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Evaluation of Licensing Act: Measuring Crime and Disorder in and around Licensed Premises, Research Study SRG/05/007 Annex 2: Birmingham, prepared for the Home Office

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# Applied Criminology Centre

The University of Huddersfield



# **Evaluation of Licensing Act:**

Measuring Crime and Disorder in and around Licensed Premises

Research Study SRG/05/007

Final Report Prepared for the Home Office Annex 2: Birmingham

Dr Andrew Newton, Professor Alex Hirschfield, Dr. Rachel Armitage, Michelle Rogerson, Leanne Monchuk and Dr Aidan Wilcox

March 2008

This report was submitted July 2007.

The views expressed in this report are those of the authors, not necessarily those of the Home Office (nor do they reflect Government policy).

Applying criminological research for policy and practice



# Overview

This Annex provides detailed findings of a study into the impact of licensing hours in a single case study area, Birmingham City Centre (Police Force Area F1). This area is one of five case study areas considered as part of a Home Office funded study to assess the impact of changes in the licensing laws on crime and disorder. The Licensing Act 2003 (LA03), hereafter referred to as the Act, came into effect in November 2005, and this research forms part of a wider evaluation programme of the Act, including a number of larger scale national measures and surveys. This annex is one of five (one for each case study area) and these individual annexes are supported by a final report, a technical annex, and a single additional supplementary annex.

This research examines two time periods, a baseline (April 1<sup>st</sup> 2003 to 23<sup>rd</sup> November 2005) and a post implementation period (24<sup>th</sup> November 2005 to 31<sup>st</sup> November 2006). It uses a mixture of quantitative and qualitative research methods to assess the potential impacts of the Act at three scales; the macro level (entire study area), meso level (near to licensed premises) and micro level (at or inside licensed premises). It is argued that this increases the robustness of the findings.

A number of sources of data were examined in the quantitative analysis. The first area investigated is violence against the person, and two sources of data were used for this. These were police violence against the person crime offences, and ambulance, accident and emergency data (where available) were also utilised. The second area investigated was criminal damage (using police recorded crime data) and the third was sexual offences (again using police recorded crime data). The final area examined in the quantitative analysis was disorder, and police calls for service (disorder only) records were used here.

This quantitative analysis was supplemented by local qualitative fieldwork which involved participant observation of both premises and key drinking areas, along with semi structured interviews with licensees, door supervisors and bar staff. These took place both before and after the introduction of the Act.

A more detailed discussions of the methods used in this research can be found in the technical annex.

# Summary of Findings

The key findings from the Birmingham analysis were:

# Violence against the person

Although monthly levels of violence against the person were higher in the post implementation period than the baseline period (8 months of increases), statistical significant tests revealed no significant changes in levels of violence against the person in the baseline period or the post implementation period (see supplementary annex). There was a slight increase in serious offences (plus 9) (see supplementary annex).

Violence against the person was highly concentrated in areas closest to licensed premises. Over 40% of Birmingham City Centre's (police force F1) violence against the person was located within 0-50m of a licensed premise. In both the baseline and post implementation periods the proportion of violence against the person decreased with distance from licensed premises.

The crime ratio suggests that the concentration of violence against the person in areas with a high density of pubs compared to the rest of the city centre has remained fairly stable over the past three years. There is no evidence of violence against the person becoming more concentrated since the introduction of the Act.

The proportion of offences by time of day reduced between 1.00am and 2.59am, and increased from 3.00am and 4.59am. This effect was greatest near to licensed premises.

The A& E data revealed there was a greater volume of incidents of assaults and violence against the person offences between 3.00am and 5.00am in the post implementation period.

The locations of hot spots of violence against the person have not altered dramatically since the introduction of the Act. There has been a slight change in the hot spots between 3.00am and 5.00am in the post implementation period, when hot spots have remained for longer periods in and around some of the case study's key drinking areas. The KDE synthesis maps revealed reductions 1.00am to 2.59am, and increases 3.00am to 4.59am. These are concentrated around the key drinking areas (see supplementary annex)

Weekday violence against the person offences increased for 9 out of 12 months. The most common combination of change was for increases in both weekend and weekday violence against the person (see supplementary annex),

There was a modest reduction in violence on weekday nights between 1am and 2am and this reduction was stronger at the weekends. Violence also reduced quite markedly on weekend nights between 2am and 3am by 122 offences. This amounted to a 6.3% fall in the concentration of violence between 2am and 3am at weekends (see supplementary annex)

The 15 premises with the highest frequency of violence against the person were responsible for almost 50 per cent of such offences. 11 of the 15 premises in the top 15 were in the top 15 in both the baseline and post implementation periods.

Premises using one to five additional hours per week experienced reductions in their proportion of violence against the person offences. Those using six or more had an increased share of offences. This change was not evident when examining *applied for* hours, highlighting the importance of collecting information on additional hours *used*.

# Criminal damage

Criminal damage in Birmingham City Centre has retained similar levels during the post implementation period compared to the baseline. There were no significant changes to criminal damage offences in the baseline or post implementation periods (see supplementary annex). There were some monthly fluctuations with seven months of the post implementation period showing increases in criminal damage compared to corresponding months in the baseline.

The daily and weekly distribution of criminal damage offences during the post implementation period retained a similar pattern to the baseline. A larger proportion of post implementation offences occurred between 3.00pm and 5.59pm while a smaller proportion of criminal damage offences were recorded between 6.00pm and 9.59pm and between 1.00am and 03.59am. There was a tendency for these temporal changes to be more pronounced in the areas closer to licensed premises.

Criminal damage hot spots have remained fairly consistent in the baseline and post implementation periods. From 3.00am to 5.00am criminal damage was more intense and prolonged during the post implementation period than in the baseline period.

There was very little change in the timing of weekday and weekend criminal damage offences in Birmingham in the post implementation period compared with the baseline with only marginal changes in the number of offences in any one-hour (see supplementary annex)

The KDE synthesis maps revealed some changes (reductions from 1.00am to 2.59am and increases from 3.00am to 4.59am) that correspond with the key drinking areas (see supplementary annex).

### Sexual Offences

The small numbers make it difficult to detect patterns of change in sexual offences. For five months of the year, sexual offences reduced compared to the corresponding months in the baseline period. There were only marginal changes to the overall daily distribution of sexual offences between the baseline and post implementation periods.

The proportion of sexual offences recorded, in both the baseline and post implementation periods, was highest between the hours of midnight and 0.59am. A greater proportion of post implementation offences occurred between 4.00pm and midnight compared to the baseline. Conversely a lower proportion of post implementation offences occurred between 1.00am and 5.00am.

#### Calls for disorder

Calls for disorder in Birmingham City Centre reduced between the baseline and post implementation periods. For each month in the post implementation period, the number of calls for disorder decreased in comparison to corresponding months. March saw the largest decrease in the number of calls for disorder made. T tests revealed a significant reduction in disorder incidents in the second half of the baseline period (preceding the Act) and the first half of the post implementation period (see supplementary annex).

The daily distribution of calls during the post implementation period followed a similar pattern to the baseline although the frequency of calls was lower throughout most of the day.

The proportion of calls recorded between 10.00pm and 02.59am was lower than the baseline. Between 3.00am and 07.59am the proportion of calls recorded increased compared to the baseline. There was a tendency for these changes to be more pronounced in the areas closer to licensed premises.

There tended to be monthly reductions in disorder both during the week and at weekends. Disorder at weekends was lower than in the baseline period for 10 of the 12 months (see supplementary annex).

Levels of disorder fell throughout the night both during the week and at weekends. There was a sizeable reduction between 11pm and midnight and between 1am to 2am but the greatest fall occurred between 2am and 3am at weekends during which there were three per cent fewer calls compared with the baseline (see supplementary annex).

## Findings from the fieldwork

Nine participants took part in the post implementation interviews. Of the nine, four had signed up to Pubwatch. When asked whether they felt that the levels of night-time violence in their premise had changed since the introduction of the Act, five (56%) felt that it had not changed, four (44%) felt that it had decreased. When asked whether they felt that the levels of night-time violence in the town/city had changed since the introduction of the Act, one (11%) felt that it had not changed, three (33%) felt that it had increased and five (56%) felt that it had decreased.

When asked whether they felt that the levels of drunk and disorderly behaviour had changed since the introduction of the Act, four (44%) felt that it had not changed, three (33%) felt that it had decreased and one (11%) felt that it had increased. Three of the respondents (33%) felt that the Act had resulted in staggered closing times, three (33%) felt that it had not. Two (22%) of the respondents felt that that extended drinking hours had led to people drinking more responsibly, three (33%) said that it had not.

Finally, three (33%) of respondents felt that the Act was a good policy, none felt that it was not. Of the nine, five stated that they had changed their hours, three suggested that they had not.

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Table 6.2	Participant observation of individual premises in Birmingham City Centre
	(police force area F1) (January 2007)
Table 6.3	Baseline period licensing hours for premises in Birmingham City Centre
	(police force area F1)
Table 6.4	Post implementation licensing hours for licensed premises in Birmingham City
	Centre (police force area F1)

# 1. Introduction: profile of case study area

# Brief description of profile area

Britain's second largest city, Birmingham, is home to Europe's largest retail led project - the Bullring. The city centre has a large vibrant night time economy, with a residential population of approximately 28,000 (Acorn 2006 population). The residential population of Birmingham is approximately 985,000 (The Office for National Statistics, 2005 mid year estimates). The hub of Birmingham's nightlife is Broad Street where most of the city's activities take place. Broad Street is a major road to the immediate West of Birmingham city centre in which the clubs and pubs are situated close to one another. Hurst Street is a smaller road containing a number of bars and is approximately twenty minutes walk from Broad Street. Broad Street is part of a drinking area commonly known as the "Golden Mile" with the majority of bars and clubs requiring a smart dress code (no trainers or blue jeans). Broad Street has excellent transport links in which buses run late into the evening and a number of taxi ranks make for easier transport home.

In the summer of 2005, West Midlands police pioneered a new scheme involving football style red and yellow cards for anti-social behaviour. These carried messages warning offenders that they may face potential summons or arrest if they persisted with their behaviour. Broad Street has also introduced initiatives such as plain clothed officers visiting licensed premises on Monday nights (usually student nights). In addition, Birmingham City Centre Partnership has launched a 'Go Easy' campaign encouraging drinkers to drink responsibly through hard-hitting images of the possible consequences of binge drinking. Taxi rank wardens have also been introduced to make travel home safer. These and additional initiatives will be explored in more detail later in the report. The locations of pubs, bars and night clubs in Birmingham City Centre (police force F1) are shown in Figure 1.1. There were 179 pubs and bars and 15 night clubs that were geo-coded and used in this research. Note that these descriptions include fieldworker observations from both the baseline and post implementation periods.

# Map of case study area

Figure 1.1 Location of pubs, bars and nightclubs in Birmingham City Centre (police force area F1) Nightclub Quarter Station Pub/Bar Railway stations Astor Jniv erist v Railway line St Pauls Station Points of interest City centre (F1) Hagspital **Broad** Street athedra[ Hurst Street ⊌4gorStStati Street Station Hospital Bull Rind ,Børdesley Station Five Ways Station Highgate Number of pubs and bars = 179 Kilometers Number of clubs = 15

# Key drinking areas

Birmingham city centre consists of two key drinking areas; these are Hurst Street and Broad Street.

#### **Hurst Street**

Hurst Street is approximately 20 minutes walk away from New Street Train Station and is a long road which joins onto the busy Birmingham Queensway, a main route out of Birmingham.

Observations from the baseline visits revealed that Hurst Street appeared to be a smarter area of Birmingham (than Broad Street), attracting older and more well-dressed drinkers. People using this area appeared to be in smaller groups as well as families. Police presence on Hurst Street was minimal compared to Broad Street and the area had a relaxed atmosphere. Many of the venues on Hurst Street and the nearby Arcadian Centre (which contains pre-club bars and restaurants) enforced a strict dress code of smart casual wear and would not allow entry to those wearing tracksuits, sportswear or hooded tops.

Observations from the post implementation *visits* revealed that at the Queensway end of Hurst Street there were two large clubs, one of which was Oceania - a new and very busy venue. At this point, Hurst Street is cut through by a one way street which curves round and joins onto the Birmingham Queensway. This one way street was busy with cars, buses and taxis and contained a zebra crossing. On the other side of the zebra crossing was a large taxi rank where taxis were continually dropping off and picking up customers. This taxi rank was not marshalled.

At this area, Hurst Street becomes pedestrianised with a few fast food places, gay bars and the Hippodrome theatre. To the right there was the Arcadian Centre which contained several up-market pre-club bars and eating establishments. Walking through the Arcadian Centre led to the Chinese Quarter which included many Chinese restaurants and supermarkets. Back onto Hurst Street there were more bars and restaurants catering for those attending the theatre. At this point, the pedestrianised section of the road came to an end and the area started to become more rundown. This area, which contained several bars and clubs, had a distinct lack of lighting. This bleakness was exemplified by a large area of waste land which advertising hoardings suggested will soon house luxury apartments. The bottom end of the road led to commercial properties such as timber merchants and offices.

In terms of transport, there was easy access in and out of Hurst Street by taxi and there were many licensed black cabs available. Although most bus services end between 10.00pm and 11.00pm, this area was within easy reach of New Street Train Station which had several late night services. The taxi rank at the top end of Hurst Street appeared to be quite busy and, at busy times, may have become a pressure point causing conflict between those waiting for a prompt exit from the area. However, no actual disturbances were observed.

Police were visible on Hurst Street, although this was minimal compared to Broad Street. The police seemed to adopt the approach of allowing door supervisors to get on with things, observing and only stepping in when the need required. In both areas, interviewees spoke of a very good relationship between themselves and the police.

#### **Broad Street**

Broad Street, also known as the 'golden mile', is the main drinking area in the city centre with a high concentration of licensed premises. It is a major thorough fare which leads from the NIA (National Indoor Arena) and the Symphony Hall at the top to the ring road leading out of Birmingham city centre, and the suburbs at the bottom. Broad Street is a 15 minute walk from New Street Train Station.

Observations from the baseline visits revealed that the establishments visited on Broad Street appeared to be tailored towards a younger market (18-35), with typical clientele being

students and young professionals. Most premises on Broad Street opened until 1.00am or 2.00am.

There was a large police presence on Broad Street with many uniformed officers patrolling the street throughout the evening. Door staff were also observed communicating with other venues via radio-link.

Pressure points were observed outside several popular establishments such as Walkabout where customers had to queue for entry on Friday and Saturday evenings. As the majority of venues are located along one side of Broad Street, there was evidence of congestion along the pavement, particularly where customers had to queue to enter venues.

Observations from the post implementation visits revealed that the majority of the premises along Broad Street were large bars; however there were one or two restaurants and a few hotels, specifically the large multi national companies. The area was very vibrant during the day and the night with many people passing through.

There appeared to be no specific pressure point in the Broad Street area, there were no mobile fast food venues and the main taxi ranks were marshalled.

In terms of transport, there was easy access in and out of Broad Street by taxi and there were many licensed black cabs available. Although most bus services ended between 10.00pm and 11.00pm, Broad Street was within easy reach of New Street Train Station which had several late night services.

There was a high level of policing on Broad Street with both police and Community Support Officers. There were many police vehicles either parked up or driving through and these included police dog vans and mobile CCTV vehicles. The police seemed to adopt the approach of allowing door supervisors to get on with things, observing and then stepping in when the need required. In both areas interviewees spoke of a very good relationship between themselves and the police.

# 2. Violence against the person

Violence against the person is a diverse crime category including crimes such as murder, wounding and common assault. Analysis of police recorded data and the British Crime Survey (Walker, Kershaw and Nicholas, 2006) has shown that in England and Wales between 2004/05 and 2005/06 most types of violent crime have reduced or remained stable. Police recorded data has shown:

- a decrease of 13 per cent in more serious violence against the person;
- a four per cent decrease in more serious wounding;
- a six per cent increase in less serious wounding;
- a 14 per cent reduction in common assaults.

However, these trends have been distorted by recent changes to police recording practices, particularly in relation to less serious wounding and common assault. The British Crime Survey shows that incidents of wounding and common assaults have decreased over the same period. Violent crimes such as wounding and common assault have been found to display seasonal patterns with peaks in the summer months and troughs in the winter months (Hird and Ruparel, 2007).

The findings of this analysis are supported by additional analysis presented in the supplementary annex which examines violence against the person using statistical tests of change from the baseline to post implementation, serious and other violence against the person, weekend and weekday offences, and synthesis maps of hot spot change by time of day. The results of this are detailed in the supplementary analysis, and also included in the summary findings at the start of this annex, and concluding sections of this annex. The reader is also referred to the final report that summarises the findings of all five case study areas.

#### Macro level

The following section presents an analysis of trends in offences of violence against the person across Birmingham City Centre. The total number of offences increased from year 1 to year 2 (3593 to 3684 offences) in the baseline period, and then continued to increase in the post implementation period (3884 offences). The monthly analysis identified that levels of violence against the person were generally higher in the post implementation period compared to the baseline period with an average of 324 offences per month compared to 303 offences per month in the baseline period

Table 2.1 displays the number of violence against the person offences in Birmingham City Centre by month and year. The blue shaded area represents the post implementation period. The final column represents the percentage between the baseline and post implementation periods. This has been calculated as the change between the number of offences in each month during the post implementation period, and the average number of offences in the two corresponding months from the two previous years in the baseline period. The table shows that the number of offences per month was higher in the post implementation period for 8 of the 12 months analysed.

Figure 2.1 presents the monthly rate of violence against the person in Birmingham City Centre (per 10,000 persons) during the post implementation (blue line). The average monthly rate of violence against the person for the baseline period is shown as a dotted grey line. The graph illustrates the increase in monthly violence against the person compared to the baseline period. These increases are particularly evident from May to July 2006, timing which coincides with the World Cup.

Figure 2.2 displays the final column of Table 2.1 graphically. This figure highlights that with the exception of December, February, August and October, there was an increase in violence against the person for each month of the post implementation period compared to the corresponding months in the baseline period.

**Table 2.1** Violence against the person monthly crime counts in Birmingham City Centre (police force area F1) (November 2003 to December 2006)

			Year	Post implementation		
	2003	2004	2005	2006	percentage change (monthly average) 1	
January		291	321	336	9.8	
February		289	284	284	-0.9	
March		290	313	328	8.8	
April		280	324	323	7.0	
May		348	308	368	12.2	
June		262	280	347	28.0	
July		298	298	365	22.5	
August		323	283	299	-1.3	
September		285	294	317	9.5	
October		307	348	299	-8.7	
November		300	298	301	0.7	
December	320	333	317	302	-2.9	

<sup>&</sup>lt;sup>1</sup> Note: The baseline period is an average of the two year period 2004/2005

Figure 2.1 Violence against the person crime rates in Birmingham City Centre (police force area F1) (average monthly baseline and post implementation period)

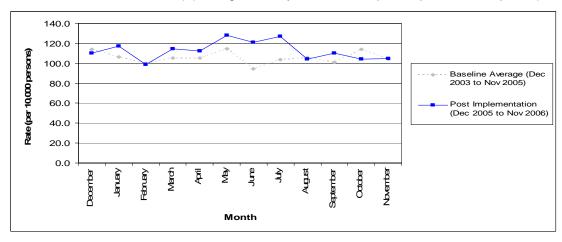


Figure 2.2 Percentage change in violence against person offences in Birmingham City Centre (police force area F1) (average monthly baseline to post implementation period change)

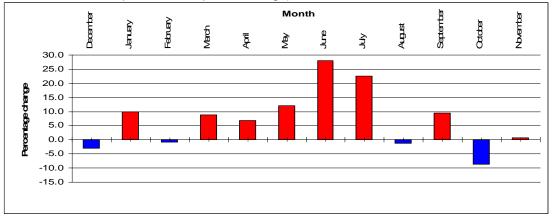
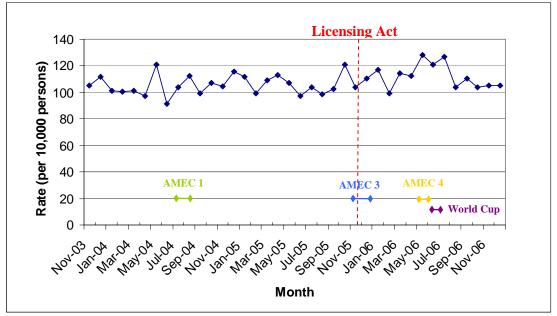


Figure 2.3 displays the rate of violence against the person offences from November 2003 to December 2006. This graph depicts the timing of the implementation of the Act along with

AMEC (Alcohol Misuse Enforcement Campaign) initiatives and the World Cup. The graph shows that the rate of violence against the person in Birmingham City Centre has remained fairly stable over the baseline and implementation periods, although there have been some monthly fluctuations.

AMEC 1 was in operation from the 8th July until 30th August 2004. The graph below shows that upon the commencement of the campaign, there was a small increase in the rate of violence against the person (it is possible that the AMEC campaign could have resulted in increased reporting). AMEC 3 ran from November 2005 until January 2006 and therefore coincided with the implementation of the Act. The rate of violence against the person offences initially fell but then increased through December 2005 and January 2006. AMEC 4 ran from the 8th May 2006 until 8th June 2006 and was implemented in an attempt to try and set the tone of acceptable behaviour before the commencement of the World Cup (June/July 2006). May 2006 saw the highest number of violence against the person offences recorded. This again could be due to increased police presence due to AMEC 4 or, as identified in the qualitative research, due to an increase in the numbers of people out drinking in the summer months.

Figure 2.3 Violence against the person crime rate in Birmingham City Centre (police force area F1) and local initiatives (November 2003 to December 2006)



Distribution of offences by time of day and day of week

The analysis considered whether the implementation of the Act had resulted in any changes to the distribution of offences across times of the day and days of the week. Table 2.2 displays the number of violence against the person offences by time of day for each of the three year periods examined. The right hand column presents the percentage change between the average baseline period frequency of violence against the person offences (year one and year two for each time interval) and the frequency of such offences post implementation for each time interval.

The table shows that for most of the time periods across the course of the day, there was an increase in the number of violence against the person offences recorded. The most notable changes were the decreases between 1.00am and 2.59am followed by increases in the number of offences recorded between 3.00am until 6.59am. These changes have resulted in a flattening of the 1.00am to 2.59am peak in offences.

**Table 2.2** Violence against the person offences by time of day in Birmingham City Centre (police force area F1) (baseline and post implementation periods)

Time of day	Baseline year 1 frequency	ar 1 Baseline year 2 Post implementation year 3 frequency		Percentage change (average baseline to post implementation period)
0900-0959	47	58	81	54.3
1000-1059	67	77	89	23.6
1100-1159	103	108	116	10.0
1200-1259	146	121	132	-1.1
1300-1359	153	135	132	-8.3
1400-1459	126	121	149	20.6
1500-1559	187	177	170	-6.6
1600-1659	177	157	209	25.1
1700-1759	162	182	187	8.7
1800-1859	118	125	176	44.9
1900-1959	120	146	157	18.0
2000-2059	117	149	155	16.5
2100-2159	133	141	162	18.2
2200-2259	164	195	219	22.0
2300-2359	251	281	239	-10.2
0000-0059	307	360	329	-1.3
0100-0159	427	428	317	-25.8
0200-0259	483	486	361	-25.5
0300-0359	158	104	221	68.7
0400-0459	49	49	96	95.9
0500-0559	19	18	55	197.3
0600-0659	15	13	29	107.1
0700-0759	27	23	31	24.0
0800-0859	33	53	55	27.9

Figure 2.4 shows the percentage of violence against the person offences in each time interval for each year. For the baseline period this is averaged over the two year period. A smoothed trend line has also been plotted for each period<sup>1</sup>. This illustrates that in both the baseline and post implementation periods, the greatest percentage of offences were recorded between 2.00am and 2.59am. The trend line shows that between 11.00pm and 2.59am the proportion of offences recorded in the post implementation period was slightly lower than during the baseline period. The proportion of offences reported in the post implementation period between 3.00am to 7.59am was higher than the baseline. This figure points to a flattening out of the peaks of violence against the person by time of day post implementation.

<sup>1</sup> A two month moving average.

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Figure 2.4 Proportional changes to violence against the person offences by time of day in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)

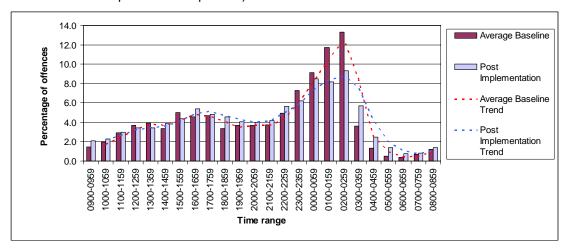
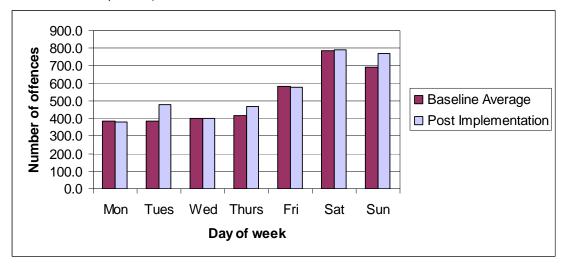


Figure 2.5 displays the frequency of violence against the person offences by day of week for the baseline and post implementation periods. The baseline period is an average for the two years. The distribution of offences across the week has not changed greatly between the baseline and post implementation periods. In both periods the number of offences recorded increased from Thursday towards the weekend. More offences were recorded over a Saturday in the post implementation period compared the baseline period. A greater number of offences were recorded on a Tuesday in the post implementation period.

Figure 2.5 Violence against the person offences by day of week in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)



### Victim profile

Figure 2.6 displays the gender of victims of violence against the person during the baseline and post implementation periods. The gender for the baseline period is an average over the two years. It is essential to consider the impact of the 'not recorded' field (missing values) when interpreting the findings of this section of the analysis. The figures presented are based on those recorded.

The recording of victim gender improved in the post implementation period (17.8 per cent not recorded compared to 24.6 per cent of offences during the baseline period). In both the baseline and post implementation time periods, males were recorded as being the victim of violence against the person in a greater number of cases than females.

Figure 2.6 Violence against the person offences by gender in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)

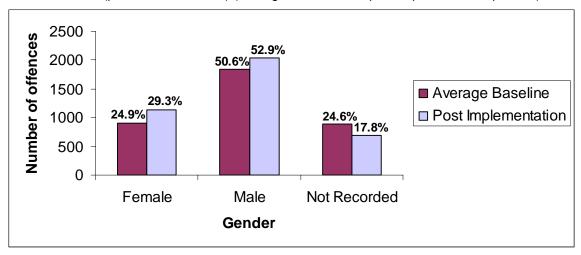
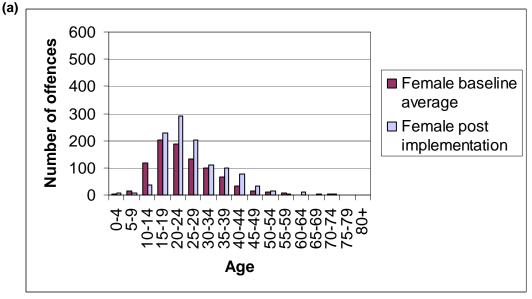
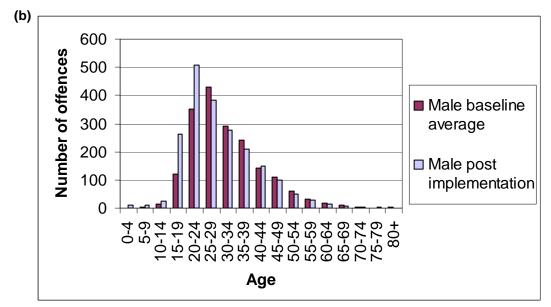


Figure 2.7 displays the gender and age of victims of violence against the person during the baseline and post implementation periods. The gender and age categories for the baseline periods are an average over the two years.

Figure 2.7a shows that the peak age for female victims of violence against the person during the baseline period was between 15 and 19 years old. In the post implementation period the peak age for female victims was between 20 and 24 years old. Figure 2.7b shows that the peak age for male victims during the baseline period was between 25 and 29 years old. In the post implementation period, the peak age for male victims was between 20 and 24 years old. These changes may have been influenced by the improvements in recording noted in Figure 2.6.

Figure 2.7 Violence against the person by age and gender in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)



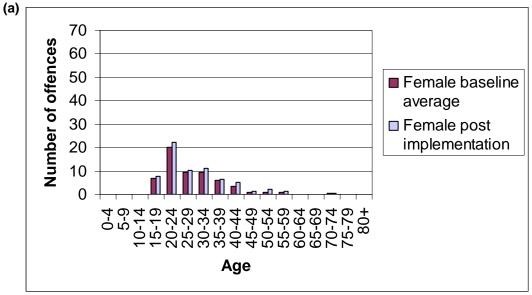


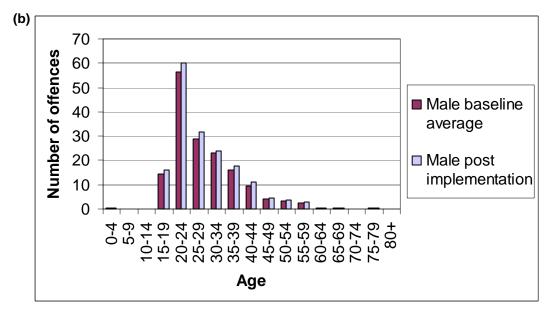
Alcohol related violence against the person

The crime offences supplied for this research also contained flags for whether alcohol was involved in the violence against the person offence, and a flag for domestic violence. In the case study area, seven per cent of violence against the person offences in the baseline period had an alcohol flag. In the post implementation period three per cent of offences had an alcohol flag. The following analysis is based on those offences with an alcohol flag only.

Figure 2.8 portrays the gender and age of victims of alcohol related violence against the person offences during the baseline and post implementation periods. The baseline frequencies are an average over the two years. As with violence against the person, overall there were a greater number of male victims of alcohol related violence against the person than there were female victims. Figure 2.8a shows that in both the baseline and post implementation periods, the peak age for female victims was between 20 and 24 years old (the same age group as the peak age for female victims of all violence against the person). Figure 2.8b shows that in both periods the peak age for male victims of alcohol related violence against the person was 20-24. This is slightly older than the peak age for male victims of all violence against the person offences.

Figure 2.8 Victims of violence against the person (with alcohol 'flagged') by age and gender in Birmingham City Centre (police force area F1) (average baseline and post implementation time periods)





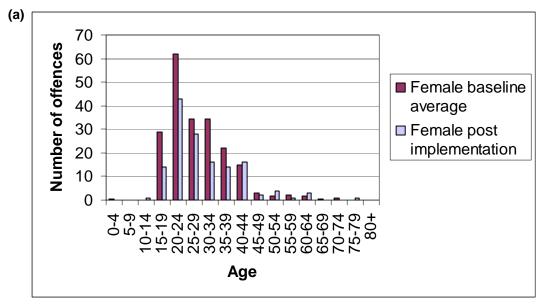
#### Domestic violence

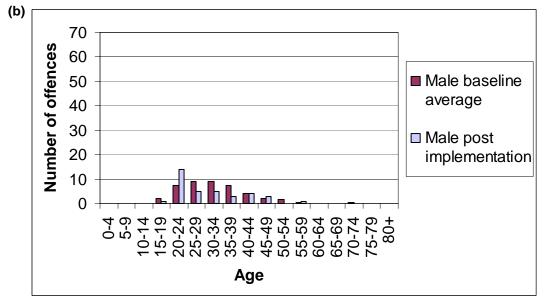
In the case study area, seven per cent of violence against the person offences in the baseline period and five per cent of offences in the post implementation period had a domestic violence flag. The following analysis is based on those offences with a domestic violence flag only.

Figure 2.9 portrays the gender and age of victims of violence against the person offences during the baseline and post implementation periods with a domestic violence flag. The baseline frequencies are an average over the two years. The majority of victims of violence against the person offences with a domestic flag were female. For both the baseline and post implementation periods, the peak age for victims was 20 - 24 years old. However, figure 2.9a shows that for female victims this peak was less pronounced in the post implementation

period with reductions in the number of victims from this age group. Conversely Figure 2.9b shows there has been an increase in the number of male victims in this age group.

Figure 2.9 Victims of violence against the person (with domestic violence 'flagged') by age and gender in Birmingham City Centre (police force area F1) (average baseline and post implementation time periods)





## Meso and micro level

In addition to examining change across the macro level (entire case study area), a further focus of this research was to consider whether the Act has impacted on crime and disorder at specific times and specific locations. The distribution of licensed premises is neither random nor uniform across the case study area, thus it is likely the impact of the Act on crime and disorder is also not evenly distributed across the case study area. The advantages and limitations of using these macro, meso and micro level analyses are discussed in more detail in the technical annex.

Two areas were generated for the quantitative analysis. The first was a series of concentric buffer zones produced using a Geographical Information System (GIS), at a distance of 50 metre intervals from licensed premises. Thus, the first buffer zone covered the area 0 to 50 metres from licensed premises, the second 50 to 100 metres, the third 100 to 150 metres, and the fourth 150 to 200 metres. In addition to this, software was used to run clustering algorithms that generated areas were there was a concentration of licensed premises. These could be considered areas with a high density of licensed premises. The methodology for constructing theses zones is described in more detail in the technical annex.

The cluster area contains 46 per cent of premises, and has a mean nearest neighbour distance of 35 metres. The non cluster area contains 54 per cent of premises and a mean nearest neighbour distance of 73 metres. Thus premises are on average twice as close together in the cluster area.

Furthermore, there was an examination of crime that occurred inside or within the vicinity of (directly outside) licensed premises. The police recorded crime data contains a licensed premise flag, and this was used to attribute violence against the person offences to individual premises. These areas can be considered inside or immediately adjacent to a premise.

Figure 2.10 Concentric buffer zones (50m intervals) around pubs, bars and nightclubs in Birmingham City Centre (police force area F1)

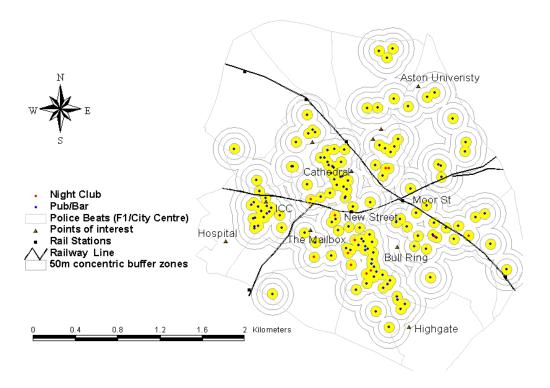
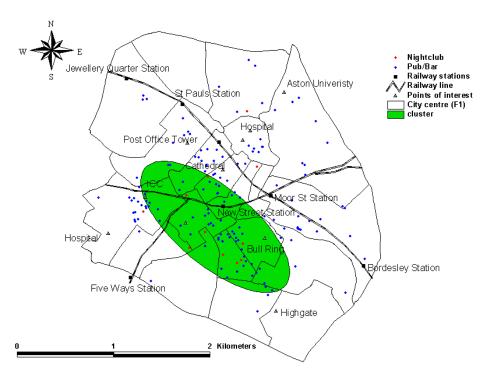


Figure 2.11 Cluster (high density) areas of pubs, bars and nightclubs in Birmingham City Centre (police force area F1)



Cluster area
Percentage of premises = 45.9
Mean nearest neighbour distance = 35.1m

Non cluster area Percentage of premises = 54.1 Mean nearest neighbour distance = 72.5m The frequency of violence against the person offences in each individual zone was calculated for the baseline period and post implementation period. These figures are reported in table 2.3. The table shows these offences are highly concentrated in the areas most closely surrounding licensed premises with just over 40 per cent of Birmingham City Centre's violence against the person occurring between 0-50m from a licensed premise in both periods. In both periods the proportion of violence against the person decreased with distance from licensed premises. There was little change to the proportion of violence against the person recorded in each of the zones between the two periods. There were slight increases in the proportion of violence against the person recorded in all of the buffers zones and in the cluster area.

**Table 2.3** Proportional changes to violence against the person offences in the buffer zones and cluster area in Birmingham City Centre (police force area F1) (average monthly baseline and post implementation periods)

				Area		
	Cluster	0-50m	50-100m	100-150m	150-200m	Birmingham City Centre (police force area F1)
Percentage baseline	35.7	41.3	18.6	11.3	8.0	100.0
Percentage post implementation	38.1	42.3	20.0	11.6	9.6	100.0
Proportional change	2.4	1.0	1.4	0.4	1.5	

### Daily distribution of violence against the person in specified zones

The frequency of violence against the person offences in each individual zone was divided by time of day into twenty-four one hour time intervals. The percentage of offences in each time interval for the baseline period (average over two years), and also the post implementation period was then calculated. From this a percentage change could be generated for each time interval in each individual zone, from the average baseline to the post implementation periods. The result of this proportional change analysis is depicted in table 2.4. This table also includes volume change in addition to the proportional change that represents the actual change in numbers.

The table shows that the changes to the distribution of violence against the person throughout Birmingham City Centre tended to be more pronounced in the areas closes to licensed premises and within the cluster area (concentration of pubs, clubs and bars). The major examples of this are the reductions between 2.00am and 2.59am and the increases between 3.00am and 3.59am.

**Table 2.4** Proportional changes to violence against the person by time of day and location in Birmingham City Centre (police force area F1) (average baseline and post implementation time periods)

	Area											
Time of day	Clust	Cluster 0-50m		50-100m		100-150m		150-200m		Birmingham		
	Proportion	Volume	Proportion	Volume	Proportion	Volume	Proportion	Volume	Proportion	Volume	Proportion	Volume
0900-0959	0.5	10	0.4	8	1.3	13	1.4	7	-0.7	-1	0.7	29
1000-1059	0.4	8	0.7	14	-0.3	1	-0.8	-3	-0.7	-1	0.3	16
1100-1159	0.4	11	0.8	16	-0.5	-1	0.2	3	-0.3	2	0.1	11
1200-1259	-0.4	0	0.3	8	-1.7	-8	-0.4	1	-1.5	-2	-0.3	-3
1300-1359	-0.2	3	-0.6	-7	-0.7	-1	-0.8	-2	-1.8	-2	-0.5	-11
1400-1459	0.2	9	0.0	3	0.3	7	2.5	13	-0.8	1	0.4	25
1500-1559	-1.4	-13	-0.2	1	-1.5	-5	-1.8	-5	-2.0	-3	-0.6	-11
1600-1659	0.8	20	0.7	16	-0.1	6	3.9	20	-3.2	-6	0.9	44
1700-1759	0.6	16	-0.4	-2	0.7	12	0.5	5	-0.1	5	0.1	14
1800-1859	0.8	17	-0.1	2	2.4	22	3.3	17	0.7	6	1.2	55
1900-1959	-0.7	-3	0.0	4	0.9	11	-2.5	-9	-1.1	-1	0.4	25
2000-2059	-0.5	-2	0.6	15	0.0	5	-1.9	-7	1.7	9	0.4	22
2100-2159	-0.5	-1	-0.2	2	2.0	19	-1.3	-4	1.2	7	0.4	24
2200-2259	0.4	15	1.9	37	-0.5	2	-1.3	-4	-0.1	5	0.8	42
2300-2359	-1.1	-3	-0.5	3	0.0	4	0.2	3	-0.1	5	-1.0	-24
0000-0059	0.4	25	-0.4	9	-0.5	2	0.4	4	0.3	9	-0.7	-7
0100-0159	-3.6	-28	-5.6	-70	-3.0	-16	-0.5	-1	2.3	16	-3.6	-112
0200-0259	-5.6	-53	-4.6	-54	-4.4	-25	-2.1	-7	2.3	19	-4.0	-123
0300-0359	4.6	78	3.8	66	2.6	24	-0.7	-2	3.0	14	2.2	91
0400-0459	1.5	27	1.1	20	1.0	10	2.1	10	-0.1	1	1.1	47
0500-0559	1.5	23	1.0	17	0.6	5	0.5	3	0.7	3	0.9	37
0600-0659	1.1	17	0.7	12	0.3	3	0.2	1	0.2	1	0.4	16
0700-0759	0.2	4	0.1	2	-0.1	1	0.4	2	0.3	2	0.1	6
0800-0859	0.6	11	0.5	9	1.1	10	-1.2	-5	-0.1	1	0.3	13

### Proportion of violence against the person in the cluster area

Crime ratios were produced to compare the number of offences that occurred within the cluster area with the number of offences that occurred outside the cluster area. The purpose of this is to examine whether there has been a change in the concentration of crime offences over time that occur in areas with high densities of pubs, bars and nightclubs.

Figure 2.12 tracks the changes to monthly crime ratios for the analysis period. This illustrates how the proportion of Birmingham's violence against the person occurring within the cluster area has changed over the baseline and implementation periods. Figure 2.12 shows that the proportion of Birmingham's violence has remained relatively stable throughout the baseline and post implementation periods, fluctuating between a ratio of 0.5 and 0.6.

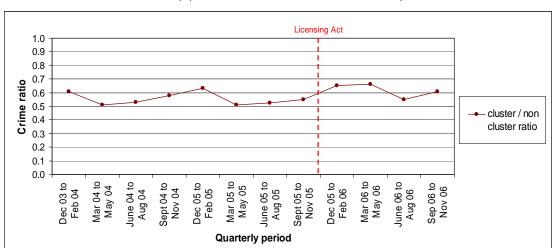


Figure 2.12 Violence against the person crime ratio in Birmingham City Centre (police force area F1) (December 2003 to November 2006)

Geographical distribution of violence against the person

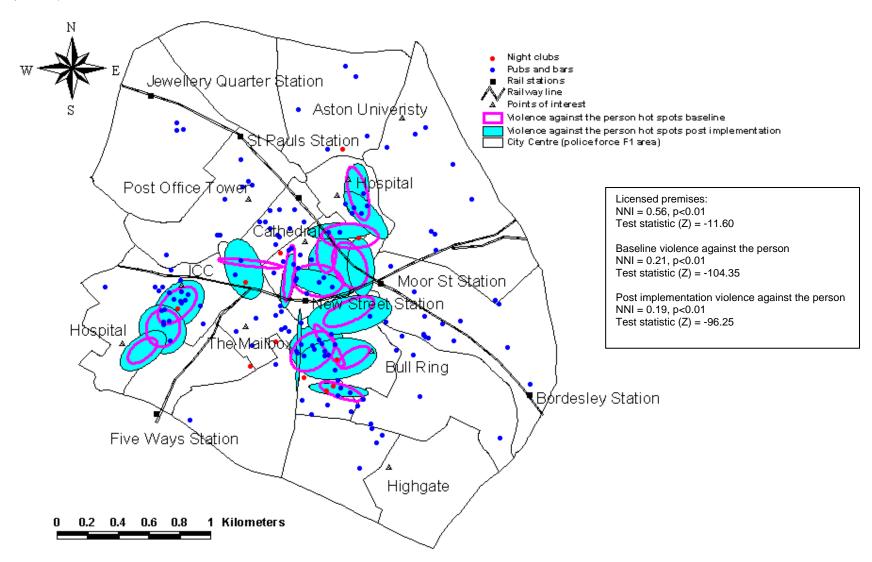
The following section examines the distribution of violence against the person in more detail using hot spot maps that were produced for both the baseline and post implementation periods. Two types of hot spots were generated using CrimeStat III, these were Nearest Neighbour Hierarchical Clusters (NNHC) and Kernel Density Estimations (KDE). More detailed information on the generation of hot spots, and the advantages and limitations of these approaches, are provided in the technical annex.

The Nearest Neighbour Index (NNI) statistic (described in the technical annex) was calculated prior to the construction of hot spots. This shows that there is evidence of clustering in the violence against the person data, above the clustering exhibited by premises themselves, and that hot spot analysis is an appropriate technique to use.

Figure 2.13 maps the NNHC hot spots in Birmingham City Centre both in the baseline and post implementation periods. More detailed information on the generation of the violence against the person hot spots is provided in the technical annex.

The ellipses on the map are generated statistically and represent hot spots of violence against the person. The purple ellipses represent the baseline and the blue ones the post implementation period. These hot spots do not account for the timing of the offences, but consider the overall concentration of offending over the period. The map reveals a correspondence between hot spots of violence against the person and areas with high densities of licensed premises. The hot spots remained relatively stable over time with those evident in baseline period remaining in post implementation period. Consequently there is little evidence of change in the geographical distribution of violence against the person.

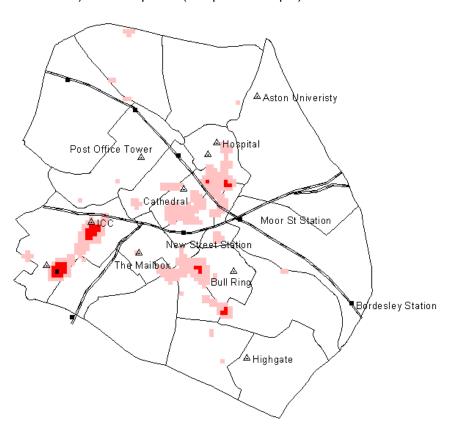
Figure 2.13 Violence against the person hot spots (NNHC) in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)



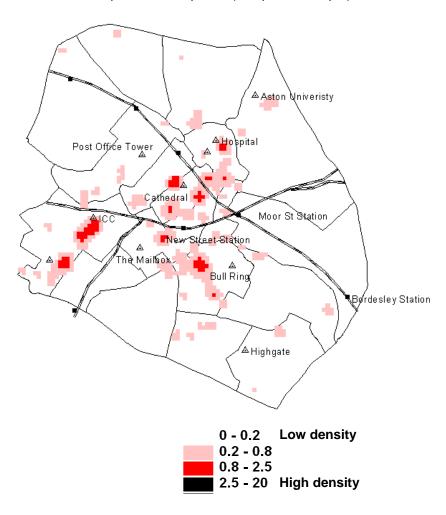
The maps which follow (Figure 2.14) show violence against the person hot spots by time of day. The hot spots are generated using KDE. The timing of offences has been grouped into four periods, namely 9.00pm to 10.59pm, 11.00pm to 0.59am, 1.00am to 2.59am and 3.00am to 4.59am. These hours were selected for two reasons. Firstly, the hours between 9.00pm and 5.00am account for the majority of all crimes of violence. Secondly, this period covers the hours when any changes to premises opening hours would occur. For each of the pairs of maps, the left hand side represents the baseline period, while the right hand side represents the post implementation period. The geographical distribution of violence against the person remained broadly similar between the baseline and post implementation periods. Between 9.00pm to 10.59pm in both periods hot spots begin to form around the Broad Street (ICC) and Hurst Street areas (around the Mailbox). There are also some hot spots to the north of New Street Station near the cathedral. These hot spots were more intense in the post implementation phase compared to the baseline. From 11.00pm to 0.59pm the intensity of hot spots in these locations increases, particularly in the Broad Street and Hurst Street areas. From 1.00am to 2.59am hot spots remain in these areas, with Broad Street and Hurst Street continuing to form key locations for violence against the person. During this period a new hot spot also forms to the east of the Bullring. In the baseline period, violence against the person reduces by the 3.00am to 4.59am time period. This reduction is far less evident in the post implementation period.

Figure 2.14 Violence against the person hot spots (KDE) by time of day in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)

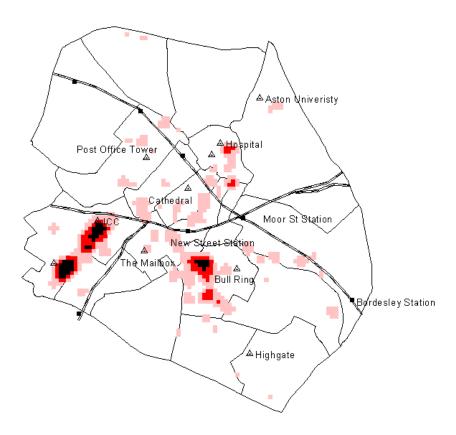
a) Baseline period (9.00pm - 10.59pm)



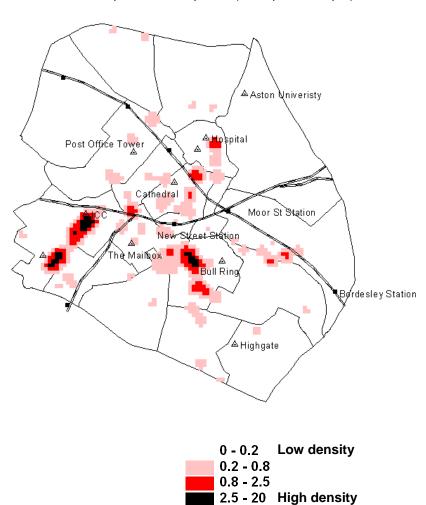
Post implementation period (9.00pm – 10.59pm)



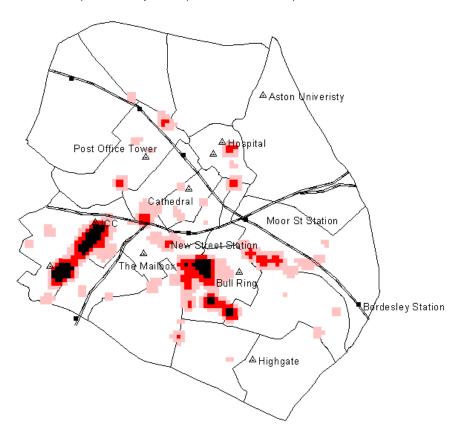
## b) Baseline period (11.00pm - 0.59pm)



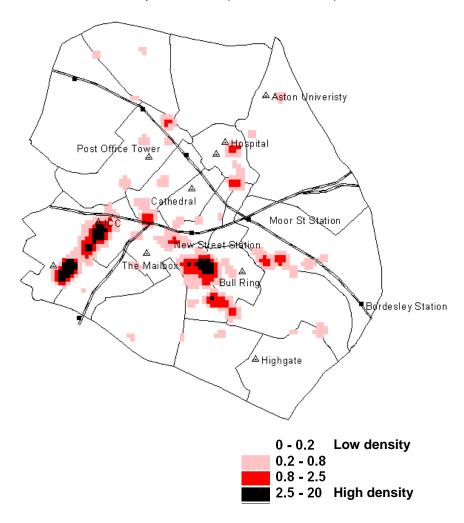
## Post implementation period (11.00pm – 0.59pm)



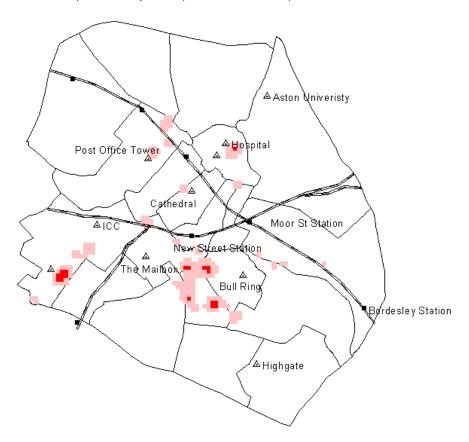
## c) Baseline period (1.00am - 2.59am)



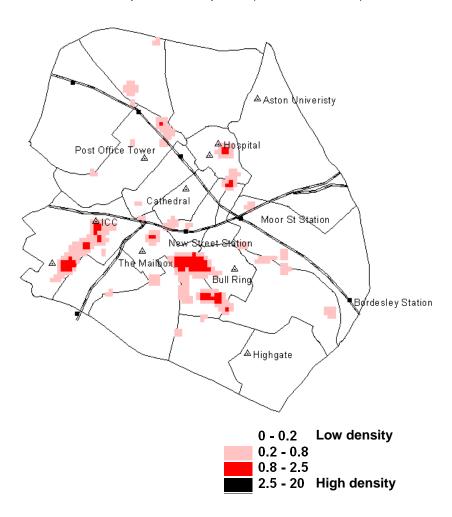
## Post implementation (1.00am – 2.59am)



## d) Baseline period (3.00am - 4.59am)



## Post implementation period (3.00am – 4.59am)



#### Violence against the person in or at licensed premises

The two Resource Targeting Tables which follow show the number and percentage of violence against the person offences occurring in or at licensed premises. Premises are ranked in descending order of the number of offences. For more detailed information on each individual premise the reader is referred to the qualitative fieldwork and the findings in tables 6.2 and 6.3. Note that these tables do not account for differences in premise type, for example the capacity, the hours open (pub or nightclub hours for example), or whether the premise has been closed for any period. They relate to the absolute number of offences in an area, and those premises with the highest concentrations of offences irrespective of premise type, as these do have a direct impact on policing. More discussion of this is provided in the technical annex.

Table 2.5, which covers the baseline period, shows that the top 15 premises (19% of premises) were responsible for over 47 per cent of all violence against the person offences. The premise with the most offences (81) accounted for 7 per cent of offences and the top 3 premises accounted for 16 per cent. At 30 per cent of premises there were no recorded offences. Eleven of the top 15 premises in the baseline also appeared in the top 15 in the post implementation period.

Results from the post implementation period are displayed in Table 2.6. The table shows that the top 15 premises (8% of all premises) together accounted for almost half (48%) of all offences of violence against the person. The same premise was responsible for the highest number of offences at the baseline period, again accounting for six per cent of offences. Two of the top three premises in the implementation period are the same as the baseline. These three premises accounted for 16 per cent of offences. As with the baseline, 30 per cent of premises had no recorded offences. The evidence from these tables suggests that the top 15 premises were responsible for a smaller proportion of offences in the post implementation period, while a similar proportion of premises in both periods had no offences recorded against them.

Figure 2.15 overleaf plots the hot spots of violence against the person for baseline and post implementation periods, along with the location of the top 15 premises in both periods. Most of the top 15 premises fall within the vicinity of violence against the person hot spots, with one top 15 premise falling just outside of a hot spot area. The majority of top 15 premises are concentrated around Broad Street and Hurst Street (near the Bullring) areas. There are also, however, a number of hot spot locations which did not coincide with any of the highlighted premises.

Resource Targeting Table of recorded<sup>1</sup> violence against the person offences recorded in or at pubs, bars and nightclubs in Birmingham City Centre (police force area F1) (baseline period) Table 2.5

Venue	Number of offences <sup>2</sup>	Number of premises	Cumulative number of offences	Cumulative number of premises	Percentage of offences	Percentage of premises	Cumulative percentage of offences	Cumulative percentage of premises
Α	81	1	81	1	6.9	0.5	6.9	0.5
В	59	1	140	2	5.0	0.5	11.9	1.0
C	44	1	184	3	3.7	0.5	15.6	1.5
D	38	1	222	4	3.2	0.5	18.8	2.1
E	35	1	257	5	3.0	0.5	21.8	2.6
F	35	1	292	6	3.0	0.5	24.8	3.1
G	34	1	326	7	2.9	0.5	27.7	3.6
Н	31	1	357	8	2.6	0.5	30.3	4.1
I	30	1	387	9	2.5	0.5	32.8	4.6
J	30	1	417	10	2.5	0.5	35.4	5.2
K	28	1	445	11	2.4	0.5	37.7	5.7
L	25	1	470	12	2.1	0.5	39.9	6.2
M	24	1	494	13	2.0	0.5	41.9	6.7
N	24	1	518	14	2.0	0.5	43.9	7.2
0	21	1	539	15	1.8	0.5	45.7	7.7
	10 to 20	22	851	37	26.5	11.3	72.2	19.1
	5 to 9	20	1020	57	14.3	10.3	86.5	29.4
	1 to 4	82	1179	139	13.5	42.3	100.0	71.6
	0	55	0	194	0.0	28.4	100.0	100.0
	1179	194	na	na	100.0	100.0	na	na

<sup>&</sup>lt;sup>1</sup> Based on police recorded crime data using offences flagged in or at individual licensed premises <sup>2</sup> These figures represent the sum of 2 years of baseline data

Top 15 premise baseline and post implementation

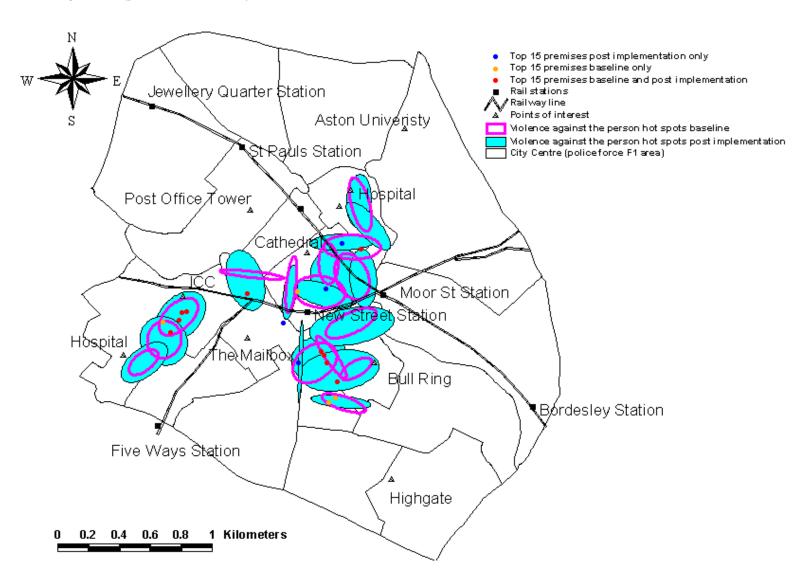
**Table 2.6** Resource Targeting Table of violence against the person offences recorded in or at pubs, bars and nightclubs in Birmingham City Centre (police force area F1) (post implementation period)

Venue	Baseline rank	Number of offences	Number of premises	Cumulative number of offences	Cumulative number of premises	Percentage of offences	Percentage of premises	Cumulative percentage of offences	Cumulative percentage of premises
A	1	39	1	39	1	6.4	0.5	6.4	0.5
C	3	29	1	68	2	4.8	0.5	11.2	1.0
D	4	26	1	94	3	4.3	0.5	15.5	1.5
В	2	24	1	118	4	4.0	0.5	19.5	2.1
F	6	24	1	142	5	4.0	0.5	23.5	2.6
	10	19	1	161	6	3.1	0.5	26.6	3.1
L L	12	17	1	178	7	2.8	0.5	29.4	3.6
G	7	17	1	195	8	2.8	0.5	32.2	4.1
H	8	17	1	212	9	2.8	0.5	35.0	4.6
Р	>15	16	1	228	10	2.6	0.5	37.7	5.2
E	5	15	1	243	11	2.5	0.5	40.2	5.7
Q	>15	14	1	257	12	2.3	0.5	42.5	6.2
R	>15	12	1	269	13	2.0	0.5	44.5	6.7
N	14	12	1	281	14	2.0	0.5	46.4	7.2
S	>15	12	1	293	15	2.0	0.5	48.4	7.7
		7 to 11	12	396	27	17.0	6.2	65.5	13.9
		3 to 6	30	516	57	19.8	15.5	85.3	29.4
		1 to 2	61	605	118	14.7	31.4	100.0	60.8
		0	76	0	194	0.0	39.2	100.0	100.0
		605	194	na	na	100.0	100.0	na	na

<sup>&</sup>lt;sup>1</sup> Based on police recorded crime data using offences flagged in or at individual licensed premises

Top 15 premise baseline and post implementation

Figure 2.15 Comparison of top 15 ranked establishments for violence against the person in the baseline and post implementation periods in Birmingham City Centre (police force area F1)



#### Additional hours used and applied for

The fieldworkers collected information on the actual additional hours premises *used* as opposed to those that were applied for. Information on the hours *applied for* were provided by the local authority for each area in the licensed premises databases.

Table 2.7 presents information on premises visited by the fieldworkers during the qualitative part of the study. This shows that five of the premises visited were in the top 15 in both periods, the remaining three were not in the top fifteen in either period (although most were in the top 30).

Only one premise did not apply for additional hours. Of the seven which did, five applied for nine or more hours. Premises do not, of course, always use the hours they apply for. In fact, none of the premises routinely used all of the hours applied for, and on average, premises used just 47 per cent of the extra hours.

**Table 2.7** Profile of premises visited by fieldworkers in Birmingham City Centre (police force area F1) during post implementation interviews

	Weekly additional hours (applied for)	Weekly additional hours (used)	Percentage hours applied for used	Capacity	Violence against person offences (average baseline)	Violence against person offences (post implementation)
Т	15	11	73.3	-	1	7
U	11	8	72.7	-	10	12
В	8	4	50.0	2400	30	24
N	30	12	40.0	210	6	12
С	0	0	0.0	1198	22	29
V	10	4	40.0	530	4	1
L	4	4	100.0	-	12	17
G	8	0	0.0	-	17	17

Top 15
Baseline and post
Baseline only
Post only

In order to make comparisons easier, premises were grouped into one of three categories according to the number of additional hours *used per week*: none; one to five, and six or more.

Table 2.8 examines crime by the additional hours premises *used*, at premises visited by the fieldworkers. This shows that at these premises there was an increase in the overall number of offences post implementation compared to baseline (from 102 to 119). In terms of the percentage of offences, the 25 per cent of premises *using no additional hours* accounted for 38 per cent of offences in the baseline period and a similar 39 per cent post implementation. Those *using* between one and five hours decreased their share of offences from 45 per cent to 35 per cent, while the share of those using six or more hours increased from 17 per cent to 26 per cent. In other words, there was a reduction post implementation in terms of violence against the person offences for those *using* one to five hours, while all other premises increased their share. Due to the data structures it is not simple to compare the time of day or day of week of crime directly with the time of day or day of week when premises extended their hours.

**Table 2.8** Estimated additional hours *used* per week by premises visited by fieldworkers in Birmingham City Centre (police force area F1) and violence against the person offences (average baseline and post implementation periods)

Additional hours (used)	Number of premises	Violence against the person offences (average baseline)	Violence against the person offences (post implementation)
None	2	39	46
1 to 5	3	46	42
6 plus	3	17	31
Total	8	102	119

A -1 -1:4:1	Percentage	Percentage of violence against the person				
Additional hours (used)	of premises	Average baseline	Post implementation			
None	25.0	38.2	38.7			
1 to 5	37.5	45.1	35.3			
6 plus	37.5	16.7	26.1			
Total	100.0	100.0	100.0			

This analysis was repeated using the additional hours *applied for* at premises were this data was available. In Birmingham there were 185 such premises. As baseline opening hours were not known, it was necessary to estimate the number of additional hours applied for, on the assumption that most pubs would have closed at 11.00pm and most clubs at 2.00am in the baseline period *(traditional closing hours)*. The difference between the traditional baseline hours and the post implementation hours *applied for* were generated the number of *additional hours applied for per week*.

Table 2.9 shows that an estimated 40 per cent of premises did not *apply for* additional hours, 23 per cent applied for one to eight additional hours per week, and 36 per cent applied for more than nine hours per week. The proportion of violence against the person occurring in each of these three groups of premises remained stable between the baseline and implementation periods. Premises that did not *apply for* additional hours accounted for just over 40 per cent of violence against the person offences in both periods. Premises that *applied for* one to eight hours accounted for around 24 per cent of offences in the baseline, with little change post implementation. Premises *applying for* nine hours or more accounted for 34 per cent of offences in the baseline and 33 per cent of offences post implementation.

**Table 2.9** Estimated additional hours *applied for* by all premises in Birmingham City Centre (police force area F1) and violence against the person offences (average baseline and post implementation periods)

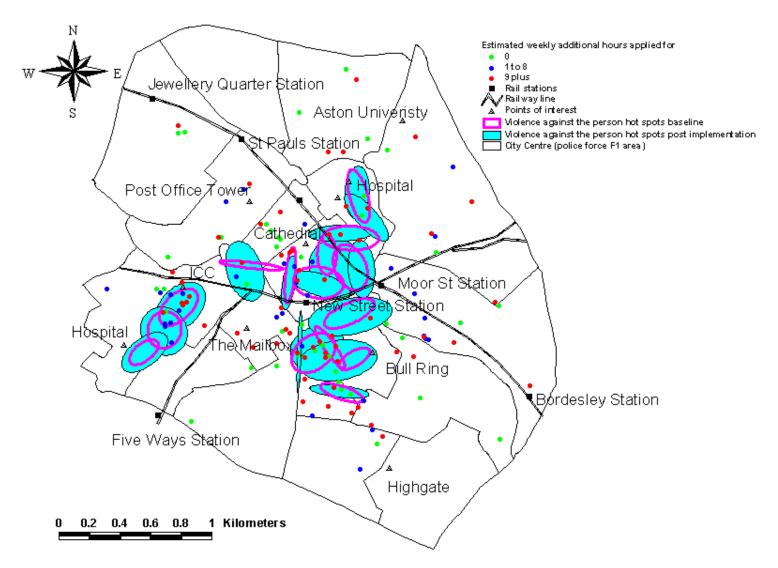
		Violence against	
Additional		the person	
hours	Number of	(average	Violence against the person (post
(applied)	premises	baseline)	implementation)
None	74	162	161
1 to 8	44	96	95
9 plus	67	135	126
Total	185	393	382

Additional	Percentage	Percentage of violence against the person			
hours	of				
(applied)	premises	Average baseline	Post implementation		
None	40.0	41.2	42.1		
1 to 8	23.8	24.4	24.9		
9 plus	36.2	34.4	33.0		
Total	100.0	100.0	100.0		

Unfortunately the data structures make it very difficult to link changes in licensing hours to change in crime by location and time. The top 15 analysis uses recorded crime data (violence against the person offences) and extracts the premise name as a text field based on the number of times it appears (frequency). It is a complex process to link the frequencies generated on premise name back to the individual crime records to extract number of offences at each premise by time of day. It is suggested that future research here is necessary and that local authorities maintain a database of violence offences by premise which include the date and time of the offence, the name of the premise, and the premise opening hours at the time of the offence.

Figure 2.16 maps the distribution of estimated additional hours applied for by premises grouped into categories according to the number of hours applied for (none denoted by green dot; 1-8 hours, blue dot; and 9 hours or more, red dot) and compares this with baseline and post implementation hot spots. Those applying for more additional hours tend to be concentrated around the Hurst Street and Broad Street areas. Post implementation hot spots do concentrate around areas where there are a high number of premises applying for more additional hours; however most of these areas were also hot spots during the baseline period.

Figure 2.16 Estimated weekly additional hours applied for by premises in Birmingham City Centre (police force area F1) in the post implementation period



# Accident and Emergency and ambulance data

Ambulance data was provided for Birmingham from November 2004 to the end of December 2006. Details of the information requested are provided in the technical annex. Incidents of assault were extracted and analysed by month, by hour of the night and by age. The time periods covered were 10.00pm on Friday through to 5.00am on Saturday and 10.00pm on Saturday through to 5.00am on Sunday. Only those patients aged 18 to 34 were included in the data set. Accident and Emergency data was not supplied.

#### Distribution of incidents by month and year

In total, 846 ambulance assaults were available for analysis covering a period of 25 months. Subsets of police recorded crime data on violence against the person were produced to accord with the days and times covered by the assault data. Therefore violence against the person offences occurring outside of weekend nights were excluded to allow a more meaningful comparison between recorded crime and assaults. However, changes in violence against the person on weekend nights were compared with overall violence against the person (i.e. that occurring at any time) to provide a broader context for the various analyses.

Caution must be exercised in comparing the results from the ambulance data with those on recorded crime. This is because the geographical areas covered by the ambulance service will not be coterminous with BCUs or police wards. Also, there will be different interpretations of what constitutes violence against the person for police recording purposes and what constitutes an assault for ambulance service recording purposes. As police violence against the person and assaults recorded by the ambulance service use entirely different information systems it was not possible to link the two various data sets.

On average, there were just over two and a half times as many violence against the person offences recorded by the police than assaults in the baseline period. This is indicated by the violence against the person/assaults ratio in Table 2.10. The ratio between the two reduced slightly over time.

Weekend violence against the person fell by just over five per cent between the baseline and the post implementation period. Assaults recorded by the ambulance service saw a very small increase of less than two per cent.

**Table 2.10** Violence against the person and ambulance response assault data in Birmingham (December 2004 to November 2006)

Category	Baseline December 2004 to November 2005	Post implementation December 2005 to November 2006	Percentage change baseline post implementation
Violence against the person	1034	981	-5.1
Assaults	382	388	1.6
Ratio of violence against the person to ambulance assaults	2.7	2.5	

The monthly distribution of ambulance service recorded assaults appears in Table 2.11 and in Figure 2.17. Since just over two years' worth of data was provided by the ambulance service, it was not possible to derive a baseline from data covering the previous two years. As a result change was calculated against data for the previous 12 months.

Overall, there was little change in the volume of assaults for Birmingham. However, when the changes are examined by month some fluctuations are evident. These are characterised by

some reductions in the immediate post implementation period followed by monthly increases from June 2006 onwards.

Figure 2.17 compares the assaults following the implementation of the Act with the mean monthly totals in the previous year. The baseline appears as a grey dotted line. The post implementation line tracks the baseline very closely in the first three months; it then falls below it in April and May 2006. From June onwards it increases above the baseline with a higher number of assaults occurring compared with the previous year.

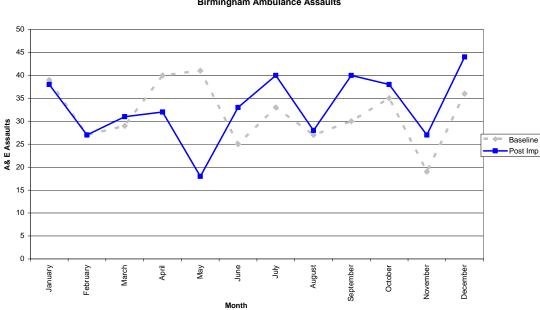
There is generally a strong correspondence between ambulance service assaults in the baseline and post implementation periods; the peaks and troughs coincide except in May 2006 when there is a sizeable 56 per cent reduction compared with the previous year, although the number of cases is relatively low.

**Table 2.11** Ambulance response assault data in Birmingham (November 2004 to December 2006)

		Υe	ear		Post implementation	
	2003	2004	2005	2006	percentage change (monthly average) 1	
January			39	38	-2.6	
February			27	27	0	
March			29	31	6.9	
April			40	32	-20	
May			41	18	-56	
June			25	33	32	
July			33	40	21.2	
August			27	28	3.7	
September			30	40	33.3	
October			35	38	8.6	
November		32	19	27	42.1	
December		37	36	44	20.5	

<sup>&</sup>lt;sup>1</sup> Note: The baseline period is an average of the two year period 2004/2005

Figure 2.17 Ambulance response assault data in Birmingham (average monthly baseline periods and post implementation period)



**Birmingham Ambulance Assaults** 

Figure 2.18 compares the monthly percentage change in ambulance data assaults (displayed in the grey bars) with that of police recorded violence against the person for weekend nights. The latter is shown in red where increased levels occurred compared with the same month in the previous two years and in blue where a reduction has taken place.

There are four months in 2006 when both assaults and weekend violence against the person registered an increase on the previous year. They both increased in June and July (the period of the World Cup) and by a similar amount in September. They also both increased, albeit by a very small margin, in May. Assaults and violence against the person both fell in April and May. Although some months saw changes in opposite directions (e.g. October and November 2006) there was greater consistency in the direction of change between assaults and violence against the person than in several other case study areas.

Figure 2.19 compares baseline and post implementation monthly changes in weekend evening violence against the person with changes for all violence against the person occurring in Birmingham. The red and blue bars represent violence against the person on weekend nights and the clear white bars show changes in all violence against the person offences.

There are clear differences in the direction of change between weekend nightly violence against the person and overall violence against the person in the first half of the post implementation period. Large reductions occurred in weekend violence against the person in April and May against moderate increases in overall violence against the person. Interestingly, both weekend violence against the person and overall violence against the person increased in Birmingham during the summer months of June and July. This might reflect the impact of the World Cup. These months also saw a similar increase in assaults. However, in most months there were reductions in violence against the person during nights at weekends against a background of moderate increases in violence against the person in general.

Figure 2.18 Percentage change in ambulance response assault data in Birmingham (average baseline to post implementation period change)

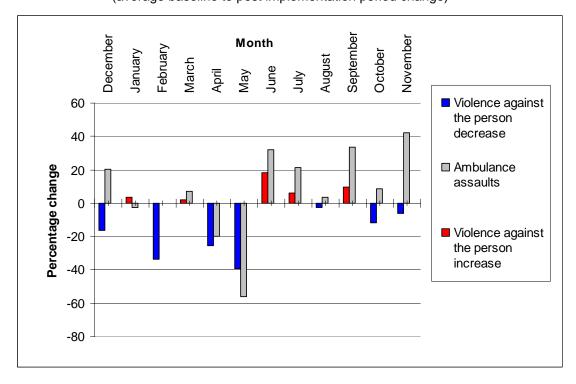
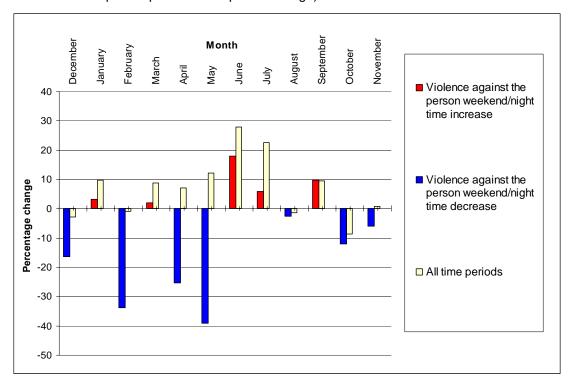


Figure 2.19 Percentage change in violence against the person occurring at weekends and violence against the person overall in Birmingham (average baseline to post implementation period change)



Distribution of incidents by time of day

The timing of ambulance data assaults appear in Table 2.12. Frequencies of assault by time of day are shown for the baseline period and for the post implementation period. The baseline and post implementation change in assaults is displayed in the penultimate column and this is compared with changes in weekend violence against the person in the final column.

**Table 2.12** Ambulance response assault data by time of day in Birmingham (baseline and post implementation periods)

Time of day	2005 frequency	Post implementation December 2005 to November 2006	Ambulance assaults percentage change baseline post implementation	Weekend violence against the person percentage change mean baseline post implementation
2200-2259	38	33	-13.1	1.3
2300-2359	61	42	-31.1	-9.5
0000-0059	66	85	28.7	-9.3
0100-0159	76	83	9.2	-14.2
0200-0259	86	75	-12.8	-23.2
0300-0359	41	55	34.1	77.1
0400-0459	13	23	76.9	50.0

There are some noticeable similarities in the direction and to some extent the magnitude of change in the timing of assaults and violence against the person. Both show a decrease between 2.00am and 2.59am and sizeable increases between 3.00am and 3.59am and between 4.00am and 4.59am.

Assaults increased between midnight and 12.59am against the background of a 9.5 per cent fall in violence against the person.

The proportion of assaults within each time band in the baseline and post implementation periods are shown in Figure 2.20.

This shows changes in the distribution of assaults throughout weekend nights. The post implementation period has seen a greater proportion of these offences concentrated at three points during the night; between midnight and 12.59am and in the early hours between 3.00am and 3.59am and between 4.00am and 4.59am.

25.0 Ambulance data assaults 20.0 15.0 ■ Baseline average 10.0 ■ Post implementation 5.0 0.0 2200-2259 2300-2359 0000-002 0100-0159 0200-0259 0300-0359 Time range

Figure 2.20 Percentage of ambulance response assault data by time period in Birmingham (average baseline and post implementation periods)

# Victim profile

The results of an analysis of assaults by age appear in Figure 2.21. With only modest changes on the previous year, the age distributions are similar. Of interest, changes include the modest increase in the number of victims aged 21-24 and the more marked rise in younger victims aged 18.

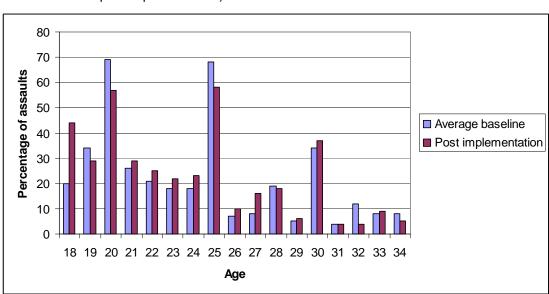


Figure 2.21 Percentage of assaults in Birmingham by age of victim (average baseline and post implementation)

# Summary of findings: violence against the person

- Levels of violence against the person were higher in the post implementation period compared to the baseline.
- Males were recorded as being the victim of violence against the person in a greater number of cases than females.
- The peak age for female victims of violence against the person during the baseline period was between 15-19 years old this shifted to 20-24 post implementation.
- The peak age for male victims during the baseline period was between 25 and 29 years old. This shifted to 20-24 post implementation period.
- The majority of victims of violence against the person offences with a domestic flag were female. For both the baseline and post implementation periods, the peak age for victims was 20-24 years old.
- Violence against the person was highly concentrated in areas closest to licensed premises. Over 40% of Birmingham City Centre's violence against the person was located within 0-50m of a licensed premise. In both the baseline and post implementation periods the proportion of violence against the person decreased with distance from licensed premises.
- Changes to the distribution of violence against the person throughout Birmingham City Centre tended to be more pronounced in the areas closest to licensed premises and within the cluster area.
- The crime ratio suggests that the concentration of violence against the person in areas with a high density of pubs compared to the rest of the city centre has remained fairly stable over the past three years. There is no evidence of violence against the person becoming more concentrated since the introduction of the Act.
- The locations of hot spots of violence against the person have not altered dramatically since the introduction of the Act. There has been a slight change in the hot spots between 3.00am and 5.00am in the post implementation period, when hot spots have remained for longer periods in and around some of the case study's key drinking areas.
- The 15 premises with the highest frequency of violence against the person were responsible for almost 50 per cent of such offences.
- There was a reduction post implementation in terms of violence against the person offences for premises *using* one to five hours, while all other premises increased their share.
- This change was not evident when examining premises by the number of additional hours applied for. This highlights the importance of collecting information on additional hours used.
- A&E data demonstrated that 2.5 times as many violence against the person offences were recorded by the police compared with assaults in the baseline period.
- Weekend violence against the person fell by just over five per cent between the baseline and the post implementation period.

- Weekend violence against the person, overall violence against the person and assaults increased in June and July 2006.
- Ambulance service assaults remained the same in the baseline and post implementation periods, except in May 2006 which saw a 56 per cent reduction.
- There was a greater volume of incidents of assaults and violence against the person offences between 3.00am and 5.00am in the post implementation period.
- Statistical significant tests revealed no significant changes in levels of violence against the person in the baseline period or the post implementation period (see supplementary annex)
- There was a slight increase in serious offences of plus 9 offences (see supplementary annex)
- Birmingham registered increases in weekday violence against the person for 9 out of 12 months post implementation (see supplementary annex)
- In Birmingham, there was a modest reduction in violence on weekday nights between 1am and 2am and this reduction was stronger at the weekends.
   Violence also reduced quite markedly on weekend nights between 2am and 3am by 122 offences. This amounted to a 6.3% fall in the concentration of violence between 2am and 3am at weekends (see supplementary annex)
- The KDE synthesis maps revealed reductions 1.00am to 2.59am, and increases 3.00am. These are concentrated around the key drinking areas (see supplementary annex)

# 3. Criminal damage

Criminal damage includes crimes such as arson, damage and vandalism to buildings, vehicles and other property and threat or possession with intent to commit criminal damage.

Vandalism recorded by the British Crime Survey has fallen by 19 per cent since its high point in 1995. Between 2004/5 and 2005/06 the British Crime Survey reported no significant change in criminal damage while police recorded figures showed a 1 per cent reduction. (Walker, Kershaw and Nicholas, 2006). Nationally, criminal damage offences tend to peak in the spring months then fall in the summer months followed by another peak in autumn (Hird and Ruparel, 2007).

The findings of this analysis are supported by additional analysis presented in the supplementary annex which examines criminal damage using statistical tests of change from the baseline to post implementation, weekend and weekday offences, and synthesis maps of hot spot change by time of day. The results of this are detailed in the supplementary analysis, and also included in the summary findings at the start of this annex, and concluding sections of this annex. The reader is also referred to the final report that summarises the findings of all five case study areas.

#### Macro level

Annual criminal damage counts in Birmingham have slightly increased over time from 1116 offences in year 1 and 1174 offences in year 2 (both baseline) and remained similar at 1169 offences in the post implementation period. Monthly variations show an average of 95 offences per month in the baseline period and an average of 97 offences per month post implementation. However, these averages hide some important fluctuations occurring throughout the period of analysis. Table 3.1 displays the number of criminal damage offences in Birmingham City Centre by month and year, and the blue shaded area represents the post implementation period. The percentage change figure is the change between the number of offences in each month during the post implementation period, and the average number of offences in the two corresponding months from the two previous years in the baseline period. The table shows that for seven months of the post implementation period there were increases in criminal damage compared to corresponding months in the baseline, with the remaining five months showing decreases. The most notable changes are the increases in June (18.9%), July (38.3%) and November (26.2%) and the decreases in March (34.7%), May (12.1%) and September (15.3%).

**Table 3.1** Criminal damage monthly crime counts in Birmingham City Centre (police force area F1) (November 2003 to December 2006)

		Yε	ear		Post implementation percentage change
	2003	2004	2005	2006	(monthly average) 1
January		85	103	98	4.3
February		90	96	99	6.5
March		120	116	77	-34.7
April		88	105	99	2.6
May		105	109	94	-12.1
June		97	93	113	18.9
July		78	97	121	38.3
August		93	89	83	-8.8
September		99	90	80	-15.3
October		86	105	103	7.9
November		80	88	106	26.2
December	95	83	94	89	5.6

<sup>&</sup>lt;sup>1</sup> Note: The baseline period is an average of the two year period 2004/2005

Figure 3.1 shows the monthly rate of criminal damage (per 10,000 persons) in Birmingham City Centre during the post implementation period (blue line). The average monthly rate of criminal damage for the baseline period is shown as a dotted grey line. The rate of criminal damage remained stable during the post implementation period between December to May; although this trend was interrupted by a short term decrease between February and March 2006 (a period during which short term increases had been recorded in the baseline period). From May to July of the post implementation period criminal damage offences increased sharply; this period coincides with the World Cup.

Figure 3.1 Criminal damage crime rates in Birmingham City Centre (police force area F1) (average monthly baseline and post implementation periods)

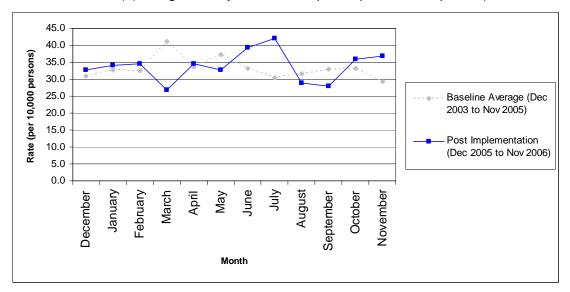
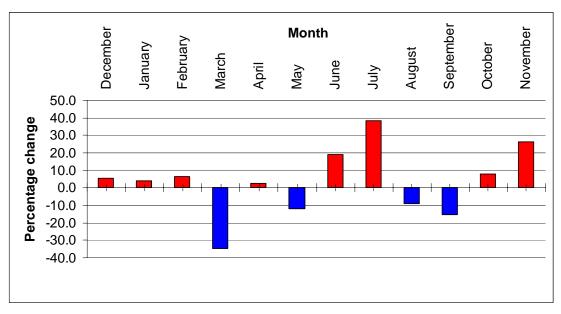


Figure 3.2 shows the percentage change between the average monthly frequency of criminal damage offences during the baseline period, and the monthly frequencies of such offences during the post implementation period. The graph highlights the reductions, compared to baseline levels, in criminal damage recorded in March, May, August and September and the increases recorded for all other months.

Figure 3.2 Percentage change in criminal damage offences in Birmingham City Centre (police force area F1) (average monthly baseline to post implementation period change)



#### Distribution of offences by time of day and day of week

Table 3.2 displays the number of criminal damage offences by time of day for each of the three year periods examined. The average percentage change reflects the change between the average baseline period frequency of criminal damage (year one and year two for each time interval) and the frequency of such offences post implementation for each time interval. This shows that the daily distribution of criminal damage offences during the post implementation period retained a similar pattern to the baseline. The number of offences rises steadily from 6.00am until it peaks around 5.00pm and 6.00pm, offences continue to occur at a similar but slightly lower level until around 3.00am when the frequency of offences in each hour begins to fall. However, changes between the baseline and post implementation periods can be identified. There was an increase in the number of criminal damage offences recorded between 6.00am and 8.59am, with a particularly marked increase between 6.00am and 6.59am (77.8%). There was a decrease of 33.8 per cent in the number of offences occurring between 7.00pm and 7.59pm.

**Table 3.2** Criminal damage offences by time of day in Birmingham City Centre (police force area F1) (baseline and post implementation periods)

			7	1
Time of day	Baseline year 1 frequency	Baseline year 2 frequency	Post implementation year 3 frequency	Percentage change (average baseline to post implementation period)
0900-0959	42	40	39	-4.9
1000-1059	33	33	29	-12.1
1100-1159	33	24	41	43.9
1200-1259	45	49	48	2.1
1300-1359	36	35	31	-12.7
1400-1459	43	55	46	-6.1
1500-1559	53	50	58	12.6
1600-1659	57	52	77	41.3
1700-1759	70	85	76	-1.9
1800-1859	82	81	77	-5.5
1900-1959	69	73	47	-33.8
2000-2059	63	63	62	-1.6
2100-2159	54	68	73	19.7
2200-2259	50	55	62	18.1
2300-2359	69	73	68	-4.2
0000-0059	67	56	55	-10.6
0100-0159	64	73	54	-21.2
0200-0259	77	70	61	-17.0
0300-0359	37	42	46	16.5
0400-0459	19	15	29	70.6
0500-0559	16	10	9	-30.8
0600-0659	8	10	16	77.8
0700-0759	14	20	24	41.2
0800-0859	23	31	41	51.9

Figure 3.3 shows the percentage of criminal damage offences in each time interval for each year. For the baseline period this is averaged over the two year period. There is also a smoothed trend line<sup>2</sup> plotted for each of the time periods under consideration.

The trend lines indicate that, compared to the baseline, a higher number of post implementation offences occurred between 3.00pm and 5.59pm. A smaller proportion of criminal damage offences were recorded between 6.00pm and 9.59pm and 1.00 am and

<sup>&</sup>lt;sup>2</sup> Two month moving average

3.59am. It is difficult to detect any change in criminal damage offence peaks by time of day post implementation.

Figure 3.3 Proportional changes to criminal damage offences by time period in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)

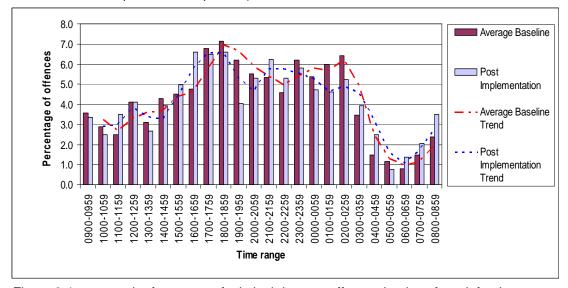
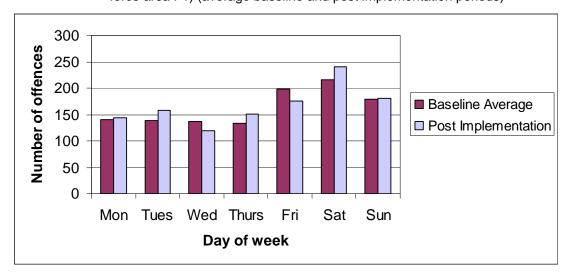


Figure 3.4 portrays the frequency of criminal damage offences by day of week for the baseline period and post implementation periods. The baseline period is an average for the two years. The graph shows that there was little change in the weekly distribution of criminal damage offences between the baseline and post implementation periods. Criminal damage was highest on Saturday for both time periods although there was an increase in the number of criminal damage offences recorded on Saturdays in the post implementation period. There were reductions in the numbers of offences recorded on Wednesdays and Fridays during the post implementation period.

Figure 3.4 Criminal damage offences by day of week in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)



#### Meso and micro level

In order to examine change in more detail, the frequency of criminal damage offences were examined for specifically defined zones within the case study area. These were 50m concentric buffer zones surrounding licensed premises (pubs, bars and clubs) and also cluster areas (areas with high densities of licensed premises). The methodology for constructing these zones is described in more detail in the technical annex.

Table 3.3 shows the proportion of criminal damage offences occurring in each of these zones during the two periods. The table shows that criminal damage is most concentrated in the areas closest to licensed premises, with the proportion of offences declining with increased distance from premises. This trend is similar in both periods although there have been slight increases in the proportion of offences occurring between 0 and 150m from licensed premises during the post implementation period.

**Table 3.3** Proportional changes to criminal damage offences in the buffer zones and cluster area in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)

	Area							
	Cluster	0.50~	50.400m	100-	150-	Birmingham City Centre (Police Force		
	Cluster	0-50m	50-100m	150m	200m	F1 area)		
Percentage								
baseline	28.5	27.6	21.7	13.4	11.1	100.0		
Percentage post								
implementation	27.6	29.3	23.3	11.6	10.1	100.0		
Proportional								
change	-0.9	1.8	1.6	-1.9	-1.0			

Daily distribution of criminal damage in specified zones

The frequencies of criminal damage offences in each individual zone in the baseline period and post implementation period were divided by time of day into twenty-four one hour time intervals. The percentage of offences in each time interval for the baseline period (average over two years), and also the post implementation period was then calculated. From this a percentage change could be generated for each time interval in each individual zone, from the average baseline to the post implementation periods. The result of this proportional change analysis is depicted in Table 3.4. The result of this proportional change analysis is depicted in Table 3.4. This table also includes volume change in addition to the proportional change that represents the actual change in numbers.

The table shows that the changes to the daily distribution of criminal damage were not distributed evenly across the Birmingham area. Nor was there a discernible pattern to the changes that did occur. Most of the changes were only minor – less than one percentage point. There was a tendency for the changes that occurred in Birmingham as a whole to be more pronounced in the areas closer to licensed premises. A number of the changes to criminal damage occur during the day, at times when they are unlikely to be influenced by the new opening hours as a result of the Act. It is recommended that further contextual data, for example land use, be incorporated into future analysis to examine this further. Reasons why this has not been done in this research project are described in the final report and technical annex.

**Table 3.4** Proportional changes to criminal damage offences by time of day and location in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)

		Area											
Time of day	ay Cluster		0-50	0-50m		50-100m		100-150m		150-200m		Birmingham	
	Proportion	Volume	Proportion	Volume	Proportion	Volume	Proportion	Volume	Proportion	Volume	Proportion	Volume	
0900-0959	0.0	0	0.1	1	0.3	2	-1.6	-4	0.6	1	-0.5	-5	
1000-1059	0.0	0	0.1	1	0.8	3	-2.4	-4	0.1	0	-2.2	-24	
1100-1159	0.1	1	-0.2	0	0.0	1	8.8	11	0.5	1	-0.2	-1	
1200-1259	-1.3	-4	-1.9	-6	0.0	2	0.7	0	1.2	1	0.9	12	
1300-1359	-1.4	-5	-0.9	-3	-1.0	-2	0.6	0	-1.4	-2	0.7	10	
1400-1459	-0.1	0	-1.1	-3	2.7	9	-4.4	-8	0.6	1	-0.4	-3	
1500-1559	2.7	9	2.1	8	-0.3	1	2.1	2	-0.5	-1	-0.7	-7	
1600-1659	3.0	10	2.0	8	5.5	17	0.5	-1	2.4	3	-1.4	-15	
1700-1759	0.2	1	0.1	2	-0.7	1	-0.4	-2	-0.3	-1	-1.2	-13	
1800-1859	-1.7	-5	0.7	5	0.2	3	-2.3	-5	-3.7	-5	0.5	7	
1900-1959	-2.7	-9	-3.1	-9	-4.4	-10	0.8	0	0.9	1	1.0	12	
2000-2059	2.8	10	-0.1	1	2.1	7	0.9	0	1.9	2	-0.4	-4	
2100-2159	0.7	3	0.3	3	-0.2	1	0.2	-1	-1.2	-2	0.6	7	
2200-2259	2.4	8	2.5	10	0.0	2	1.3	1	2.8	3	0.6	7	
2300-2359	-1.5	-5	2.2	9	-3.3	-7	1.4	1	-3.5	-5	1.1	14	
0000-0059	-1.0	-3	-1.6	-4	-0.9	-1	1.5	1	0.7	1	-0.2	-2	
0100-0159	-1.8	-6	-0.2	2	-2.1	-5	-4.4	-7	0.3	0	-0.4	-4	
0200-0259	-1.8	-6	-3.7	-10	-0.3	1	-0.1	-1	-2.4	-4	1.0	13	
0300-0359	0.8	3	-0.1	1	0.3	2	-1.0	-2	-0.1	-1	0.0	1	
0400-0459	0.9	3	2.6	10	0.7	3	-0.4	-1	-0.8	-1	-0.5	-5	
0500-0559	0.1	1	-0.1	0	-1.5	-4	0.0	0	-1.6	-2	-0.4	-3	
0600-0659	0.1	1	0.1	1	0.4	2	0.1	0	1.8	2	0.5	7	
0700-0759	-0.5	-2	-0.4	-1	0.2	1	-0.5	-1	0.1	0	1.8	23	
0800-0859	0.1	1	0.6	3	1.4	5	-1.3	-3	1.4	2	-0.3	-2	

#### Proportion of criminal damage in the cluster area

Criminal damage crime ratios were calculated by dividing the monthly counts of calls in the cluster area with counts for the remainder of Birmingham. These ratios can then be used to examine how the proportion of calls for disorder in the cluster area has changed over the analysis period.

This shows that the crime ratio has varied between 0.3 and 0.55, and there is no evidence of this increasing or decreasing since the introduction of the Act. However, the crime ratio appears to have been more stable since June 2005.

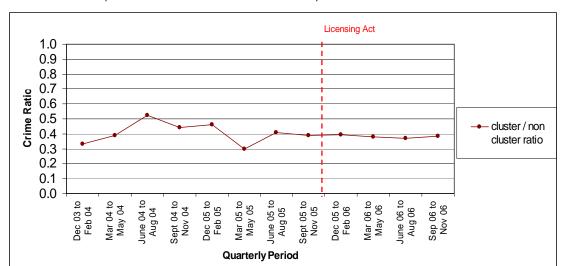


Figure 3.5 Criminal damage crime ratio in Birmingham City Centre (police force area F1) (December 2003 to November 2006)

#### Geographical distribution of criminal damage

Two methods were used to generate hot spots and these are detailed in the technical annex. The NNI statistic (also described in the technical annex) shows that there is evidence of clustering in the criminal damage data, above the clustering exhibited by premises themselves, and that hot spot analysis is an appropriate technique to use.

Figure 3.6 shows NNHC hot spots of criminal damage in Birmingham City Centre for baseline and post implementation periods. The ellipses on the map are generated statistically and represent hot spots of criminal damage. The purple ellipses represent the baseline and the blue ones the post implementation period. These hot spots do not account for the timing of the offences, but consider the overall concentration of offending over the period. As with violence against the person, criminal damage is concentrated around the Hurst street and Broad Street areas and to the north of New Street station. Criminal damage hot spots appear to be concentrated in fewer areas than violence against the person. The hot spots in the Hurst Street and Broad Street remain in the post implementation period. However the hot spot north of New Street station no is longer apparent in the post implementation period this was replaced by a new hot spot that emerged to the east of the station.

Figure 3.7 show criminal damage KDE hot spots by time of day. The timing of offences has been grouped into four periods, namely 9.00pm to 10.59pm, 11.00pm to 00.59am, 1.00am to 2.59am and 3.00am to 4.59am. These time intervals were selected for further examination for two reasons. Firstly, the hours between 9.00pm and 5.00am account for the majority of all crimes of violence. Secondly, this period covers the hours when any changes to premises opening hours would occur. For each of the pairs of maps, the left hand side represents the baseline period, while the right hand side represents the post implementation period. The map shows that from 9.00am to 10.59pm criminal damage is distributed throughout the city centre and not solely concentrated around the key drinking areas.

Between 11.00pm to 0.59am criminal damage hot spots become more defined in particular areas, these include the area around the ICC, the Mailbox and the Bullring, and in the vicinity of the hospital to north of city. There was little change between the baseline and the post implementation period, although the hot spot in the Bullring area is more intense. Between 1.00am to 2.59 am the hot spots become more concentrated around the ICC and Mailbox/Bullring areas. From 3.00am to 4.49am there is dramatic reduction in the intensity and extent of hot spots, although a small hot spot remains around the Bullring in the baseline period. In the post implementation period a larger number of hot spots persist within this time interval with hot spots surrounding the Bullring, New Street Station and to south east of ICC. This suggests that criminal damage was more intense and prolonged during the post implementation period.

Figure 3.6 Criminal damage hot spots (NNHC) in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)

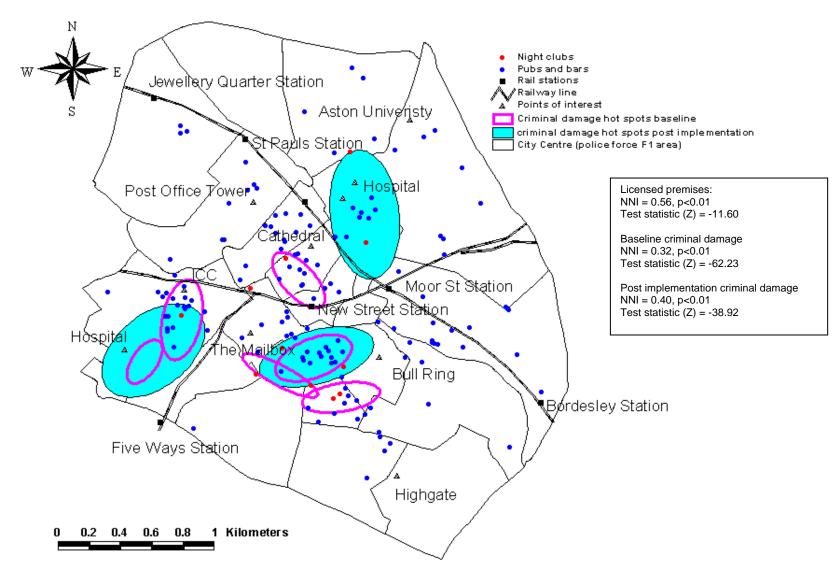
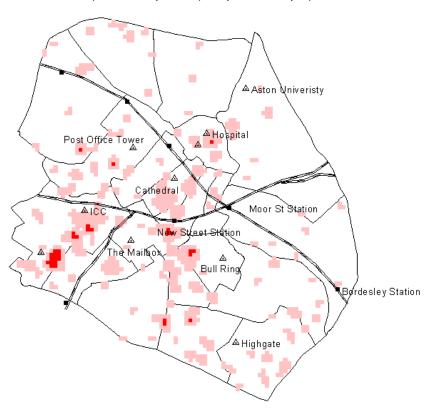
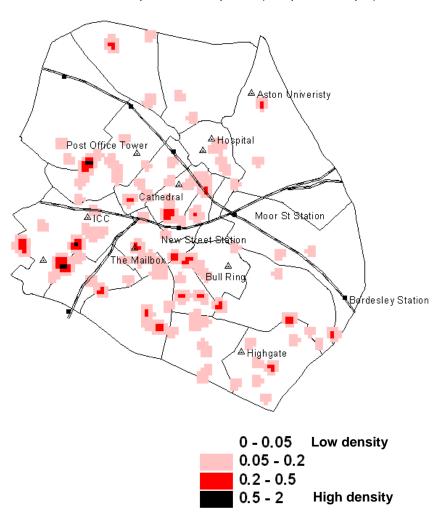


Figure 3.7 Criminal damage hot spots (KDE) by time of day in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)

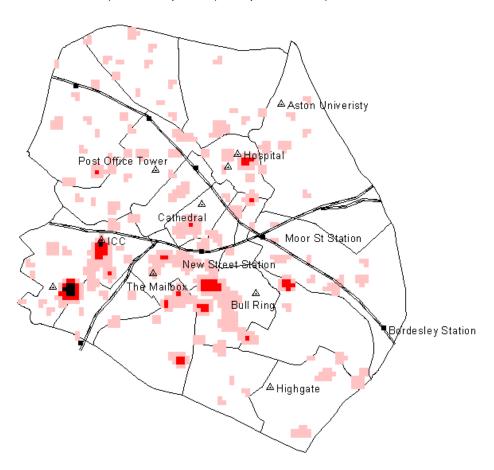
a) Baseline period (9.00pm - 10.59pm)



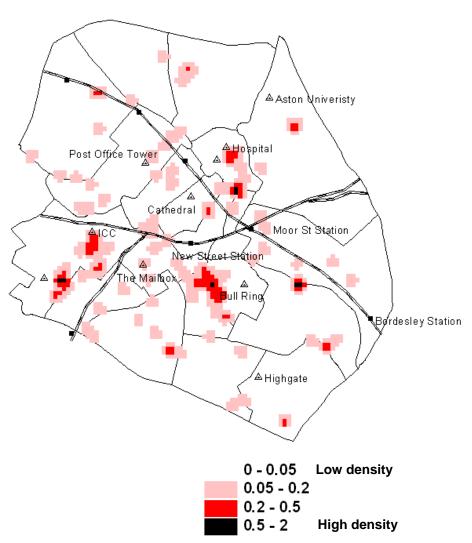
Post implementation period (9.00pm - 10.59pm)



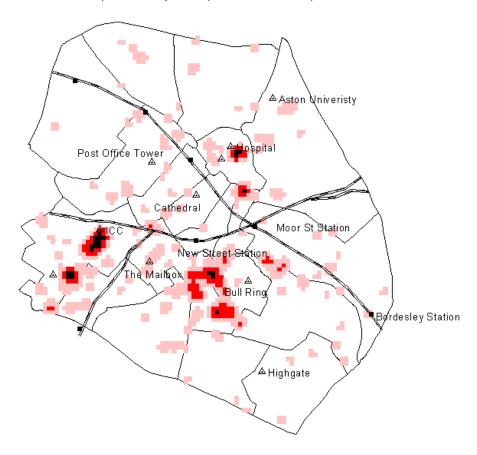
# b) Baseline period (11.00pm - 0.59am)



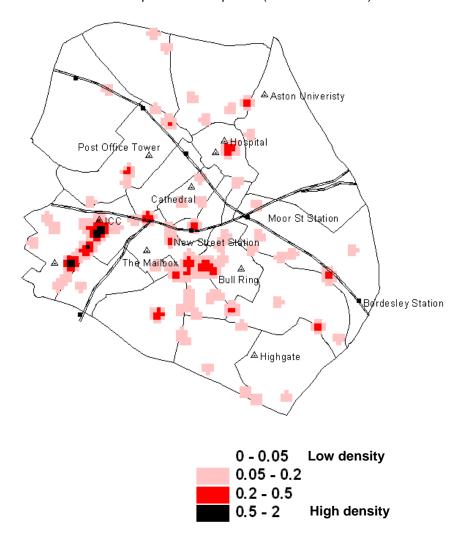
# Post implementation period (11.00pm - 0.59am)



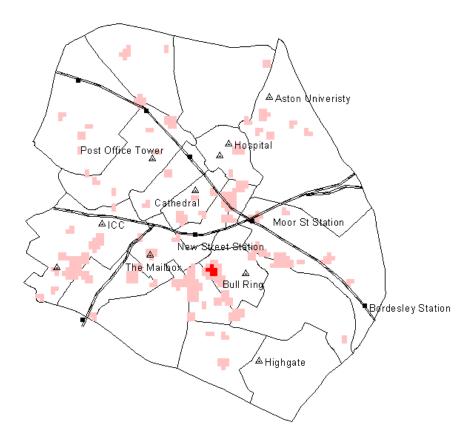
# c) Baseline period (1.00am - 2.59am)



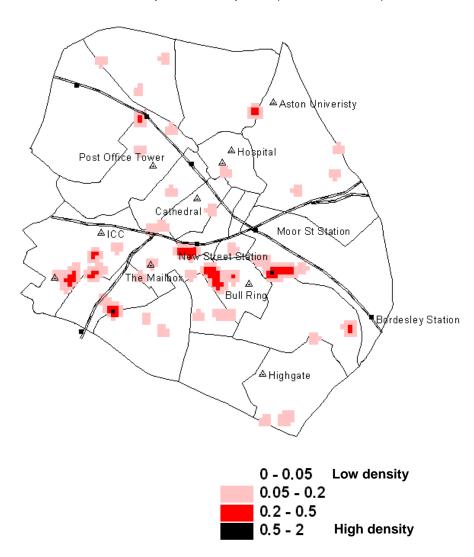
# Post implementation period (1.00am - 2.59am)



# d) Baseline period (3.00am - 4.59am)



# Post implementation period (3.00am - 4.59am)



# Summary of findings: criminal damage

- Criminal damage in Birmingham City Centre has retained similar levels during the post implementation period compared to the baseline.
- There were some important monthly fluctuations with seven months of the post implementation period showing increases in criminal damage compared to corresponding months in the baseline. The remaining five months showed decreases.
- The daily and weekly distribution of criminal damage offences during the post implementation period retained a similar pattern to the baseline. A larger proportion of post implementation offences occurred between 3.00pm and 5.59pm while a smaller proportion of criminal damage offences were recorded between 6.00pm and 9.59pm and between 1.00am and 03.59am.
- There was a tendency for these temporal changes to be more pronounced in the areas closer to licensed premises.
- Criminal damage was concentrated in the areas closest to licensed premises, with the proportion of offences declining with increased distance from premises. There were only small changes to this distribution post implementation although there were slight increases in the proportion of offences occurring between 0 and 150m from licensed premises.
- The ratio of criminal damage in the cluster area to the non cluster area has varied between 0.3 and 0.55, but has become more stable since June 2005. There is no evidence of an increase in criminal damage in areas with high densities of licensed premises since the introduction of the Act.
- Criminal damage hot spots have remained fairly consistent in the baseline and post implementation periods. From 3.00am to 5.00am criminal damage was more intense and prolonged during the post implementation period than in the baseline period.
- There were no significant changes to criminal damage offences in the baseline or post implementation periods (see supplementary annex)
- There was very little change in the timing of weekday and weekend criminal damage offences in Birmingham in the post implementation period compared with the baseline with only marginal changes in the number of offences in any one-hour (see supplementary annex)
- The KDE synthesis maps revealed are some changes (reductions from 1.00am to 2.59am and increases from 3.00am to 4.59am) that correspond with the key drinking areas (see supplementary annex).

# 4. Sexual offences

Sexual offences include sexual assault, rape and gross indecency. Not all sexual offences are violent. Analysis of police recorded crime data (Walker, Kershaw and Nicholas, 2006) has found that:

- The number of police recorded sexual offences in England and Wales changed little between 2004/05 and 2005/6 (from 62,084 offences to 62,081).
- The number of police recorded indecent assaults reduced by 7 per cent between 2004/05 and 2005/06.
- The number of police recorded rapes increased by 3 per cent between 2004/05 and 2005/06.
- Sexual offences follow seasonal patterns with a large peak in the summer (Hird and Ruparel, 2007).

It is important to note that the number of sexual offences reported are relatively low (compared to violence against the person and criminal damage offences). Thus the analysis could not be performed at areas smaller than the macro level, and care should also be taken in interpreting the findings due to small numbers.

#### Macro level

There was little change to the level of sexual offences in Birmingham City Centre between the baseline and post implementation periods, with an average of 13 offences per month in both periods. However this average hides some important monthly fluctuations. Table 4.1 displays the number of sexual offences in Birmingham City Centre by month and year, and the blue shaded area represents the post implementation period. The percentage change figure is the change between the number of offences in each month during the post implementation period, and the average number of offences in the two corresponding months from the two previous years in the baseline period. The table shows that for five months of the year sexual offences had reduced compared to the corresponding months in the baseline period and six months of the year displayed an increase. The greatest percentage decrease was in October with a 33.3 per cent reduction in the number of sexual offences recorded compared to corresponding months. The most notable percentage increase was in May with a 58.8 per cent increase in the number of sexual offences recorded in the post implementation month compared to corresponding months in the baseline period.

Figure 4.1 shows the monthly rate of sexual offences in Birmingham City Centre (per 10,000 persons) during the post implementation (blue line). The average monthly rate of sexual offences for the baseline period is shown as a dotted grey line. In both the baseline and post implementation periods the rate of sexual offences was subject to fluctuation. For much of the post implementation period the rate of sexual offences remained relatively close to baseline levels. However, it is clear that the rate of sexual offences recorded in May in the post implementation period was greater than the rates recorded in the average baseline period and the rate of recorded offences in October was lower than the baseline.

Figure 4.2 shows the percentage change between the average monthly frequency of sexual offences during the baseline period, and the monthly frequencies of such offences during the post implementation period. This highlights the percentage decreases in the number of sexual offences in February, June, July, August and October and increases in December, January, March, May, September and November in the post implementation period.

**Table 4.1** Sexual offences monthly crime counts in Birmingham City Centre (police force area F1) (November 2003 to December 2006)

	Year				Post implementation percentage	
	2003	2004	2005	2006	change (monthly average) 1	
January		10	14	13	8.3	
February		15	10	11	-12.0	
March		9	15	13	8.3	
April		11	11	11	0.0	
May		17	17	27	58.8	
June		12	12	10	-16.7	
July		18	9	12	-11.1	
August		16	11	10	-25.9	
September		9	10	12	26.3	
October		15	21	12	-33.3	
November		9	9	10	11.1	
December	11	8	15	9	57.9	

Note: The baseline period is an average of the two year period 2004/2005

Figure 4.1 Sexual offences crime rates in Birmingham City Centre (police force area F1) (average monthly baseline and post implementation period)

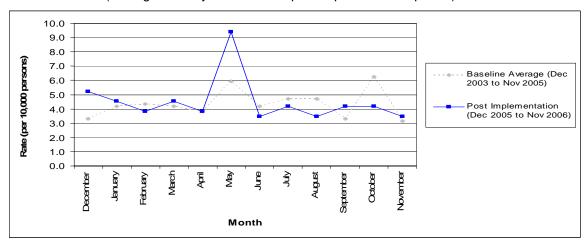
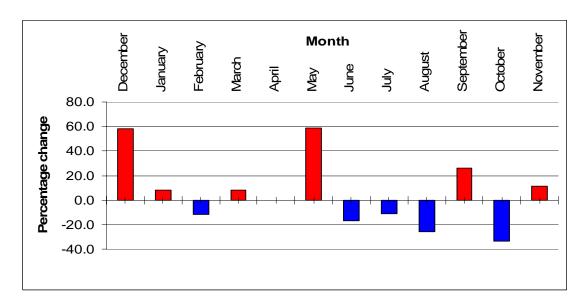


Figure 4.2 Percentage change in sexual offences in Birmingham City Centre (police force area F1) (average monthly baseline to post implementation period change)



## Distribution of offences by time of day and day of week

Table 4.2 displays the number of sexual offences by time of day for each of the three year periods examined. The average percentage change reflects the change between the average baseline period frequency of sexual offences (year one and year two for each time interval) and the frequency of such offences post implementation for each time interval. The table shows that there were only marginal changes to the overall daily distribution of sexual offences between the baseline and post implementation periods. In both periods there is a clear peak in the number of offences occurring between 1.00am and 1.59am. It should be noted that given the small number of offences recorded in some time periods, reporting change in percentages may appear to inflate the degree of change. Bearing this in mind, the most notable changes between the two periods were the increases in the number of sexual offences recorded between 10.00pm and 0.59am (particularly between 11.00pm and 11.59pm which saw an 83.3 per cent increase) and the decreases between 1.00am and 1.59am and 10.00am and 10.59am, where there was a 63.6% decrease in the number of sexual offences recorded.

**Table 4.2** Sexual offences by time of day in Birmingham City Centre (police force area F1) (baseline and post implementation periods)

	, (		• /	
Time of day	Baseline year 1 frequency	Baseline year 2 frequency	Post implementation year 3 frequency	Percentage change (average baseline to post implementation period)
0900-0959	3	2	1	-60.0
1000-1059	8	3	2	-63.6
1100-1159	5	6	4	-27.3
1200-1259	4	10	8	14.3
1300-1359	4	7	5	-9.1
1400-1459	7	7	8	14.3
1500-1559	8	11	4	-57.9
1600-1659	6	3	8	77.8
1700-1759	6	7	8	23.1
1800-1859	5	8	8	23.1
1900-1959	7	6	9	38.5
2000-2059	3	5	9	125.0
2100-2159	9	12	10	-4.8
2200-2259	4	6	8	60.0
2300-2359	6	6	11	83.3
0000-0059	21	13	22	29.4
0100-0159	22	11	6	-63.6
0200-0259	14	8	8	-27.3
0300-0359	3	6	8	77.8
0400-0459	1	5	3	0.0
0500-0559	1	0	0	-100.0
0600-0659	2	1	1	-33.3
0700-0759	0	2	1	0.0
0800-0859	4	2	2	-33.3

Figure 4.3 shows the percentage of sexual offences in each time interval for each year. For the baseline period this is averaged over the two year period. A smoothed trend line is also plotted for both periods.<sup>3</sup> The figure below illustrates that the proportion of sexual offences recorded in both the baseline and post implementation periods, was highest between the hours of midnight and 0.59am, with more offences recorded in the post implementation period. The trend lines show that a higher proportion of post implementation offences

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<sup>&</sup>lt;sup>3</sup> A two month moving average

occurred between 4.00pm and midnight compared to the baseline. Conversely a lower proportion of post implementation offences occurred between 1.00am and 5.00am. It is difficult to detect any changes to the peaks of sexual offences by time of day post implementation.

Figure 4.3 Proportional changes to sexual offences by time of day in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)

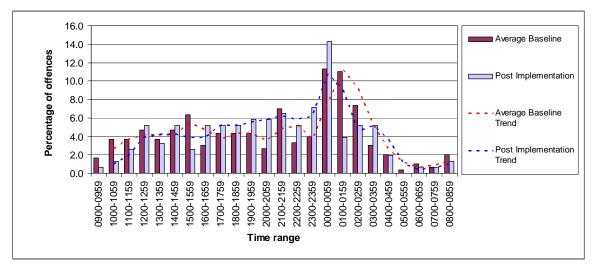
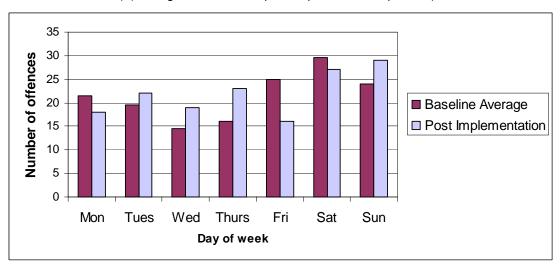


Figure 4.4 portrays the frequency of sexual offences by day of week for the baseline period and post implementation periods. The baseline period is an average for the two years. During the baseline period, the greatest numbers of offences were recorded on a Saturday. In the post implementation period, the greatest numbers of sexual offences were recorded on a Sunday. More sexual offences were also recorded on a Tuesday, Wednesday and Thursday in the post implementation period.

Figure 4.4 Sexual offences by day of week in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)



#### Victim profile

Figure 4.5 displays the gender of victims of sexual offences during the baseline and post implementation periods. The gender for the baseline period is an average over the two years. This shows that in both the baseline and post implementation periods over 80 per cent of victims of sexual offences were female. The recording of victim gender improved in the post implementation period. It is essential to consider the impact of the 'not recorded' field (missing values) when interpreting the findings of this section of the analysis.

Figure 4.5 Sexual offences by gender in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)

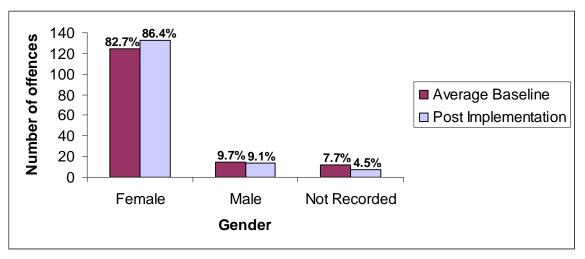
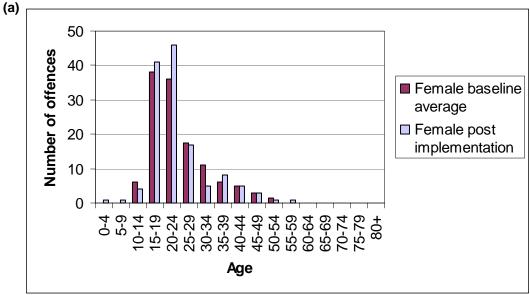
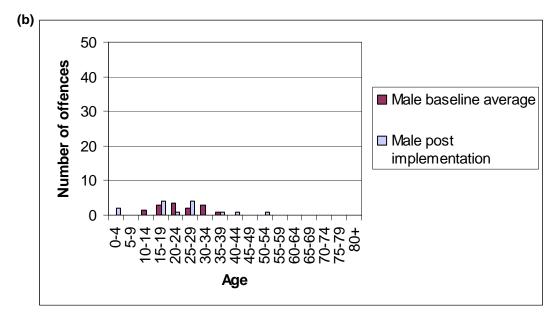


Figure 4.6 displays the gender and age of victims of sexual offences during the baseline and post implementation periods. The gender and age categories for the baseline periods are an average over the two years. Figure 4.6a shows that the age profile of female victims was similar in both periods although the peak age for female victims increased from 15-19 to 20-24. The low numbers of male victims make it difficult to identify a discernable pattern.

Figure 4.6 Sexual offences by age and gender in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)





# Summary of findings: sexual offences

- There was little change to average monthly counts of sexual offences in Birmingham City Centre between the baseline and post implementation periods.
- For five months of the year, sexual offences reduced compared to the corresponding months in the baseline period. Six months of the year displayed an increase.
- There were only marginal changes to the overall daily distribution of sexual offences between the baseline and post implementation periods.
- The proportion of sexual offences recorded, in both the baseline and post implementation periods, was highest between the hours of midnight and 0.59am.
- A greater proportion of post implementation offences occurred between 4.00pm and midnight compared to the baseline. Conversely a lower proportion of post implementation offences occurred between 1.00am and 5.00am.
- During the baseline period, the greatest numbers of offences were recorded on a Saturday. In the post implementation period, the greatest numbers of sexual offences were recorded on a Sunday.
- The age profile of female victims was similar in both periods although the peak age for female victims increased from 15-19 pre-implementation to 20-24 postimplementation.

# 5. Calls for disorder

Calls for disorder include incidents such as disturbances in public places, disturbances in licensed premises, drunkenness and noise nuisance. This data on incidents recorded by the police is not crime per se, but calls made by the public for police assistance. This data is often used as an alternative to police recorded crime data, as it provides a measure of the volume of calls made to the police, and as a proxy to measure the publics' perception of crime and need for police assistance.

The findings of this analysis are supported by additional analysis presented in the supplementary annex which examines calls for disorder incidents using statistical tests of change from the baseline to post implementation and weekend and weekday incidents. The results of this are detailed in the supplementary analysis, and also included in the summary findings at the start of this annex, and concluding sections of this annex. The reader is also referred to the final report that summarises the findings of all five case study areas.

#### Macro level

Annual comparisons show a continued reduction on calls from disorder from 9998 and 9240 in year one and year two (baseline period) and 8150 offences in the post implementation period. Monthly variations show reductions between the baseline and post implementation periods from an average of 801 incidents per month in the baseline period to an average of 679 incidents per month post implementation. Table 5.1 displays the number of calls for disorder incidents in Birmingham City Centre by month and year, and the blue shaded area represents the post implementation period. The percentage change figure is the change between the number of incidents in each month during the post implementation period, and the average number of incidents in the two corresponding months from the two previous years in the baseline period.

The table shows that for each month in the post implementation period the number of calls for disorder decreased in comparison to corresponding months. March saw the largest decrease in the number of calls for disorder made.

**Table 5.1** Calls for 'disorder' monthly incident counts in Birmingham City Centre (police force area F1) (November 2003 to December 2006)

		,	Year		Post implementation percentage change	
	2003	2004	2005	2006	(monthly average) 1	
January		747	846	663	-16.8	
February		786	777	606	-22.5	
March		883	923	636	-29.6	
April		825	767	676	-15.1	
May		921	783	678	-20.4	
June		826	709	740	-3.6	
July		875	821	735	-13.3	
August		883	762	676	-17.8	
September		759	737	662	-11.5	
October		817	672	723	-2.9	
November		793	588	653	-5.4	
December	883	855	702	749	-19.2	

<sup>&</sup>lt;sup>1</sup> Note: The baseline period is an average of the two year period 2004/2005

Figure 5.1 shows the monthly rate of calls for disorder (per 10,000 persons) in Birmingham City Centre during the post implementation period (blue line). The average monthly rate of calls for disorder in the baseline period is shown as a dotted grey line. The graph indicates that throughout the post implementation period the rate of calls for disorder was lower than

the baseline. During the baseline period calls for disorder peaked in March and then followed an overall pattern of reduction until November. During the post implementation period the calls gradually increased between February and June, although the rate of calls remained lower than baseline levels. The highest rate of calls during the implementation period coincided with the World Cup in June 2006.

Figure 5.1 Calls for 'disorder' incident rates in Birmingham City Centre (police force area F1) (post implementation and average baseline periods)

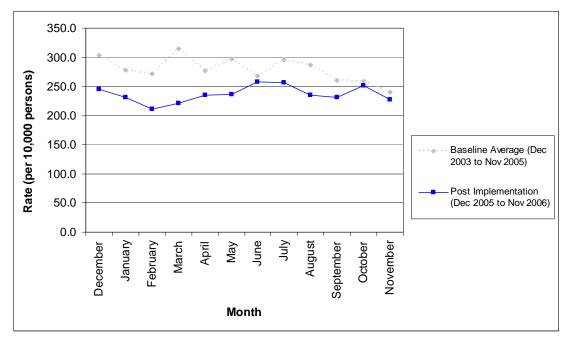
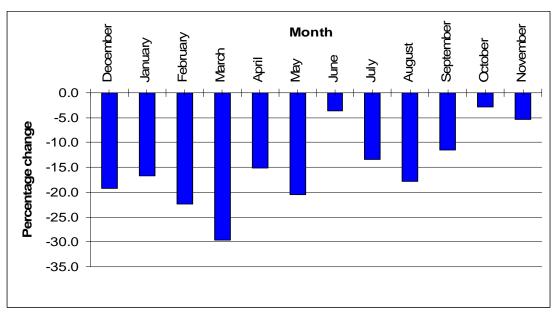


Figure 5.2 shows the percentage change between the average monthly frequency of calls for disorder incidents during the baseline period, and the monthly frequencies of such incidents during the post implementation period. The chart clearly shows that for all twelve months in the post implementation period, there was a decrease in the number of calls for disorder made compared to corresponding months in the baseline average period.

Figure 5.2 Percentage change in calls for 'disorder' in Birmingham City Centre (police force area F1) (average monthly baseline to post implementation period change)



## Distribution of calls by time of day and day of week

Table 5.2 displays the number of calls for disorder incidents by time of day for each of the three year periods examined. The average percentage change reflects the change between the average baseline period frequency of calls for disorder incidents (year one and year two for each time interval) and the frequency of such incidents post implementation for each time interval.

The table shows that the daily distribution of calls during the post implementation period followed a similar pattern to the baseline although the frequency of calls was lower throughout most of the day. There were increases in the number of incidents recorded between 4.00am and 6.59am, including a 70.6 per cent increase between 4.00am and 4.59am.

**Table 5.2** Calls for 'disorder' incidents by time of day in Birmingham City Centre (police force area F1) (baseline and post implementation periods)

Time of day	Baseline year 1 frequency	Baseline year 2 frequency	Post implementation year 3 frequency	Percentage change (average baseline to post implementation period)
0900-0959	143	127	126	-6.7
1000-1059	220	164	171	-10.9
1100-1159	278	244	235	-10.0
1200-1259	318	302	310	0.0
1300-1359	426	350	288	-25.8
1400-1459	391	407	317	-20.6
1500-1559	493	461	358	-24.9
1600-1659	484	490	470	-3.5
1700-1759	519	470	393	-20.5
1800-1859	460	451	397	-12.8
1900-1959	456	430	349	-21.2
2000-2059	469	465	397	-15.0
2100-2159	478	418	381	-15.0
2200-2259	507	528	415	-19.8
2300-2359	681	643	441	-33.4
0000-0059	753	656	616	-12.6
0100-0159	858	802	589	-29.0
0200-0259	1084	975	696	-32.4
0300-0359	455	463	464	1.1
0400-0459	193	161	302	70.6
0500-0559	110	82	133	38.5
0600-0659	76	68	104	44.4
0700-0759	57	78	61	-9.6
0800-0859	80	92	100	16.3

Figure 5.3 shows the percentage of calls for disorder incidents in each time interval for each year. For the baseline period this is averaged over the two year period. A smoothed trend line has been plotted for both the baseline and implementation periods<sup>4</sup>. The figure illustrates that changes to the daily distribution of calls for disorder have been marginal. In both the baseline and post implementation periods, the proportion of calls for disorder increased steadily from 8.00am with the greatest proportion of calls made between 2.00am and 2.59am. In both periods, the number of calls then declines until 7.59am. The trend lines indicate that during the implementation periods the proportion of calls recorded between 10.00pm and 2.59am was lower than the baseline period. Between 3.00am and 7.59am the proportion of calls recorded increased compared to the baseline. This suggests overall a slight flattening out of disorder peaks by time of day.

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<sup>&</sup>lt;sup>4</sup> A two month moving average

Figure 5.3 Proportional changes to calls for 'disorder' by time of day in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)

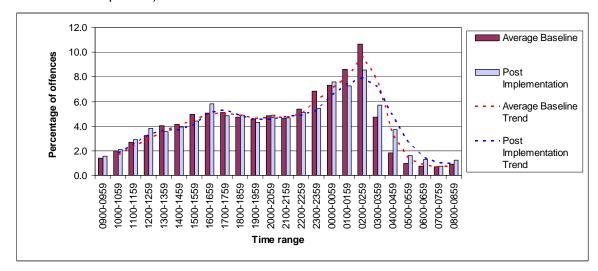
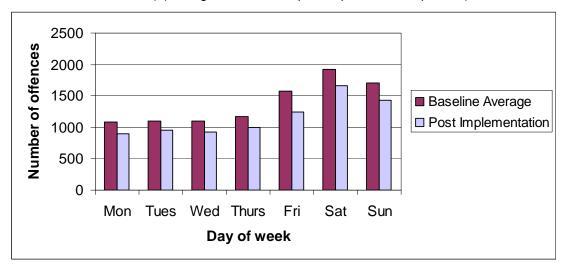


Figure 5.4 displays the frequency of calls for disorder incidents by day of week for the baseline period and post implementation periods. The baseline period is an average for the two years. During the baseline period incidents increased over the weekend, peaking on Saturdays, this remained the case during the post implementation period but the weekend increase was less prominent.

Figure 5.4 Calls for 'disorder' by day of week in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)



## Meso and micro level

In order to examine change in more detail, the frequency of calls for disorder incidents were examined for specifically defined zones within the case study area. These were 50m concentric buffer zones surrounding licensed premises (pubs, bars and clubs) and also cluster areas (areas with high densities of licensed premises). The methodology for constructing these zones is described in more detail in the technical annex. The proportion of calls for disorder incidents in each individual zone is reported in Table 5.3.

Table 5.3 shows that calls for disorder are more concentrated closer to licensed premises, with the proportion decreasing in the zones further away from licensed premises. The table shows that the proportion of calls for disorder shared by each of the zones was broadly similar in both periods, although there was a slight increase in the proportion of incidents occurring between 0-50m from licensed premises.

**Table 5.3** Proportional changes to calls for 'disorder' incidents in the buffer zones and cluster area in Birmingham City Centre (police force area F1) (average baseline and post implementation periods)

		Area								
						Birmingham City Centre				
	Cluster	0-50m	50- 100m	100- 150m	150- 200m	(police force area F1)				
	Clusiel	0-50111	100111	150111	200111	alea F I)				
Percentage baseline	34.9	20.2	10.2	8.4	34.9	100.0				
Percentage post										
implementation	34.6	21.0	10.3	9.0	34.6	100.0				
Proportional change	0.0	0.8	0.1	0.6	-0.3					

## Daily distribution of calls for disorder in specified zones

The frequency of calls for disorder incidents in each individual zone was divided by time of day into twenty-four one hour time intervals. The percentage of incidents in each time interval for the baseline period (average over two years), and also the post implementation period was then calculated. From this a percentage change could be generated for each time interval in each individual zone, from the average baseline to the post implementation periods. The result of this proportional change analysis is depicted in Table 5.4. This table also includes volume change in addition to the proportional change that represents the actual change in numbers.

The table shows most of the changes to the proportion of calls across times of the day were only minor – the majority were less than one percentage point. There was a tendency for the changes that occurred in Birmingham as a whole to be more pronounced in the areas closer to licensed premises.

**Table 5.4** Proportional changes to calls for 'disorder' incidents by time of day and location in Birmingham City Centre (police force area F1) (average baseline and post implementation time periods)

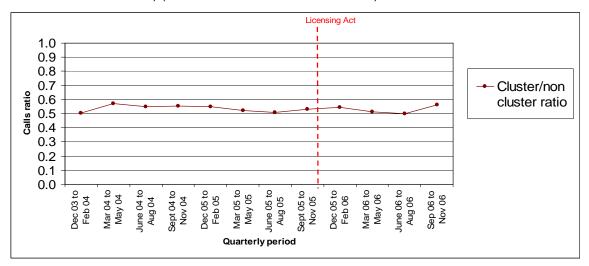
	Area												
Time of day	Clust	Cluster		0-50m		50-100m		100-150m		150-200m		Birmingham	
	Proportion	Volume	Proportion	Volume	Proportion	Volume	Proportion	Volume	Proportion	Volume	Proportion	Volume	
0900-0959	0.8	18	0.6	14	-0.3	-10	0.8	5	-0.2	-3	0.2	-9	
1000-1059	0.5	5	0.2	-3	0.4	1	0.2	-4	-0.2	-3	0.1	-21	
1100-1159	0.3	-4	0.8	15	0.1	-7	-0.5	-11	0.1	-1	0.2	-26	
1200-1259	0.7	5	0.7	9	0.7	2	1.0	1	-0.1	-4	0.6	0	
1300-1359	-1.0	-47	-0.7	-40	-0.3	-16	-0.2	-11	-0.9	-11	-0.5	-100	
1400-1459	-0.7	-44	-0.4	-33	0.1	-11	1.1	2	-1.1	-12	-0.2	-82	
1500-1559	-1.0	-52	-0.6	-39	-1.2	-36	0.1	-10	0.6	1	-0.5	-119	
1600-1659	0.4	-14	0.9	4	1.2	5	0.1	-11	-0.6	-9	0.8	-17	
1700-1759	-0.9	-54	-0.4	-38	-1.0	-33	-0.8	-17	0.0	-4	-0.3	-102	
1800-1859	-0.1	-28	0.1	-22	-0.3	-19	-0.3	-11	1.1	4	0.2	-59	
1900-1959	-0.2	-30	-0.9	-56	0.5	-3	0.0	-8	0.2	-3	-0.3	-94	
2000-2059	-0.4	-37	0.2	-22	-0.2	-15	-0.1	-9	-0.9	-12	0.1	-70	
2100-2159	-0.4	-36	-0.3	-37	-0.4	-19	-1.3	-18	1.9	11	0.1	-67	
2200-2259	-0.5	-43	-0.4	-47	-0.3	-19	0.2	-5	-1.5	-16	-0.2	-103	
2300-2359	-1.7	-90	-2.0	-113	-1.2	-35	-1.7	-22	-0.4	-8	-1.4	-221	
0000-0059	0.8	-25	-0.4	-73	2.2	27	0.0	-7	0.9	1	0.3	-89	
0100-0159	-0.4	-70	-1.7	-129	-0.8	-28	-1.0	-15	1.2	2	-1.3	-241	
0200-0259	-2.8	-155	-2.2	-159	-3.9	-88	0.8	-1	-0.9	-16	-2.1	-334	
0300-0359	2.4	34	1.7	25	1.2	8	0.2	-2	1.1	4	1.0	5	
0400-0459	2.5	55	2.6	73	2.2	33	1.1	8	-0.1	-2	1.9	125	
0500-0559	0.8	16	1.0	28	0.7	9	-0.1	-3	-0.2	-2	0.6	37	
0600-0659	0.8	17	0.8	24	0.5	7	0.3	2	0.2	1	0.5	32	
0700-0759	0.1	-2	0.1	-1	0.0	-2	0.4	2	-0.3	-3	0.1	-7	
0800-0859	0.1	-1	0.3	6	0.3	3	-0.1	-4	0.2	1	0.3	14	

## Proportion of calls for disorder in the cluster area

Calls for disorder ratios were calculated by dividing the monthly counts of calls in the cluster area with counts for the remainder of Birmingham. The calls for disorder ratios can then be used to examine how the proportion calls for disorder in the cluster area has changed over the analysis period.

Figure 5.5 tracks the changes of monthly ratios for the analysis period. This illustrates whether the ratio of calls in the cluster area to calls in the City Centre have changed over the baseline and implementation periods. Figure 5.5 shows that the ratio has remained steady throughout the baseline period.

Figure 5.5 Calls for 'disorder' incident ratios in Birmingham City Centre (police force area F1) (December 2003 to November 2006)



## Summary of findings: calls for disorder

- Calls for disorder in Birmingham City Centre reduced between the baseline and post implementation periods.
- For each month in the post implementation period, the number of calls for disorder decreased in comparison to corresponding months. March saw the largest decrease in the number of calls for disorder made.
- The daily distribution of calls during the post implementation period followed a similar pattern to the baseline although the frequency of calls was lower throughout most of the day.
- The proportion of calls recorded between 10.00pm and 02.59am was lower than the baseline. Between 3.00am and 07.59am the proportion of calls recorded increased compared to the baseline. There was a tendency for these changes to be more pronounced in the areas closer to licensed premises.
- The concentration of calls for disorder was higher closer to licensed premises, with the proportion decreasing in the zones further away from licensed premises.
- The proportion of calls for disorder shared by each of the zones was broadly similar in both periods, although there was a slight increase in the proportion of incidents occurring between 0-50m from licensed premises.
- The ratio of calls for disorder in the cluster area to calls in the City Centre increased gradually throughout the baseline period.
- T tests revealed a significant reduction in disorder incidents in the second half of the baseline period (preceding the Act) and the first half of the post implementation period (see supplementary annex).
- There tended to be monthly reductions in disorder both during the week and at weekends. Disorder at weekends was lower than in the baseline period for 10 of the 12 months (see supplementary annex).
- Levels of disorder fell throughout the night both during the week and at weekends.
  There was a sizeable reduction between 11pm and midnight and between 1am to
  2am but the greatest fall occurred between 2am and 3am at weekends during which
  there were three per cent fewer calls compared with the baseline (see
  supplementary annex).

## 6. Findings from qualitative analysis

As was outlined within the methodology section of the main report, participant observation and interviews with bar and door staff took place at key premises before the Act was implemented (November 2005), approximately two months after the Act came into force (between January and March 2006) and one year post implementation (January 2007).

As the venues visited as part of the fieldwork were selected based upon their level of recorded violence against the person offences (top 15 premises), the same 15 premises were not automatically included in the three phases. However, there is some level of consistency which will allow before and after comparisons.

Table 6.1 displays the premises visited in phases one, two and three and the colour coding identifies the premises which were visited in either one, two or three of the phases.

**Table 6.1** Premises visited in phases one, two and three in Birmingham City Centre (police force area F1) (January 2007)

Premises visited in phase one (baseline)	Premises visited in phase two (2 months post implementation)	Premises visited in phase three (12 months post implementation)		
T	T	T		
C	С	С		
L	L	L		
U	U	U		
D	D			
В		В		
Н	Н			
	Н	Н		
W				
E				
X				
Y				
F				
Z				
AA				
AB				
AC				
AD				
AE				
AF				
AG				
AH				
Al				
AJ				
AK				
AL				
	AM			
	AN			
		N		
		G		
Pad shading denotes premises visited		AO		

Red shading denotes premises visited across three phases; Blue shading denotes premises visited across two phases

## Findings from fieldwork conducted at key licensed premises

Findings from fieldwork conducted baseline and two months post implementation

The findings here present those from the initial visits to the case study areas. Interviews occurred in the first two months post implementation. However it is not possible to distinguish whether observations occurred in the initial visit (baseline period) or subsequent visits (post implementation).

#### Context

Of the door supervisors interviewed, all had good knowledge of Birmingham. Although some licensees had only worked in their current premise for 12 months, they had all worked in the trade for a number of years and had extensive knowledge of issues relating to crime, disorder and the night time economy.

#### Clientele

The clientele varied in each bar but were mainly aged between 18 and 35. A few of the premises catered for predominately over 25 year olds. Participants stated that the majority of customers were locals i.e. those living in the city centre or those from other areas in Birmingham; however, they expressed the view that people do travel from further afield, usually when attending conferences in the city or visiting friends. One licensee stated that: "We've had people coming down from Newcastle!" Most premises attracted small groups of between three and five; large groups of men were viewed as being problematic and would be turned away from various bars.

#### Violence and disorder

The general consensus from the interviews with licensees and door staff was that there had been no increase in violence and disorder over the past two years. One licensee suggested that there had been an increase. However it was suggested that this reflects changes in drinking habits and behaviour across the country.

Although many felt that it was too early to tell, the opinion of most participants was that violence and disorder had remained the same or reduced in the two month period post implementation. Many stated that it was difficult to pinpoint exactly whether this was a result of extended drinking hours as a result of the Act or city centre improvements such as marshalled taxi ranks, better CCTV, more visible police presence, licensing and training of door supervisors, and better communication between the police and licensees.

Some door supervisors were positive about the impact of the Act. One stated that: 'It's not bad like it was in the 1990s, things have calmed down a lot, people are crazier, they drink a hell of a lot more, but like there's more police, we've had more training, it's not just chuck them out on the street, but we try to break it up, make sure it doesn't kick off, make sure everyone has a good time.' A bar manager stated that: 'I think things are better but it's hard to tell you know. There's been a lot going on like they have those police officers and we've got cameras everywhere but like it's difficult to tell. Maybe it'll be different in the summer.' Another Licensee reiterated this view and stated that: 'Well I think people only have so much money to spend. They can spend it on only so much so I don't really think it has much to do with licensing laws.'

In the opinion of licensees and door supervisors, the type of weapons used had remained the same before and after the implementation of the Act. These were knives, chairs, bottles and two supervisors mentioned guns.

#### **Problematic times and groups**

In general, participants viewed Fridays and Saturdays as the most problematic. Christmas and New Year were also identified as particularly problematic. This was seen to be as a consequence of the greater numbers of people out in the city centre as well as the volume of alcohol that is consumed. Student nights were also identified as being a problem. Participants felt that this related to a lot of young people consuming large quantities of alcohol. There was a general reluctance amongst licensees and managers to hold these events. One licensee stated that: "Well there's a place round here that has them [student nights] but you can't have 200 or so students all coming in and drinking, cheap prices and that. I think there should be some sort of minimum price and we all keep to it."

Many of the venues had big screens and showed football, rugby, and other sports. There was an awareness by door supervisors that there might be trouble when either Birmingham City or Aston Villa had been playing. However there was also an awareness that incidents may happen at any time. One door supervisor stated that: "I'm a Villain (Aston Villa supporter) and when they play, when there's a big match on you have to be say more alert. But then you have to be all the time 'cos it only takes one idiot to cause trouble."

Participants felt that more violence and disorder takes place during the summer months when more people are out, the weather is nicer, and the nights are longer. Door supervisors, managers and licensees felt the summer would be a crucial time for testing the impact of the Act.

The findings from the interviews suggest that the perception of problematic days and times had not changed since the introduction of the Act. It was suggested that the two month period since the Act was introduced was not sufficient to judge whether there had been any impact upon patterns of behaviour.

In terms of groups, males between the ages of 18-25 were consistently viewed as being the predominant group to be involved in violence and disorder. However, many suggested that the behaviour of young females was getting worse, and that they proved more difficult to deal with. These problems were viewed as largely verbal as opposed to physical violence. One door supervisor expressed the following view: "Well like I said I've been a doorman for nearly 15 years and I've seen a lot of changes in that time. Like women they're drinking a lot more, not just wine but spirits, pints and they're a lot more lippy. Can't handle the drink and get into trouble. It's also more difficult to move them on, as they tend to be more aggressive, more argumentative."

#### **Door supervision**

The main policy of door supervisors was to prevent trouble from starting in the first instance, usually by not allowing known trouble makers or those who looked under-age into the premises. If trouble did arise door supervisors did try to smooth it over, sending the offending parties to different sides of the premises if needs be. Throwing out was not an immediate response. However, if things become too difficult an individual or group would be ejected from the premises.

One door supervisor felt comforted by the fact that there was a lot of CCTV in the premises and the streets outside. He stated that: "so that if they say like we were too hard we can go to the police show the videos and prove it – like what happened a month or two ago, before Christmas. They said that we had been too physical but the police came took our tapes, had a look, and nothing came of it."

The door supervisors also held strong opinions about the Security Industry Authority (SIA) licensing and the training that they had had to undertake. One problem that was mentioned was the time it takes for the licence to come through. However, the majority of door supervisors suggested that the accreditation and training were beneficial, giving them more kudos with police and generally making them better equipped to tackle the changing role of door supervision.

#### Relationship with police, door supervisors and licensees

Both door supervisors and licensees stated that they have a very good relationship with the police. However, it appeared that the door supervisors and licensees from the Hurst Street area did not have quite such a close relationship with the police as in Broad Street. All door supervisors reported liaising with the police about potential troublemakers.

Most licensees mentioned attending Pubwatch meetings with the police and found them to be beneficial. Licensees were quick to mention the number of meetings that they went to with the police and other licensees. One licensee noted that he was paying a lot of money to the police for improved services e.g. CCTV cameras and marshalled taxi ranks and that it was therefore appropriate that the police were doing a good job.

Both door supervisors and licensees/managers mentioned the fact that the police may walk through the premises at any time and that this was a positive experience, as it made customers feel safe. In general, the participants felt that the introduction of the Act had not altered their relationship with the police; however, these interviews took place just two months after the Act was introduced.

#### **Extended hours**

The majority of premises visited already had longer opening hours and would not usually close until 2.00am. All venues visited had applied for extended hours, however, not all made use of the hours they had been awarded. This was generally related to profit, as one licensee stated: 'It's a cultural thing I don't think the British are programmed to stay out past 2.00am. It's not like in Italy.'

The general consensus was that the extended hours had not drastically changed the working practice of door supervisors. One door supervisor did express the view that the introduction of the Act had led to door supervisors becoming stricter.

None of the interviewees spoke of reduced trade since the introduction of the Act; in fact many saw their own bars, as well as others in the area, as going from strength to strength.

### Reducing alcohol related crime and disorder

When asked how they felt about reducing alcohol related crime and disorder, participants suggested that bars should act responsibly with not too many promotions, education should be improved in schools (relating to the effects of alcohol), promotions should be stopped and the recruitment of female door staff should be encouraged. This view was expressed by a door supervisor who stated that: "Sometimes a woman she can deal with a problem better than a man can. Sometimes they can talk, and calm it down and the guy will listen so it's much better."

#### Overall view of interviewees

In general, the overall view from interviews conducted two months post implementation suggested that there had been no perceived change in the level of violence and disorder since the introduction of the Act. Violence and disorder were perceived to have decreased over recent months; however, those interviewed felt that it was impossible to state clearly whether this was as a result of extended hours introduced by the Act or just improved policing. This was compounded by the fact that the premises had hardly used their extended opening hours, since they generally shut as late as 2.00am before the Act.

## Findings from fieldwork conducted 12 months post implementation

 Table 6.2
 Participant observation of individual premises in Birmingham City Centre (police force area F1) (January 2007)

Name	Food served	Capacity	Dress code	Age of clients	Entertainment facilities	Promotions/ entertainment	Door staff	Management of area by staff	Safety initiatives
N	No	210	No	20-35	Yes (fruit machine)	No	Greet and welcome customers	Management moved around the venue regularly	CCTV
V	Yes	1000	No caps, no Rockport	18-40	TV, fruit machine, table football	Yes – football and karaoke	Chat and friendly	None noticed	CCTV
Р	Yes	750	No	18-25	Fruit machines	No	Polite – asked for ID	Friendly	CCTV
Н	Yes	500	Smart – no caps, trainers or sportswear	21+	Large screen TV	Sports matches	Only venue where door staff were seen challenging customers who were intoxicated	Friendly	None apparent
U	No	460	Relaxed – no baseball caps	18-35	Pool	No	Friendly	Manager walking around all evening, chatting to staff	None apparent
С	Yes	1198	Smart casual	18+	TV screens	Sports events	Outside very busy, inside none observed	None noticed	None apparent
D	No	450 (estimate)	No sportswear or baseball caps	25+	Fruit machines	Karaoke, DJs, Miami nights	Greet and welcome	None noticed	CCTV

В	Yes	2400	Smart casual	21+	TV	DJs and jazz night	Friendly	Professional and observant	CCTV
S	No	650 (estimate)	Smart casual	18-50	No	No	No interaction observed	None observed	None observed
Т	Yes	210	Smart casual	21-30	TV	Private hire parties	Asked for ID	Proactive manager, walking the floor – liaising with door staff	CCTV
F	Yes	1358	Smart casual	18-25	TV, pool, table football	Sports matches, DJs, rodeo	None observed	None observed	None observed
AO	Yes	530	Smart – no leisure wear	21-40	Big screen	No	Not friendly or welcoming	None observed	CCTV
E	Yes	400	Smart casual	18-40	TV screen, games machines	No	Greet and welcome	None observed	None observed
L	No	650	No Timberland, Kickers, Rockport, Burberry, football strips	18-24	Pool, TV	Salsa night, DJs, podium dancers	Friendly with regulars	None observed	Plastic bottles and glasses. CCTV, Notices warning about pickpockets
G	No	291	No sportswear	18-25	Live music, pool	DJs, bands	Bag check, friendly	None observed	Plastic glasses, no bottle

**Table 6.3** Baseline licensing hours for licensed premises in Birmingham City Centre (police force area F1)

Premise	Mon - Wed	Thurs	Fri	Sat	Sun
V	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN
U	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN
В	12.00-3.00	12.00-1.00	12.00-0.00	12.00-3.00	12.00-0.00
N	12.00-2.00	12.00-2.00	12.00-2.00	12.00-2.00	12.00-0.30
С	12.00-2.00	12.00-2.00	12.00-2.00	12.00-2.00	12.00-2.00
AO	11.30-2.00	11.30-2.00	11.30-2.00	11.30-2.00	12.00-2.00
L	Mon: 21.00- 23.30 Tue: CLOSED Wed: CLOSED	20.00-2.00	20.00-2.00	19.00-2.00	CLOSED
G	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN
Т	12.00-2.00	12.00-2.00	12.00-2.00	12.00-2.00	CLOSED

**Table 6.4** Post implementation licensing hours for licensed premises in Birmingham City Centre (police force area F1)

Premise	Mon - Wed	Thurs	Fri	Sat	Sun
V	12.00-1.00	12.00-1.00	12.00-2.00	12.00-4.00	12.00-2.00
U	17.00-2.00	17.00-23.00	17.00-2.30	17.00-2.30	17.00-2.00
В	12.00-3.00	12.00-1.00	12.00-0.00	12.00-3.00	12.00-0.00
N	12.00-2.00	12.00-2.00	12.00-2.00	12.00-2.00	12.00-0.30
С	12.00-2.00	12.00-2.00	12.00-3.00	12.00-3.00	12.00-2.00
AO	11.30-2.00	11.30-2.00	11.30-2.00	11.30-2.00	12.00-2.00
L	Mon: 21.00- 23.30 Tue: CLOSED Wed: CLOSED	20.00-3.30	20.00-3.30	19.00-3.30	CLOSED
G	19.00-23.00	19.00-2.00	19.00-2.00	19.00-2.00	19.00-23.00
Т	12.00-2.00	12.00-2.00	12.00-2.00	12.00-2.00	CLOSED

Findings from interviews with door supervisors

### **Contextual information**

None of the door supervisors interviewed worked exclusively for individual premises; instead they worked for security companies. It was therefore very difficult to arrange interviews as the managers of the premises were not always in a position to authorise the interview. This problem was compounded by the fact that often when door supervisors started work, at say 8.00pm, the premises were getting busy and they could not afford to leave the door to conduct the interview.

Three interviews were completed in total, one female and two males. In an attempt to increase the number of participants, follow-up calls were made to several security companies operating in the Birmingham area. These included Leisuresec, Bridgegate Security, SafetyNet and Elite, but all refused to take part.

Of the three participants, all were SIA accredited. There was a variation in the length of time they had been in the profession: 14 years, three years and 12 months. Two of the interviewees had lived and worked in Birmingham for over seven years whilst one had moved to the area in the past six months. As mentioned above, all interviewees worked for security companies and also worked at more than one venue as part of their normal working week. All

three had an extensive knowledge of many of the drinking areas in Birmingham and could provide comparisons between them.

#### Clientele and premises

The three premises were of a medium to large capacity, ranging from 300 to 1000. One venue was marketed as a live music venue, one was a bar/club that served food and opened from 12.00pm onwards and one was a late night bar/club venue that opened from 7.00pm. All premises charged for entry on certain nights and after certain times.

There was a varied clientele across the three premises. In general, clients were small groups of three to five single gender and mixed gender groups. The dress codes were relatively relaxed, however two of the interviewees said that they were very strict on not allowing sportswear or labels associated with a 'chav/yob' culture i.e. Timberland/ Kickers/Rockport boots and Burberry. With regards to large groups, one venue was never approached by stag parties, one had a strict policy not to allow them and the other welcomed them, saying "it's not fair to discriminate".

#### Levels of violence and disorder

All interviewees found it difficult to talk about the effects of the Act on levels of violence and disorder. They often did not want to say that it was specifically the Act that had caused any changes. The reasons for their reluctance were that the changes came into force quite a long time ago and so they felt it was difficult to remember the baseline period. They also felt that other factors had affected levels of violence such as changes to management policies.

Two of the door supervisors believed that levels of violence had stayed the same; this was because they did not believe that they had high levels of violence prior to the introduction of the Act. The third door supervisor believed that levels of violence had decreased in his premises; he related this to a decrease in binge drinking since hours had been extended.

The door supervisors all had different opinions on whether levels of drunkenness had decreased in Birmingham generally, one said 'increased', another 'decreased' and another 'stayed the same'. These different opinions stemmed from the same issue; customers having the opportunity to drink for longer. There was no consensus as to whether more hours encouraged people to take their time over their usual amount of drinks or conversely, encouraged them to try to drink more.

There was a perception that excess alcohol fuelled the majority of violence. Two interviewees mentioned gangs as being responsible for a large amount of violence and clarified that this had nothing to do with the Act. He stated that: "Gang related violence exists and it isn't related to alcohol – you'll always get some people who just want to cause trouble".

As a general trend, the questions about weapons and violence did not generate detailed responses from interviewees. Often they stressed that they did not see problems in the particular premises and they were reticent in implying that Birmingham had a culture of such problems. Bottles and glasses being used to commit violence were seen as a minor problem in Birmingham and in one instance, following the management's decision to introduce plastic bottles, incidents had dramatically reduced. Violence involving knives and firearms were treated as isolated incidents related to gangs. The participants felt that the Act had not impacted upon these trends.

## Relationship with police

All door supervisors said that they liaised with the police weekly and had direct radio links that they used "when necessary". Two interviewees said the police 'helped their job'. This was related to an increase in police presence and one door supervisor added: "it's good to know they're close-by, as a back up". Interviewees mentioned that levels of communication between themselves and the police had increased since the Act and had become more of a

routine occurrence rather than something out of the ordinary. There was a recognition that both parties are working towards the same goal.

## Impact of the Act on their role

Only one out of the three interviewees spoke with confidence about whether the premises they worked at had changed their opening hours since the introduction of the Act. This may be a consequence of the participants working at more than one premise and not getting to know venues in-depth and also, the fact that two of the interviewees had only been working at the premises for a couple of months.

Participants stated that following the Act, hours were extended on Thursday, Friday and Saturday nights for two of the venues. Whereas previously the venues would stay open until 2.00am on these nights, they now opened until 3.30am -4.00am. In both cases they held licenses for later than this (up to 6.00am) but they felt that there was no demand from customers for the venues to open until 6.00am. In the third venue the interviewee did not know whether licensing hours had been extended or not.

All interviewees thought that the level of difficulty of their job had stayed the same since the introduction of the Act. One respondent said that the Act had changed their job only as it offered the opportunity to work "longer hours for more money". On the other hand another respondent felt that you had to "work for your money now, you have to be checking ID and be alert all time".

The interviewees found it easier to talk about the changes to their role brought about by SIA accreditation rather than the Licensing laws. One bar manager expressed strong opinions on SIA accreditation, calling it "a ridiculous money making scheme although a good idea in principle". He stated that door supervision had previously been thought of as a good option to get a decent second income, however people are now looking elsewhere as the cost of gaining the license is too high. Door supervisors held positive views about SIA accreditation, suggesting that the stereotypical image of the bouncer 'looking for a fight' had decreased as accreditation had turned it into "career rather than a part time job".

Participants also felt that SIA accreditation had changed door supervisors' attitude towards removing persons from premises. Emphasis was now placed on talking and reasoning with customers whilst physical measures were discussed as "a last resort". According to one respondent, the negative aspect of SIA accreditation was that some troublemakers would "rile door staff knowing that they cannot do anything about it". Interviewees stated that these changes were not linked to the introduction of the Act.

Findings from interviews with licensees/managers and bar staff

#### **Contextual information**

Three interviews were undertaken with bar staff, and four interviews were conducted with licensee/managers. Two of the bar staff were female and one male, all the licensee/managers were male.

The majority interviews took place face to face and were tape recorded; the others took place on the phone and were not tape recorded.

The interviewees had a variety of levels of experience of working in the pub/club trade from two and a half years to fifteen years. However in the bars/clubs that participated, experience ranged from six months to ten years. In three of the establishments the interviewees had started working since the implementation of the Act and consequently it was difficult for them to answer all the questions.

#### Type of establishment

The premises varied with two gay bars and two smarter bars (one large and one small). The capacities varied from 210 to 2400. One premise had an Australian theme, whilst another was a vodka bar.

All premises strictly adhered to an over 18's policy, with all of them introducing a Challenge 21 scheme (one even had a Challenge 25 scheme). However, it appeared that customers were used to this and came prepared with their passports or driving licences.

'Even if they come in one week and the next week they don't have the ID we still don't let them in. I spend a lot of the time at the door and I make the final decision.' (Bar Manager)

'We actually use challenge 25 because if you actually look at it the visual differences at the younger age it is very difficult so we challenge all.' (Licensee)

The serving of food was very important to two of the premises and two of them did not serve food. For the two premises where food was viewed as an important feature, the management stated that it: 'brings in the customers during the week and if they enjoy it might mean repeat custom'

The importance placed on food service was also linked to the introduction of the No Smoking Act in July this year which was seen to have a potential effect on custom in the future. By making itself more as a food destination it was hoped that the effects of the no smoking policy would not be detrimental to profits.

#### Clientele

All the premises suggested that they attracted a 'mixed' or 'varied' crowd; however, students were singled out as a target market. One manager commented: 'There are four universities and one college in Birmingham you're bound to get some students coming here most nights.' Some premises discouraged hen parties and stag nights, "we're not the sort of place which has hen nights and stuff it causes too much trouble." Whereas another premise encouraged hen and stag nights by providing a reserved table and a free bottle of champagne.

Although there was no active policy, certain managers/licensees did use their discretion to turn away certain groups. 'Well we don't allow large groups of males, if we've got a lot in already, we like to keep an even balance, it just makes it pleasanter for all.'

A smart/casual dress code was in place in all the premises; however this was not always strictly enforced. One bar manager stated that: "we're a bit more relaxed on student nights."

All the participants were happy with the behaviour of their customers, however they recognised that "you'll always get the trouble makers you can't do much about it."

### Levels of violence and disorder

Younger people were consistently viewed as causing the most trouble with Christmas being recognised as a particular time of difficulty, especially 'black Friday' - the last Friday before Christmas. Two premises also recognised the difficulties of Christmas when 'you get people who never go out the rest the rest of the year.'

The football season was seen as particularly troublesome, however as one manager/licensee mentioned: "If you're gonna be stupid enough to show Villa or Blues matches, well you're asking for trouble." Nevertheless showing sports matches was seen to be essential for attracting customers. One manager stated: "We don't show the local derbys but we show the England matches and there's a good atmosphere. The World Cup was a lot less trouble than we thought it was going to be."

The use of knives and firearms, although recognised as a problem, were not seen as being a particular concern. Bar staff stated that: 'I think it's more of a problem in the suburbs.' 'Well you see it on the news but I've never seen anything.'

There appeared to be differences in the views expressed by bar staff as opposed to management. Bar staff were more likely to see glass being used as a weapon as a major problem, managers on the other hand see this as less problematic, or only a minor problem. One manager/licensee did suggest that he would like to introduce plastic bottles for alcopops, but he couldn't get it from his brewery because it was too expensive.

#### Relationship with police

All premises reported a good relationship with the police, expressing the view that there was respect from both sides and that the police helped their job. One manger/licensee commented: 'The best thing is to call them just in case something's gonna happen. Or if like we find some drugs, some powder, a couple of tablets, just one spliff, we confiscate it and call the police'

All the premises used the radiolink whenever necessary, but as one licensee/manager explained: 'We don't actually have to use the radio that often the police are always within visual distance.' However, one participant from a venue on Hurst Street premises was less keen on using the police link, seeing it to be faster to call upon fellow door staff from nearby premises.

Although all participants were positive regarding their relationship with the police, this appeared to be stronger with premises from Broad Street. Broad Street is part of a business improvement district as one manager/licensee mentioned: "We pay an extra 2% business rate tax to improve things like the road, lighting, community street wardens."

Three premises mentioned the walk-throughs by police as being particularly useful. One participant stated that: 'More police presence means that the public feels safer and there's less trouble.' However one manager recognised: 'It's good that the police come and do their walk-throughs show a presence, but it can get a bit off putting if it happens every night.'

The Birmingham Pubwatch and the Broad Street initiative were also seen as being especially effective in bringing the police and licensees/managers together.

Levels and times of policing seem to be crucial in determining the perceptions of night time violence. Although the respondents for the most part felt safe or very safe, they recognised that violence and disorder did occur, and that people were binge drinking. Many, however, were reluctant to link any change to the introduction of the Act.

#### **Extended hours**

All of the premises already had extended hours from the traditional closing time of 11.00pm. However the majority of premises had applied for longer licensing hours and had been granted them (but did not use the full hours available on every night of the week). Only one premise had difficulties obtaining an extension due to 'concerns about disturbing the neighbours in the new flats opposite.'

The majority of respondents felt that it was not profitable to open for longer hours as, 'people just don't want to be out on the streets at three, four o'clock in the morning.' One premise had a twenty-four hour licence but had never used it.

Responses differed as to whether people were drinking more responsibly since the introduction of the Act. For one participant who lived near a club open from 10.00pm until 10.00am, 'yeah you get more alkies, I see 'em all queuing up when I'm coming home from work.' For another respondent there was no difference, 'they just start later and finisher later.' Another participant noticed a small change but suggested that it would take time for behaviour and attitudes to change completely. 'People went a bit mad at first and I'd say they were

drinking more, but now things have slowed down a bit and they're taking care, but it's not going to happen overnight.'

## Summary of findings from post implementation interviews

- Nine participants took part in the post implementation interviews.
- Of the nine, one had signed up to the Pub Accreditation Scheme.
- Of the nine, none had signed up to the British Beer and Pub Association.
- Of the nine, three had signed up to the government's Social Responsibility Standards.
- Of the nine, four had signed up to Pubwatch.
- When asked whether they felt that the levels of night-time violence in their premise had changed since the introduction of the Act, five (56%) felt that it had not changed, four (44%) felt that it had decreased.
- When asked whether they felt that the levels of night-time violence in the town/city had changed since the introduction of the Act, one (11%) felt that it had not changed, three (33%) felt that it had increased and five (56%) felt that it had decreased.
- When asked whether they felt that the levels of drunk and disorderly behaviour had changed since the introduction of the Act, four (44%) felt that it had not changed, three (33%) felt that it had decreased and one (11%) felt that it had increased.
- When asked whether there had been a change in the use of bottles/glasses as a
  weapon since the introduction of the Act, six (67%) said that there had been no
  change, two (22%) said that there had been a small reduction, one (11%) said
  that there had been a large reduction, none said that there had been an
  increase.
- When asked whether there had been a change in the use of knives since the
  introduction of the Act, eight (89%) felt that there had been no change, one
  (11%) felt that there had been a small reduction, none felt that there had been
  an increase.
- When asked whether there had been a change in the use of firearms since the introduction of the Act, seven (78%) said that there had been no change, one (11%) said that had been a small reduction, none said that there had been an increase.
- When asked whether they felt that the number of violent incidents which they
  had had to deal with had changed since the introduction of the Act, four (44%)
  felt that it has stayed the same, none felt that it had increased and none felt that
  it had decreased.
- One respondent (11%) stated that they felt unsafe in the town/city where their premise was located, six (40%) felt safe and two (2%) felt very safe.
- Five (56%) said that these feelings had not changed since the introduction of the Act, two (22%) said that it had.
- Three of the respondents (33%) felt that the Act had resulted in staggered closing times, three (33%) felt that it had not.
- Two (22%) of the respondents felt that that extended drinking hours had led to people drinking more responsibly, three (33%) said that it had not.
- Finally, three (33%) of respondents felt that the Act was a good policy, none felt that it was not.
- Of the nine, five stated that they had changed their hours, three suggested that
  they had not. Tables 6.3 and 6.4 below highlight the hours baseline and post
  implementation as identified by the interview participants. It should be noted
  that these hours do not always appear consistent and are therefore only an
  indication.

# 7. Summary of findings

## Introduction

Birmingham is England's second city and has a large night time economy. The hub of Birmingham's nightlife is Broad Street, although Hurst Street is also popular. In the summer of 2005, West Midlands police pioneered a scheme involving football style red and yellow cards for anti-social behaviour. In addition, plain clothed officers visit licensed premises on Monday nights (usually student nights) while Birmingham City Centre Partnership launched a 'Go Easy' campaign encouraging drinkers to drink responsibly. Taxi rank wardens have also been introduced to make travel home safer.

## Violence against the person

The number of violence against the person offences was 7 per cent higher in the post implementation period compared to baseline, and was also higher in all but four months post implementation compared with the baseline period (the average of the equivalent months in 2004 and 2005). The largest increases were seen in June and July. There was no clear relationship between the timing of changes in violence against the person and the running of alcohol misuse enforcement campaigns (AMEC) in the city.

Statistical significance tests revealed there were no significant increases or decreases in violence against the person offences in either the baseline period or post implementation period (see supplementary annex).

The distribution of offences across the week did not change greatly between the baseline and post implementation periods. In both periods the number of offences recorded increased from Thursday towards the weekend.

Weekday and weekend analysis (see supplementary annex) showed increases in weekday violence against the person for 9 out of 12 months post implementation (see supplementary annex)

Increases in violence against the person were not spread evenly across the entire day. In both the baseline and post implementation periods, the greatest percentage of offences were recorded between 2.00am and 2.59am. Between 11.00pm and 2.59am the proportion of offences recorded in the post implementation period was slightly lower than during the baseline period. The proportion of offences reported in the post implementation period between 3.00am to 7.59am was higher than the baseline.

There was a modest reduction in violence on weekday nights between 1am and 2am and this reduction was stronger at the weekends. Violence also reduced quite markedly on weekend nights between 2am and 3am by 122 offences. This amounted to a 6.3% fall in the concentration of violence between 2am and 3am at weekends (see supplementary annex)

The recording of victim gender improved in the post implementation period (17.8% not recorded compared to 24.6% of offences during the baseline period). In both the baseline and post implementation time periods, males were recorded as being the victim of violence against the person in a greater number of cases than females. The peak age for female victims of violence against the person during the baseline period was between 15 and 19 years old. In the post implementation period the peak age for female victims was between 20 and 24 years old. The peak age for male victims during the baseline period was between 25 and 29 years old. In the post implementation period, the peak age for male victims was between 20 and 24 years old. These changes may have been influenced by the improvements in recording

As with violence against the person overall, males were more likely to be victims of alcohol related violence against the person than females. In both the baseline and post implementation periods the peak age for female victims was between 20 and 24 years old (the same age group as the peak age for female victims of all violence against the person), while for males the peak age for both periods was 20-24. This is slightly older than the peak age for male victims of all violence against the person offences.

The majority of victims of violence against the person offences with a domestic flag were female. For both the baseline and post implementation periods, the peak age for victims was 20-24 years old. However, for female victims this peak was less pronounced in the post implementation period with reductions in the number of victims from this age group.

Offences were highly concentrated in the areas most closely surrounding licensed premises, with just over 40 per cent of Birmingham City Centre's violence against the person occurring between 0-50m from a licensed premise in both periods. In both periods the proportion of violence against the person decreased with distance from licensed premises. There was little change to the proportion of violence against the person recorded in each of the zones between the two periods.

The ratio of violence within the pubs cluster to that in the rest of Birmingham remained fairly stable between the baseline and post implementation period.

There was a correspondence between hot spots of violence against the person and areas with high densities of licensed premises. The hot spots remained relatively stable over time with those evident in the baseline period remaining in the post implementation period. Consequently there was little evidence of change in the geographical distribution of violence against the person.

Between 9.00pm to 10.59pm in both periods hot spots begin to form around Broad Street and Hurst Street, and these were more intense in the post implementation phase compared to the baseline. From 11.00pm to 0.59pm the intensity of hot spots in these locations increases, particularly in the Broad Street and Hurst Street areas. From 1.00am to 2.59am hot spots remain in these areas, with Broad Street and Hurst Street continuing to form key locations for violence against the person. During this period a new hot spot also forms to the east of the Bullring. In the baseline period, violence against the person reduces by the 3.00am to 4.59am time period. This reduction is far less evident in the post implementation period.

The KDE synthesis maps revealed reductions 1.00am to 2.59am, and increases 3.00am in violence against the person hot spots. These are concentrated around the key drinking areas (see supplementary annex)

Although violence against the person was concentrated in and around a relatively small number of licensed premises, it was less so than in some other areas. The top 15 premises accounted for 46 per cent of the violence in the baseline and 48 per cent in the post implementation period. Most of these premises (11 of the 15) fell into the worst 15 in both periods.

Of the eight licensed premises visited by fieldworkers (most of which were in the top 15 on violence against the person offences) all but one applied for additional hours. On average these premises used just 47 per cent of the hours applied for. Within these premises those open for six or more additional hours increased their share of violence against the person incidents between the baseline and post implementation period whilst those open for five or fewer additional hours had a reduced share of violence against the person.

An examination of the relationship between violence against the person and additional opening hours using estimates for all pubs in the case study area revealed that the 36 per cent of pubs opened for more than nine additional hours accounted for around 33 per cent of violence against the person offences in both the baseline and post implementation periods. Thus, using an estimate of the number of additional hours applied for, there was no such relationship between the number of hours and share of violence against the person offences.

## Accident and emergency

There were on average two and a half times as many violence against the person offences than assaults recorded by the ambulance service and this is fairly constant over time. Data on assaults were provided for just over 12 months so it was not possible to construct a mean baseline of two years, as was possible in other case study areas.

Ambulance assaults in 2006 displayed a similar monthly variation compared with the previous year. There was a general correspondence in the peaks and troughs across the two years. Weekend violence against the person, overall violence against the person and assaults also showed an increase in June and July 2006, coinciding with the World Cup.

There were some marked differences between changes in weekend nightly violence against the person and overall violence against the person offences. Large reductions observed in weekend violence against the person were not reflected in changes in all violence against the person offences and in some cases the changes were in opposite directions.

A greater volume of both assaults and violence against the person offences occurred between 3.00am and 5.00am post implementation compared with the previous year although reductions in both periods were identified between 2.00am and 3.00am.

Overall, the changes between the baseline and post implementation periods were modest and there was little variation in the age distribution of victims over time. There is insufficient evidence to assess the relationship between assaults and violence against the person offences or to attribute any of the observed fluctuations in offences and assaults to the Act.

## Criminal damage

Levels of criminal damage were very similar during the baseline (95 offences per month) and post implementation periods (97 offences per month). The most notable changes are the increases in July (38%) and November (26%) and decreases in March (35%).

Statistical significance tests demonstrate there were no significant increases or decreases to criminal damage in the baseline or post implementation periods (see supplementary annex)

The daily distribution of criminal damage offences during the post implementation period retained a similar pattern to the baseline. However, there were increases post implementation in the number of criminal damage offences recorded between 6.00am and 8.59am, with a particularly marked increase between 6.00am and 6.59am (78%). There was a decrease in the number of offences occurring between 7.00pm and 7.59pm of 34 per cent.

There was very little change in the timing of weekday and weekend criminal damage offences in Birmingham in the post implementation period compared with the baseline with only marginal changes in the number of offences in any one-hour (see supplementary annex)

The analysis showed that there was little change in the weekly distribution of criminal damage offences between the baseline and post implementation phases. Criminal damage was highest on Saturday for both time periods although there was an increase in the number of criminal damage offences recorded on Saturdays in the post implementation period.

Criminal damage was most concentrated in the areas closest to licensed premises, with the proportion of offences declining with increased distance from premises. This trend was similar in both periods although there were slight increases in the proportion of offences occurring between 0 and 150m from licensed premises. The observed changes to criminal damage by hour of the day were marginal.

Between 1.00am and 2.59 am the hot spots become more concentrated around the ICC and Mailbox/Bullring areas. From 3.00am to 4.49am there was a dramatic reduction in the

intensity and extent of hot spots, although a small hot spot remained around the Bullring in the baseline period. In the post implementation period a larger number of hot spots persisted until this time period, which suggests that criminal damage was more intense and prolonged during the post implementation period.

The KDE synthesis maps revealed are some changes (reductions from 1.00am to 2.59am and increases from 3.00am to 4.59am) that correspond with the key drinking areas (see supplementary annex).

The ratio between criminal damage in the pubs cluster and that in the rest of Birmingham was highly stable through time. This suggests that observed changes in the main drinking area were in line with those elsewhere in Birmingham. There was nothing distinctive happening in the pubs cluster in terms of criminal damage either baseline or post implementation.

## Sexual offences

There was little change to the level of sexual offences in Birmingham City Centre between the baseline and post implementation periods, with an average of 13 offences per month in both periods. The greatest percentage decrease was in October with a 33 per cent reduction, with the largest increase occurring in May (59%).

There were some small marginal changes to the overall daily distribution of sexual offences between the baseline and post implementation periods – with a higher proportion of post implementation offences occurring between 4.00pm and midnight compared to the baseline and a lower proportion of post implementation offences occurred between 1.00am and 5.00am.

During the baseline period, the greatest numbers of offences were recorded on a Saturday. In the post implementation period, the greatest numbers of sexual offences were recorded on a Sunday. Given the relatively small number of sexual offences, little should be read into such changes.

The age profile of female victims was similar in both periods although the peak age for female victims increased from 15-19 to 20-24

## Calls for disorder

T tests revealed a significant reduction in disorder incidents in the second half of the baseline period (preceding the Act) and the first half of the post implementation period (see supplementary annex).

Calls for disorder in Birmingham City Centre reduced by 15 per cent between the baseline and post implementation periods; each month saw a decrease, with the largest in March. The decreases were greater in the first six months post implementation than in the following six months, suggesting that whatever caused this decline was wearing off somewhat.

There tended to be monthly reductions in disorder both during the week and at weekends. Disorder at weekends was lower than in the baseline period for 10 of the 12 months (see supplementary annex).

Although overall levels of calls declined, there were changes to the distribution of calls by time of day. In the post implementation periods, there were large increases in the hours between 4.00am and 7.00am, with decreases at all other times of day.

Levels of disorder fell throughout the night both during the week and at weekends. There was a sizeable reduction between 11pm and midnight and between 1am to 2am but the greatest fall occurred between 2am and 3am at weekends during which there were three per cent fewer calls compared with the baseline (see supplementary annex).

Just under a third of all disorder calls related to incidents within Birmingham's main drinking areas and an additional fifth were in close proximity to them. The proportion of calls for disorder shared by each of the zones was broadly similar in both periods, although there was a slight increase in the proportion of offences occurring between 0-50m from licensed premises.

## Qualitative fieldwork

All of the respondents believed that the levels of night-time violence in their premise had either decreased or not changed since the introduction of the Act. On levels of violence in the city as a whole, only one third of respondents thought it had increased. The use of weapons including knives and firearms was also believed by the majority not to have increased post implementation.

# 8. References

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