



Part Night Lighting

**An examination of the County
Councils Policy of Part Night Lighting**

1st October 2013

**Report of the Overview and Scrutiny
Committee**

Contents

1.0	Purpose of Report	3
2.0	Recommendations	3
3.0	Background	4
4.0	Conclusions	5
5.0	Members and Witnesses	10
	Appendix 1 Scoping Document	

REPORT OF THE OVERVIEW AND SCRUTINY COMMITTEE (OSC) INTO PART NIGHT LIGHTING (PNL) ISSUES

1.0 Purpose of Report

- 1.1 This is the report of the OSC investigation into part night lighting (pnl) issues.
- 1.2 The Topic Group addressed the following questions:
 - Did the change to PNL deliver the benefits as intended?
 - What has been the impact of PNL changes on road safety?
 - What has been the impact of PNL changes on criminality and night time safety?
 - What alternatives are there to the current policy?
- 1.3 The scoping document can be seen at **Appendix 1**. The papers issued to members along with the minutes can be seen at http://www.hertsdirect.org/your-council/civic_calendar/overviewscruity/17983831/

2.0 Recommendations

- 2.1 To continue to monitor:
 - The economic business case. (4.1)
 - Carbon savings. (4.2)
 - Personal Injury Collisions (PIC) data. (4..3)
 - Crime data. (4.4)

and provide regular updates to the Highways and Waste Management Cabinet Panel.

- 2.2 To introduce a number of changes to the PNL policy namely:
 - Greater local flexibility for members to make changes to lighting and operational hours, e.g. around railway stations, at the end of cul-de-sacs, lighting issues arising from night time economy in particular towns etc.

- To pursue the original strategy to appropriately adjust the operating periods of lighting on main roads.
- To convert areas to part-night operation where crime levels are no longer high/where people do not go late at night e.g. industrial areas.
- To return to full lighting 'desire lines', those routes always used by pedestrians at night and consider part-night operation in roads in town centres that are not generally used by pedestrians late at night.
- Allowing members to use their locality budget to return some lamps to full night lighting, including associated energy and maintenance costs.

(4.5 and 4.6)

2.3 To endorse the clarification around lighting of remote footpaths. (4.7)

2.4 To develop an invest to save opportunity through the Integrated Plan (IP) process to move to Light Emitting Diode (LED) lighting when it is financially viable and reliability and efficiency has reached a level to make a scheme viable. (4.8)

3.0 Background

3.1 The part-night lighting strategy was developed in 2010/11 in response to a number of issues namely:

- The withdrawal of the Private Finance Initiative (PFI) scheme, which would have enabled HCC to replace its lighting stock, whilst investing in the latest energy saving technology
- The challenge set by the September 2010 Cabinet to generate further revenue savings over and above the efficiency savings already identified
- The County Council's corporate objective to reduce its carbon footprint and the potential costs of carbon

3.2 The February 2011 Full Council endorsed the funding of Hertfordshire's PNL project, which was based on the risk based strategy developed through a series of consultations of Highways and Transport Cabinet Panel and Cabinet in 2010/11 (now the Highways and Waste Management Cabinet Panel). The project was substantially completed in autumn 2012.

3.3 The project involved the installation of photo-electric cells on lighting units which turns lights off between the hours of midnight and 6am to

an accuracy of +/- 15 minutes. The project converted 80,319 lanterns (68%) or 75,739 columns (67%) to PNL.

- 3.4 A series of exceptions to PNL were established with the aim of maintaining a safe highway, protecting against fear of crime and supporting the night time economy, which meant that the following were left in full-night illumination: bollards; beacons; regulatory illuminated traffic signs; subways; tunnels; town centres; CCTV coverage areas; areas of high crime and traffic route hazards.
- 3.5 Local members were consulted on prepared plans to test generally the correctness of the proposals, not the validity of the strategy and its exception criteria. However, they were consulted upon exceptions around:
- Local alleyways and remote footpaths.
 - Small Villages and Hamlets.

The police were consulted on CCTV coverage areas and areas of high Crime.

- 3.6 A number of lights were not converted, but put on a list for future review, because of engineering difficulties, or due to impasse between the local member and the project team over interpretation of the exception criteria. The adjustment to existing operating periods of lighting on Hertfordshire's A Roads, which was identified as a potential later phase, remains underdeveloped.

4.0 Conclusions

- 4.1 Members were advised that a review of the economic business case shows that:
- The out turn project costs were £3.75m, which was well within the £4.56m project budget.
 - The energy savings per annum are £80k higher than the £1.08m forecast within the business case, at £1.16m.
 - The project is delivering total savings of £1.38m per annum, which is £200k above the forecast within the business case.
 - £91k carbon tax costs will be avoided from April 2014.
 - Pay back will be achieved by December 2014.

They noted that HCC Insurance Section has received 23 insurance claims covering the period 1/9/20011 – 31/8/2013 that mentions

lighting in the description but none of the claims recorded are as a direct result of PNL.

Members were also informed that it is anticipated that energy costs will rise by 10% (one pence/kWh) by the start of 2014/15, with further increases at the rate of half a pence to one pence/kWh year on year. The existing street lighting installation currently consumes an estimated 31.5 million kWh/annum, down from 42 million prior to the commencement of the project.

Members asked that the economic business case continue to be monitored with updates supplied to the Highways and Waste Management Cabinet Panel. (Recommendation 2.1)

- 4.2 Members were advised that PNL has delivered 5316 tonnes of carbon savings, which is commensurate to the reduced numbers of conversions to PNL and within the range of the best case scenario which forecast delivery of 6,000 tonnes of carbon savings. These savings will be realised on a year on year basis. At the same time upward light pollution has been significantly reduced during the period that PNL units are switched off. The project also makes an effective contribution to the council's sustainability agenda by reducing the demand on future energy supplies and reduced operational maintenance costs (i.e. life of lamp, associated labour, plant, materials, fuel and traffic management) Members asked that carbon savings continue to be monitored with updates supplied to the Highways and Transport Cabinet Panel. (Recommendation 2.1)
- 4.3 Members were advised that the review of road safety impact included an assessment of Personal Injury Collisions (PIC) per month dating from the initial implementation of the PNL project and shows that of the 77 Divisions of Hertfordshire, 29 have experienced a higher frequency of PIC during the 'After' implementation period compared to 'Before' implementation whilst 48 have experienced a lower frequency of PIC during the 'After' period compared to 'Before'. Members were told that in the Divisions where there were increases in PICs 'After' implementation of PNL that this was not down to PNL but other factors such as an increase in PIC on motorways, roads not subject to PNL and roads where there had never been any night lighting. Members were advised that as a result the road safety team do not believe there is significant road safety concerns associated with the implementation of PNL. Members asked that PIC continue to be monitored with updates supplied to the Highways and Transport Cabinet Panel. (Recommendation 2.1)
- 4.4 Members took evidence from the Emergency Services. They heard that the East of England Ambulance Service and the Hertfordshire Fire and Rescue Service currently had no issues with PNL. Hertfordshire Constabulary have undertaken a full crime review of criminality from

the initial implementation of the PNL project. Members heard that it shows:

- Crime levels in Hertfordshire have been falling for a number of years.
- Overnight crime (between 00:00 and 06:00) at both Community Safety Partnership and County level has also continued to fall.
- The position at beat level is more varied. Many beats have low crime levels and some of the variation will be natural variance and some may be as a direct consequence of PNL. However there is no overall aggregated increase in criminality at beat level.

Police evidence does not appear to support the view that PNL has caused an increase in criminality within the county. Members asked that crime data continue to be monitored with updates supplied to the Highways and Waste Management Cabinet Panel. (Recommendation 2.1)

4.5 Representations from residents have been invited via the web and at the invitation from local members through the press since early June as part of the Scrutiny of the PNL project. As of 1st October 126 responses were received, as summarised below:

- 40 in support of PNL.
- 39 suggesting some modification to PNL (including one petition of over 100 signatures, led by Lucinda Carney, Red bourn).
- 47 against PNL.
- Two petitions objecting to PNL were received before June 2013 from Duncan Lewis of Welham Green with 921 signatories and Daniel Graham of Borehamwood with 1760 signatories. The latter now has 5562 signatories.

Members heard that the main comments contained in the emails and letters and raised on the telephone with the Head of Scrutiny are:

- Alter the timing of operation of PNL.
- PNL operation should be confined to every other column or multiples of columns.
- Introduce alternative technologies such as LED.

- Turn lights off on major roads and relight side streets.
- Fear of crime and night time safety.
- The night time economy.
- People leaving lights on/investing in security lights.
- Uneven pavements and edges of roads affecting cyclists and pedestrians.
- Unlit pathways with obstacles such as bins on them.
- Lack of parking close to home/poor parking.

This was reinforced by the evidence members heard at the meeting from Hertfordshire residents. In particular members noted that fear of crime was a recurring issue which is extremely difficult to address.

Members noted that a number of those who had written in concerning the scrutiny had identified as an issue the fact that lights at some railway stations were turned off before the last train had arrived and did not go back on until after trains had started running. This was also a concern to them. They therefore felt that lights at stations should only go off when the last train has arrived, not before. (Recommendation 2.2)

- 4.6 Members discussed possible changes to the current PNL arrangements. They were advised that altering the timing of operation of PNL would result in an increase in cost to implement, maintain and carbon charges and a reduction in savings. They heard that the implementation costs of re-programming the PNL cells will be approximately £1.8m (c £20-30 per column) with each ½ hour returned to lighting costing approximately £100k – £150k per annum in energy and maintenance costs, plus £10k - £15k carbon costs depending upon which ends of the night are adjusted. Confining the operation of PNL to every other column would also result in a 50% increase in energy, maintenance and carbon charges over and above the implemented project. In addition, there would be a cost of around £1.3m convert every other light from PNL to full night light. This operation would not provide the public with the clarity around what should and should not be PNL, which may well lead to an increase in abortive reports. Notwithstanding the above members concluded on the basis of the evidence they had heard that a number of changes should be made to the PNL policy namely:

- Greater local flexibility for members to make changes to lighting and operational hours egg around railway stations, at the end of cul-de-sacs, lighting issues arising from night time economy in particular towns etc.

- To pursue the original strategy to appropriately adjust the operating periods of lighting on main roads.
- To convert areas to part-night operation where crime levels are no longer high/where people do not go late at night e.g. industrial areas and some of the lamps on large lighting columns at roundabouts.
- To return to full lighting 'desire lines', those routes always used by pedestrians at night and consider part-night operation in roads in town centres that are not generally used by pedestrians late at night.
- Allowing members to use their locality budget to return some lamps to full lighting.

(Recommendation 2.2)

- 4.7 Members were advised that the interpretations of the exception criterion associated with remote footpaths resulted in some lighting columns being converted to part-night operation whilst other columns were left illuminated. Members welcomed the introduction of a clarification that any columns within 2m of a remote footpath (defined as 5m or more from an adjacent carriageway). This will enable local members to nominate those columns in close proximity to remote footpaths to be returned to full night lighting. (Recommendation 2.3)
- 4.8 Members discussed the use of alternative technologies which would give greater flexibility to PNL without reverting to full night lighting. They were reminded that in 2010 the use of alternative technologies such as Light Emitting Diode (LED), solar power or dimming (i.e. central management systems) had been considered as an alternative to, or a complement to PNL. However, the capital cost and reliability of these technologies at the time of the development of the PNL strategy was such that they did not provide a positive economic business case as an alternative to, or a complement to PNL. However since 2010 members heard that LED had become more competitive, with increased efficiency, long term reliability improving and revenue benefits to be set against the increasing cost of energy, meaning that in the future it could become a significant option for replacement lighting schemes. Members asked that relative costs of LED be monitored with a view to developing invest to save opportunities through the Integrated Planning process as soon as possible. (Recommendation 2.4)

5.0 Members and Witnesses

Members of the Topic Group

Caroline Clapper
Malcolm Cowan (Vice Chairman)
Tony Hunter
Anne Joynes
Ian Reay
Leon Reeve (Vice Chairman)
Peter Ruffles
Alan Searing (Chairman)
Sandy Walkington
Colin Woodward

Other Members in Attendance

David Andrews
Frances Button
Maureen Cook
Terry Douris
Stephen Giles-Medhurst
Fiona Hill
Michael Muir
Richard Smith
Jeanette Taylor

Witnesses

Suzanne Alford	Borehamwood Petition
Graham Beviss	Principal Engineer, Environment Dept
Simon Brown	Hertfordshire Fire and Rescue Service
Mark Burrows	PNL Project Manager
Karl Edwards	East of England Ambulance Service
Peter Hosking	Leicestershire County Council
Mike Rhead	Hertfordshire Police
Peter Simpson	Senior Asset Manager, Environment Dept

Officers

Tom Hawkyard	Head of Scrutiny
Deborah Jeffrey	Democratic Services Officer

OBJECTIVE: To review the implementation of part-night operating street lighting (PNL) across the county (installed June 2010-September 2011).	
QUESTIONS TO BE ADDRESSED: 1. Did the change to PNL deliver the benefits as intended? 2. What has been the impact of PNL changes on road safety? 3. What has been the impact of PNL changes on criminality and night time safety? 4. What alternatives are there to the current policy?	
OUTCOME: For Members to take a view as to whether PNL has been implemented effectively, in line with policy objectives.	
CONSTRAINTS: The review will not consider the implementation of PNL at specific locations, other than for illustrative purposes.	
EVIDENCE & WITNESSES:	
Peter Simpson	Manager, Asset Mgt
Graham Beviss (01992 658 284)	Road Safety Officer
Karl Edwards General Manager, Hertfordshire Simon Brown Area Commander, Community Protection Mike Rhead	E of E Ambulance Trust HFRS Hertfordshire Police
Petitioners and interested members of the public	
District Council representatives	TBA
METHOD: One day scrutiny	DATE: Tuesday 1 st October 2013
MEMBERSHIP: OSC	
SUPPORT: Scrutiny Officer: Tom Hawkyard Lead Officers: Peter Simpson Democratic Services Officer: Debbie Jeffries	
HCC Priorities for Action: how this item helps deliver the Priorities 1. Opportunity to get the best out of life <input type="checkbox"/> 2. Opportunity to share in Hertfordshire's strong economy <input type="checkbox"/> 3. Opportunity to be healthy and stay safe <input type="checkbox"/> 4. Opportunity to take part <input type="checkbox"/>	
CfPS ACCOUNTABILITY OBJECTIVES: 1. Transparent – opening up data, information and governance <input type="checkbox"/> 2. Inclusive – listening, understanding and changing <input type="checkbox"/> 3. Accountable – demonstrating credibility <input checked="" type="checkbox"/>	

