

## HAMPSHIRE COUNTY COUNCIL

### Decision Report

<b>Decision Maker:</b>	Executive Member for Economy, Transport and Environment
<b>Date:</b>	21 March 2016
<b>Title:</b>	Street Lighting Dimming Policy Review
<b>Reference:</b>	7286
<b>Report From:</b>	Director of Economy, Transport and Environment

**Contact name:** Adrian Gray

**Tel:** 01962 846892

**Email:** [adrian.gray@hants.gov.uk](mailto:adrian.gray@hants.gov.uk)

#### 1. Executive Summary

- 1.1. The purpose of this report is to seek approval to implement further Variable Light Output (dimming) to street lighting units on residential roads for 2016/17.
- 1.2. This report also seeks approval to delegate authority to the Director of Economy, Transport and Environment, in consultation with the Executive Member for Economy, Transport and Environment, to agree future variations to dimming street lighting units on all roads in Hampshire.

#### 2. Contextual information

- 2.1. As part of the Core Investment Programme of the street lighting Private Finance Initiative (PFI), all street lighting units are 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. A total of 141,800 street lights (inclusive of Parish and District Council owned units) will be under full dimming control. It is therefore possible to vary the 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 replaced, helping to reduce energy consumption and costs for the County Council. The original PFI contract also required 25% dimming from midnight until 5 a.m. 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 5 a.m. and then back to 25% until switch off.

- 2.5. Approval was given in March 2015 to further increase dimming levels on residential roads to 35/60/35. This is the 35/60/35 dimming level currently in operation for street lighting in Hampshire.
- 2.6. 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 subject to 40% dimming from switch on until switch off.
- 2.7. There are 10,000 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.
- 2.8. The proposal for 2016/17 is to further increase the dimming levels on residential roads to 45/65/45.
- 2.9. Dimming street lights was identified as a preferred way for the County Council to make savings in the Shaping Hampshire Spending Review consultation (carried out between 26 May and 6 July 2015). This opportunity was subject to a second stage of consultation in November 2015 when the following additional savings options were offered:
  - further dimming of lights in urban and rural areas to achieve up to a 10% reduction in power;
  - further dimming of lights in urban and rural areas to achieve up to a 20% reduction in power;
  - longer hours for street light dimming, and
  - turning off street lights between certain hours.
- 2.10. Dimming all street lights to achieve up to a 20% reduction in power was the most favoured option. The proposals in 2.8 above to implement further dimming to street lighting units on residential roads would achieve up to a 10% reduction in power. Further work is required to develop plans to increase dimming on residential roads for example to 55/65/55, and to extend dimming to principal roads where a lesser dimming is currently operating.

### **3. Finance**

- 3.1. The projected saving in energy for the year 2016/17 based upon the revised dimming of 45/65/45 for residential roads is £116,618.
- 3.2. The full value of the savings may not be achieved due to the need to make local adjustments in response to individuals adversely affected by dimming changes.

#### **4. Recommendations**

- 4.1. That the Executive Member for Economy, Transport and Environment approves the policy of achieving energy cost savings through increased dimming in preference to switching street light units off.
- 4.2. That the Executive Member for Economy, Transport and Environment approves the implementation of further Variable Light Output (dimming) to street lighting units from 1 April 2016 to dim street lights on residential roads by 45% from switch on until midnight, 65% from midnight until 5 a.m. and then back to 45% until switch off.
- 4.3. That authority be delegated to the Director of Economy, Transport and Environment, in consultation with the Executive Member for Economy, Transport and Environment, to agree future variations to dimming street lighting units from 2017 onwards to achieve up to 20% energy cost savings.

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

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

**Other Significant Links**

<b>Links to previous Member decisions:</b>		
<u>Title</u>	<u>Reference</u>	<u>Date</u>
Street Lighting Dimming Policy	RPT/3754/ JP	06/03/2012
Street Lighting – Executive Member for Economy, Transport and Environment	6496	03/03/2015
<b>Direct links to specific legislation or Government Directives</b>		
<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:**

Dimming street lighting may 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 (65% reduction in light output compared with 60% 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.

A lower level of dimming will be applied from dusk to midnight and from 5am to dawn, providing a progression 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 the County Council's remote monitoring system is that it potentially enables an increase in the lighting output on specific routes if concerns are raised about individuals adversely affected by dimming.

## **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 CO<sub>2</sub> used in energy consumption.