
Meeting: Sustainable Communities OSC

Date: 4th August 2009

Subject: Strategy for managing Highways Lighting

Report of: Director of Sustainable Communities

Summary: Central Bedfordshire is responsible for the upkeep of approximately 21,000 street lights. Whilst street lighting is expensive to maintain and environmentally damaging, it has the benefit of reducing road accidents, as well as helping to address issues related to fear of crime. Also, the Council has a general duty of care to road users and the general public to ensure their safety, but in common with many local authorities in England, our highways capital allocation from Central Government is insufficient to allow the Council to maintain the value of its existing highways assets over the long term. A street lighting strategy has therefore been developed which aims to provide the level of service that people expect in a sustainable way. The Committee's views on the framework of this strategy, and a more detailed report on the proposed strategy is attached as Appendix A.

Contact Officer: Basil Jackson – Assistant Director Highways and Transport

Public/Exempt: Public

Wards Affected: All

Function of: Sustainable Communities Overview & Scrutiny Committee

Key Decision No

Reason for urgency/
Exemption from call-in
(if appropriate) N/A

RECOMMENDATIONS:

1. That members comment on the proposed strategy for the provision, maintenance and renewal of street lighting.

Reason for Recommendations: So that best value may be obtained from the highways capital allocation for street lighting

Street Lighting strategy

1. There are over 21,000 lighting units in Central Bedfordshire which need to be replaced after between 25 and 40 years in service. About 60% of the existing stock is over 20 years old and the cost of replacing it over the next 20 years requires a capital investment of £20m. In January 2009 the Executive approved an increased capital budget allocation for 2009/10 – 2012/13. In addition, new developments are increasing the lighting stock without any corresponding increase in available maintenance budgets. It is therefore proposed to introduce a sustainable strategy for the provision, maintenance and renewal of street lighting aimed at improving value for money, which will then be incorporated into the forthcoming Highway Design Guide for new developments. (A more detailed summary of the proposed lighting strategy is at Appendix A)

2. The proposed strategy will:
 - 2.1 Save on lighting energy costs by:
 - 2.1.1 dimming street lighting between 23.00 and 06.00 on all traffic routes and also during the remaining lit hours, depending on the nature of the trafficked route;
 - 2.1.2 trimming street lighting by reducing burning hours (coming on 10 to 20 minutes later and similarly turning off earlier);
 - 2.1.3 turn off street lights for part of the night, say 24.00 to 06.00, where supported by the local community and partner organisations;
 - 2.1.4 replace lanterns with white light varieties in residential areas which will allow energy consumption and luminance levels to be reduced;
 - 2.1.5 remove illumination on signs and bollards where new standards allow; and
 - 2.1.6 trial the use of LED lanterns.

 - 2.2 Reduce the cost of capital renewals by adopting new local street lighting standards aimed at reducing the luminance levels, and therefore the number of lighting columns, in streets where it is safe to do so. This involves the development of new local lighting standards to:
 - 2.2.1 provide varying lighting levels and light sources dependant on environmental zone, road hierarchy, accident statistics and crime map; and
 - 2.2.2 greater use of white light lamps which allows a lower luminance level for the same degree of visibility

 - 2.3 Apply similar reduced street lighting standards to new developments through the planning approvals process to reduce future energy, maintenance and renewal liabilities.

 - 2.4 Minimum estimated annualised revenue savings for 2009/10 are £20,000 in electricity charges and £10,000 in maintenance costs.

- 2.5 In 2009/10 it is proposed to replace approximately 1,600 columns/lanterns with a similar number in the next 3 years. This represents about 8% of the Authorities stock per annum. Assuming a minimum reduction in energy consumption of 50% per new lantern, it is expected that the street lighting energy consumption will be reduced by a minimum of 4% per annum. In June 2009, the Authorities CBMT received a report on climate change, which identified the need to reduce energy consumption to meet the Authorities Carbon Reduction Commitment (CRC). Street lighting accounts for about 15% of the Authorities CO₂ emissions. From April 2010 onwards it is estimated the Authority will incur £45,000 per annum to pay for CRC allowances, thus 4% reduction in CO₂ emissions equates to an annual saving of £1,800 per annum.
- 3 Reducing or removing levels of lighting has the potential to create an environment where crime and disorder or fear of crime can increase. To ensure that only areas which are suitable for lower lighting levels are selected as part of the strategy, it is proposed that consultation both internally within Central Bedfordshire Council and externally with partner organisations will take place.
- 4 The proposals will be piloted at 2 sites, one in Flitwick and one in Dunstable. In Flitwick the pilot will involve the replacement of 196 existing lighting units with LED white light units with full electronic control to allow dimming, trimming and part lighting. It will also involve the removal of sign and bollard lighting where possible and in other cases replacement of sign lighting with LED units. In Dunstable a similar pilot will be conducted with the replacement of 119 existing lighting units. The pilots are timetabled to commence in Flitwick during August and September in Dunstable with works completed by November.

CORPORATE IMPLICATIONS

Council Priorities:

The strategy will contribute towards the following Council priorities:

- Restraining council tax through value for money
- Managing growth effectively

Financial:

For an initial capital outlay in 2009/10 of **£2,200,000**, the strategy detailed in this report would save the Authority **£20,000** per annum in electricity and a further **£10,000** in maintenance costs. Members should note that there is sufficient funding allocated in the capital programme deliver the 2009/10 proposals.

Legal:

There is no statutory requirement for a Highway Authority to illuminate the highway; however Central Bedfordshire as Highway Authority has a duty under the Electrical Wiring Regulations BS7671 17th Edition to safely maintain existing lighting. Under section 17 of the Crime and Disorder Act the Council has a statutory requirement to take all reasonable measures to prevent crime and disorder.

Risk Management:

The Authority has a duty of care and should ensure new lighting is provided in compliance with BS5489 (EN13201-1) whilst ensuring that existing lighting is maintained according with our duties under the Section 41 of the Highways Act.

Staffing (including Trades Unions):

None

Equalities/Human Rights:

None

Community Development/Safety:

Provision of good quality street lighting provides the local community with an increased sense of security and confidence. Well lit areas also have lower levels of crime and lower levels of the fear of crime, a major factor in community safety. Reducing or removing lighting has the potential to increase crime and disorder or fear of crime. Reduced levels of lighting can also have an adverse effect on the effectiveness of public space surveillance including the operation of CCTV.

Sustainability:

On June 10th CMBT received a report "Tackling the climate change agenda: key actions for 2009/10". The proposals will assist in meeting the Authorities Carbon Reduction Commitment (CRC) by reducing CO₂ emissions by **0.5%** for each year of implementation and reducing the Authorities CRC costs by **£1,800** for each year of implementation.

Appendices:

Appendix A – Lighting Report July 2009

Background Papers (open to public inspection):

None

Location of papers: Priory House, Chicksands