

# The patchwork of alcohol-free zones and alcohol-prohibited areas in New South Wales (Australia)

Daren G. Fisher, Phillip Wadds and Garner Clancey

## Abstract

**Purpose** – Developing policies to curb public alcohol consumption is a priority for governments. In the Australian state of New South Wales (NSW), local governments have introduced alcohol-free zones (AFZs) and alcohol-prohibited areas (APAs) to prohibit the public consumption of alcohol and reduce crime stemming from intoxication. Previous studies, however, argue that these policies are driven by stakeholder desire rather than alcohol-related crime and may result in increased criminal justice contact for vulnerable populations. The purpose of this paper is to estimate the number of AFZs and APAs in NSW and examine the extent to which these policies are connected to the frequency of alcohol-related crime.

**Design/methodology/approach** – Examining the 152 local government areas (LGAs) of NSW, the authors analysed whether the implementation of AFZs and APAs were linked to the frequency of liquor offences and assaults using group-based trajectory models.

**Findings** – The authors found that AFZs and APAs were often not advertised nor inconsistently implemented both across and within jurisdictions. Group-based trajectory models indicated that AFZs were more common in low liquor offence LGAs than high liquor offences LGAs, but were more frequently implemented in high assault LGAs compared to low assault LGAs. APAs were more common in the lowest crime LGAs compared to those LGAs that experienced higher levels of recorded crime.

**Originality/value** – These analyses demonstrate how widespread AFZs and APAs have become and provides evidence that the implementation of is only tenuously linked to the frequency of crime.

**Keywords** Australia, Public policy, Alcohol, Local government, Policy implementation, Crime prevention

**Paper type** Research paper

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## Introduction

Alcohol-related crime is a major cause of social harm in Australia (Collins and Lapsley, 2008). The estimated annual cost from the effects of alcohol in Australia is \$15.3 billion (AUD), stemming primarily from treatment costs, premature deaths, and crime (Collins and Lapsley, 2008). Alcohol consumption has been connected to increased personal injury (Hobday *et al.*, 2015), lost economic productivity (Collins and Lapsley, 2008), and more than a third of violent crime (Laslett *et al.*, 2010). Public alcohol consumption also leads to substantial community concern, and constitutes a significant drain on community, health, and police resources (Donnelly *et al.*, 2007; Manning *et al.*, 2013). Alcohol is a major factor in many prominent crime types, including assault, malicious damage to property, public disorder, and dangerous driving (Graham and Homel, 2008; Poynton *et al.*, 2005). Indeed, research suggests that a substantial proportion of assaults involve alcohol, with alcohol consumption being a contributing factor in up to 73 per cent of all assaults (Briscoe and Donnelly, 2001), half of assault hospitalisations, and a third of road fatalities in Australia (Chikritzhs *et al.*, 1999).

Commensurate with these significant costs, the consequences of alcohol consumption and intoxication are frequently featured in media reports and influence public perceptions of safety in New South Wales (NSW). This attention has mobilised local political action to confront the issue

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(Wadds, 2015). In response to populist calls for action, a number of high-profile legislative and regulatory interventions have been instituted across NSW, including highly controversial licensed trading restrictions popularly known as the “lock-out laws[1].” Aiming to address public concern with crime and safety related to alcohol, many of these strategies have drawn public criticism on the grounds that there is little empirical evidence to support their implementation (Patty, 2014). This criticism has been compounded by reported declines in pedestrian flows, business viability, and the erosion of urban nightlife culture in Sydney (Barrie, 2016a, b). Despite these critiques, the introduction of policies aimed at reducing public alcohol consumption in NSW in 2014 have been found to be related to significant decreases in recorded violent crime in Sydney’s major urban nightlife precincts, with smaller decreases being detected across the rest of the state (Menéndez *et al.*, 2015). In the most recent release of recorded crime data within the designated lock-out zone, alcohol-related assaults were down by 49 per cent since the introduction of the lock-out interventions, although the report did also show significant displacement of assaults in both distal and proximal nightlife precincts in Sydney (up 17 and 12 per cent, respectively) (Donnelly *et al.*, 2017).

However, these highly publicised state-wide policies are only part of the suite of interventions that seek to reduce alcohol consumption and related crime in NSW. NSW local governments have long had the legislative power to manage the consumption of alcohol in public spaces through the establishment of alcohol-free zones (AFZs) and alcohol-prohibited areas (APAs). AFZs prohibit public alcohol consumption on and around public roads, footpaths, and car parks, whereas APAs cover all other public spaces, and both designated areas allow Police and authorised council enforcement officers to confiscate and tip out alcohol, and to impose fines (Woodward, 2010). Occurring amidst a legislative context that has increasingly regulated public drinking through licensed premise and footpath trading restrictions, these localised laws have created a patchwork of drinking controls that require intensive coordination between local councils and police to enforce (Pennay and Room, 2012; Pennay *et al.*, 2013). These zones allow police officers to confiscate and dispose of any open alcohol containers and impose fines of up to \$2,200 to those found consuming alcohol in the designated areas (Woodward, 2010). These fines represent a relatively large cost, amounting to approximately 2.7 per cent of the median gross annual income for NSW in 2014 (Australian Bureau of Statistics, 2015).

Particular concern has been expressed regarding the possible impact of this type of legislation on Indigenous communities (Burns, 1992). The history of regulation concerning public intoxication and drinking in NSW (and elsewhere in Australia) has been, and continues to be, intimately connected with the criminalisation and policing of Indigenous persons and communities (McNamara and Quilter, 2015). As such, the aforementioned fines and other controls relating to public alcohol consumption have had a disproportionate impact on Indigenous Australians (Palmer and Warren, 2014). Compounding these pernicious effects, there is little research indicating the success of these regulatory strategies in reducing rates of victimisation and/or crime within AFZs or APAs, leading to calls that they may, in fact, increase social marginalisation and criminal justice contact for already disadvantaged populations (Burns, 1992; Pennay *et al.*, 2013). Thus, while these policies may lead to reductions in the incidence of public drinking, such outcomes come at great social cost with “no indication of any change in the recorded rates of assault, malicious damage to property or offensive behaviour” (Burns, 1992, pp. 19-20).

These policies have been implemented through powers derived from the introduction of the Local Government (Street Drinking) Amendment Act 1990 (NSW). This Act supplemented local councils’ pre-existing power to ban public drinking in parks and reserves and declare public spaces, including roads, footpaths, and car parks, as AFZs (NSW Department of Local Government, 2009). Powers associated with establishing AFZs and APAs were subsequently incorporated in the Local Government Act 1993 (NSW). According to the Ministerial Guidelines on Alcohol-Free Zones, produced by the NSW Department of Local Government in 2009:

The object of alcohol-free zones is an early intervention measure to prevent the escalation of irresponsible street drinking to incidents involving serious crime. The drinking of alcohol is prohibited in an alcohol-free zone that has been established by a council. Public places that are public roads, footpaths or public carparks may be included in a zone (NSW Department of Local Government, 2009, p. 5).

The establishment of these zones is accompanied by a number of requirements by local governments, including consultation by the relevant council with local police, notification of

relevant parties (including police and licensees) of an intention to establish an AFZ, and erection of signage to indicate the boundaries of and period for which an area is designated an AFZ. The Ministerial Guidelines state that:

Councils with authorized council enforcement officers need to establish a system to record the number of occasions that these officers enforce the Alcohol-Free Zone legislation in the area. This should include monitoring the number of authorized council enforcement officers and how often alcohol is tipped out or otherwise disposed of (NSW Department of Local Government, 2009, p. 14).

Despite the public attention paid to other alcohol-related policies and their potential impact on crime and criminality, there has been relatively little scrutiny or debate about the implementation or impact of AFZs and APAs. This study provides the first systematic analysis of the implementation of AFZs and APAs within NSW. This study empirically examines whether the implementation patterns of AFZs and APAs adhere to the level of assault and alcohol-related crimes in the 152 local government areas (LGAs) of NSW. This study concludes with a discussion of the policy implications stemming from these analyses.

## Methods

To examine the implementation of AFZs and APAs in NSW, this study first sought to identify which LGAs had instituted these provisions. After compiling a sampling frame of all 152 LGAs in NSW, the official website of each LGA was examined to identify the existence and quantity of AFZs or APAs within each LGA. As many councils did not publicise the presence, number, or location of these areas, this research employed additional methods to identify whether or not LGAs had AFZs and APAs. After exhausting official local government resources, alternative records were obtained using the global news database Factiva to search local newspapers for reference regarding implementation of AFZs or APAs. For LGAs where there was no online or newspaper record of AFZs or APAs, emails were then sent to the LGA's public liaison requesting this information. When no reply was heard within a month following this initial e-mail, a follow-up e-mail was then sent, and telephone calls were used if no reply was received in the following month. After an additional period of two months had elapsed these LGAs were recorded as not having either an AFZ or an APA ( $n = 9$ , 5.92 per cent). As such, this measure for the absence of AFZs and APAs indicates the inability to identify the presence of these areas using publicly available data and not necessarily the physical absence.

When multiple sources were located for a single LGA, it was common to find varying counts for the number of AFZs or APAs. In the majority of these cases, the number of these designated areas increased over time, with council meeting minutes documenting the incorporation of additional areas, while for some jurisdictions the number decreased as the prohibitions were allowed to expire or were not renewed. However, in two LGAs the number of AFZs decreased due to the expansion of these areas leading to previously separate zones becoming one larger area. For the purposes of this study, AFZs or APAs were counted separately only if they had some geographic separation, and the most recent record of these areas was used for the subsequent analysis.

In order to examine potential links between crime and the introduction of these areas, crime data were also gathered from the NSW Bureau of Crime Statistics and Research. These publicly available data provide the official counts for recorded crime in each of the 152 LGAs in NSW for each month between January 1995 and December 2015, and cover 62 separate crime types. Given the focus on the link between public alcohol consumption and assault, this study specifically examined data on non-domestic assault[2], and liquor offences[3].

Group-based trajectory models were used to explore whether there was any meaningful variation between LGAs, and to discern whether distinctive patterns of crime emerged for both offence types. These models were designed to identify clusters of individuals or larger units that follow similar progressions of a particular behaviour over a period of time (Jones and Nagin, 2007). Weisburd *et al.* (2004) note that group-based trajectory are particularly valuable for studying patterns of crime changes within heterogeneous geographic areas, and are able to detect qualitatively distinct behaviour patterns over time. In the present study, this method was used to examine whether there were meaningful differences in the trajectories of NSW LGAs with regard to population rates of liquor offences and assault. In order to allow for the skewed distribution and

non-linear trends in the incidence of crime in NSW (see Haviland *et al.*, 2011), censored normal models with quadratic functions were initially used to estimate LGA-level trajectories.

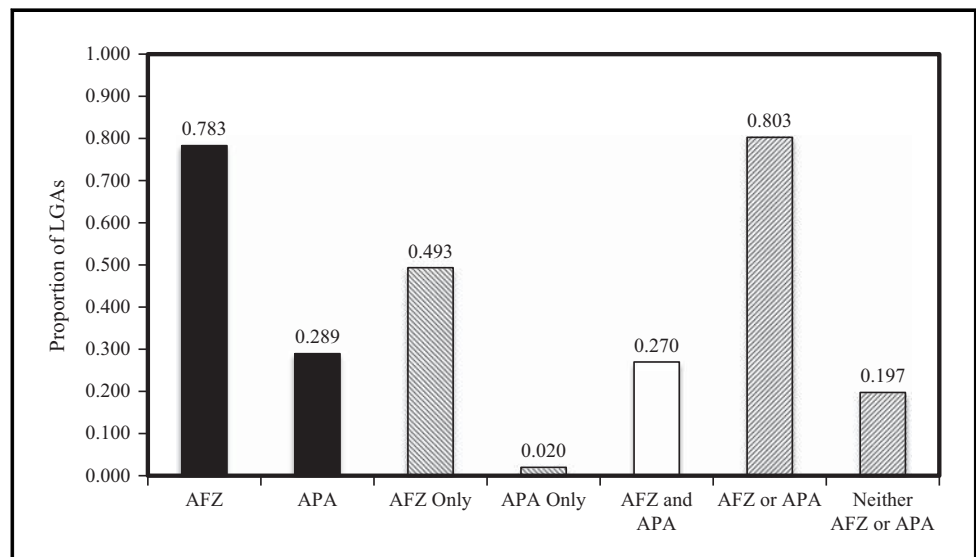
The optimal number of latent groups that fit the data and the model specification were determined by iteratively comparing the Bayesian Information Criterion statistics. These latent groups do not represent real groups, but instead represent LGAs that were observed to follow similar crime trajectories in this period (see Nagin and Tremblay, 2005). Consequently it is important to note that within each presented group, individual LGAs did not follow this pattern in “lock-step” (Nagin and Tremblay, 2005, p. 874). As will be further discussed below, this method produced small group sizes (< 5 per cent) for some models. As these groups represented LGAs that had substantively different crime trends in the offences being examined, and due in part to the small sample size, the present analysis elected to retain these smaller groups due to their policy relevance (Hynes and Clarkberg, 2005). The posterior probability of group measurement for each LGA that falls into each specific trajectory was also examined to determine how well both of the models fit with the existing data. In all cases, this probability was above 0.80 for all groups.

## Results

Using publicly available information, it was clear that AFZs had been widely implemented across NSW. As can be seen in Figure 1, this study identified that 119 out of the 152 LGAs had implemented AFZs (78.3 per cent). AFZs were also more prevalent compared to APAs, as only 44 LGAs had at least one APA (29.0 per cent). APAs were also rarely implemented independently, and were exclusively used in only three LGAs. In contrast, nearly half of all LGAs had exclusively introduced AFZs ( $n = 75$ , 49.3 per cent). AFZs and APAs were not mutually exclusive policy strategies, as 41 LGAs employed both AFZs and APAs (27 per cent). Combining both types together, 80.3 per cent of councils ( $n = 122$ ) operated AFZs and/or APAs while 19.7 per cent of LGAs ( $n = 30$ ) had no public indications that either AFZs or APAs had been used. The use of language denoting AFZs and APAs varied both across and within LGAs. Indeed, some LGAs had created their own terms synonymous with the legislative terminology following leadership changes, indicating a lack of consistency that could potentially confuse stakeholders. Some LGAs also imposed AFZs and APAs temporarily for major public events such as New Year’s Eve and public holidays.

The number of AFZs varied between 0 and 351 distinct geographic areas within an LGA, with a mean of 11.59 AFZs ( $SD = 34.16$ ) and a median of two. APAs were less numerous within LGAs with a maximum of 48 being present within a single LGA and a median of 0 ( $\bar{x} = 2.21$ ,  $t = 3.31$ ,

**Figure 1** The proportion of local government areas with alcohol-free zones and alcohol-prohibited areas in New South Wales



$p = 0.001$ ). These figures should be treated with caution, as direct comparisons obscure the variation in geographic area contained within these zones. Some LGAs designated areas as small as car parks as individual AFZs or APAs, while others selected large beachside reserves that were hundreds of metres in length. Although attempts were made to estimate the total geographic area encompassed by these zones in each LGA, many official LGA documents list only the location of AFZs and APAs without indicating their official boundaries. While some LGAs provided maps that clearly delineated AFZs and APAs, this study highlights that there was a great deal of geographic ambiguity that rendered systematic estimations impossible.

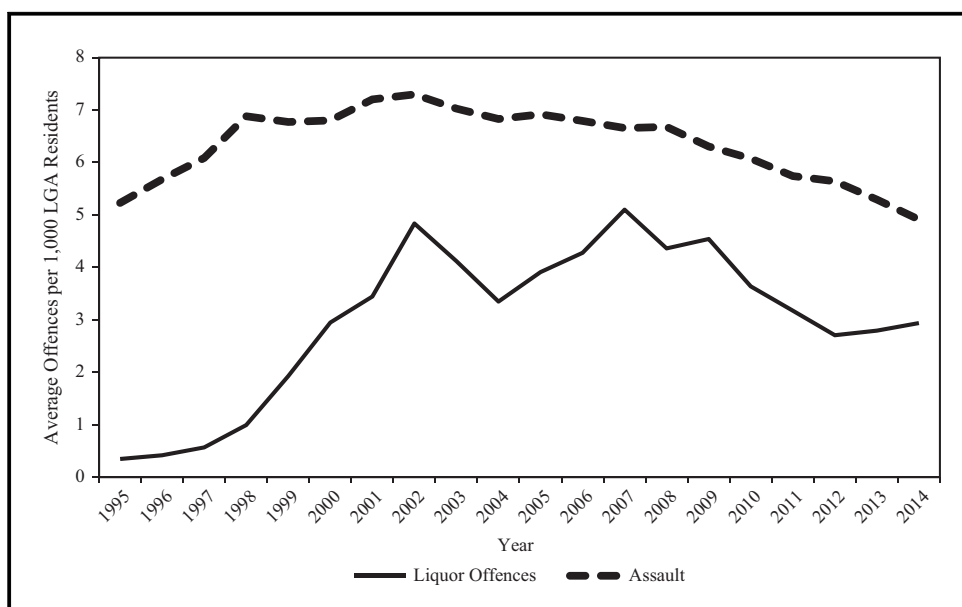
### The convergence of AFZs, APAs, and crime

The state-wide trends in the population rates for liquor offences assaults in NSW between 1995 and 2014 can be seen in Figure 2. For both offences, a marked increase was evident between 1998 and 2002, particularly for liquor offences. After 2001 however, the incidence of liquor offences relative to population decreased (from 4.84 per 1,000 residents to 2.94 per 1,000 residents in 2014). The trend in assaults was also similar, peaking in 2002 with an average of 7.30 assaults per 1,000 people, then declining thereafter.

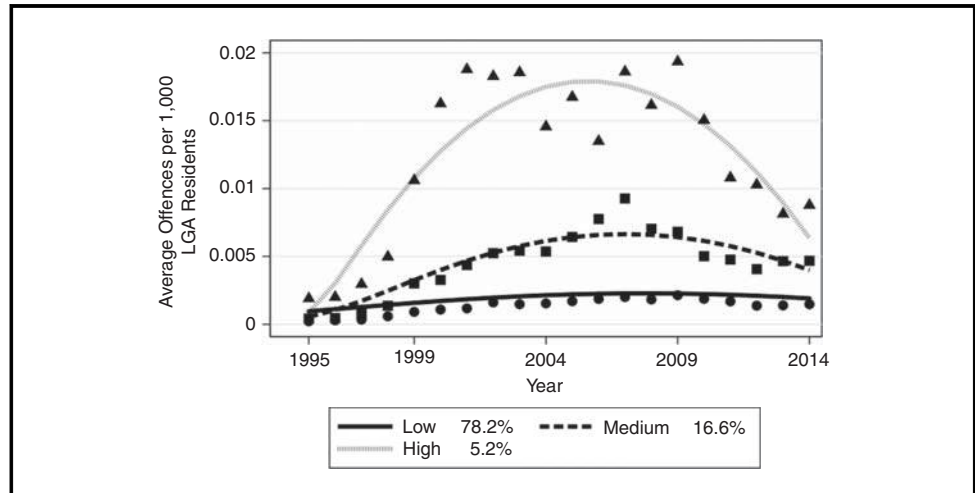
To examine how representative these state-wide averages were, group-based trajectory models were run for both offences. Turning first to liquor offences, Figure 3 suggests the presence of three groups of LGAs in NSW – a high group comprising 5.2 per cent of LGAs ( $n = 8$ ) that on average experienced more rapid increases then declines in liquor offences compared to the rest of NSW; a moderate group of 16.6 per cent of LGAs that experienced less pronounced but consistent increases in liquor offences; and low and stable group of 78.2 per cent of LGAs that experienced relatively few liquor offences relative to their population. Contrary to the predictions of this study, both AFZs and APAs were most commonly implemented in LGAs that were identified as being part of the low and stable group for liquor offences. In the lowest group, 79.0 per cent of LGAs had AFZs compared to 62.5 per cent of LGAs in the highest group of LGAs. Similarly, 32.8 per cent of low-offence LGAs had APAs while the highest group had 0 councils with detectable APAs. Similar substantive findings were also observed when examining the raw rates of liquor offences. The outputs from these analyses are available from the authors upon request.

The group-based trajectory models also suggested three groups for non-domestic violence assaults in NSW. Again, the modal group for LGAs in NSW was a low and stable group, comprising

**Figure 2** The average frequency of liquor offences and assaults per 1,000 residents in each LGA in NSW between 1995 and 2014



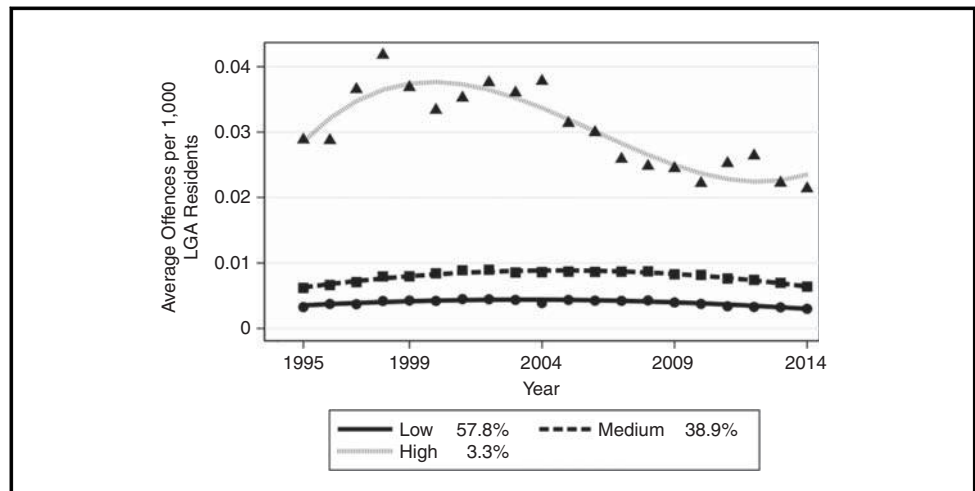
**Figure 3** Group-based trajectory model for liquor offences per 1,000 residents in each LGA in NSW between 1995 and 2014



57.8 per cent of LGAs (see Figure 4). A second relatively stable group was also observed with a slightly higher rate of non-domestic violence assaults in NSW that encompassed 38.9 per cent of LGAs. Unlike liquor offences however, the highest group of LGAs did not begin the observed period at a similar level and instead produced an overall high but declining trajectory. Although this group fell below the traditional cut point of 5 per cent for minimum group size at 3.3 per cent, the five LGAs in this group had a qualitatively different start point and overall trajectory compared to all other LGAs in NSW. Unlike liquor offences, AFZs (low = 0.713, medium = 0.833, high = 0.800) and APAs (low = 0.264, medium = 0.333, high = 0.200) were more consistently implemented across all three observed groups. Indeed, the higher of the two low and stable groups had the highest proportion out of any of the groups, however, these differences were not statistically significant for either AFZs or APAs.

Pennay *et al.* (2013) suggest that the introduction of AFZs and APAs is a function of stakeholder desire rather than a result of specific evidence proving the effectiveness of these policies in reducing alcohol-related harm – a finding supported here. This may have broad negative impacts on marginalised social groups, regardless of whether these policies are effective in regulating public drinking and associated crime (Coleman *et al.*, 2005).

**Figure 4** Group-based trajectory model for non-domestic violence assault per 1,000 residents in each LGA in NSW between 1995 and 2014



## Discussion and conclusions

The results from the above analyses confirm that AFZs and APAs have been widely implemented across NSW. Our conservative estimate suggests that at least 80 per cent of LGAs have implemented some form of geographic designation that renders public alcohol consumption illegal. Our data further suggest that AFZs are the most common policy that has been adopted, being evidenced in more than three-quarters of all LGAs. While this prevalence was widespread, LGAs often created and changed their own nomenclature for these zones over time. In many cases, these zones were also allowed to expire, or were implemented only temporarily, with little public discussion or advertisement. Thus, while our estimates are likely underestimations of the prevalence of AFZs and APAs, these observations reflect the information that is available to the public. This study highlights that the lack of clear and transparent advertisement of these areas may prove potentially confusing for local communities, particularly given the ongoing fears that these policies may have disproportionate and negative impacts on marginalised and disadvantaged groups that might not have access to, or knowledge about where to find, this information.

Extending the locally-based observations of Pennay *et al.* (2013), our findings also indicated that the introduction of AFZs and APAs share only a tenuous link to the incidence of crime. The descriptive analysis enabled by the group-based trajectory models suggests that, for the majority of LGAs, both liquor offences and non-domestic assaults were low and stable between January 1995 and December 2015. In addition, LGAs that were categorised as being in the highest groups for these offence types were not more likely to have implemented either AFZs or APAs. Consequently, these findings suggest that the rate of alcohol-related crime within an LGA is not a primary determinant for the introduction of AFZs or APAs.

The data compiled for this study have a number of important limitations that should be noted. In addition to the likely underestimation of the AFZs and APAs that was noted above, the present study also did not attempt to differentiate when AFZs and APAs were introduced. As periods of introduction were often vague or contradictory in the data that were gathered, the ability to provide reliable estimations of when these zones were implemented was undermined. Consequently, this study was unable to assess with confidence the direct impacts that the introduction of AFZs and APAs had upon crime trends in NSW. It is, however, evident that these ambiguities may only serve to further reinforce the difficulties that the public may experience in identifying which areas of an LGA allow the legal public consumption of alcohol.

Based on the analyses presented here, this study provides the first systematic evidence regarding the breadth of the introduction of AFZs and APAs within an Australian state (NSW). In light of the evidence suggesting that these zones were implemented inconsistently both across and within LGAs, and that their implementation may share only a tenuous link with the incidence of crimes connected to public alcohol consumption, these findings support earlier research conducted into the design of AFZ and APA policy that suggested that their implementation acts to serve stakeholder desires rather than as a response to any evidence that they are required to address high crime rates. Given the potentially negative impacts on particular populations, especially those already suffering marginalisation, stigmatisation, and disadvantage, there is a need to review the widespread use of AFZs and APAs in NSW, and improve the overall management and implementation of these powers.

## Notes

1. The “lock-out laws” are a major component of the much broader Sydney CBD Entertainment Precinct Plan of Management that was rolled out across 2014 and includes a 1:30 a.m. venue lock-out (no entry or re-entry to a licensed venue) and 3:00 a.m. cessation of service requirement for all licensed premises within the designated area. Other interventions include the establishment of a liquor licence freeze to the newly established CBD precinct, the introduction of temporary banning orders that police can issue to remove troublemakers from the CBD precinct, a new state-wide closing time of 10:00 p.m. for all takeaway alcohol sales, a new Periodic Licence Fee Scheme, a mandatory minimum eight-year jail sentence for “one-punch” assaults, increasing the maximum sentence to 25 years for the illegal supply and possession of steroids, the removal of voluntary intoxication as a mitigating factor in sentencing, increases to criminal infringement notice penalties, including for offensive language, offensive behaviour, and continued drunk and disorderly behaviour, greater police powers allowing the NSW Police Force to conduct drug and alcohol testing where they suspect an offender has committed a drug or

alcohol-related violent assault, and a number of other trading restrictions and safety measures to operate inside and around licensed venues (NSW Treasury, 2016).

2. Assault is defined as the “direct (and immediate/confrontational) infliction of force, injury or violence upon a person or persons or the direct (and immediate/confrontational) threat of force, injury or violence where there is an apprehension that the threat could be enacted” (Bureau of Crime Statistics and Research (BOCSAR), 2016).
3. Liquor offences are defined as the: “production, sale, purchase and/or consumption of alcohol in breach of licensing conditions/regulations/laws (BOCSAR, 2016). Includes the police incident categories of consume alcohol in public by minor, consume alcohol in an alcohol-free zone, Licensing Legislation Offences (e.g. offence by licensee/employee/secretary/minor/customer (not minor), supply liquor to juvenile, offence against registered clubs” (BOCSAR, 2016, p. 8).

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## Further reading

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