

# CCTV and Crime Reduction in Crawley.

## Follow-Up Study 2000.

An independent evaluation of the Crawley CCTV System.

Peter Squires, PhD. BSc.  
Health & Social Policy Research Centre  
University of Brighton

## CONTENTS

Executive Summary	3
Summary of CCTV Impact Data	9
Main Report	10
Introduction	10
Evaluation Methods	11
Geography of CCTV	12
Crimes Recorded over the 30 Month Period	14
Incidents	17
Crime Trends	21
Violent Offences	22
Burglary	26
Shoplifting	28
Criminal Damage	30
Drugs Offences	33
Racially Aggravated offences	34
CCTV Operating Statistics	36
Conclusions	38
<b>Appendices</b>	<b>39</b>
<b>Bibliography</b>	<b>45</b>

### **Acknowledgements**

I would like to thank Margaret Pears at Horsham police station for providing much of the data upon which this evaluation is based. Likewise, Richard Hoare provided the CCTV operating statistics.

Peter Squires  
May 2000

# EXECUTIVE SUMMARY

## **1. Introduction**

This report examines the impact of the Crawley CCTV system upon crime and incident trends in Crawley Town Centre. It follows an earlier study, completed in January 1998. During the first six months of the CCTV system's operation the cameras appeared to have a significant impact upon five out of the six crime and incident types considered. The total number of offences recorded for the evaluation area fell by 20% and crime on three specified shopping parades had fallen by 25%. The results were generally taken as a success. Taken together they suggested that the Crawley CCTV system had a significant, preventative impact upon criminal activity where it was installed.

1.1 It was acknowledged in the original report that six months was a rather short period over which to draw reliable conclusions about the impact of a crime prevention initiative. Furthermore, it has been noted that, "the effect of cameras on crime may start to fade in the longer term." (Brown, 1995, p.vi) Therefore an important question concerned the sustainability of the crime reduction figures produced during the first six months of the scheme. If the results from the first evaluation were fairly conclusive, the results from the current analysis present a rather more ambiguous picture. The original study covered the period from December 1995 (18 months before CCTV installation) to November 1997 (6 months after). This study takes the evaluation period through to December 1999 (a further two years) and is confined to an evaluation of crime and incident trends in the Crawley town centre.

## **2. Evaluation Methods**

The current study adopts the same methods as the original survey. The performance of the Crawley CCTV system is assessed in terms of its apparent impact upon a series of crime and incident trends within the surveillance area - these are compared alongside the underlying crime and incident trends for the Crawley Sector more generally. The crime and incident types, were identified by the original project commissioning team, although two further offences categories have been added. This study comprises: incidents recorded by Sussex Police and, specifically, public order incidents and criminal damage incidents. Offence categories examined include: 'all crimes' recorded, and specifically violent crime, burglary, shoplifting and criminal damage. The two further offence types which were drugs offences (possession and supply) and racially aggravated offences.

2.1 Data on all of the above, in monthly totals, covering the period December 1997 to December 1999 inclusive, were obtained from the Sussex Police, Horsham Data Centre. The data was reworked as twelve-month moving averages and then indexed for purposes of comparison. Finally a limited amount of information was obtained on CCTV system usage and performance, including incidents originated by CCTV, arrests monitored, and arrests due to CCTV.

### **3. CCTV Impact on total crime**

Figure one, in the main report reveals that the period covered by the earlier evaluation coincided with a most pronounced decline in the Crawley town centre crime figures. After November, however, the crime figures climb sharply, especially in the town centre itself. The reclassification of offence categories during 1999 appears to have had a marked effect in the Crawley sector as a whole, but little sustained impact in the town centre. The introduction of CCTV to Crawley town centre, in the midst of an already falling crime pattern, may have helped sustain this trend for another six months. In the longer term this crime reduction effect, whether attributable to CCTV alone, or in combination with other policing initiatives, has not been maintained. By December 1999, offences recorded in the town centre had risen to a monthly average 30% higher than the level at which they stood when the CCTV system was first installed and 45% higher than the level to which they fell during the first 6 months of the CCTV system's operation.

3.1 These results raise difficult questions of interpretation and clarification. The dilemma is simply expressed. When crime is seen to fall, commentators are often pleased just to acknowledge this fact. When a falling crime trend coincides with the introduction of a crime prevention initiative, the temptation is to attribute the trend to the new initiative. The first evaluation of the Crawley CCTV system showed the introduction of the cameras to coincide with a falling crime trend. Considered overall and across several distinct categories of offending this was an entirely reasonable conclusion to draw. CCTV appeared to be associated with some preventive or effect. As was noted at the time, there was obviously more to it because some of the crime figures were falling even before the CCTV cameras were installed. In any event, none of the advice or guidance available to CCTV scheme developers suggests that cameras can be effective alone. The guidance reminds planners only that CCTV can be effective, 'in conjunction with other crime management initiatives.' (Edwards and Tilley, 1994)

3.2 CCTV in Crawley town centre, in conjunction with other factors, originally appeared to contribute to a significant reduction in crimes recorded. Given that a fall in crime represented a desirable policy outcome, one key question was whether this could be sustained. On the available evidence, this does not appear to have happened, however, a number of other factors have to be acknowledged. We have already noted the likely influence of the changed offence classifications and Sussex Police's 'proactive' offence recording policy. A further factor might relate to the operation of the CCTV cameras themselves. Camera surveillance might result in the 'detection' of additional offences that might, otherwise, have gone unrecorded. Cameras might 'detect' offences directly or facilitate police incident response, thereby allowing officers a greater opportunity to detect offences or secure sufficient evidence to permit the recording of crimes.

3.3 Unfortunately, these explanations are not particularly convincing, as the CCTV monitoring figures themselves suggest. If the CCTV cameras were driving up the recording of offences one would expect to see an increase in the incidents 'monitored' or 'originated' but, as figures 21 and 22 indicate, no significant overall trends are apparent. Whilst it was possible to argue with some confidence that the cameras had originally contributed to a significant overall crime reduction effect, this no longer seems to be the case, especially

in respect of violent offences. It is, of course, impossible to determine what the crime figures might have been without CCTV. At the very least one can point to between 10 and 20 incidents and around ten arrests originated per month by CCTV operators (thereby pushing police records up) we cannot know how many potential offenders might have been deterred or displaced by the presence of the cameras.

3.4 Equally, one has to acknowledge a role for CCTV as a Police management and 'incident response' tool rather than a primary 'general crime prevention' tool. This is an argument we have encountered in earlier studies (Squires and Measor, 1996). However, in common with Norris and Armstrong who found only 45 police deployments in 600 hours of observation (Norris and Armstrong, 1999, p. 166), we have found little clear evidence of regular incident response via CCTV. As figure 22 shows in a typical month, incidents initiated fall between 10 and 20 (for around 700 hours of observation). Many incidents (but rather fewer arrests) are monitored, providing an additional incident response capacity should it be required but relatively few incidents are 'originated' via the CCTV cameras.

#### **4. Incident Trends**

The incident trend across the Crawley sector largely stabilised during 1998-99 whereas the trend in the town centre CCTV area fell sharply following a slight peak in November 1998. Without further research it is not easy to reconcile these separate patterns. A falling trend for incidents would generally be regarded as a positive development. There are many more incidents than offences, they take up police time and resources and often generate fears and concerns amongst the general public. A declining profile of incidents would suggest a reduction in potentially criminal, anti-social or disruptive behaviour in public places. It may be that CCTV and related policing activities help restrain patterns of behaviour which might otherwise lead to offending or disorder, leaving the police to concentrate upon a core of more harmful and criminal activities.

##### **4.1 Public order and violence**

While the overall trend for 'total incidents recorded' was downwards, the same was not true of public order incidents where, for most of the period, the trend was clearly upwards. To a large extent this will be the result of the deployment of extra cameras outside night-clubs (in March 1998) and outside a new 'theme pub' in the Crawley Town Centre area (in April 1999). The installation of these additional cameras was precisely to monitor disorderly or violent, alcohol-related behaviour, and allow police to respond effectively. It should be no surprise, therefore, when this is precisely what happens, and should, arguably, be taken as a sign of the CCTV system doing its job. In such a situation, CCTV allows the police to respond to incidents more 'intelligently,' reacting quickly to disorderly or potentially violent encounters and, ultimately, recording more violent offences. An earlier CCTV evaluation in East Grinstead produced a similar result: locating cameras in the vicinity of nightclubs led to a sharp increase in disorderly incidents and 'assault' offences. (Squires, 1998b) Thus, dwarfing all the other indexed trends are the figures showing the percentage increase in violent offences. The actual number of violent offences recorded in any given month may not be high (between 10 - 20 per month in the town centre and up to 130 across the sector as a whole) but the proportionate increase in the recording of these offences is

significant. However, these increases also reflect a reclassification of offence categories during the period covered by the evaluation and the rigorous recording policy of Sussex Police.

4.2 As we have noted, the trends in respect of crimes and in respect of incidents are quite divergent and, by the end of the evaluation period, the police were recording 30% more offences in the town centre but almost 10% less incidents. This might be interpreted in a number of ways. As we have suggested already, incidents outnumber crimes by about 5 or 6 to one, therefore a significant reduction in the number of incidents can represent a significant reduction in criminal and disorderly behaviour on the streets. If this is the case, then CCTV may well be achieving one of its primary objectives of helping contain street level disorder. The increase in crime, by contrast, could well reflect the fact that (with declining incidents) the police have more time and resources to devote to more serious and or criminal activities. The number of crimes recorded is never just the result of the number of crimes committed, but typically involves a complex set of relationships between crimes committed, police activities, the reporting behaviour of the public and police offence recording practices. Alongside a declining rate of incidents an increase in crimes recorded need not be such a negative development, although questions then need to be asked about how the crimes recorded were cleared up. Unfortunately, this was a line of enquiry which fell beyond the scope of this analysis.

4.3 Criminal damage incidents are clearly falling. As we have noted on a number of occasions, criminal damage appears to be an offence type that appears particularly amenable to the influence of CCTV.

## **5. Discrete crime trends**

The crime trend in Crawley Sector as a whole increases in parallel with that for the town centre after November 1997. For a while at least, the area with the highest percentage increase in recorded offending was the area outside the CCTV surveillance area (Crawley Sector minus Beat One). The increase is relatively small, but evidence such as this might be a sign of possible displacement of criminal activity away from the camera surveillance area and into the surrounding areas. Unfortunately the limited nature of the available evidence makes it difficult to pursue this line of analysis. In any event the trends converge once again by June 1999.

### **5.1 Violent offences**

During the 24 month period the average number of violent offences in Crawley as a whole appears to have doubled. A similarly sharp percentage increase is observable in respect of violent offences recorded within the town centre CCTV area. While recorded violent offences in both areas appeared to be climbing, the figures for the town centre break sharply upwards in mid 1999 (probably attributable to the locations of the additional cameras referred to in paragraph 4.1). It is very likely that this sudden leap in the figures reflects the influence of the new cameras and also the reclassification of offences and, in this case, the introduction of the 'common assault' criminal charge. Even so, it is apparent that both the CCTV surveillance area and the Crawley sector as a whole were influenced by very similar trends and many of these pre-date the reclassification of offences.

## **5.2 Burglary**

A relatively small - and diminishing - proportion of burglaries takes place in the town centre. The number of burglaries in Crawley had been falling throughout the 18 months prior to the installation of CCTV (figures 23 and 24, pages 37 and 38: Squires, 1998a). During early 1998 the burglary figures underwent a brief revival before falling away again. During 1999 there were consistently less than 10 burglaries a month, on average, in the town centre. Between February 1998 and December 1999, burglaries in the whole Crawley sector as a whole appear to have fallen by almost 25%.

## **5.3 Shoplifting**

The majority of shoplifting falls within the town centre. In the earlier study, it was clear that shoplifting had been falling consistently in both areas. With the exception of the brief upwards spike in shoplifting offences in early 1998, the consistently falling trend in recorded offences of shoplifting is continued throughout the 30 months covered by this evaluation. The number of shoplifting offences recorded in Crawley town centre fell by some 30% (approximately 10 offences per month).

## **5.4 Criminal Damage**

In the past criminal damage offences have appeared to be especially amenable to the influence of CCTV cameras. However, throughout the entire 2 year period, criminal damage offences in the town centre have increased by 15 per cent (roughly the same proportion by which they have increased in Crawley sector as a whole). Admittedly, a relatively low number of criminal damage offences are recorded in the town centre, roughly ten per month. However, for 12 months, the criminal damage rate was increased by some 25% per month until it fell back again in March 1999. The number of additional offences is only small (2 or 3 per month), but this does appear to have a significant effect on the overall figures. It is difficult to account for the increased recording of these offences at this time.

## **5.5 Additional offence types: Drugs and racially aggravated offences**

The numbers of each type of offence recorded were undoubtedly low (but in both cases climbing in frequency). These apparently steeply climbing offence trends have to be set against their very low starting points. Furthermore, both offence types will be susceptible to differing police enforcement activities. It follows that these offence profiles need not reveal a worrying explosion in drug related or racially aggravated offending in the Crawley area, they are just as likely to reflect the operation of particular police enforcement policies, or police beginning to get to grips with a particular type of incident. Between 4-5 drug offences are recorded in the town centre in an average month and the trend is fairly stable. Across the sector as a whole, the number of drugs offences recorded continues to rise. Likewise, while the average number of racially aggravated incidents appears to be climbing, the monthly average for the sector as a whole remains in single figures. The raw figures suggest something of a seasonal pattern, with more incidents in the summer months (perhaps related to school summer holidays). With the available evidence, it is difficult to draw any further conclusions.

## **6. CCTV Performance Data**

When the camera system was first installed, CCTV operators were monitoring in excess of 300 incidents a month in Crawley. Six months later the number of incidents monitored had fallen to just over 200 per month, but throughout the next two years the number of incidents monitored has climbed steadily back to the 300 mark. Given that CCTV operators are responsible for monitoring cameras in a number of other areas besides Crawley, successfully maintaining the rate of monitoring (especially while the number of crimes recorded appears to be growing) is an important issue. As more towns and more cameras are added to the system CCTV monitoring staff are less able to be 'proactive' in their use of the system. Nevertheless the monitoring data indicates that Initiated arrests are up by as much as 25% across the county as a whole. The increase in Crawley is not so dramatic and the figures fluctuate somewhat during the year.

6.1 The camera operators have an important role to play in supporting officers on the street. They do this by monitoring officers making arrests within the CCTV surveillance area. If the need arises they can quickly summon back-up and/or monitor the conduct of the arrest. The number of arrests monitored has varied between as little as 15 in a month to as many as 50. Over recent months the average has been fluctuating around 40. The available data does not permit any assessment of the proportion of total CCTV area arrests that are recorded on camera. One further issue concerns the developing experience and expertise of the CCTV operators themselves. The installation of additional cameras outside pubs and clubs makes explicit the targeting of cameras on known trouble spots at certain times of the day, but this is also an aspect of the developing knowledge and skills of CCTV operators as they become more efficient and 'aware' in positioning the cameras.

6.2 Camera operators record all incidents that they themselves originate and all arrests resulting from such incidents. The data suggests that throughout 1998 and early 1999, CCTV operators were initiating rather less incidents than earlier but that, during the second part of 1999 the number of incidents originated began to increase once again. The number of actual arrests arising from incidents initiated by the CCTV operators is typically low but, as the evidence shows, it has certainly begun to rise from mid-1998, perhaps as operators became more experienced in targeting the cameras at different times and places. On average, between 6-10 arrests per month result from incidents originated by the CCTV camera operators.



## Summary CCTV Impact Data

Offence Type	Trend	% change and no of offences
<b>Total crime recorded, CCTV area</b>	Rising: Dec. 97 - Dec 99.	30% increase. Approx 40 more offences per month on average.
<b>Violent crime CCTV area</b>	Rising: Jan98-Dec99	100% increase. Approx 10-15 additional offences per month on average. Steeper increase than sector as a whole, attributable to additional cameras in disorder 'hot-spots' (pubs and clubs)
<b>Burglaries CCTV area</b>	Falling: Jan 98 - Dec. 99	25% reduction. Approx 5 less burglaries per month on average. Steeper decline than sector as a whole
<b>Shoplifting CCTV area</b>	Falling overall: Jan 98 - Dec. 99	22% reduction overall. Approx. 10 less offences per month on average. Steeper decline than sector as a whole.
<b>Criminal Damage CCTV area</b>	Rising overall: Jan 98 - Dec. 99	13% increase. Approx 2-3 more offences per month on average. Smaller rate of increase than Sector as a whole.
<b>Drugs offences, CCTV area.</b>	Rising	Figures too small for reliable trend. Smaller rate of increase than Sector as a whole.
<b>Racially Aggravated offences, CCTV area</b>	Rising	Figures too small for reliable trend.

# MAIN REPORT

## Evaluation of the Crawley CCTV System.

### **Introduction: The Follow-Up Study.**

This report examines the impact of the Crawley CCTV system upon crime and incident trends in Crawley Town Centre. The Report follows an earlier study, completed in January 1998, which had examined the impact of the Sussex Police CCTV system during its first months of operation. The system was first installed and operational in June 1997 and during the first six months it appeared to have a significant impact upon five out of the six crime and incident types considered in the evaluation. The total number of offences recorded for the evaluation area was down by 20% (153 less offences). Crime on three specified shopping parades had fallen by 25%, violent crimes recorded in the town centre area were down by 39% (15 less offences), shoplifting offences recorded were down by 45% throughout the evaluation period (falling faster post-CCTV) and criminal damage offences were down by 30% overall in the CCTV evaluation areas.

These results were generally taken as a success. Taken together they suggested that the Crawley CCTV system had a dampening, preventative or deterrent impact upon criminal activity where it was installed. However, in crime prevention research, as in most other aggregate social scientific enquiry one is seldom able to offer absolute uncontested proof. For instance, CCTV does not operate in isolation, many other factors are likely to influence crime trends - including other policing initiatives. To some extent, in this and the earlier study, we have tried to control for wider influences by comparing the CCTV surveillance area results with crime and incident trends for the Crawley Sector as a whole. Even then, other factors might be at work within the target area itself, underlying crime rates may not change but victims might simply be reporting more offences. Equally, crimes reported might not be the best way to judge the success of CCTV, it might be more appropriate to focus upon crimes 'cleared up,' or upon offenders apprehended and successfully prosecuted, or upon the success of CCTV as a police command and control tool. Despite these caveats, however, the results achieved over the first six months of the Crawley CCTV system were significant enough to confidently assert that it had been successful. The decision to invest in the CCTV technology appeared to be vindicated.

Nevertheless, it was recognised in the evaluation report that six months was a rather short period over which to draw reliable conclusions about the impact of a crime prevention technology. Furthermore, it has been noted that, "the effect of cameras on crime may start to fade in the longer term." (Brown, 1995, p.vi) A key question concerned the sustainability of the crime reduction figures produced during the first six months of the scheme. If the results from the first evaluation were fairly conclusive, the results from the current analysis present, at first sight, a rather more ambiguous picture. The original

study covered the period from December 1995 (18 months before CCTV installation) to November 1997 (6 months after). This study takes the evaluation period through to December 1999 (a further two years) and is largely confined to an evaluation of crime and incident trends in the Crawley town centre CCTV evaluation area

## **Evaluation Methods**

As in the initial study, the performance of the Crawley CCTV system is assessed in terms of its apparent effect in relation to a series of crime and incident trends within the surveillance area - and within the Crawley Sector more generally. The crime and incident types, were identified by the project commissioning team and spelled out in the original CCTV funding document sent to the Home Office. The factors taken into consideration in this evaluation involve:

- 1.1 **Incidents recorded by Sussex Police** and, specifically,
- 1.2 **Public Order Incidents** (including incidents involving offensive weapons, assaults, assaults on police officers, disturbances, disturbances in licensed premises, public drunkenness, breaches of the peace, community problems, racially motivated incidents and other disturbances)
- 1.3 **Criminal Damage incidents.**
- 2.1 **Crimes** (Total crime recorded)
- 2.2 **Violent Crime** (Common assault, ABH, GBH, Affray, Wounding)
- 2.3 **Burglary** (Dwelling, Non-Dwelling, Aggravated Burglary)
- 2.4 **Shoplifting**
- 2.5 **Criminal Damage**

Two further offence types were added for the purposes of the present evaluation, these were **Drugs offences** (possession and supply) and **Racially Aggravated** offences.

Data on all of the above, covering the period December 1997 to December 1999 inclusive, were obtained from the Sussex Police, Horsham Data Centre. The data consisted of monthly totals for 'All Crime'<sup>1</sup> and 'All Incidents' and then subdivided, again by month, into the above crime and incident categories. The data was presented for the Crawley Sector as a whole and for Beat One (the town centre - roughly coterminous with the camera surveillance area).

In the following report, the reworked data is presented in two principle forms. The figures are presented in graphs as **twelve-month moving averages**. The advantage of this method of presentation is that it stabilises the visible trends (by eliminating monthly or seasonal fluctuations in incident frequency) and allows one to recognise the relative scale of different crime or incident patterns. The second method of presentation takes these moving average figures and recalculates them on an indexed basis in order to allow a clear picture of the percentage increase or decrease in the relevant crime or incident trends to emerge. The advantage of using indexed graphs is that they allow direct comparison between different (and perhaps otherwise

unrelated) sets of figures, allowing any trends to emerge much more clearly. The first figure in a given sequence is indexed at 100 and every subsequent months total presented as a percentage variation on it. Some of the following graphs run the sequence of figures back to December 1995, others are indexed back to June 1997 (when the CCTV system was launched) others (as a result of the data available) cover only 1998 and 1999.

Not all incidents will be crimes, however, and in Crawley as a whole, around 5-6 times as many incidents are recorded as compared to crimes, whereas in the town centre a ratio of between 2-3 to one prevails (Appendix A). In both cases however, the ratio of incidents to crimes is falling: recorded incidents are falling faster and the number of crimes recorded is rising faster in the town centre CCTV area (Appendix A, graph 3). A falling pattern of recorded incidents compared to a rising crime trend could indicate a more effective targeting of police resources away from 'non-crime' activities. However, it is difficult to draw conclusions until one knows how the crimes recorded are dealt with or otherwise 'cleared up/

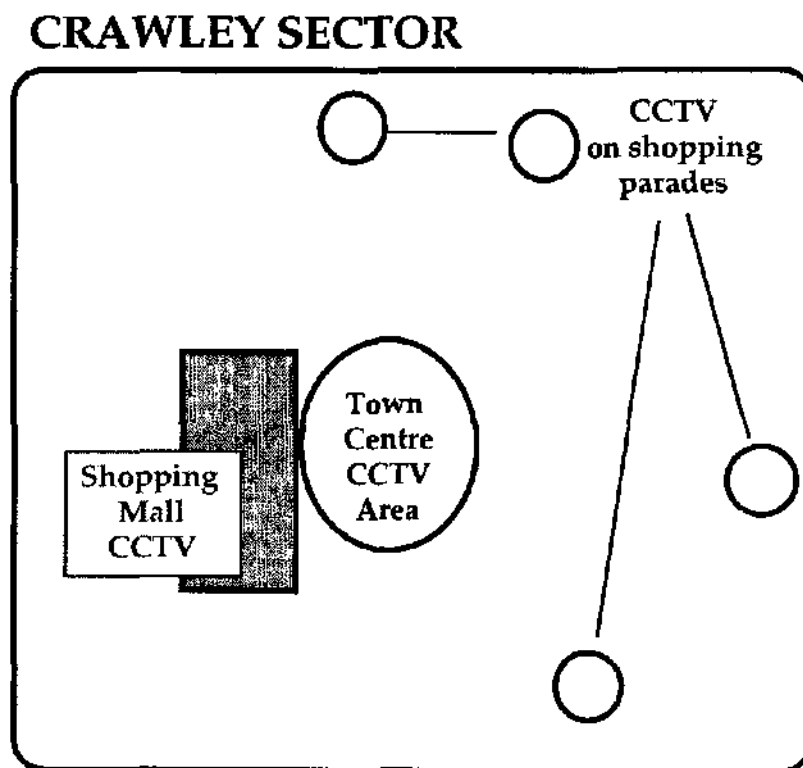
### **System use Indicators**

A limited amount of data was made available on the operational use of the system. These figures, including **Incidents originated by CCTV, Total arrests monitored, and Arrests due to CCTV** are contained in the final section of the report and commented upon there.

### **The Geography of CCTV Surveillance**

Drawing conclusions about the effectiveness of CCTV in Crawley is rendered somewhat more difficult by a number of factors. These are illustrated in the following diagram. First, we have data for only Crawley sector as a whole (a large area) and one beat in the town centre (roughly coterminous with the CCTV surveillance area). It has not been possible to examine the issue of 'crime displacement' (or even the 'halo effect') because the available figures do not permit the specification of a 'displacement' area other than the sector as a whole. Secondly, the layout of CCTV in Crawley is rather different than in many towns in that the CCTV cameras are not all grouped in the town centre. Instead CCTV cameras are positioned on a number of satellite suburban shopping parades. While the first evaluation showed that crime rates on the individual shopping parades were typically very low, they did appear to have some impact and therefore complicate the simple contrast between CCTV in the town centre and the rest of the sector. Finally, this simple contrast is further undermined by the existence of a large enclosed shopping mall with its own internal CCTV system (not monitored by Sussex Police). The CCTV system here will, of course generate its own effects and influence crime and incident trends in the area.

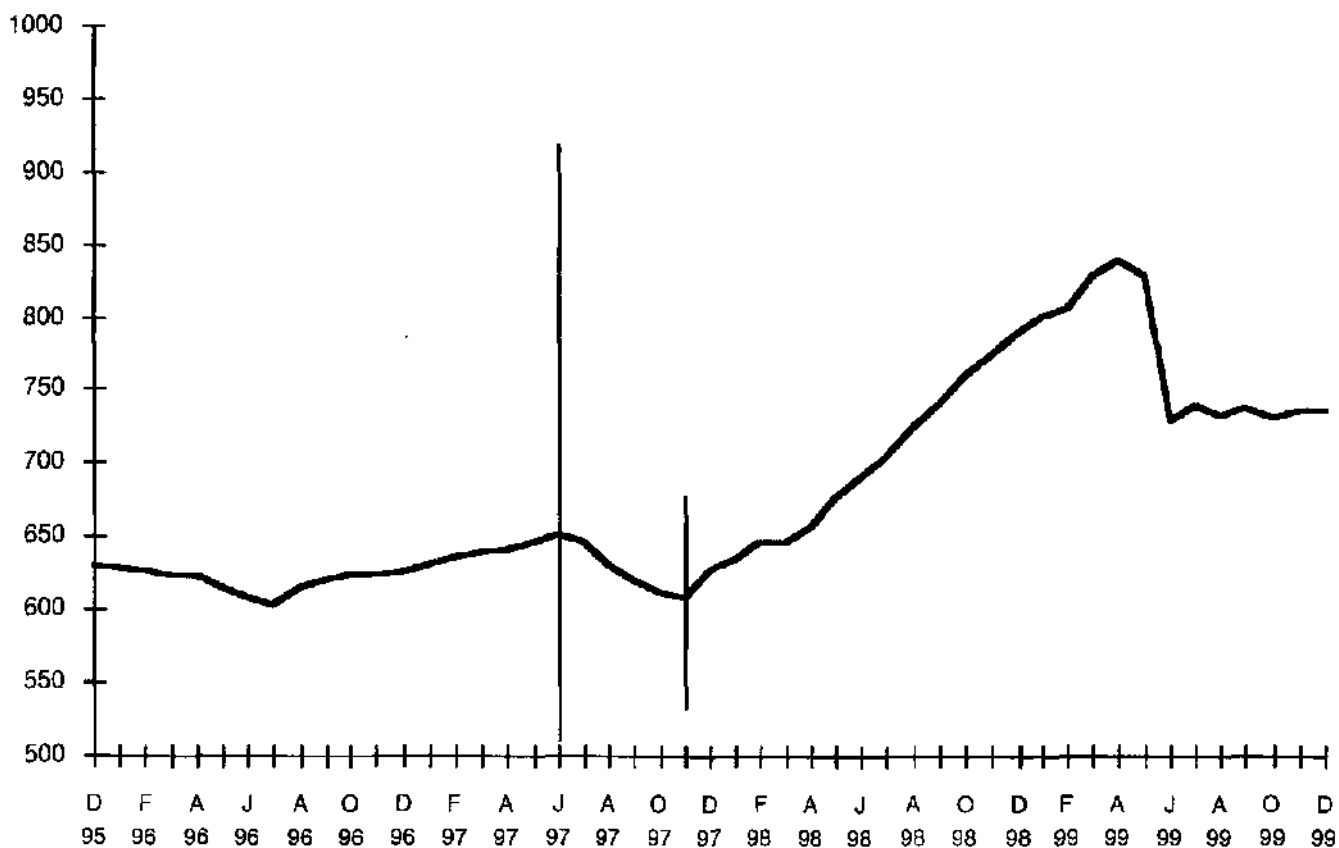
Figure 1: CCTV in Crawley



## PART I Crimes recorded over the 30 Month Period

The first two graphs which follow continue the information on crime trends contained in the original Report on Crawley CCTV. Figure 2, below takes the data from the first report (December 1995 - November 1997) and adds the new information relating to the last two years. The graph shows a moving average for the entire four year period for the Crawley sector as a whole. The larger vertical line denotes June 1997 when the CCTV system was installed, the second, smaller vertical line (November 1997) marks the period covered by the first evaluation.

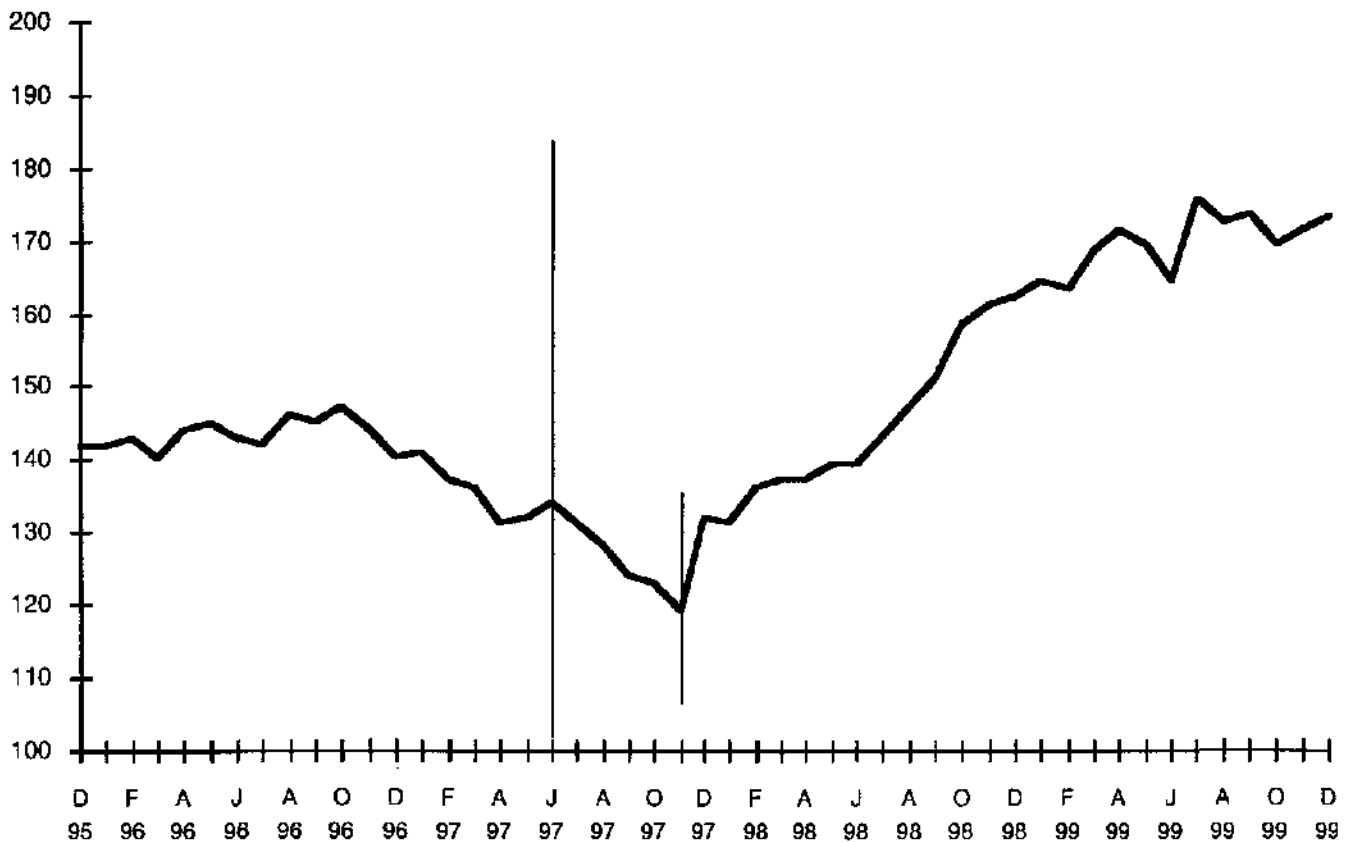
**Figure 2** All Crime: Crawley Sector.  
 Twelve month moving averages, December 1995 - December 1999.



Essentially the same data sequence, moving averages for crime figures December 1995 to December 1999 are presented in the following graph which,

this time, covers the town centre CCTV area. The same vertical lines are included. The similarities between the graphs are fairly striking.

**Figure 3** All Crime: Town Centre/Beat One.  
Twelve month moving averages, Dec. 1995 - Dec. 1999.



In each case the graphs show that the period covered by the earlier evaluation coincided with the most pronounced decline in crime figures for both Crawley sector as a whole and the town centre. After November, however, the crime figures climb sharply (also reflecting national trends), especially in the town centre itself. The reclassification of offence categories during 1999 appears to have had a marked effect in the sector as a whole, but little sustained impact in the town centre.

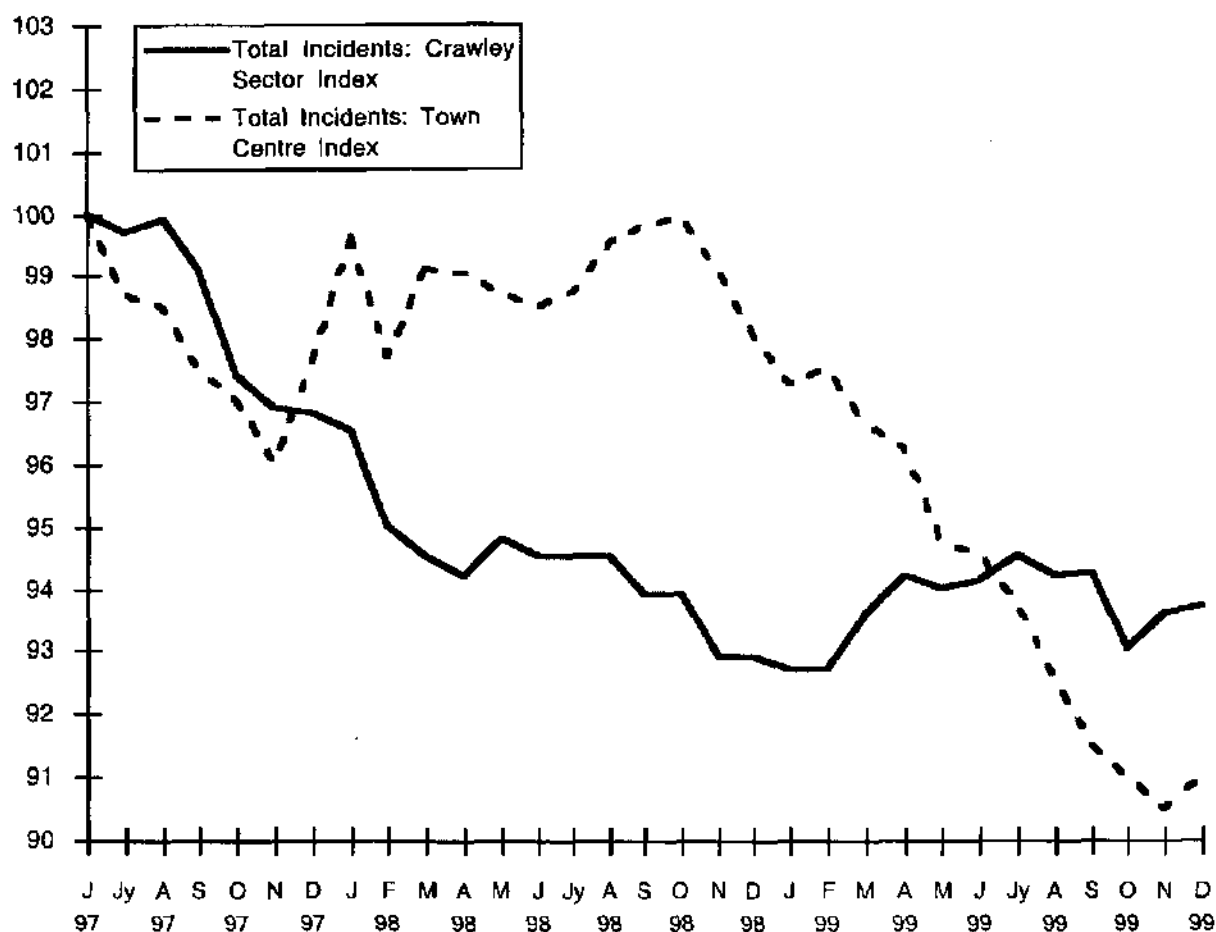
At face value, figure 3 appears to show that the introduction of CCTV to Crawley town centre, coming in the midst of an already falling crime pattern, may have helped sustain this falling pattern for another six months. In the longer term this crime reduction effect, whether attributable to CCTV at all, or in combination with other policing initiatives, has not been maintained. Further analysis may be necessary to ascertain whether the rising trend in recorded crime might be explained by reference to other factors such as particular policing activities

While the crime figures showed marked increases after the initial six months of CCTV, incidents in both the Crawley Sector as a whole and in the town centre CCTV surveillance area fell significantly after June 1997. Throughout 1998 the trends in the town centre and those of the rest of Crawley followed diverging paths. The following graphs are all indexed back to June 1997 when the CCTV cameras were first installed.



## PART 2 INCIDENTS

Figure 4 Total Incidents: Crawley Sector as a whole compared with the Town Centre/Beat One Index. June 1997-December 1999

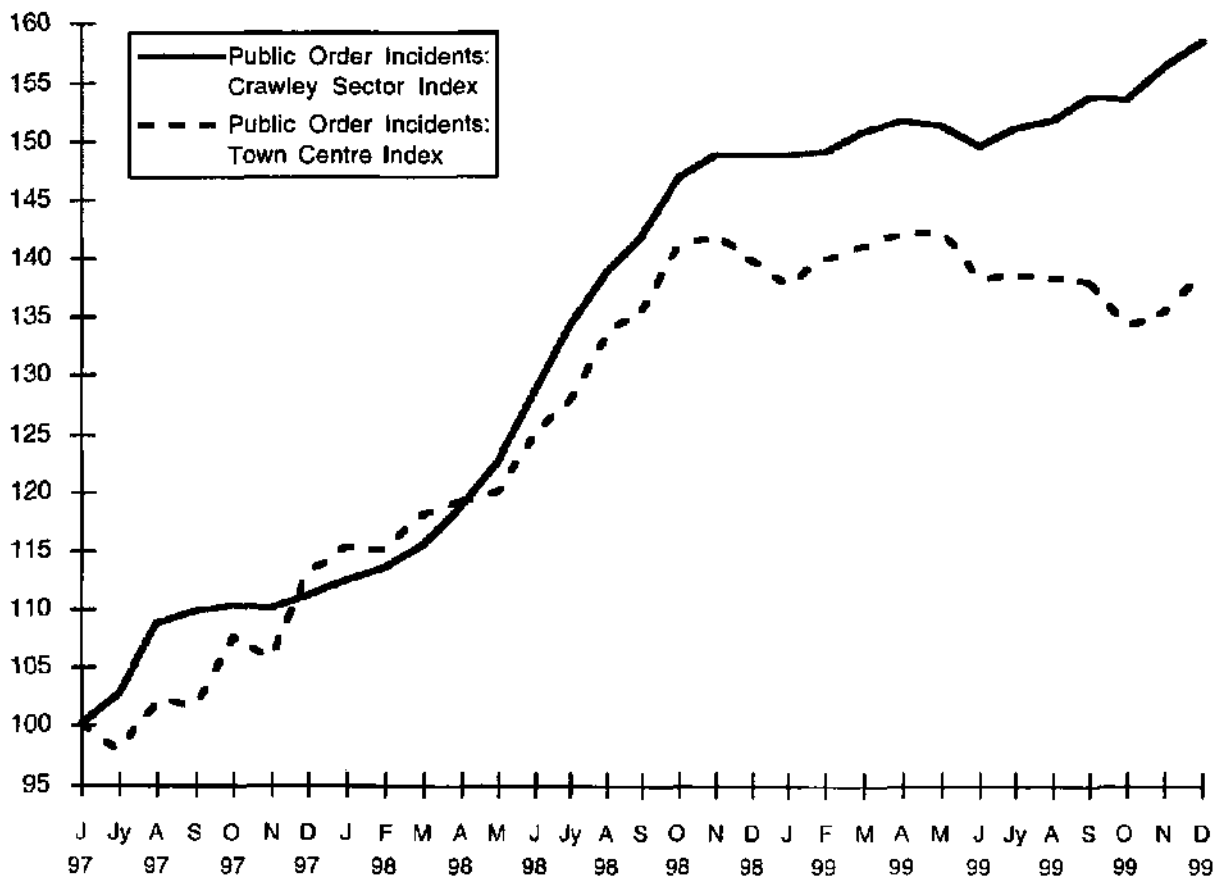


The incident trend across the Crawley sector largely stabilised during 1998-99 whereas the trend in the town centre CCTV area fell sharply following a slight peak in November 1998. Without further research it is difficult to account for these particular trends with regard to recorded incidents.

As has been suggested, it is not easily to reconcile these separate patterns (see figure 7). A falling trend for incidents would generally be regarded as a positive development, incidents (there are many more of them than offences) take up police time and resources and often generate fears and concerns amongst the general public. A declining profile of incidents would generally be regarded as positive, suggesting a reduction in potentially criminal, anti-social or disruptive behaviour in public places. It may be that CCTV and

related policing activities help restrain patterns of behaviour which might otherwise lead to offending or disorder, leaving the police to concentrate upon a core of more harmful and criminal activities.

**Figure 5** Public Order Incidents: Crawley Sector Index compared with the Town Centre/Beat One Index. June 1997-December 1999

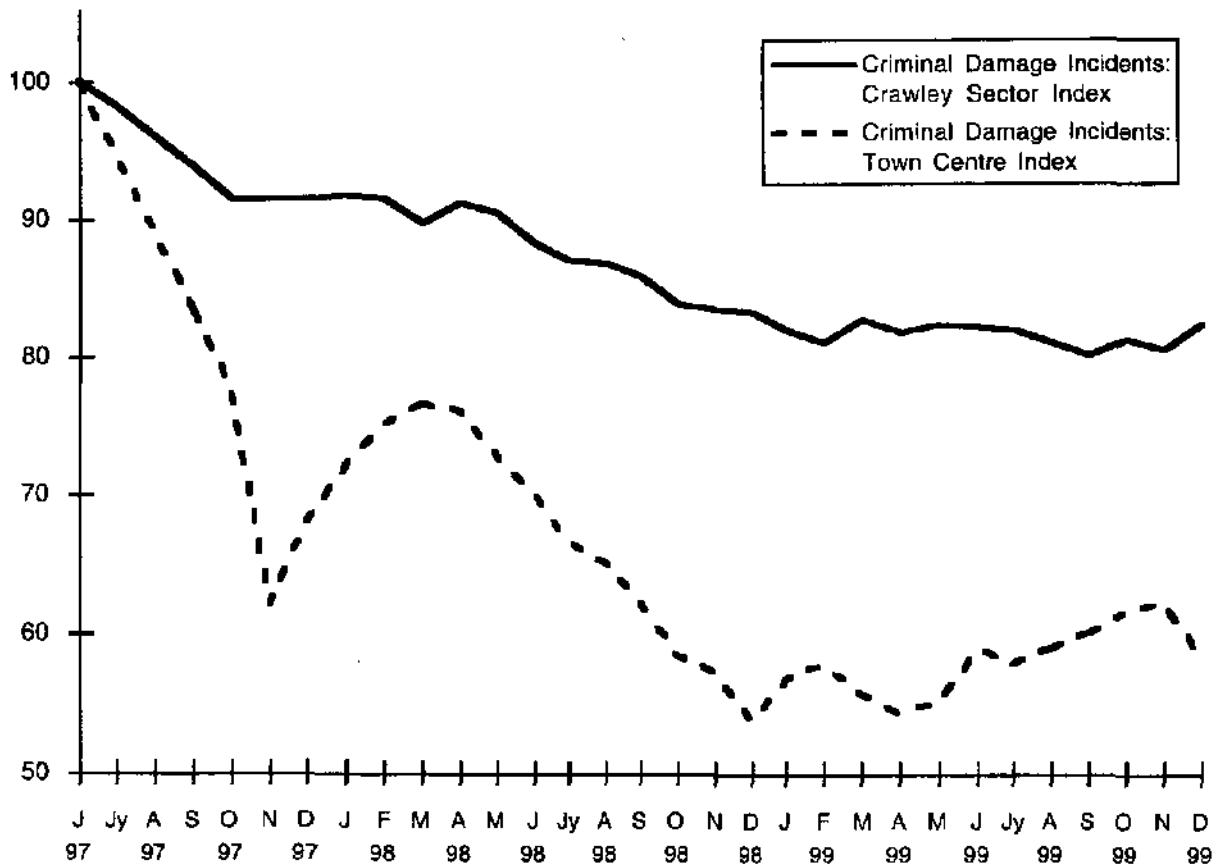


As figure 4 indicated, the overall trend for 'all incidents recorded by the police' was downwards, albeit after a couple of fluctuations. The same was not true of public order incidents where, as figure 5 reveals, the trends are clearly upwards, (corresponding with Figure 6, page 20 in the earlier report). Both trends stabilise somewhat during 1999, the town centre incident figures even falling back slightly throughout the year.

While the overall trend for 'total incidents recorded' was downwards, the same was not true of public order incidents where, for most of the period, the trend was clearly upwards. To a large extent this will be the result of the deployment of extra cameras outside night-clubs (in March 1998) and outside a new 'theme pub' in the Crawley Town Centre area (in April 1999). The installation of these additional cameras was precisely to monitor disorderly or violent, alcohol-related behaviour, and allow police to respond effectively. It

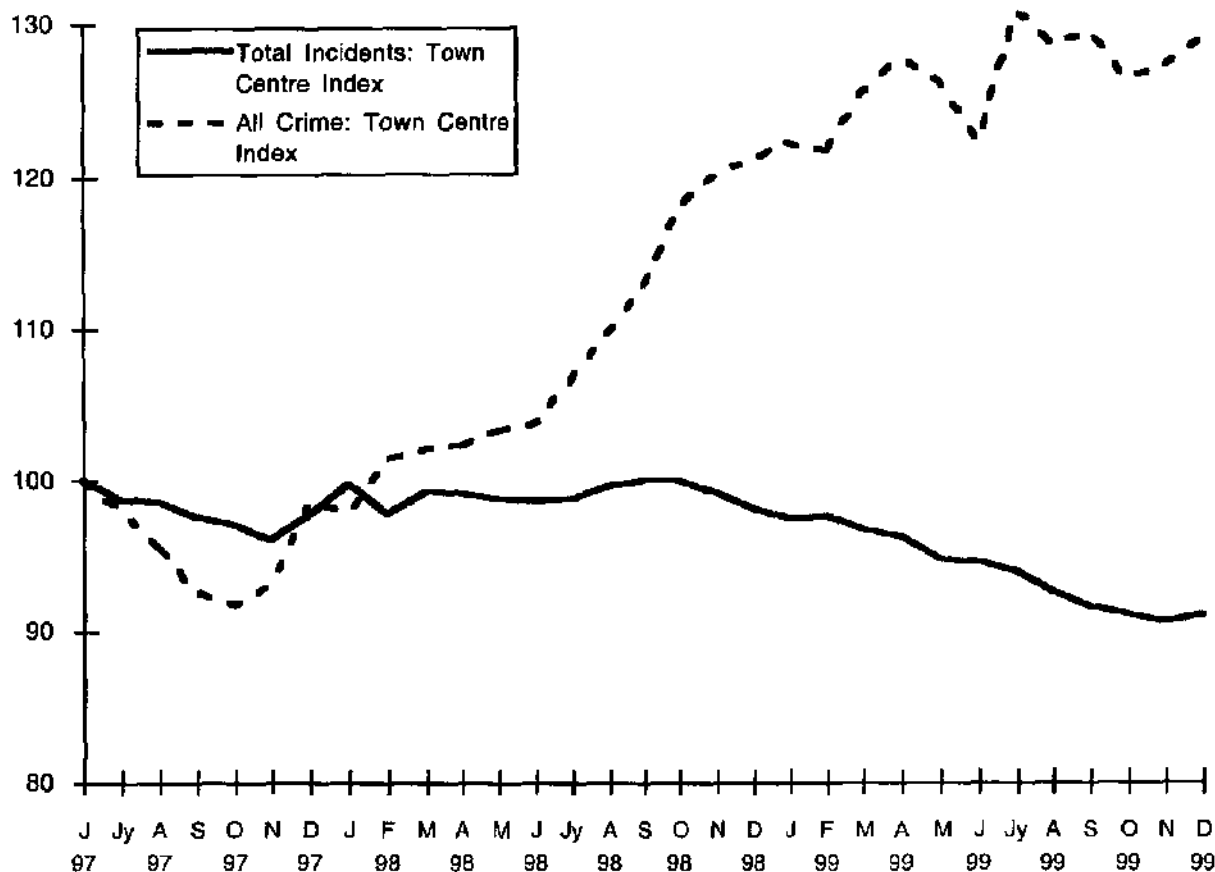
should be no surprise, therefore, when this is precisely what happens. In such a situation, CCTV allows the police to respond to incidents more 'intelligently/ reacting quickly to disorderly or potentially violent encounters and, ultimately, recording more violent offences.

**Figure 6 Criminal Damage Incidents: Crawley Sector Index compared with the Town Centre/Beat One Index. June 1997-December 1999**



While the trend for public order incidents had been clearly upwards, the trend for criminal damage incidents is equally clearly downwards. As we have noted on a number of occasions, not least the earlier report on Crawley CCTV, criminal damage appears to be an offence activity that is particularly amenable to the influence of CCTV. It is often the case that sizeable reductions are achieved, following CCTV installation, in the frequency of criminal damage offences.

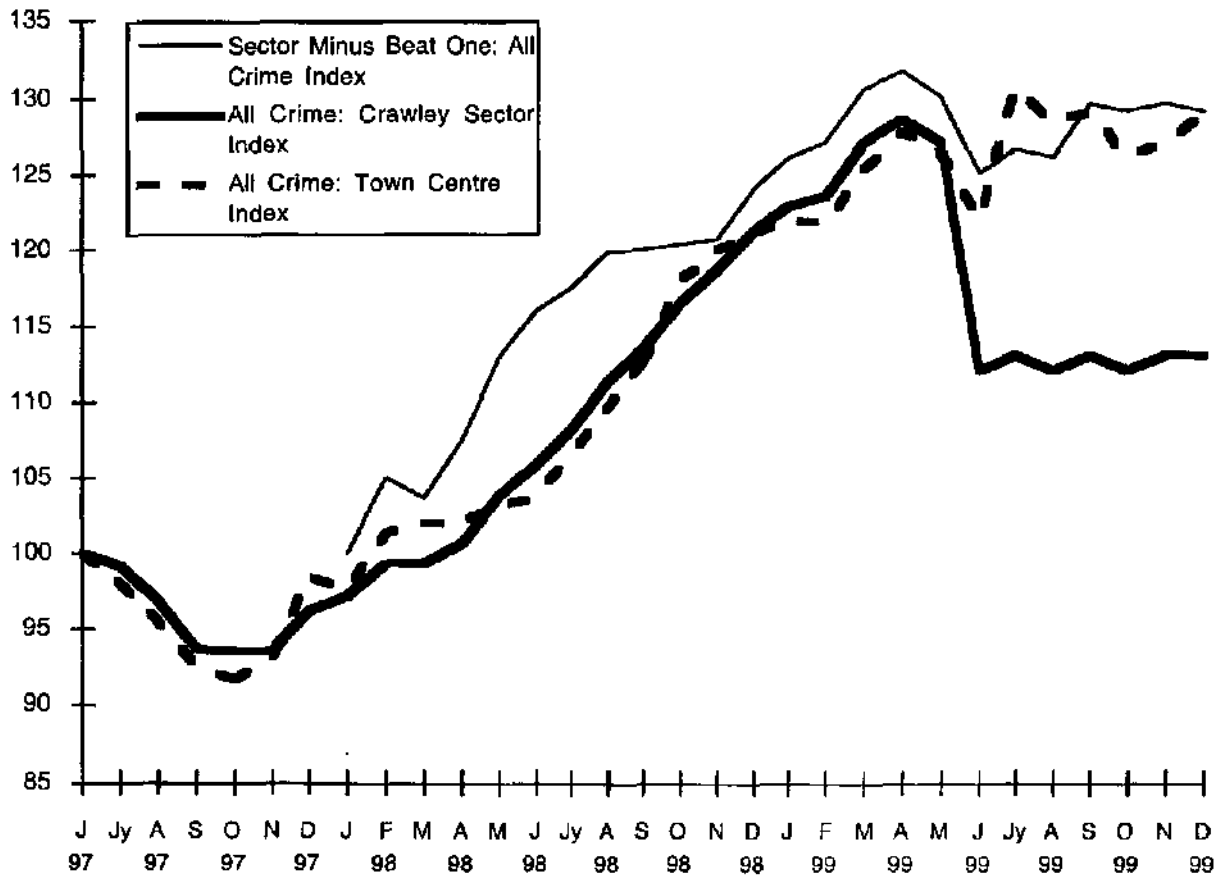
**Figure 7** Town Centre: Index of total incidents compared with index of total crimes.



As we have noted already, the trends in respect of crimes and in respect of incidents are quite divergent and, by the end of the period represented in figure 7, the police were recording 30% more offences in the town centre but almost 10% less incidents. This might be interpreted in a number of ways. As we have suggested already, incidents outnumber crimes by about 5 or 6 to one, therefore a significant reduction in the number of incidents can represent a significant reduction in criminal and disorderly behaviour on the streets. If this is the case, then CCTV may well be achieving one of its primary objectives of helping contain street-level disorder. The increase in crime, by contrast, could well reflect the fact that (with declining numbers of incidents) the police have more time and resources to devote to more serious and or criminal activities- The number of crimes recorded is never just the result of the number of crimes committed, but typically involves a complex set of relationships between crimes committed, police activities, the reporting behaviour of the public and police offence recording practices. Alongside a declining rate of incidents an increase in crimes recorded need not be such a negative development, although questions then need to be asked about how the crimes recorded were cleared up. Unfortunately, this was a line of enquiry which fell beyond the scope of this analysis.

## PART 3 CRIME TRENDS

**Figure 8 All Crime Indices: Three Areas.  
(June 1997 - December 1999.)**



Two things are immediately apparent in figure 8: First, the crime trend in the whole Crawley Sector increases in a very close relationship with that of the town centre after around November 1997. Second, there is the marked effect of the reclassification of offence categories in May /June 1999 (this appears not to have affected the other areas so dramatically). Perhaps the most interesting finding from figure 8, however, is the evidence that, for a while at least, the area with the highest percentage increase in recorded offending was the area outside the CCTV surveillance area (Crawley Sector minus Beat One). The increase may be relatively small and not especially significant, but evidence such as this might be a sign of some displacement of criminal activity away from the camera surveillance area and into the surrounding areas. Unfortunately the limited nature of the available evidence makes it difficult to pursue this line of analysis. In any event we are only considering

a slight effect of limited duration (by June 1999 the trends had converged once again).

**Figure 9 Violent Offences in Crawley Sector and in the Town Centre: Moving averages, January 1998 - December 1999.**

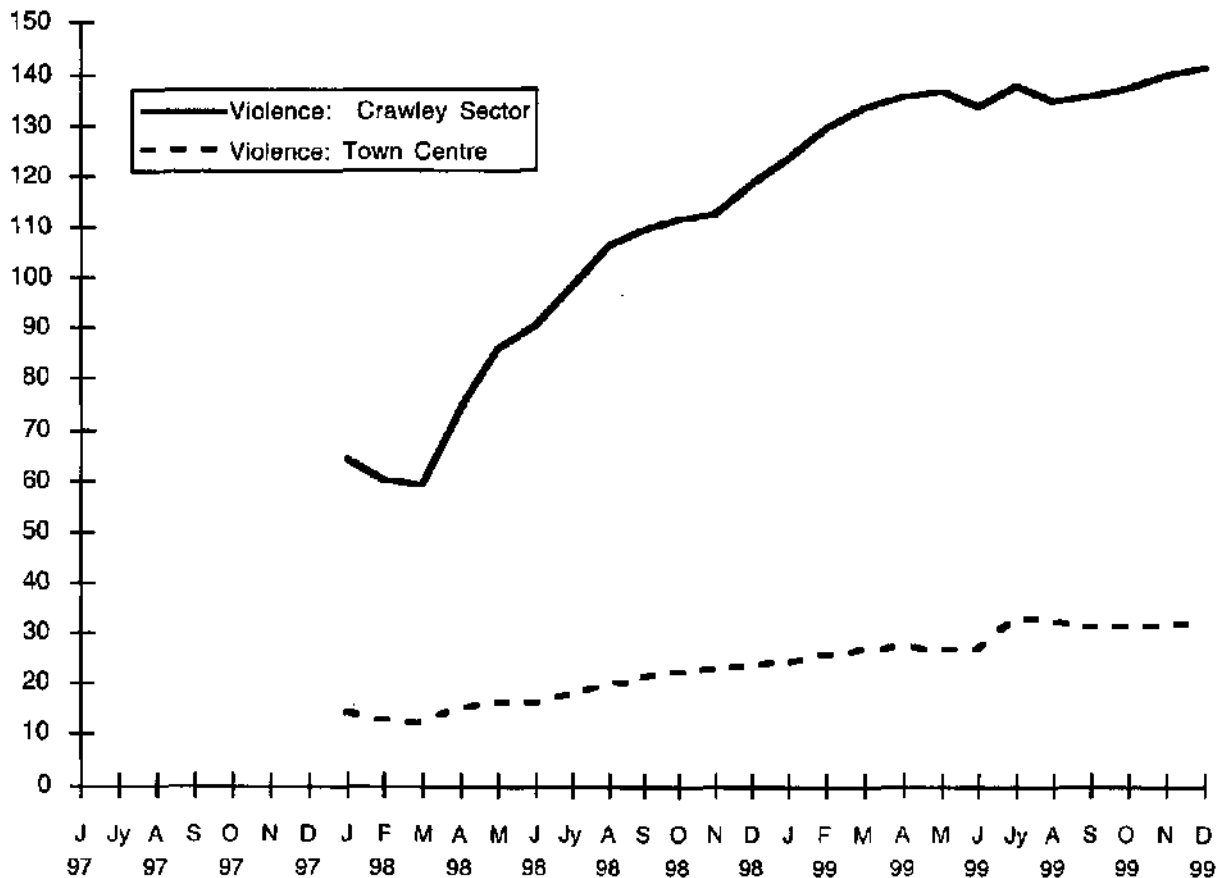
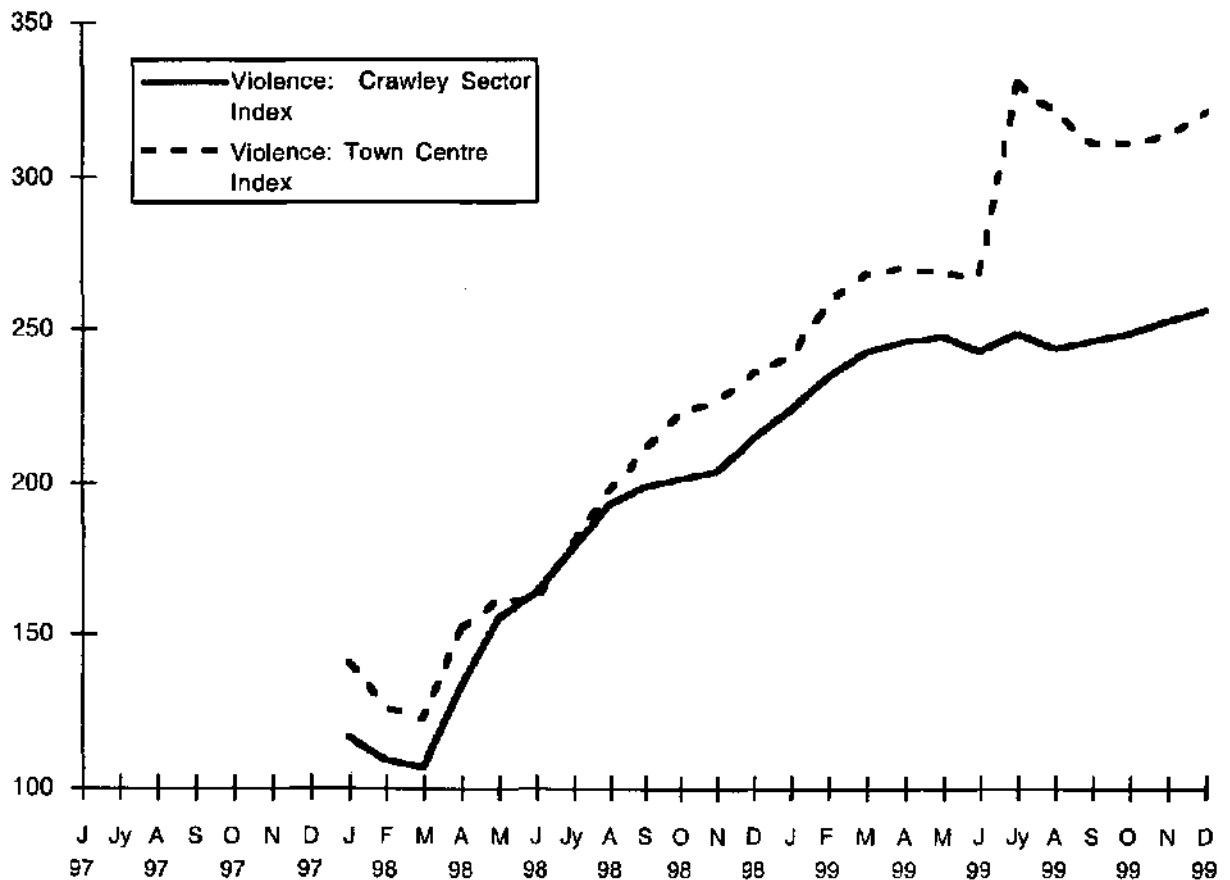


Figure 9 shows a six-month moving average figure for violent offences across Crawley sector as a whole and within the town centre CCTV area. During the 24 month period the average number of violent offences in Crawley as a whole appears to have doubled (as we have suggested earlier, a large part of this increase is likely to be attributable to the installation of the additional cameras around pubs and clubs). As figure 10 (below) indicates, a similarly sharp percentage increase is observable in respect of violent offences recorded within the town centre CCTV area.

**Figure 10** Violent Offence Indices for Crawley Sector and for the Town Centre: January 1998 - December 1999. (Moving averages indexed back to June 1997, when CCTV first introduced.)



While recorded violent offences in both areas (Crawley as a whole and the CCTV surveillance area) appeared to be climbing, the figures for the town centre break away sharply in mid 1999. It is very likely that this sudden leap in the figures reflects both the influence of the new cameras and also the reclassification of offences and, in this case, the introduction of the 'common assault<sup>1</sup> criminal charge. Even so, it is apparent that both the CCTV surveillance area and the Crawley sector as a whole were influenced by very similar trends and many of these pre-date the reclassification of offences.

**Figure 11 Comparative indices for Violence: Crawley Sector and the Town Centre, incidents and crimes.**

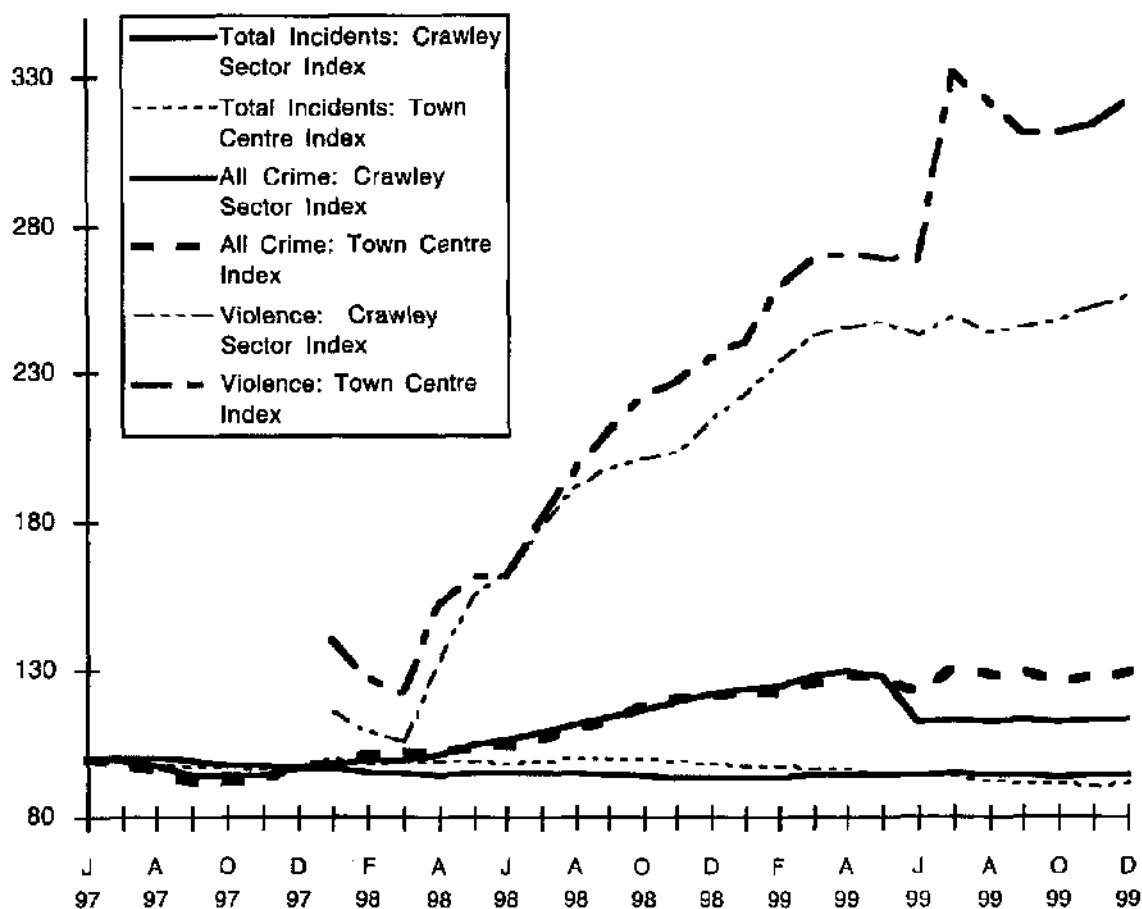


Figure 11 gives no new information, but pulls together the indices for violent crimes recorded (in Crawley Sector and in the town centre) and for all crimes and all incidents recorded in the same areas. At the bottom of the graph are the stable, slightly falling indices for incidents recorded. In the middle, rising slightly, are the 'all crime' figures, but dwarfing both sets of trends are the figures showing the percentage increase in recorded crimes of violence. As we have already seen in figure 9, the actual number of violent offences recorded in any given month may not be that high (between 10 - 20 in the town centre and up to 130 across the sector as a whole) but the proportionate increase in the recording of these offences is highly significant. It also reflects both the reclassification of offence categories during the period covered by the evaluation and the rigorous recording policy of Sussex Police.

Results such as these raise important questions of interpretation and clarification when one seeks to assess the effectiveness of the CCTV system.

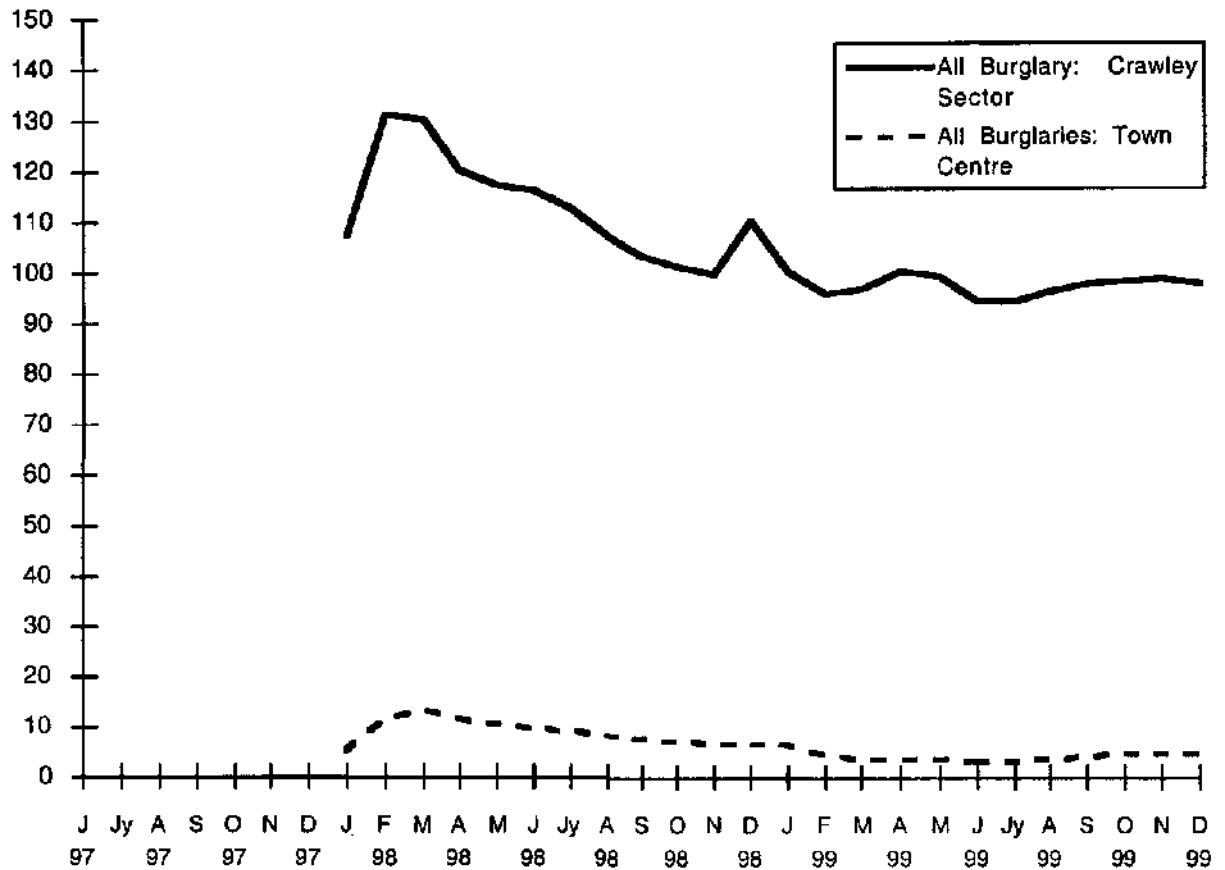


On the available evidence, these questions are not easily answered. The dilemma is simply expressed, when crime is seen to fall, commentators are often pleased just to acknowledge this fact without asking too many searching questions. When a falling crime trend coincides with the introduction of a crime prevention initiative, the temptation is to attribute the trend to the new initiative. Everyone is happy. The earlier evaluation of the Crawley CCTV system showed the introduction of the cameras to coincide with a falling crime trend. Considered overall and across several discrete categories of offending this was an entirely reasonable conclusion to draw, CCTV appeared to be associated with some preventive or 'deterrent' effect. As was noted at the time, there was obviously more to it (other crime prevention or management initiatives) because some of the crime figures clearly began falling before the CCTV cameras were installed. In any event, none of the advice or guidance available to CCTV scheme developers suggests that cameras can be effective alone. The guidance reminds planners only that CCTV can be effective, 'in conjunction with other crime management initiatives.' (Edwards and Tilley, 1994)

CCTV in Crawley town centre, in conjunction with other factors, appeared to contribute to a significant reduction in incidents and crimes recorded. Given that a fall in crime represented a desirable policy outcome, the key question was whether this could be sustained. On the available evidence, this does not appear to have happened, however, a number of other factors have to be acknowledged. We have already noted the likely influence of the changed offence classifications and Sussex Police's 'proactive' offence recording policy. A further factor might relate to the operation of the CCTV cameras themselves, camera surveillance might result in the 'detection' of additional offences that might, otherwise, have gone unrecorded. Cameras might 'detect' offences directly or facilitate police incident response, thereby allowing officers deployed a greater opportunity to detect offences or secure sufficient evidence to permit the recording of crimes.

Unfortunately the latter two explanations are rather unconvincing, as the CCTV performance monitoring figures reported in figures 21 and 22 below suggest. If the CCTV cameras were themselves driving up the recording of offences one would expect to see an increase in the incidents 'monitored' or 'originated' but, as figures 21 and 22 indicate, these do not appear to show any significant overall trend. Whilst it was possible to argue with some confidence that, during the first six months of CCTV in Crawley, the cameras had contributed to a significant overall crime reduction effect, this no longer seems to be the case, especially in respect of violent offences. It is, of course, impossible to determine what the crime figures might have been without CCTV. At the very least one can point to between 10 and 20 incidents and around ten arrests originated per month by CCTV operators (thereby pushing police records up) but we cannot know how many potential offenders might have been deterred or displaced by the presence of the cameras.

**Figure 12 Burglaries: Crawley Sector and Town Centre: Moving Average.**



As figure 12 demonstrates, only a relatively small - and diminishing - proportion of burglaries takes place in the town centre. As the earlier report revealed, the number of burglaries in Crawley had been falling throughout the 18 month prior to the installation of CCTV (figures 23 and 24, pages 37 and 38: Squires, 1998a). During early 1998 the burglary figures underwent a brief revival before falling away again. During 1999 there were consistently less than 10 burglaries a month, on average, in the town centre. Between February 1998 and December 1999, burglaries in the Crawley sector as a whole appear to have fallen by almost 25%. The proportionate decline in burglaries is better illustrated in figure 13, below.

**Figure 13 Burglaries: Crawley Sector and Town Centre Indices**

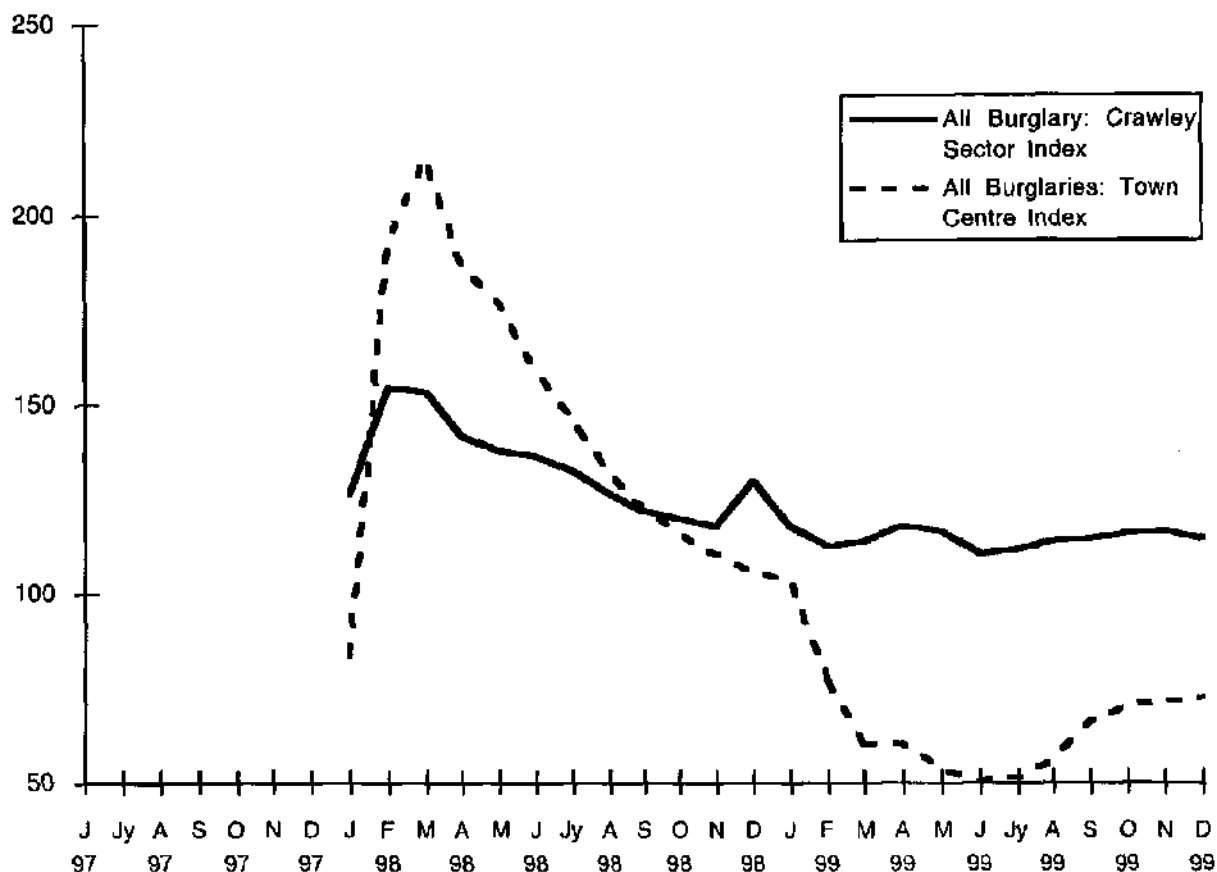
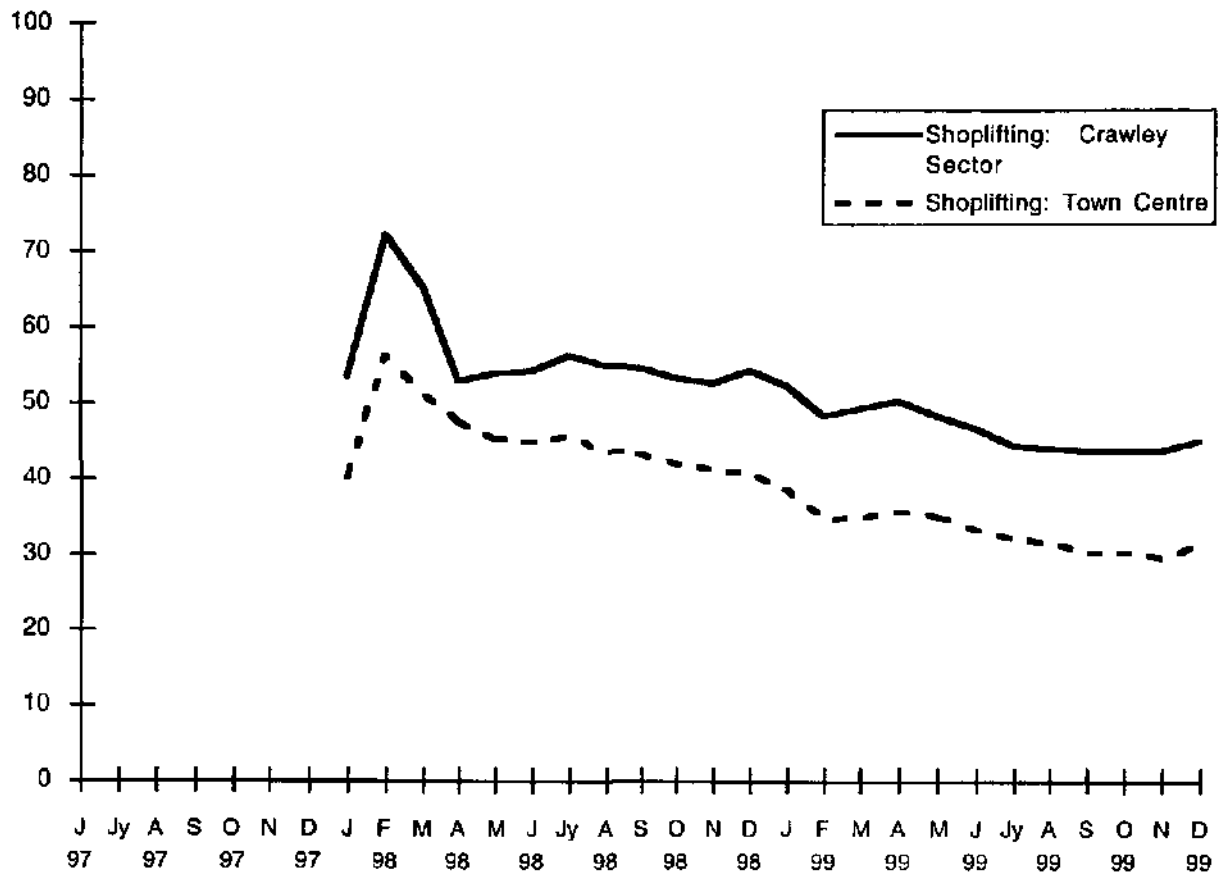


Figure 13 makes very clear the falling trends for burglaries in the town centre and across the sector as a whole. The trend for the town centre falls much further and faster than that for the entire sector. Unfortunately, the figures give little clue as to the reason for the sudden upturn in burglaries in the town centre in the early part of 1998. As the number of burglaries in the town centre tends to be fairly low, usually well below ten per month, a few extra burglaries over a few months can have a dramatic effect upon the observable trend, after which time the frequency of offences falls back to its more usual rate. As the earlier report on CCTV in Crawley indicated, since 1995 burglary had fallen by some 50% in Crawley town centre (most of this fall occurring prior to the installation of CCTV). Figures for the past 2 years suggest that (with the exception of the fluctuating trend in early 1998) while there has not been a similar overall reduction during 1998-99, the generally low burglary figures appear to have been sustained.

**Figure 14 Shoplifting: Crawley Sector and Town Centre: Moving Averages.**



As the main shopping area, it is to be expected that the lion's share of shoplifting would fall within the town centre. In the earlier study, it was clear that shoplifting had been falling consistently in both areas. Figures 14 and 15 indicate that, with the exception of the brief upwards spike in shoplifting offences in the town centre in early 1998, the consistently falling trend in recorded offences of shoplifting is continued throughout the 30 months covered by this evaluation.

**Figure 15 Shoplifting: Crawley Sector and Town Centre Indices**

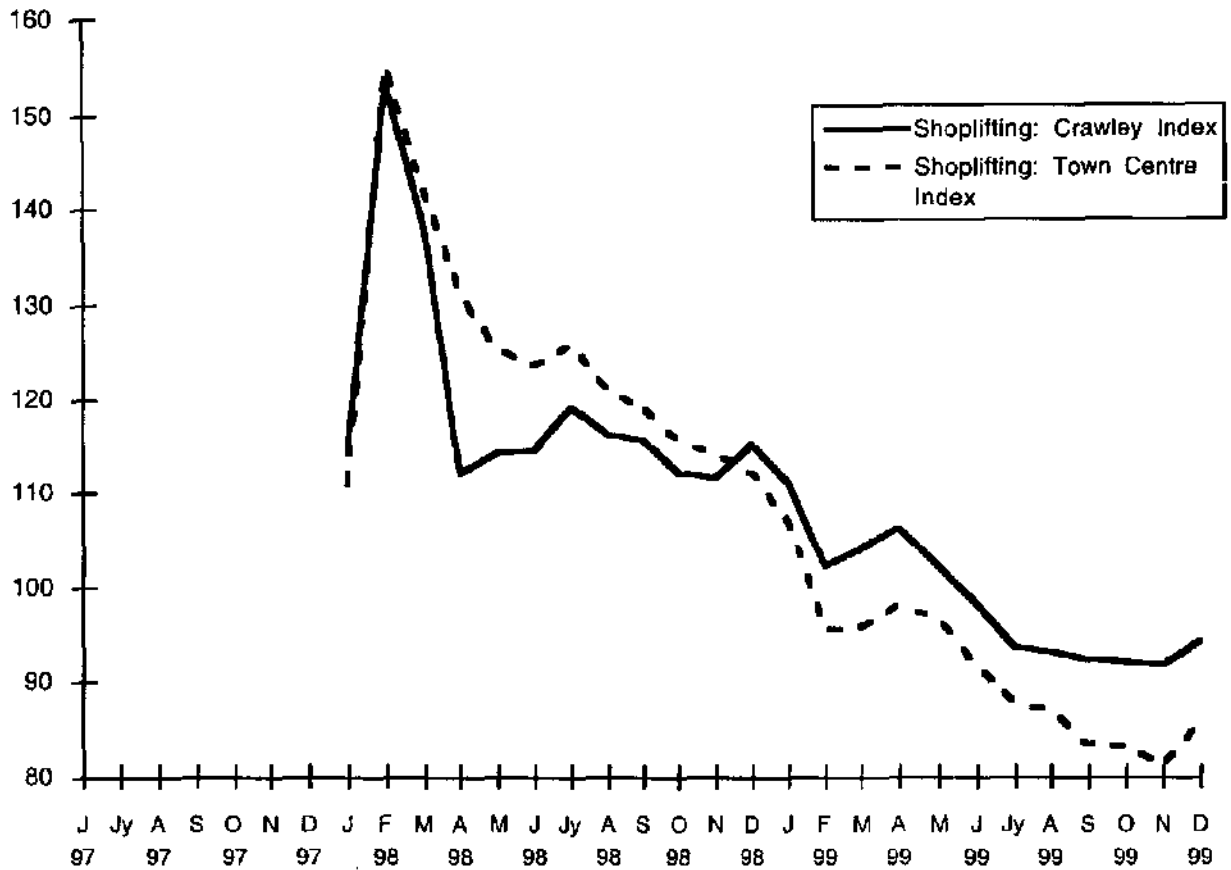
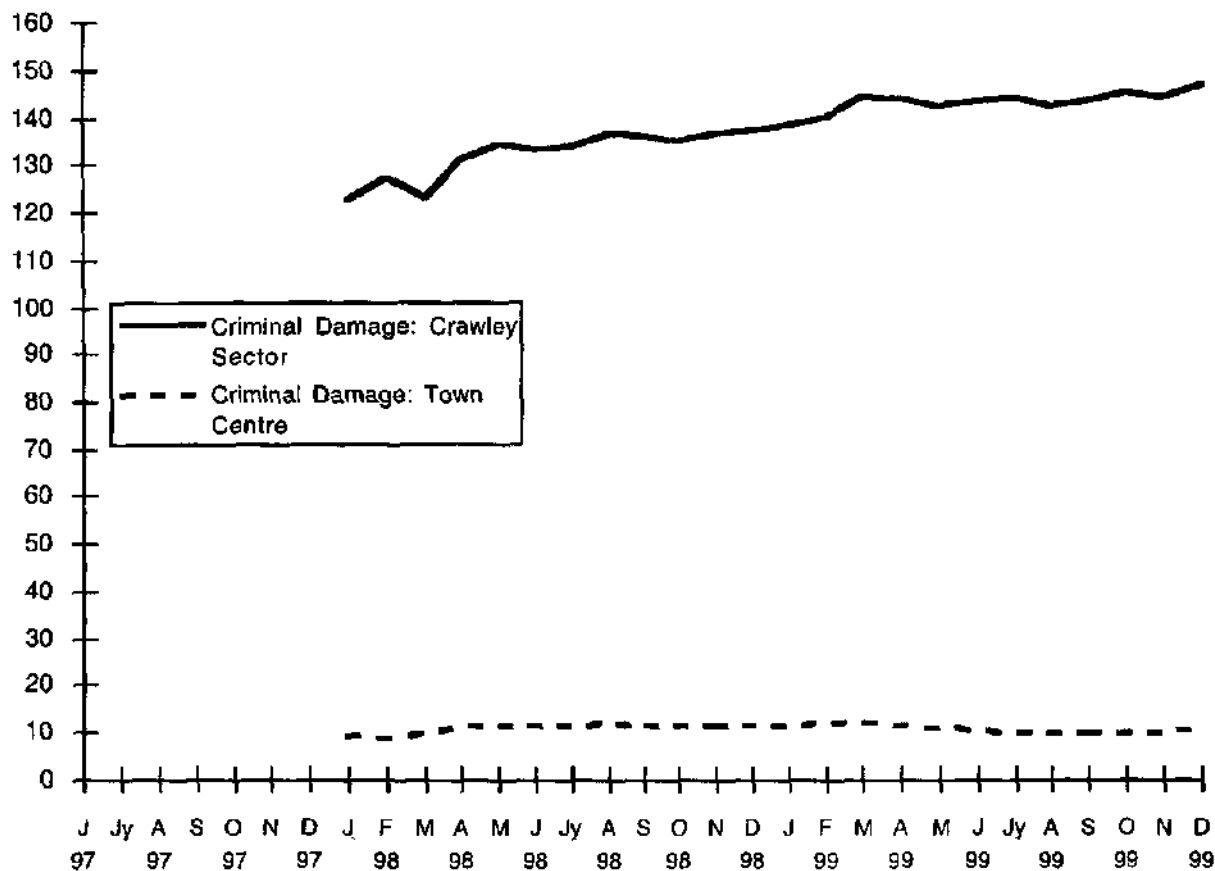


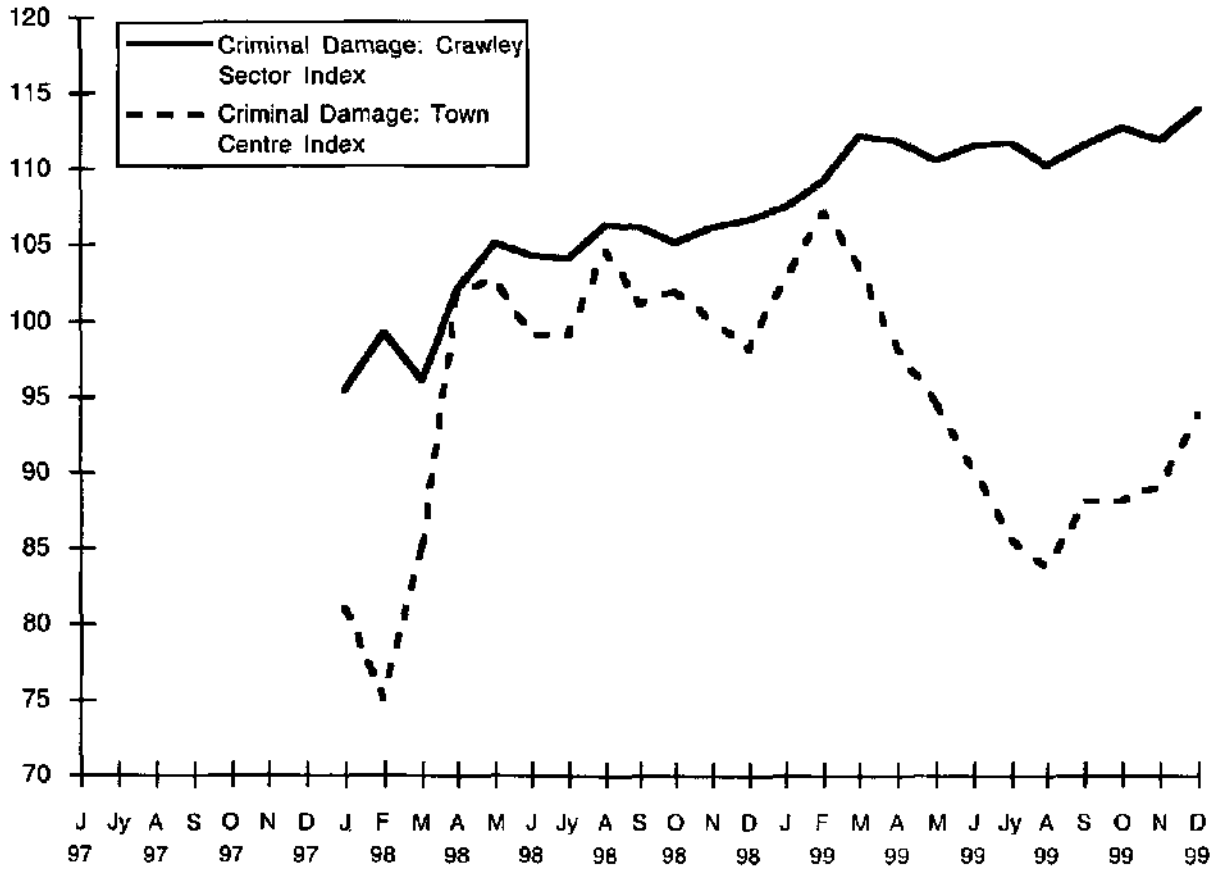
Figure 15 shows that during 1998-99, the number of shoplifting offences recorded in Crawley fell by some 30% (approximately 10 offences per month). Disregarding the sudden upwards spike in the number of shoplifting offences in the town centre, (which appear to coincide with a 'Retail Crime Initiative' undertaken in the town centre at this time). The sharp increase in shoplifting offences recorded here (around 40 more offences than the underlying trend) is unusual, but could have reflected the additional resources devoted to the Retail Crime Initiative. Judged by the data from the rest of the year, the impetus of the initiative has had a lasting effect.

**Figure 16 Criminal Damage: Crawley Sector and the Town Centre. Moving Averages.**



We have earlier suggested that criminal damage offences appeared to be especially amenable to the influence of CCTV cameras. In the earlier evaluation, criminal damage offences recorded within the CCTV evaluation area fell by some 30%. Unfortunately, no consistent picture emerges from the present evaluation. Figure 16 reveals a relatively low number of criminal damage offences recorded in the town centre, roughly ten per month. The trend across Crawley sector as a whole is undoubtedly upwards. Figure 17 however (following) suggests a rather unstable pattern for the criminal damage offences recorded in the town centre CCTV area.

**Figure 17 Criminal Damage Offences: Crawley Sector and Town Centre Indices. January 1998 to December 1999.**



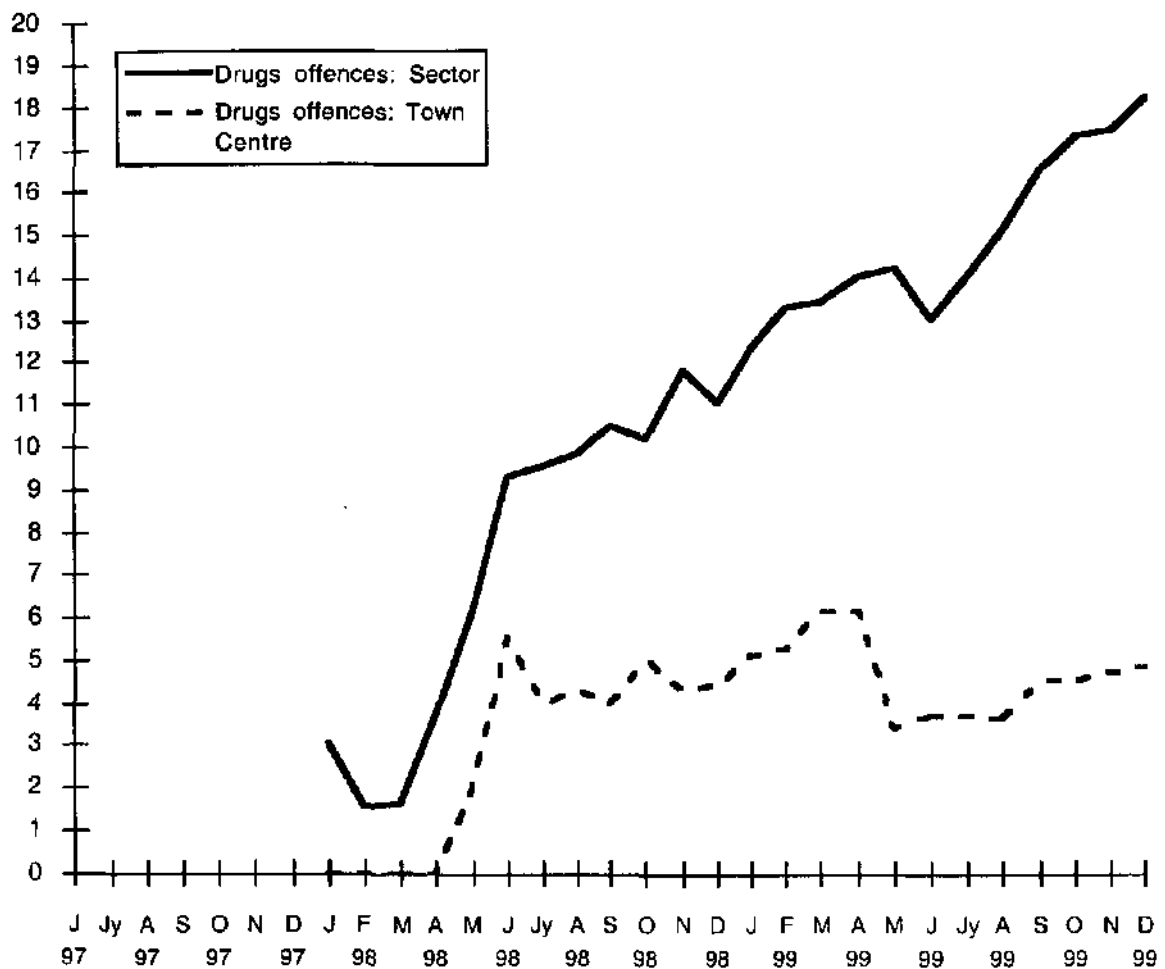
At first sight it is difficult to account for the increased recording of criminal damage offences in Crawley town centre between March 1998 and March 1999. The underlying trend is fairly stable, as the figures for Crawley sector indicate. However, for 12 months, the criminal damage rate was increased by some 25% per month until it fell back again in March 1999. Undoubtedly, the number of offences involved, only 2 or 3 per month, is small but this does appear to have a dramatic effect on the overall figures. Throughout the entire 2 year period, criminal damage offences in the town centre have increased by 15 per cent (roughly the same proportion by which they have increased in Crawley sector as a whole).

members of the public to report incidents, confident that they can leave things to the CCTV operators. Whilst acknowledging that this might be a factor in Crawley, the available evidence allows no conclusion to be drawn in this respect.

### Additional Offence Types

Figures 19 and 20 examine evidence in respect of illegal drugs and racially aggravated offences. Neither offence type was covered in the original evaluation in 1998 but they have been added at the request of the local authority.

**Figure 19 Drugs offences: Moving averages.**



A number of observations apply to the trends observable in both offence types. Firstly, the numbers of each type of offence recorded were undoubtedly low (but in both cases climbing in frequency). Both offences are likewise only presented as moving averages (the percentage index is an



invalid method of comparison where the numbers are low). Finally, both sets of statistics need to be interpreted carefully. The apparently steeply climbing offence trends have to be set against their very low starting points (in the case of drugs offences in the town centre, none recorded until May 1998 and, in the case of racially aggravated offences in the same area, 12 months out of the 24 surveyed saw no such offences recorded at all). In particular, both offence types will be susceptible to differing police enforcement activities. In the one case, police actions such as stop and search will 'uncover' illegal substances in people's possession and in the case of racially aggravated offending then, as a relatively new offence, it is likely to take some time for officers to include it in a charge sheet (and record it appropriately). It follows that figures 19 and twenty do not necessarily reveal a worrying explosion in drug related or racially aggravated offending in the Crawley area, they are just as likely to reflect the operation of particular police enforcement policies, or police beginning to get to grips with a particular type of incident.

**Figure 20 Racially aggravated offences: Moving averages**

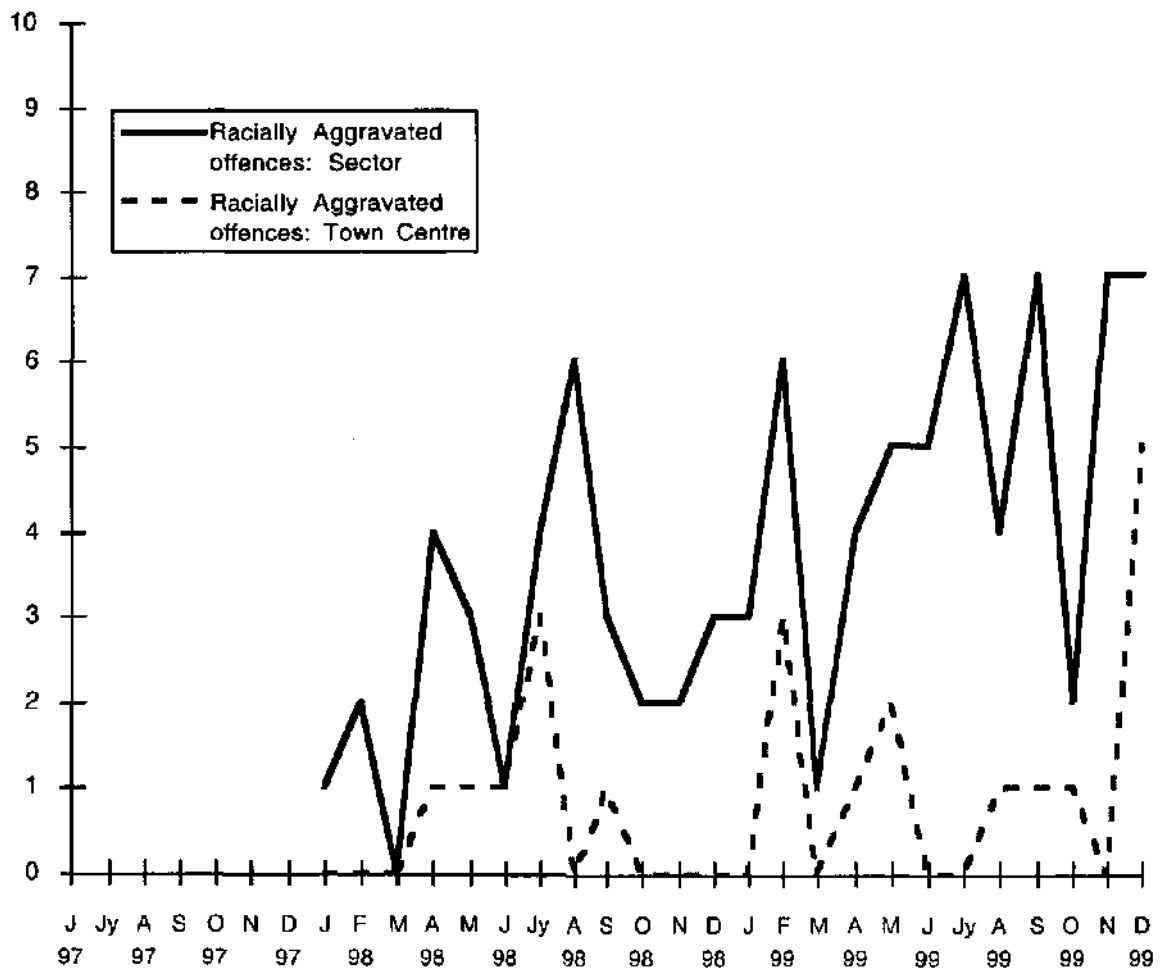


Figure 19 suggests that between 4 - 5 drug offences (possession and possession with intent to supply) are recorded in the town centre in an

average month and that the trend is fairly stable. Across the sector as a whole the number of drugs offences recorded continues to rise.

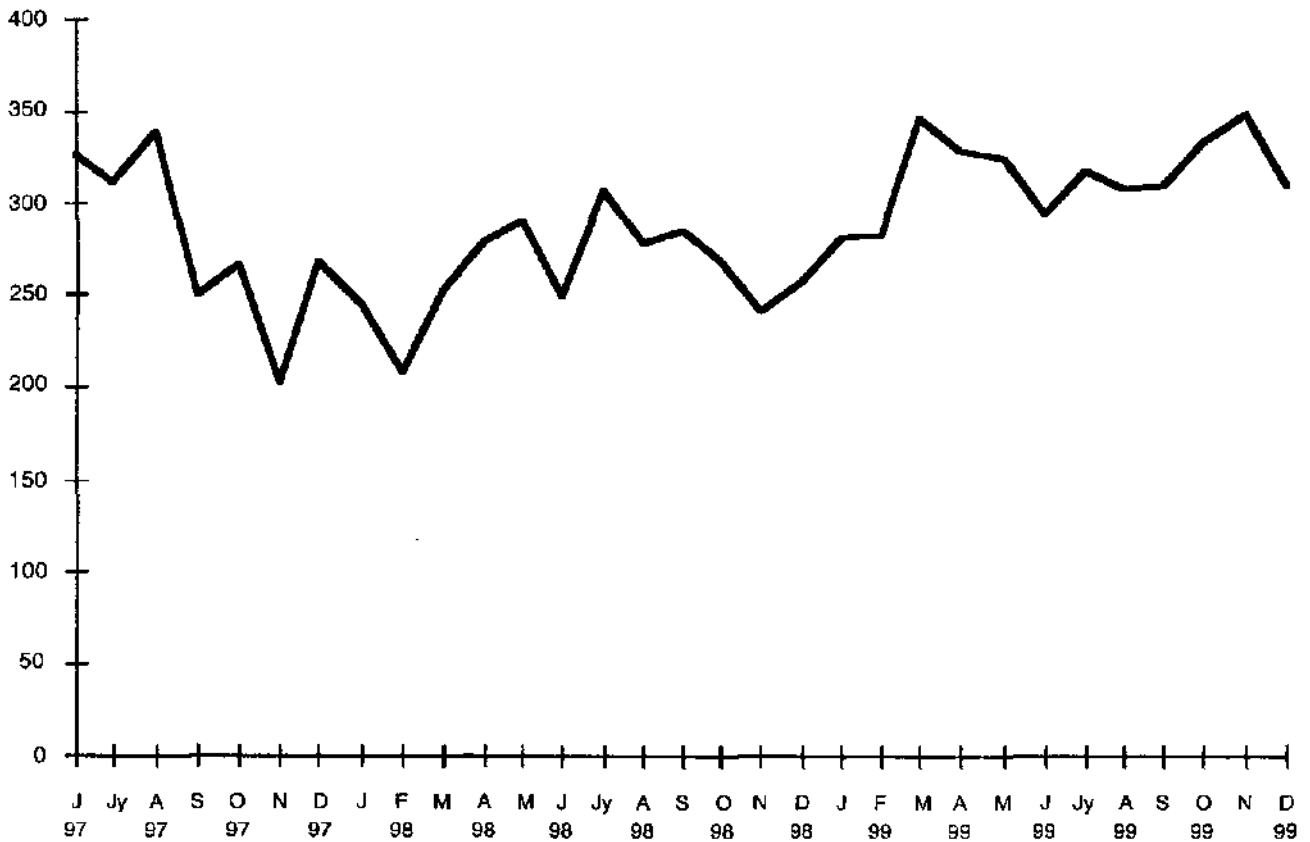
Figure 20 indicates that, while the average number of racially aggravated incidents appears to be climbing, the monthly average for the sector as a whole remains low, in single figures. The raw figures (not presented here) suggest something of a seasonal pattern, with more incidents in the summer months (perhaps related to school summer holidays) but this pattern is somewhat obscured by the unusually high number of offences recorded in December 1999. Above all, recording of racially motivated offences is likely to reflect the changing arrangements made for the reporting of offences. Without further research it is difficult to tell whether the underlying trend is increasing or whether, given the new 'common reporting' arrangements, the trend simply reflects the fact that more offences are now being reported.

Given the qualifying comments made in respect of the information presented in figures 19 and 20, it is difficult to draw any further conclusions.

## PART 4 CCTV Operating Statistics

Operating data on the Crawley CCTV cameras were supplied by the CCTV manager at Sussex police HQ. The statistics related to the total number of incidents monitored, the number of incidents originated by the CCTV operators, the number arrests monitored and the number of arrests resulting from incidents originated by the CCTV operators.

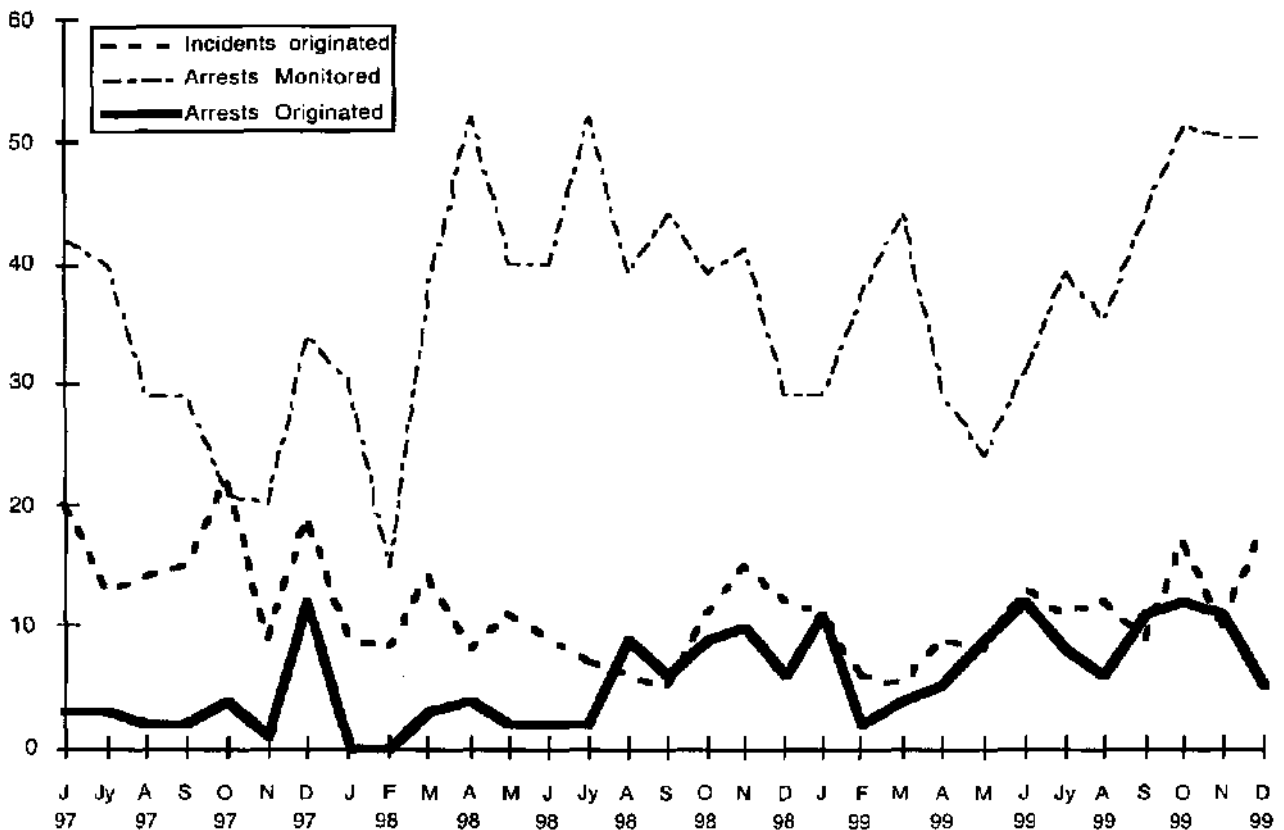
**Figure 21 Incidents Monitored**



When the camera system was first installed, CCTV operators were monitoring in excess of 300 incidents a month in Crawley, over the first six months the number of incidents monitored fell to just over 200 per month but throughout the next two years the number of incidents monitored has climbed steadily back to the 300 mark. Given that CCTV operators are responsible for monitoring cameras in a number of other areas besides Crawley, successfully maintaining the rate of monitoring (especially while the number of crimes recorded appears to be growing) is an important issue.

The installation of additional cameras outside pubs and clubs makes explicit the targeting of cameras on known trouble spots at certain times of the day. This is also an aspect of the developing knowledge and skills of CCTV operators as they become more efficient and 'aware' in positioning the cameras.

**Figure 22 Incidents Originated, Arrests Monitored and Arrests Originated**



The camera operators have an important role to play in supporting officers on the street. They do this by monitoring officers making arrests within the CCTV surveillance area, if the need arises they can quickly summon back up and/or monitor the performance of the arrest. As figure 22 reveals, the number of arrests monitored has fluctuated between as little as 15 in a month to as many as 50. Over recent months the average has been fluctuating around 40. The available data does not permit any assessment of the proportion of total CCTV area arrests that are recorded on camera. As more towns and more cameras are added to the system CCTV monitoring staff are less able to be 'proactive' in their use of the system. Nevertheless the monitoring data indicates that 'initiated arrests' are up by as much as 25%

across the county as a whole. The increase in Crawley is not so dramatic and the figures fluctuate somewhat during the year.

The camera operators also record all incidents that they themselves originate and all arrests resulting from incidents that they have initiated. The data suggests that throughout 1998 and early 1999, CCTV operators were initiating rather less incidents than earlier but that, during the second part of 1999 the number of incidents originated began to increase once again. The number of actual arrests arising from incidents initiated by the CCTV operators is typically fairly low but, as the graph shows, it has certainly begun to rise from mid-1998, perhaps as operators became more experienced in targeting the cameras at different times and places. On average, between 6-10 arrests per month result from incidents originated by the CCTV camera operators.

## Conclusions

An earlier study reviewed the impact of the Crawley CCTV system after six months of its operation and found evidence that the camera system had apparently contributed to a pronounced decline in the Crawley town centre crime figures. However, in the longer term this crime reduction effect, whether attributable to CCTV alone, or in combination with other policing initiatives, appears not to have been maintained. By December 1999, offences recorded in the town centre had risen to a monthly average 30% higher than the level at which they stood when the CCTV system was first installed and 45% higher than the level to which they fell during the first 6 months of the CCTV system's operation. As we have noted in this report, these results raise difficult questions of interpretation and clarification.

The overall number of 'incidents recorded by the police' was falling, but the same was not true of public order incidents where, for most of the period, the trend was clearly upwards. However, dwarfing all the other indexed trends are figures showing the percentage increase in violent offences. The actual number of violent offences recorded in any given month may not be high (between 10 - 20 per month in the town centre and up to 130 across the sector as a whole) but the proportionate increase in the recording of these offences is highly significant. During the two year period the average number of violent offences in Crawley as a whole appears to have doubled. A similarly sharp percentage increase is observable in respect of violent offences recorded within the town centre CCTV area. However, these increases also reflect a reclassification of offence categories during the period covered by the evaluation and the rigorous recording policy of Sussex Police.

As we have noted, the trends in respect of crimes and in respect of incidents are quite divergent and, by the end of the evaluation period, the police were recording 30% more offences in the town centre but almost 10% less incidents. This might be interpreted in a number of ways.

A relatively small - and diminishing - proportion of burglaries takes place in the town centre. During 1999 there were consistently less than 10 burglaries a month, on average, in the town centre. Between February 1998 and

December 1999, burglaries in the whole Crawley sector as a whole appear to have fallen by almost 25%. Similarly, with the exception of the brief upwards spike in shoplifting offences in early 1998, the consistently falling trend in recorded offences of shoplifting is continued throughout the 30 months covered by this evaluation. The number of shoplifting offences recorded in Crawley town centre fell by some 30% (approximately 10 offences per month).

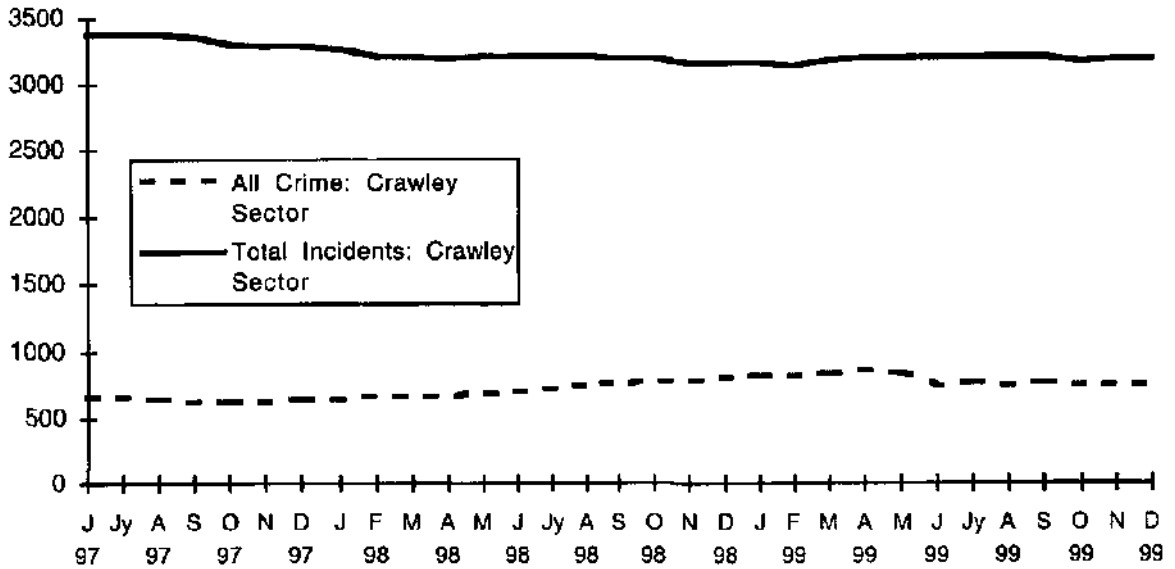
In the past criminal damage offences have appeared to be especially amenable to the influence of CCTV cameras. However, throughout the entire 2 year period, criminal damage offences in the town centre have increased by 15 per cent (roughly the same proportion by which they have increased in Crawley sector as a whole). Admittedly, a relatively low number of criminal damage offences are recorded in the town centre, roughly ten per month.

The numbers of drug-related and racially aggravated offences appear to be climbing rapidly, but these are rising from such a low starting point that it is too early to draw reliable conclusions about underlying trends. These offence profiles need not reveal a worrying explosion in drug related or racially aggravated offending in the Crawley area, they are just as likely to reflect the operation of particular police enforcement policies, or police beginning to get to grips with a particular type of incident. Between 4-5 drug offences are recorded in the town centre in an average month and the trend seems fairly stable. Across the sector as a whole, the number of drugs offences recorded continues to rise.

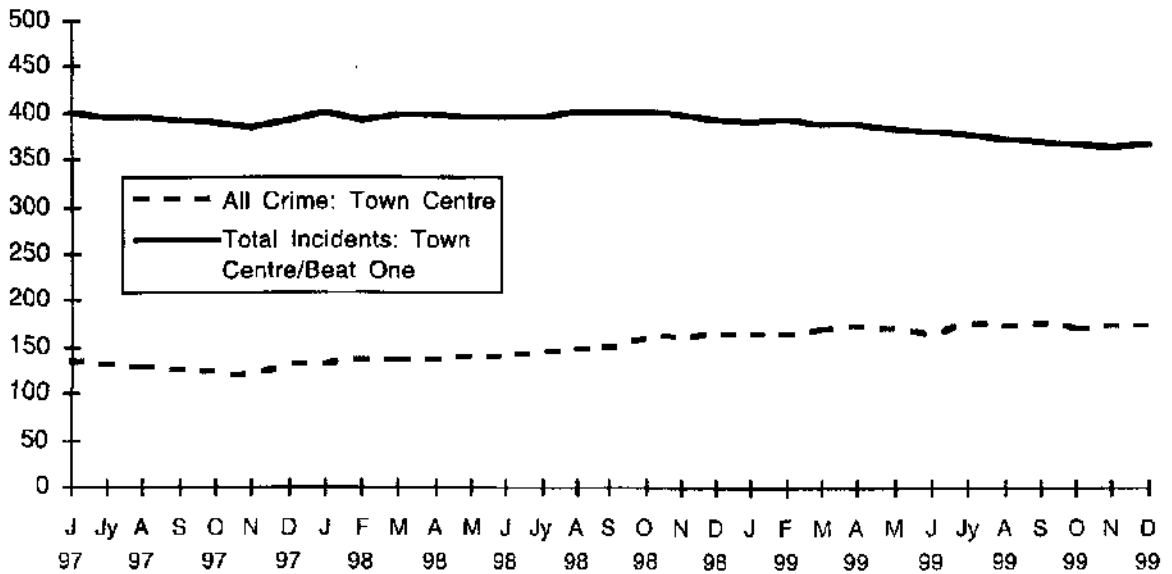
When the camera system was first installed, CCTV operators were monitoring in excess of 300 incidents a month in Crawley. Six months later the number of incidents monitored had fallen to just over 200 per month, but throughout the next two years the number of incidents monitored has climbed steadily back to the 300 mark. The number of arrests monitored has varied between as little as 15 in a month to as many as 50. Over recent months the average has been fluctuating around 40. The available data does not permit any assessment of the proportion of total CCTV area arrests that are recorded on camera. The camera operators also record all incidents that they themselves originate and all arrests resulting from such incidents. The number of actual arrests arising from incidents initiated by the CCTV operators is typically low but, on average, between 6-10 arrests per month result from incidents originated by the CCTV camera operators.

# Appendix A: Ratios of Crimes to Incidents

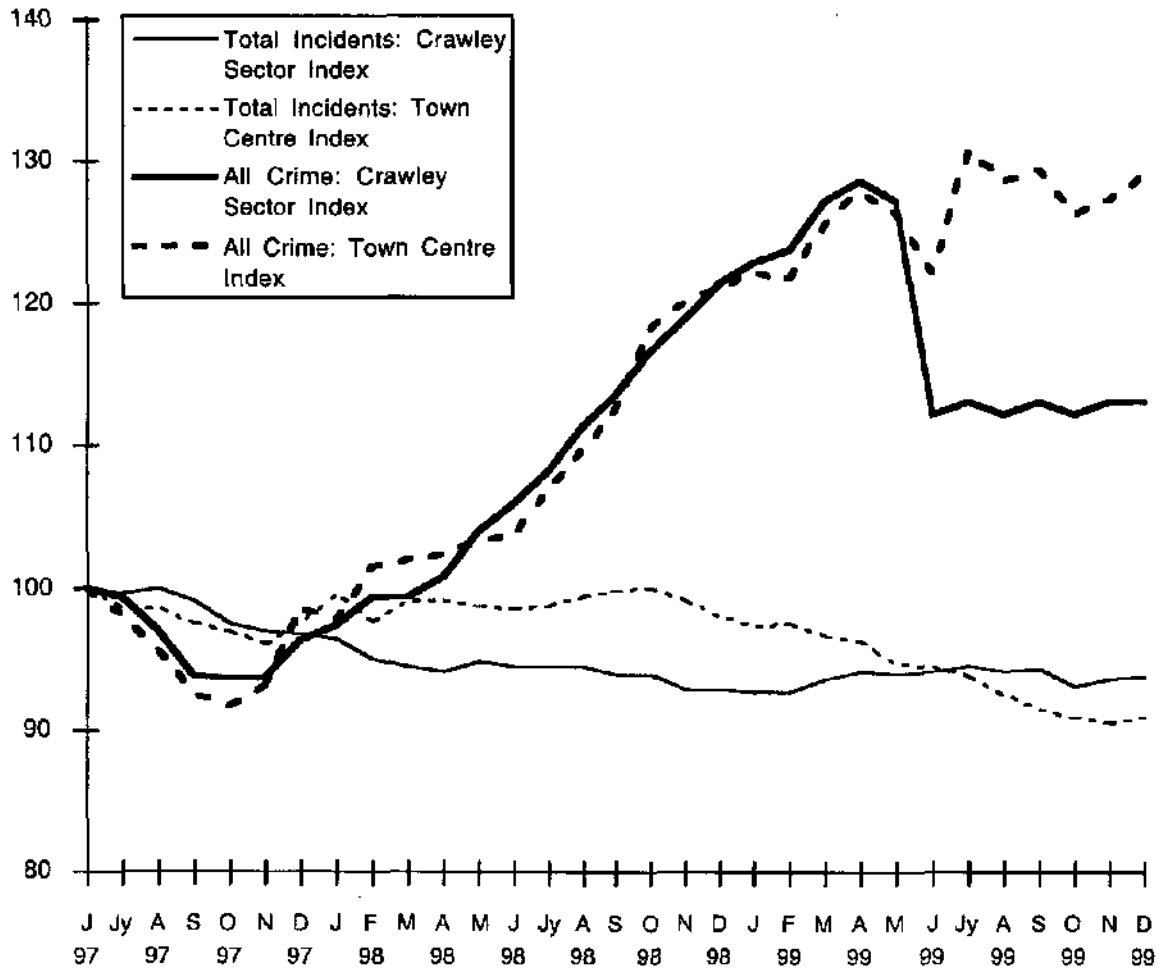
A1. Crawley Sector



A2. Crawley Town Centre



### A3. Crawley Sector and Town Centre: Crime and Incident Indices



The above graphs show the ratio of incidents to crimes in Crawley Sector and the Town Centre CCTV area. Graph 3 shows the indexed trends. In both areas the number of crimes recorded is rising significantly while the number of incidents recorded by the police is falling. The trends for both areas are fairly compatible although the Home Office reclassification of offence categories had a marked impact in mid 1999. This effect is much less apparent for town centre offences. The incident trends are again closely linked although the decline in numbers of incidents across Crawley sector as a whole appears to level out during 1999 whereas the incident trend for the town centre CCTV area continues to fall.



## Appendix B: Total Incidents, Crawley Sector

Figure B1 Total Incidents: Crawley Sector. June 1997 - December 1999

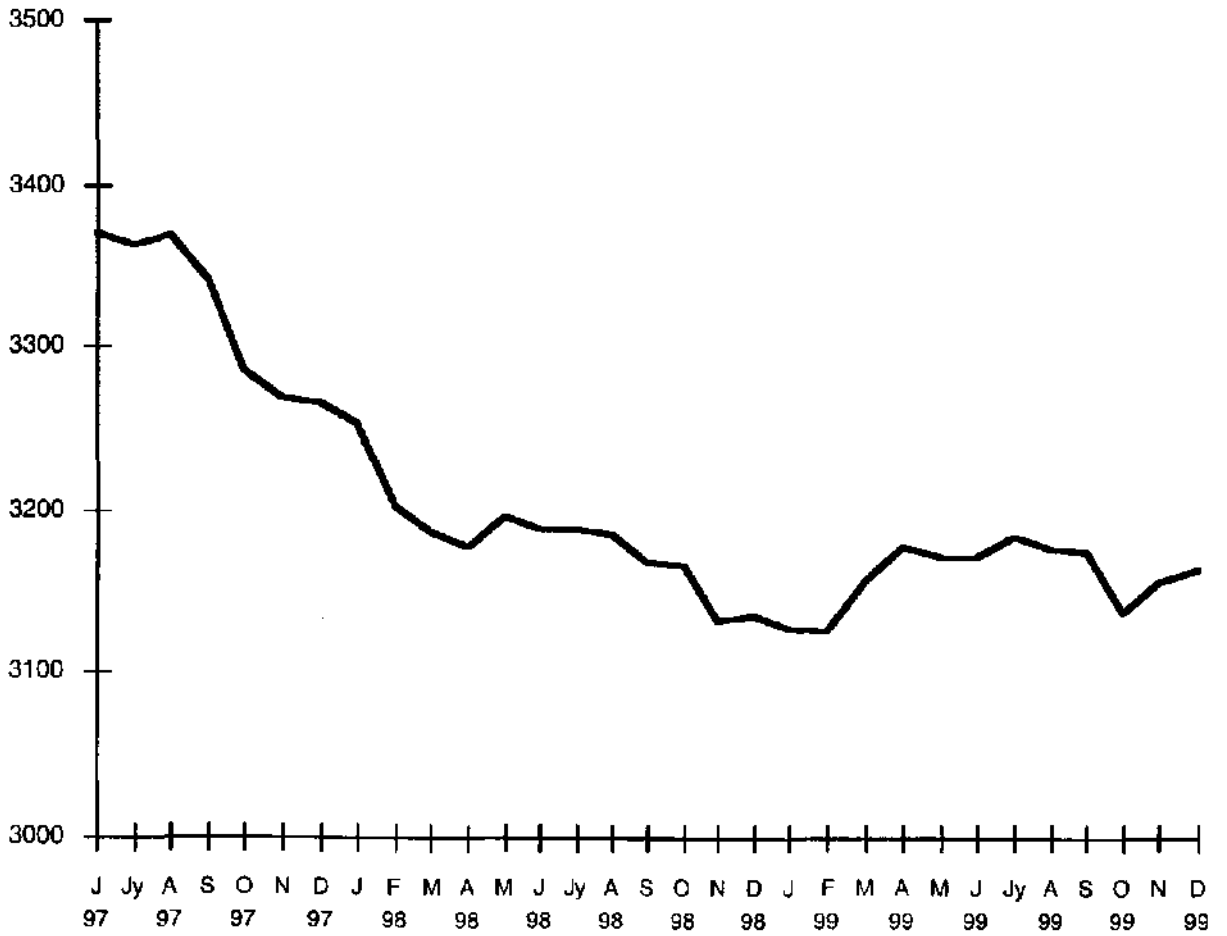


Figure B2 Total Incidents: Town Centre/Beat One. June 1997-December 1999

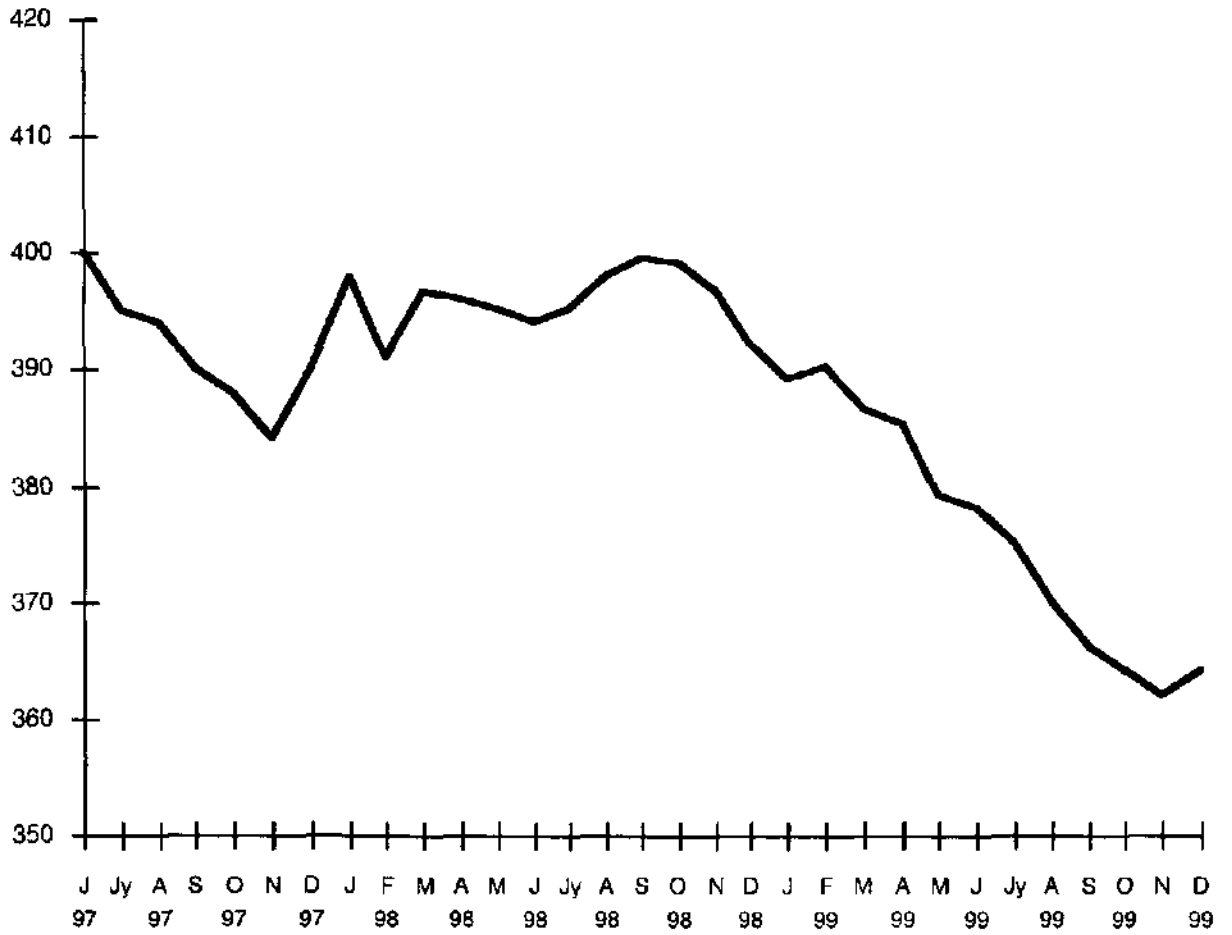
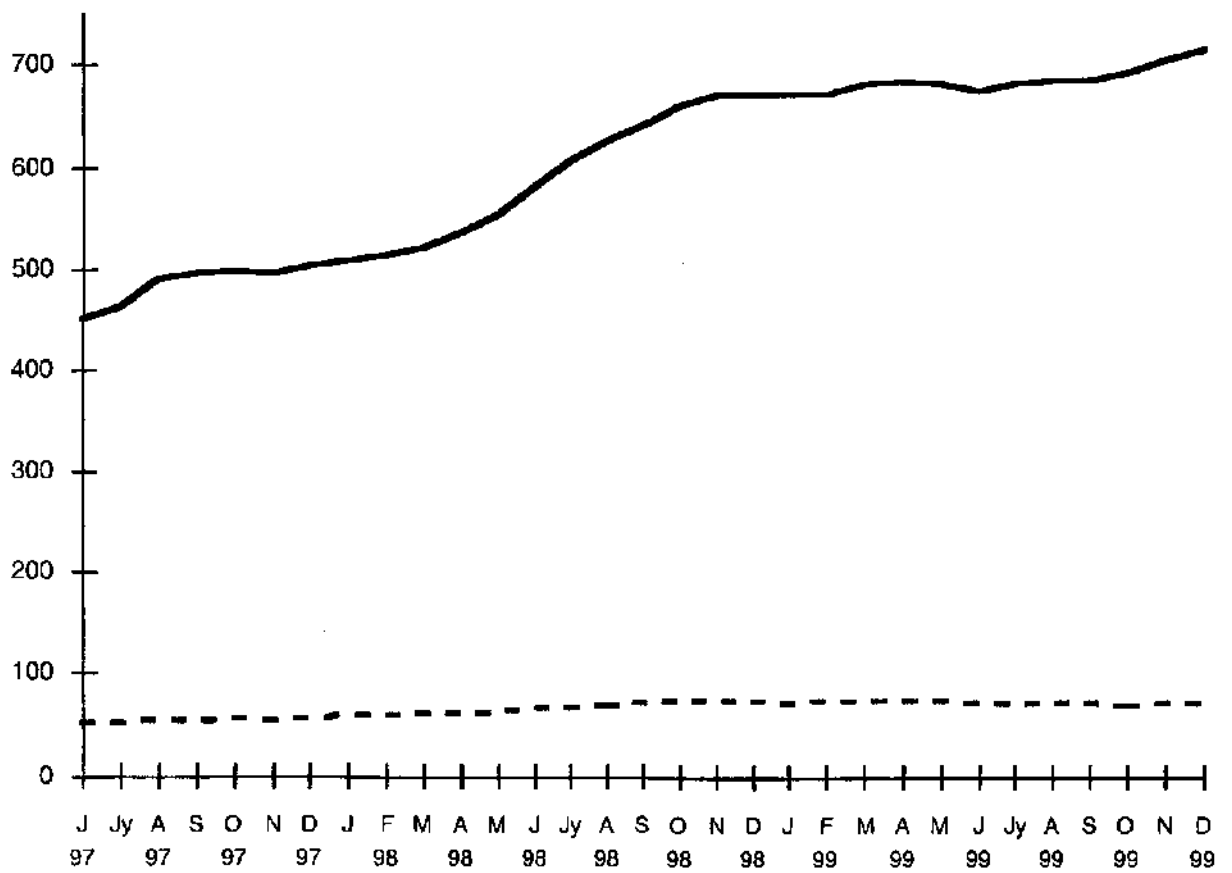


Figure B3 Public Order Incidents: Crawley Sector compared with the Town Centre/Beat One. Moving Average June 1997-December 1999



## Bibliography

Brown, B. (1995) *CCTV in Town Centres: Three Case Studies*. Home Office Police Research Group. Crime Detection and Prevention Series, Paper 68.

Edwards, P. and Tilley, N. 1994, *CCTV: Looking out for You*, Home Office, HMSO.

Norris, C. and Armstrong, G. 1999, *The Maximum Surveillance Society: The Rise of CCTV*, Oxford, Berg.

Squires, P. 1998a, *CCTV and Crime Reduction in Crawley: An independent Evaluation*, University of Brighton, Health & Social Policy Research Centre.

Squires, P. 1998b *The East Grinstead Town Centre CCTV System: An Independent Evaluation*. University of Brighton, Health & Social Policy Research Centre.

Squires, P. and Measor, L. 1996, *Closed Circuit TV Surveillance in Brighton*. University of Brighton, Health & Social Policy Research Centre.