

# HOST COMMUNITY PERCEPTIONS OF THE IMPACT OF EVENTS

## A COMPARISON OF DIFFERENT EVENT THEMES IN URBAN AND REGIONAL COMMUNITIES



*By Liz Fredline, Marg Deery and Leo Jago*

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## **ABSTRACT**

Over recent years, there has been increasing interest shown by tourism policy makers and planners in the social impacts of tourism events (see, for example, Gabr 2004; Fredline & Faulkner 2002a). However, to date the vast majority of research effort has been directed toward evaluating only the economic impacts. Thus, economic impact evaluation has reached a point where there is substantial agreement on the most appropriate techniques to be used. Social impact assessment lags far behind this point. This paper goes some way to addressing this issue by comparing three different events that vary by location and theme. In so doing, this research offers tourism policy makers and planners a means of comparing different types of events through the evaluation of their social impacts on the community.

Three case studies were selected specifically for their geographic and theme characteristics; the Australian Grand Prix, the Moomba Festival (both hosted in Melbourne) and a regional community festival, the Horsham Art Is... Festival. For each event, self-complete questionnaires were used to collect data from local residents regarding their perception of the impacts of the event, and a range of independent variables including the distance of the residence from the event zone, the amount of travel to the event zone, the involvement in tourism, the identification with the theme and the socio-political values of the respondents. Following the methods of Fredline (2000), the perception data were measured using a three part scale. The scale included 45 impact statements (42 of which are common to all instruments), and residents were first asked to assess whether they believed the item had changed because of the event and to identify the direction of the change. If residents did perceive a change, they were subsequently asked to assess the effect on their personal quality of life, and also the effect on the community as a whole. These latter two assessments were measured using a seven point Likert type scale ranging from -3 (very negative impact) to +3 (very positive impact).

The findings from the research suggest that, for each of the events, the majority of the respondents indicated that the event had 'no effect' at the personal level, but the proportions indicating a positive impact outweighed those indicating a negative impact, resulting in a positive mean score. It is interesting to note that although the Grand Prix registered the highest proportions indicating a negative impact, it also registered the highest proportion indicating the most positive level of benefit. All three events were rated as having a substantial community level benefit. In comparing the specific impacts of the event, fewer impacts were perceived for the Art Is... Festival, with 16 of the 42 potential impacts being perceived by the majority to have not changed, compared with only three for the Grand Prix, and seven for the Moomba Festival. The paper proceeds to discuss a number of observations made in relation to the three different events and the reaction of the host community to them. The paper concludes by comparing (a) the different themed event across the same community and (b) the similar themed events in different communities. With each of these commentaries, recommendations are provided for planning and management.

## SUMMARY

### Objectives of Study

This report provides the findings from a comparative study of the social impacts of three events located in different regions and differentiated by theme. The key objective of this report was:

- To examine host community perceptions of event impacts across a range of events and host communities, specifically;
  - A comparison of different themed events in the same community. The Grand Prix data collected in 2002 was compared with data on resident reactions to the Melbourne Moomba Festival, a community festival.
  - A comparison of similar themed events in different sized communities. The Moomba festival data was compared to data collected at the Art Is... Festival in Horsham, a regional community about 275 km west of Melbourne.

### Methodology

A research instrument was designed utilising statements from previous event and tourism literature with the inclusion of additional items from the social capital literature. Three slightly different versions of the instrument were developed for the three different events, the only differences being variation as necessary to allow for differences in the types of event and locations.

Following the methods of Fredline (2000), the main dependant variables, namely, residents' perceptions of the impacts of events, were measured using a three part scale. The scale included 45 impact statements (42 of which are common to all instruments), and residents were first asked to assess whether they believed the item had changed because of the event and to identify the direction of the change. If residents did perceive a change, they were subsequently asked to assess the effect on their personal quality of life, and also the effect on the community as a whole. These latter two assessments were measured using a seven point Likert type scale ranging from -3 (very negative impact) to +3 (very positive impact).

The instrument was administered via a postal survey. Although this method is not without its shortcomings, given resource limitations, it is often the most effective method for collecting data adequate for analysis. The most serious problems associated with postal surveys are low response rates, self-completion errors and missing data. Previous studies in this area would suggest that response rates in the order of 30% are possible in this type of research (Fredline 2000) provided that reminder questionnaires are dispatched. A decision was made to include only residents with a 15 km radius of the centre of the event precinct. This decision was made in recognition of the localised nature of many event impacts such as noise and traffic congestion, and the need to adequately represent people living close to the event precinct.

Given the anticipation of low response, large numbers of survey packages were dispatched for each event, with the aim of achieving datasets in the order of 200-300 responses for each event. For each of the two Melbourne based events, 2400 questionnaires were distributed, while in Horsham, 1400 packages were sent out. The usable returns for the Grand Prix, the Moomba Festival, and the Horsham Art Is...Festival were 279, 181 and 96 respectively, representing effective response rates of 13%, 8%, and 8%. A profile of the respondents found that there were almost equal numbers of males and females, the most common age group was between 40-49 years of age, 22% had completed a post graduate degree and the majority (60%) were employed.

### Key Findings

The key findings from the study are:

- In the case of each event, the majority indicated 'no effect' at the personal level, but the proportions indicating a positive impact outweighed those indicating a negative impact, resulting in a positive mean score.
- Fewer impacts were perceived for the Art Is... Festival, with 16 of the 42 potential impacts being perceived by the majority to have not changed, compared with only three for the Grand Prix, and seven for the Moomba Festival.

- All events were perceived as having a positive impact on maintenance of public facilities but this was seen to be far more beneficial in the case of the Grand Prix than for the other events. Similarly, a larger proportion of respondents felt that the Grand Prix had improved facilities available to local residents.
- Unlike the other events, the Grand Prix is perceived as having a substantially negative impact on the community because of the noise it creates.
- The events are seen to have differencing levels of impact on employment opportunities, with the Grand Prix being seen as providing substantial employment opportunities, while the Art Is... Festival was seen as having the lowest (but still positive) employment impact.
- The Moomba festival was perceived as having a more negative impact on rowdy and delinquent behaviour and excessive drinking and drug use than either of the other two events. Similarly Moomba is seen as having a more negative impact on litter than the Grand Prix or Art Is... Festival.
- Traffic congestion and the decreased availability of parking were seen to be less of a problem with regard to the Art Is... Festival in Horsham, than they were with regard to the two Melbourne based events.
- It was perceived that the Grand Prix is associated with a decrease in the rights and civil liberties of local residents, but no similar impact was reported for the other two events. Similarly, there was substantial agreement that ordinary residents get no say in the planning and management of the Grand Prix, whereas this was seen to be a less substantial issue for the Moomba Festival and not an issue at all for the Art Is... Festival.
- The Grand Prix is also seen to be somewhat disruptive, inducing stress in the lives of local residents, while this was not seen to be a problem associated with the other events.
- All of the events were seen as providing opportunities for people to have fun with their family and friends, although to varying extents. The Art Is... Festival was seen as providing the most benefit in this regard, while the Grand Prix was perceived as providing the least benefit.
- The proportion who believed that the events promoted values that are good was significantly lower with respect to the Grand Prix, than for the other two events.
- Using cluster analysis, respondents in the Grand Prix survey were somewhat more likely to be in the negative cluster than those who participated in the surveys relating to the other two events.
- Contact with the event is important in predicting cluster membership for the Grand Prix, but it is not important for either Moomba or the Art Is... Festival.
- A strong relationship was observed between identification with the theme of the event and cluster membership, with members of the positive cluster much more likely to register higher levels of interest in the event than negative and unconcerned groups.
- People with mostly post-materialist values are more likely to be negatively disposed to events.
- People who are more negatively disposed to the event are most likely to have not ever attended the event, while positive cluster members are most likely to have a history of attendance.

## **Future Action**

The findings from this research suggest there are more elements in common between each of the events than would be expected in terms of the social impacts on the community. There appears to be a general consensus that events have fairly substantial economic, entertainment, social and development benefits. There is also agreement with regard to some negative impacts such as increased prices and damage to the environment, but these are not perceived to have substantial impact. Whilst the instrument that has been developed to assess the social impacts of events has proved effective, it is a fairly complex instrument to administer that has implications for resident response rates. Plans are already underway to further refine this instrument to allow for a more parsimonious set of items that can be more readily administered using telephone interviews. This will enhance the usability of the scale. Substantial testing will be required to determine the reliability of a shorter instrument.

In parallel with this work to reduce the size of the social impact survey instrument, research will be undertaken to incorporate social impact analysis into a more holistic event evaluation kit. This research seeks to evaluate events from multiple perspectives at one time rather than treating each evaluation perspective in isolation as has happened in the past.



## *Chapter 1*

# INTRODUCTION

In recent decades, substantial work has been conducted examining residents' perceptions of the impacts of tourism and, to a lesser extent, events. Through this work, considerable light has been shed on many of the potential impacts of tourism and also on some of the variables that tend to be associated with positive and negative reactions to tourism activity. However, not all tourism is equal; tourism is a nebulous concept that manifests its impact differently across communities. Therefore, more information is required about the differential effects of alternative types of tourism on local hosts. Within the multitude of case studies that have been undertaken, the impacts of many different forms of tourism have been investigated. However, these investigations have taken place in different contexts, making it difficult to attribute variations in community reaction solely to the variations in tourism activity. Additionally, the multitude of different methods used impedes comparison.

Public planners and decision makers encourage tourism because it brings benefits to communities. It is, therefore, logical that they would prefer to promote the type of tourism that maximises positive impacts and minimises negative impacts, but they need suitable information about relative costs and benefits of different types of tourism in order to make informed decisions. The substantial body of research investigating economic impacts of events and other forms of tourism is driven by a desire to identify the 'best' type of tourism from an economic perspective, or at least, to make the best of the tourism activity that exists. While a range of economic impact assessment techniques exist, the need for comparison across cases has led to a call for consistency in approach. A similar consistent approach needs to be developed to investigate and compare the social impacts of events and other forms of tourism. The development and refinement of a suitable method will require considerable testing and validation, but the study reported in this paper aims to undertake some of the preliminary work and lay a foundation for future advances.

More specifically, the research objectives for this study were:

- To examine host community perceptions of event impacts across a range of events and host communities, specifically;
  - A comparison of residents' reactions to the Australian Formula One Grand Prix in Melbourne in 2002, with data previously collected in 1999, in an effort to identify longitudinal changes in community reactions.
  - A comparison of different themed events in the same community. The Grand Prix data collected in 2002 was compared with data on resident reactions to the Melbourne Moomba Festival, a community festival.
  - A comparison of similar themed events in different sized communities. The Moomba festival data was compared to data collected at the Art Is... Festival in Horsham, a regional community about 275 km west of Melbourne.
- Progression toward development of a compressed generic instrument to evaluate impacts of events and facilitate comparison.
- Examination of intrinsic variation within communities with regard to their reactions to events.

This report presents the results of the comparisons referred to in objectives 1b and 1c. It also examines the influence of intrinsic variation within the host populations as referred to in objective 3. The longitudinal comparison referred to in objective 1a is reported in a separate technical report. The development of a compressed instrument referred to in objective 2 is also reported independently.

## Chapter 2

# REVIEW OF LITERATURE

## Social Impacts of Tourism

Teo (1994, p.126) defines social and cultural impacts of tourism as:

‘the ways in which tourism is contributing to changes in the value systems, morals and their conduct, individual behaviour, family relationships, collective lifestyles, creative expressions, traditional ceremonies and community organization.’

The issue of the social impacts of tourism has, more recently, attracted the attention of researchers and practitioners. This is evidenced by an expanding literature on sustainable tourism development (see for example the *Journal of Sustainable Tourism*) and government backing for research into the sustainability of tourism evidenced by widespread support for the Sustainable Tourism CRC. There is also a growing acceptance of the concept of ‘social responsibility’ (Pearce, Morrison & Rutledge 1998), and increasing incidence of community opposition to tourism developments that harm both the social and natural environment (Gabr 2004).

The impacts of tourism on a community provide a good example of ‘a double-edged sword’. Marcouiller (1997), in his study of tourism development in US rural communities, argued that the injection of tourists into a rural community can divide a previously homogenous community because the influx changes the dynamics of the community. Glasson’s (1994) study of the UK heritage city, Oxford, found that, although the overall effect of tourism on the city was positive, many of the local respondents stated that tourism increased overcrowding, noise, litter and crime. The costs of tourism have been documented under a number of themes. For example, King and Stewart (1996), among others, discuss the negative effects associated with the commodification of a destination’s culture and the negative impact of tourist activities such as sex tourism. Doxey’s (1975) Irridex Model has been tested in a number of tourism environments to determine the level of resident irritation generated by tourism. Teo (1994), in using Doxey’s instrument, for example, found a reasonably high level of intolerance for tourists in Singapore and those residents associated tourism with higher levels of crime. Other negative social impacts such as the impact of the cultural and behavioural differences between tourists and residents and, the often, high inequality between the wealth of tourists and residents, are well documented (Weaver & Opperman 2000).

On the other hand, Marcouiller (1997, p.351) argues that: ‘Other important sociological effects of tourism development on rural communities include developing a local sense of place, community pride or image, and local quality of life.’ This sense of community pride, wellbeing and stability is an indicator of the social capital of a community. Onyx and Leonard (2000) argue that there is a growing recognition of the importance of social capital in maintaining a healthy and vibrant civil society. Tourism is often perceived as increasing the economic wellbeing of communities. Tourism also provides an incentive to preserve culture and heritage, although this does not necessarily add to the social capital of the community. Teo’s (1994) study of Singapore found that the conservation projects of the city had preserved the cultural heritage, but, unfortunately, local residents did not identify with the environment created by these projects and moved out. So the ‘double-edged sword’ of tourism can both preserve cultural aspects but can also alienate the community in the process.

## Definition of Events

Within the tourism field, the term ‘event’ is used to describe a wide range of event categories many of which have quite different characteristics. Such events range from the Olympic Games at the mega-event end of the scale to small regional festivals. Even within these sub-groupings, there is substantial debate as to the definitions that should be adopted (see, for example, Getz 1991; Jago & Shaw 1998; Arcodia & Robb 2000). The definition that has been adopted here is that proposed by Jago and Shaw (1998, p.29), namely, ‘a onetime or infrequently occurring event of limited duration that provides the consumer with a leisure and social opportunity beyond everyday experience’. This definition is taken as embracing the other subcategories of events, including community festivals and mega-events.

## Social Impacts of Festivals and Events

Although there has been a strong focus on economic impacts, there are other types of impacts of events and festivals including social impacts. These include reinvigorating existing facilities and creating an image for the tourist destination, as well as promoting tourism sustainability (Getz 1991). While there is a reasonable amount of literature on the social impacts of tourism, particularly through the sustainable tourism literature, less research has concentrated on the social impacts of events and festivals. Issues such as safety, trust and ‘a sense of personal and collective efficacy’ (Onyx & Bullen 2000) form part of the social capital concept and would appear to have relevance in an investigation of the social impacts of events and community festivals. Delamere’s (1997) social impacts instrument for community festivals investigates a number of key elements pertinent to this study. These include the impact of the festival on the friendliness, safety, tolerance and creativity of the community. Delamere concentrates his questionnaire on the social costs and benefits of community festivals.

For the purposes of this paper, social impacts are defined as any impacts which potentially have an impact on quality of life for local residents. Thus, economic outcomes of events (such as employment opportunities) and environmental effects (such as litter) are included because perceptions of such impacts are likely to contribute to residents’ overall reactions to an event. This is consistent with most of the previous work in this area.

Ritchie (1984), and later Hall (1989, 1992) suggested a classification of potential event impacts comprising six dimensions; economic, tourism/commercial, physical, socio-cultural, psychological, and political. Some examples of positive and negative manifestations of these impacts are shown in Table 1 with references as applicable to further examples in the literature.

**Table 1: A taxonomy of potential event impacts**

DIMENSIONS	POSITIVE	NEGATIVE
ECONOMIC	Small community festivals may generate internal surpluses	It is unusual for large events to recoup their enormous capital and operating expenditures - many require extensive public funding
	Visitor expenditure and associated multiplier effects - increased demand for goods and services	Increased prices for locals
	Creation of direct and indirect employment	Opportunity Costs
TOURISM/ COMMERCIAL	‘Showcase effect’ (Hiller 1989){ XE "Hiller, 1989" } - magnification of the region’s profile which may have implications for increasing tourism and other business activities	Acquisition of a poor reputation if the event is unsuccessful
	Extension of tourist season - smooth out cyclical demand (Ritchie & Beliveau 1974){ XE "Ritchie & Beliveau, 1974" }	
PHYSICAL	Construction of new facilities and infrastructure - the extent of this benefit depends on the long term usefulness of these facilities to the community	Dislocation of lower socioeconomic groups during the creation of new ‘desirable middle class environments’ (Hall 1995){ XE "Hall, 1995" }
	Regeneration and beautification of run down areas	Architectural pollution
		Environmental damage
SOCIO- CULTURAL	Entertainment and social opportunities for local residents	Dissatisfaction especially where the theme of the event does not fit the socio-cultural milieu of the community
	Increase in the level of local interest in the activity associated with the event (Ritchie 1984{ XE "Ritchie, 1984" })	Commodification and commercialisation of traditional local events
	Opportunity for intercultural contact	Potential for intercultural misunderstanding

**Table 1: A taxonomy of potential event impacts (continued)**

DIMENSIONS	POSITIVE	NEGATIVE
SOCIO-CULTURAL	Volunteerism - improved local social support networks	May contribute to general social problems such as crime, prostitution and changing moral values
		Crowding can exacerbate rowdy behaviour, drinking, drug use and violence (Getz 1991{ XE "Getz, 1991" }; Hall 1992{ XE "Hall, 1992" }) 'Hoon effect' (Fischer, Hatch & Paix 1986{ XE "Fisher, Hatch & Paix, 1986" })
PSYCHOLOGICAL	Bring a sense of belonging and sharing to the community (Getz 1991{ XE "Getz, 1991" })	Rapid development may bring disruptions which may lead to feelings of alienation, and the loss of a sense of belonging or attachment to the community (McCool & Martin 1994{ XE "McCool & Martin, 1994" })
	Excitement, spectacle, pride and self esteem brought about by being the focus of international attention (Burns & Mules 1986{ XE "Burns, Hatch & Mules, 1986" })	
POLITICAL	Enhance certain images and ideologies (Hall 1992{ XE "Hall, 1992" }) - may be either positive or negative depending on the extent to which residents concur with these	Where conflicting interests exist it is likely that the interests of the politically powerful will win out over the interests of the politically weak
	Career enhancement of specific political figures (Hall 1992{ XE "Hall, 1992" })	Loss of local autonomy (Krippendorf 1987{ XE "Krippendorf, 1987" })
		Formation of protest groups - 'rebellion of the hosts' (Krippendorf 1987{ XE "Krippendorf, 1987" })

Source: Adapted from Ritchie 1984 and Hall 1989 & 1992

## Extrinsic vs Intrinsic Studies

As mentioned in the introduction, there has been a growing awareness of the need for assessing all of the potential impacts of tourism activity, and this has led to a recent proliferation of research into social impacts of tourism on host communities. Generally speaking, two types of social impact study have been conducted.

The first type, sometimes referred to as stage-based models (Pearce, Moscardo & Ross 1996), or 'extrinsic' studies (Faulkner & Tideswell 1997), investigate the impact of tourism on the community as a whole and, therefore, assume a level of homogeneity among the residents of a region. These models consider the effects of variables such as the stage of tourism development in a community, the tourist / resident ratio, the cultural distance between hosts and guests, and the seasonality of the tourist activity. A good example is Doxey's Irridex Model (1975) that suggests that residents' responses to tourism will pass through a series of stages (euphoria, apathy, irritation, and antagonism) as continued exposure to negative impacts is reflected by increasing annoyance. These models tend to be overly simplistic, ignoring the diversity of communities and the undeniable potential for tourism to impact various subgroups in different ways. However, their value lies in the contribution they have made in highlighting the fact that negative social impacts will lead to resident dissatisfaction unless appropriately managed.

The second type of research, described as 'intrinsic' (Faulkner & Tideswell 1997), does consider the heterogeneity of communities by measuring social impacts through the perception of members of the host community and then investigating differences in perception held by different sub-sectors of the community. These studies acknowledge that subgroups may be affected by tourism differentially, and also that differing value systems may be responsible for variations in perceptions.

Previous research on the Gold Coast Indy and the Australian Formula One Grand Prix (Fredline 2000)

identified the influence of a range of intrinsic variables. Key findings are referred to below, and these relationships are summarised in Table 2.

### **Residential Proximity and Contact with Event Zone**

It was found that those who held negative attitudes toward the events were more likely to live very close (within 1.5km on average) while those who lived more than 5km away appeared to be fairly unconcerned. Residents with positive attitudes tended to live somewhere in between. Similarly, people who visited the area frequently were more negative, while those who seldom did were indifferent.

### **Involvement in Tourism**

People who worked in tourism, or perceived that their industry was positively affected by the event, tended to have more positive attitudes, while those who did not were less positive.

### **Identification with the Theme**

Residents who identified themselves as having an interest in motorsport as a spectator sport or an interest in other aspects of the event were more positive than those who claimed no interest.

### **Socio-Political Values**

People who identified more with materialist goals for society such as security and economic growth (which tend to be aligned more with conservative political opinions) are more positive about the event than those who identify more with post-materialist values such as equality and civil rights.

**Table 2: Summary of previous research into intrinsic variation of residents' reactions to events**

<b>INTRINSIC VARIABLE</b>	<b>NEGATIVE</b>	<b>UNCONCERNED</b>	<b>POSITIVE</b>
<b>Distance of residence from event Zone</b>	Live close to event zone	Live far away from event zone	Live mid distance from event zone
<b>Travel to event zone</b>	Visit frequently	Visit very infrequently	Visit moderately often
<b>Involvement in tourism</b>	Tend not to work in tourism	Tend not to work in tourism	Tend to work in tourism
<b>Identification with theme</b>	Uninterested in motorsport	Uninterested in motorsport	Interested in motorsport
<b>Socio-Political values</b>	Tend toward postmaterialist values	Tend toward mixed values	Tend toward materialist values

In an effort to generalise these findings to a broader range of events, three case studies were included, the Australian Formula One Grand Prix, the Melbourne Moomba Festival, and the Horsham Art is... Festival. These events were selected to facilitate comparison of different themed events in the same community (Grand Prix compared to Moomba Festival), and comparison of similar themed events in different sized communities (Moomba festival compared to Art Is... Festival). A brief background on each of these events is provided next.

## **Case Studies**

### **Australian Formula One Grand Prix**

The Australian Formula One Grand Prix has been staged annually in Melbourne since 1996. It is a four-day event featuring qualifying, practice and support races on the first three days and the main Formula One Race on the final day (a Sunday). In the early years there was some opposition to the staging of the event in Albert Park and a number of local residents formed a vocal protest group known as 'Save Albert Park'. This group still exists, however, in recent years there has been far less publicity relating to their activities. There is evidence to suggest that resident reactions to the event have become less intense which may be due to acclimatisation or selective migration .

### **Melbourne Moomba Festival**

The Melbourne Moomba Festival is an outdoor festival held over the Labour Day weekend in March in the city

centre. The origins of the word 'Moomba' come from an Aboriginal word meaning 'Lets get together and have fun' and the festival features a street parade, street parties, a fireworks display, water-skiing competitions on the Yarra River, and fair-ground attractions. Moomba is managed by the City of Melbourne, and was originally held to encourage the community and visitors into the city centre. The traditional Moomba festival, however, has been re-invented and launched as Melbourne Moomba Waterfest in 2003 merging the old and the new themes for the festival. Moomba is 'free' to enter and is open to the public although some activities may incur a cost. In 2004, over 950,000 people attended Moomba Waterfest. The 2004 program combined Moomba events such as the Parade, water skiing, fire show and carnival, with new programs, including a dedicated children's entertainment area, a multicultural and community performance and workshop, starlight cinema, a series of night time 'River Rhythms' concerts and the 'Birdman Rally.' (<http://www.melbourne.vic.gov.au/info>)

### **Horsham Art Is... Festival.**

This annual event in Horsham is a ten day community celebration offering a diverse range of activities. The event has continued to grow since 1996, and showcases performing and visual artists from the Wimmera region, and from around the state of Victoria. The festival involves artists from all genres and involve exhibitions, dance and music performances. It is a community-based festival aimed at broadening community participation and audience experience. There is a great range of activities scheduled in both the day and night over 10 days.

The event is held in the last 10 days of March each year and relies on links with other organisations both local and regional to launch the event. There are some free events open to the public. Ticket costs vary between events and include concession and family rates.

## **Chapter 3**

# **METHOD**

## **Definition of Population and Selection of Sampling Frame**

The population of interest in each of the case studies was defined as the permanent local population of the urban areas in which the events take place. However, finding a sampling frame that accurately represents this population is difficult. The two most obvious choices are the telephone directory and electoral rolls, but each of these has their disadvantages. A third option, and the one chosen for this study, is the use of a proprietary list such as the National Consumer File maintained by Prime Prospects List Marketing. This list is based on the electoral roll but is supplemented with information from the census in an effort to overcome the representation issues associated with the rolls. This list is also updated on a more frequent basis.

An arbitrary decision was made to include only residents with a 15 km radius of the centre of the event precinct. This decision was made in recognition of the localised nature of many event impacts such as noise and traffic congestion, and the need to adequately represent people living close to the event precinct.

## **Sampling Methods**

Given the decision to use the National Consumer File to provide the sampling frame, a variety of stratification options were possible. Previous work in this area has employed disproportionate stratified sampling based on geographical strata, with the aim of over-representing those living closest to the events in an effort to illuminate the importance of proximity (Fredline & Faulkner 2002a, 2002b). As there is already substantial evidence of the relationship between proximity and impacts, this over-representation was not required in the current study. In the case of the two Melbourne based events, simple random sampling within the defined population was employed. In the Horsham case study, a slightly different approach was adopted because of the small population size. An entire population listing for the area was obtained (6,000 residents) and residents were systematically selected using a sampling fraction of one in five.

## **Administration Method**

The instrument was administered via a postal survey. Although this method is not without its shortcomings, given resource limitations, it is often the most effective method for collecting data adequate for analysis. The most serious problems associated with postal surveys are low response rates, self-completion errors and missing data. Previous studies in this area would suggest that response rates in the order of 30% are possible in this type of research (Fredline 2000) provided that reminder questionnaires are dispatched. However, any non-response is an issue of concern. Although it is difficult to investigate, it seems logical to suggest that non-response to a survey investigating perceptions of the impacts of events on quality of life would be, at least to some extent, associated with a lack of concern. Although non-response bias has the potential to distort the representation of different sectors in the community, it should not impact the overall range of responses observed.

The second major problem associated with a postal survey is erroneous or missing data. The most effective tactics for minimising this problem include employing good instrument design principles and pilot testing, and these strategies were utilised in this study.

## **Instrument Design**

The instrument was designed utilising statements from previous event and tourism literature with the inclusion of additional items from the social capital literature. Three slightly different versions of the instrument were developed for the three different events, the only differences being variation as necessary to allow for differences in the types of event and locations. A copy of the instrument used for the Grand Prix is presented in Appendix A.

Following the methods of Fredline (2000), the main dependant variables, namely, residents' perceptions of the impacts of events, were measured using a three part scale. The scale included 45 impact statements (42 of which are common to all instruments), and residents were first asked to assess whether they believed the item had changed because of the event and to identify the direction of the change. If residents did perceive a change,

they were subsequently asked to assess the effect on their personal quality of life, and also the effect on the community as a whole. These latter two assessments were measured using a seven point Likert type scale ranging from -3 (very negative impact) to +3 (very positive impact).

Other sections included the questions measuring the independent variables and demographic information. These variables were included to examine variations in perceptions within communities. Given that the instrument used in this study drew very heavily upon an instrument that was used successfully in previous research (Fredline 2000; Fredline & Faulkner 2002a), it was considered that there was no need to employ an extensive pre/pilot testing phase. However, prior to the data collection phase, the instrument was tested with an appropriate group for comprehension and ease of completion.

The final instrument included approximately 80 questions and spread over 12 pages, and would be considered long by any standards. Pilot testing indicated that it would take between 15 and 30 minutes to fully complete. In an effort to boost response, an incentive was offered in the form of a \$500 lottery for full completion by the specified date. However, given the length and complexity of the instrument, a low response rate was anticipated.

As previously mentioned, non-response creates concerns about representativeness and bias. Nevertheless, such a large instrument was considered necessary to fully consider all of the potential impacts of the events and to assess the differences and similarities across events. At this stage of scale development, therefore, it was decided that, in the trade-off between parsimony and thoroughness, priority should be given to thoroughness. In subsequent stages, once a suitable level of understanding has been reached about the underlying dimensions of event impacts as perceived by the host community, this lengthy scale will be replaced a compressed scale which is easier to administer and promotes higher rates of response.

## **Response**

Given the anticipation of low response, large numbers of survey packages were dispatched for each event, with the aim of achieving datasets in the order of 200-300 responses for each event. For each of the two Melbourne based events, 2,400 questionnaires were distributed, while in Horsham, 1,400 packages were sent out. The usable returns for the Grand Prix, the Moomba Festival, and the Horsham Art Is...Festival were 279, 181 and 96 respectively, representing effective response rates of 13%, 8%, and 8%.

The demographic characteristics of the sample were compared to known population parameters from the 2001 Census Data. As can be seen in Table 3, young people are substantially underrepresented in the sample, as are non-Australian born residents. Given that such demographic groups are less likely to be captured on electoral rolls, this result is not unexpected. Other demographic groups appear to be adequately represented.

**Table 3: Response for all events**

		FREQUENCY	PERCENT	POPULATION PROPORTION	$\chi^2$
Gender	Female	263	48.8	51.05	
	Male	276	51.2	48.95	0.2 (3.841)
Age (Mean = 50.9 years)	18-29 years	31	6.0	23.48	
	30-39 years	99	19.0	21.23	
	40-49 years	135	26.0	19.17	
	50-59 years	114	21.9	15.04	
	60-69 years	73	14.0	9.58	
	70-79 years	55	10.6	7.46	
	80 years and over	13	2.5	4.03	22.8 (12.592)
Highest education level completed	No formal qualifications	34	6.4	No equivalent data available	
	Completed year 10 at school	60	11.2		
	Completed year 12	88	16.4		
	Trade Qualification	55	10.3		
	Technical College/TAFE Diploma	66	12.3		
	Undergraduate Degree	91	17.0		
	Post Graduate Degree	122	22.8		
Employment status	Employed	303	60.4	56.8	
	Unemployed	21	4.2	4.1	
	Retired	109	21.7	Not in Labour Force 39.1	
	Student	11	2.2		
	Student/part-time work	16	3.2		
	Home duties	42	8.4		0.6 (5.991)
Where were you born?	Melbourne	259	47.7	Total born in Australia 65.75	
	Elsewhere in Victoria	116	21.4		
	Elsewhere in Australia	61	11.2		
	In another country	107	19.7	34.25	9.4 (3.841)

\*The calculated value of  $\chi^2$  appears first, with the appropriate critical value enclosed in parentheses.

However, demographic representativeness does not necessarily imply adequate representation in terms of variation in perceptions of event impacts. Based on previous research, it would be expected that at least three different subgroups would exist within the community, namely, those who have largely negative perceptions of the impacts of the event(s) on their personal quality of life, those who are predominantly positively disposed, and those who are largely unconcerned, perceiving little or no impacts of the event(s). Given the high non-response, it would seem likely that the latter group would be underrepresented, as their motivation to participate in the survey would probably be lower than those whose feelings were more intense. Previous research has also tended to indicate that the unconcerned sector of the community is the largest (Fredline 2000).

This likely lack of proportional representation at this stage of scale development is not of major concern. The main aim is to ensure that the range of perceptions is covered, and indeed, adequate proportional representation would be likely to yield very low sample sizes at the extreme ends of the spectrum, hindering statistical comparison.

The preliminary results presented below should not, therefore, be considered as absolute indicators of the impacts of events on the quality of life of Melbourne and Horsham residents. However, given that the same methods have been used in each case study, it can be assumed that any biases are fairly consistent across the data sets. Thus, the results can be used as an indicator of issues of relative importance and as a mechanism for comparison across events, communities, and community sub-groups.

Chapter 4

RESULTS

The following results section initially presents an overall comparison of the three events and then investigates the intrinsic variation in resident perceptions of the events.

Overall Perceptions of Impacts

As referred to in method section, the main dependant variables, perception of personal and community level impacts of the events, were measured in two ways. Initially, two overall statements were presented to respondents as shown in Table 4, and similar patterns can be observed. In the case of each event, the majority indicated ‘no effect’ at the personal level, but the proportions indicating a positive impact outweighed those indicating a negative impact, resulting in a positive mean score. It is interesting to note that although the Grand Prix registered the highest proportions indicating a negative impact, it also registered the highest proportion indicating the most positive level of benefit. This greater tendency toward polarisation can also be observed in the slightly higher standard deviation scores associated with this event.

Table 4: Overall perceptions of personal and community impacts for each event

STATEMENT	EVENT	VERY NEG. -3	-2	-1	NO EFFECT 0	+1	+2	VERY POS. +3	MEAN	STD DEV
Overall, how does the event affect your personal quality of life?	Grand Prix	3.3%	3.3%	8.9%	51.3%	17.7%	4.1%	11.4%	0.35	1.35
	Moomba	1.1%	1.1%	3.3%	59.4%	25.0%	5.0%	5.0%	0.41	0.93
	Art Is...	1.1%	0%	2.2%	48.9%	27.2%	12.0%	8.7%	0.72	1.08
Overall, how does the event affect the community as a whole?	Grand Prix	1.9%	4.6%	8.1%	6.9%	24.1%	28.7%	25.7%	1.36	1.52
	Moomba	1.1%	0.6%	2.9%	8.6%	36.0%	38.3%	12.6%	1.43	1.07
	Art Is...	1.1%	1.1%	1.1%	9.9%	35.2%	29.7%	22.0%	1.54	1.15

When tested using a 2 X 3 mixed factorial design ANOVA (impact level X event), the only significant effect observed was for impact level,  $F_{(1, 524)} = 265.7, p < 0.05$ ; that is, for each event the perceived benefit at the community level is significantly higher than at the personal level, but the differences between the event means at each level are not significant.

Perceptions of Specific Impacts

A series of Chi-square contingency table analyses was performed comparing the relationship between the different events and the perceived direction of change of the impacts (that is, Part A in the dependant measure scale as described in the method section). In an effort to simplify these results, Table 5 shows only the direction of change perceived by the largest proportion of the respective sample. Where this proportion is significantly higher or lower than would have been expected (based on standardised cell residuals greater than  $\pm 2$ ), this is highlighted in bold and the direction is denoted by an upward or downward facing arrow.

**Table 5: Perceptions of direction of change for specific event impacts**

EVENT IMPACTS	GRAND PRIX		MOOMBA FESTIVAL		ART IS... FESTIVAL	
	Direction	%	Direction	%	Direction	%
Maintenance of public facilities	Increased	65.2	Increased	48.3	Increased	50.0
Noise levels	Increased	81.5	Increased	56.3	No Change	70.3 ↑
Employment opportunities	<b>Increased</b>	<b>72.4 ↑</b>	Increased	58.1	<b>Increased</b>	<b>43.3 ↓</b>
Range of interesting things to do	Increased	68.4	Increased	78.0	Increased	75.8
Number of people in the area	Increased	59.5	Increased	59.8	No Change	45.7 ↑
Rowdy and delinquent behaviour	No Change	36.0	<b>Increased</b>	<b>41.4 ↑</b>	No Change	63.7 ↑
Property values in the area	Don't Know	43.5	No Change	<b>46.3 ↑</b>	No Change	67.4 ↑
Crime levels	<b>Don't Know</b>	<b>49.1 ↑</b>	No Change	37.1	No Change	57.0 ↑
Entertainment opportunities	<b>Increased</b>	<b>69.4</b>	Increased	81.2	<b>Increased</b>	<b>73.6</b>
Prices of some goods and services	Increased	44.0	Increased	42.4	No Change	67.0 ↑
Pride that residents have in the city	Increased	68.3	Increased	58.7	Increased	64.0
Overall cost of living	No Change	63.2	No Change	61.6	No Change	80.0
Litter in the vicinity	Increased	38.2	<b>Increased</b>	<b>65.9 ↑</b>	No Change	55.6 ↑
Damage to the environment	Increased	39.2	Increased	37.8	No Change	66.7 ↑
Opportunities to meet new people	Increased	64.6	Increased	55.8	Increased	73.0
Opportunities for local business	Increased	67.8	Increased	67.1	Increased	65.6
Parking availability in the vicinity	Decreased	64.9	Decreased	65.3	<b>Decreased</b>	<b>44.9 ↓</b>
Traffic congestion in the vicinity	Increased	80.4	Increased	74.0	Increased	57.3
The number of tourists visiting at other times of the year	<b>Increased</b>	<b>56.3 ↑</b>	Increased	38.7	No Change	39.3
Excessive drinking and/or drug use	Don't Know	39.8	Don't Know	38.0	No Change	50.6 ↑
Turnover for local businesses	Increased	57.7	Increased	55.0	Increased	65.6
Number of people moving in permanently or buying holiday homes	Don't Know	56.3	Don't Know	50.9	No Change	54.9 ↑
The rights and civil liberties of local residents	<b>Decreased</b>	<b>37.5 ↑</b>	No Change	49.1	No Change	66.7 ↑
Appearance of area around event	Improved	72.5	Improved	53.2	Improved	70.3
Public transport	<b>Improved</b>	<b>47.8 ↑</b>	No Change	39.3	No Change	74.4 ↑
Interactions between locals and tourists	Improved	39.5	Improved	45.9	Improved	39.6
Facilities available to local residents	<b>Improved</b>	<b>43.8 ↑</b>	No Change	32.7	No Change	53.8
Social and moral values	No Change	60.4	No Change	55.0	No Change	59.3
The media coverage of the event promotes tourism and business development in Melbourne / Horsham	Agree	81.9	Agree	69.9	Agree	72.2
The public money spent on the event would be better spent on other things	Disagree	51.6	Disagree	62.0	Disagree	56.7

**Table 5: (continued) Perceptions of direction of change for specific event impacts**

EVENT IMPACTS	GRAND PRIX		MOOMBA FESTIVAL		ART IS... FESTIVAL	
	Direction	%	Direction	%	Direction	%
The event entertains local residents and gives them an opportunity to attend a major international event	Agree	63.5	Agree	69.2	Agree	87.8 ↑
The event disrupts the lives of local residents and causes them stress	Agree	61.7 ↑	Disagree	40.9	Disagree	70.7 ↑
Because of the event, the skill base for event management has increased	Agree	70.3	Agree	53.2	Agree	55.6
The event increases social inequity because it provides benefits to the rich, but none to the poor	Disagree	53.7	Disagree	65.9	Disagree	68.1
The event gives us an opportunity to show other people how special our community is	Agree	67.6	Agree	69.6	Agree	71.4
The event brings too many people into our community	Disagree	75.1	Disagree	78.3	Disagree	82.6
The event enhances Victoria's reputation as 'The Events State'	Agree	82.5	Agree	64.4	Agree	58.2
Because of the event, friends come and visit me	Disagree	70.4	Disagree	78.9	Disagree	69.9
Ordinary residents get no say in the planning and management of the event	Agree	53.1 ↑	Don't Know	48.6 ↑	Disagree	44.6 ↑
The event promotes values that are good	Agree	38.2 ↓	Agree	62.9 ↑	Agree	64.8 ↑
The event provides opportunities for people to have fun with their family and friends	Agree	79.1	Agree	94.3	Agree	90.0
The money that tourists spend when they come to the event helps to stimulate the economy	Agree	88.0	Agree	79.0	Agree	80.2

A number of broad observations can be made. Fewer impacts were perceived for the Art Is... Festival, with 16 of the 42 potential impacts being perceived by the majority to have not changed, compared with only three for the Grand Prix, and seven for the Moomba Festival. This is probably indicative of the fact that this is a much smaller event, without the same capacity to effect substantial change in the community, and that this is recognised by the local population. Additionally, it is interesting to note that for no statements did the majority of the Horsham sample indicate that they did not know about the direction of the impact change. Perhaps this is because this community is much smaller than Melbourne, and residents feel relatively better informed about the changes in their community.

Table 6 presents the mean scores of residents' perceptions of each impact on personal quality of life and overall community well being (that is, Parts B and C of the dependant measure). As noted in the method section, where respondents selected 'no change' or 'don't know' as their response to these questions, they were not required to complete Parts B or C. Therefore, for the purposes of calculating these overall means, the 'no change' responses were coded as zero (0) indicating 'no effect', while the 'don't know' responses were coded as missing and therefore eliminated from the analysis. It should thus be noted that the means presented in Table 6 do not necessarily included all respondents.

**Table 6: Perceptions of specific event impacts on personal and community quality of life**

EVENT IMPACTS	MEAN PERSONAL IMPACT RATING			MEAN COMMUNITY IMPACT RATINGS		
	GP 1	MOOMBA 2	ART IS 3	GP 1	MOOMBA 2	ART IS 3
<b>Maintenance of public facilities</b>	<b>0.71<sub>2</sub></b>	<b>0.23<sub>1</sub></b>	<b>0.41</b>	<b>1.40<sub>23</sub></b>	<b>0.72<sub>1</sub></b>	<b>0.81<sub>1</sub></b>
<b>Noise levels</b>	<b>-0.27</b>	<b>-0.02</b>	<b>-0.06</b>	<b>-0.79<sub>23</sub></b>	<b>-0.20<sub>1</sub></b>	<b>-0.03<sub>1</sub></b>
<b>Employment opportunities</b>	<b>0.22</b>	<b>0.21</b>	<b>0.15</b>	<b>1.40<sub>23</sub></b>	<b>1.01<sub>13</sub></b>	<b>0.57<sub>12</sub></b>
Range of interesting things to do	0.62	0.74	0.75	1.21	1.53	1.27
Number of people in the area	0.03	0.00	0.24	0.42	0.43	0.71
<b>Rowdy and delinquent behaviour</b>	<b>-0.16</b>	<b>-0.38</b>	<b>-0.06</b>	<b>-0.36</b>	<b>-0.67<sub>3</sub></b>	<b>-0.03<sub>2</sub></b>
<i>Property values in the area</i>	<i>0.17</i>	<i>0.02</i>	<i>0.04</i>	<i>0.49</i>	<i>0.19</i>	<i>0.15</i>
Crime levels	-0.05	-0.23	-0.13	-0.15	-0.26	-0.12
Entertainment opportunities	0.51	0.71	0.64	1.23	1.47	1.21
<i>Prices of some goods and services</i>	<i>-0.24</i>	<i>-0.40</i>	<i>-0.10</i>	<i>-0.32</i>	<i>-0.60</i>	<i>-0.11</i>
Pride that residents have in the city	0.75	0.64	0.67	1.15	1.10	1.06
Overall cost of living	-0.04	-0.16	0.04	-0.05	-0.05	0.06
<b>Litter in the vicinity</b>	<b>-0.16</b>	<b>-0.53</b>	<b>0.08</b>	<b>-0.53<sub>2</sub></b>	<b>-1.18<sub>13</sub></b>	<b>-0.27<sub>2</sub></b>
<i>Damage to the environment</i>	<i>-0.25</i>	<i>-0.24</i>	<i>-0.08</i>	<i>-0.41</i>	<i>-0.50</i>	<i>-0.03</i>
<i>Opportunities to meet new people</i>	<i>0.49</i>	<i>0.42</i>	<i>0.85</i>	<i>1.09</i>	<i>0.89</i>	<i>1.22</i>
Opportunities for local business	0.26	0.14	0.41	1.21	1.15	1.03
<b>Parking availability in the vicinity</b>	<b>-0.41</b>	<b>-0.35</b>	<b>-0.18</b>	<b>-1.16<sub>3</sub></b>	<b>-0.99</b>	<b>-0.40<sub>1</sub></b>
<b>Traffic congestion in the vicinity</b>	<b>-0.62<sub>3</sub></b>	<b>-0.54<sub>3</sub></b>	<b>-0.09<sub>12</sub></b>	<b>-1.18<sub>3</sub></b>	<b>-1.12<sub>3</sub></b>	<b>-0.36<sub>12</sub></b>
<i>The number of tourists visiting at other times of the year</i>	<i>0.26</i>	<i>0.20</i>	<i>0.26</i>	<i>1.26</i>	<i>0.92</i>	<i>0.74</i>
<b>Excessive drinking and/or drug use</b>	<b>-0.09</b>	<b>-0.39</b>	<b>-0.11</b>	<b>-0.30<sub>2</sub></b>	<b>-0.76<sub>13</sub></b>	<b>0.00<sub>2</sub></b>
Turnover for local businesses	0.24	0.12	0.33	1.17	1.21	1.26
Number of people moving in permanently or buying holiday homes	0.08	0.07	0.07	0.43	0.20	0.17
<b>The rights and civil liberties of local residents</b>	<b>-0.19</b>	<b>0.00</b>	<b>0.01</b>	<b>-0.71<sub>23</sub></b>	<b>-0.14<sub>1</sub></b>	<b>-0.03<sub>1</sub></b>
<i>Appearance of area around event</i>	<i>0.60</i>	<i>0.35</i>	<i>0.70</i>	<i>1.19</i>	<i>0.83</i>	<i>1.18</i>
<i>Public transport</i>	<i>0.34</i>	<i>0.29</i>	<i>0.14</i>	<i>0.81</i>	<i>0.64</i>	<i>0.23</i>
Interactions between locals and tourists	0.29	0.29	0.31	0.75	0.86	0.71
Facilities available to local residents	0.27	0.19	0.29	0.66	0.38	0.45
Social and moral values	-0.08	0.18	0.08	0.01	0.17	0.13
The media coverage of the event promotes tourism and business development in Melbourne / Horsham	0.41	0.34	0.41	1.50	1.36	1.23
The public money spent on the event would be better spent on other things	<b>-0.27<sub>23</sub></b>	<b>-0.01<sub>1</sub></b>	<b>-0.01<sub>1</sub></b>	<b>-0.38<sub>23</sub></b>	<b>-0.05<sub>1</sub></b>	<b>-0.01<sub>1</sub></b>

**Table 6: (continued) Perceptions of specific event impacts on personal and community quality of life**

EVENT IMPACTS	MEAN PERSONAL IMPACT RATING			MEAN COMMUNITY IMPACT RATINGS		
	GP 1	MOOMBA 2	ART IS 3	GP 1	MOOMBA 2	ART IS 3
<i>The event entertains local residents and gives them an opportunity to attend a major international event</i>	0.51	0.57	0.75	0.98	1.20	1.47
<b>The event disrupts the lives of local residents and causes them stress</b>	<b>-0.19</b>	<b>-0.04</b>	<b>-0.05</b>	<b>-0.85<sub>23</sub></b>	<b>-0.26<sub>1</sub></b>	<b>-0.07<sub>1</sub></b>
<i>Because of the event, the skill base for event management in Melbourne has increased</i>	0.37	0.15	0.30	1.27	0.87	1.28
The event increases social inequity because it provides benefits to the rich, but none to the poor	-0.06	-0.01	0.01	-0.32	-0.18	-0.04
The event gives us an opportunity to show other people how special our community is	0.50	0.50	0.63	1.18	1.08	1.37
The event brings too many people into our community	-0.02	0.01	0.05	0.02	0.01	0.14
<i>The event enhances Victoria's reputation as 'The Events State'</i>	0.68	0.52	0.52	1.41	1.29	0.93
<i>Because of the event, friends come and visit me</i>	0.36	0.12	0.31	0.38	0.14	0.32
<b>Ordinary residents get no say in the planning and management of the event</b>	<b>-0.22</b>	<b>-0.15</b>	<b>-0.02</b>	<b>-0.77<sub>3</sub></b>	<b>-0.55</b>	<b>-0.08<sub>1</sub></b>
<b>The event promotes values that are good</b>	<b>0.38<sub>3</sub></b>	<b>0.57</b>	<b>0.80<sub>1</sub></b>	<b>0.67<sub>23</sub></b>	<b>1.18<sub>1</sub></b>	<b>1.39<sub>1</sub></b>
<i>The event provides opportunities for people to have fun with their family and friends</i>	0.68	0.83	1.00	1.38 <sub>2</sub>	1.77 <sub>1</sub>	1.70
The money that tourists spend when they come to the event helps to stimulate the economy	0.56	0.41	0.50	1.70	1.62	1.49

A mixed design factorial ANOVA (similar to the analysis described with regard to Table 4 and more fully described in Appendix B) was used to examine the differences between the mean scores presented in Table 6. When these are interpreted in conjunction with the proportions in Table 4, the following conclusions can be drawn about the perceptions of the differing events:

- All events were perceived as having a positive impact on maintenance of public facilities but this was seen to be far more beneficial in the case of the Grand Prix than for the other events. Similarly, a larger proportion of respondents felt that the Grand Prix had improved facilities available to local residents.
- Unlike the other events, the Grand Prix is perceived as having a substantially negative impact on the community because of the noise it creates.
- The events are seen to have differencing levels of impact on employment opportunities, with the Grand Prix being seen as providing substantial employment opportunities, while the Art Is... Festival was seen as having the lowest (but still positive) employment impact.
- The Moomba festival was perceived as having a more negative impact on rowdy and delinquent behaviour and excessive drinking and drug use than either of the other two events. Similarly Moomba is seen as having a more negative impact on litter than the Grand Prix or Art Is... Festival.
- Traffic congestion and the decreased availability of parking were seen to be less of a problem with regard to the Art Is... Festival in Horsham, than they were with regard to the two Melbourne based events.

- It was perceived that the Grand Prix is associated with a decrease in the rights and civil liberties of local residents, but no similar impact was reported for the other two events. Similarly, there was substantial agreement that ordinary residents get no say in the planning and management of the Grand Prix, whereas this was seen to be a less substantial issue for the Moomba Festival and not an issue at all for the Art Is... Festival.
- The Grand Prix is also seen to be somewhat disruptive, inducing stress in the lives of local residents, while this was not seen to be a problem associated with the other events.
- All of the events were seen as providing opportunities for people to have fun with their family and friends, although to varying extents. The Art Is... Festival was seen as providing the most benefit in this regard, while the Grand Prix was perceived as providing the least benefit.
- The proportion who believed that the events promoted values that are good was significantly lower with respect to the Grand Prix, than for the other two events.

The differences in perceived costs and benefits of the three events can be further explored in Table 7, Table 8 and Table 9, which show the most strongly perceived personal and community level benefits for each event based on the mean scores for each sample. It is interesting to note that while the opportunity to have fun with family and friends is the most highly perceived benefit for the Moomba and Art Is... Festivals at both the personal and community levels, this benefit is not paramount for the Grand Prix. At a personal level it is perceived that the Grand Prix increases resident's level of pride in their city, while the economic benefits are seen as the most important community legacy.

It is also interesting to note that although the negative impacts of concern to Horsham residents are similar to those associated with the two Melbourne based events, that the mean scores are much closer to zero, indicating that these impacts are not seen to be as detrimental to quality of life.

**Table 7: The most strongly perceived benefits and costs of the Grand Prix**

<b>PERSONAL BENEFITS</b>	<b>MEAN</b>	<b>COMMUNITY BENEFITS</b>	<b>MEAN</b>
Pride that residents have in the city	0.75	The money that tourists spend when they come to the event helps to stimulate the economy	1.70
Maintenance of public facilities	0.71	The media coverage of the event promotes tourism and business development in Melbourne / Horsham	1.50
The event enhances Victoria's reputation as 'The Events State'	0.68	The event enhances Victoria's reputation as 'The Events State'	1.41
The event provides opportunities for people to have fun with their family and friends	0.68	Employment opportunities	1.40
Range of interesting things to do	0.62	Maintenance of public facilities	1.40
<b>PERSONAL COSTS</b>	<b>MEAN</b>	<b>COMMUNITY COSTS</b>	<b>MEAN</b>
Traffic congestion in the vicinity	-0.62	Traffic congestion in the vicinity	-1.18
Parking availability in the vicinity	-0.41	Parking availability in the vicinity	-1.16
The public money spent on the event would be better spent on other things	-0.27	The event disrupts the lives of local residents and causes them stress	-0.85
Noise levels	-0.27	Noise levels	-0.79
Damage to the environment	-0.25	Ordinary residents get no say in the planning and management of the event	-0.77

**Table 8: The most strongly perceived benefits and costs of the Moomba Festival**

PERSONAL BENEFITS	MEAN	COMMUNITY BENEFITS	MEAN
The event provides opportunities for people to have fun with their family and friends	0.83	The event provides opportunities for people to have fun with their family and friends	1.77
Range of interesting things to do	0.74	The money that tourists spend when they come to the event helps to stimulate the economy	1.62
Entertainment opportunities	0.71	Range of interesting things to do	1.53
Pride that residents have in the city	0.64	Entertainment opportunities	1.47
The event entertains local residents and gives them an opportunity to attend a major international event	0.57	The media coverage of the event promotes tourism and business development in Melbourne / Horsham	1.36
PERSONAL COSTS	MEAN	COMMUNITY COSTS	MEAN
Traffic congestion in the vicinity	-0.54	Litter in the vicinity	-1.18
Litter in the vicinity	-0.53	Traffic congestion in the vicinity	-1.12
Prices of some goods and services	-0.40	Parking availability in the vicinity	-0.99
Excessive drinking and/or drug use	-0.39	Excessive drinking and/or drug use	-0.76
Rowdy and delinquent behaviour	-0.38	Rowdy and delinquent behaviour	-0.67

**Table 9: The most strongly perceived benefits and costs of the Art Is... Festival**

PERSONAL BENEFITS	MEAN	COMMUNITY BENEFITS	MEAN
The event provides opportunities for people to have fun with their family and friends	1.00	The event provides opportunities for people to have fun with their family and friends	1.70
Opportunities to meet new people	0.85	The money that tourists spend when they come to the event helps to stimulate the economy	1.49
The event promotes values that are good	0.80	The event entertains local residents and gives them an opportunity to attend a major international event	1.47
The event entertains local residents and gives them an opportunity to attend a major international event	0.75	The event promotes values that are good	1.39
Range of interesting things to do	0.75	The event gives us an opportunity to show other people how special our community is	1.37
PERSONAL COSTS	MEAN	COMMUNITY COSTS	MEAN
Parking availability in the vicinity	-0.18	Parking availability in the vicinity	-0.40
Crime levels	-0.13	Traffic congestion in the vicinity	-0.36
Excessive drinking and/or drug use	-0.11	Litter in the vicinity	-0.27
Prices of some goods and services	-0.10	Crime levels	-0.12
Traffic congestion in the vicinity	-0.09	Prices of some goods and services	-0.11

These specific impact statements can then be used as an additional measure of overall impact through the creation of a multi item summated measure. Table 10 shows the comparison between the single item scores (previously reported in Table 3) and these summated multi-item scores. As is typical of multi-item scales, a much smaller range is observed; however, strong bivariate correlations were observed between the two measures.

**Table 10: Comparison of single and multi-item scores of overall impact**

STATEMENT	EVENT	SINGLE ITEM MEASURE		MULTI ITEM MEASURE		CORRELATION COEFFICIENT
		MEAN	STD DEV	MEAN	STD DEV	
Personal Impact	Grand Prix	0.35	1.35	0.18	0.52	0.710
	Moomba	0.41	0.93	0.15	0.35	0.699
	Art Is...	0.72	1.08	0.27	0.49	0.534
Community Impact	Grand Prix	1.36	1.52	0.44	0.77	0.597
	Moomba	1.43	1.07	0.42	0.52	0.578
	Art Is...	1.54	1.15	0.54	0.61	0.562

## Future Preferences

An additional question was asked regarding residents' preferences for continuation of the event in either their current location or an alternative. As shown in Table 11, the Moomba Festival was supported to the greatest extent, while the Grand Prix received less support; however, the vast majority of this sample was in favour of the continuation of the Grand Prix in its current location.

**Table 11: Preferences for future of events**

PREFERENCE	GRAND PRIX		MOOMBA FESTIVAL		ART IS... FESTIVAL	
	FREQ.	PERCENT	FREQ.	PERCENT	FREQ.	PERCENT
Discontinue	62	22.8	18	10.2	15	17.0
Continue in another location	25	9.2	16	9.0	7	8.0
Continue in current location	185	68.0	143	80.8	66	75.0

## Comparison of Perceived Impacts of a Range of Events

In the Grand Prix and Moomba festival instruments respondents were asked to rate the personal and community level impacts of a range of major events. A simpler scale was used than that employed in Section B for the main dependant variable. This scale ranged only from -1 (negative impact) to +1 (positive impact).

As shown in Table 12, the mean for the sample as a whole indicates that the event perceived as being most beneficial, at both personal and community levels, is the Australian Open Tennis Championship. The Grand Prix was rated as producing the lowest level of benefit, but nonetheless it is still rated overall as producing positive rather than negative impacts.

**Table 12: Mean rating of personal and community benefit of major Melbourne events**

EVENT	PERSONAL MEAN	COMMUNITY MEAN
Australian Open Tennis Championships	0.56	0.96
Australian Football League (AFL) Finals Series	0.52	0.91
Melbourne International Flower and Garden Show	0.44	0.88
Melbourne Festival	0.42	0.87
Spring Racing Carnival	0.40	0.85
Melbourne Food and Wine Festival	0.39	0.84
Melbourne International Comedy Festival	0.38	0.85
Melbourne Moomba Festival	0.37	0.83
Australian Formula One Grand Prix	0.18	0.60

## Community Segmentation

In an effort to identify differing representations of these events, cluster analysis was used to group respondents based on their perception of the impacts of the events on their personal quality of life. A two stage clustering procedure was undertaken building on the analysis previously reported in the Grand Prix technical report (REF). In order to facilitate comparison with the previous analysis, the cluster centroids observed in the original hierarchical analysis on the Grand Prix sample were used to seed a non-hierarchical analysis of the three event data set. Thus, the five clusters are highly similar to those identified in the original Grand Prix only analysis.

Table 13 shows the distances between the cluster centroids (between group variability) in the lower half of the matrix and the means of the distances of each case from its cluster centroid (within group variability) on the diagonal. In an ideal cluster solution the between group variability would be greater than the within group variability. Such perfect discrimination cannot be claimed in this case, however, there appears to be an adequate separation of the groups.

**Table 13: Comparison of between and within group variability**

CLUSTER	VERY NEGATIVE N = 6	NEGATIVE N = 32	UNCONCERNED N = 296	POSITIVE N = 178	VERY POSITIVE N = 41
Very Negative	5.18				
Negative	8.53	5.91			
Unconcerned	12.82	5.59	2.38		
Positive	14.79	7.51	3.22	4.24	
Very Positive	19.23	12.16	8.60	5.75	6.7

The five cluster solution describes a range of reactions from highly negative to highly positive, with a large group in the middle who appeared to be largely unconcerned about the personal impacts of the events. Notwithstanding the fact that this solution appears to be acceptable, the small sample sizes in the groups at the extreme ends of the spectrum impedes statistical comparison. Therefore, a decision was made to collapse together the two negative groups and the two positive groups.

Table 14 shows the relationship between cluster membership and event. It can be seen that respondents in the Grand Prix survey were somewhat more likely to be in the negative cluster than those who participated in the surveys relating to the other two events. This is consistent with the descriptive statistics which reported more negative attitudes to some aspects of the Grand Prix.

**Table 14: Relationship between cluster membership and event**

CLUSTER	N	MELBOURNE GRAND PRIX	MELBOURNE MOOMBA FESTIVAL	HORSHAM ART IS... FESTIVAL	TOTAL
		N = 279	N = 180	N = 94	
Negative	38	10.04% ↑	3.89%	3.19%	6.87%
Unconcerned	269	51.97%	57.22%	51.06%	53.53%
Positive	219	37.99%	38.89%	45.74%	39.6%

## Perceptions of Impacts across Clusters

Table 15 displays the mean overall ratings of impact on quality of life for each cluster, and provides some evidence that the discrimination between the groups has been effective. It can be seen that the negative cluster perceive the event to be negative at both a personal and a community level, although they perceive themselves to be more negatively impacted than the community at large. The unconcerned group perceive very little impact personally, but believe that the event is slightly good for the community. The positive group perceive personal benefit but report that the benefit to the community is even greater.

**Table 15: Mean impact ratings for each cluster**

CLUSTER	EVENT	N	PERSONAL	COMMUNITY	OVERALL PERSONAL	OVERALL COMMUNITY
Negative	Grand Prix	28	-1.43	-0.44	-1.32	-0.47
	Moomba	7	-0.86	-0.43		
	Art Is...	3	-1.50	-1.00		
Unconcerned	Grand Prix	145	0.03	1.10	0.10	1.17
	Moomba	103	0.15	1.21		
	Art Is...	48	0.21	1.29		
Positive	Grand Prix	106	1.26	2.18	1.19	2.05
	Moomba	70	0.94	1.93		
	Art Is...	43	1.44	1.95		

## Cluster Profiles

In an effort to better understand the intrinsic variation in perceptions, that is, why some groups perceive the events in different ways to others, the observed clusters were profiled on a range of variables which had been identified in previous research as being relevant.

## Contact

As referred to in the review of literature, previous research has indicated a negative relationship between residential proximity and/or contact with the event zone and perceptions of the impacts of the event on quality of life. That is, people who have higher levels on contact tend to be more negatively disposed to the event. However, as shown in Table 16, such a relationship was not observed in this case using the pooled event data. This result was puzzling given the strength of the relationship observed previously; therefore, the events were then examined individually and the anticipated relationship was observed for the Grand Prix only data ( $\chi^2_{(8)} = 21.3, p < 0.05$ ) with respondents who never visit the area being more likely to be unconcerned, and those who visit every day being more likely to be negative. It appears that contact is important in predicting cluster membership for the Grand Prix, but it is not important for either Moomba or the Art Is... Festival. This is likely to be because the localised negative impacts of the Grand Prix are more substantial.

**Table 16: Summary of cluster profiles**

VARIABLE	RESPONSE	NEGATIVE	UNCONCERNED	POSITIVE	
Contact $\chi^2_{(8)} = 15.2,$ $p > 0.05$	Never visit event zone	8.1%	21.3%	12.2%	
	Visit event zone every day	21.6%	21.3%	25.4%	
Involvement in industry positively affected by event $\chi^2_{(6)} = 23.8,$ $p < 0.05$	Current Involvement	2.7%	7.5%	<b>16.0% ↑</b>	
	Previous involvement	8.1%	5.8%	10.8%	
	Involvement of family or close friends	8.1%	8.9%	13.6%	
	No involvement	81.1%	77.8%	<b>59.6% ↓</b>	
Identification with Theme $\chi^2_{(6)} = 174.8,$ $p < 0.05$	I am an avid fan of event and try to attend every year	0%	<b>1.4% ↓</b>	<b>15.5% ↑</b>	
	I am interested in aspects of the event	<b>8.1% ↓</b>	<b>40.7% ↓</b>	<b>71.8% ↑</b>	
	Not interested in event, but sometimes attend because of family or friends are interested	24.3%	<b>24.8% ↑</b>	<b>10.8% ↓</b>	
	Absolutely no interest in event and do not wish to attend	<b>67.6% ↑</b>	<b>33.1% ↑</b>	<b>1.9% ↓</b>	
Leisure orientations – mean annual participation rates	Attend a popular music concert	$F_{(2, 521)} = 4.5,$ $p < 0.05$	2.49	1.23 <sub>3</sub>	3.72 <sub>2</sub>
	Visit museums or art galleries	$F_{(2, 523)} = 8.3,$ $p < 0.05$	9.08 <sub>23</sub>	2.02 <sub>13</sub>	4.01 <sub>12</sub>
	See a movie	$F_{(2, 526)} = 3.6,$ $p < 0.05$	12.28	7.44 <sub>3</sub>	11.62 <sub>2</sub>
	Visit a pub or club	$F_{(2, 515)} = 5.1,$ $p < 0.05$	18.15	9.91 <sub>3</sub>	15.89 <sub>2</sub>
Socio-political values $\chi^2_{(4)} = 22.4,$ $p < 0.05$	Mostly post-materialist (0-2 materialist values)	<b>68.4% ↑</b>	37.8%	33.3%	
	Mixed (3 materialist values)	10.5%	26.4%	20.1%	
	Mostly materialist (4-6 materialist values)	21.1%	35.8%	46.6%	
<b>DEMOGRAPHICS</b>					
Age	Mean $F_{(2, 522)} = 1.1,$ $p > 0.05$	50.9	48.7	50.1	
Gender $\chi^2_{(2)} = 1.8,$ $p > 0.05$	Male	41.7%	53.1%	50.5%	
	Female	58.3%	46.9%	49.5%	

Proportions reported are within columns

## Involvement

Respondents were asked about their involvement in industries positively affected by the events such as tourism, hospitality, or retail. Different level of involvement were defined, the highest being current employment in or ownership of a business, followed by previous employment or ownership, and employment or ownership of such a business by family members or close friends. The lowest level comprised people who did not report any of the above and who were classified as having no involvement. As shown in Table 16, the results are consistent with previous research demonstrating that people with an involvement are more likely to have positive perceptions of the event.

## Identification with Theme

A strong relationship was observed between identification with the theme of the event and cluster membership, with members of the positive cluster much more likely to register higher levels of interest in the event than negative and unconcerned groups.

In addition to measuring interest in the specific event, a scale was included to ascertain leisure orientations of respondents to see whether or not these were related to cluster membership. This scale asked respondents to

report their participation rates in each of 15 leisure activities, on a six-point ordinal level scale ranging from never to several times a week. These ordinal scale points were then recoded to reflect an estimate of the number of times per year that the respondent participated in the specified event as shown in Table 17. Using one-way ANOVA, significant differences in participation rates were observed for four of the activities as shown in Table 16. In all four cases, the unconcerned group reported the lowest participation rates, with the negative group displaying the highest rate in all activities except attending a popular music concert, which was most common amongst positive cluster members.

**Table 17: Recoding for leisure orientation scale**

ORDINAL CODE	SCALE POINT DESCRIPTION	ESTIMATED NUMBER OF TIMES PER YEAR
0	Never	0
1	Once a year or less often	1
2	Several times a year	2
3	Less than once a week but usually at least once a month	12
4	About once a week	52
5	Several times a week	104

### Socio-Political Values

Socio-political values were measured using Inglehart’s Materialism scale. Respondents are presented with 12 statements, six of which represent materialist values and six which represent post-materialist values. The statements are presented in three sets of four (see Section G of the Instrument presented in Appendix A) and respondents are asked to choose the two they most identify with. Once all selections are made and the scale is scored in terms of the number of materialist values selected, the range is between zero and six. These data were then recoded into three groups as shown in Table 16: mostly post-materialist, mixed, and mostly materialist. As has been observed in previous research, people with mostly post-materialist values are more likely to be negatively disposed to events.

### Demographics

As can be seen from Table 16, there were no significant differences observed in terms of the average age of cluster members, and there was no relationship observed with gender.

### Attendance

It is also interesting to observe any differences in attendance patterns amongst the different clusters. As would be expected, people who are more negatively disposed to the event are most likely to have not ever attended the event, while positive cluster members are most likely to have a history of attendance (see Table 18).

**Table 18: Attendance patterns across clusters**

VARIABLE	RESPONSE	NEGATIVE	UNCONCERNED	POSITIVE
Attendance $\chi^2_{(6)} = 90.5,$ $p < 0.05$	Never attended	<b>64.9% ↑</b>	<b>50.2% ↑</b>	<b>19.3% ↓</b>
	Attended in the past but not this year	29.7%	41.6%	46.7%
	Attended this year for the first time	0%	2.4%	4.2%
	History of attendance including this year	5.4%	5.8%	<b>29.7% ↑</b>

As shown in Table 19, attendance rates also varied substantially by event with respondents being much more likely to have attended the Moomba Festival and the Art Is... Festival than the Grand Prix. This is logical given that the former two events are largely free, while Grand Prix is relatively expensive. It is interesting to note though that Moomba respondents were most likely to have attended in the past but not this year, while Art Is... Festival respondents were most likely to have a history of attendance including this year.

**Table 19: Attendance patterns across events**

VARIABLE	RESPONSE	GRAND PRIX	MOOMBA FESTIVAL	ART IS... FESTIVAL
Attendance $\chi^2_{(6)} = 175.2,$ $p < 0.05$	Never attended	<b>62.9% ↑</b>	<b>10.2% ↓</b>	<b>24.2% ↓</b>
	Attended in the past but not this year	<b>25.5% ↓</b>	<b>71.8% ↑</b>	38.5%
	Attended this year for the first time	1.8%	0.6%	<b>11.0% ↑</b>
	History of attendance including this year	<b>9.8% ↓</b>	17.5%	<b>26.4% ↑</b>

## Perceptions of Other Events

As reported earlier, the Grand Prix and Moomba respondents were asked to rate the impacts of a range of major events staged annually in Melbourne. These ratings were then compared across clusters and some interesting patterns can be observed. As seen in Table 20, both the unconcerned and positive groups rate the Tennis Championships and the AFL Finals most highly in terms of personal benefit, while the negative group rates the Melbourne Festival as having the most positive impact on personal quality of life.

**Table 20: Ratings of impact of major Melbourne events by cluster**

EVENT	NEGATIVE		UNCONCERNED		POSITIVE		TOTAL
	Mean	Rank	Mean	Rank	Mean	Rank	
Australian Open Tennis Championships	0.48	4	0.48	1	0.68	1	0.56
Australian Football League (AFL) Finals Series	0.32	6	0.45	2	0.65	2	0.52
Melbourne International Flower and Garden Show	0.36	5	0.41	3	0.49	7	0.44
Melbourne Festival	0.58	1	0.32	5	0.53	4	0.42
Spring Racing Carnival	0.18	8	0.31	6	0.57	3	0.40
Melbourne Food and Wine Festival	0.50	3	0.35	4	0.42	9	0.39
Melbourne International Comedy Festival	0.52	2	0.30	7	0.47	8	0.38
Melbourne Moomba Festival	0.31	7	0.28	8	0.51	5	0.37
Australian Formula One Grand Prix	-0.55	9	0.05	9	0.51	5	0.18

Chapter 5

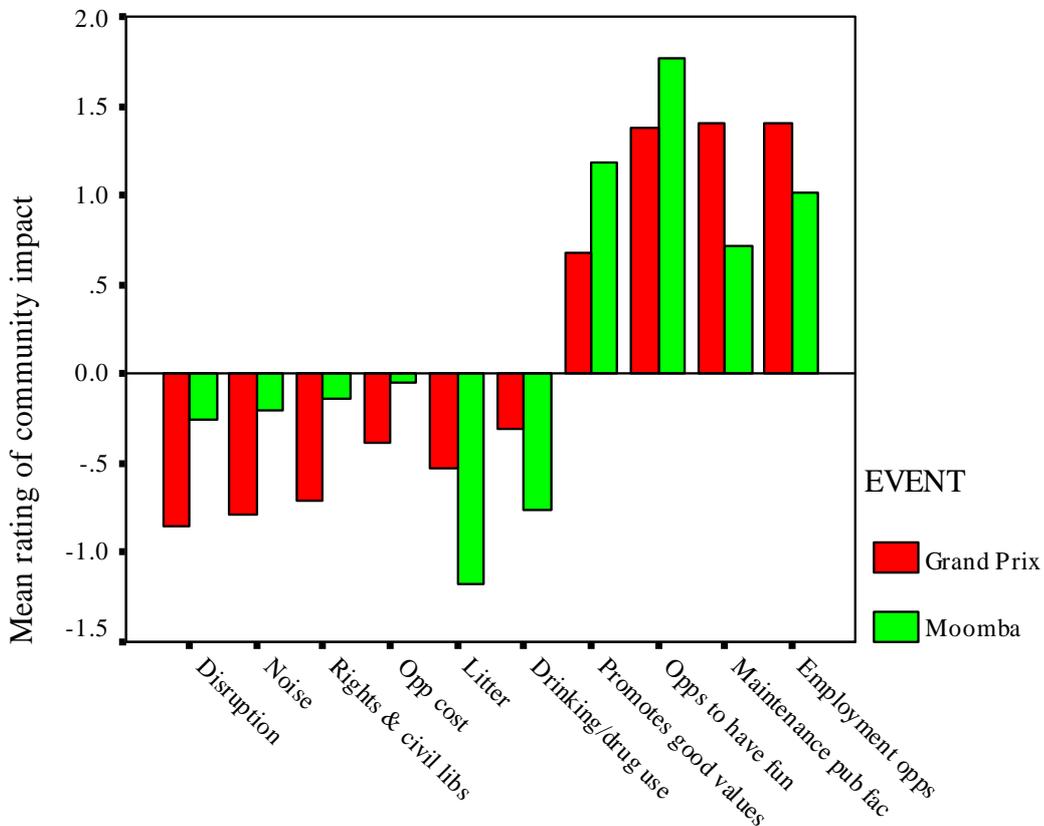
DISCUSSION AND CONCLUSION

This report has presented the results of a study investigating local residents’ perceptions of the impacts of events on their quality of life. Three case studies were included in an effort to facilitate comparison between different events in different types of community. This final chapter discusses those comparisons and the implications for event management.

Comparison One – Different Themed Events in the Same Community

The first comparison evaluated the perceptions of the Grand Prix against the Melbourne Moomba Festival. These events are staged in the same community and have quite different themes. Perceptions of community level impact differed significantly on ten items as shown in Figure 1. The Grand Prix was seen as being more negative in terms of disruption and noise, and in terms of decreasing the rights and civil liberties of local residents. There was also a stronger perception that the public money invested in the Grand Prix would be better spent on other things. However, the Moomba festival was seen as being more negative in terms of the litter generated and the excessive drinking and/or drug use associated with the event. These differences relate to the different nature of the events. The Grand Prix is noisy and disruptive by nature, because of the necessity to erect and dismantle the infrastructure, which also necessitates regulations which may be perceived as infringing upon the rights and civil liberties of local residents. Additionally, the event is quite expensive to attend denying many residents the opportunity. Perhaps it is for this reason that there is a belief that the public money should be spent on other endeavours. On the other hand, Moomba is a free event with open access across multiple venues. This would make the policing of delinquent behaviour more difficult.

Figure 1: Comparison between community impacts of Grand Prix and Moomba Festival

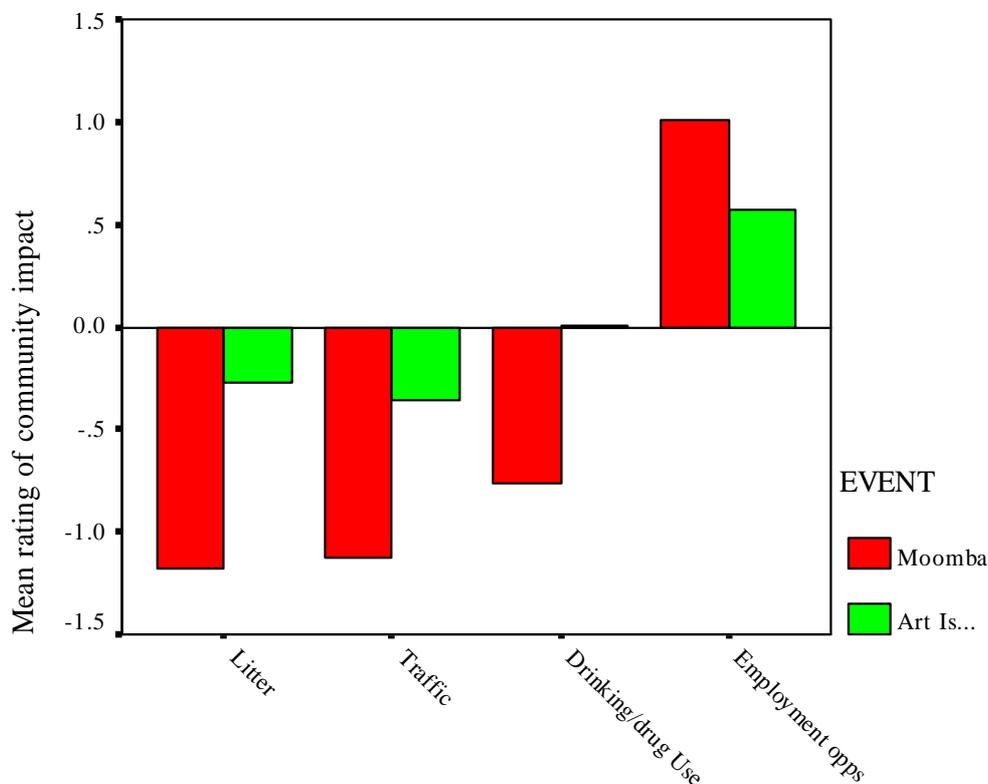


On the positive side, the Grand Prix is seen as creating more employment opportunities and leading to better maintenance of public facilities in the vicinity of the event zone. Again, this is logical given that this is a large internationally focussed event that requires substantial infrastructure. However, Moomba is seen as better in terms of the creation of social capital type benefits such as promoting values that are good and giving residents an opportunity to have fun with their families and friends.

### Comparison Two – Similar Themed Events in Different Communities

The second comparison looks at the Moomba Festival and the Art Is... Festival evaluating the relative impacts of similar events in communities of very different sizes. As shown in Figure 2, Moomba is perceived as having a more negative impact in terms of litter and traffic congestion, and there is a greater association with excessive drinking/drug use. On the other hand, Moomba is also seen as producing more employment benefits than the Art Is... Festival. But perhaps the most interesting finding is that for the remaining 38 impact statement, very similar ratings were observed, suggesting that, when the themes are similar, a small event can have as substantial an impact in a small community as a larger event has in a larger community.

Figure 2: Comparison between community impacts of Moomba Festival and Art Is... Festival



### Recommendations for Planning and Management

The aim of this research was to investigate the differential impacts that different types of event can have on different communities as perceived by their local residents. This type of research is important because an understanding of the social impacts of events can be used in conjunction with economic and environmental impact assessment techniques to management events in a more holistic and sustainable manner.

The results show that there are many impacts which appear to be common to events even when the theme and host community are quite different. Table 21 shows the impacts which were perceived at a similar level in all three of these events and the overall mean rating of community impact.

There appears to be a general consensus that events have fairly substantial economic, entertainment, social and development benefits. There is also agreement with regard to some negative impacts such as increased prices and damage to the environment, but these are not perceived to have substantial impact.

**Table 21: Impacts which were perceived to be similar for all three events**

<b>IMPACT</b>	<b>MEAN RATING OF COMMUNITY IMPACT ACROSS ALL EVENTS</b>
The money that tourists spend when they come to the event helps to stimulate the economy	1.4
The media coverage of the event promotes tourism and business development in Melbourne / Horsham	1.2
Range of interesting things to do	1.2
Entertainment opportunities	1.1
The event enhances Victoria's reputation as 'The Events State'	1.1
The event gives us an opportunity to show other people how special our community is	1.0
Pride that residents have in their city	0.9
Appearance of area around event precinct	0.9
The event entertains local residents and gives them an opportunity to attend a major international event	0.9
Opportunities for local business	0.9
Opportunities to meet new people	0.9
Turnover for local businesses	0.8
Because of the event, the skill base for event management has increased	0.8
The number of tourists visiting at other times of the year	0.7
Public transport	0.5
Interactions between locals and tourists	0.5
Facilities available to local residents	0.4
Number of people in the area around the event precinct	0.4
Because of the event, friends come and visit me	0.3
Property values in the vicinity of the event precinct	0.2
Number of people moving in permanently or buying holiday homes	0.1
Social and moral values	0.1
The event brings too many people into our community	0.0
Overall cost of living	0.0
Crime levels	-0.1
The event increases social inequity because it provides benefits to the rich, but none to the poor	-0.2
Prices of some goods and services	-0.3
Damage to the environment	-0.3

From the perspective of managing the impacts of specific events, it appears as though the most substantial negative impacts are somewhat case specific. Traffic and parking issues rating amongst the top five negative issues for all three events but the magnitude of the problem varied significantly. Far less of a problem was perceived in Horsham which is understandable given that the event would attract much smaller number of visitors, and a regional town such as Horsham would have lower levels of non-event related traffic and parking issues. Litter was seen as a problem at the Moomba Festival, but not at the Grand Prix. This may be because the Grand Prix has a substantial operating budget funded by ticket sales, sponsorship, and other revenues. Also, the event is gated and it is relatively easy to employ staff to keep litter under control. Moomba has many non-ticketed components, and they would also have substantially lower revenues. Thus control of litter is more difficult.

Many other differences can be observed, particularly with regard to negative impacts such as noise, civil liberties, disruption, and opportunity costs as shown in Table 22. Variables associated with theme and size of the

event, and the way it is managed and delivered are likely to determine the exact nature of the negative externalities.

At the other end of the scale, positive impacts appear to be more consistent across events. As seen in Table 22, only three positive impacts were perceived to vary substantially between these events. The Grand Prix was seen as contributing more to the maintenance of public facilities. This is perhaps illusory because the event requires non-permanent infrastructure to be erected and dismantled each year creating the impression that substantial maintenance work is being undertaken. It is interesting to note that the differences in perception of employment opportunities at each event are all significant. That is, the Moomba Festival is rated significantly higher than the Art Is ... Festival, while the Grand Prix is seen as having a bigger employment impact than Moomba. This would appear to relate to the magnitude of the events. A reverse relationship exists with regard to the perception of the event as promoting values that are good, with the two arts festivals being rated as producing greater benefits in this respect.

**Table 22: Impacts which were perceived to be different for all three events**

EVENT IMPACTS	MEAN COMMUNITY IMPACT RATINGS		
	GP 1	MOOMBA 2	ART IS 3
Maintenance of public facilities	1.4 <sub>23</sub>	0.7 <sub>1</sub>	0.8 <sub>1</sub>
Employment opportunities	1.4 <sub>23</sub>	1.0 <sub>13</sub>	0.6 <sub>12</sub>
The event promotes values that are good	0.7 <sub>23</sub>	1.2 <sub>1</sub>	1.4 <sub>1</sub>
Excessive drinking and/or drug use	-0.3 <sub>2</sub>	-0.8 <sub>13</sub>	0.0 <sub>2</sub>
Rowdy and delinquent behaviour	-0.4	-0.7 <sub>3</sub>	-0.0 <sub>2</sub>
The public money spent on the event would be better spent on other things	-0.4 <sub>23</sub>	-0.1 <sub>1</sub>	-0.0 <sub>1</sub>
Litter in the vicinity	-0.5 <sub>2</sub>	-1.2 <sub>13</sub>	-0.3 <sub>2</sub>
The rights and civil liberties of local residents	-0.7 <sub>23</sub>	-0.1 <sub>1</sub>	-0.0 <sub>1</sub>
Ordinary residents get no say in the planning and management of the event	-0.8 <sub>3</sub>	-0.6	-0.1 <sub>1</sub>
Noise levels	-0.8 <sub>23</sub>	-0.2 <sub>1</sub>	-0.0 <sub>1</sub>
The event disrupts the lives of local residents and causes them stress	-0.9 <sub>23</sub>	-0.3 <sub>1</sub>	-0.1 <sub>1</sub>
Parking availability in the vicinity	-1.2 <sub>3</sub>	-1.0	-0.4 <sub>1</sub>
Traffic congestion in the vicinity	-1.2 <sub>3</sub>	-1.1 <sub>3</sub>	-0.4 <sub>12</sub>

## Limitations

As mentioned previously this research aimed to compare a range of events with different themes and in different locations in an effort to examine similarities and differences in the social impacts that events have in various contexts. Case study research is useful in this regard, but there are clearly many other types of events and host communities which could have been included in the study. Ongoing research by the Sustainable Tourism CRC in other states will hopefully add to the external validity of these results.

As referred to in the method section, the response rate in this study was lower than desirable, although to be expected given the length and complexity of the instrument. This trade off was considered appropriate given that one of the aims of the study was scale development. Future research using a compressed instrument and administered using a telephone interview will hopefully extend the representativeness of the sample and subsequent results.

## Future Research Directions

The findings from this research suggest there are more elements in common between each of the events than would be expected in terms of the social impacts on the community. There appears to be a general consensus that events have fairly substantial economic, entertainment, social and development benefits. There is also agreement with regard to some negative impacts such as increased prices and damage to the environment, but these are not perceived to have substantial impact. Whilst the instrument that has been developed to assess the social impacts

of events has proved effective, it is a fairly complex instrument to administer that has implications for resident response rates. Plans are already underway to further refine this instrument to allow for a more parsimonious set of items that can be more readily administered using telephone interviews. This will enhance the usability of the scale. Substantial testing will be required to determine the reliability of a shorter instrument.

In parallel with this work to reduce the size of the social impact survey instrument, research will be undertaken to incorporate social impact analysis into a more holistic event evaluation kit. This research seeks to evaluate events from multiple perspectives at one time rather than treating each evaluation perspective in isolation as has happened in the past.

## APPENDIX A: INSTRUMENT

### Community Attitudes toward the Australian Formula One Grand Prix 2002

#### Section A: Overall Impact of the Australian Formula One Grand Prix

A1. What is the first word that comes to mind when you think of the Australian Formula One Grand Prix? (one word only please)

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A2. Overall, how does the Australian Formula One Grand Prix affect your personal quality of life? (please indicate your response by circling the appropriate number on the scale below)

Very Negatively			No Effect			Very Positively
-3	-2	-1	0	+1	+2	+3

A3. Overall, how does the Australian Formula One Grand Prix affect the Melbourne community as a whole?

Very Negatively			No Effect			Very Positively
-3	-2	-1	0	+1	+2	+3

A4. What do you think are the most positive aspects of the Australian Formula One Grand Prix?

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A5. What do you think are the most negative aspects of the Australian Formula One Grand Prix?

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**Section B: Specific Impacts**

This section has 46 questions each with three parts.

Part A of each question asks you whether something has changed because of the Australian Formula One Grand Prix, and what direction the change was in.

**FOR EXAMPLE:**

1a	Because of the influence of television, video and computers, the average fitness level of Australian children has.....	<input checked="" type="checkbox"/>	Decreased ⇒
		<input type="checkbox"/>	Increased ⇒
		<input type="checkbox"/>	No Change ↓ go to 2a
		<input type="checkbox"/>	Don't Know ↓ go to 2a

Suppose you think that the average fitness level has DECREASED. You should mark the box next to DECREASED as shown to the left. This is just an example. If you think it has INCREASED or that there is NO CHANGE, then mark the appropriate box.

Please note that questions 25 to 29 ask you to comment on whether the impact has worsened or improved, and questions 30 to 45, ask you to agree or disagree with a statement.

Please think about the issue carefully rather than taking the easy option of 'DON'T KNOW'. Only mark this box if you genuinely have no idea about the matter. If you select 'NO CHANGE' or DON'T KNOW', there is no need to complete parts B and C.

Part B of the Question asks you to rate how this affects you personally. Please circle the point on the scale that you think best reflects the affect on your personal quality of life.

**FOR EXAMPLE:**

1b. How has this affected your personal quality of life?	-3	-2	-1	0	+	+	+
					1	2	3

Part C asks you to rate how it has affected the Melbourne community as a whole. Use the same scale as above but think about the overall affect on the community.

**FOR EXAMPLE:**

1c. How has this affected the community as a whole?	-3	-2	-1	0	+	+	+
					1	2	3

**Please bear in mind that this is not a test. There are no right or wrong answers, we are interested in what you think.**

HOST COMMUNITY PERCEPTIONS OF THE IMPACTS OF EVENTS

Statement	Direction	Very Negative	No Effect	Very Positive
1a	Because of the Grand Prix, the appearance of the area around the track is...	Better ⇒ Worse ⇒ No Change ↓ go to 2a Don't Know ↓ go to 2a	1b. How has this affected your personal quality of life?	-3 -2 -1 0 +1 +2 +3
			1c. How has this affected the community as a whole?	-3 -2 -1 0 +1 +2 +3
2a	Because of the Grand Prix, the maintenance of public facilities in the vicinity of the track is....	Decreased ⇒ Increased ⇒ No Change ↓ go to 3a Don't Know ↓ go to 3a	2b. How has this affected your personal quality of life?	-3 -2 -1 0 +1 +2 +3
			2c. How has this affected the community as a whole?	-3 -2 -1 0 +1 +2 +3
3a	Because of the Grand Prix, noise levels in the area around the track have....	Decreased ⇒ Increased ⇒ No Change ↓ go to 4a Don't Know ↓ go to 4a	3b. How has this affected your personal quality of life?	-3 -2 -1 0 +1 +2 +3
			3c. How has this affected the community as a whole?	-3 -2 -1 0 +1 +2 +3
4a	Because of the Grand Prix, employment opportunities in Melbourne have.....	Decreased ⇒ Increased ⇒ No Change ↓ go to 5a Don't Know ↓ go to 5a	4b. How has this affected your personal quality of life?	-3 -2 -1 0 +1 +2 +3
			4c. How has this affected the community as a whole?	-3 -2 -1 0 +1 +2 +3
5a	Because of the Grand Prix, the range of interesting things to do in Melbourne has.....	Decreased ⇒ Increased ⇒ No Change ↓ go to 6a Don't Know ↓ go to 6a	5b. How has this affected your personal quality of life?	-3 -2 -1 0 +1 +2 +3
			5c. How has this affected the community as a whole?	-3 -2 -1 0 +1 +2 +3
6a	Because of the Grand Prix, the number of people in the area around the race track has.....	Decreased ⇒ Increased ⇒ No Change ↓ go to 7a Don't Know ↓ go to 7a	6b. How has this affected your personal quality of life?	-3 -2 -1 0 +1 +2 +3
			6c. How has this affected the community as a whole?	-3 -2 -1 0 +1 +2 +3
7a	Because of the Grand Prix, rowdy and delinquent behaviour has.....	Decreased ⇒ Increased ⇒ No Change ↓ go to 8a Don't Know ↓ go to 8a	7b. How has this affected your personal quality of life?	-3 -2 -1 0 +1 +2 +3
			7c. How has this affected the community as a whole?	-3 -2 -1 0 +1 +2 +3
8a	Because of the Grand Prix, property values in the vicinity of the track have.....	Decreased ⇒ Increased ⇒ No Change ↓ go to 9a Don't Know ↓ go to 9a	8b. How has this affected your personal quality of life?	-3 -2 -1 0 +1 +2 +3
			8c. How has this affected the community as a whole?	-3 -2 -1 0 +1 +2 +3

Statement		Direction		Very Negative			No Effect			Very Positive		
9a	Because of the Grand Prix, crime levels have.....		Decreased ⇒	9b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Increased ⇒	9c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	
			No Change ↓ go to 10a									
			Don't Know ↓ go to 10a									
10a	Because of the Grand Prix, dangerous driving has.....		Decreased ⇒	10b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Increased ⇒	10c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	
			No Change ↓ go to 11a									
			Don't Know ↓ go to 11a									
11a	Because of the Grand Prix, entertainment opportunities have.....		Decreased ⇒	11b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Increased ⇒	11c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	
			No Change ↓ go to 12a									
			Don't Know ↓ go to 12a									
12a	Because of the Grand Prix, prices of some goods and services have....		Decreased ⇒	12b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Increased ⇒	12c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	
			No Change ↓ go to 13a									
			Don't Know ↓ go to 13a									
13a	Because of the Grand Prix, the pride that Melbourne residents have in their city has.....		Decreased ⇒	13b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Increased ⇒	13c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	
			No Change ↓ go to 14a									
			Don't Know ↓ go to 14a									
14a	Because of the Grand Prix, the overall cost of living has.....		Decreased ⇒	14b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Increased ⇒	14c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	
			No Change ↓ go to 15a									
			Don't Know ↓ go to 15a									
15a	Because of the Grand Prix, litter in the vicinity of the track has.....		Decreased ⇒	15b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Increased ⇒	15c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	
			No Change ↓ go to 16a									
			Don't Know ↓ go to 16a									
16a	Because of the Grand Prix, damage to the environment has.....		Decreased ⇒	16b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Increased ⇒	16c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	
			No Change ↓ go to 17a									
			Don't Know ↓ go to 17a									

HOST COMMUNITY PERCEPTIONS OF THE IMPACTS OF EVENTS

Statement		Direction		Very Negative	No Effect	Very Positive				
17a	Because of the Grand Prix, the opportunities to meet new people have.....	Decreased ⇒	17b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3
		Increased ⇒								
		No Change ↓ go to 18a								
		Don't Know ↓ go to 18a								
Decreased ⇒										
Increased ⇒										
No Change ↓ go to 19a										
18a	Because of the Grand Prix, opportunities for local business have.....	Don't Know ↓ go to 19a	18b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3
		Decreased ⇒								
		Increased ⇒								
		No Change ↓ go to 19a								
19a	During the Grand Prix, parking availability in the vicinity of the track has.....	Don't Know ↓ go to 19a	18c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3
		Decreased ⇒								
		Increased ⇒								
		No Change ↓ go to 20a								
20a	During the Grand Prix, traffic congestion in the vicinity of the track has.....	Don't Know ↓ go to 20a	19b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3
		Decreased ⇒								
		Increased ⇒								
		No Change ↓ go to 20a								
21a	Because of the Grand Prix, the number of tourists visiting Melbourne at other times of the year has.....	Don't Know ↓ go to 20a	19c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3
		Decreased ⇒								
		Increased ⇒								
		No Change ↓ go to 21a								
22a	Because of the Grand Prix, excessive drinking and/or drug use has.....	Don't Know ↓ go to 21a	20b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3
		Decreased ⇒								
		Increased ⇒								
		No Change ↓ go to 21a								
23a	During the Grand Prix, the turnover for local businesses has.....	Don't Know ↓ go to 21a	20c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3
		Decreased ⇒								
		Increased ⇒								
		No Change ↓ go to 22a								
24a	Because of the Grand Prix, the number of people moving to Melbourne permanently or buying holiday homes here has.....	Don't Know ↓ go to 22a	21b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3
		Decreased ⇒								
		Increased ⇒								
		No Change ↓ go to 22a								
24a	Because of the Grand Prix, the number of people moving to Melbourne permanently or buying holiday homes here has.....	Don't Know ↓ go to 22a	21c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3
		Decreased ⇒								
		Increased ⇒								
		No Change ↓ go to 23a								
24a	Because of the Grand Prix, the number of people moving to Melbourne permanently or buying holiday homes here has.....	Don't Know ↓ go to 23a	22b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3
		Decreased ⇒								
		Increased ⇒								
		No Change ↓ go to 23a								
24a	Because of the Grand Prix, the number of people moving to Melbourne permanently or buying holiday homes here has.....	Don't Know ↓ go to 23a	22c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3
		Decreased ⇒								
		Increased ⇒								
		No Change ↓ go to 24a								
24a	Because of the Grand Prix, the number of people moving to Melbourne permanently or buying holiday homes here has.....	Don't Know ↓ go to 24a	23b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3
		Decreased ⇒								
		Increased ⇒								
		No Change ↓ go to 24a								
24a	Because of the Grand Prix, the number of people moving to Melbourne permanently or buying holiday homes here has.....	Don't Know ↓ go to 24a	23c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3
		Decreased ⇒								
		Increased ⇒								
		No Change ↓ go to 25a								
24a	Because of the Grand Prix, the number of people moving to Melbourne permanently or buying holiday homes here has.....	Don't Know ↓ go to 25a	24b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3
		Decreased ⇒								
		Increased ⇒								
		No Change ↓ go to 25a								
24a	Because of the Grand Prix, the number of people moving to Melbourne permanently or buying holiday homes here has.....	Don't Know ↓ go to 25a	24c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3
		Decreased ⇒								
		Increased ⇒								
		No Change ↓ go to 25a								

Statement		Direction		Very Negative			No Effect			Very Positive		
25a	Because of the Grand Prix, public funding for sport has....		Decreased ⇒	25b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Increased ⇒									
			No Change ↓ go to 26a	25c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	
			Don't Know ↓ go to 26a									
26a	Because of the Grand Prix, the rights and civil liberties of local residents have.....		Decreased ⇒	26b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Increased ⇒									
			No Change ↓ go to 27a	26c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	
			Don't Know ↓ go to 27a									
27a	Because of the Grand Prix, public transport has.....		Worsened ⇒	27b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Improved ⇒									
			No Change ↓ go to 28a	27c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	
			Don't Know ↓ go to 28a									
28a	Because of the Grand Prix, interactions between locals and tourists have.....		Worsened ⇒	28b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Improved ⇒									
			No Change ↓ go to 29a	28c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	
			Don't Know ↓ go to 29a									
29a	Because of the Grand Prix, facilities available to local residents have.....		Worsened ⇒	29b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Improved ⇒									
			No Change ↓ go to 30a	29c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	
			Don't Know ↓ go to 30a									
30a	Because of the Grand Prix, social and moral values have.....		Worsened ⇒	30b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Improved ⇒									
			No Change ↓ go to 31a	30c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	
			Don't Know ↓ go to 31a									
31a	The media coverage of the Grand Prix promotes tourism and business development in Melbourne		Agree ⇒	31b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Disagree ↓ go to 32a									
			Don't Know ↓ go to 32a	31c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	
32a	The public money spent on the Grand Prix would be better spent on other things		Agree ⇒	32b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3	
			Disagree ↓ go to 33a									
			Don't Know ↓ go to 33a	32c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3	

HOST COMMUNITY PERCEPTIONS OF THE IMPACTS OF EVENTS

Statement		Direction		Very Negative			No Effect			Very Positive		
33a	The Grand Prix entertains local residents and gives them an opportunity to attend a major international event	Agree ⇒	33b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3		
		Disagree ↓ go to 34a		-3	-2	-1	0	+1	+2	+3		
		Don't Know ↓ go to 34a	33c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3		
34a	The Grand Prix disrupts the lives of local residents and causes them stress	Agree ⇒	34b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3		
		Disagree ↓ go to 35a		-3	-2	-1	0	+1	+2	+3		
		Don't Know ↓ go to 35a	34c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3		
35a	The theme of the Grand Prix fits poorly with the culture of Melbourne	Agree ⇒	35b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3		
		Disagree ↓ go to 36a		-3	-2	-1	0	+1	+2	+3		
		Don't Know ↓ go to 36a	35c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3		
36a	Because of the Grand Prix, the skill base for event management in Melbourne is increased	Agree ⇒	36b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3		
		Disagree ↓ go to 37a		-3	-2	-1	0	+1	+2	+3		
		Don't Know ↓ go to 37a	36c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3		
37a	The Grand Prix increases social inequity because it provides benefits to the rich, but none to the poor	Agree ⇒	37b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3		
		Disagree ↓ go to 38a		-3	-2	-1	0	+1	+2	+3		
		Don't Know ↓ go to 38a	37c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3		
38a	The Grand Prix gives us an opportunity to show other people how special our community is	Agree ⇒	38b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3		
		Disagree ↓ go to 39a		-3	-2	-1	0	+1	+2	+3		
		Don't Know ↓ go to 39a	38c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3		
39a	The Grand Prix brings too many people into the community	Agree ⇒	39b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3		
		Disagree ↓ go to 40a		-3	-2	-1	0	+1	+2	+3		
		Don't Know ↓ go to 40a	39c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3		
40a	The Grand Prix enhances Victoria's reputation as 'The Events State'	Agree ⇒	40b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3		
		Disagree ↓ go to 41a		-3	-2	-1	0	+1	+2	+3		
		Don't Know ↓ go to 41a	40c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3		

Statement		Direction		Very Negative			No Effect			Very Positive		
41a	Because of the Grand Prix, friends come and visit me	Agree ⇒	41b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3		
		Disagree ⇓ go to 42a		-3	-2	-1	0	+1	+2	+3		
		Don't Know ⇓ go to 42a	41c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3		
42a	Ordinary residents get no say in the planning and management of the Grand Prix	Agree ⇒	42b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3		
		Disagree ⇓ go to 43a		-3	-2	-1	0	+1	+2	+3		
		Don't Know ⇓ go to 43a	42c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3		
43a	The Grand Prix promotes values that are good	Agree ⇒	43b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3		
		Disagree ⇓ go to 44a		-3	-2	-1	0	+1	+2	+3		
		Don't Know ⇓ go to 44a	43c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3		
44a	The Grand Prix provides opportunities for people to have fun with their family and friends	Agree ⇒	44b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3		
		Disagree ⇓ go to 45a		-3	-2	-1	0	+1	+2	+3		
		Don't Know ⇓ go to 45a	44c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3		
45a	The money that tourists spend when they come to the Grand Prix helps to stimulate the economy	Agree ⇒	45b. How has this affected your personal quality of life?	-3	-2	-1	0	+1	+2	+3		
		Disagree ⇓		-3	-2	-1	0	+1	+2	+3		
		Don't Know ⇓	45c. How has this affected the community as a whole?	-3	-2	-1	0	+1	+2	+3		

B46. Are there any other impacts associated with the Grand Prix? Please describe.

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B47. Are you in favour of the continuation of the Grand Prix in future years?

- 1  No  
 2  Yes

B48. Would you prefer to see the Grand Prix continue in its current location or some other location?

- 1  Current  
 2  Other ⇒ please state \_\_\_\_\_

**Section C: Contact**

Below is a map of the Melbourne region, highlighting a section around the Grand Prix track in Albert Park. In the next questions you are asked to indicate how often you travel to or through this area. Mark the appropriate response on the scale below.

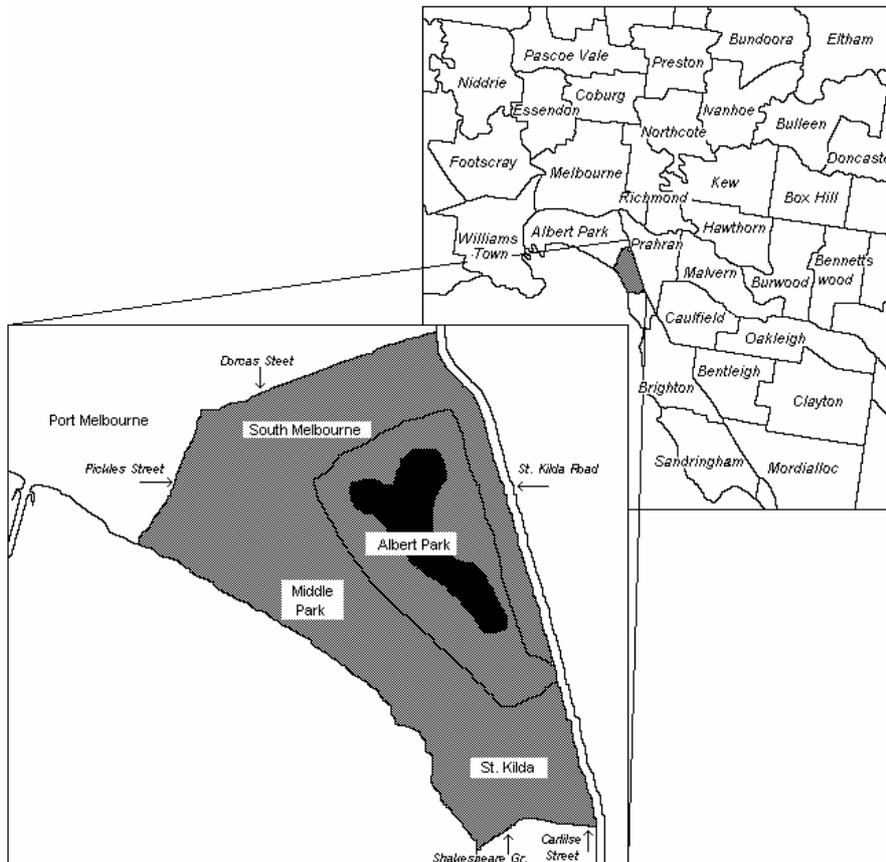
C1. In a normal week, how often would you travel to or through the area shaded on the map?

- |       |                       |             |                      |           |
|-------|-----------------------|-------------|----------------------|-----------|
| Never | Less than Once a week | Once a week | Several Times a Week | Every Day |
| 0     | 1                     | 2           | 3                    | 4         |

C2. Did this vary during the Australian Formula One Grand Prix 2002 (28 February to 3 March)

- 1  No  
 2  Yes ⇒ Approximately how often did you travel to or through the area shaded on the map during the Melbourne Formula One Grand Prix? ↓↓

- |       |                       |             |                      |           |
|-------|-----------------------|-------------|----------------------|-----------|
| Never | Less than Once a week | Once a week | Several Times a Week | Every Day |
| 0     | 1                     | 2           | 3                    | 4         |



C3. In a normal week, how often do you use Albert Park?

Never	Less than Once a week	Once a week	Several Times a Week	Every Day
0	1	2	3	4

C4. What do you do there? What facilities do you use?

\_\_\_\_\_

\_\_\_\_\_

C5. How would you rate the level of impact of the Melbourne Formula One Grand Prix on your home suburb?

Non Existent	Low	Average	High	Very High
0	1	2	3	4

**Section D: Participation**

D1. Did you attend the Australian Formula One Grand Prix this year?

- 1  No
- 2  Yes

D2. Have you attended the Australian Formula One Grand Prix in previous years?

- 1  No ⇒ go to D4
- 2  Yes ⇒ go to D3

D3. Why did you not attend this year? (please select main reason only)

- 1  Didn't have time
- 2  Too expensive
- 3  Couldn't get tickets
- 4  Didn't want to
- 5  Other ⇒ please state \_\_\_\_\_

D4. Have you ever attended any other motor sport events?

- 1  Yes, frequently
- 2  Yes, but not often
- 3  No, never attended a motor sport event ⇒ go to D5

D5. Have you ever worked at the Australian Formula One Grand Prix in either a paid or voluntary capacity?

- 1  No
- 2  Yes, a paid position ⇒ please detail \_\_\_\_\_
- 3  Yes, a voluntary position ⇒ please detail \_\_\_\_\_

D6. How satisfied were you with this experience?

Very Dissatisfied	Dissatisfied	Neither Satisfied or Dissatisfied	Satisfied	Very Satisfied
-2	-1	0	+1	+2

D7. Do you currently work in or own a business that you think is positively affected by the event (e.g. tourism, hospitality, retail)?

- 1  No  
2  Yes

D8. Have you ever worked in or owned a business that you think is positively affected by the event (e.g. tourism, hospitality, retail)?

- 1  No  
2  Yes

D9. Does anyone else in your household work in or own a business that you think is positively affected by the event (e.g. tourism, hospitality, retail)?

- 1  No  
2  Yes

**Section E: Identification with Theme**

E1. Which of the following statements best summarises your level of interest in Grand Prix racing? Please mark only one box.

- 1  I am an avid fan of Grand Prix Racing, and I try never to miss a race  
2  I am interested in Grand Prix Racing and watch it when I can  
3  I am not particularly interested in Grand Prix Racing, but I like to see it when it is in Melbourne  
4  I am not interested in Grand Prix Racing but enjoy the other festivities associated with the event  
5  I am not interested in Grand Prix Racing but I sometimes attend or watch it because family or friends are interested  
6  I have absolutely no interest in Grand Prix Racing or the associated festivities, even when the race is in Melbourne

E2. Please indicate, by circling the appropriate responses below, how often you participate in each of the following leisure activities.

Activity	Never	Once a year or less often	Several times a year	Less than once a week but usually at least once a month	About once a week	Several times a week
Participate in organised sport	0	1	2	3	4	5
Participate in other physical exercise	0	1	2	3	4	5
Participate in other outdoor recreation (e.g. bush walking)	0	1	2	3	4	5
Participate in adventure activities (e.g. rock climbing, white water rafting)	0	1	2	3	4	5
Attend a spectator sporting event	0	1	2	3	4	5
Attend a popular music concert	0	1	2	3	4	5
Attend a classical music concert or opera	0	1	2	3	4	5
Attend the theatre or ballet	0	1	2	3	4	5
Visit museums or art galleries	0	1	2	3	4	5
See a movie	0	1	2	3	4	5
Dine out in a restaurant	0	1	2	3	4	5
Visit a pub or club	0	1	2	3	4	5
Visit a nightclub	0	1	2	3	4	5
Visit a botanical garden or other parklands	0	1	2	3	4	5
Visit a natural area such as a national park	0	1	2	3	4	5

E3. Please rate the following events (or as many as you have heard of) in terms of their impact on your personal quality of life and on the community as a whole. Please circle the appropriate response.

Event	I don't know anything about this event	Impact on Your Personal Quality of Life			Impact on the Community as a Whole		
		Negative Impact	No Impact	Positive Impact	Negative Impact	No Impact	Positive Impact
Australian Open Tennis Championships	DN	-1	0	+1	-1	0	+1
Australian Formula One Grand Prix	DN	-1	0	+1	-1	0	+1
Melbourne Moomba Festival	DN	-1	0	+1	-1	0	+1
Melbourne Food and Wine Festival	DN	-1	0	+1	-1	0	+1
Melbourne International Comedy Festival	DN	-1	0	+1	-1	0	+1
Melbourne International Flower and Garden Show	DN	-1	0	+1	-1	0	+1
Australian Football League (AFL) Finals Series	DN	-1	0	+1	-1	0	+1
Spring Racing Carnival	DN	-1	0	+1	-1	0	+1
Melbourne Festival	DN	-1	0	+1	-1	0	+1

### Section F: Community Attachment

F1. Where were you born?

- 1  Melbourne ⇒ go to F3
- 2  Elsewhere in Victoria ⇒ go to F2
- 3  Elsewhere in Australia ⇒ go to F2
- 4  In another country ⇒ go to F2

F2. If not in Melbourne, approximately how long have you lived here? \_\_\_\_\_ years

F3. Which of the following statements best describes how you feel about living in Melbourne?

- 1  I love it, I can't think of anywhere else I would rather live
- 2  I enjoy living in Melbourne but can think of other places I would enjoy equally
- 3  I only live here because circumstances demand it and would prefer to live somewhere else

### Section G: Socio Political Values

G1. Listed below are four goals for society which different people may consider important. Please place a 1 in the box next to the one you consider to be most important. Please place a 2 in the box next to the one you consider to be second most important.

- 1  Maintaining a high level of economic growth
- 2  Making sure that this country has strong defence forces
- 3  Seeing that people have more say about how things are done at their jobs and in their communities
- 4  Trying to make our cities and countryside more beautiful

G2. From the four statements below please select and mark those that you consider to be the most important and the second most important as you did before.

- 1  Maintaining order in the nation
- 2  Give the people more say in governmental decisions
- 3  Fighting rising prices
- 4  Protecting freedom of speech

G3. From the four statements below please select and mark those that you consider to be the most important and the second most important as you did before.

- 1  A stable economy
- 2  Progress toward a less impersonal and more humane society

- 3  Progress toward a society in which ideas count more than money
- 4  The fight against crime

G4. Which of the following political parties do you most identify with?(please select only one)

- 1  Democrats
- 2  Greens
- 3  Labor
- 4  Liberals
- 5  Nationals
- 6  One Nation
- 7  Other => please state \_\_\_\_\_
- 8  No political loyalty
- 9  Prefer not to say

**Section H: Background Information**

H1. What is your employment status? Please mark only one box.

- 1  Employed
- 2  Unemployed
- 3  Retired
- 4  Student
- 5  Student/part time work
- 6  Home duties
- 7  Other => please state \_\_\_\_\_

H2. In what year were you born? \_\_\_\_\_

H3. What is your gender? \_\_\_\_\_

- 1  Female
- 2  Male

H4. What is the highest education level you have completed? Please mark only one box.

- 1  No formal qualifications
- 2  Completed year 10 at school
- 3  Completed year 12
- 4  Trade Qualification
- 5  Technical College/TAFE Diploma
- 6  Undergraduate Degree
- 7  Post Graduate Degree
- 8  Other => please state \_\_\_\_\_

**Please check that you have not accidentally missed any questions.**

**Thank you very much for completing the survey.**

## **APPENDIX B: FULLER EXPLANATION OF ANALYSIS PRESENTED IN TABLE 6**

### **Mixed Design Factorial Analysis of Variance (ANOVA)**

Factorial ANOVA is a technique used to compare mean scores of groups in different conditions in an effort to understand the influence of the independent variables (IVs) separately (main effects), and also to see if there is any combined influence (an interaction). The analysis reported in Table 6 was mixed designs because one independent variable, EVENT, was measured on different groups of residents, while the other, LEVEL (personal versus community level impact), is a repeated measure, that is the same people reported both personal and community level impacts. The interaction term was non-significant ( $F = 0.8, p > 0.05$ ) as is evidenced by the means, which demonstrate a consistent pattern characterised by residents tending to rate the overall impact on the community as being more positive than the personal impacts. This main effect for level was significant ( $F = 265.7, p < 0.05$ ), but the mean differences observed between events were not significant ( $F = 2.0, p > 0.05$ ).

An additional complication is that the post hoc tests on the repeated measures factor are actually tests of the difference between personal and community level impacts rather than comparisons of each level for each event. Thus, an additional Oneway ANOVA was conducted with subsequent post hoc tests of differences between events, and the means on which these difference tests are based are presented in Table 6. The impacts shown in bold have been identified as having a significant main effect for event in the factorial analysis, and also in the Oneway ANOVA. Given the large number of comparisons being made, a conservative alpha level was used,  $\alpha = 0.0012, (0.05/42)$  to maintain an acceptable family wise Type I error rate. This Bonferroni type correction clearly has the potential to inflate Type II error rates, thus differences that are significant at the 0.05 level are shown in italics for the interest of readers. The subscripts to the mean scores shown in the right hand side of the table denote significant differences ( $\alpha = 0.0012$ ) identified using Tukey's post hoc tests.

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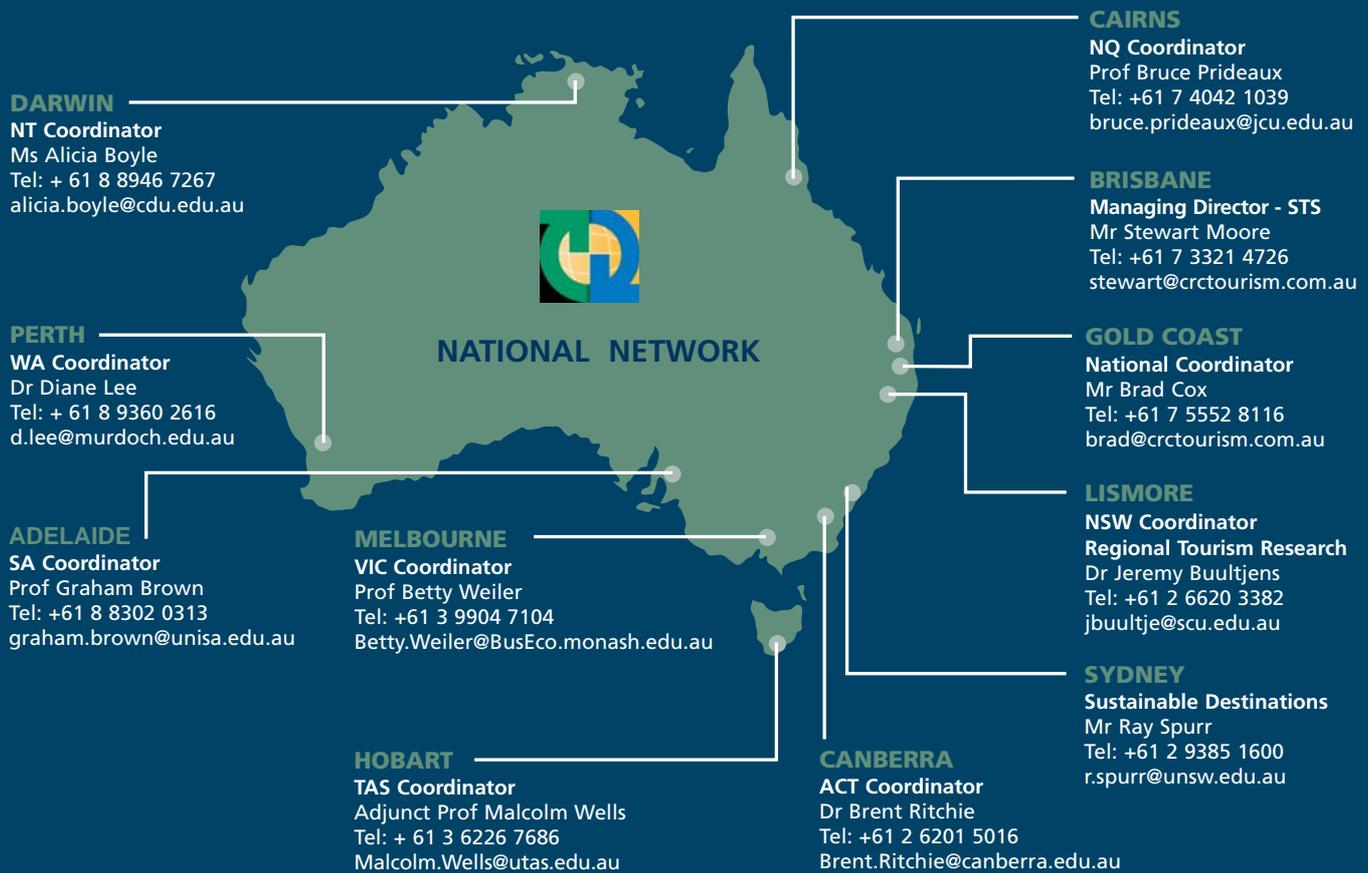
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