Police. This finding could be factored by the Police into their enforcement tactics.

Conclusions

Survey results as they relate to the campaigns

The key success indicators derived from the surveys are all pointing in a positive direction indicating positive impacts of the campaigns.

The cumulative improvements in survey results from the two publicity campaigns supports the findings from previous research that increases in general deterrence advertising, accompanying a comprehensive breath testing operation, will improve deterrence. This indicates that there is scope for improved deterrence with a higher level of publicity spend.

Breath testing results as they relate to the campaigns

These are all pointing in a positive direction indicating positive impacts of the campaigns.



The Quantum of general deterrence related Police support publicity

Consideration should be given to increasing the quantum of this essential component of the Police operations to reduce drink driving using general deterrence.