

Briefing Paper for the Police and Crime Panel – Part-Night Lighting (Update)



Protecting and serving Essex

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Unit: SCMD

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1.0 Introduction

In November/December 2013, briefing papers were provided to the Police and Crime Panel by Ben Sutherland (Essex County Council) and Chief Inspector Steve Ditchburn (Essex Police) in relation to the implementation of the Part-Night Lighting (PNL) scheme across some of the Essex County Council districts.

In May 2014, a further briefing was paper prepared by Chief Inspector Tina Noble (Essex Police) and presented to the Police and Crime Panel.

This paper provides an update on the two briefing papers above relating to part-night lighting across the Essex County Council areas of responsibility, including comparative police data pre and post implementation relating to crime, anti-social behaviour and road traffic collisions and an overview of the national 'Lanterns Project'.

This paper recognises Essex County Council as the Highway Authority as defined in the Traffic Management Act 2004.

2.0 Background

2.2 PNL Implementation Programme and Current Operational Status

The table below highlights the introduction of PNL by district council area. The two original trial district authorities were Maldon and Uttlesford.

District	Implementation Date
Maldon	01/10/2007
Uttlesford	01/10/2007
Braintree	01/09/2013
Chelmsford	01/09/2013
Colchester	01/12/2013
A127	16/12/2013
Castle	12/01/2014
Epping	12/01/2014
Rochford	26/01/2014
Basildon	23/02/2014
Harlow	02/03/2014
Tendring	02/03/2014
Brentwood	09/03/2014

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- **Essex County Council** - Amendment made by Cabinet Member of Essex County Council Highways Cllr Bass to alter PNL scheme times of operation. The change provided a directive that between Monday and Saturday PNL operates between the hours 01:00 – 05:00 and on Sundays between 24:00 – 05:00. This change became operational on March 31st 2015.
- **Harlow District** – An Essex County Council report dated October 13th 2015 recommends approval to be made by Essex County Council Highways Cabinet Member Mr Eddie Johnson to allow an amendment to the current PNL Scheme allowing lights to be lit all night in the Harlow District if the District Council agrees to meet additional costs incurred. Both authorities agreed and PNL was suspended within the Harlow District Council area on October 25th 2015.
- **Southend Borough Council** – Has not adopted a PNL scheme. It should be noted that Southend Borough Council as the Highway Authority has started a programme of upgrading all street lights within the borough to LED (Light Emitting Diode). This will impact upon 14,000 current street lights and all illuminated traffic signs.
- **Thurrock Council** – On August 13th 2014, Thurrock Council's cabinet agreed to replace 17,000 street lamps located within the authority's area with LED lights. The programme of works will take two years to complete. There are currently no plans within the authority to implement PNL.

3.0 Community Impact

Essex Police recognises political and community sensitivity around PNL and continues to acknowledge any specific issue or concern that relates directly to the risk of harm.

Concerns from community groups will always be passed onto Essex County Council as the Highways Authority (and policy makers in these matters) for their consideration and comment.

There continues to be some campaigning from local community groups, with the support of local politicians, wishing for a return to full street lighting in the Tendring, Basildon, Castle Point and Rochford areas, as highlighted in recent media bulletins in October 2015, with many referring to the agreement made between Essex County Council and Harlow District Council (as referred to above under item 2.2).

Essex Police acknowledges the work undertaken by some district councils to dedicate areas of their public facing website to provide advice and links to local crime data, for example:

http://www.rochford.gov.uk/parking_and_travel/highways/part-night-lighting

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4.0 Operational Impact

4.1 Protocol between Essex Police and Essex County Council – Operating Procedure for PNL to be Suspended

On July 30th 2014, a protocol was agreed between Essex Police and Essex County Council Highways outlining the operating procedure between both authorities in relation to:

- The police requesting street lights to be kept on prior to being switched off as part of PNL.
- The police requesting street lights to be switched on between 01:00 and 05:00 and where the request is made by the Essex Police control room (FCR) during the period 01:00 and 05:00.

During 2015, a total of **32** recorded requests have been made by Essex Police (authorised rank Chief Inspector or above) to Essex County Council for consideration of PNL to be suspended (temporarily/permanently). This includes provision for public safety during the 'V' Festival held in Chelmsford, missing person(s) incidents and serious crime scene investigations.

Governance of the above protocol is overseen by a quarterly review meeting held between Essex Police and Essex County Council.

4.2 Impact on other Emergency Services

As far as Essex Police is aware, there have been no identified operational issues highlighted by Essex Fire and Rescue or The East of England Ambulance Trust in relation to the PNL policy.

5.0 Impact on Crime - Data Appendix A

Local Essex Police monitoring and analysis, as highlighted at Appendix A, identifies no discernible increase in crime that is attributed to the PNL policy. This is supported by the findings of the national Lantern Project.

6.0 Impact on Anti-Social Behaviour – Data Appendix B

Local Essex Police monitoring and analysis, as highlighted at Appendix B, identifies no discernible increase in incidents of anti-social behaviour that is attributed to the PNL policy.

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7.0 Impact on Road Safety

7.1 Road Traffic Collision Data Review (All Injury Severities)

Aim

The summary below provides a brief update to a document (Reference RSA-15-185) prepared by the Safer Essex Roads Partnership road traffic collision (RTC) data analyst, showing a comparison of collision patterns before and after transition to PNL. Data used in this report is for the period 01/01/2010 to 25/10/2015.

Collision Rate

The table below shows the change in collisions rates following the PNL transition period, for collisions occurring between midnight and 5am on roads with street lights present. Negative numbers represent a decrease in collision rates and positive numbers represent an increase in collision rates.

It should be noted that the designated control areas are Maldon District Council, Uttlesford District Council, Thurrock Council and Southend Borough Council.

Change in collision rates, midnight to 5am on roads with lamp columns

Area	All Collisions	KSI	Pedestrian involved	Driver impaired	Pedestrian impaired
A127	5.4	-2.1	0.1	-0.7	-0.7
Southend	-2.5	-0.8	-2.9	2.8	-2.3
Thurrock	-18.6	-5.7	-3.4	-7.8	-1.4
Basildon	10.0	9.2	6.4	2.9	5.0
Braintree	-9.0	0.1	2.6	-5.2	0.5
Brentwood	-1.8	-0.3	-2.0	0.4	-1.3
Castle Point	2.0	-0.7	0.8	-0.4	0.8
Chelmsford	-15.3	-6.4	-3.1	-1.5	-2.1
Colchester	-6.3	2.1	0.7	-10.6	-1.4
Epping Forest	-15.9	-2.4	-1.3	-1.0	-2.1
Harlow	-3.2	1.0	4.0	-1.0	3.7
Maldon	-3.3	0.8	1.5	-2.1	0.0
Rochford	1.3	1.1	0.2	2.9	0.9
Tendring	-6.6	1.9	-2.0	-0.8	0.0
Uttlesford	-0.9	0.8	-0.7	0.8	0.0
Transition areas	-35.6	5.0	7.8	-13.8	4.1
Control areas	-25.3	-4.9	-5.5	-6.2	-3.7

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The table highlights Basildon as the area with the greatest increase following transition to PNL. Chelmsford, Epping Forest and Braintree all showed considerable reductions in collisions following transition to PNL.

There was an increase in pedestrian collisions in transition areas, while there was a decrease in pedestrian collisions in the control areas. The vulnerability of pedestrians to injury as a high risk high harm group may therefore have resulted in a corresponding increase in Killed or Seriously Injured (KSI) collisions for transition areas.

The data supports anecdotal evidence that some pedestrian casualties are linked to the night-time economy, with an increase in collisions involving impaired pedestrians. At the same time there has been a decrease in impaired driver collisions.

Collision Types

The table below provides a breakdown of collision types that coincided with PNL. This is defined as any collision occurring post transition between midnight and 5am on a road with street lights present but unlit in any of the districts where PNL is in operation.

Area	Fatal	Serious	Slight	All severities	Involving pedestrian	Involving impaired pedestrian	Involving impaired driver
A127			4	4	1		
Basildon	1	6	6	13	6	4	4
Braintree		1	1	2			
Brentwood			2	2			1
Castle Point			3	3			2
Chelmsford		1	3	4	1	1	4
Colchester	1		2	3	1	1	1
Epping Forest		1	3	4			3
Harlow		1	3	4	2	1	1
Rochford	1	1	2	4			3
Uttlesford			1	1			
Grand Total	3	11	30	44	11	7	19

A recent road safety study undertaken by Direct Line Insurance and Parliamentary Advisory Committee Transport Safety identified a 42% increase in pedestrian casualties following involvement in a road traffic collision during the month of November and that 26% of all recorded serious injury casualties during the month of November related to pedestrians.

The Safer Essex Road Partnership launched a pedestrian safety campaign on 1st October 2015, recognising the vulnerability of this road user group. This campaign includes a significant number of public engagement events across Essex which are supported by social media.

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The Essex Street Pastors (charitable organisation) have volunteered their services to assist with promoting pedestrian safety relating to the night-time economy, recognising that 10% of all pedestrian casualties are under the influence of alcohol.

7.2 Fatal RTC A1235, Cranes Farm Road, Basildon November 29th 2014 HM Coroner Inquest

On Saturday November 29th 2014 at 01:00, a male pedestrian was struck by two vehicles on Cranes Farm Road Basildon. The location at the time was subject to PNL, with street lights unlit at the time of the collision.

Following the collision, Essex Police requested with the Highway Authority, Essex County Council that consideration should be given for the street lights to remain on at this location. The request made by Essex Police and subsequent actions of Essex County Council in suspending the PNL at this location did not form part of the Fatal Road Traffic Collision investigation or pre-empt any specific decision(s) or requests by HM Coroner ahead of the inquest findings outlined below. The Highway Authority subsequently agreed with the PNL operation being suspended.

On September 7th 2015, HM Coroner presided over the inquest and determined that the death was an “accident”. HM Coroner made reference that if street lights had been present at the time of the collision the lighting would have afforded a better chance of visibility but neither driver could have avoided the collision. Upon conclusion of the inquest, H M Coroner issued a report outlining “Matters of Concern” under Regulation 28 (Paragraph 7, Schedule 5 of the Coroners and Justice Act 2009 and regulations 28 and 29 of the Coroners (Investigations) Regulations 2013) “Report to prevent Future Deaths” to the Highway Authority, Essex County Council.

8.0 Lantern Project Research Findings – The Effect of Reduced Street Lighting on Road Casualties and Crime in England and Wales: Controlled Interrupted Time Series Analysis

8.1 Background

The Lantern Project objective is to provide a detailed research project set around the impact of decisions taken by many local authorities across England and Wales focused upon the four street light adaptations strategies (switch off, PNL, dimming and white light) on road traffic casualties and crime.

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8.2 Methods

Observational study based on analysis of geographically coded police data on road traffic collisions (STATS19) and crime in 62 local authorities.

8.3 Results

- There is no evidence that reduced street lighting is associated with increases in road traffic collisions or crime.
- Dimming the amount of light or switching to white light/LEDs may reduce crime in a designated area.
- When risks are carefully considered, local authorities can safely reduce street lighting, saving energy costs and reducing carbon emissions, without impacting negatively on road traffic collisions or crime.

8.4 Conclusions

The findings of the Lantern Project were released on July 28th 2015 with the following conclusions:

The study found “little evidence of harmful effects of switch off, Part-Night Lighting, dimming, or changes to white light / LEDs on road collisions or crime in England and Wales”.

Results from the study also suggested that “when risks are carefully considered, local authorities can safely reduce street lighting saving both costs and energy using switch off, Part-Night Lighting, dimming, and white light strategies without necessarily impacting negatively upon road traffic collisions and crime”.

9.0 Partnership Liaison

- Essex Police, Essex County Council and the Office of the Police and Crime Commissioner fully recognise the community and political sensitivity around PNL and liaise regularly to review and reflect any specific issues highlighted.
- During April 2015, The Safer Essex Roads Partnership (SERP) Board approved a sub group to review and monitor the impact of PNL on road traffic collisions. This sub group meets regularly and includes the Safer Essex Roads Partnership RTC data analyst who reviews all recorded road traffic collisions and provides regular reports back to the board, highlighting any specific areas of concern or note.
- The Board has a standing agenda item reviewing RTC casualty data which also specifically reviews collisions that occur within an area designated as PNL.

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- The Safer Essex Roads Partnership comprises Essex Police, Essex County Council Highways, Essex Fire and Rescue, Highways England, East of England Ambulance Service, Thurrock Council, Southend Borough Council, Essex and Hertfordshire Air Ambulance and Safer Roads Foundation.

10.0 Summary and Conclusion

- There are defined protocols between Essex Police and Essex County Council (the Highway Authority) which identifies significant co-operation between both authorities when a request is made to suspend (temporarily/permanently) a PNL system in response to an identified situation or incident.
- There is evidence of significant analytical tasks undertaken by staff within the Casualty Reduction Section, Roads Policing and by the Safer Essex Road Partnership RTC data analyst reviewing all reported road traffic collisions with the ability to act and respond to any identified risks to public safety.
- The national 'Lantern' study concluded from its research that there was no evidence that PNL had a negative impact upon crime and road traffic collisions.
- Essex Police data relating to crime, anti-social behaviour and road traffic collisions highlights no discernible increase, supporting the findings of the Lantern Project.
- The Highway Authority, Essex County Council, has through its agreement with Harlow District Council, demonstrated an ability to be flexible within its PNL Policy, offering districts the opportunity to fund lighting at a local level.
- Recognising one specific outcome from the Lantern Project, Essex Police should note and consider monitoring the introduction of white light/LED street lighting across Southend and Thurrock, reflecting that the study identified a link between the introduction of white light/LED and a reduction in crime.

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Appendix A – Effect of Change of Part-Night Lighting Hours on Crime

87 days before/days after switch off hours changed

District	Part Night Commencement	Year of switch off		Year before switch off		Year prior to switch-off			Year of switch-off		
		87 days before switch off	87 days after switch off	87 days before switch off (year minus 1)	87 days after switch off (year minus 1)	87 days before switch off date	87 days after switch off date	Change	87 days before switch off date	87 days after switch off date	Change
Basildon	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	155	175	13%	145	149	3%
Braintree	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	65	65	0%	55	87	58%
Brentwood	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	67	61	-9%	54	61	13%
Castle Point	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	29	31	7%	23	50	117%
Chelmsford	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	183	169	-8%	139	134	-4%
Colchester	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	201	204	1%	185	172	-7%
Epping	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	86	108	26%	84	78	-7%
Harlow	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	75	98	31%	89	76	-15%
Maldon	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	22	24	9%	18	22	22%
Rochford	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	25	38	52%	26	38	46%
Tendring	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	86	106	23%	80	90	13%
Uttlesford	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	17	32	88%	31	36	16%

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Appendix B - Effect of Change of Part-Night Lighting Hours on Anti-Social Behaviour

						Year prior to switch-off			Year of switch-off		
						87 days before switch off date	87 days after switch off date	Change	87 days before switch off date	87 days after switch off date	Change
Basildon	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	101	141	40%	90	103	14%
Braintree	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	52	64	23%	61	73	20%
Brentwood	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	39	45	15%	38	50	32%
Castle Point	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	24	49	104%	34	34	0%
Chelmsford	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	93	140	51%	88	119	35%
Colchester	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	136	207	52%	155	165	6%
Epping	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	47	74	57%	76	70	-8%
Harlow	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	80	82	3%	88	84	-5%
Maldon	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	9	25	178%	9	18	100%
Rochford	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	19	30	58%	30	32	7%
Tendring	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	64	113	77%	85	119	40%
Uttlesford	30/03/2015	02/01/2015	25/06/2015	02/01/2014	25/06/2014	15	25	67%	15	25	67%