

Scrutiny Review: Impact of the Part Night Street Lighting Policy

Date: **24 January 2018**

Subject: **Other Local Authorities Part Night Lighting Arrangements**

Summary:

A national research project in October 2014 identified that 48% of lighting authorities that responded had instigated some part-night lighting. It would be a fair assumption that this figure has risen as revenue pressures have increased and the energy usage of street lighting has come under greater focus.

1. Background

The experience of other authorities has been canvassed through established contacts and professional technical groups. They are presented in no specific order.

Cambridgeshire

In April 2016, Cambridgeshire commenced conversion to part-night any of its 58,000 streetlights that are in residential areas. However, by December 2016 the Council had voted to reverse this. There was no empirical data to suggest that crime or accidents had risen and the timescale in which the decision was reversed would not have allowed relevant data to be gathered. This decision appears to have been made based on perception only, with complaints from elderly people and shift workers being cited in the debate.

During the brief time that part-night lighting was in place, Cambridgeshire operated a policy whereby parishes or District Councils could pay for lights to remain on all night; Cambridge City Council paid to keep all lights on within the City Boundary from the start.

It is worth noting that Cambridgeshire operate a Central Management System (CMS), meaning that changes can be implemented cheaply and quickly.

Nottinghamshire

Nottinghamshire started introducing part-night lighting in 2010 but, despite having consulted on this in advance, found that they received many complaints and petitions as it was rolled out. An election campaign in which safety and fear of crime featured as significant issues led to a change in administration in 2013. The new administration reversed the policy and Nottinghamshire have decided to replace all lighting stock with LEDs, dimmed during the early hours.

Nottinghamshire does not have a CMS, so they would have incurred significant costs in implementing this reversal.

Derbyshire

Derbyshire has limited part-night lighting, with around 8000 out of 90,000 lights converted between 2012 and 2015. This has reduced to around 7355, with those that have been reversed being done so through discussion with the Community Safety Team. In addition, when the fittings on part-night lights were converted to LED, they were also returned to being on all night; this is no longer the case so that part-night lights remain as such when changed to LED.

The feedback from officers is that residents who experience a theft tend to attribute this to part- night lighting rather than their own security provisions and that it is fear of crime rather than actual data which has led to reversals.

Derbyshire do not have a CMS, so there is a cost in reversing any part-night operated lights.

Leicestershire

Since 2010 almost 55% of Leicestershire's 68,000 lights have been converted to part-night operation. By the end of the current financial year all lights within Leicestershire will also be LED and controlled through a CMS; however, part-night lighting will be retained where it has been implemented.

The only reversals of part-night lighting in Leicestershire have been done in conjunction with the police, mainly in response to specific spates of crime. One such area saw an increase in vandalism to cars, perceived as being due to part-night lighting. However, another area had experienced a burglary spree for two weeks prior to the introduction of part-night lighting, which continued after its introduction, resulting in selective reversal in the area.

The most significant area for partial reversal is the Oadby suburb of Leicester with around 23,000 inhabitants. They had experienced a spate of at least 27 break-ins over a matter of weeks in autumn 2017. Utilising the CMS, the Police asked for the street lights to be turned back on across Oadby until the end of January 2018 after which the situation is due to be reviewed with the possibility of reverting to part-night lighting. It is worth noting that additional crime-reduction measures have also been taken such as increasing police patrols.

Warwickshire

Warwickshire has roughly 50,000 street lights with part-night operation currently on 32,166. This phased operation began in December 2012, and has been implemented through a CMS.

The Principal Lighting Engineer has confirmed that there have been no reversals other than those which were overlooked as meeting the exception criteria for the project.

He also states that complaints regarding part night lighting are now at a low level indicating that part-night lighting has largely been accepted within the County.

North East Lincolnshire and North Lincolnshire

Neither of our neighbours to the north appears to have implemented any part-night lighting at this stage, although both have installed or are in the process of installing LED replacements to the majority of their stock. However, we have had enquiries from them about how we managed the implementation of part-night lighting, indicating that they are giving it some consideration.

Norfolk County Council

Norfolk has implemented a large scale part-night lighting programme on a large percentage of their 53,000 street lights. This has been implemented in full consultation with Norfolk Police and any reversals are required to be agreed and instigated by the Police.

To date, they have temporarily reversed a handful of lights using their CMS. This has been in response to specific incidents whilst the Police have undertaken inquiries. All of these have returned to being part-night operated following the completion of the Police investigations. To date therefore there have been no permanent reversals due to crime or other incidents.

Kent County Council

Kent is one of the largest lighting authorities in the UK with 118,000 street lights. In 2014 60,000 of these were converted to part-night operation. Subsequently, a consultation process was instigated which included workshops, focus groups and a public survey. As a result it was decided (in February 2016) that the savings to be made by installing LEDs and dimming could allow the restoration of all night lighting as and when the LEDs are installed, which is to be over a 14 month period.

The Authority recently awarded a 15 year contract whereby all street lights will be converted to LED and a CMS installed. It should be noted that there is no information to suggest that this reversal was in any way linked to an actual increase in crime but as a response to the consultation.

Suffolk County Council

From their website, it is known that Suffolk has part night operation of 73% of their 55,000 lighting stock, implemented using a CMS. Nothing in the public domain has suggested any reversal of the part-night strategy at Suffolk.

2. Conclusion

There is no evidence to suggest that actual crime rates have resulted in decisions to permanently reverse part-night lighting, with fear of crime and the perception of an unsafe environment being the significant drivers for reversal.

Authorities that have introduced a CMS are able to relatively quickly and cheaply reverse any part-night operation. However, the initial investment for a CMS and the annual running charges are significant across a large lighting stock.

Where reversal is combined with the introduction of LED lighting and dimming, energy savings can be maintained, although the initial investment to do this is significant across a large lighting stock.

There is also evidence to suggest that Part Night lighting does become more accepted by the public the longer it is in operation.

3. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

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Scrutiny Review: Impact of the Part Night Street Lighting Policy

Date: **24 January 2018**

Subject: **A review of open source material about the fear of crime and street lighting**

Summary:

This document will provide an overview of the key findings from openly available studies about the fear of crime generally and specifically in relation to the issue of street lighting. This information will be used to brief Lincolnshire County Council's Street Lighting Scrutiny Panel.

1. Background

There are a range of factors that can affect an individual's or a community's fear of crime quite apart from the crime rate. Recent studies of the impact of reduced street lighting in England and Wales would suggest that part night lighting does not significantly impact on the crime rate. Despite this, studies show that there is an impact on feelings of safety. While many people do not notice the changes to street lighting levels in their local area, many of those who do notice changes report feeling less safe. The reduction in the feeling of safety does appear to result in behaviour change, causing some people, for instance, to consider going out less or to avoid unlit areas. Research would suggest that it is not only the increased darkness that causes concern, but that to some people the switch off of lights also represents a retreat of state authority and investment from the local area.

The Safer Lincolnshire Partnership (formerly the Lincolnshire Community Safety Partnership) conducts a regular community safety survey of Lincolnshire residents. This survey, with some modifications, may offer the opportunity to measure the impact of street lighting changes on the fear of crime.

Guidance on the best methods for reducing the fear of crime would suggest that there is no one size fits all solution for reducing fear. Instead the causes of the fear of crime should be understood and targeted directly. These may not be the same for all areas or groups of people. Efforts to reduce the fear of crime caused by the reduction in street lighting will therefore need to be targeted at the specific concerns underlying the fears (for instance the retreat of state investment and authority from the neighbourhood).

Fear of crime in general

An individual's fear of crime can be influenced by a range of different factors. These include the individual's personal experience of crime, their demographic characteristics, and their perception about the levels of social cohesion in their area. Those who have been a recent victim of crime unsurprisingly have a higher worry about being a victim of crime in the future. This finding has been evidenced by the Office for National Statistics' regular Crime Survey of England and Wales (CSEW). For example, a person who had been a victim of burglary was nearly two and a half times more likely to be 'very worried' about being a victim of burglary in the future than a person who had not been a victim of burglary (25.6% compared to 10.3%).¹

CSEW information would suggest that there are also demographic factors which influence an individual's fear of crime. For example, those aged 35 and over have a perception that they are likely to be a victim of crime in the next year that is higher than their risk of actually being a victim of crime, while those aged 16-24 have a slightly lower perception of their likely victimisation than their actual risk of future victimisation. Meanwhile, those from ethnic minorities and those living in areas of deprivation have significantly above average perceptions about the crime rate in their local area.²

Perceptions about the levels of social cohesion in an area also appear to influence an individual's fear of crime according to academic research. One recent study concluded that *'people do not separate out the issue of crime from issues of cohesion, collective efficacy, social change and tension: rather than being about an irrational (and narrow) sense of crime, fear (whether it is everyday worry or anxiety) expresses and distils lay diagnoses about neighbourhood breakdown and stability'*.³ In other words, community cohesion and fear of crime are closely linked. A higher fear of crime is seen as another consequence of living in a neighbourhood where people from different backgrounds do not get on.

There is evidence to suggest that there is a link between perceived levels of social cohesion and perceived levels of crime and feelings of safety in Lincolnshire. The 2016 Lincolnshire Community Safety Partnership Survey asked Lincolnshire residents a series of questions about community safety in their local area. Among these questions, respondents were asked:

- Do you feel more or less safe in your local area than you felt 12 months ago?
- Do you think that levels of crime and anti-social behaviour have gone up or down in the last year?

¹ Public perceptions of crime in England and Wales: year ending March 2016, Office for National Statistics, <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/publicperceptionsofcrimeinenglandandwales/yearendingmarch2016>

² Public perceptions of crime in England and Wales: year ending March 2016, Office for National Statistics, <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/publicperceptionsofcrimeinenglandandwales/yearendingmarch2016>

³ Social Order and the Fear of Crime in Contemporary Times. Oxford: Oxford University Press, Clarendon Studies in Criminology (2009), Stephen D. Farrall, Jonathan Jackson, and Emily Gray. Abstract available at https://www.researchgate.net/publication/234138670_Social_Order_and_the_Fear_of_Crime_in_Contemporary_Times_Oxford_Oxford_University_Press_Clarendon_Studies_in_Criminology

- To what extent do you agree or disagree that your local area is a place where people from different backgrounds get on well together?

Respondents living in Boston and South Holland were significantly more likely to report that people from different backgrounds did not get on well together than those living in the remaining districts of Lincolnshire. Boston and South Holland respondents were also more likely to report that crime levels in their area had gone up in the last twelve months and that they felt less safe in their area than they did twelve months ago.⁴ While correlation is not the same as causation, this information would seem to offer some corroboration of the findings in the academic literature about the link between community cohesion and the fear of crime. It would also suggest that the fear of crime may be higher in Boston and South Holland than it is in other districts of Lincolnshire.

Street lighting, crime, and the fear of crime

The link between street lighting, crime levels, and fear of crime is complicated. Academic research in this area predominantly examines the impact of introducing street lighting in a locality rather than the impact that the reduction of existing street lighting has on crime levels and the fear of crime. While the research would tend to suggest that the introduction of street lighting did have a positive reducing effect on crime and the fear of crime, research on the withdrawal of lighting would suggest that crime levels may be unaffected, but that the fear of crime may increase.

Home Office research suggests that the introduction of street lighting did have a positive reducing effect on the number of crimes recorded in an area.⁵ It should be noted, however, that the evidence for the beneficial impact of street lighting derives from studies dating back to the 1970s, when crime levels were much higher. This perhaps makes direct comparison with current crime conditions less relevant.⁶

Two theories have been posited as to why street lighting might reduce crime. *'The first suggests that improved lighting leads to increased surveillance of potential offenders (both by improving visibility and by increasing the number of people on the street) and hence to increased deterrence of potential offenders. The second suggests that improved lighting signals community investment in the area and that the area is improving, leading to increased community pride, community cohesiveness, and informal social control. The first theory predicts decreases in crime especially during the hours of darkness, while the second theory predicts decreases in crime during both daytime and night time.'*⁷ A systematic review of street lighting research papers undertaken in 2008 found that *'night time crimes did not decrease more than daytime crimes. This suggests that a theory of street lighting focusing on its role in increasing community pride and informal social control may be more plausible than a theory focusing on increased surveillance and increased*

⁴ LCSP Survey Results 2016, LCC Safer Communities Service

⁵ The effect of better street lighting on crime and fear. Home Office Review (1991), <http://library.college.police.uk/docs/hopolicers/fcpu29.pdf>

⁶ Evidence regarding the impact of the street lighting on crime and antisocial behaviour (2015), Cambridge Research Group, <http://cambridgeshireinsight.org.uk/file/2737/download>

⁷ Effects of improved street lighting on crime: a systematic review. Home Office Research Study 251, (2002) http://www.crim.cam.ac.uk/people/academic_research/david_farrington/hors251.pdf

deterrence.⁸ In this scenario, street lighting is a visible representation of civility and modernity, a sign that the state is supporting order in the area. This gives members of the community more confidence, increasing their mobility and reducing their fear of crime. These factors combine to change the environment of the neighbourhood so that it attracts less crime. This theory may help to explain why moves to part night lighting do not appear to significantly increase crime, but they do increase the fear of crime. This is corroborated by the studies discussed below.

A 2015 study of 62 local authorities found that, on the whole, reductions in street lighting did not make an immediate impact on crime levels.⁹ However, other studies have noted the impact that street light reductions have had on public perceptions about their safety. A large scale survey of residents' views about street lighting undertaken in 2013 suggested that, of those who noted street light reductions in their area, *'52.8% of women and 38.8% of men said that their local community feels less safe... Asked how dimming or switching off lighting affects their behaviour, 40% of respondents considered going out less, 65% avoided unlit areas and 15% said that they would take taxis rather than walk.'*¹⁰ Meanwhile, a 2015 study of public views about the impact of reduced street lighting concluded that *'Public concern focused on road safety, fear of crime, mobility and seeing the night sky but, for the majority in areas with interventions, reductions went unnoticed. However, more private concerns tapped into deep-seated anxieties about darkness, modernity 'going backwards', and local governance.'*¹¹ These studies therefore suggest that for many residents who noticed the change, reduced street lighting made them feel less safe to the extent that they considered changing their behaviour. This was not simply because of the increased darkness resulting from reduced lighting, but for some this was also because the changes signified the retreat of state authority from their area. It should be noted, however, that many residents in these studies did not notice the change to part night lighting in their area, and so their feelings of safety were unaffected.

It would therefore appear that the initial investment in street lighting in an area has a positive reducing impact on levels of crime during the day and the night. The visible state investment in reducing darkness from the area appears to signify increased security and control in the locality, making the area less attractive to crime, and leaving local residents feeling safer and more confident in their neighbourhood. The move to part night lighting is perhaps a less radical change on the environment of the neighbourhood than the introduction of street lighting. Many of the benefits of the street lights remain, meaning that much of their apparent deterrent effect on levels of crime also remains. However, for those who notice the change to part night lighting, the change impacts on their feeling of safety, as the reassurance that had previously been provided by state investment in the area is eroded.

⁸ Effects of Improved Street Lighting on Crime. Brandon P. Welsh, David C. Farrington (2008)
http://www.crim.cam.ac.uk/people/academic_research/david_farrington/light.pdf

⁹ What is the effect of reduced street lighting on crime and road traffic injuries at night? A mixed-methods study (2015). Summary available at <https://njl-admin.nihr.ac.uk/document/download/2004077>

¹⁰ Street Lighting and Perceptions of Safety Survey November 2013, Results and Analysis, Suzy Lamplugh Trust and Neighbourhood Watch
https://www.ourwatch.org.uk/uploads/pub_res/Perceptions_of_Safety_survey_FINAL.pdf

¹¹ Reduced street lighting at night and health: A rapid appraisal of public views in England and Wales (2015)
<https://www.sciencedirect.com/science/article/pii/S1353829215000775>

Measuring the impact of street lighting changes in Lincolnshire on the fear of crime

The Safer Lincolnshire Partnership (formerly the Lincolnshire Community Safety Partnership) has a statutory obligation to engage the local community about crime and disorder issues. Between August and November 2016 the partnership undertook a major survey of Lincolnshire residents' views about community safety in the county.

Among other questions, the survey asked respondents what issues they thought the partnership should focus on in their local area. Nearly 1,000 suggestions were received. Although the Street Lighting Transformation Project in Lincolnshire was only in the early stages of implementation during the survey period, a small number of these suggestions (1%) related to street lighting. However, there were many other issues that a higher proportion of residents wanted the partnership to focus on, including anti-social behaviour, alcohol, road safety, police visibility, drugs, burglary, increasing resources/effectiveness, vandalism, rural crime, community cohesion and violence.¹²

The survey also asked respondents if they felt more or less safe in their local area than they did 12 months ago. While the majority (56%) of respondents to the 2016 survey stated that they felt as safe as they did 12 months ago, a significant minority (33%) stated that they felt less safe. Respondents were not asked why they felt less safe, so it is unclear what factors may have influenced their feelings of safety. It would be possible to include this question in future surveys. This would provide an indication of the extent to which street lighting changes may have affected feelings of safety. The collection of demographic data about the gender, age and local authority of residence of respondents would help to identify whether certain groups have been disproportionately affected.

Reducing the fear of crime

Although there is no official UK government guidance about fear of crime reduction, a comprehensive guidance document written by the US Department of Justice entitled 'Reducing Fear of Crime: Strategies for Police' offers a clear method for how to reduce the fear of crime in local communities.¹³ This study draws extensively from UK case studies and intelligence led policing principles to offer the following guidelines for how to reduce the fear of crime:

- Information about the fear of crime should be collected from local communities. Engagement with the community can take many forms, including surveys, community meetings, key individuals, environmental audits, and routine public contacts. Information should be collected not just about the level of worry, but the underlying factors that affect perceptions of safety.
- The collected information should be analysed alongside other sources of information, to identify patterns and trends in the fear of crime. The analysis

¹² LCSP Survey Results 2016, LCC Safer Communities Service

¹³ Reducing Fear of Crime, Strategies for Police (2010), US Department of Justice
<http://www.popcenter.org/library/reading/PDFs/ReducingFearGuide.pdf>

should identify areas and groups that may be disproportionately affected by the fear of crime as well as the specific concerns that undermine feelings of safety.

- A tailored response to the identified fear of crime issues should be designed and enacted. There is no 'one size fits all' solution to reducing the fear of crime. Interventions should be targeted at the causes of the feelings of fear among different groups or at different locations.
- Feedback should be provided to the community so that they are aware that action has been taken to alleviate their concerns.

In the case of street lighting, it might be possible to use the information collected in both the street lighting survey and the Safer Lincolnshire Partnership's survey, together with the findings of the academic research summarised in this paper, as a platform for analysing how and why street lighting changes might be affecting feelings of safety. Resource permitting, a more detailed public engagement exercise could also be undertaken along similar lines to Kent County Council's street lighting consultation in 2016, which included workshops and focus groups with key groups (including shift workers, the elderly and students).¹⁴ Once these sources of data are analysed, a tailored response to the issues could be designed and enacted.

For instance, if the hypothesis is correct that for some groups, street lighting changes undermine feelings of safety because they symbolise the retreat of the state from a local area, any efforts to mitigate this concern will need to find a way to tackle the perception that authorities have abandoned the area. Residents may need to feel that their area is still worthwhile, despite the reduction in street lighting. Whatever responses are enacted to tackle the causes of this perception, care will need to be taken to ensure that the response is clearly communicated to the community.

2. Background Papers

Fear of crime:

- Public perceptions of crime in England and Wales: year ending March 2016, Office for National Statistics. Full article available at <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/publicperceptionsofcrimeinenglandandwales/yearendingmarch2016>
- Social Order and the Fear of Crime in Contemporary Times. Oxford: Oxford University Press, Clarendon Studies in Criminology (2009), Stephen D. Farrall, Jonathan Jackson, and Emily Gray. Abstract available at https://www.researchgate.net/publication/234138670_Social_Order_and_the_Fear_of_Crime_in_Contemporary_Times_Oxford_Oxford_University_Press_Clarendon_Studies_in_Criminology

Street lighting and the fear of crime:

- The effect of better street lighting on crime and fear. Home Office Review (1991). Full article available at <http://library.college.police.uk/docs/hopolicers/fcpu29.pdf>
- Effects of improved street lighting on crime: a systematic review (2002). Home Office Research Study 251. Full article available at

¹⁴ Street Lighting Consultation. Main Report (2016), Kent County Council, https://consultations.kent.gov.uk/gf2.ti/f/603586/19341445.1/PDF/-/Street_Lighting_Main_Report.pdf

http://www.crim.cam.ac.uk/people/academic_research/david_farrington/hors251.pdf

- Effects of Improved Street Lighting on Crime (2008). Brandon P. Welsh, David C. Farrington. Full article available at http://www.crim.cam.ac.uk/people/academic_research/david_farrington/light.pdf
- Reduced street lighting at night and health: A rapid appraisal of public views in England and Wales (2015) Judith Green, Chloe Perkins, Rebecca Steinbach, Phil Edwards. Full article available at <https://www.sciencedirect.com/science/article/pii/S1353829215000775>
- What is the effect of reduced street lighting on crime and road traffic injuries at night? A mixed-methods study (2015), Chloe Perkins, Rebecca Steinbach, Lisa Tompson, Judith Green, Shane Johnson, Chris Grundy, Paul Wilkinson and Phil Edwards. Summary available at <https://njl-admin.nihr.ac.uk/document/download/2004077>
- Evidence regarding the impact of the street lighting on crime and antisocial behaviour (2015), Cambridge Research Group. Full article available at <http://cambridgeshireinsight.org.uk/file/2737/download>
- Street Lighting and Perceptions of Safety Survey November 2013, Results and Analysis, Suzy Lamplugh Trust and Neighbourhood Watch. Full article available at https://www.ourwatch.org.uk/uploads/pub_res/Perceptions_of_Safety_survey_FINAL.pdf
- Street Lighting Consultation. Main Report (2016), Kent County Council. Full article available at https://consultations.kent.gov.uk/gf2.ti/f/603586/19341445.1/PDF/-/Street_Lighting_Main_Report.pdf

Other:

- Lincolnshire Community Safety Partnership Survey Results 2016, LCC Safer Communities Service. Available on request.
- Reducing Fear of Crime, Strategies for Police (2010), US Department of Justice. Full article available at <http://www.popcenter.org/library/reading/PDFs/ReducingFearGuide.pdf>

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