Joint Partnership Strategic Assessment 2010/11

Blaby CSP Appendices

Risk Assessment Matrix

		Crime/Disorder Type	No. crimes/incidents last 12 months	% of overall crime/incident	Level of Control	Probability Score	Harm Score	Threat (Probability x Harm)	Classification	Include with Strategic Assessment?	Rate per 1000 Population	Year on Year Percentage Change
SPI categories	Serious Acquisitive Crime	Burglary Dwelling	417	7.4	C	11	15	165	High	Y	4.467	6.6
		Vehicle Crime	706	12.5	C	17	12	204	High	Y	7.562	-16.7
		Robbery	31	0.6	C	2	11	22	Low		0.332	-6.1
	Serious Sexual Crime	Sexual Offences Against Adults (18 & Over)	7	0.1	C	1	10	10	Low		0.075	-2.1
		Sexual Offences Against Children (Under 18)	40	0.7	C	2	14	28	Low		0.428	
	Serious Violent Crime	Murder	0	0.0	C	1	12	12	Low		0.000	0.0
		Manslaughter	0	0.0	C	1	12	12	Low		0.000	0.0
		GBH sec. 18	6	0.1	C	1	12	12	Low		0.064	-54.5
		GBH sec. 20	5	0.1	C	1	12	12	Low		0.054	-62.5
	Assault LSI	ABH s 47	285	5.1	C	8	13	104	Med		3.053	-10.9
	Criminal Damage	Arson	36	0.6	C	2	11	22	Low		0.386	5.9
		Damage	916	16.3	C	17	16	272	High	Y	9.811	-27.2
NSIR categories	Anti-Social Behaviour	Animal Problems	51	1.6	C	3	12	36	Low		0.546	-32.9
		Begging & Vagrancy	12	0.4	C	1	6	6	Low		0.129	-25.0
		Street Drinking	5	0.2	C	1	16	16	Low		0.054	-44.4
		Malicious Communications	84	2.6	C	5	10	50	Low		0.900	-9.7
		Noise	55	1.7	C	3	12	36	Low		0.589	1.9
		Prostitution Related Activity	1	0.0	C	1	6	6	Low		0.011	
		Inappropriate sale / use / possession of fireworks	13	0.4	C	1	6	6	Low		0.139	-56.7
		Hoax Calls to Emergency Services	111	3.4	C	5	6	30	Low		1.189	-2.6
		Littering/Drugs Paraphernalia	16	0.5	C	1	12	12	Low		0.171	
		R & N Neighbour Disputes	184	5.6	C	8	14	112	Med		1.971	0.0
		R & N Rowdy or Inconsiderate Behaviour	1980	60.3	C	17	17	289	High	Y	21.208	-20.1
		Trespass	14	0.4	C	1	6	6	Low		0.150	75.0
		Abandoned Vehicles (not stolen nor obstruction)	275	8.4	C	14	7	98	Med		2.946	-17.9
		Vehicle nuisance & inappropriate use (not obstruction)	476	14.5	C	17	8	136	Med		5.098	-29.1
Other categories		Domestic Abuse	414	7.4	C	11	20	220	High	Y	4.434	3.5
		Business Crime (Local Objective Burglary OTD >£1000)	29	0.5	C	1	11	11	Low		0.311	-9.4
		Business Crime	979	17.4	C	17	11	187	High	Y	10.486	-12.7
		Hate Crime	46	0.8	C	2	11	22	Low		0.493	27.8
		Burglary OTD	538	9.6	C	14	12	168	High	Y	5.763	12.3
		Theft	1235	21.9	C	17	11	187	High	Y	13.228	-6.7
		Gun Crime	7	0.1	C	1	8	8	Low		0.075	-42.9
		Knife Crime	11	0.2	C	1	6	6	Low		0.118	-31.3
		Speeding				13						
		Killed or Seriously Injured Road Traffic Collisions				21						

HIGH = score > 151
MEDIUM = score 76 – 150
LOW = score 0 - 75

Figure 1. Scanning Matrix for Blaby CSP

ABH

| 2007/08 | 2008/09 | 2009/10 |

GI* Statistic

- p < 0.01
- p >= 0.01
- p >= 0.05
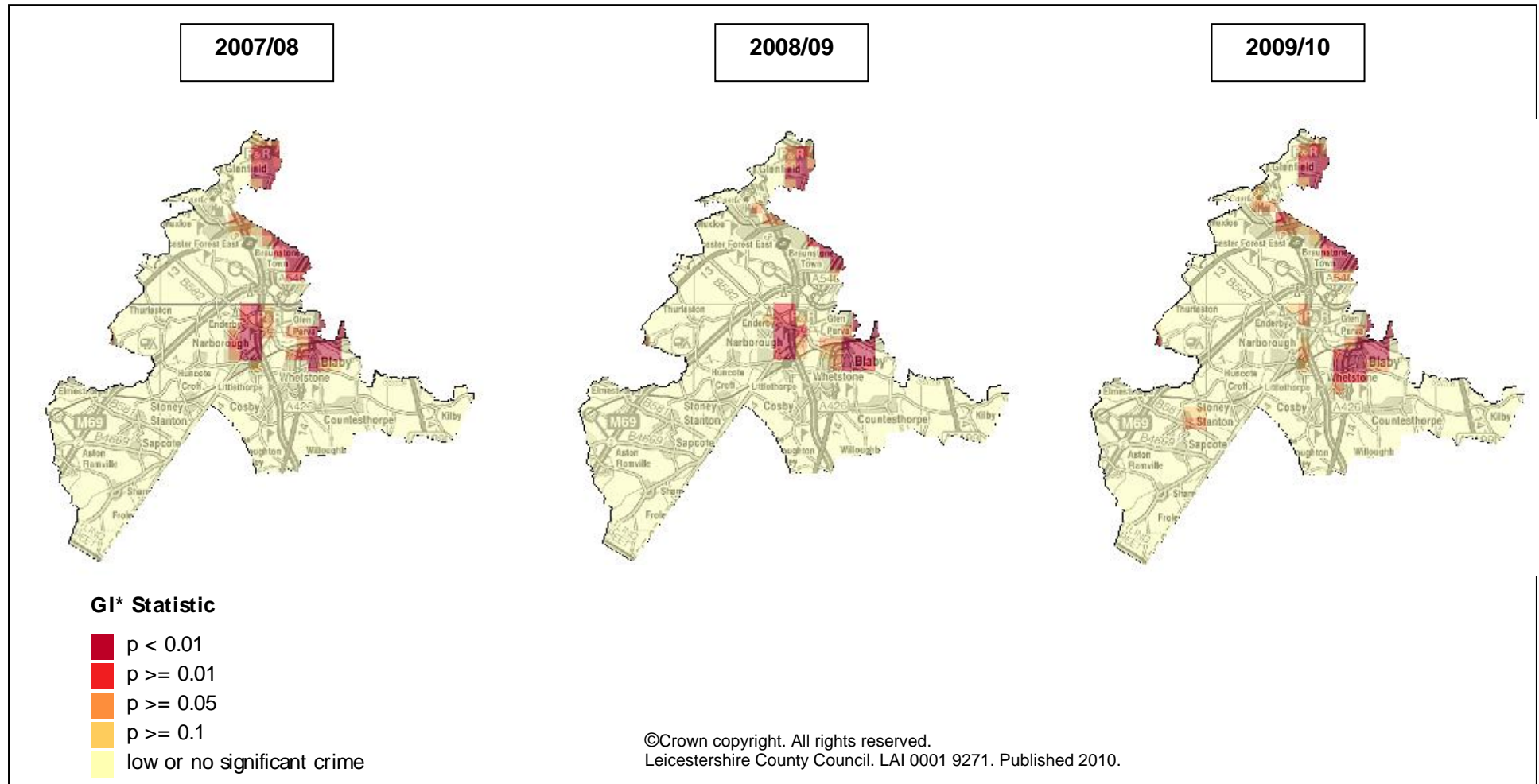- p >= 0.1
- low or no significant crime

Figure 2. ABH Hot spots in Blaby CSP

ABH hot spots are focused on the larger settlements in the north and north east of the district. Areas covered include the urban area adjacent to Leicester city, Glenfield (parts of which have the highest actual incidence in the district), Braunstone Town, Blaby, Enderby and Narborough. In 2009/10, the hot spot covering Enderby and Narborough has reduced in intensity and is now less noticeable.
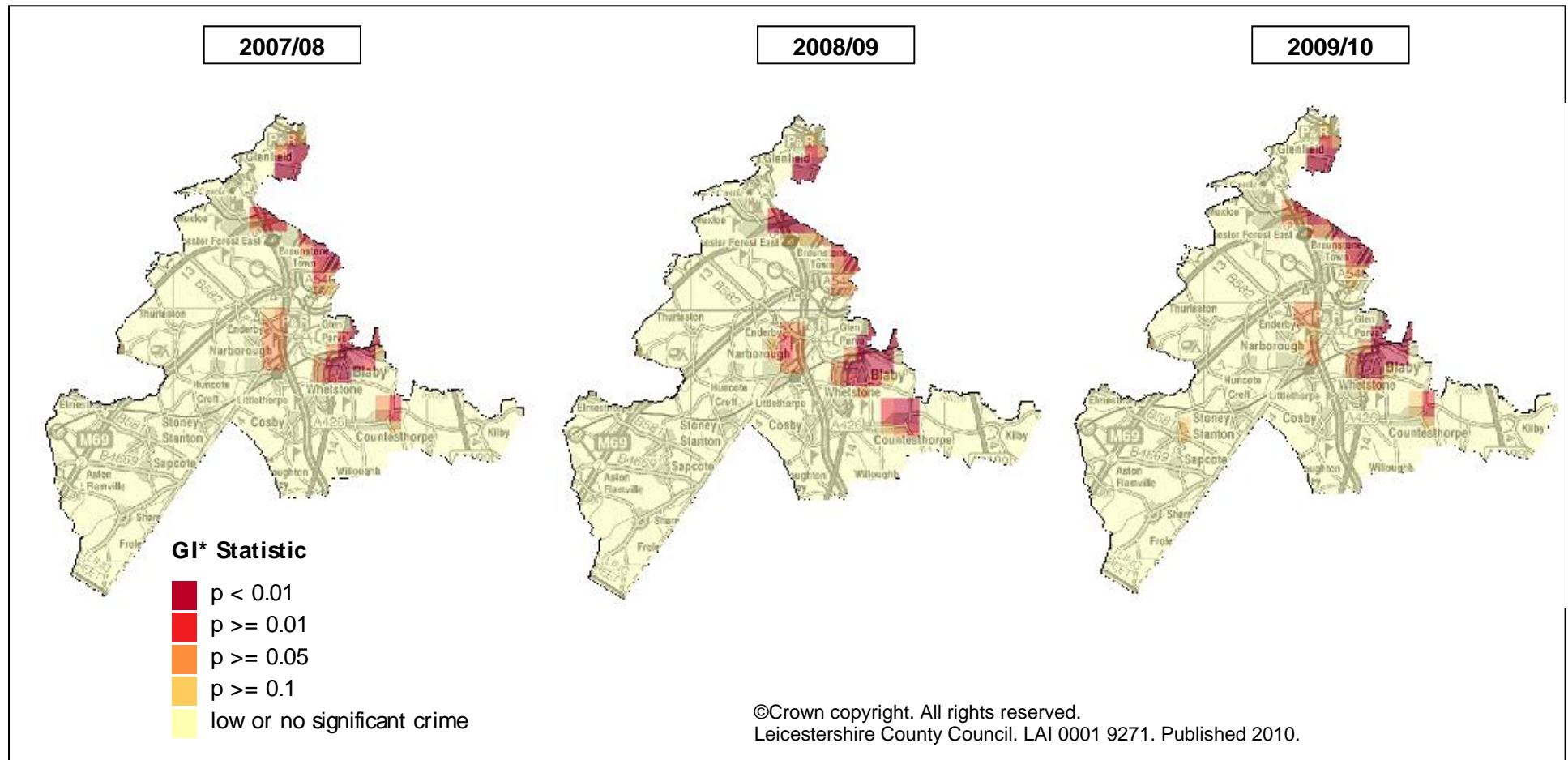
Anti-Social Behaviour

Figure 3. Ant Social Behaviour Hot spots in Blaby CSP

The hot spot areas in Blaby are found primarily around the urban areas forming the city fringe. These areas have remained constant since 2007/08. While the hot spot covering Blaby town centre and extending to Whetstone has remained static through time, the number of incidents appears to have decreased slightly, especially in the Whetstone area. Improving areas, considering only the spread and intensity of the hot spots, include Enderby, Narborough and Countesthorpe. There is one area identified in 2009/10 as emerging: Stoney Stanton and this area has experienced a slight increase in ASB incidents since 2007/08.

Burglary Dwelling

2007/08 2008/09 2009/10

p < 0.01
p >= 0.01
p >= 0.05
p >= 0.1
low or no significant crime

©Crown copyright. All rights reserved.
Leicestershire County Council. LAI 0001 9271. Published 2010.
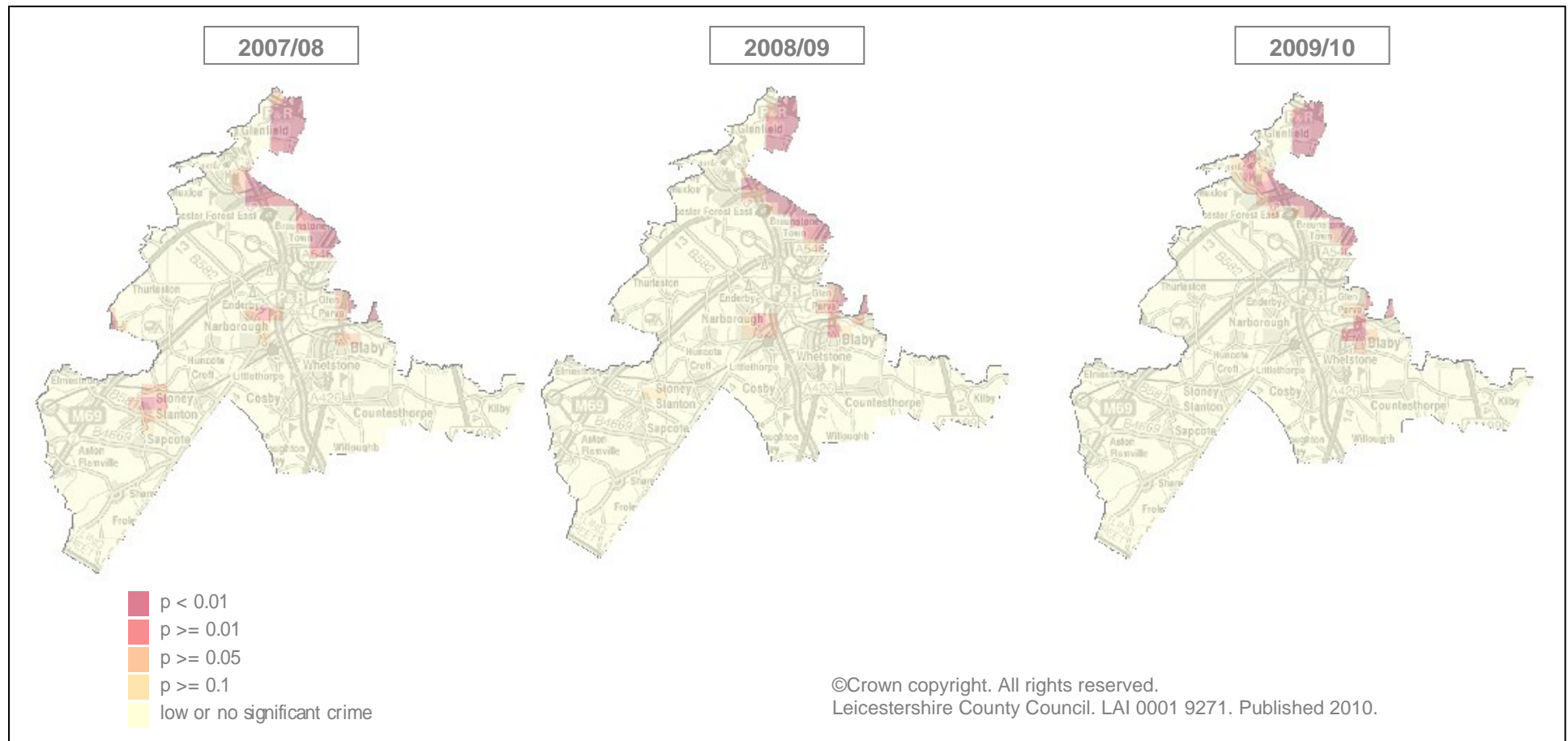
Figure 4. Burglary Dwelling Hot Spots in Blaby CSP

The edge effect of the city is evident in the major static hot spots for domestic burglary in Blaby. Areas such as Leicester Forest East and Braunstone have remained static hot spots since 2007/08. Emerging areas that may now be of concern can be found in Kirby Muxloe and also the extension to the hot spot area around Blaby. The volume of crime, especially in Blaby, does not show a large amount of change since 2007/08 so it is likely that the emergence and spread of this area is linked to the relative improvement in areas such as Narborough, Enderby and Stoney Stanton.
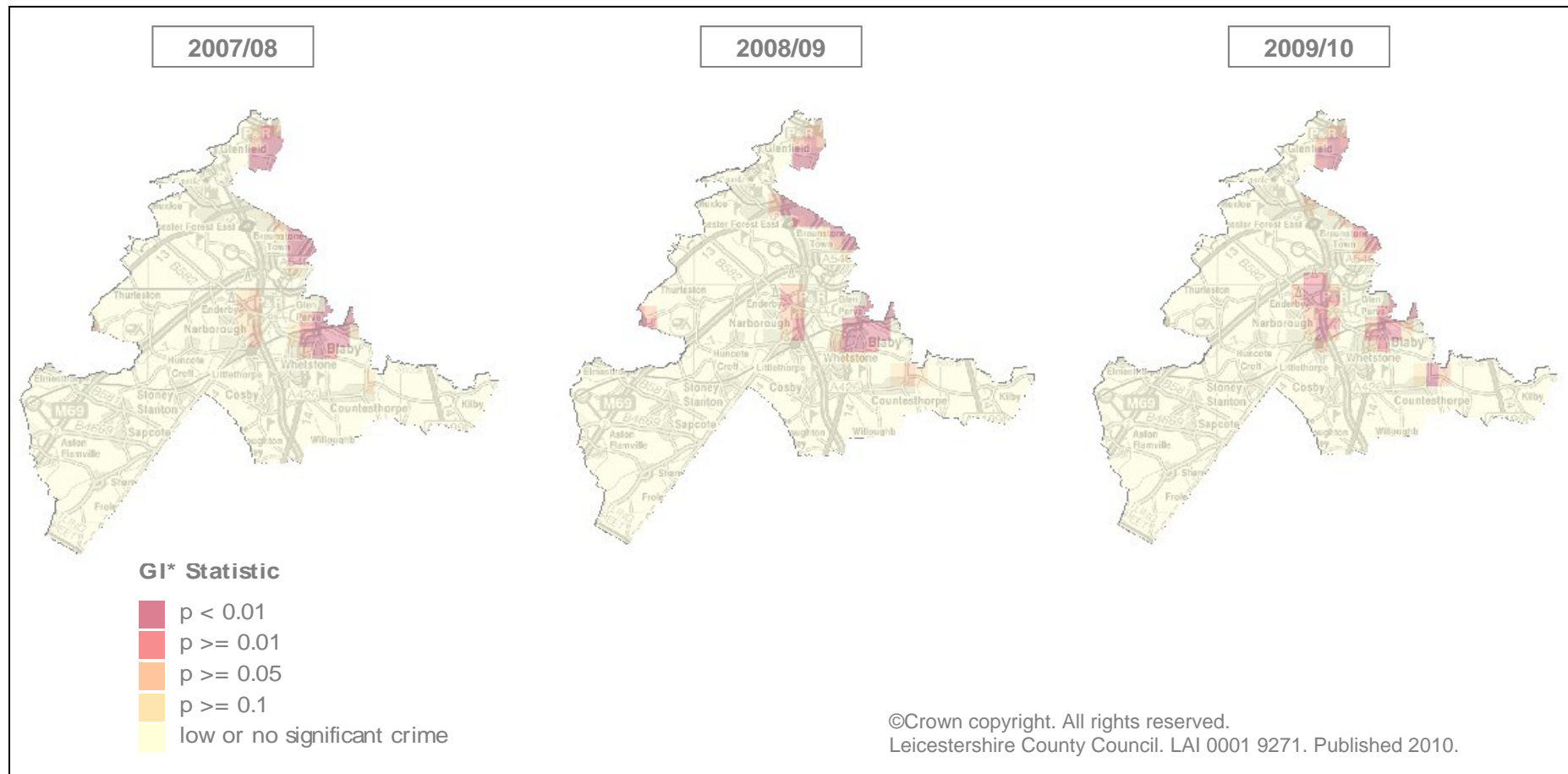
Criminal Damage

Figure 5. Criminal damage Hot Spots in Blaby CSP

The main hot spots in Blaby district are focused around the edge of the district, bordering Leicester City suggesting a spill over from the city. There also exists hot spots around Glenfield, Braunstone Town, Blaby and Countesthorpe, with new hot spots emerging from 2007/08 around Enderby and Narborough. The area around Braunstone Town and Leicester Forest East has increased in intensity during 2008/09 but has since fallen away in 2009/10.
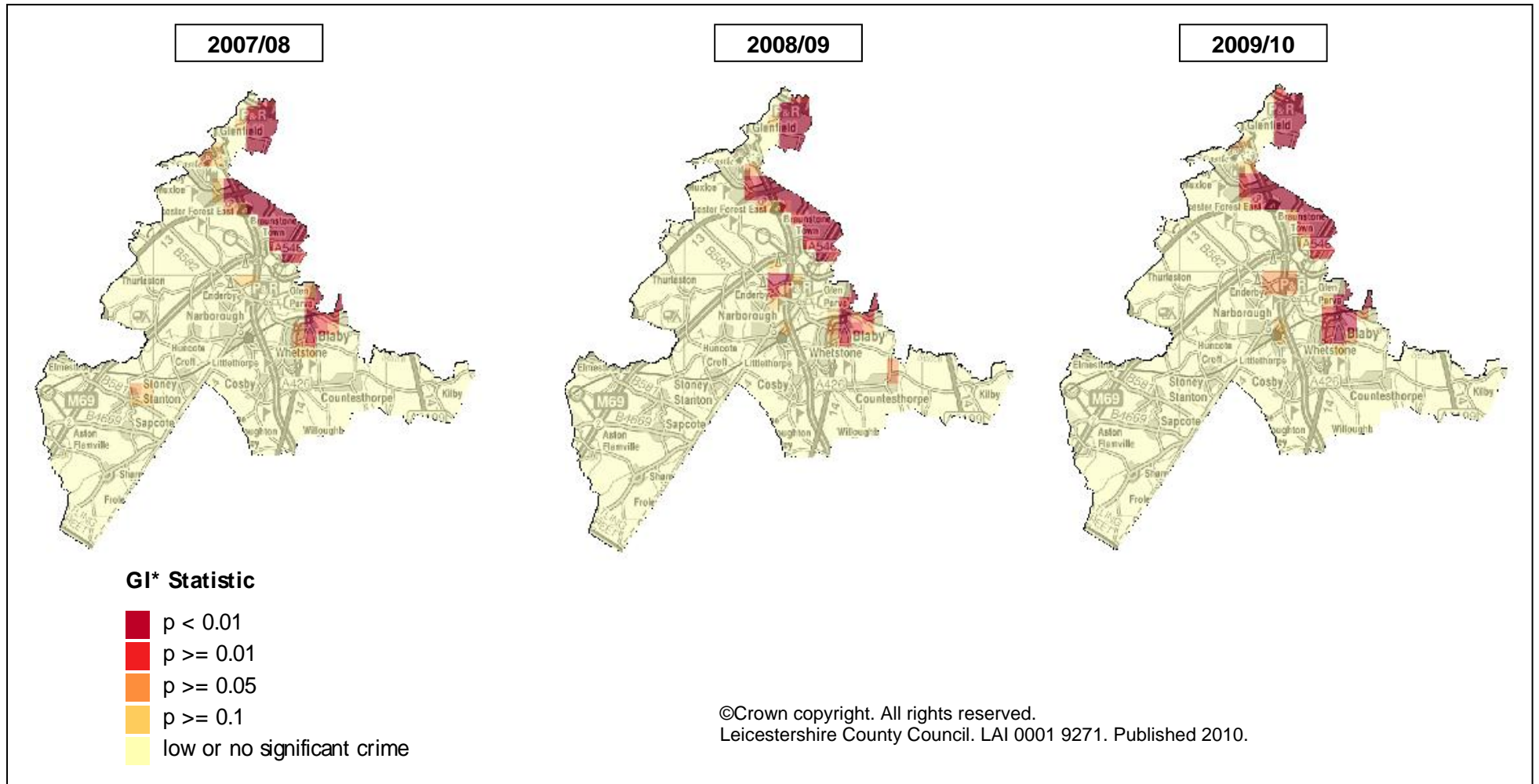
Vehicle Crime

Figure 6. Vehicle Crime Hot Spots in Blaby CSP

Vehicle crime hot spots in Blaby are located around the urban area adjoining Leicester city and have experienced little change from 2007/08 to 2009/10. The size and intensity of the hot spots have remained constant, with the most noticeable change being a minor hot spot appearing in Enderby in 2008/09 which becomes less intense in 2009/10. Elsewhere in the district there is little significant incidence of crime and no noticeable hot spots as a result.

Mapping Methodology

The maps cover five different crime types identified as being of interest to the Partnership Strategic Assessment 2010: Actual Bodily Harm, Anti-Social Behaviour, Vehicle Crime, Criminal Damage and Domestic Burglary. Due to methodology employed it was necessary to provide separate maps at all levels of geography covering the Leicestershire Constabulary Force Area, Leicester City, Leicestershire County, each of the seven districts, and Rutland.

The maps operate on a 500m grid resolution and use a spatial statistic to test for local spatial autocorrelation, or how closely near-by areas resemble each other in terms of the volume of crime. The statistic used is the Getis and Ord (1996) GI* statistic[1] which was run via the Rook's Case[2] add-on for Microsoft Excel. The volume of crime in each individual grid square is compared to the values in the eight squares that immediately surround it. These values are then compared to the global average for the area under consideration. A high positive value for the GI* statistic means that lots of high crime grid-squares are grouped together, whereas very low, negative, GI* values mean that lots of low crime areas are group together. For the purpose of the PSA mapping these low grid squares were classified together with areas of no crime.

As well as comparing local and global averages, a significance test is applied to the result for each grid-square that identifies if the local pattern of crime is significantly different to what is generally observed across the whole study area. The Rook's Case software reports this result as a standardised z-score which can then be converted into a probability. Where the probability is equal to 0.1 it means there is only a 10% chance that the differences observed occurred by chance rather than any real statistical difference in the grid pattern. The probabilities range between 0.1 and 0.01.

Standard thematic maps by grid square are used to display these probabilities in MapInfo and the following analysis is based on these maps. It is important to note that because of the way the statistic works: it considers only the distribution of values at a given point in time for a given area; direct comparison over time is not possible. Where comments have been made about changes over time, it is because either further analysis has been used within the GIS to work with the volume of crime, or the discussion relates to relative changes through time regarding emerging or improving hot spot locations. For the most part, the analysis is based only on the mapping evidence (particularly for the individual districts) and it should be noted that the volume of crime in these areas can be at very low levels, even in the identified hot spots. However, when considered in the context of each district individually, these areas are picked out as being statistically different from others by the mapping statistic.

---

[1] Getis, A. and Ord, J.K. (1996) Local Spatial Statistics: An Overview. *In* Longley, P. and Batty, M. (eds.) *Spatial Analysis: Modelling in a GIS Environment.* (pp. 261-277). Cambridge, England: GeoInformation International.
[2] http://www.lpc.uottawa.ca/data/scripts/index.html

Deliberate Fires in Blaby 2009/10

Highest Fire Areas (Outliers)

High Fires (Top 25% of areas)

Above Average Fires

Below Average Fires

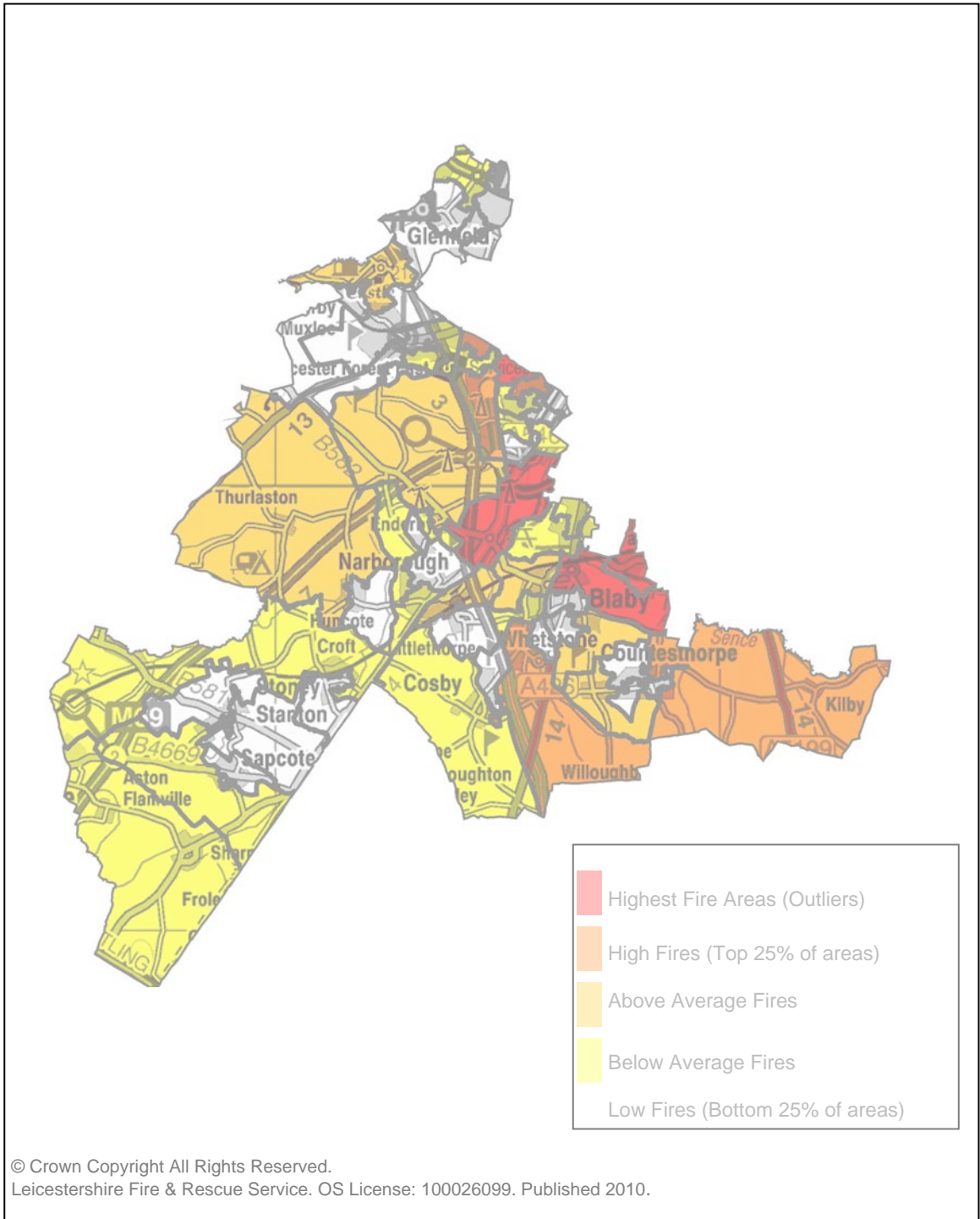Low Fires (Bottom 25% of areas)

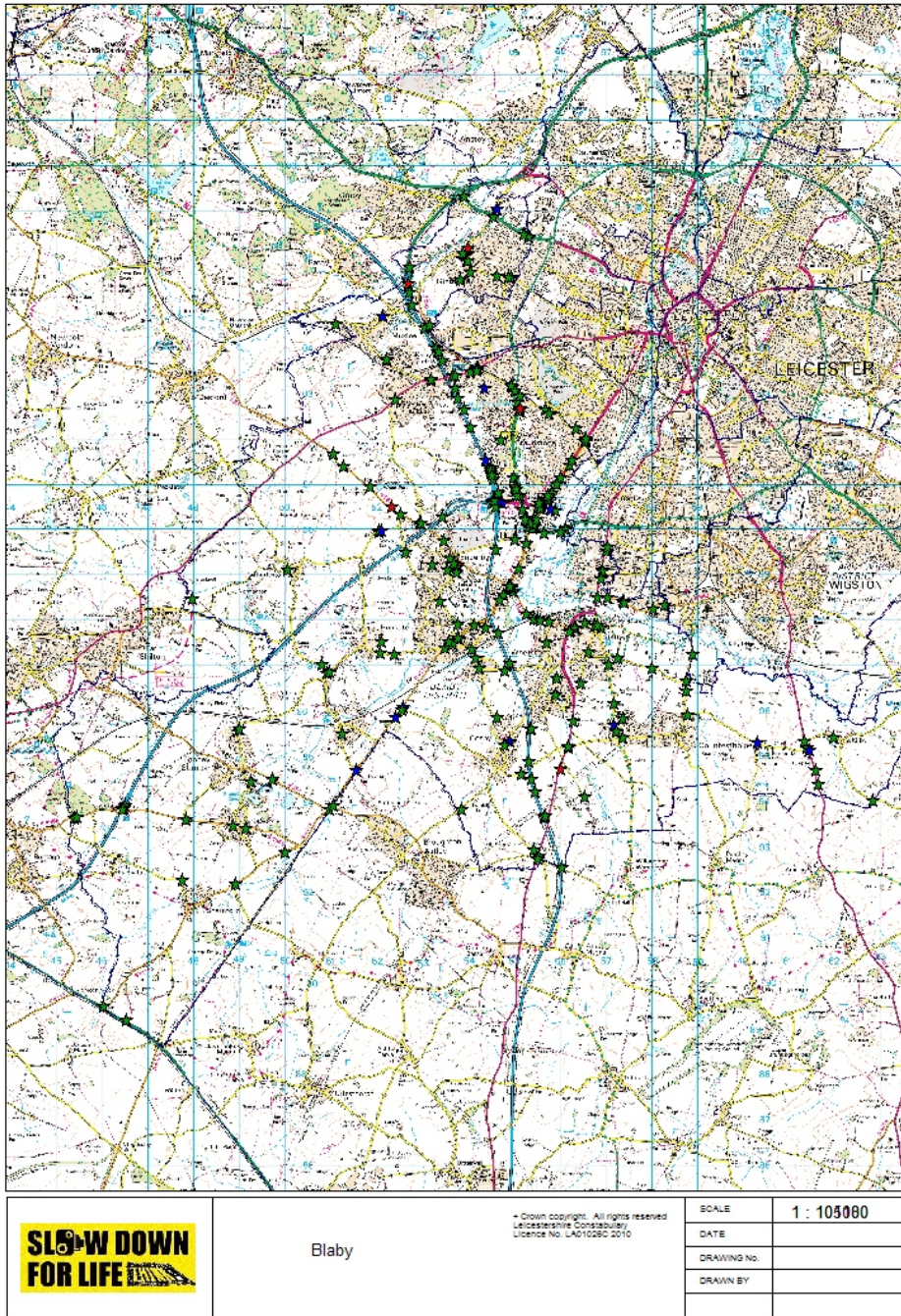**Figure 7.** Deliberate Fires in Blaby CSP Apr 09 – Mar 10

Blaby RTC

Figure 8 Locations of Road Traffic Accidents in Blaby CSP Apr 09 – Mar 10