Overview and Scrutiny Report

Street Lighting Review Part Night Switch Off March 2014



1. Executive Summary

- 1.1 A sub-group of the Environment and Culture Sub-Committee was established in June 2013 to explore the different options for street lighting with a view of reducing energy consumption and to achieve efficiency savings. Due to the time constraints the sub-group did not have time to investigate in detail whether part night switch off was a viable option for some non residential areas of the borough but did agreed that this was something that should be considered as a longer term savings option. On completion of the review the sub-group presented their findings and recommendations to Cabinet at its meeting on 13 January 2014. Following this Cabinet asked the sub-group to reconvene and to work with officers to investigate the options available for part night switch off.
- 1.2 The Street Lighting Sub-group reconvened and held two meeting with officers of the Council to gather evidence and discuss the options for part night switch off in order to help them formulate recommendations.
- 1.3 The sub-group considered a scheme which had been designed in July 2012, this listed potential non-residential areas for part night switch off. Officers were asked to review the list and include any new areas which would be suitable. A revised scheme was presented to the sub-group which increased the number of lamps for part night switch off from 2,600 to 3,200 lighting columns, the sub-group were informed that if these were switched off between midnight and 5.30am it would create estimated savings of £140,000 and a reduction of 739 tonnes of CO2.
- 1.4 The sub-group also explored the options on how part night switch off could be facilitated and after consideration preferred the option of extending the Mayflower Central Management System (CMS). Although there were costs associated with extending the Mayflower CMS, Members concluded that the benefits outweighed the cost in terms of the system being safer and fully flexible, also that a substantial amount of the cost required to extend the system would be covered by the first year's efficiency savings.
- 1.5 In total the sub-group made two recommendations in support of trialling part night switch off in the non-residential areas listed in the revised scheme.

2. Recommendations

- 2.1 In accordance with Section 21B of the Local Government Act 2000, Cabinet are required to provide a response to the recommendations of the Overview and Scrutiny Committee within two months. In providing this response Cabinet are asked to state whether or not it accepts each recommendations and the reasons for this decision. Cabinet must also indicate what action, if any, it proposes to take.
 - R1: That Cabinet considers implementing a trial of part night switch off between midnight and 5.30am in the non-residential areas listed in the revised scheme attached at Appendix B and that this is facilitated through extending the Mayflower Central Management System to these areas.
 - R2: That Cabinet ask the Senior Manager of Commercial Partnerships to seek feedback from residents and local businesses once the part night switch off trial has been in operation for three months.

3. Background to the study

- 3.1 A sub-group of the Environment and Culture Sub-committee was established in June 2013 to explore the different options for street lighting with a view of reducing energy consumption and to achieve efficiency savings. On completion of the review the sub-group presented their findings and four recommendations to Cabinet at its meeting on 13 January 2014. After consideration Cabinet accepted all four recommendations, these recommendations and the associated actions can be found at Appendix A.
- 3.2 Given the tight timescale for the initial review, the sub-group did not have enough time to investigate in detail whether part night switch off was a viable option for selected non-residential areas of the borough, but did agree that this was something that should be considered as a longer term option. The sub-group recommended that Cabinet give further consideration to the option of part night switch off in non-residential areas (recommendation 4 in the original report). Cabinet responded by asking the sub-group to reconvene and to work with officers to investigate the options available for part night switch off and then report back to Cabinet with their findings and recommendations.
- 3.3 A reconvened sub-group of the Environment and Culture Sub-committee was established to carry out the study. Members of the sub-group included:

Cllr Brian Burdis Cllr Gary Bell Cllr Cath Davis Cllr David Ord 3.4 The reconvened sub-group met with Andrew Gate, Senior Manager for Commercial Partnerships and Vicky Taylor, Major Contracts Officer on two occasions, 26 February 2014 and 13 March 2014.

4. Findings and recommendations

- 4.1 The sub-group were informed that in July 2012 a scheme had been designed which would have led to part night switch off between midnight and 5.30am of 2,600 lights on paths and roads in non-residential areas of the borough. This would have created estimated savings of £93,000 per annum and a reduction of 530 tonnes of CO₂. If the same scheme was implemented now, due to energy price rises, the savings would increase to an estimate of £103,000 per annum (based on 10p pkWh).
- 4.2 The sub-group spent some time considering the proposed list of paths and roads in the original scheme and asked officers if there was any potential to expand the list to include other areas. Officers agreed to review the list and presented a revised scheme to the sub-group at their meeting on the 13 March 2014. The revised scheme increased the number of lamps for part night switch off from 2,600 to 3,200 lighting columns, and if these were switched off between midnight and 5.30am would create estimated savings of £140,000 and a reduction of 739 tonnes of CO₂. Details of the revised scheme for part night switch off are attached at Appendix B.
- 4.3 Faced with the same challenges to save money and reduce CO2, the subgroup were informed that many other local authorities across the UK have trialled and successfully implemented part night switch off.
- 4.4 Officers re-assured the sub-group that the paths and roads in the scheme had been selected because they had been identified as low risk and located in non-residential areas, and that there would continue to be high quality lighting in residential areas.
- 4,5 The sub-group were informed that currently there was lack of research into the long term impact of part night switch-off on crime and road safety, however were made aware that a trial had been running on the A189 dual carriageway since May 2012 where lights had been turned off between midnight and 5.30am and to date there hadn't been an increase in road accidents.
- 4.6 In relation to crime, some local authorities have reported a reduction in crime since turning off street lights this includes Bristol and parts of Essex. There is also some belief that switching off lights on footpaths improves personal safety as people are encouraged to walk along routes with better lighting.
- 4.7 The sub-group learnt that officers had met with Northumbria Police in April 2012 to discuss the initial scheme for part night switch off. The Police were supportive and had no objections to the proposed areas for part night switch off with the expectation of the Tyne Tunnel Trading Estate area where they suggested some minor amendments. The Police also fully supported the part

night trial on the A189 dual carriageway. Officers have recently consulted the Police on the revised scheme who are broadly supportive of this provided that it is Mayflower controlled so they can instruct the Council to leave lighting on in any areas covered by the scheme that they fear may become crime hot spots or in response to road traffic accidents. The Police are analysing the list of roads and footpaths in detail and will come back to the Council with any requested amendments to the revised scheme that they would like to see. In discussion with officers they indicated for example some of the industrial estates could be targeted by burglars if the lights were part night switched off.

- 4.8 As stated in the original street lighting report (October 2013) a number of consultation exercises has taken place with local residents regarding street lighting. This includes a recent survey of 300 residents following a two week trial of dimming and trimming in the Weetslade area. Although this consultation was not specifically in relation to part night switch off, residents were generally in support of dimming street lights to reduce energy consumption.
- 4.9 Regarding the implementation of part night switch off the sub-group considered two options, these were:
 - 1. To extend the Mayflower Central Management System (CMS) which is currently being implemented in residential areas in the borough, to include the additional lighting columns selected for part night switch off. Based on the revised scheme of switching off 3,200 lighting columns, the cost for this would be around £50.00 per column which equates to £160,000. This cost would work out at slightly more than the first year's savings of £140,000. The advantages of extending the Mayflower system is that it would give full flexibility and would be safer, for example if there were any particular concerns from residents or an incident in a particular area the lighting columns could be turned on immediately. It would also give more opportunity to extend the scheme and switch off lights in other areas at a later date.
 - 2. To manually adjust all lighting columns so that they would go off and on at agreed times. This would be provided free of charge by Scottish and Southern Energy Contracts (SSEC) however wouldn't be part of the Mayflower CMS. This wouldn't offer any flexibility and if the lights needed to be turned back on this could take a few days and would not meet with approval from the Police.
- 4.10 Following consideration of part night switch off and the potential energy and cost savings, the sub-group were in support of a trial in the non-residential areas listed in the revised scheme to be facilitated through the extension of the Mayflower CMS. Although there is associated costs with extending the Mayflower CMS, Members concluded that the benefits outweighed the cost in terms of the system being safer and fully flexible, also that a substantial amount of the cost required to extend the system would be covered by the first years efficiency savings.

- R1: That Cabinet considers implementing a trial of part night switch off between midnight and 5.30am in the non-residential areas listed in the revised scheme attached at Appendix B and that this is facilitated through extending the Mayflower Central Management System to these areas.
- 4.11 The sub-group welcomed the positive feedback following the trial of dimming and trimming in the Weetslade area and suggested that once part night switch off has been in operation for three months that wider feedback is requested from residents and local businesses via the Council's website.
 - R2: That Cabinet ask the Senior Manager of Commercial Partnerships to seek feedback from residents and local businesses once the part night switch off trial has been in operation for three months.

5. Background Information

The following documents have been used in the compilation of this report and may be inspected at the offices of the author:

Overview and Scrutiny Report - Street Lighting Review (October 2013)
Cabinet response to Street Lighting Review
Part night switch off revised scheme (March 2014)
Ward maps which highlights part night switch off areas (March 2014)

6. Acknowledgements

6.1 The sub-group would like to place on record their thanks to the following officers for the information, support and advice they have provided:

Andrew Gate – Senior Manager for Commercial Partnerships Vicky Taylor - Major Contracts Officer Sharon Ranadé – Scrutiny Advisor

7. Appendices

Appendix A – Cabinet response to Street Lighting Review Appendix B – Part night switch off revised scheme