Joint Partnership Strategic Assessment 2010/11

Rutland CSP Appendices

Rutland CSP 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	203	5.6	C	8	14	112	Med		3.548	12.8
		Vehicle Crime	223	6.2	C	11	11	121	Med		3.898	-23.6
		Robbery	39	1.1	C	3	15	45	Low		0.682	-36.1
	Serious Sexual Crime	Sexual Offences Against Adults (18 & Over)	10	0.3	C	1	10	10	Low		0.175	17.9
		Sexual Offences Against Children (Under 18)	25	0.6	C	2	11	22	Low		0.437	
	Serious Violent Crime	Murder	0	0.0	C	1	13	13	Low		0.000	100.0
		Manslaughter	0	0.0	C	1	13	13	Low		0.000	0.0
		GBH sec. 18	3	0.1	C	1	14	14	Low		0.052	-50.0
		GBH sec. 20	4	0.1	C	1	14	14	Low		0.070	-72.7
	Assault LSI	ABH s 47	276	7.7	C	11	11	121	Med		4.824	7.4
	Criminal Damage	Arson	27	0.7	C	2	10	20	Low		0.472	-12.9
		Damage	724	20.1	C	17	16	272	High	Y	12.655	7.1
NSIR categories	Anti-Social Behaviour	Animal Problems	21	0.9	C	2	6	12	Low		0.367	-4.5
		Begging & Vagrancy	4	0.2	C	1	6	6	Low		0.070	-71.4
		Street Drinking	9	0.4	C	1	15	15	Low		0.157	-10.0
		Malicious Communications	75	3.2	C	5	8	40	Low		1.311	11.9
		Noise	40	1.7	C	3	12	36	Low		0.699	-4.8
		Prostitution Related Activity	1	0.0	C	1	6	6	Low		0.017	
		Inappropriate sale / use / possession of fireworks	22	0.9	C	2	6	12	Low		0.385	120.0
		Hoax Calls to Emergency Services	143	6.2	C	11	7	77	Med		2.500	43.0
		Littering/Drugs Paraphernalia	13	0.6	C	2	11	22	Low		0.227	
		R & N Neighbour Disputes	114	4.9	C	8	12	96	Med		1.993	-24.0
		R & N Rowdy or Inconsiderate Behaviour	1535	66.2	C	17	17	289	High	Y	26.831	-6.3
		Trespass	5	0.2	C	1	6	6	Low		0.087	-37.5
		Abandoned Vehicles (not stolen nor obstruction)	149	6.4	C	11	11	121	Med		2.604	-11.8
		Vehicle nuisance & inappropriate use (not obstruction)	185	8.0	C	11	8	88	Med		3.234	-31.2
Other categories	Domestic Abuse		345	9.6	C	14	17	238	High	Y	6.030	8.5
	Business Crime (Local Objective Burglary OTD >£1000)		20	0.6	C	2			Low		0.350	81.9
	Business Crime		663	18.4	C	17	15	255	High	Y	11.589	10.3
	Hate Crime		35	1.0	C	2	14	28	Low		0.612	2.9
	Burglary OTD		181	5.0	C	8	11	88	Med		3.164	-6.7
	Theft		892	24.7	C	17	13	221	High	Y	15.592	23.7
	Gun Crime		8	0.2	C	1	10	10	Low		0.140	-50.0
	Knife Crime		55	0.4	C	1	12	12	Low		0.961	7.1
	Speeding						12					
	Killed or Seriously Injured Road Traffic Collisions						16					
	HIGH = score > 151 **MEDIUM** = score 76 - 150 **LOW** = score 0 - 75											

Figure 1. Scanning Matrix for Rutland CSP

ABH

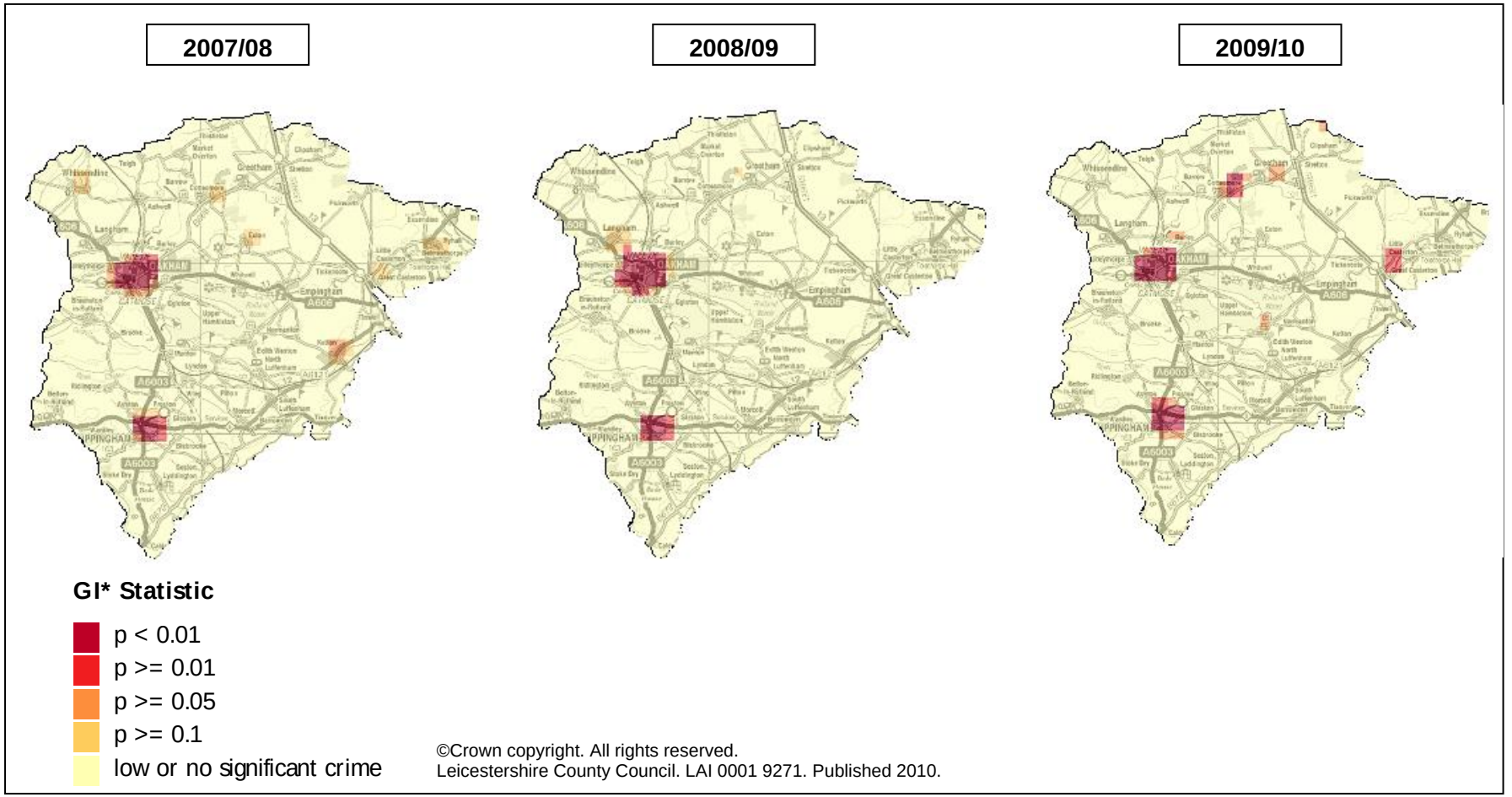

Figure 2. ABH Hot Spots in Rutland CSP

The two main hot spots for Actual Bodily Harm in Rutland CSP are centred on Oakham and Uppingham; these have remained broadly consistent since 2007/08, with a slight reduction in the size of the hot spot in both settlements during 2009/10. Elsewhere in the CSP a small number of isolated hot spots have appeared in 2009/10, focused around the settlements of Cottesmore, Casterton and Great Casterton, although the actual incidences in these areas are small when compared to the areas covering Oakham and Uppingham.

Anti Social Behaviour

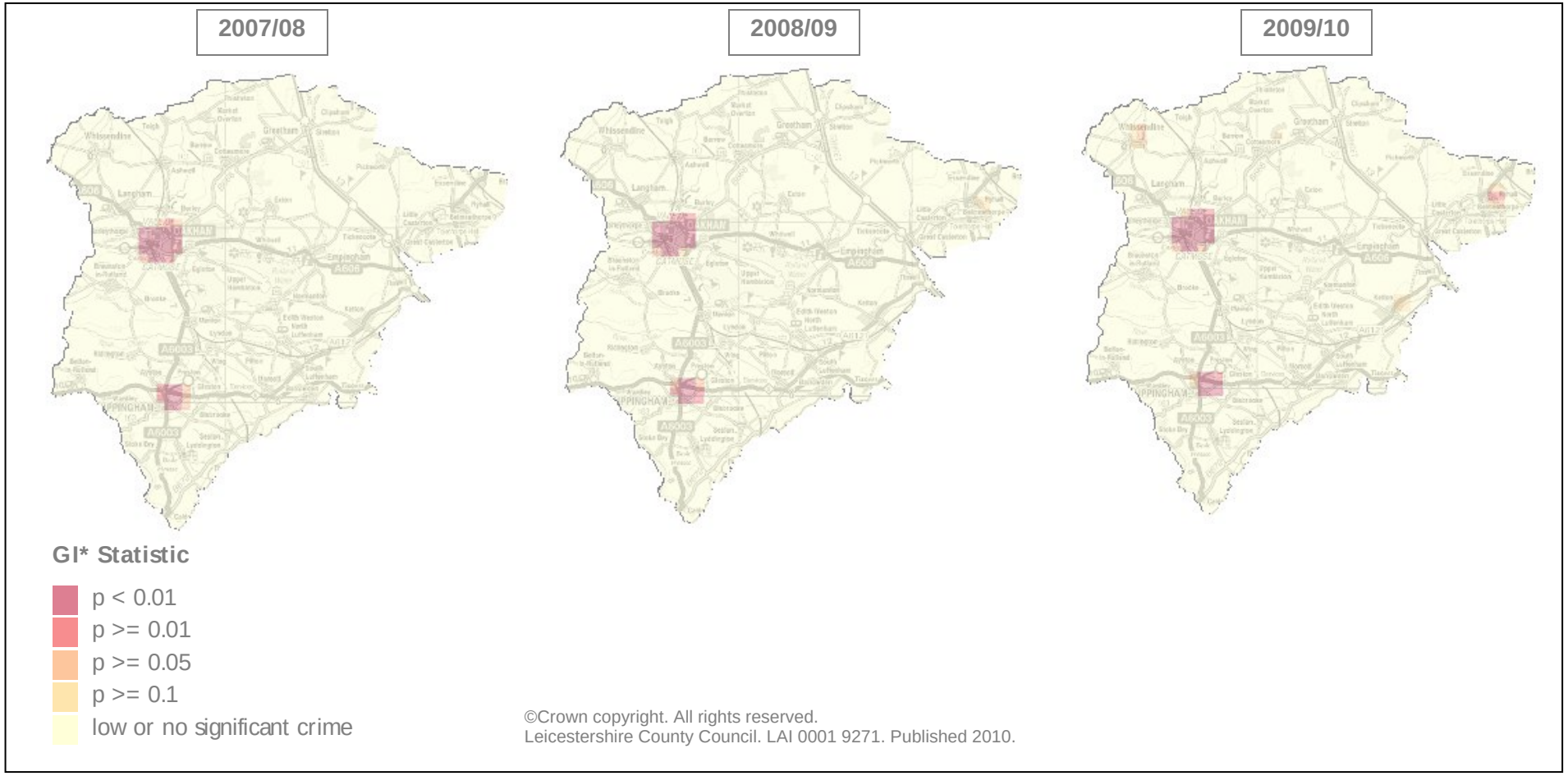

Figure 3. Anti Social Behaviour Hot Spots in Rutland CSP

Uppingham and Oakham have remained as ASB hot spots since 2007/08. In 2009/10 it possible to identify new additional areas of concern in Ryhall, Ketton and Whissendine, but these should be considered with caution due to the small number of offences involved.

Burglary Dwelling

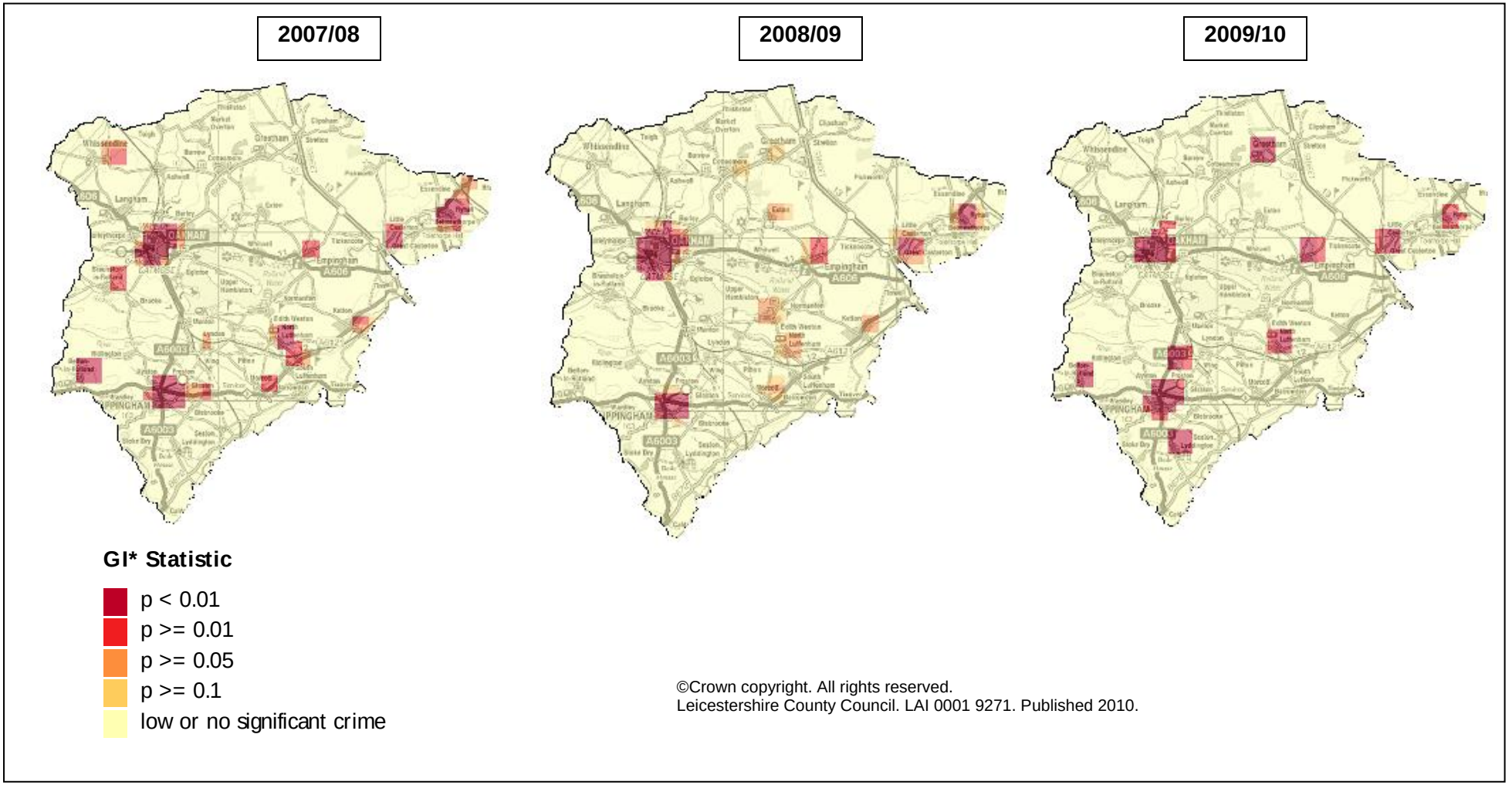

Figure 4. Burglary Dwelling Hot Spots in Rutland CSP

The main settlements of Oakham and Uppingham remain static and consistent through time. The other emerging areas shown on the map are perhaps only present because the largely rural nature of the area means that the volume of crime is very low and even small increases in the number of offences will be picked up as significant within the mapping statistic.

Criminal Damage

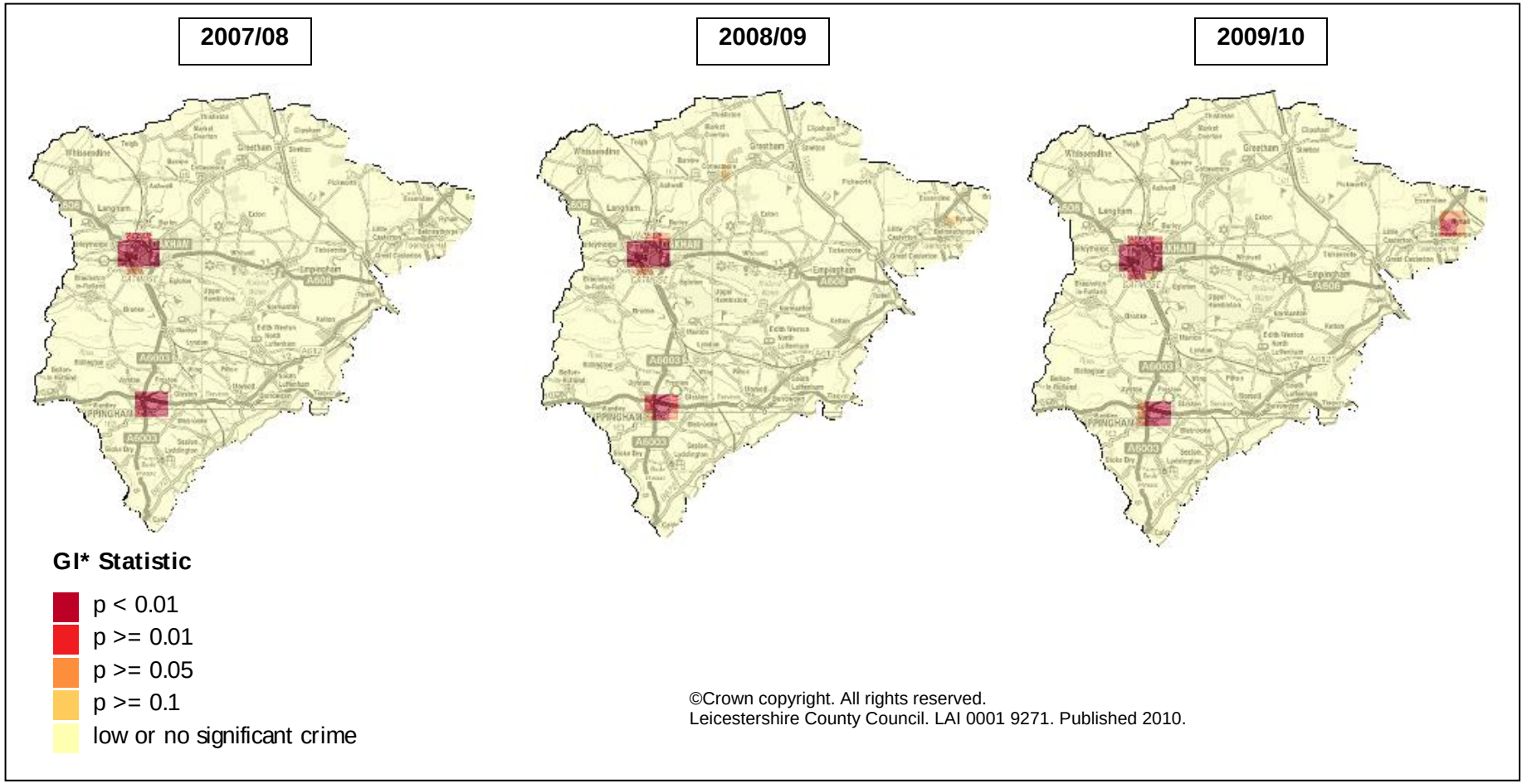

Figure 5. Criminal Damage Hot Spots in Rutland CSP

Given Rutland's rural character, the incidence of criminal damage is relatively isolated and focused around the main settlements of Oakham and Uppingham. These hot spots have experienced only small changes in the total number of incidents over the three years. These hot spots have remained fairly stable in terms of size and intensity between 2007/08 and 2009/10, with both experiencing a small reduction in terms of relative size and intensity in 2008/09 with the trend reversed for 2009/10.

Vehicle Crime

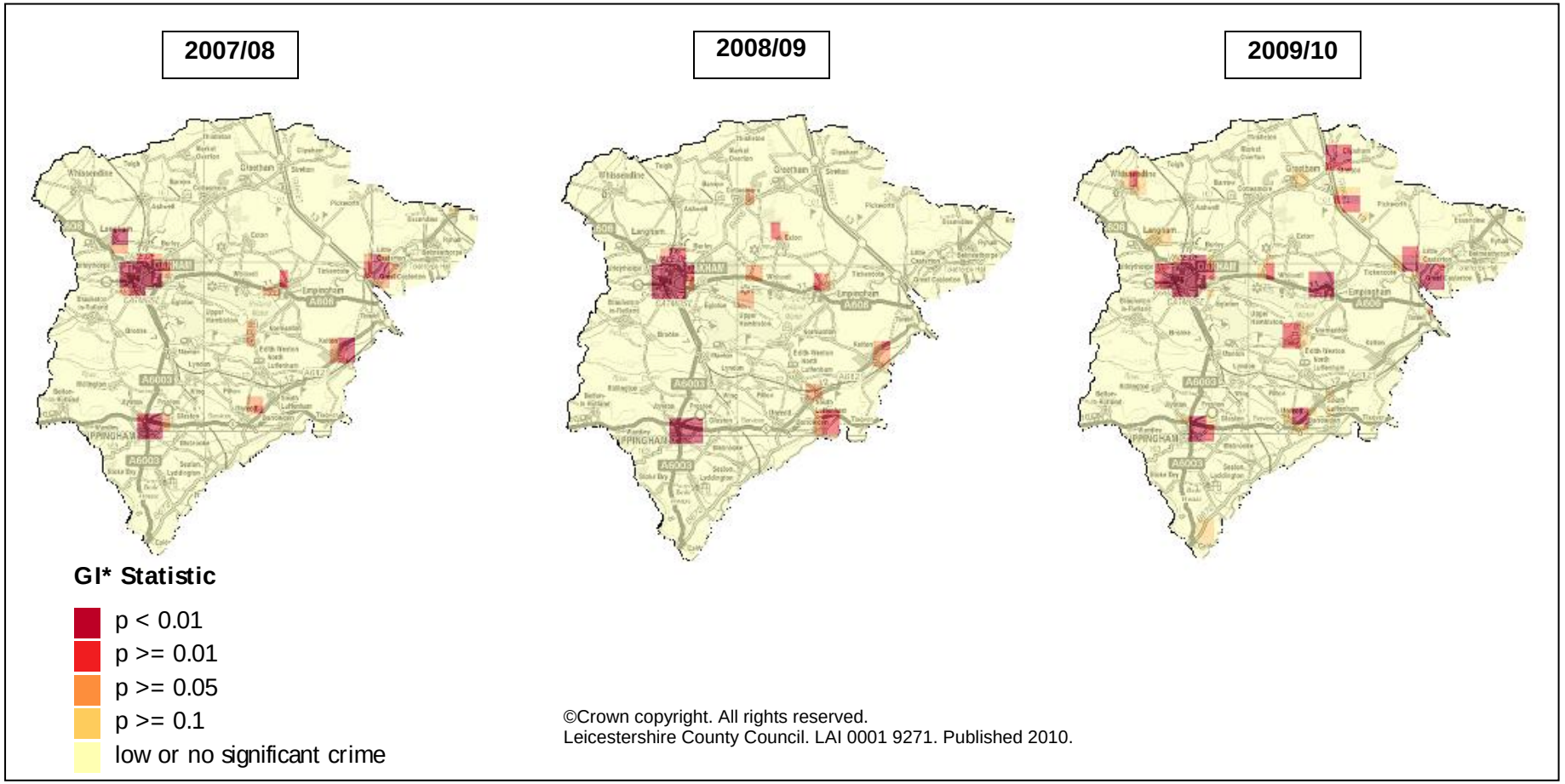

Figure 6. Vehicle Crime Hot Spots in Rutland CSP

Hot spots of vehicle crime are focused around the main settlements of Oakham and Uppingham, with other hot spots scattered across the county, focused around main roads and junctions. In 2009/10, a number of small, localised hot spots have developed along the A1, although in these cases, along with Rutland as a whole, the actual numbers of incidents are very small and are more a result of a small number of incidences in adjacent locations compounding the effect, creating hot spots.

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 Rutland 2009/10

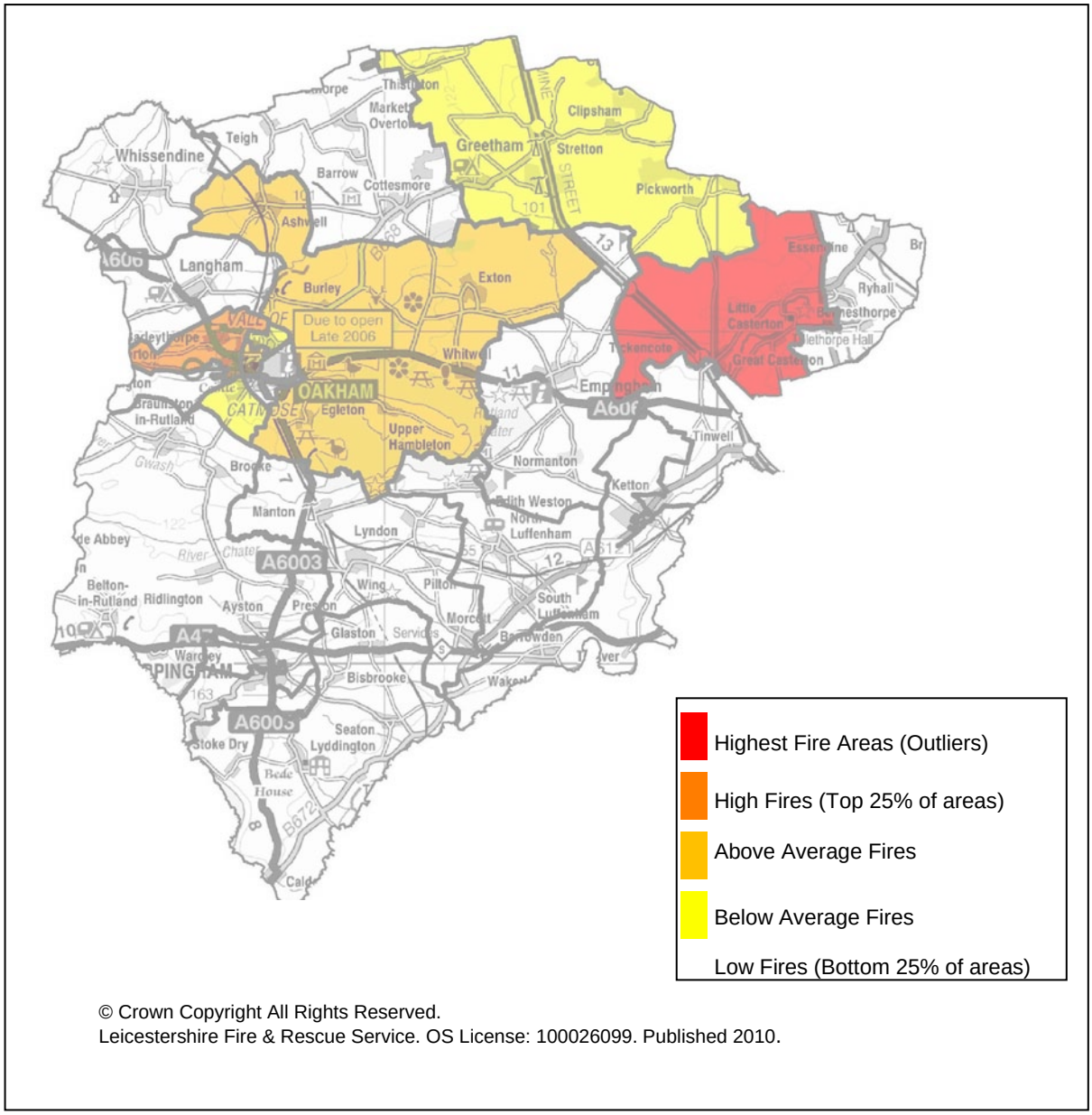

Figure 7. Deliberate Fires in Rutland CSP 2009/10

Rutland CSP Road Traffic Collisions 2009/10

Figure 8. Road Traffic Collisions in Rutland CSP 2009/10