

## **Introduction**

'Our point is that the race is in the wrong place. We feel that the best location for a car race is on a designated track ... the Parliamentary Triangle for [reasons of] safety ... symbolism, and the totally inappropriate exploitation of national assets, is not a suitable location' (Rees and Davey 2000 8).

This paper examines a number of possible road safety implications of the GMC 400 V8 Supercar Race, held in Canberra in June 2000. Some of these impacts are local in scale, while others may have national or international impacts. Some of the impacts are common to most motor racing events. However, the GMC 400 race is unique in the world in the way in which its spatial location gives particular sanction to some potentially damaging influences of the race on road safety. The paper takes a geographic approach to understanding the road safety impacts of the race. An important component of the paper involves the explanation of the meaning of place that has been deliberately developed for the Parliamentary Zone, the location of the race.

The paper is based on the 'danger reduction' approach to road safety, which is concerned with reducing danger in the whole environment, and promoting equity and accessibility for non-motorised road users (Tight, Page, Wolinski and Dixey 1998). This approach recognises that to improve road safety it is necessary to provide physical environments and cultural circumstances that are conducive to lowering traffic accidents. It contrasts with the 'casualty reduction' approach, which requires vulnerable users to bear much of the burden of responsibility for their own safety, or relies on secondary safety measures such as increasing safety within vehicles. In the danger reduction approach, the importance of an environment that is "safe" for pedestrians and cyclists is recognised. The approach acknowledges that a lack of accidents does not always mean that an area is safe, and that if non-motorised road users must modify their behaviour to avoid accidents, then 'this is a legitimate road safety concern' (Tight *et al.* 1998, 187). This approach also recognises the importance of developing cultural attitudes in which behaviours such as heavy drinking, speeding or risk taking on roads are seen as socially unacceptable rather than as something that is glorified as "macho" behaviour (Hartig and Dunn 1998). The danger reduction approach is congruent with a 'Vision Zero' approach to road transport, in which safety is afforded a higher priority than motorised mobility (Tingvall and Haworth 1999).

## **Background to the GMC 400 V8 Supercar Race**

The Global Machinery Company (GMC) 400 V8 Supercar Race was held on a track which passed through the Parliamentary Zone in Australia's national capital (see Figure 1). The weekend-long festival (June 9-11, 2000) consisted of races for a variety of categories. Three feature races were conducted for the V8 Supercar category, which is designed solely for Ford Falcon and Holden Commodore V8-engined cars. The organising group behind the race was the product of an alliance between the "official guardians" of the Parliamentary Zone as a national place, and a number of groups with a commercial interest in the race. The "official guardians" were the National Capital Authority (NCA) and Federal Parliament. The groups with a commercial interest consisted of the Canberra Tourism and Events

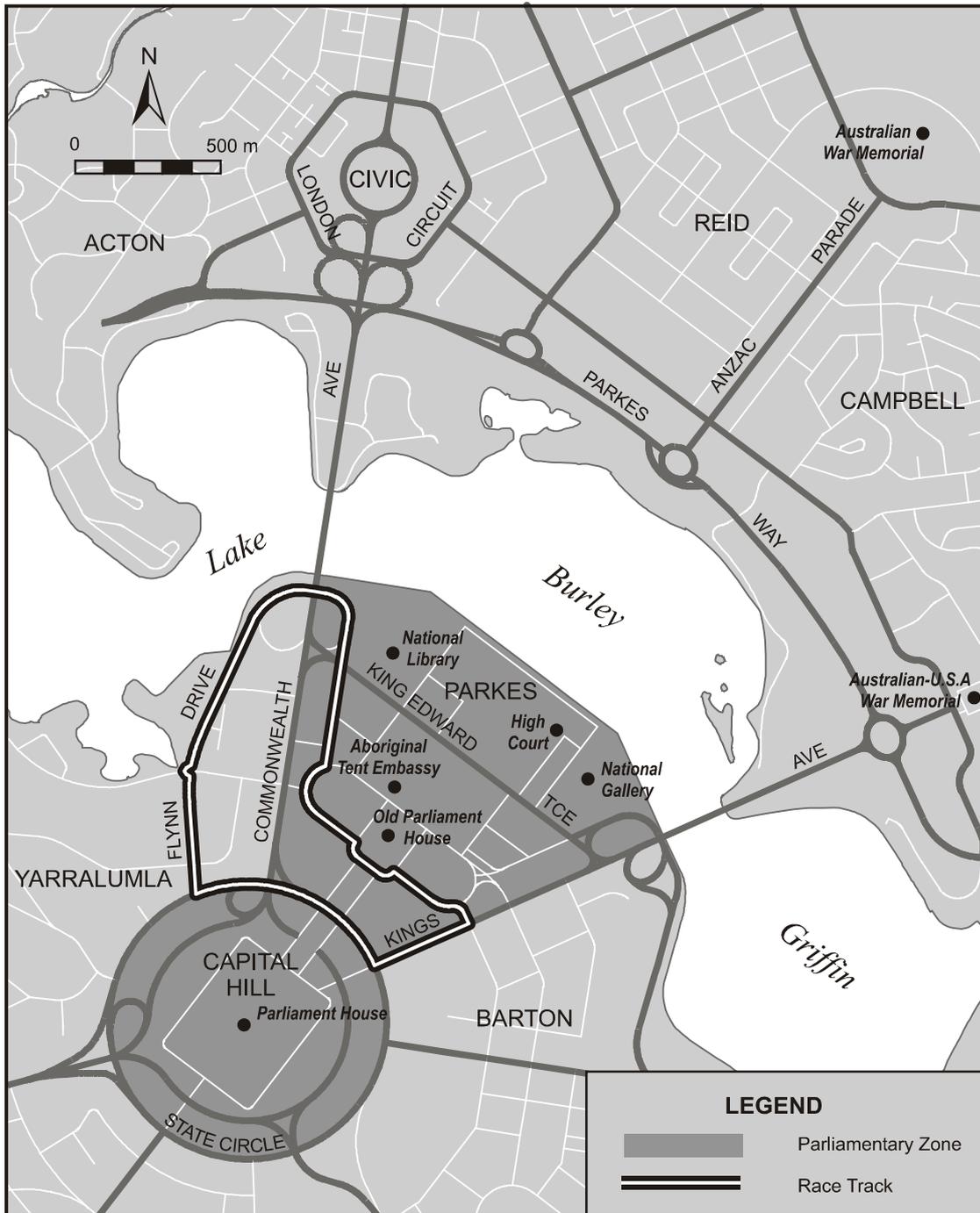
Corporation (CTEC) an Australian Capital Territory (ACT) Government run corporation responsible for tourism in Canberra, and a private company called the Australian Vee Eight Supercar Company (AVESCO), the national promoters of V8 Supercar racing. These two organisations received permission to stage an overtly commercial activity, a car race complete with advertising and sponsorship, in what was until that time a carefully developed national symbolic place, for cultural, legal and governmental uses.

The cost of staging the race was \$12.2 million, and \$4.5 million was recouped through ticket sales and other revenue. The ACT government has claimed that the race brought \$13.2 million benefit to Canberra (Lawson 2000). However, the calculation of this supposed benefit has been criticised, partly on the basis that some of the costs of the race (e.g. extra mileage and wasted time in traffic hold-ups) were not considered (Stirling 2000). Similarly, possible road safety impacts, such as those discussed in this paper, were not considered.

Although the event itself lasted just three days, the organisation and physical preparation and dismantling of the track lasted approximately 12 weeks. In accordance with motor sport safety regulations, safety barriers had to be constructed around the entire length of the circuit. As well as these safety barriers, many grandstands, corporate facilities and other temporary buildings were constructed in association with the event. One of the most controversial changes to the landscape associated with the race involved the advertising signs that were erected, including those advertising alcohol.

The Parliamentary Zone has been designed as a place in which *all* Australians can feel welcome and at home (NCA 2000b). Despite this, the GMC 400 severely restricted public access in and around the Parliamentary Zone during the event. Vehicular traffic was affected noticeably by road closures, especially on 7th and 8th June 2000. The traffic congestion caused by the works associated with the race received much media attention, and attracted a great deal of public criticism. The degree to which traffic was disrupted stemmed from the fact that the track precincts occupied part of the main arteries between North and South Canberra. The roads in and around the Parliamentary Zone include some of Canberra's busiest roads, such as Commonwealth Avenue, with over 30,000 vehicles per day in each direction during weekdays (ACT Roads and Stormwater 1999).

The GMC 400 proved to be highly controversial, prompting considerable criticism of its appropriateness for the Parliamentary Zone (Keeffe 2000; Rees and Davey 2000). Some of this criticism related to the road safety implications of the race.



**Figure 1: The Parliamentary Zone.** The Zone, as defined by the *Parliament Act (1974)* is the darker shaded area. The double line denotes the racetrack for the GMC 400 V8 Supercar Race.

## **Impacts on road safety at the local scale, both positive and negative**

An important aspect of the road danger reduction approach to road safety is the protection and encouragement of benign modes of transport. If the ACT government had road danger reduction as a high priority, it would invest heavily in the promotion of walking, cycling and public transport (all of which themselves generate little traffic danger) (Tranter and Whitelegg 1994). The government would discourage car traffic as much as possible, through lower speed limits, traffic calming, reduction in car parking spaces and increased car parking costs. Instead, the ACT government chose to make a number of Canberra roads “safe” for cars to travel at speeds well over 200 km/h.

The GMC 400 was an event that severely compromised both the freedom and the safety of cyclists and pedestrians. Pedestrian access to the areas surrounding the track remained relatively open until Wednesday 7 June, when many of the roads and footpaths around the Parliamentary Zone were blocked off. However, even before that time, as shown in Figures 2 and 3, construction works restricted use of cycle paths and footpaths. In the case of Figure 2 the footpath was particularly dangerous considering that the only lane of traffic on the road (because of road works) was near the footpath. This almost left no space for pedestrians within the area.

During the race itself, cyclists were diverted on a contorted route that involved cycling under parts of the race track, adding considerably to the length of their journey. Tourists who came to Canberra to experience the cyclepaths around Lake Burley Griffin would wonder if Canberra was really a cycle-friendly city. After the race, during the removal of barriers and spectator stands, some cyclepaths were completely cut off. One of these was adjacent to Langton Crescent, near Commonwealth Avenue Bridge, where some cyclists found that the only viable way around the obstacle was to ride the wrong way on the road.

Apart from the physical barriers, many cyclists and pedestrians may also have been put off by the excessive noise created by the race. The maximum noise level permitted in the central national area (including the Parliamentary Zone) is 55 db(A) (Environment Protection Regulations, 1998, s27.1). However, this maximum level was exceeded even within many buildings in the Parliamentary Zone, including the National Archives building, where noise levels were recorded at 66 db(A) during the race.

Speed has been clearly established as a major contributing factor to accidents. Anything that encourages drivers to speed is likely to lead to a reduction in road safety. Even minor increases or decreases in speed can have noticeable negative impacts on road safety. An analysis of international experience by the Transport Research Laboratory in Britain has suggested that a reduction of average speed everywhere of only 1km/h could reduce injury accidents by 5 percent and fatal accidents by 7 percent (Tight *et al.* 1998).



**Figure 2: Restricted pedestrian traffic access to Langton Crescent. Use of the footpath (on the right) was practically impossible, while traffic was restricted to one lane, further endangering pedestrians.**

According to the Australian Federal Police, there was not a noticeable increase in speeding offences in Canberra around the time of the GMC 400. However, an increased police presence after the race may have helped to curb such excesses (Neit 2000). Also, there is considerable anecdotal evidence of car drivers (mainly young males) “doing the track” and testing their own driving skills in the period leading up to the race, before the road closures were put in place, but while many of the concrete barriers were in place. One anecdote from a Canberra driver suggested that simply driving along the roads of the track gave him a definite sense that he was on a race track: ‘the concrete barriers close in on you, and make you feel as though you are in a race ... you can feel your hands tightening on the steering wheel’. Similar stories exist about drivers and motorcyclists “doing the track” near Bathurst in New South Wales (NSW). Thus, at the local scale it is possible that the race may have helped to raise the risk thermostat, or the target level of risk (Wilde 1982; Assum, Bjornskau, Fosser and Sagberg 1999). This effect may also have operated at larger spatial scales, for any spectators whose propensity for risk taking may have been heightened by watching cars travelling at high speed.

The visual impact of the race lasted longer than the period of road closures and construction and removal of the concrete race barriers. For many months after the race, rubber tyre marks left by the racing cars could clearly be seen on the bitumen at the corners of the circuit. These tyre marks were a lasting reminder to drivers that the roads were part of a race track.



**Figure 3: Restricted access to cycle paths. This photo demonstrates the impact of scaffolding erected for grandstands in Flynn Drive on access to the footpaths/cyclepaths. Although access was still possible, it was restricted and did present a possible risk to the users.**

Because of the relative rarity of accident occurrences, it would be necessary to have many years of road accident data to get any indication of whether road accidents in Canberra were influenced by an event such as the GMC 400 (Tight *et al.* 1998). However, it is possible that at a very local scale, the event may have actually reduced the probability of serious accidents. Ironically, the event was possibly successful in achieving lower average speeds for vehicles travelling in and around the Parliamentary Zone during the time of preparation for the race, largely due to the extra traffic congestion created through road closures, but also because of temporary lower speed limits. In what may be interpreted as natural justice, the very politicians who authorised the race were themselves inconvenienced by the road closures. Colin Hollis (MP) asked: ‘*Who authorised this chaos?*’ (Wright 2000). Having encountered the traffic snarls and concrete barriers caused by the GMC 400, Mr Hollis obviously forgot that he, as a member of Federal Parliament had ‘authorised this chaos’.

Apart from the local impacts of the GMC 400, some of the road safety impacts may have been experienced at national or even international scales.

## **Impacts on road safety at larger spatial scales, both positive and negative**

In terms of the casualty reduction approach, car racing has been claimed to have some positive impacts on road safety. For example, research on improved braking and vehicle occupant protection is an important aspect of vehicle design for car racing. However, if a more holistic approach to road safety is taken, a 'danger reduction approach would include reducing the emphasis on in-car safety and more crashworthy vehicles', instead concentrating on measures to ensure the safety of all road users (Tight *et al.* 1998, 190). This argument follows logically from the concept of risk compensation and the redistribution of risk (Wilde 1982; Adams 1995). Drivers in "safe" cars compensate to some extent for the safety benefits by driving more quickly or with less vigilance. The safety benefits are consumed as performance benefits. Consequently, the burden of risk is shifted to pedestrians and cyclists. A far better approach to road safety than protecting the drivers and passengers would be to make car travel less attractive to motorists and to reduce the speed of motorised traffic (Hass-Klau 1990; Hass-Klau, Nold, Bocker and Crampton 1992; Whitelegg 1997).

Some of the messages relating to road safety (even if subtle or subliminal) that may come from the GMC 400 can be identified through a careful analysis of the television coverage of the race, including the advertisements associated with this coverage. Apart from messages about the importance of having functional equipment (e.g. shock absorbers) in your car, most of the identifiable road safety messages would be likely to undermine road safety through encouraging dangerous behaviours (speeding on urban roads, driving aggressively, tailgating, and alcohol consumption).

Clearly, the car race demonstrates the glorification of speed, or as Hartig and Dunn (1999) might argue, a glorification of problematic hyper-masculinity. The race glorifies a certain image for young males: "risk taking", "aggressive" "egocentric" "macho". Those drivers who take the most risks, whose driving is most aggressive, will be successful. They will "win the race" and be famous and popular.

The GMC 400 was held on public urban roads, all of which had posted speed limits of 60 km/h. Many of the cars in the event were involved in accidents (with other cars or with the concrete barriers). Fortunately, no one was killed or seriously injured. Unfortunately, a possible message from the GMC 400 is that it is safe to drive around urban streets at high speed crashing into things: driving at 160 km/h *above* the current speed limits is safe, as long as your car has good suspension and good brakes, and you wear your seatbelt. The GMC 400, like other production car races on public roads, disguises the extreme dangers involved in such activities, particularly for non-motorised road users. This is particularly problematic, as it suggests to macho teenagers that urban speed limits are ridiculously low, while in fact they may be far too high (when pedestrian safety is considered) (Whitelegg 1993).

Aggressive driving is another behaviour that is encouraged in car racing drivers. As one of the GMC 400 commentators explained: 'You've got to be aggressive'. But aggressive behaviour is not conducive to road safety. One type of aggressive driving involves the practice of tailgating. Travelling extremely close to another car gives you advantages in

racing. Another comment from a commentator for the race suggested that merely tailgating was not aggressive enough. During the race, when a faster car was trying to get past a slower one on the narrow racing circuit, a commentator offered this piece of advice: 'in a situation like that, a little tap up the bum is not wrong really'. Research on tailgating has indicated that this behaviour is increasing in motorists (at least in Germany). In the 1970s it was 'only at motor races that you saw such dangerously close distances between cars as are now seen on motorways ...since 1981 the percentage of 0.5 second gaps between overtaking cars in the fast lanes has risen by one-third (Holzapfel 1995, 41).

Another possible impact at a larger spatial scale involves the possible effect of the race on drink driving. Alcohol was noticeably associated with the race. Alcohol consumption (for the spectators) and alcohol advertising and sponsorship are an accepted part of Australia's car racing culture. After winning a race, drivers get to do strange things with alcohol (champagne), associating alcohol with victory and success. The association of alcohol and speed is arguably the most significant road safety impact of the race, particularly in terms of the symbolism of allowing the clear association of alcohol and speed in Australia's most significant national place.

### **Alcohol advertising and sponsorship at the GMC 400: the alliance of alcohol and speed**

Of all the factors associated with road accidents, two of the most significant are alcohol consumption and speed (Tight *et al.* 1998; Abdel-Aty and Abdelwahab 2000; Horwood and Fergusson 2000). These factors are particularly important for young men, but recent research shows the importance of habitual alcohol consumption among young women as well (Dobson, Brown, Ball, Powers and McFadden 1999). One study has even suggested that drivers who simply believed that they had drunk alcohol drove more recklessly: 'believing that they had drunk alcohol gave them "permission" to drive recklessly, since now they could not be considered responsible for their actions' (Holzapfel 1995, 43). Drink driving is frequently associated with other aspects of unsafe driving, including speeding, unsafe overtaking and ill judged decision making (Horwood and Fergusson 2000). All of these behaviours may have been encouraged by the thrill of watching the GMC 400, complete with alcohol advertising and sponsorship.

Advertising and sponsorship are deliberate strategies to change attitudes and behaviours. The effects of sponsorship are almost indistinguishable from those of advertising in the media. However, because sponsorship is less overt, its impact is often seen as more insidious (Mackay 1990). Both advertising and sponsorship frequently rely on the technique of association of a particular product with popular activities. They simultaneously influence and reflect our culture. Alcohol advertising and sponsorship can influence the place of alcohol in our culture, and thus can reduce any attempts by communities and health authorities to control alcohol consumption. People (particularly young people) attending or watching car racing events where alcohol is promoted, advertised and consumed, may learn to associate alcohol consumption with the excitement of the event or the skill and popularity of the drivers. Alcohol advertising and sponsorship avoids any messages about the risks of alcohol use and abuse.

The GMC 400 television coverage was sponsored by a range of companies, including an Australian brewing company. A number of racing cars sponsored by a brewing company clearly displayed the logo of a popular Australian beer. Drivers also had this logo on their clothing. Interestingly, both Ford and Holden teams were sponsored by this brewing company. Large signs advertising beer were placed beside and across the track. There were also a number of television advertisements for various alcohol products during the coverage of the race. One of these alcohol products involved a drink widely regarded as a young woman's alcoholic drink, while others featured Australian beers. Not surprisingly, some of the car advertisements shown during the race emphasised high speed, power and acceleration (hardly the characteristics needed for increased road safety).

Television advertisements for alcohol are normally restricted to after 8.30 p.m. on Australian television through the Commercial Television Industry Code of Practice, which restricts 'direct advertisements for alcoholic drinks' to M (mature) MA (mature adult) or AV (Adult violence) classification periods. However, the code makes an unfortunate exception to this, allowing such advertising as an 'accompaniment to the live broadcast of a sporting event on weekends and public holidays'. If the reason for the restrictions on advertising alcohol to adult viewing periods is to limit the exposure of young people to this advertising, then the exception for sporting events is a very questionable concession to the alcohol industry. Many young people (including those under legal drinking age) watch sporting events (including car racing). Such people are thus exposed to this advertising, which is normally restricted because of this potential audience. Australia's Federal Health Minister Michael Wooldridge agrees, suggesting that 'many younger people are getting messages about alcohol that they shouldn't be getting and that are contrary to what we are trying to do with our campaigns to discourage under-age drinking' (Gray 2000).

The locations of the signs advertising beer around the track were well chosen in terms of their visibility to television audiences. At the corner of State Circle and Flynn Drive, where racing cars were slowing to negotiate the corner, signs advertising an Australian beer were strategically placed on both sides of the road. Because of the slow speeds at this point (cars back to first gear), the signs were clearly evident as cameras followed the cars into and through the corner. After the cars negotiated this corner, they then accelerated down Flynn Drive, one of the fastest parts of the track. Located over the track, and stretching right across the entire race track, was a huge advertising sign for the same beer. The camera shots of this advertising sign were usually telephoto shots from the bottom of the hill. As the cars were racing down this street at speeds of around 200 km/h, the advertisement was clearly visible for as long as the camera covered cars coming down the hill.

In terms of the power of association, the location of this large sign across the track was unfortunate for road safety, and fortuitous for advertisers who obtained a subliminal association of beer with excitement, speed and power. During a demonstration lap with a race cam, as the car was accelerating under the beer advertising sign above the track, one driver commented: '200 odd ks down here'. On another race-cam, the speedometer indicated over 180 km/h just as the car passed under the beer advertisement.

Normally, billboard style advertising is not allowed in Canberra. The advertising signs on the GMC 400 track contravene the *National Capital Plan* which states that free standing signs are not to exceed 3m<sup>2</sup> in size (NCA 2000a, 145). This apparent illegality was justified by the Chief Executive of the NCA, who explained that the race organisers had received an exemption for the erection of advertising signs (Pegrum 2000). Such a contravention of planning guidelines demonstrates the power held by the race organisers.

Many studies have demonstrated a link between alcohol advertising, drinking and public health, particularly in younger age groups, and there have been many calls for a ban in Australia (and elsewhere) on alcohol advertising (Sivyer 1990; Grube and Wallack 1994; Casswell 1995; McDaniel and Mason 1999). In particular, the marketing of alcohol in association with sport has been criticised for its informal sanctioning of drinking, and for promoting the false notion that alcohol consumption is virile and healthy and will lead to success. Because of the national importance of sport in Australia, '...the advertising of alcohol in conjunction with sport is reinforcing the concept that alcohol is also part of the fabric of Australian society' (Sivyer 1990, 230). Sugar (1978) according to Crompton (1993) has suggested that breweries seek links with sport as this offers them a macho vehicle (literally in the case of car racing) to appeal to young males. Ironically, alcohol consumption in males lowers levels of testosterone, the male hormone that maintains the sex drive (Burke 1999). Sporting events have been described as incongruous with the use of alcohol. Indeed, Australia's Federal Health Minister, Michael Wooldridge, has indicated his support for limiting alcohol advertising at sporting events, even suggesting that 'restricting alcohol sponsorship of sport is the next major public health challenge' (Gray 2000). Some studies have also suggested that the Australian public would not oppose restrictions on the advertising of alcohol (Sivyer 1990).

Although there are conflicting research findings on the role of alcohol advertising on consumption, a number of studies have indicated that alcohol related problems can be reduced through the control of types, locations and times of alcohol advertising (Casswell 1995; Saffer 1997; Saffer 1998; Jernigan, Monteiro, Room and Saxena 2000). For example, Saffer's (1998) research found that advertising bans show a decrease in consumption if media and marketing substitution is not allowed, and that counteradvertising is also effective in reducing consumption. Saffer (1998) also demonstrates that while some studies have found no effect of alcohol advertising on consumption, these tend to be studies that measure advertising at a high level of aggregation, an approach that almost guarantees that no effect will be found, because advertising data have little variance at this scale of analysis. However, studies conducted at a local cross-sectional level do show an effect. Another study (Saffer 1991) found that countries with bans on alcohol advertising (e.g. Sweden) tend to have lower levels of alcohol abuse. Many European countries also restrict sponsorship by alcohol companies. In the mid-1970s the per capita consumption of alcohol in Sweden decreased by 20 percent after beer and wine advertising was banned (American Academy of Pediatrics 1995). An important caveat about policies on alcohol advertising, however, is that if manufacturers can increase other forms of marketing, such as sponsorship or use of other media, then advertising bans may have limited effect.

Australia has few restrictions on alcohol advertising or sponsorship compared with countries such as Sweden. Australia has also been described as a nation of high-risk boozers in which

51 percent of all alcohol consumed exceeded safe drinking guidelines. Recent research by Australia's National Drug Research Institute found that Australia had become 'economically dependent on high risk drinking' where 50 percent of the \$2 billion tax collected on alcohol purchases is 'based on drinking that represents a risk to health and safety' (Canberra Times 2000).

Saffer (1997) provides evidence from regression modelling indicating that alcohol advertising not only increases consumption of alcohol, but is also related to increased highway fatalities. His analysis indicated that a ban on broadcast alcohol marketing could reduce highway fatalities in the U.S. by between 2000 and 3000 lives per year.

Alcohol advertising has many parallels with tobacco advertising. Both involve public health issues, both involve powerful and well-funded lobby groups, and both see benefits in associating themselves with sporting events. The restriction of alcohol advertising is often opposed on the grounds that unlike tobacco, moderate alcohol consumption may have health benefits. However, the argument that moderate consumption of alcohol is beneficial loses its validity in terms of the impact of alcohol on road safety. An awareness of the harmful impact of even moderate alcohol consumption, especially on young drivers, is reflected in regulations limiting Blood Alcohol Concentrations (BACs) to zero or to very low levels for Learner Drivers and Provisional Licence holders in many parts of Australia and throughout the world. In some Australian states (e.g. Tasmania and Queensland) certain categories of inexperienced drivers are restricted to BACs of zero. Other states (e.g. ACT, NSW) restrict such drivers to BACs of 0.02 grams of alcohol per 100 millilitres of blood. In Sweden this limit (0.02) is the maximum level for any driver.

The power of alcohol advertising at the GMC 400 may have been enhanced by its location in the Parliamentary Zone. Not only could the advertisers associate alcohol with speed and excitement, but also with national symbolism.

### **The significance of place: car racing in the Parliamentary Zone**

'Nowhere in the world do you see anything like this. They run here between the old and new Parliament House. It doesn't happen with NASCARs around the White House. It doesn't happen with Formula One cars around the House of Lords. But here the V8s are storming around the National Capital'  
(Race commentator for GMC 400). The last section of this commentary was given just as cars raced past signs advertising a popular Australian beer.

Place is an integral and dynamic feature of Australian society. Not only do we identify ourselves by our significant places, certain places reflect our society, culture and heritage. Some places can be defined as 'national places' because they are the places by which the nation identifies itself. National places represent the cultural, social and heritage values of a nation (NCPA 1996; Keeffe 2000).

The Parliamentary Zone in Canberra (the location of the GMC 400) is a very significant national place that has been created in a conscious and deliberate process, albeit a process

that has evolved over the history of our nation (Keeffe 2000). In his initial plan for Canberra, Walter Burley Griffin tried to capture the young nation's identity in the city's design. The centrepiece of this design was the Parliamentary Triangle, which 'was intended to be the architectural, monumental and symbolic centre of the National Capital – the area that expressed the aspirations of Australians and summed up our idea of ourselves as a nation' (Overall, 1995, 21-22). The Parliamentary Zone refers to an area within Griffin's Parliamentary Triangle, enclosed by State Circle, Kings Avenue, Commonwealth Avenue and the southern foreshore of Lake Burley Griffin.

The importance of national symbolism in the Parliamentary Zone cannot be overstated. The *Parliamentary Zone Review* declared that 'the symbolic appeal of the Parliamentary Zone, mainly attributable to its political roles and the clarity of its geometry and setting must not be compromised' (NCA, 2000b, 6). The *National Capital Plan* which is used to control the Parliamentary Zone, describes it as 'the home of the nation's most important cultural and judicial institutions and symbols' (NCA 2000a, 28).

The elements of the landscape that contribute to the sense of nationalism include many national icons and monuments, such as Parliament House, the National Library and the National Gallery. Many of these elements of the Parliamentary Zone landscape are instantly recognisable as symbols of Australian nationalism. Even the press 'has forgiven the tax-money spent on the building' and now considers Parliament House as a symbol for the nation (Colombijn 1998, 572). Capital Hill, the location of Parliament House, and a clearly recognisable backdrop to the GMC 400, has been described in a symbolic sense as the place in which 'the whole country comes together' ... 'Parliament House brings the nation together at a colossal central flagpole with the Australian flag' (Colombijn 1998, 572, 579).

Alcohol advertisers try to associate their product with the glamour and excitement of car racing. Similarly, the organisers and promoters of the GMC 400 make a particular point of capitalising on the national functions of the Parliamentary Zone as a way of raising interest in the race. As one commentator for the television coverage of the race explained: '... let's recap the location of this unique circuit ... old and new Parliament Houses, Treasury, National Gallery, National Library, High Court building ... so many landmarks, so much excitement'. The association of the national icons of the Parliamentary Zone with the GMC 400 (and its various sponsors) represents the exploitation of publicly owned and nationally symbolic property for commercial gain.

Ford Falcon and Holden Commodore V8 cars are regarded as the quintessential 'Australian' supercars. Allowing the marketing of alcohol through sponsorship of these V8 cars not only informally sanctions the idea that alcohol consumption is healthy and virile, but also that alcohol consumption is typically Australian. The great Aussie V8 driver is associated with the great Aussie drinker. Also, because of the national importance of sport in Australia '...the advertising of alcohol in conjunction with sport is reinforcing the concept that alcohol is also part of the fabric of Australian society' (Sivyer 1990). For the GMC 400, this association is strengthened by being located in Australia's most significant national place. What could be more Australian than Australian beer, Australian V8 cars competing in a uniquely Australian sport, with a backdrop of Australia's Parliament House and Parliamentary Zone?

The GMC 400, like many other car races in Australia, sanctions the combination of the pursuit of speed on public roads with the promotion of alcohol. Unlike other car racing events anywhere in Australia, and perhaps anywhere in the world, the location of the GMC 400 is problematic in terms of a road safety message. It is one thing to allow the combination of alcohol advertising and speed in a car race. It is significantly different if this event is held in a significant national place. The location of the GMC 400 in the Parliamentary Zone in Australia's national capital sends a message to people throughout the world that our Federal Government supports, more than simply condones or allows, the combination of alcohol advertising and high speed car travel on public roads. This could be interpreted as implying that the Federal government is willing to place road safety issues at a lower priority than the promotion of local brewing industries.

'Politicians ... have to play a major role in motivating society to pay active attention to furthering road safety' (van Uden and Heijkamp 1995, 249). Many decisions made by governments and policy makers have impacts on road safety. However, it is very likely that the road safety consequences of many decisions are not recognised. The authorisation of the GMC 400, along with exemptions for advertising signs, in the Parliamentary Zone provides an example of how politicians, both ACT and Federal, may have (albeit unwittingly) helped to promote values that undermine road safety.

## **Conclusion**

Politicians and government departments need to recognise the road safety implications of all of their policies and actions. They also need to put public health issues, particularly the reduction in road fatalities, above any other motives, including economic development. They should be encouraged to follow an ethical rule proposed to guide road system designers in the 'Vision Zero' philosophy of road safety. This ethical rule states: "Life and health can never be exchanged for other benefits within the society" (Tingvall and Haworth 1999).

Other major local interests often conflict with road safety (van Uden and Heijkamp 1995). In the ACT, the current government is focused on economic development, with a particular emphasis on tourist oriented development. The GMC 400 was staged in Canberra for economic reasons. However, in determining the overall benefit of the race, it is unlikely that any consideration was given to the possible costs to Australian society in terms of the road safety implications of increased alcohol promotion and consumption. Though such costs are difficult to measure, they should at least be part of any comprehensive approach to improving well-being in society, and they are an integral component of the road danger reduction approach.

As well as using narrowly defined economic indicators, a realistic assessment of the impact of the GMC 400 should take into account the array of road safety and environmental impacts of the race at a range of spatial scales, including national and even international. The following list (though not exhaustive) provides an indication of the costs that should be considered, many of which involve road safety costs:

- Extra local mileage costs due to traffic detours;
- Wasted time in traffic hold ups (a major factor in conventional cost-benefit analyses);
- Impact of alcohol advertising on accidents at the national and international scales. (The race was televised to an audience of millions, in places as distant as Edinburgh.);
- Increased exposure to accidents through increased mileage associated with the event. This includes:
  - Mileage of those who left Canberra to get away from the expected impacts of the GMC 400 (noise pollution, traffic);
  - Mileage of those who travelled to the GMC 400, especially those who travelled from interstate (e.g. Sydney). A conservative estimate of this would be about 10 million kilometres. (It would take an average Australian motorist more than 500 years to travel this distance, during which time he/she could expect to be involved in numerous accidents.);
- Lost income to the ACT from those who left Canberra to escape the expected impacts of GMC 400;
- Lost income to the ACT from visitors who avoided coming to Canberra because of expected impacts of GMC 400;
- Lost income at national attractions in the Parliamentary Zone, when people (both visitors and locals) were deterred from going to places such as the National Gallery and the National Science and Technology Centre;
- Loss of security for pedestrians and cyclists.

If all of these factors were taken into account in a more holistic cost-benefit analysis of this race, it is likely that the overall benefits of the race (locally, nationally and internationally) would be less than the sum of the numerous costs of the race.

Australia's road toll has been significantly lowered by strategies aimed at reducing the amount of drink driving. However, drink driving continues to be a problem, particularly in rural areas (Randall 1995) and even when legal BACs are lowered (McLean, Kloeden, McColl and Laslett 1995). Perhaps it is time to develop wider public policies to combat dangerous driving, including driving under the influence of alcohol. Such policies should seriously consider challenging the way in which alcohol advertising and sponsorship is associated with car racing.

Banning alcohol sponsorship and advertising at car racing events will probably have little effect on alcohol consumption and road accidents, if such sponsorship and advertising is simply moved to alternative events. Ideally, a more comprehensive ban on alcohol advertising and sponsorship at sporting events should be introduced (as is the case in some European countries). However, given the power of the alcohol lobby groups, and the weakness of politicians in terms of making radical decisions, such a situation is unlikely to eventuate in the near future. However, banning all alcohol advertising and sponsorship for the GMC 400 in Australia's Parliamentary Zone would be a very symbolic first step that could provide a catalyst for any further moves to tighten regulations on alcohol advertisements in Australia. This would send a powerful message to young people that Australian society does not condone the association of car racing and alcohol, and is willing to place the road safety of Australians above increasing the profits of alcohol companies.

## Acknowledgments

Thanks to Doug Taylor, Chris Oyston and Ted Stapinski for their insights into the attitudes of adult and teenage male car racing enthusiasts, and the impact of the GMC 400 race circuit on driving behaviours. Thanks also to Penny Umphelby and Julie Kesby for assistance in finding references and information on road safety and the GMC 400.

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