

**Report of Director of City Development**

**Report to Executive Board**

**Date: 19 June 2013**

**Subject: Energy Saving Measures for Street Lighting – Consultation Outcome and Further Proposals**

Are specific electoral Wards affected? If relevant, name(s) of Ward(s):	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are there implications for equality and diversity and cohesion and integration?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Is the decision eligible for Call-In?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the report contain confidential or exempt information? If relevant, Access to Information Procedure Rule number: Appendix number:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

**Summary of main issues**

- Members approved a recommendation in May 2011 to undertake consultation on the proposals to implement selective part-night switching of street lights as an energy saving initiative for street lighting.
- “Part-night switching” involves the adaptation of a street light to turn off for a set period during the night when the use of certain parts of a street is so infrequent that street lighting need not be provided. The period of switch off that is recommended is midnight to 5:30am.
- This report recommends that selective part-night street lighting is applied only to those street lights that meet certain criteria and will be assessed to minimise the risk to road safety and the fear of crime. It is anticipated that around 8,000 (8.7% of all) street lights will be converted to part-night operation.
- Consultation is now complete and concluded a favourable view of the proposals. A pattern emerged to add further criteria to avoid part-night switching at bus stops that are in operation during the proposed times of switch-off. This has been added to the proposals.
- The implementation of selective part-night switching will take 3 years and cost an estimated £376,643. The benefit to the council in terms of reduced energy cost is estimated to be £1,384,507 over the next ten years, producing a net saving of £1,007,864.

## **Recommendations**

6. Executive Board is requested to:
  - i. Note the outcome of consultation on the proposal to implement selective part-night switching of street lights.
  - ii. Approve the injection of £376,643 into the capital programme to proceed with the design and installation of selective part-night street lighting in accordance with the criteria within this report.

### **1 Purpose of this report**

- 1.1 The purpose of this report is to;
  - i. present the outcome of consultation on the proposal to implement selective part-night switching of street lights and;
  - ii. seek approval to inject £376,643 into the capital programme to proceed with the design and installation of selective part-night street lighting.

### **2 Background information**

- 2.1 Leeds City Council operates approximately 92,000 street lights, consuming an estimated £3.97m of electricity each year. It is a council objective to reduce energy consumption wherever possible and proposals to reduce the energy consumption of street lighting are a key part of that objective.
- 2.2 A report outlining the potential energy saving measures for street lighting was presented to Executive Board on 18th May 2011. The report presented the different options for spend to save initiatives, the most favourable being selective part-night switching.
- 2.3 Executive Board approved the recommendation to undertake consultation on the potential to implement the most favoured option of selective part-night switching of around 8,000 (8.7% of all) street lights. The proposal involves a capital investment of £376,643 to implement the measures over a three year period with an overall saving to the council of £1,007,864 over the next ten years.
- 2.4 Consultation is now complete and Section 4.1 of this report presents a summary of the method and outcome of that consultation. The full consultation report has been published on the councils web pages.
- 2.5 The consultation demonstrated support for the proposals and promoted one change of adding bus stops that are in use during the proposed period of switch-off to the locations to be avoided.

### 3 Main Issues

- 3.1 The provision of lighting a highway is a discretionary power. It is recognised as good practice to install lighting in appropriate areas. The street lighting PFI endorsed this concept and was predicated on delivering a number of benefits for the city. The outline business case approved by Executive Board in May 2004 set out specific outcomes to achieve improved road safety and a reduction in the fear of crime. Any proposals to reduce energy requirements need to be balanced with the ability of the lighting to continue to meet these objectives.
- 3.2 "Part-night switching" involves the adaptation of the switch (photocell) within each street light to turn the light off for a set period during the night when on certain streets the road use is so infrequent that street lighting need not be provided. The proposed period of switch off is midnight to 5:30am in accordance with the recommendations of the consultation report.
- 3.3 Experience of selective part-night switching in other authorities suggests that it can be undertaken with little or no impact on the safety objectives of the lighting system. The code of good practice for lighting allows for the complete removal of lighting provision at times when the use of a street reduces significantly.
- 3.4 The proposals within this report suggest a cautious approach of risk assessment of each site before part-night switching of any street light is proposed, followed by monitoring the effect on crime and road safety.
- 3.5 In order to continue to meet the outcomes of the street lighting PFI of improved road safety and a reduction in the fear of crime it is recommended that part night switching is avoided:
- On roads with a significant road traffic accident record during the proposed switch-off period.
  - In areas with above average record of crime during the proposed switch-off period.
  - In areas with a police record of frequent anti-social behaviour during the proposed switch-off period.
  - In areas provided with CCTV local authority/police surveillance equipment.
  - In areas with sheltered housing and other residences accommodating vulnerable people.
  - Around 24hr operational emergency services sites including hospitals.
  - At formal pedestrian crossings, subways, and enclosed footpaths and alleyways where one end links to a street that is lit all night.
  - Where there are potential hazards on the highway such as roundabouts, central carriageway islands, chicanes and traffic calming features.
  - Where public transport stops are in use during the proposed period of switch-off.

### **Part-night switching (traffic routes)**

- 3.6 The greatest cost/benefit is achieved with part-night switching the higher wattage lamps on traffic routes with a payback period of around 1.4 years.
- 3.7 A provisional assessment of the criteria where part-night switching may be applicable suggests that there is scope to install part-night switching to around 3,250 of the 27,000 street lights on traffic routes across the city.

### **Part-night switching (residential streets)**

- 3.8 Part-night switching of the lower wattage lamps in residential streets is slightly less beneficial with a payback period of around 3.5 years.
- 3.9 A provisional assessment of the criteria where part-night switching may be applicable suggests that there is scope to install part-night switching to around 4,750 of the 64,000 street lights on residential streets across the city.

### **Applying measures to alternate lights.**

- 3.10 There is an expectation that to allay public fears of the darkness it may be preferable to only switch alternate street lights, leaving half on and half off. It is understandable that this may be seen as desirable to maintain at least some light in a street. However, it can be argued that lighting a street in this way with significant dark patches (bearing in mind that some street lights are around 50m apart) creates more of a fear of crime than switching off the whole street. There is also a concern for drivers that the eye is unable to adapt quickly enough to the “on/off” difference in light levels along a street, leading to the potential for reduced night time visibility and a potential increase in accidents.
- 3.11 In addition, alternate switching would provide significant operational difficulties. Efficiency of service delivery for street lighting is predicated on economies of scale and uniformity of application. A street with different operating mechanisms on each light and with lamps that will need replacing at different intervals due to different burning hours will present an inefficient maintenance regime that over time may negate the savings in energy.
- 3.12 Application of energy saving measures to alternate street lights is therefore not recommended in this report.

### **Adaptation/mitigation measures**

- 3.13 There are different standards of road markings and signing required on street lit and unlit roads. The reduction or removal of lighting at any time during the night will require an assessment of the adequacy of road markings and signing. Where required road markings, signs and reflecting road studs (cat's eyes) will be upgraded/installed. An additional allowance of £10,000 to undertake this work is included within this proposal.

### **Fear of crime and community support**

- 3.14 When reducing the lighting of residential areas it is appreciated that residents will be concerned about the fear of crime in their immediate environment. Advice from Safer Leeds has suggested that by working together, Street Lighting and Safer Leeds can offer advice and support to worried communities about precautions that can be taken to protect individuals and property during the hours of darkness. On-site assessments could be undertaken where there is a significant concern. In order to facilitate this partnership an allowance of £12,000 for Safer Leeds is included within this proposal.

### **Providing warning to road users**

- 3.15 In areas subjected to part-night switching it is reasonable to expect road users to be able to tell which street lights are to be switched off and at what times. It is proposed to erect signs warning road users of the times of switching. Warning signs should also reduce the incidence of the reports of faulty lights during the period when they are deliberately turned off. Signs such as these have been used successfully in other local authorities to alert road users to the lighting times. The anticipated cost of this work is £64,000 and is included within this proposal.

### **Removing street lights**

- 3.16 In addition to the selective part-night switching proposals the earlier energy saving report highlighted the potential to completely remove a small number of street lights where they are no longer required in areas such as redundant streets. An allowance for the removal of around 150 of such street lights is included within this proposal as a prudent efficiency measure for the council. It is not intended to remove any street lights where there is a need to retain street lighting.

### **Implementation**

- 3.17 Subject to approval of this report assessment of street lights will begin in August 2013 with the first lights to be converted to part-night operation from October 2013. It is anticipated that the assessment and notification of proposals across the whole of the Leeds district will take around 3 years to complete. The process will follow roughly the same implementation cycle as the street lighting replacement programme within the street lighting PFI. The proposed programme of implementation is as follows:
- October 2013 to September 2014, 3,250 traffic route street lights.
  - March 2014 to September 2016, 4,750 residential street lights.
- 3.18 The consultation undertaken so far has been generic to the overall proposals within this report. As street lights are assessed against the criteria in paragraph 3.4 of this report, those that are eligible for conversion to part-night switching will be notified to Ward Members and any resident within 50m of each street light to be converted.
- 3.19 Appendix A shows the financial implications for the council of these proposals over a 10 year period.

- 3.20 A Street Lighting Partnership Group has been created that includes representatives of the emergency services, crime reduction, community safety and road casualty reduction to ensure that the ongoing assessment of sites remains appropriate and to ensure appropriate and swift reaction to any adverse effects.

### **Monitoring**

- 3.21 Any changes in street lighting provision will be monitored for its effect on crime and road traffic accidents.
- 3.22 Reported crime and road traffic accidents will be monitored by the Police and Road Casualty Reduction. If at any time the records suggest that there is an unacceptable change in the incidence of crime or road traffic accidents and that the alteration to the street lighting is identified as the cause, then the energy saving measures will be terminated at that location.
- 3.23 Incidence of crime and road traffic accidents will be monitored at six monthly intervals for the first two years at all sites to determine general trends. Reviews will be undertaken by the Street Lighting Partnership Group to determine any cause for concern and action to be taken.

## **4. Corporate Considerations**

### **4.1 Consultation and Engagement**

- 4.1.1 Consultation and Engagement has been undertaken as follows:

- Public consultation commenced on 21 February 2013 and continued to 12 April 2013. This was advertised in council buildings and featured on BBC Radio Leeds. The questionnaire was available on the Talking Point website and offered in paper form over the counter at one stop shops and available by post/email on request.
- Ward Members received an email on 5 March 2013 with a copy of the public questionnaire attached asking them to complete and return the questionnaire.
- Officers presented the proposals to the Parish and Town Council Annual Forum on 31 January 2013 and invited responses to the questionnaire.
- Two focus group sessions were held with members of the Citizens Panel.
- A focus group was held with representatives of the Equality Hub.

- 4.1.2 23 ward members responded to the request for their views. 9 were against the proposal, some quite strongly opposed, expressing concern for residents safety. 8 were in favour of the proposals and 6 offered general observations neither in support or by objection. 8 ward members completed a questionnaire and returned them directly to the project officer. The returned questionnaires have been included within the overall responses analysed below.

- 4.1.3 449 responses to the consultation were received:

- 75% agreed that we should save energy costs and carbon emissions by switching off some street lights.
- 71% agreed that street lighting helps reduce their fear of crime.
- 84% agreed with the criteria for where part-night switching should be avoided.
- 69% agreed with switching street lights off on residential roads.
- 67% agreed with switching street lights off on main roads.
- 67% agreed with switching street lights off from midnight or earlier.
- 62% agreed with switching street lights back on at 6am or later.
- 69% would not like to see electricity price rises reflected in the council tax.

4.1.4 The Citizens Panel focus group and a number of questionnaire responses suggested that bus stops in areas where public transport operates after the proposed switch off time or before the proposed switch back on time should be added to the exemption list for part-night lighting. This has been accepted on the grounds that such locations cannot be avoided by pedestrians and the criteria have been amended accordingly.

4.1.5 The majority of consultees agreed with a switch-off time of midnight and a switch back on time of 6:00am. In view of the comment in the previous paragraph and the typical commencement of scheduled bus services of between 5:30 and 6:00am a switch back-on time of 5:30am is proposed.

4.1.6 Officers have met with representatives of West Yorkshire Police, West Yorkshire Fire and Rescue Service, Yorkshire Ambulance Service, Leeds City Council Leeds Watch, Leeds City Council Safer Leeds and Leeds City Council Road Casualty Reduction. They were all supportive of the proposals, subject to appropriate risk assessment to the stated criteria and have no objections to the proposals.

4.1.7 The Executive Member for Development and the Economy has been consulted on the proposals and has requested that this report be progressed to Executive Board.

## **4.2 Equality and Diversity / Cohesion and Integration**

4.2.1 An equality, diversity, cohesion and integration impact assessment was undertaken on the proposals on the 16<sup>th</sup> March 2011. The resulting actions from the assessment highlight the potential difficulties in applying energy saving measures within criteria that will create a different approach dependant on local conditions. The report recommends transparency of approach and sufficient consultation and communication to explain the process. The report also welcomes the proposal for street lighting officers to work in partnership with Safer Leeds and to put in place robust monitoring of crime and road accidents. The final report was published on 21<sup>st</sup> April 2011 and is attached at Appendix B.

## **4.3 Council policies and City Priorities**

- 4.3.1 The proposals comply with the council's strategic outcome ENV-1 : "Reduced ecological footprint through responding to environmental and climate change and influencing others" and Business Plan outcome VfM-2: Efficiency/Value for Money.
- 4.3.2 The proposals comply with the Local Transport Plan objective S1; provide an appropriate road environment with facilities for each user group and AQ4; Measures to adapt to the effects of climate change.

#### **4.4 Resources and value for money**

- 4.4.1 This report seeks funding of £376,643 from 2013 to 2016 to implement the proposals. This is made up from £69,209 in 2013/14, £194,847 in 2014/15 and £112,587 in 2015/16. The potential financial implications of the proposals over a 10 year period are shown in Appendix A. The 10 year plan demonstrates an overall saving to the council of £1,007,864 by 2023 at current energy prices.
- 4.4.2 The return on investment of 2.7 times over 10 years represents value for money for the council. Risk assessment of the sites to be selected for part-night switching and monitoring of the after effects will reduce the risk of an adverse effect on the community. Electricity costs are expected to continue to experience above inflation price rises.
- 4.4.3 There are no implications for staffing resources as a result of the recommendations within this report. The phased approach to assessments over a 3 year period has been aligned to existing resources. Any acceleration of the programme would require additional staffing resources.

#### **4.5 Legal Implications, Access to Information and Call In**

- 4.5.1 A highway authority has a discretionary power under the provision of section 97 of the Highways Act 1980 to provide lighting for the purposes of any highway for which they are or will be the highway authority
- 4.5.2 All local authorities have a duty under Section 17 of the Crime and Disorder Act 1998 to do all they can to reasonably prevent crime, disorder and anti-social behaviour in their area. Reduction in street lighting services needs to consider the effects on crime and work in partnership with related organisations.
- 4.5.3 Proposals to reduce the lighting may mean that the recommended standards for road lighting are not met. It has been established by case law that Section 97 Highways Act 1980 - does not impose a duty on the authority to light a highway it is a discretionary power and there is no liability for accidents arising from a failure to light. (Shepherd -v- Glossop Corporation [1921] 3 KB 132 and Fisher -v- Ruislip-Northwood UDC [1945] KB 584) - If an authority has however done something to make a road dangerous, the creator of the danger will be liable in negligence or nuisance for injuries caused by that danger if he has not taken reasonable steps to eliminate the danger.
- 4.5.4 Under the current PFI agreement TVL have taken responsibility for all liabilities arising from the street lighting provision and apparatus. The proposal to alter the routine functioning of the lighting system will result in partial liabilities, as the organisation making the decision in 5.3 above, being returned to the council.

- 4.5.5 Unless provided by a separate order, the provisions of section 82 of the Road Traffic Regulation Act 1984 state that a road is a “Restricted road” (where a 30mph speed limit applies) if there is provided on it a system of street lighting furnished by means of lamps placed not more than 200 yards (183 metres) apart. Complete removal of lighting columns in these areas will require a legal order and additional signing to reinstate the speed restriction.
- 4.5.6 Prior to the complete removal of any street lighting the authority will need to ensure that road markings and reflecting road studs are provided in accordance with current standards for unlit roads contained in the Traffic Signs Regulations and General Directions 2002.
- 4.5.7 The Electricity at Work Regulations impose a duty on owners to ensure the safety of the apparatus. Lighting systems will continue to require regular inspection, regardless of their operation.
- 4.5.8 The energy saving cost estimates included within this report are based on energy charges at current tariff. All indications are that energy costs are likely to increase in future. The measures proposed are saving energy in the early hours of the morning where energy demand is at its lowest. As energy demand varies, it is possible that energy suppliers look to increase the tariff for the evening peak period which will reduce the benefit of these energy saving measures.

## **4.6 Risk Management**

- 4.6.1 If not managed appropriately the proposals within this report present a risk that the objectives of street lighting to improve road safety and a reduce the fear of crime may not be met. To mitigate that risk a set of criteria has been established against which all proposals will be measured. The effects of the introduction of part-night street lighting at all locations will be monitored and the measures may be reversed in any location where it is found that the reduction in street lighting could cause an adverse effect on road safety or crime. The street lighting partnership group of representatives of the emergency services, crime reduction, community safety and road casualty reduction will oversee the implementation and monitoring arrangements.

## **5 Conclusion**

- 5.1 The current energy costs for street lighting is approximately £3.97m per annum. It is a council objective to reduce energy consumption wherever possible and proposals to reduce the energy consumption of street lighting are a key part of that objective. The most favourable approach has been accepted as selective part-night switching and Executive Board requested consultation on the proposals. Consultation has been completed and has supported the implementation subject to certain criteria. This is a spend-to-save initiative that requires the investment of £376,643 over 3 years to save a projected £1,384,507 over the next ten years. Risk will be managed by applying the criteria and monitoring the effects closely. Executive Board are therefore requested to approve the recommendation to implement selective part-night switching of street lights.

## **6 Recommendations**

6.1 Executive Board is requested to:

- i. Note the outcome of consultation on the proposal to implement selective part-night switching of street lights and;
- ii. Approve the injection of £376,643 into the capital programme to proceed with the design and installation of selective part-night street lighting in accordance with the criteria within this report.

## **7 Background documents<sup>1</sup>**

7.1 None.

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<sup>1</sup> The background documents listed in this section are available to download from the Council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.

**Energy Saving Measures for Street Lighting  
Consultation Outcome and Further Proposals**

**Appendix A**

**Financial Forecast**

Year	Part - Night Switch Off Traffic Routes			Part - Night Switch Off Residential Streets			Lighting Removal			Total
	Expenditure £	Savings £	Net £	Expenditure £	Savings £	Net £	Expenditure £	Savings £	Net £	
2013/14	69,209	-12,202	57,007	0	0	0	0	0	0	57,007
2014/15	69,209	-81,556	-12,347	125,639	-18,105	107,534	0	-7,614	-7,614	87,572
2015/16	0	-99,125	-99,125	54,387	-45,368	9,019	58,200	-7,614	50,586	-39,520
2016/17	0	-99,125	-99,125	0	-52,250	-52,250	0	-7,614	-7,614	-158,989
2017/18	0	-99,125	-99,125	0	-52,250	-52,250	0	-7,614	-7,614	-158,989
2018/19	0	-99,125	-99,125	0	-52,250	-52,250	0	-7,614	-7,614	-158,989
2019/20	0	-99,125	-99,125	0	-52,250	-52,250	0	-7,614	-7,614	-158,989
2020/21	0	-99,125	-99,125	0	-52,250	-52,250	0	-7,614	-7,614	-158,989
2021/22	0	-99,125	-99,125	0	-52,250	-52,250	0	-7,614	-7,614	-158,989
2022/23	0	-99,125	-99,125	0	-52,250	-52,250	0	-7,614	-7,614	-158,989
<b>Total Savings</b>			<b>-748,340</b>			<b>-249,198</b>			<b>-10,326</b>	<b>-1,007,864</b>

**Energy Saving Measures for Street Lighting: Financial Forecast  
10 year period 2013 to 2023**



**Equality, Diversity, Cohesion and  
Integration Impact Assessment**



As a public authority we need to ensure that all our strategies, policies, service and functions, both current and proposed have given proper consideration to equality, diversity, cohesion and integration. In all appropriate instances we will need to carry out an equality, diversity, cohesion and integration impact assessment.

This form:

- can be used to prompt discussion when carrying out your impact assessment
- should be completed either during the assessment process or following completion of the assessment
- should include a brief explanation where a section is not applicable

<b>Directorate: City Development</b>	<b>Service area: Highways &amp; Transportation</b>
<b>Lead person: Andrew Molyneux</b>	<b>Contact number: 0113 2475316</b>
<b>Date of the equality, diversity, cohesion and integration impact assessment: 16 March 2011</b>	

<b>1. Title: Proposal to invest in increased energy saving initiatives for Street Lighting</b>
Is this a:  <input type="checkbox"/> Strategy <input type="checkbox"/> Policy <input checked="" type="checkbox"/> Service <input type="checkbox"/> Function <input type="checkbox"/> Other
Is this:  <input type="checkbox"/> New/ proposed <input checked="" type="checkbox"/> Already exists and is being reviewed <input type="checkbox"/> Is changing
(Please tick one of the above)

**2. Members of the assessment team:**

<b>Name</b>	<b>Organisation</b>	<b>Role on assessment team e.g. service user, manager of service, specialist</b>
Andrew Molyneux	LCC Highways Asset Manager	Service Manager
Diane Zanre	LCC Technical Support	Project Support
Lisa Powell	LCC Performance &	Equality Lead

	Improvement Team	
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**3. Summary of strategy, policy, service or function that was assessed:**

Leeds City Council operates just over 92,000 street lights, which used approximately £3.4million of energy during 2010/11. The service is already providing significant efficiencies in energy consumption through the use of low energy lamps and new lantern technology however, due to recent increases in the financial and environmental cost of electrical energy and the need to seek efficiencies across the provision of all council services, an exploration of ways to further reduce street lighting energy is required.

This EIA assesses the impact of the proposals set out in the Report of the Director of City Development, entitled 'Proposal to invest in increased energy saving initiatives for street lighting', specifically, the 'stage 1' proposal for a part-night (midnight to 5am) switch-off of street lights on traffic routes and residential streets.

**4. Scope of the equality, diversity, cohesion and integration impact assessment**  
(complete - 4a. if you are assessing a strategy, policy or plan and 4b. if you are assessing a service, function or event)

**4a. Strategy, policy or plan**  
(please tick the appropriate box below)

The vision and themes, objectives or outcomes	<input type="checkbox"/>
The vision and themes, objectives or outcomes and the supporting guidance	<input type="checkbox"/>
A specific section within the strategy, policy or plan	<input type="checkbox"/>
<b>Please provide detail:</b>	

**4b. Service, function, event**  
please tick the appropriate box below

The whole service (including service provision and employment)	<input type="checkbox"/>
A specific part of the service (including service provision or employment or a specific section of the service)	<input checked="" type="checkbox"/>
Procuring of a service	<input type="checkbox"/>

(by contract or grant)  
(please see equality assurance in procurement)

**Please provide detail:**

The Street Lighting Team is proposing a series of changes to the service currently provided to reduce energy consumption. The first stage of this proposal involves a part-night switch-off of street lights between the hours of midnight and 5am. The impact of this proposal will be assessed. Further impact assessments may be required as the project progresses.

**5. Fact finding – what do we already know**

Make a note here of all information you will be using to carry out this assessment. This could include: previous consultation, involvement, research, results from perception surveys, equality monitoring and customer/ staff feedback.

(priority should be given to equality, diversity, cohesion and integration related information)

**Background Information**

*Leeds City Council operates approximately 92,000 street lights. The street lighting service in Leeds is delivered under a Private Finance Initiative (PFI) agreement with Tay Valley Lighting (TVL). This contractual arrangement began in July 2006 and will continue until July 2031.*

*Provision of street lighting is not a statutory requirement however, the council has a duty of care to road users and it is recognised as good practice to install lighting in appropriate areas to reduce the fear of crime and improve road safety.*

*The current energy bill for street equipment is around £4.3million. This is made up of approximately £3.4million for street lighting and £0.9million for other services such as traffic lights, bollards, signs and car parks.*

*Street lighting designs provide two distinct categories of lighting; traffic routes and residential streets. Requirements for lighting levels on traffic routes are much higher than for residential streets due to the number and speed of vehicles and the potential for pedestrian and vehicle conflict.*

**Research & Benchmarking**

*As part of the proposal development, a number of authorities across the country were contacted to establish how they have approached energy saving initiatives. In summary:*

- Part-night switch-off has been used, and will continue to be used in the following local authority areas; Cornwall, Essex, Gloucestershire, Leicestershire, Nottinghamshire, Poole, Wokingham, Devon and Oxfordshire.*
- A complete switch off (in specified areas) has been implemented in; Buckinghamshire, Leicestershire and Nottinghamshire.*
- Where a complete switch off was undertaken, the trials were considered a success and had no adverse impact on either crime or road safety.*

- *Buckinghamshire and Leicestershire included a package of 'enhancements' to minimise the risk of any adverse effects on road safety or crime*

*Unfortunately, no specific equality related information was made available to us.*

*In addition to this, the street lighting service discussed the proposals with TVL, utilising their expertise to ensure the best possible outcome.*

### **Customer Satisfaction & Equality within Leeds**

TVL perform annual customer satisfaction surveys in relation to the maintenance work they perform and the installation of new street lighting as part of the Core Investment programme (CIP). The following equality related information has been identified:

- *51% of males surveyed thought the installation of new street lights would deter crime.*
- *32% of females felt the new lights made no difference to feeling safe.*
- *69% of the Asian or British Asian residents reported that they felt safer due to the installation of the new lights*
- *62% of residents aged 65 years or over felt safer.*

*Satisfaction surveys are conducted annually by TVL, and we will work with them to try and use the surveys to monitor the impact of the proposals on these trends.*

### **Options**

*As a result of the benchmarking and discussions with street lighting professionals, a range of options have been considered (and in some cases trialled) as part of the development process. These include:*

- *White light – use of white light as oppose to 'orange' lights which provides a better level of lighting*
- *Switching or 'trimming' - turning the lights off to an appropriate level at dawn and dusk.*
- *Light Emitting Diodes (LED) – provides lower level lighting suitable for signs*
- *Dimming – dimming street lights at pre-determined times*
- *Removal of street lights (permanently or temporarily).*
- *Part-night switching – switching lights off throughout the city for part of the night between midnight and 5am.*
- *Part-night switching - traffic routes only*
- *Part-night switching - residential streets only.*

- *Applying measures to alternate lights*

### **Considerations**

*The measures adopted will vary across the City. An assessment of every street will need to be made. Factors which will be considered include:*

- Road traffic accidents statistics
- Crime statistics

Also, some areas will be exempt automatically. These include:

- Areas with CCTV local authority / police surveillance equipment
- Sheltered housing and other residences accommodating vulnerable people.
- 24hr operational emergency services sites including hospitals.
- At formal pedestrian crossings, subways, and enclosed footpaths and alleyways where one end links to a street that is lit all night.
- Where there are potential hazards on the highway such as roundabouts, central carriageway islands, chicanes and traffic calming features.
- Where there is an above average crime rate during the hours of darkness
- Where there is a history of accidents during the hours of darkness.

### **Proposal**

*Based on this information, an options appraisal was performed. Details may be seen in the Executive Board report dated 18<sup>th</sup> May 2011, entitled 'Proposal to invest in increased energy saving initiatives for street lighting'.*

*Having assessed the energy saving measures available, the first proposed step in this programme is to switch off an estimated 8,000 (8.7% of the lighting network) lights between 12 midnight and 5am, 7 days a week.*

If the proposals are a success there may be the potential, subject to funding, to expand to larger numbers of street lights to achieve greater energy savings.

### **Are there any gaps in equality and diversity information**

**Please provide detail:**

None.

The street lighting service is provided across the city and benefits all residents and visitors.

### **Action required:**

None

**6. Wider involvement – have you involved groups of people who are most likely to be affected or interested**

Yes

No

**Please provide detail:**

Key stakeholders who have been involved in the development of these proposals include:

- Community Safety CCTV
- Community safety team
- West Yorkshire Police
- West Yorkshire Fire and Rescue Service
- Ambulance Service

The Executive Member for City Development and Regeneration has also been consulted on the proposals and has requested that a report be prepared for discussion at Executive Board. If approval is granted a formal consultation plan will be developed.

Other stake holders who will be involved in consultation will include:

- Ward members – Ward Members will be informed of any proposals to reduce the street lighting service in their ward and asked for comment on the local conditions that have been applied to the selection criteria within this report.
- Residents & Businesses - Residents and businesses will be informed of any proposals to reduce the street lighting provision within 50m of their premises and asked for observations on the local conditions that have been applied to the selection criteria within this report. Notification will include advice from community safety representatives on how to limit the fear of crime in the location.

**Action required:**

Consider the formal approach to consultation

### 7. Who may be affected by this activity?

please tick all relevant and significant equality characteristics, stakeholders and barriers that apply to your strategy, policy, service or function

#### Equality characteristics

<input checked="" type="checkbox"/>	Age	<input type="checkbox"/>	Carers	<input checked="" type="checkbox"/>	Disability
<input type="checkbox"/>	Gender reassignment	<input checked="" type="checkbox"/>	Race	<input checked="" type="checkbox"/>	Religion or Belief
<input checked="" type="checkbox"/>	Sex (male or female)	<input checked="" type="checkbox"/>	Sexual orientation		
<input checked="" type="checkbox"/>	Other				

(for example – marriage and civil partnership, pregnancy and maternity, social class, income, unemployment, residential location or family background, education or skills level)

#### Please specify:

Race/older people/women/disabled - The proposals affect all residents and visitors to Leeds however, it is recognised that community/personal safety fears are more acute within certain groups. The service will use equality monitoring on feedback to gauge the effect on these groups.

Socio-economic background – Low income people who work shifts and may walk/cycle to work may be adversely affected by the proposals

#### Stakeholders

<input checked="" type="checkbox"/>	Services users	<input type="checkbox"/>	Employees	<input type="checkbox"/>	Trade Unions
<input checked="" type="checkbox"/>	Partners	<input checked="" type="checkbox"/>	Members	<input checked="" type="checkbox"/>	Suppliers
<input type="checkbox"/>	Other please specify				

#### Potential barriers.

<input checked="" type="checkbox"/>	Built environment	<input checked="" type="checkbox"/>	Location of premises and services
<input checked="" type="checkbox"/>	Information and communication	<input type="checkbox"/>	Customer care
<input type="checkbox"/>	Timing	<input type="checkbox"/>	Stereotypes and assumptions
<input type="checkbox"/>	Cost	<input checked="" type="checkbox"/>	Consultation and involvement



**specific barriers to the strategy, policy, services or function**

**Please specify**

Built Environment / Location of Premises and Services – The built environment and location of premises and services will be factors in determining what measures are adopted.

Information, Consultation & Involvement – these proposals are ‘sensitive’ due to the community safety fears. Consultation and communication will be essential in ensuring buy-in from residents and businesses.

**8. Positive and negative impact**

Think about what you are assessing (scope), the fact finding information, the potential positive and negative impact on equality characteristics, stakeholders and the effect of the barriers

**8a. Positive impact:**

**Environmental Impact**

- Reduction in the amount of energy consumed
- Reduced light pollution

**Financial Impact**

- Reduction in the annual energy costs to the authority allowing funds to be diverted elsewhere
- Greater value for money for taxpayers

**Action required:**

Communication of the benefits of this initiative

**8b. Negative impact:**

**Fear of crime**

**Characteristics Effected: Age (older and younger people), Race, Sex, Disabled, Socially disadvantaged poorer areas**

When reducing the lighting in residential areas it is appreciated that residents will be concerned about the fear of crime in their immediate environment. It is also recognised that all local authorities have a duty under Section 17 of the Crime and Disorder Act 1998 to do all they can to reasonably prevent crime, disorder and anti-social behaviour. As such the effect of the removal of street lighting will need to be assessed in terms of this.

**Road Safety**

**Characteristics Effected: Age (older and younger people) and Disabled**

Street lighting illuminates areas giving better visibility. A reduction in visibility may lead to an increased number of accidents.

**Action required:**

**Fear of crime**

The street assessment performed will consider issues surrounding community safety for a particular area. The Community Safety Team will provide information on crime statistics and local issues which will determine the suitability of a street for the switch off.

The Street Lighting Team will work with Safer Leeds to provide advice and support to worried communities about precautions that can be taken to protect individuals and property during the hours of darkness. On-site assessments could be undertaken where there is a significant concern. In order to facilitate this partnership consideration of funding of around £12,000 to Safer Leeds will be sought in the first year of the proposed change.

**Road Safety**

The switching off of lights at any time during the night or removal of lighting will require an assessment of the adequacy of road markings and signing. There are formal industry standards which determine the road markings and signing required. The site assessments will review this and if required, the road markings/signs/reflecting road studs will be upgraded.

Also, in areas subjected to part-night switching it is reasonable as part of our duty of care for road users to expect to be able to tell which street lights are to go off and at what times. It is proposed to erect signs at the start and end of part-night switching zones warning road users of the times of switching. Warning signs should also reduce the incidence of the reports of faulty lights during the period when they are deliberately turned off.

To manage these concerns, a monitoring system will be developed to assess the overall impact of the proposals.

**9. Will this activity promote strong and positive relationships between the groups/communities identified?**

Yes

No

**Please provide detail:**

Potential for one community to feel that they are being put at a disadvantage compared to neighbouring communities. May lead to conflict between local people.

**Action required:**  
Effective communication of the decisions made and transparency of the decision making process.

**10. Does this activity bring groups/communities into increased contact with each other (e.g. in schools, neighbourhood, workplace)?**

Yes

No

**Please provide detail:**

**Action required:**

N/A

**11. Could this activity be perceived as benefiting one group at the expense of another?**

Yes

No

**Please provide detail:**

Potential for one community to feel that they are being put at a disadvantage compared to neighbouring communities. May lead to conflict between local people.

May lead to crime 'hot-spots' moving from one community to another.

**Action required:**

Effective communication of the decisions made and transparency of the decision making process.

Monitoring of crime statistics.

Enter into a partnership agreement with Safer Leeds to provide support and advice to residents

**12. Equality, diversity, cohesion and integration action plan**

(insert all your actions from your assessment here, set timescales, measures and identify a lead person for each action)

<b>Action</b>	<b>Timescale</b>	<b>Measure</b>	<b>Lead person</b>
Consider developing a formal approach to consultation and communication which includes transparency of the decision making process	May 2011	Number of complaints received	Ian Moore
Work with partners including Safer Leeds to develop a monitoring system which tracks the impact of the changes including crime statistics and killed and seriously injured (KSI) stats	May 2011	Number of KSI in affected areas during hours of switch-off.  Number of crimes committed in affected areas during hours of switch-off.  Results of annual TVL satisfaction survey	Ian Moore
Enter into a partnership agreement with Safer Leeds to provide support and advice to residents	May 2011	Funding requested within project approval.  Partnership agreement in place	Ian Moore

<b>13. Governance, ownership and approval</b>		
State here who has approved the actions and outcomes from the equality, diversity, cohesion and integration impact assessment		
Name	Job Title	Date
Helen Franklin	Head of Highways Services	21 April 2011

<b>14. Monitoring progress for equality, diversity, cohesion and integration actions</b> (please tick)	
<input checked="" type="checkbox"/>	As part of Service Planning performance monitoring
<input type="checkbox"/>	As part of Project monitoring
<input type="checkbox"/>	Update report will be agreed and provided to the appropriate board Please specify which board
<input type="checkbox"/>	Other (please specify)

<b>15. Publishing</b>	
Date sent to Equality Team	
Date published	21 April 2011