

HAMPSHIRE COUNTY COUNCIL

Decision Report

Decision Maker:	Executive Member for Economy, Transport and Environment
Date:	3 March 2015
Title:	Street Lighting
Reference:	6496
Report From:	Director of Economy, Transport and Environment

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1. Executive Summary

- 1.1. The purpose of this paper is to seek approval to implement further Variable Light Output (dimming) to street lighting units for 2015/16.
- 1.2. This paper additionally seeks to advise the Executive Member for Economy, Transport and Environment on the financial savings that can be realised from further dimming of street lights based upon current energy rates, and seeks approval to develop further proposals to adjust lighting levels so as to deliver carbon reductions, budgetary savings, and the appropriate night lighting level on residential streets.

2. Background

- 2.1. As part of the Core Investment Programme of the street lighting Private Finance Initiative (PFI), all street lighting units will be fitted with the Mayflower remote monitoring system. This enables the County Council to identify defective street lighting units and to control the light output from these units.
- 2.2. The replacement of all of the lighting units required under the Core Investment Programme will be completed on time by 31 March 2015. The roll out of the Remote Monitoring of these units will be completed by September 2015. At that time 141,100 street lights (inclusive of Parish and District Council owned units) will be under full dimming control. It is therefore now possible to consider a revised approach to dimming for all county council owned street lighting in Hampshire.
- 2.3. The street lighting units installed through the Core Investment Programme are more energy efficient than the units they replace, helping to reduce energy consumption and costs for the County Council. The original PFI

contract also required 25% dimming from midnight until 5AM as a further energy saving. The switch on/off times vary throughout the seasons.

- 2.4 This dimming level was varied in February 2012 to dim street lights by 25% from switch on until midnight, 50% from midnight until 5AM and then back to 25% until switch off. This is the 25/50/25 dimming level currently in operation for street lighting in Hampshire.
- 2.5 The only exception to this is for Cosmopolis light sources which can only be dimmed by a maximum of 40%. Cosmopolis light sources (approximately 18,000 units) are currently on a trial of 40% dimming from switch on until switch off. To date there have been very few negative comments regarding the existing dimming levels currently implemented, including the Cosmopolis light sources.
- 2.6 There are 9,800 street lights owned by District, Town and Parish Councils currently within the PFI contract. The maintenance and energy costs for these street lights are then re-charged to them. With the roll out of the Core Investment Programme, the installation of the remote monitoring system and the existing dimming levels, all councils have seen a much reduced cost in their respective energy charges. Should these local councils wish to participate in the further dimming schemes proposed in this report then they will see these charges reduced further.
- 2.7 It is proposed to adopt the current trial of all Cosmopolis light sources, dimming these at their maximum dimming capability (40%) from switch on until switch off.
- 2.8 The proposal for 2015/16 is to further increase the dimming levels on residential roads to 35/60/35. This will provide a step progression in dimming and allow further evaluation of a gradual dimming of lighting as part of considering opportunities for further energy savings in the future. This would be subject to a further formal decision in due course if this option is to be pursued.
- 2.9 The full, countywide dimming of street lighting will only be possible with the completion of the Core Investment Programme and installation of the Remote Monitoring system detailed in 2.2 above, which limits the scope to achieve these energy cost savings earlier.

3 Finance

- 3.1 The projected savings in energy for Cosmopolis light sources for the year 2015/16 based upon a revised dimming of 40% switch on till switch off is £10,000.
- 3.2 The projected saving in energy for the year 2015/16 based upon the revised dimming of 35/60/35 for residential roads is £50,000.

- 3.3 Were the County Council to seek savings in energy on the Principal Road network for the year 2015/16, based upon a revised dimming of 35/60/35 the estimated financial saving would constitute a further £50,000, but this has been rejected at this time pending an assessment of the road safety implications on these busier traffic routes

4 Recommendations

- 4.1 That the Executive Member for Economy, Transport and Environment approves the dimming level currently under trial for Cosmopolis light sources.
- 4.2 That the Executive Member for Economy, Transport and Environment approves the proposed dimming level of 35/60/35 for residential roads in Hampshire for 2015/16.

CORPORATE OR LEGAL INFORMATION:**Links to the Corporate Strategy**

Hampshire safer and more secure for all:	yes
Corporate Improvement plan link number (if appropriate):	
Maximising well-being:	yes
Corporate Improvement plan link number (if appropriate):	
Enhancing our quality of place:	yes
Corporate Improvement plan link number (if appropriate):	

Other Significant Links

Links to previous Member decisions:		
<u>Title</u> : Street Lighting Dimming Policy	<u>Reference</u> RPT/3754/ JP	<u>Date</u> 06/03/2012
Direct links to specific legislation or Government Directives		
<u>Title</u>	<u>Date</u>	

Section 100 D - Local Government Act 1972 - background documents

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

<u>Document</u>	<u>Location</u>
None	

IMPACT ASSESSMENTS:

1. Equality Duty

1.1. The County Council has a duty under Section 149 of the Equality Act 2010 ('the Act') to have due regard in the exercise of its functions to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited under the Act;
- Advance equality of opportunity between persons who share a relevant protected characteristic (age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, gender and sexual orientation) and those who do not share it;
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

Due regard in this context involves having due regard in particular to:

- a) The need to remove or minimise disadvantages suffered by persons sharing a relevant characteristic connected to that characteristic;
- b) Take steps to meet the needs of persons sharing a relevant protected characteristic different from the needs of persons who do not share it;
- c) Encourage persons sharing a relevant protected characteristic to participate in public life or in any other activity which participation by such persons is disproportionately low.

1.2 Equalities Impact Assessment:

The white light sources installed through the PFI core investment programme provide a more uniform light output that provides an effective level of lighting when dimmed compared with older light sources. Dimming street lighting may, however, have an impact on people with a visual impairment walking during the hours of darkness. The greatest reduction in light output in the dimming proposal is from midnight to 5 AM (60% reduction in light output compared with 50% currently), which could be expected in itself to limit the adverse impact on pedestrians. There may be individuals, for whom this would not be the case, but equally alternative energy cost saving measures like part-night lighting or switching off individual street lights within a lit area would potentially have a greater impact.

In addition, because a lower level of dimming will be applied from dusk to midnight and from 5am to dawn, a progression will be provided rather than a sudden drop in light that would be experienced with alternative energy cost saving measures like part-night lighting or switching off alternate lanterns.

Adopting a universal dimming regime would not preclude suitable adjustments to respond to specific issues. The benefit of our remote monitoring system is that we would be able to potentially increase the lighting output on specific routes if we had concerns raised with us about individuals adversely affected by dimming.

While there may be individuals or groups opposed to lower lighting levels, there will also be groups for whom darker skies will be more desirable. Proving a dimming regime of 35/60/35 (dusk to midnight/midnight to 5 AM/5AM to dawn), will balance the needs of these different groups more effectively than other options.

2. Impact on Crime and Disorder:

- 2.1. There is a general assumption that crime is more prevalent in areas where there is less street lighting, but this is not reflected in crime statistics suggesting that it is the fear of crime that increases rather than crime itself. Dimming street lighting will enable the County Council to achieve energy cost savings and reduce carbon emissions without switching off street lights for part of the night, as is done in a number of authority areas, or switching off individual street lights within a lit area, both of which would create lower light levels. While reducing lighting levels is not anticipated to increase crime, dimming street lighting in the way proposed will potentially have a lower impact on the fear of crime than alternative options for energy saving.

3. Climate Change:

- 3.1 How does what is being proposed impact on our carbon footprint/energy consumption?

The proposed dimming schemes will further reduce the energy consumption and therefore the carbon footprint of the County Council.

- 3.2 How does what is being proposed consider the need to adapt to climate change, and be resilient to its longer term impacts?

This proposal is adapting to climate change by reducing the amount of CO₂ used in energy consumption.