

Part Night Lighting

Background Briefing Paper for the Police Crime Panel

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Essex County Council

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Approval

Name of Approver	Role	Date approved
Paul Bird	Project Sponsor	25/11/2013
Keith Tovee	Business Lead	22/11/2013

1 Background

Project Summary and Policy Context

A Vision for Essex 2013-17 sets out the Council's aims of spending taxpayers' money wisely and respecting the Essex environment. The proposal to introduce part night lighting will assist with the delivery of these aims.

It is anticipated that energy costs are going to rise over the coming years putting increased pressure on the Local Authority's revenue budget. Estimates provided by our previous supplier of energy show average predicted year on year increase of 6% between 2010 and 2015. There are pressures on Essex County Council to reduce costs and ensure good environmental management. One of the Council's major areas of energy expenditure is street lighting and therefore better management of this area will reduce cost as well as energy consumption.

In 2007 the Council implemented a trial by which street lights in the Maldon and Uttlesford districts were switched off between the hours of midnight and 5am. The pilot demonstrated that there was no significant change in crime statistics or road collisions as a result of changes. In June 2011 the Cabinet agreed to purchase a system for the central management of all streetlights in Essex based on 'invest to save' principles. The Business Case highlighted that the following benefits would result from the implementation of a Central Management System ('CMS') and part night Lighting:

Financial savings: revenue savings of around £1m / year as a result of reduced energy consumption.

Environmental Benefits: Significant carbon and light pollution or 'sky glow' reductions across Essex. If the target of switching 70% of street lights to part night lighting is achieved it will reduce carbon emissions by 8,000 tonnes per year

Operational Benefits: The installation of CMS would provide notification of streetlight failure enabling a responsive maintenance service across Essex, and increased equipment lifespan. In addition the introduction of CMS will allow street lights to come on / off with greater accuracy in relation to natural light levels and lead to a more intelligent overall management of streetlights. These operational improvements will serve to improve the public perception of street lighting maintenance as a result.

The CMS is currently being installed on all lighting columns in Essex. Installation is complete on around 97% of columns across (as of 15/11/2013).

Essex County Council has made a commitment to maintain all night lighting for street lights that meet its exception criteria. These are detailed in Appendix 1.

2 Evidence Base

2.1 The National Picture

Part night lighting as a concept is not new, for example it has operated in West Sussex since the energy crisis of the 1970s.

More recently a number of other local authorities have adopted part night lighting. Examples include Suffolk, Hertfordshire, Nottinghamshire, Dorset, and Bath and North East Somerset. In addition a number of local authorities are planning the introduction of part night lighting including Kent and Warwickshire.

Some of the negative experiences relating to switching off lights / part night lighting are due to the way in which roll out has been planned, managed, and the extent of the proposals. For example Milton Keynes Borough Council introduced a policy of switching off a number of street lights entirely. They switched them back on following public pressure and concern as a result of two high profile accidents. Switching lights off entirely increases savings but it means that, in winter, areas are unlit during the evening rush hour. This would be more likely to lead to an increase in accidents than the proposal in Essex where all lights will remain on other than between midnight and 5am.

2.2 Road Safety

There are few accidents between midnight and 5am and the exception criteria require lights to be lit all night where this is a recommendation of road safety engineers or where lights were originally installed as an accident prevention measure. This will minimise the risk of the lack of lighting causing accidents.

The experience in Maldon and Uttlesford is that the overall number of accidents continues to reduce overall in line with trends across Essex. The table below compares accident numbers in three districts, using Braintree as a control. It will be seen that the long term reduction in accident numbers since 2005 (before part night lighting was introduced) is very similar between the three districts, notwithstanding that Braintree had retained all night lighting during the period described.

District	Fall in accidents between 2005-7	Fall in accidents between 2005-12
Braintree	13%	37%
Maldon	28%	36%
Uttlesford	13%	38%

Source- Essex County Council Road Accident Database.

Approximately 5% of all reported accidents occur between midnight and 5am which represents 21% of the day. There is no significant impact on overall number of accidents in Maldon and Uttlesford. The following table records all accidents reported in the district in any location. It should be noted that the overall number of accidents is low and the small sample size means that changes may not be statistically significant.

	Percentage of road accidents occurring between midnight and 5am	
Year	Maldon	Uttlesford
2005	5%	5%
2006	7%	5%
2007	2%	7%
2008	7%	7%
2009	4%	8%
2010	4%	7%
2011	5%	6%
2012	4%	4%

Source- Essex County Council Road Accident Database.

Between 2005-12 only 5 accidents in Maldon and 1 in Uttlesford were recorded as having taken place between the hours of midnight and 5am in a location where streetlights were provided but were not lit at the time. None of these accidents were attributed to part night lighting.

2.3 Crime

An important consideration in the decision on implementation of part night lighting is the impact on crime. Under section 17 of the Crime and Disorder Act 1998 the Council is under a legal duty to exercise its various functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent, crime and disorder in its area.

This is not a duty to reduce crime but a duty to take the need into account when making decisions.

The experience in Maldon and Uttlesford Districts is that the introduction of part night street lighting has not had any impact on crime. In fact crime in both areas has fallen significantly in both districts since 2005 (the year before part night lighting was introduced), in a similar way to falls in other districts. If part night lighting was responsible for an increase in crime then one would expect to see overall crime trends to be higher in districts which introduced part night lighting.

The table below shows that the largest fall in crime between 2005-6 and 2008-9 was recorded in Maldon district which experienced a slightly larger fall than Braintree, where the streetlights remained on all night. Both Braintree and Maldon experienced a higher fall in crime than the overall East of England region (17%) whereas in Uttlesford the fall in crime during this period was lower, at 5%. The lower reduction in Uttlesford seems to be a general picture where crime levels have not fallen as much as elsewhere. However, if the introduction of part night lighting was to be a contributory factor, it would be expected that crime levels in Maldon would have fallen by less than in the East of England. In fact crime

levels in Maldon fell more than in Braintree and more than in the East of England. This seems to suggest that part night lighting is not a factor which tends to increase the level of crime.

Change in levels of notifiable offences between 2005-6 and 2008-9 (Source: Office of National Statistics)	
Maldon	-20%
Uttlesford	-5%
Braintree	-19%
East of England	-17%

Since the Council's early pilot, Hertfordshire and Suffolk have also introduced part night street lighting. They have not experienced any increase in crime as a result. A report considered by the Scrutiny Committee of the Hertfordshire Police Authority in November 2011 concluded 'there is no discernible evidence that crime has increased by the strategy to reduce street lighting between midnight and 6am.' This study compared the number of offences experienced in areas where part night lighting had been introduced with the same period a year previously. The full report is provided as Appendix 2.

There is no study we have been able to find which shows any link between part night lighting and an increase in crime. Offending levels fluctuate for a large number of reasons, but no difference can be identified between crime trends in areas with part night lighting and areas with full night lighting, and there is no noticeable change in offending levels. If any change in crime levels in a particular area is identified then the County Council's adopted exception criteria make it clear that the Council will consider any requests made by Essex Police to switch particular lights back to all night lighting. It is clear that the fall in crime in Uttlesford is lower than in other districts but if that was solely as a result of the introduction of part night lighting then similar issues would be expected to have arisen in Maldon District and in other areas where part night lighting has been introduced. The fall in crime in Maldon exceeds that in Braintree District and in the East of England as a whole.

2.4 Fear of Crime

The proposals could impact on people's fear of crime. People may fear that they are at an increased risk of crime although, as illustrated above, there is no evidence that there is an increased risk. This is important because fear of crime can influence people's behaviour – for example by deterring them from going out after dark. People may also feel less safe at home.

Since 2006 the Council has undertaken regular surveys of public attitudes. The survey questions were originally prescribed by the Department for Communities and Local Government and the Council was required to carry out a postal survey of a balanced sample of residents (although each resident is randomly selected). One of the questions asked in the survey asks people if they feel safe in their own area outside after dark. Although the survey is no longer mandatory, the Council has continued to undertake it in the same format.

Area	Residents who feel safe outside after dark in their own district	% change
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	% in 2006	% in 2013	
Braintree	55.8%	60%	+7.6%
Maldon	49.7%	67.7%	+36%
Uttlesford	62.5%	74.7%	+19.5%
Essex	46.7%	58.5%	+25%

Source: Essex County Council – Annual Tracker Surveys for summer 2006 and spring 2013.

This shows that between 2006 and 2013 Uttlesford and Maldon districts both experienced a significant increase in people who say they feel safe after dark. Unfortunately this survey was not conducted before 2006. The survey undertaken in 2005 did ask about crime but did not ask about fear of crime so unfortunately no data on fear of crime is available.

The statistical information clearly shows that the introduction of part night lighting has had no long term impact on fear of crime. Indeed the increase in the percentage of people feeling safe outside after dark has increased in Maldon and Uttlesford more than in other areas. What the statistical information cannot show is whether or not the introduction of part night lighting had an initial short term impact on fear of crime.

If there was an impact on the fear of crime in 2006 we could expect fewer people to be affected by the introduction of part night lighting. This is because the changes in Maldon and Uttlesford in 2006 were a new policy idea at the time. There is now significantly more experience across the east of England which suggests that the introduction of part night lighting does not have any discernible impact on crime levels which can be communicated to residents in areas where part night lighting is to be introduced.

3 Police consultation and involvement

Maldon and Uttlesford 2007

As part of the Maldon and Uttlesford Part Night Lighting pilot a quarterly Joint Monitoring Group was set up. The group included representatives from the emergency services, District Councils and ECC to look at the effect part night lighting had on crime and road traffic accident statistics using base lined statistics before the start of the pilot.

These monitoring arrangements were seen as a strengthening of the mitigation measures proposed in the risk assessment of the part night lighting pilot executive decision, and used to inform the wider part night lighting roll out proposals.

A copy of the Scrutiny Committee Report produced by the Joint Monitoring Group is included as Appendix 3.

Chelmsford and Braintree 2012

An Essex County Council consultation letter was sent to and received by Chief Constable Jim Barker-McCardle on 24th July 2012. A response was sent on 26th July 2012 by Chief Inspector Tom Simons, on behalf of the Chief Constable, nominating Chief Superintendent Glenn Caton as the point of contact.

Following a telephone conversation with Chief Superintendent Caton on 7th August 2012, contact details were provided for the Borough Commanders in the Braintree District (Chief Inspector Nick Lee) and Chelmsford District (Chief Inspector Steve Ditchburn).

A meeting was held with Chief Inspector Lee on 10th August 2012 and with Chief Inspector Ditchburn on 8th November 2012, where part night lighting maps were provided on CD and issues were discussed.

No concerns were raised in the District of Braintree. In Chelmsford it was requested that the Bunny Walk and Central Park retained on All Night Lighting, both requests were accepted as meeting the exception criteria and have retained All Night Lighting.

Countywide consultation 2013

A letter inviting Essex Police take part in the countywide consultation was e-mailed on 2nd September 2013; this was responded to on 13th September 2013 by Chief Inspector Alan Cook, Staff Officer to Chief Constable, in which no objections were raised to the proposals.

4 A13 and A127 Trial

Evaluation

The Council is considering introducing part night lighting on the parts of A13 and A127 which are dual carriageway. No decision has been taken to introduce this trial, and this section sets out Officers' current thinking on a trial. It is proposed that lights at major junctions would continue to be lit.

The introduction of part night lighting has not led to an increase in accidents elsewhere in Essex (see 2.2). However, the A127 and A13 are different in character from many other roads in Essex. We have sought the advice of the Council's road safety team as to whether this different character gives rise to any concern. The statistics show that since 2008 the accident statistics for these road between midnight and 5am and other than at major junctions was follows:

	Fatal	Serious	Slight
A13	0	1	2
A127	2	2	17

The conclusion of the Road Safety team is that there is a low risk that the introduction of part night lighting on these roads (but away from major junctions) will lead to an increase in accidents.

The trial which is to be considered would run for a period of two years, from 9 December 2013 until 30 November 2015. After a period of one year the trial would be reviewed and one of the following options agreed upon:

- Agree to continue to the end of the trial period
- Abandon the trial and switch street lighting on the A13 and A127 back to all night lighting

At the end of the full two years, a further review will be conducted and one of the following options agreed upon:

- To switch street lights on the A13 and A127 to part night lighting on a permanent basis
- Abandon the trial and switch street lighting on the A13 and A127 back to all night lighting

At both review points numbers of collisions along the A13 and A127 will be reviewed against previous accident data for the same roads, views will also be sought from the emergency services.

As in the wider part night lighting roll out, Essex County Council will consider any request made by the Emergency Services to have lights switched back to all night lighting, both during and after the trial duration.

Major junctions along the A13 and A127 will remain lit all night

Appendix 1:

Exception criteria

This document describes the exception criteria used to establish whether street lights remain as all night lighting. The exception criteria were shared with consultees as part of the consultation process.

It is proposed that lights in locations meeting the following exception criteria will continue to be lit through the night.

- Sites where there are a large number of conflicting traffic movements (eg roundabouts) which are on significant routes (generally those lit by columns greater than 6m high).
- Sites where street lights are installed as a result of accident remedial measures.
- Town Centre areas where there is one or more of the following features:
 - Publicly maintain CCTV
 - High proportion of high security premises (eg banks, jewellers); areas of high crime risk;
 - High concentration of people at night such as transport interchanges, nightclubs etc.
- Main approaches to town centre areas where there is a mix of development between residential and commercial/industrial i.e. not exclusively residential.
- Sites where the police can demonstrate that there is likely to be an increase in crime if the lights are switched off during part of the night (or that there will be a decrease in crime if the lights are switched back on).
- Remote footpaths and alleys linking residential streets.
- Where there is a statutory requirement to provide lighting.