
Safe and Sensible Street Lighting - Update

To: Sevenoaks Joint Transportation Board, 8th December 2015

Main Portfolio Area: Highways, Transportation & Waste

By: Robert Clark

Classification: **For Recommendation**

Ward:

Division:

Summary: This report provides an update to Members about Phase 1 of the SSSL project – Trial switch off

1.0 Introduction and Background

- 1.1 In August 2013, following a Member decision in 2011, the County Council began implementing its Safe & Sensible Street Lighting (SSSL) project to reduce the costs of providing street lighting across the County.
- 1.2 SSSL comprised two phases:

Phase 1 – Trial switch off of surplus lights;
Phase 2 – Conversion of approximately 60,000 lights to part-night operation.
- 1.3 Details of the sites to be included in the trial switch off (Phase 1), and the proposed hours of switch off and the exclusion criteria for Phase 2, were reported to Members at the Spring 2013 cycle of JTB meetings.
- 1.4 For the trial switch off sites, Members were invited at those JTB meetings to provide any information that should be considered when making the final decision on whether to proceed with the trial. This resulted in some lights being excluded from the trial and some others being amended from a full switch off to being included in Phase 2 – part night lighting.
- 1.5 For Phase 2, Members were asked to comment on the proposed hours of switch off which were 12.00 midnight to 05.30am Greenwich Mean Time (GMT) and 01.00 to 06.30 British Summer Time (BST). Members generally agreed with the proposals for Phase 2.
- 1.6 Both Phases of SSSL were largely completed by autumn 2014 and are currently saving around £1m each year.
- 1.7 This report provides Members with an update on Phase 1 of SSSL.
- 1.8 This report does not include any details about Phase 2 – Part night lighting, as a public consultation with regard to street lighting operation ends on 29th November 2015, with a decision anticipated to be made in early 2016.

2.0 Phase 1 – Trial Switch Off

Selection of sites

- 2.1 The sites selected for inclusion in the trial switch off were those where street lighting is present; however, if these roads were being designed and built today, it is most unlikely that street lighting would be provided.
- 2.2 The purpose of the trial switch off was to establish if there would be any adverse impact on a site if the lights were switched off completely. If it was found that there was no adverse impact, it would be the County Council's intention to consider these lights for removal.
- 2.3 When originally presented to Members at the Spring 2013 JTB meetings approximately 133 sites across Kent totalling around 2500 lights were identified as being potentially suitable for inclusion in the trial switch off. In the Sevenoaks district, the sites identified were:

Wheatsheaf Hill, Halstead
Polhill/London Road
Morants Court Road, Dunton Green
A20 Maidstone Road, Swanley
London Road, West Kingsdown
Farningham Hill Road, Farningham
Tonbridge Road, Sevenoaks
Goldsel Road, Crockenhill
Top Dartford Road, Hextable
Otford Road, Sevenoaks
Orpington Bypass
Button Street, Swanley
Ash Road, Ash

These sites are shown on the plan included at Appendix A.

- 2.4 At the JTB meeting Members were invited to consider three options for each site. The options were:
- a) The site should be included in the trial switch off.
 - b) The site should be excluded from the trial but the lights converted to part-night operation
 - c) The site should be withdrawn from the trial switch off and the lights left to operate without change.
- 2.5 Information provided by Members at the JTB meeting was later considered together with other factors such as crime and road safety. A recommendation was then made to the Director of Highways, Transportation & Waste, who made the final decision on whether to include each site within the trial.
- 2.6 As a result of this process, the following sites were included in the trial switch-off:

Wheatsheaf Hill, Halstead
Polhill/London Road
Morants Court Road, Dunton Green
A20 Maidstone Road, Swanley
London Road, West Kingsdown
Farningham Hill Road, Farningham
Tonbridge Road, Sevenoaks
Goldsel Road, Crockenhill

In addition, Top Dartford Road, Hextable, was identified as suitable for part-night operation.

The remaining sites were excluded from the trial switch off:

Otford Road, Sevenoaks
Orpington Bypass
Button Street, Swanley
Ash Road, Ash

- 2.7 In respect of sites in other districts in the county the JTB meetings and decision making process resulted in the original 2500 lights being reduced to around 1200 lights that were actually switched off for a trial period.

Mitigation works

- 2.8 A key aspect of the trial switch off was to ensure the absence of lighting did not create an unsafe situation.
- 2.9 Prior to switching any street lights off, each site was inspected to establish the condition of the site and identify the need for any works to be undertaken to ensure that the safety of the site was not affected. The works required were generally found to be carriageway markings, cleaning signs, and for some sites installing reflective road studs.
- 2.10 An additional safeguard that was included in these mitigation works was that strips of reflective material were fixed to individual street lights so they would be picked up by car headlights alerting drivers to the presence of the columns.
- 2.11 All mitigation works were undertaken before any street lights were switched off.

Date of switch off

- 2.12 The date that each site in the Sevenoaks district was switched off is shown in the tables within paragraph 2.29 below.
- 2.13 On the date of the switch off, information signs with a contact telephone number were erected at each site.

Monitoring during the switch off period

- 2.14 Throughout the period of the trial switch off, the sites were monitored for any adverse impacts that may have been due to the absence of street lighting. The monitoring included:
- a) Liaising regularly with Kent Police in respect of criminal activity.
 - b) Reviewing any Road Traffic Collisions (RTCs) that occurred.
 - c) Reviewing information received from others e.g. Members, the public, Parish and Town Councils, Emergency Services.
- 2.15 If any adverse impact was identified, then following consultation with the Cabinet Member, the street lights were switched back on.
- 2.16 Within the Sevenoaks district two sites experienced some adverse impact. At both Goldsel Road and Tonbridge Road surveys indicated regular use by pedestrians during the mornings and evenings. In response to this, all lights in Goldsel Road and some of those in Tonbridge Road were switched back on and converted to part night operation to provide lighting during these times.

Feedback received

- 2.17 Following the switch off, a number of enquiries about the trial were received. Most enquiries were received within a few weeks of the date of the switch off and have generally declined in number and frequency since then.

- 2.18 The enquiries were generally from customers who felt that the safety of the road would be reduced without lighting.
- 2.19 Each enquiry was considered and investigated when it was received and a response provided at the time. All enquiries received were considered again as part of the review of the trial switch off.
- 2.20 The number of enquiries received and the date of the most recent enquiry are included in the tables within paragraph 2.29 below.

Review of the trial

- 2.21 Each of the trial switch off sites was reviewed, with the following factors being considered:
- a) Enquiries received
 - b) Feedback from Kent Police on crime
 - c) RTCs occurring during the trial switch off
 - d) Future requirements for street lights at the site.

Financial implications

- 2.22 The objective of SSSL as a whole is to reduce the cost to the County Council of providing street lighting, the savings being made principally from reduced energy consumption and reduced carbon emissions. In preparation for the LED conversion rollout, there are two additional savings that can be realised from the trial switch off sites: future maintenance costs would be eliminated, and the installation costs of new LED lanterns would be avoided.
- 2.23 In order to assess the financial implications of this element of the project a comparison was made between the cost of removing the lights and the cost of retaining the lights.
- 2.24 The cost to remove a light is principally dependent on the nature of the road in which it is located and the extent of traffic management required. In all other respects the works involved are the same regardless of the location and would include disconnection, removal and disposal of the equipment and reinstatement of the highway surface.
- 2.25 The cost of retaining the light was assessed over a period of 15 years as this coincides with the duration of the forthcoming new Street Lighting Term Services Contract.. The costs of retaining the light included installation of a new LED luminaire, replacement of the column if this is likely to be needed within 15 years, energy costs and routine electrical and structural testing.
- 2.26 The comparison of costs shows that the costs of removal are lower than retaining a light over this period of time. A longer period would further increase the cost of retaining the light. Additionally if at some stage it was decided that the lights are no longer required the cost of removal would still be incurred.
- 2.27 Funds have been specifically allocated for the removal of lights associated with the trial switch off and are currently available. If the lights are to be retained the availability of this funding in the future is not certain.
- 2.28 The cost of each of these options is included in the tables within paragraph 2.29 below.

Summary of review, financial implications and recommendations for each site

- 2.29 The findings of the review are summarised in the tables below, together with conclusions and recommendations for each site.

Site	Wheatsheaf Hill, Halstead
Number of lights	6
Date of switch off	27/06/2014
Number of enquiries received	0
Date of most recent enquiry	-
Number of incidents of crime or ASB occurring in the year preceding the trial switch off	0
Number of incidents of crime or ASB occurring in the year following the trial switch off	0
Number and severity of RTCs occurring in darkness during the trial switch off	0
Remarks relating to RTCs	-
Feedback from Development Team	No concerns raised.
Feedback from Operations Team	No concerns raised.
Cost to remove	£3,000
Cost to retain and operate for 15 years	£10,020
Conclusions	<p>The trial switch-off has not led to an increase in crime or crashes, and Kent's residents have not commented on these lights being switched off, suggesting that there is no need to continue providing lighting to this part of the highway.</p> <p>These columns are at the end of their lifespan, and removing them immediately will result in savings to Kent County Council of around £7,000 over the next 15 years, with further savings in the longer term.</p>
Recommendation	The recommendation to the Cabinet Member is that the street lights should be removed.

Site	Polhill/London Road
Number of lights	60
Date of switch off	02/09/2014
Number of enquiries received	2
Date of most recent enquiry	06/01/2015
Number of incidents of crime or ASB occurring in the year preceding the trial switch off	0
Number of incidents of crime or ASB occurring in the year following the trial switch off	0
Number and severity of RTCs occurring in darkness during the trial switch off	0
Remarks relating to RTCs	-
Feedback from Development Team	No concerns raised.
Feedback from Operations Team	Proposed large development may increase number of cyclists using road.
Cost to remove	£45,000
Cost to retain and operate for 15 years	£112,200
Conclusions	<p>Although there has been no increase in crime or crashes since switch-off, and few of Kent's residents have commented on these lights being switched off, the proposed redevelopment of Fort Halstead raises the possibility that there may be a future need to provide lighting to this part of the highway.</p> <p>Set against this, the columns at this site are at the end of their expected lifespan. Some have already been 'necked' to make them safe, and the remainder are likely to need replacing within the next 15 years, so removing them would result in savings to Kent County Council of around £69,000 over the next 15 years, with further savings in the longer term.</p> <p>Considering both these points, and noting that works on major roads such as Polhill are unlikely to start within the first 14 months of the LED project, it is recommended that the trial be extended until a decision needs to be taken on whether to fit these columns with LED lanterns or to remove them. At that time it is likely that more information on the Fort Halstead proposals will be available, enabling this to be taken into consideration when reviewing the trial and making a recommendation.</p>
Recommendation	<p>Extend the trial and review the need for lighting at a later stage when more information on the Fort Halstead development proposals may be available.</p>

Site	Morants Court Road, Dunton Green
Number of lights	19
Date of switch off	25/06/2014
Number of enquiries received	1
Date of most recent enquiry	05/09/2014
Number of incidents of crime or ASB occurring in the year preceding the trial switch off	1
Number of incidents of crime or ASB occurring in the year following the trial switch off	0
Number and severity of RTCs occurring in darkness during the trial switch off	0
Remarks relating to RTCs	-
Feedback from Development Team	No concerns raised.
Feedback from Operations Team	No concerns raised.
Cost to remove	£9,500
Cost to retain and operate for 15 years	£31,730
Conclusions	<p>The trial switch-off has not led to an increase in crime or crashes, and the single enquiry received suggests that Kent's residents are largely accepting of the switch-off.</p> <p>These columns are at the end of their lifespan, and removing them immediately will result in savings to Kent County Council of around £23,000 over the next 15 years, with further savings in the longer term. Taking this into consideration, it is recommended that these columns be removed.</p>
Recommendation	The recommendation to the Cabinet Member is that the street lights should be removed.

Site	A20 Maidstone Road, Swanley
Number of lights	10
Date of switch off	28/05/2014
Number of enquiries received	1
Date of most recent enquiry	27/02/2015
Number of incidents of crime or ASB occurring in the year preceding the trial switch off	0
Number of incidents of crime or ASB occurring in the year following the trial switch off	0
Number and severity of RTCs occurring in darkness during the trial switch off	0
Remarks relating to RTCs	-
Feedback from Development Team	No concerns raised.
Feedback from Operations Team	No concerns raised.
Cost to remove	£7,500
Cost to retain and operate for 15 years	£18,700
Conclusions	<p>The trial switch-off has not led to an increase in crime or crashes, and the single enquiry received suggests that Kent's residents are largely accepting of the switch-off.</p> <p>These columns are at the end of their lifespan, and removing them immediately will result in savings to Kent County Council of around £11,000 over the next 15 years, with further savings in the longer term. Taking this into consideration, it is recommended that these columns be removed.</p>
Recommendation	The recommendation to the Cabinet Member is that the street lights should be removed.

Site	London Road, West Kingsdown
Number of lights	25
Date of switch off	28/05/2014
Number of enquiries received	0
Date of most recent enquiry	-
Number of incidents of crime or ASB occurring in the year preceding the trial switch off	6
Number of incidents of crime or ASB occurring in the year following the trial switch off	2
Number and severity of RTCs occurring in darkness during the trial switch off	0
Remarks relating to RTCs	-
Feedback from Development Team	No concerns raised.
Feedback from Operations Team	No concerns raised.
Cost to remove	£18,750
Cost to retain and operate for 15 years	£46,750
Conclusions	<p>The trial switch-off has not led to an increase in crime or crashes, and Kent's residents have not commented on these lights being switched off, suggesting that there is no need to continue providing lighting to this part of the highway.</p> <p>These columns are at the end of their lifespan, and removing them immediately will result in savings to Kent County Council of around £28,000 over the next 15 years, with further savings in the longer term.</p>
Recommendation	The recommendation to the Cabinet Member is that the street lights should be removed.

Site	Farningham Hill Road, Farningham
Number of lights	27
Date of switch off	25/06/2014
Number of enquiries received	0
Date of most recent enquiry	-
Number of incidents of crime or ASB occurring in the year preceding the trial switch off	0
Number of incidents of crime or ASB occurring in the year following the trial switch off	0
Number and severity of RTCs occurring in darkness during the trial switch off	0
Remarks relating to RTCs	-
Feedback from Development Team	No concerns raised.
Feedback from Operations Team	No concerns raised.
Cost to remove	£20,250
Cost to retain and operate for 15 years	£49,290
Conclusions	<p>The trial switch-off has not led to an increase in crime or crashes, and Kent's residents have not commented on these lights being switched off, suggesting that there is no need to continue providing lighting to this part of the highway.</p> <p>These columns are at the end of their lifespan, and removing them immediately will result in savings to Kent County Council of around £30,000 over the next 15 years, with further savings in the longer term.</p>
Recommendation	The recommendation to the Cabinet Member is that the street lights should be removed.

Site	Tonbridge Road, Sevenoaks
Number of lights	26
Date of switch off	23/5/2014
Number of enquiries received	14
Date of most recent enquiry	09/01/15
Number of incidents of crime or ASB occurring in the year preceding the trial switch off	0
Number of incidents of crime or ASB occurring in the year following the trial switch off	0
Number and severity of RTCs occurring in darkness during the trial switch off	1 - slight
Remarks relating to RTCs	-
Feedback from Development Team	No concerns raised.
Feedback from Operations Team	No concerns raised.
Cost to remove	£19,500
Cost to retain and operate for 15 years	£27,020
Conclusions	<p>The data received does not suggest that the trial switch-off has led to an increase in crime or crashes. In response to concerns expressed by local residents, a survey was carried out and 13 lights reverted to part-night lighting in that part of Tonbridge Road, closer to Sevenoaks town centre, which is used by appreciable numbers of pedestrians and cyclists. No enquiries have been received since early 2015, suggesting that Kent residents are largely accepting of the remaining trial switch-off.</p> <p>The remaining columns included in the trial are of various ages, with some at the end of their lifespan, and removing them immediately will result in savings to Kent County Council of around £8,000 over the next 15 years, with further savings in the longer term when the other columns would need to be replaced. Taking this into consideration, it is recommended that these columns be removed.</p>
Recommendation	The recommendation to the Cabinet Member is that the street lights that remain in the trial should be removed.

3.0 Legal implications

- 3.1 The County Council has no statutory duty to provide street lighting, but where it does so the lighting must be provided and maintained in accordance with industry good practice.
- 3.2 Power for the street lights is supplied by UK Power Networks and switching the lights off for a trial period is acceptable to UKPN, however UKPN will not allow the street lights to remain connected to their network indefinitely if they are not using the power.
- 3.3 If the power to the street lights is removed to satisfy UKPN's requirements the street lights would be considered to be a number of individual highway obstructions. If one of these 'obstructions' were struck, the County Council could be liable for any costs.
- 3.4 In order for the County Council to avoid any legal liability the street lights must be either turned back on or removed.
- 3.5 The presence of a system of street lights in a road restricts vehicle speeds in that road to a maximum speed of 30mph. Where a speed limit in a road with street lights exists that is more or less than 30mph that speed limit would have been made by the creation of a specific Speed Limit Order (SLO).
- 3.6 Where a SLO does not exist the removal of street lights in a road would mean that the road becomes automatically subject to the national speed limit i.e. 60mph for a single carriageway road or 70mph for a dual carriageway.
- 3.7 If the removal of street lights led to the speed limit changing from 30mph to the national speed limit, a SLO would be made to restrict vehicle speeds to a maximum of 30mph.

4.0 Conclusions

- 4.1 For the majority of sites across Kent that were included in the trial, turning off the lights has not had an adverse effect.
- 4.2 There are a small number of sites where the absence of lighting has had an adverse effect and some of these were returned to lighting during the trial. The review has identified some other sites where the recommendation is that lighting is restored.
- 4.3 To avoid any legal liability the lights must be switched back on or removed.
- 4.4 The cost to the County Council of removing the lights will in every case be less than the cost of turning the lights back on and maintaining them into the future.
- 4.5 The switch off and removal of the lights will this generate financial savings for the County Council.

5.0 Recommendations

- 5.1 For each site in the summary tables Members are asked to provide any local information that would require the recommendation being made to the Cabinet Member to be changed.

APPENDIX A