

SCRUTINY COMMISSION – 1 FEBRUARY 2012

ENERGY REDUCTION FOR STREET LIGHTING PROJECT - UPDATE

REPORT OF THE DIRECTOR OF ENVIRONMENT AND TRANSPORT

Purpose of Report

1. To update Members on the progress made to date with the Energy Reduction for Street Lighting Project, referred to in this report as “the project”.

Policy Framework and Previous Decisions

2. The project was approved by Cabinet at its meeting on 15th December 2009, with a roll-out expected to take 4 years from May 2010.

Progress to Date

3. The project contains 3 strands of work – switching off lighting permanently, dimming of lighting on main routes and the introduction of part-night lighting. All 3 strands would be rolled out as far as risk assessments allow.
4. The permanent switching off of lighting delivers the greatest saving. A desk-top review of all traffic routes was undertaken to identify those routes which were believed to be suitable for switching off lighting prior to risk assessments being undertaken. These risk assessments involved a detailed survey of the site; looking at the highway implications of switching off the lighting, particularly considering road alignment and undulations and other highway hazards, as well as considering traffic signs, lines and road marking studs. In addition, consultation was undertaken with all emergency services, the Leicestershire County Council accident unit and highways offices.
5. As a result of these risk assessments 852 (mainly high powered) street lights on main routes have been permanently switched off with the majority of works occurring on site between January and March 2011. Full 12-month accident data is not yet available, but the accident unit reports that there has been no discernable increase in traffic accidents. The limited number of 12-month reviews that have been undertaken have revealed no injury accidents at those sites since the lights were permanently switched off. The remaining 12 month reviews will be undertaken in due course. A further 63 street lights have been identified for switching off, but this work has been placed on hold until a new road marking layout has been introduced at the site.

6. Dimming of street lighting is only a viable proposition for high wattage lamps due to the costs involved in installing the dimming apparatus and the return achieved. Again, a desk top review of the main routes between urban areas was undertaken prior to detailed risk assessments being completed. Where these risk assessments determined that the street lights needed to remain lit all night, dimming has been introduced, where appropriate. In parallel to the risk assessments being undertaken, the accident unit also reviewed traffic flow and accident data and determined that dimming could commence at 19.00 hrs until 07.00 hrs rather than the 22.00 hrs to 07.00 hrs originally proposed. A trial site was installed on the A511 Birch Tree Roundabout near Coalville in the autumn of 2010. Night inspections were undertaken with a senior representative of the Police Traffic Division who was content that the reduced levels of lighting did not present a risk to highway users considering the reduced traffic flows during the dimming period. The change in dimming times was agreed by the project board and, by March 2011, 835 of our most powerful street lights had been dimmed. Further dimming will be considered within the major towns as part of the risk assessment process for these towns.
7. Part-night lighting is being rolled out across the County as far as risk assessments allow. The risk assessment process also includes consultations with the parish or town councils as well as the authority's accident unit, all the emergency services and the local County Council Member. Of the 68,000 street lights in Leicestershire, approximately 28,000 risk assessments have been undertaken with nearly 19,000 lights being identified as suitable for part-night lighting (approx 67%). Approximately 13,500 conversions have been undertaken on site to date. Appendix A is a map indicating those parish areas where the lighting has been converted to part-night lighting (in green) and those which are either under consultation or waiting for works to be completed (in yellow).
8. As well as works being completed in many villages, the market towns of Melton, Shepshed and Lutterworth have also been converted to part-night lighting this financial year. Work crews are currently converting the lighting to part-night lighting within Ashby-de-la-Zouch and Market Harborough with works planned to be completed this financial year. Further risk assessments and site works will be undertaken over the next 2 years to complete the project.

Resource Implications

9. The project is an "invest to save" project. The project has been funded to date by a combination of Regional Improvement and Efficiency Partnership (RIEP) funding and County Council funding. During 2010/11, the allocated capital funding was £535,000 of which £215,000 was obtained from the RIEP for the dimming element of the project. Actual spend was £533,000. During 2011/12, the allocated capital allocation is £325,000 with £227,000 spent by the end of December 2011. .

10. The cumulative financial energy savings achieved by December 2011 are £185,000. The work already completed will deliver cumulative energy savings estimated to be £259,000 by the end of March 2012, a figure expected to rise to £270,000 with the completion of the ongoing works. The full year impact of all work completed by March 2011 will deliver savings of £330,000 per annum going forward.

Background Papers

Report to Cabinet at its meeting on 15th December 2009 entitled Energy Reduction for Street Lighting

Report of the Scrutiny Review Panel on Street Lighting – Management and Maintenance of Street Lighting, to Cabinet on 8th May 2007.

Circulation under the Local Issues Alert Procedure

None.

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List of Appendices

Appendix A - map indicating those parish areas where the lighting has been converted to part-night lighting (in green) and those which are either under consultation or waiting for works to be completed (in yellow).

Equal Opportunities Implications

None

Crime and Disorder Implications

County Council staff have developed close working relationships with the Police through this project. The Police comment upon all initial consultations and also co-ordinate the response from the other emergency services. Detailed crime statistical analysis has not been undertaken across all the areas of the initiative, but the Police do believe that there has not been a general increase in overnight crime as a result of this initiative. Force Neighbourhood Teams are assessing any impact that the part-time lighting scheme may have had on their communities. To date, no discernible rise in crime, anti-social behaviour or collisions has come to light. In Quorn, the first area to have part-night lighting introduced, a detailed analysis by the Police showed that crime fell 5.1% between April 2010 and March 2011 compared to previous years. Sergeant Andy Moscrop stated that, "It's going in the right direction. It would suggest that

the issues over the lighting are not having an affect at all. Monitoring in Quorn and other sites by the Force will continue and any issues raised by residents will be brought to the attention of Leicestershire County Council”.

Experience in Leicestershire is being mirroring around the Country. An article in the Sunday Mirror dated 27th November 2011 about the effects of part-night lighting on crime in which Gloucestershire has seen a reduction in crime at its part-night sites. For the Gloucestershire article please see:

<http://www.mirror.co.uk/news/top-stories/2011/11/27/night-time-break-ins-fall-as-street-lights-go-out-115875-23590316/>

In one specific location, overnight crime did increase following the introduction of part-night lighting in a village over the winter of 2010/11. Crimes were committed by a person gaining entry into properties via unlocked back doors overnight. The Police arrested the person concerned and no wholesale changes were made to the part-night lighting in the area concerned. Further crime analysis in the area concerned after the arrest showed that crime during the period April to July 2011 (with the part-night lighting) was lower than April to July 2010, when the lights were lit all night.

Environmental Impact

The full-year effect of the works undertaken to date will result in carbon savings estimated to be 1141 tonnes per year. On completion, the project hopes to save 3000 tonnes of carbon per year. Compliments have also been received from astronomers, both regionally and worldwide, expressing pleasure at the lead Leicestershire is taking on reducing light pollution for the benefit of all.