

Cabinet



St Edmundsbury
BOROUGH COUNCIL

Title of Report:	Transfer of Street Lighting Columns to Suffolk County Council	
Report No:	CAB/SE/15/065	
Report to and date/s:	Cabinet	20 October 2015
	Extraordinary Council	17 November 2015
Portfolio holder:	Peter Stevens Portfolio Holder for Operations Tel: 07775 877000 Email: peter.stevens@stedsbc.gov.uk	
Lead officer:	Mark Walsh Head of Operations Tel: 01284 757300 Email: mark.walsh@westsuffolk.gov.uk	
Purpose of report:	<p>To advise on the opportunity of upgrading all street lighting assets currently owned by St Edmundsbury Borough Council (SEBC) to enable approximately half of the total to be adopted by the Suffolk County Council Highways Authority (SCC), thereby terminating future responsibility for the ongoing repair, maintenance and energy consumption of those units and reducing the cost of powering and maintaining the residual assets.</p> <p>To advise on the estimated costs of putting the relevant lights into a condition that will allow SCC to accept responsibility.</p> <p>To advise on the potential future revenue cost savings to SEBC.</p> <p>To recommend the upgrading of 3,027 street lighting assets to enable 1,547 units to be transferred to the Highway Authority and to reduce the costs of maintenance and power for the 1,481 lights that are retained by SEBC.</p> <p>This proposal comes at a capital cost of £1,810,000 but will reduce annual revenue costs by approximately £157,000 per year.</p>	

Recommendation:	<p>It is RECOMMENDED that subject to the approval of full Council:</p> <p>(1) the contents of Report No: CAB/SE/15/065 be noted; and</p> <p>(2) £1,810,000 of non-allocated capital be allocated to upgrade 3,027 St Edmundsbury Borough Council (SEBC) owned street lighting assets to enable 1,547 of them to be transferred and adopted by the Suffolk County Council Highway Authority and to reduce the cost to power and maintain the 1,481 lighting assets retained by SEBC (reducing annual SEBC revenue expenditure by £156,500 per annum).</p>		
<p>Key Decision:</p> <p><i>(Check the appropriate box and delete all those that do not apply.)</i></p>	<p><i>Is this a Key Decision and, if so, under which definition?</i></p> <p>Yes, it is a Key Decision - <input type="checkbox"/></p> <p>No, it is not a Key Decision - <input checked="" type="checkbox"/></p> <p>As it is a full Council decision and not a Cabinet decision.</p>		
Consultation:	<ul style="list-style-type: none"> Leadership Team, Portfolio Holder, other Cabinet Members, Suffolk County Council Highway Authority 		
Alternative option(s):	<ul style="list-style-type: none"> Not to take the opportunities provided in the report, however, the annual revenue costs of approximately £157,000 per year will not be achieved. 		
Implications:			
Are there any financial implications? If yes, please give details		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<ul style="list-style-type: none"> See section 1.2 of report.
Are there any staffing implications? If yes, please give details		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<ul style="list-style-type: none">
Are there any ICT implications? If yes, please give details		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<ul style="list-style-type: none">
Are there any legal and/or policy implications? If yes, please give details		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<ul style="list-style-type: none">
Are there any equality implications? If yes, please give details		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<ul style="list-style-type: none">
Risk/opportunity assessment:		<i>(potential hazards or opportunities affecting corporate, service or project objectives)</i>	
Risk area	Inherent level of risk (before controls)	Controls	Residual risk (after controls)
See body of report.			
Ward(s) affected:		All Wards	
Background papers:		None.	
Documents attached:		Appendix A – SCC report on the Impact of Part Night Street Lighting on Crime and Road Accidents	

1. Key issues and reasons for recommendation(s)

1.1 Background

- 1.1.1 SEBC owns 3,028 electrical items of street furniture across the Borough (including assets due to be adopted as part of Section 38 developments). They are maintained under a service agreement with SCC who in turn also purchase and recharge for the energy consumed.
- 1.1.2 Of the various models of lighting units the majority are of a type where the lamps are no longer manufactured as they do not comply with EU requirements and spares are now virtually exhausted.
- 1.1.3 SEBC has committed to making all street lighting controllable in respect of timing and light level output. The current SEBC units do not generally offer the ability to switch or dim without modification.
- 1.1.4 A significant number of SEBC owned units are mounted on wooden poles and situated too close to overhead power lines to be maintained within current engineering recommendations (referred to as G39/1).
- 1.1.5 From site surveys and data extracted from SCC's street lighting asset management system (Mayrise) 1,547 assets are on the highway and meet the criteria as eligible to transfer to SCC. 1,481 would remain under SEBC ownership. The exemption criteria are:
- Assets that are within private roads or un-adopted highway
 - Assets relating to housing associations
 - Assets that are only for the illumination of Car Parks
 - Assets in subways
 - Assets that are for decorative purposes only i.e. festoon lighting
 - Assets that are for architectural purposes only, i.e. spot lights / up lighters / light stacks
 - Assets that are low level bollard lighting.

1.2 Financial

- 1.2.1 The estimated cost of upgrading and altering the 1,547 eligible assets to comply with G39 requirements and to reduce their future maintenance and energy consumption cost, and to fit Intelligent Lighting Systems (ILS) for timing control is £1,033,386. Say £1.03 million.
- 1.2.2 On completion of the work the 1,547 lighting assets would be transferred to the responsibility of SCC.
- 1.2.3 The estimated cost of altering / upgrading the remaining 1,481 assets to meet current guidance inclusive of G39 requirements, European Legislation (regarding lamp types with mercury content) and to generally upgrade the SEBC asset including supplying and, where the fitting permits, fitting the ILS would require an investment of £752,081 (say £752k)
- 1.2.4 The above figures do not include works to assets such as feeder pillars, uplighters, footway bollards etc. and do not include traffic management above

Chapter 8 signing and guarding. It is recommended to include a contingency sum of say £25,000 to cover those costs.

- 1.2.5 **The total required capital investment is £ 1,810,468 (£1.81m).**
- 1.2.6 2014/2015 expenditure on energy costs including SCC administration charges was £141,765. 2014/2015 maintenance costs including SCC admin charges were £55,962.
- 1.2.7 In calculating savings a 5% annual cost increase has been included for energy and maintenance.
- 1.2.8 It is not possible to allocate the costs to individual lighting assets, but in total the costs represent a current average of £65.30 per asset per annum.
- 1.2.9 The 1,547 units transferring to SCC will show a 100% saving in on maintenance and energy. £101,019 based on 2014/2015 costs. **Saving say £100,000 p.a.** and a payback period after year 8.
- 1.2.10 The 1,481 units to remain with SEBC will consume less electricity and require reduced maintenance. Units capable of accepting Part Night Control (ILS) will consume further reduced energy.
- 1.2.11 There are approximately 150 assets that may not accept ILS. They are:
- Concrete / metal bollard lighting units
 - Festoon lighting
 - Up lighters / spot lights
 - Subway Lighting.
- 1.2.12 Savings attributable to the 1,481 retained units are estimated as £21,000 p.a. for energy and £29,000 p.a. maintenance. **Total annual saving at current values is £50,000.**
- 1.2.13 If the Council elects to take advantage of the ILS and turn off lights during part of the night a **further £6,500 saving** is anticipated. The payback of costs to the retained assets varies between 10 years (with ILS) and 12 years (without ILS).
- 1.2.14 **Total annual saving is therefore £156,500 p.a. at current prices.**
- 1.2.15 At 8.65% the internal rate of return of the project is slightly below the target return set within the Council's Medium Term Financial Strategy of 10%, when appraised on the basis of being funded by prudential borrowing. However, due to reasons outlined in 1.1 above this is considered acceptable. Actual borrowing will only take place when the Council's treasury management activities identify such a need e.g. the Council's cash flow management activities project that an external cash injection is required to maintain the appropriate level of cash balances for the Council to operate and fulfil its budget and service delivery requirements.
- 1.2.16 The Council currently manages funds in excess of this and therefore external borrowing is not expected during the life of this project in isolation. The

Council also holds unallocated capital receipts in excess of this scheme and therefore it is proposed that the full 8.65% return value of this project is realised to support the general fund budget.

1.3 **Programme**

1.3.1 It is anticipated the works programme will be nine months from receipt of materials (with an additional six weeks for lantern deliveries). SCC will adopt transferable units upon satisfactory completion of works on a monthly basis as applications for payment are made by the contractor.

1.3.2 It is envisaged the work will be in two phases:

Phase 1: units that will transfer to SCC to enable SEBC to start making savings; and

Phase 2: units remaining with SEBC.

1.3.3 We have assumed a site start of January 2016 with all upgrades and transfers complete by October 2016.

1.4 **Part Night Lighting**

1.4.1 SCC will implement part time lighting to all transferred lights and the retained lights will be similarly equipped.

1.4.2 The estimated savings assume that SEBC accepts part night lighting but SEBC would have discretion over whether to also implement part night time lighting. We are informed that each individual light can be controlled separately and, if required, can be switched on again at very short notice.

1.4.3 SCC implemented part night lighting in 2011 and report that after minor public disquiet this has been well received and there are now considerably more complaints when lights are operating all night. In areas that are part night lit, this initiative has contributed to a reported reduction in crime in excess of 25% although there may be seasonal variations and other factors that influence these figures. SCC is gathering figures regularly to identify if there are any trends). Appendix A attached to this report outlines the preliminary findings of the impact of part night street lighting on crime and road accidents

1.5 **Parish owned and maintained street lights**

1.5.1 It is understood that there are a number of street lighting assets that are owned and operated by parish councils. These lights fall outside of the scope of this report and its recommendations. However, if the recommendations of this report are approved and the project moves forward, officers will investigate if this approach could benefit parish councils.

Impact of Part Night Street lighting on Crime and Road Accidents
 by Richard Calton, Business Development, March 2015

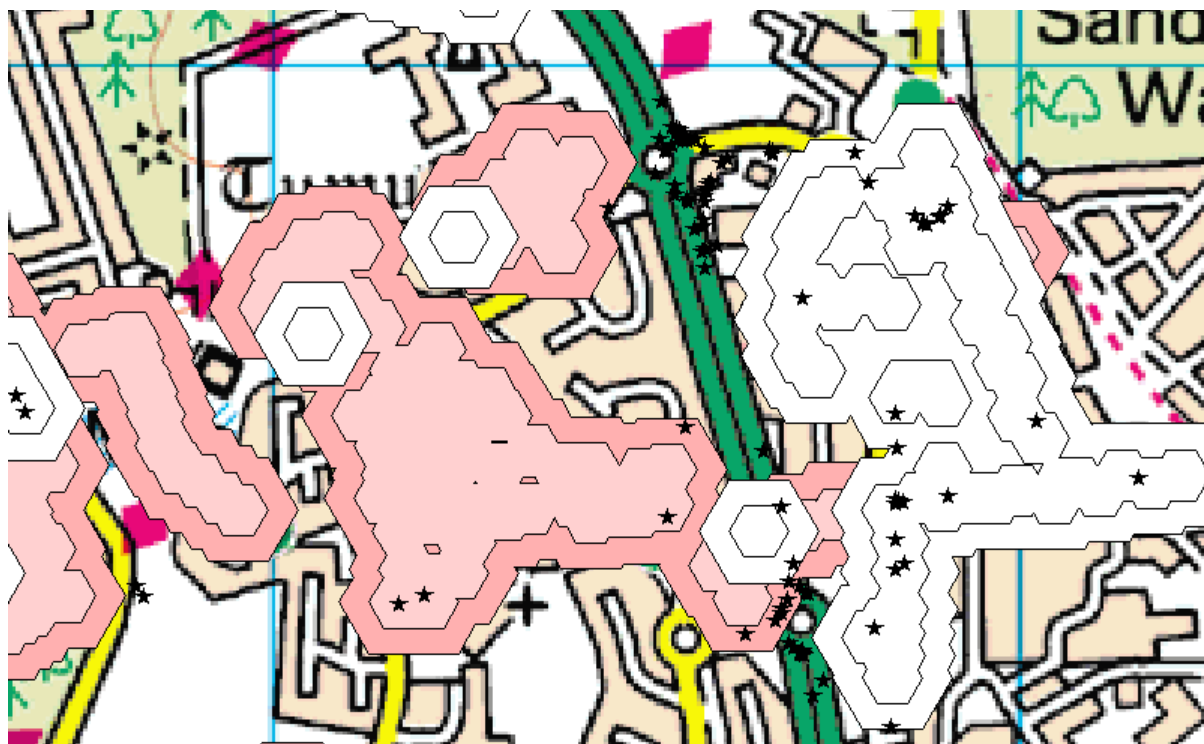
Summary

The following analysis is an extension of work carried out in 2013, showing the effect of the introduction of part-night street lighting on crime. As the 2013 analysis was carried only 8 months after implementation of the part-night street lighting scheme only a limited amount of data was available. The current analysis covers a full 2 years before and after introduction and has been extended to include road accidents.

The analysis shows a 26% decrease in crime within 40 metres of part-night street lighting during the hours of midnight to 5am and no significant change in road accidents.

Background

Part-night street lights are street lights which are switched off from midnight to 5:30am. In Suffolk part-night street lighting was introduced into selected areas over the period July 2011 to May 2012. This analysis consists of a before and after study of crime and road accidents in part-night street lighting areas. As crime and road accident numbers will change year on year data from areas where street lighting is left on all night is used as a base line.



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Figure 1 - identification of incidences within 40 and 80 metres of street lights

Methodology

For the analysis the numbers of reported crimes and road accidents for the two year period prior to the introduction of part night street lighting are compared with the same period following. Only crimes or road accidents reported during these windows are included and any incidences outside these windows or during the switch over period are excluded. The two year periods were chosen to take into account any seasonal variation in the crime or road accidents.

As the switch off was carried out zone by zone with the county split into 220 zones and all street lights within each zone switched off in a one week period all the data for crimes and road accidents for the 220 zones for the relevant periods were combined to give an overall figure for Suffolk.

Only those incidences where the time is known to within 3 hours and which have taken place within 40 or 80 metres of a street light are included. Within each zone there are some street lights which are not affected and remain on all night – these are used as the baseline.

Results – Impact on Crime Levels from Part Night Street Lighting

Table 1 and Table 2 show that crime levels within 40 or 80 metres of part-night street-lighting decreases between midnight and 5am, compared to the control group (those crimes committed within the same distance of an all-night street light). The greatest effect was observed within 40 metres of part-night street lighting with a 26% decrease and an 18% decrease within 80m.

The 4.5% increase in crime within 40 and 8.4% within 80 metres of part night street light areas during the rest of the day suggests crime migration, either to different times of the day or a different location.

Table 1 - % change in crime within 40m of a street light

	Part-night street light	All night street light (baseline)	Relative change in crime within 40m of a part-night street light
Midnight to 5am	-29.18%	-2.86%	-26.32%
Rest of the Day	-7.92%	-12.43%	4.5%

Table 2 - % change in crime within 80m of a street light

	Part- night street light	All-night street light (baseline)	Relative change in crime within 80m of a part-night street light
Midnight to 5am	-24.62%	-6.34%	-18.28%
Rest of the Day	-3.70%	-12.2%	8.4%

Results – Impact on Road Accidents from Part Night Street Lighting

Table 3 and Table 4 show that there is a slight increase in road accidents within 40 or 80 metre of part-night street lighting between midnight and 5am compared to the control group (those road accidents occurring within the same distance of an all-night street light). The change is not, however, significant due to the small numbers of road accidents involved.

Table 3 - Change in road accidents within 40m of a street light

	Part-night street light (before > after figures)	All night street light (baseline) (before > after figures)	Relative change in road accidents within 40m of a part- night street light
Midnight to 5am	(14>19)	(27>29)	+26.4%
Rest of the Day	(625>597)	911>929	-6.33

Table 4 - Change in road accidents within 80m of a street light

	Part- night street light (before > after figures)	All-night street light (baseline) (before > after figures)	Relative change in road accidents within 80m of a part- night street light
Midnight to 5am	(25>30)	34>40	+2%
Rest of the Day	987>922	1103>1090	-5.4%

Conclusions

This analysis covers a full two year period before and after the switch to part-night street lighting and reconfirms the 2013 finding that crime levels within 40 or 80 metres of a part-night street lighting have reduced since the introduction. When allowance is made for the general changes in crime using the control group for comparison the overall decrease in crime from part-night lighting is 26% within 40m, or 18% within 80 metres.

Impact on road accidents of part-night street lighting was analysed, again using a full 2 years period before and after switch off but the numbers of road accidents in Suffolk within 40 or 80 metres of part-night street lighting are too small to give significant results.