

NORTH YORKSHIRE COUNTY COUNCIL**TRANSPORT, ECONOMY & ENVIRONMENT OVERVIEW AND
SCRUTINY COMMITTEE****17 JULY 2013****STREET LIGHTING ENERGY REDUCTION PROGRAMME****Report of the Corporate Director – Business and Environmental Services****1.0 PURPOSE OF REPORT**

- 1.1 The purpose of this report is to update Members on the progress of the four year street lighting energy reduction programme.

2.0 BACKGROUND

- 2.1 In July 2011, North Yorkshire County Council's Executive approved a Transport, Economy and Environment Overview and Scrutiny Report which recommended that up to 60% of the County Council's street lighting columns be switched off in the early hours of the morning whilst road use is at its minimum. It is intended that the proposed changes will make energy savings of approximately £400,000 per annum, at current energy rates, and contribute significantly to the Council's stated aim of reducing carbon emissions by 20% by 2015.
- 2.2 There are in excess of 50,000 lighting columns within the control of the County Council. Table 1 gives the estimated completion schedule for the 4 year project.

Table 1 Timetable may be subject to change due to routine cyclical maintenance requirements

Phase	Programmed Date	Location	Approximate column numbers
1	March 2012 to June 2013 Complete	HarrogateTown Knaresborough Scarborough Town	8300 1900 6150
2	May 2013 to March 2014	Hambleton District Richmondshire District	6000 3050
3	April 2014 to March 2015	Selby District Remaining Harrogate District Remaining Scarborough District	8000 4400 5700
4	April 2015 to March 2016	Ryedale District Craven District	3550 4660
1a	Sept 2011 to Jan 2012 Complete	Selby By-Pass	230**

**** Included in Selby District total.**

3.0 KEY CRITERIA

- 3.1 Whilst the primary purpose of road and street lighting is highway safety it is acknowledged that crime is an important consideration when assessing any proposals. The Council is working closely with the police and others to ensure that the proposals will not adversely impact on community safety.
- 3.2 The main concerns when considering which street lights will be switched off include the night time accident record, criminal behaviour and maintaining operative and legislative requirements. To that end all locations are subject to a rigorous risk based assessment process involving County Council Road Safety Engineers, Lighting Engineers and North Yorkshire Police.
- 3.3 At the outset the following criteria was determined for the lights which will be excluded from the part night scheme (lights that will not be switched off):
- Main traffic routes and road junctions.
 - Locations with a significant road traffic night time injury accident record.
 - Areas with a significant record of night time crime or anti social behaviour.
 - Areas covered by CCTV operations.
 - Lights outside sheltered housing and other residences accommodating vulnerable people.
 - Areas with 24hr operational emergency services including hospitals.
 - Potential hazards on the highway such as traffic calming, speed humps (except in 20 mph zones) and road crossings.
 - Parts of Town Centres that have concentrated night time activity or economy.
 - Where residents, through the consultation process, raise legitimate safety or crime and disorder concerns.
- 3.4 Consideration is being given to amending the exclusion criteria to include specific reference to excluding lights at the head of steps and ramps.
- 3.5 In some instances there will be a limited number of lights left operational as way finders.
- 3.6 As the primary function of street lighting is for road safety it has been determined that footpaths, back forecourts and alleyways will not be lit during the part night hours except under legitimate circumstances arising from road safety or crime concerns.

4.0 PROGRESS UPDATE

4.1 Phase 1a - Selby Bypass

Implementation of the part night scheme on the Selby Bypass was completed in January 2012. A total of 230 columns were converted to part night working, this represents 60% of the total 380 columns along the carriageway.

The part-night project for Selby Bypass provided an instant energy saving of approx £14,500 per annum.

On completion of the project the Road Lighting Team requested that a stage 3 safety audit be carried out on the sections of carriageway that would be unlit after midnight. Representatives of the County Council's Traffic Engineering Team, Area 7 Highway's Office (Selby) and North Yorkshire Police reviewed the project before and after the lighting switched off; there were no reported road safety issues.

Speed monitoring before and after the completion of the part night programme has shown that overall car speeds have decreased post implementation.

No complaints have been received about the level of lighting on the bypass since the implementation of the Selby project. We are currently reviewing the options for dimming the lights that are not being switched off along the bypass.

4.2 Phase 1 – Harrogate Town, Knaresborough, Scarborough Town

The part night programme is now complete in Harrogate Town, Knaresborough and Scarborough Town. Table 1a shows the number of lighting columns in Harrogate and Knaresborough and Table 1b shows the number of lighting columns in Scarborough Town that were included and excluded in the part night scheme.

Table 1a

Harrogate & Knaresborough Wards	Total Columns	Columns Included		Columns Excluded	
Bilton, Woodfield & New Park	1,529	1,010	66%	519	34%
Starbeck & Granby	1,105	590	53%	515	47%
Low Harrogate & Harlow	1,354	615	45%	739	55%
Hookstone & Stray	1,355	696	51%	659	49%
Pannal & Rossett	1,550	1,019	66%	531	34%
Saltergate	753	509	68%	244	32%
High Harrogate	638	368	58%	270	42%
Knaresborough	1,912	1,214	63%	698	37%
Total	10,196	6,021	59%	4,175	41%

Table 1b

Scarborough Wards	Total Columns	Columns Included		Columns Excluded	
Woodlands	624	276	44%	348	56%
Falsgrave & Stepney	1032	479	46%	553	54%
Newby	794	465	58%	329	42%
Weaponess & Ramshill	957	505	53%	452	47%
Northstead	963	384	40%	579	60%
Castle & Central	1582	412	26%	1170	74%
Eastfield	586	277	47%	309	53%
Total	6538	2798	43%	3740	57%

4.3 Harrogate and Knaresborough Crime Review

In accordance with the planned process, a review of the crime statistics for the Harrogate and Knaresborough areas was carried out in March 2013. This was to determine if there had been any adverse impact on crime figures as a direct result of the part night scheme. The review looked specifically at the initial 3 month period after implementation of the proposals

The key points raised were:

- Looking at three months' worth of data after works had been completed, total crime decreased in all wards as a whole by 15% (19 crimes) when compared to the same period in the previous year and also decreased by 13% (19 crimes) when compared to the three months before installation.

There will be a review for the Scarborough wards to assess if there has been any impact on the crime statistics carried out later in 2013. There will also be a review of the road accident statistics for all of Phase 1 once the information is made available by NY Police. In the meantime there have been no concerns raised by NY Police regarding accident or crime rates since the part night programme commenced.

4.4 Phase 2 – Hambleton and Richmondshire

The street light assessment commenced in the Hambleton area in March 2013. This is being undertaken in partnership with Hambleton District Council who are also implementing a part night scheme. NYCC are leading the assessment and consultation process for both councils and Hambleton District Council has agreed to contribute £6K towards staff and consultation costs.

Work on assessing the North Yorkshire County Council street lights across Richmondshire will commence in July 2013.

Table 2 gives the current progress of phase 2 as at 1 July 2013. Work is on schedule to be complete by March 2014. There will then be a review period to assess if there has been any impact on accident and crime statistics within these areas. The project team will also take account of any lessons learned prior to commencing Phase 3.

Table 2

Phase 2 Key Milestones	Hambleton (%age completion)	Richmondshire (%age completion)
Accident, safety & crime review	100%	0% Due to commence July 2013
Local Councillor consultation	50% Due to complete July 2013	0% Due to commence Aug 2013
Resident leaflet delivery	0% Due August 2013	0% Due October 2013
4 week public consultation period	0% Due August to Sept 2013	0% Due Oct to Nov 2013
Installation of replacement photo cells	0% Commence Sept 2013	0% Commence Nov 2013
Post implementation accident, safety & crime review	0%	0%

5.0 CONSULTATION

- 5.1 The main aim of the consultation process is to utilise local knowledge to ensure specific areas of concern are identified and addressed. For those consultations already undertaken for Phase 1 and 2 we have received the support and participation of all the local County Councillors in facilitating the consultation process with the District and parish Councils. This process is essential to the delivery of the programme and ensures that the primary consultees review the proposals and provide valuable feedback based on their local knowledge and the needs of their constituents.
- 5.2 North Yorkshire Police and others are consulted to ensure that the proposals will not adversely impact on community safety. Night time road traffic accidents and crime statistics are reviewed as part of the process and no lights will be turned off in areas identified as having a significant accident or crime record.

- 5.3 Following consultation with local councillors the proposals are shown on the North Yorkshire County Council website by means of an Interactive Map. There is also further information on the scheme and a feedback form available on the website. An information leaflet is delivered to all residents which details the changes to the street lighting. A period of 4 weeks is given to allow time for feedback and further discussion. Any changes arising from the consultation will be updated on the website prior to the switch over to part-night lighting. In addition there will be press releases in the local press at key points in the process.
- 5.4 As part of the consultation process approximately 70,000 leaflets were delivered to residents in the Scarborough, Harrogate and Knaresborough areas. There will be a further 40,000 leaflets delivered to the residents of Hambleton in August 2013 as part of the consultation process for that area. The leaflet has been updated to reflect the partnership with Hambleton District Council (see Appendix A).
- 5.5 To date the County Council's street lighting energy reduction website has received in excess of 5000 page views. There have been 405 letters or emails of which 169 were negative, 47 positive; there were 172 individual requests for alterations and 17 general comments relating to the programme.
- 5.6 Following consultation the local County Councillors are asked to agree the final proposals prior to implementation commencing. Where the County Councillor has concerns about the part-night conversion and feels unable to give agreement for the scheme to commence a procedure has been introduced that involves individual meetings between each Member and the Business and Environmental Services Executive Members and the Corporate Director, BES. During these meetings the Members' concerns are discussed and, where any further requests for change meet the approved criteria, minor amendments may be made to the proposals. In circumstances where a consensus cannot be reached the Corporate Director, BES will make the final decision on the proposals in consultation with the BES Executive Members.
- 5.7 During the local councillor consultation in Scarborough there was a suggestion made to consider excluding lights within cul de sacs from the part night scheme and also to consider amending the exclusion criteria for A roads within residential areas to allow a proportion of lights to be switched off within 30 mph zones. It is considered appropriate, for road safety reasons, that all A roads continue to be fully excluded from the part night scheme. The low levels of pedestrian and traffic flows in cul de sacs would suggest that the exclusion criteria is still appropriate.

6.0 LESSONS LEARNED

- 6.1 The photo cells are not pre-programmed with the current time and date and take some time to establish themselves in terms of accuracy. Residents will be advised through the website that the switching times will get more accurate the longer the cells are in situ.

- 6.2 Due to some issues with the calibration process which affected the lights converted to part night in the days prior to the clocks changing in October 2012 no part night cells will be fitted in the 14 days prior to the change from BST to GMT and vice versa in future.
- 6.3 Due to changes in legislation road hazards such as speed humps do not require to be lit in 20mph or less zones. This will require a review of the 20 mph zones in Harrogate, Knaresborough to establish what lights adjacent to speed humps that were excluded in the initial phase can now be considered for conversion to part night. It is anticipated that this review will be carried out in April 2014 in conjunction with the remaining Harrogate District assessment.
- 6.4 In response to feedback received the information leaflet that is delivered to all residents has been amended to include the time period for the public consultation.

7.0 EQUALITIES IMPLICATIONS

- 7.1 Consideration has been given to the potential for any adverse impacts arising from the proposals. As street lighting is known to support road safety and community safety it may affect some protected characteristics such as age and gender. An EIA has been developed to help assess any potential impact arising from these proposals.

8.0 FINANCIAL IMPLICATIONS

- 8.1 There is a £200k allocation for the implementation of the part-night energy reduction project during the current financial year. This is an approved direct Revenue contribution to the Capital Programme.
- 8.2 At the start of the project it was anticipated that on completion of the 4 year programme that there would be a £400k reduction in the annual street lighting energy bill. The County Council has recently entered into a new contract for the supply of street lighting energy and the anticipated savings figure is being reviewed as a result.

9.0 LEGAL IMPLICATIONS

- 9.1 A highway authority has a power, not a duty, under the Highways Act 1980 to provide and maintain road lighting. In exercising its powers with regard to the extent, operation and maintenance of its road lighting, a highway authority should act reasonably. If it acts in a way that no reasonable authority would act, then the decision of that authority could be subject to review in the courts.

- 9.2 The Highway Authority is required, under Section 17 of the Crime and Disorder Act 1998, to have regard for the effect on crime and disorder in exercising the Highways Act powers. In undertaking these powers it also has to do all it reasonably can to prevent crime and disorder. Whilst road lighting has several community benefits there is no overriding duty on local authorities to keep lit, systems of road lighting that it owns and operates in order to prevent crime.
- 9.3 A highway authority is not liable for accidents arising from a failure to light a highway unless the accident arises because the authority has failed to take reasonable steps to prevent objects it has placed in and around the highway (eg road signs, lighting columns and bus shelters) from becoming a danger to the public.
- 9.4 A highway authority would be negligent if an accident was caused directly by its road lighting apparatus being in such a state of disrepair that it caused an injury, eg a badly maintained lighting column collapsing due to fatigue and falling onto someone passing by, or a person receiving an electric shock or being electrocuted due to faulty electrical equipment.
- 9.5 A highway authority may be challenged if it removed a system of road lighting or failed to maintain one in operation, if it cannot demonstrate that the reason for which the system of road lighting was installed was no longer applicable (eg if a system of road lighting was installed as an accident reduction measure and the level of night time accidents increased following its removal, or a system of lighting was installed as a crime reduction initiative and crime increased following the removal or downgrading of the lighting system).

10.0 RECOMMENDATIONS

- 10.1 It is recommended that Members note the progress made on the street lighting energy reduction project.

DAVID BOWE
Corporate Director – Business and Environmental Services

Authors of Report: Hazel Davidson, Project Manager (Energy)
Paul Gilmore, Street Lighting Manager

Background documents
Harrogate and Knaresborough Crime Review
Equalities Impact Assessment

Saving money

The reduction in North Yorkshire County Council's street lighting energy consumption will help us to achieve an annual saving of almost £400,000 across the County. By reducing our carbon emissions we will also cut our street lighting carbon tax by 28 per cent.

Hambleton District Council aims to save some £25,000 per annum.

In addition to the savings 'sky glow' or light pollution will be significantly reduced, allowing a clearer view of the night sky.

When are we doing it?

A four week consultation period starts from when you receive this leaflet. Alterations to your street lights will begin up to six week after this period, but changes could start sooner than that.

What will be happening to the lights in your street?

Go to www.northyorks.gov.uk/streetlighting where proposed alterations for villages and towns will be shown on an interactive map as they are agreed. You can also find technical explanations and more information about the scheme proposals online. You can comment on the proposals via our website at the above address, alternatively contact us on 0845 8727374, or email customer.services@northyorks.gov.uk. You can also write to us at the addresses on the back of this leaflet

Please note that you have four weeks from receipt of this leaflet to pass on your comments to us.

Working together

North Yorkshire County Council will work in partnership with Hambleton District Council to carry out reviews of all the parishes in Hambleton where there are both NYCC and HDC lights in place, to make sure that crime, disorder and road safety issues are considered before decisions are made. The project teams will include officers and councillors from NYCC and HDC as well as representatives from the North Yorkshire Police and the Parish Councils. In parishes where there are no NYCC lights in place, the reviews will be carried out by the HDC project team, who will also deal with all enquiries regarding these parishes.

For more information on the consultation and to view the proposed part-night street lights in your area go to www.northyorks.gov.uk/streetlighting

Contact us

North Yorkshire County Council, County Hall, Northallerton, North Yorkshire, DL7 8AD

Customer Service Centre open Mon-Fri 8am - 5.30pm (closed weekends and bank holidays). Tel: 0845 8727374 email: customer.services@northyorks.gov.uk website at: www.northyorks.gov.uk

Hambleton District Council, Civic Centre, Stone Cross, Northallerton, North Yorkshire DL6 2UU

Customer Service Centre open: Mon-Thurs 8.45am-5.15pm and Fri 8.45am-4.45pm (closed weekends and bank holidays). Tel: 08451211 555 email: info@hambleton.gov.uk website: www.hambleton.gov.uk

If you would like this information in another language or format such as Braille, large print or audio, please ask us. Tel: 01609 532917

Email: communications@northyorks.gov.uk



54446 05/13



HAMBLETON
DISTRICT COUNCIL

Changes to street lighting in North Yorkshire



www.northyorks.gov.uk/
streetlighting



NYCC Business and Environmental Services
 HDC Corporate Services

What are we doing?

North Yorkshire County Council and Hambleton District Council are changing their street lighting policies.

Since April 2012, NYCC has been implementing a street lighting energy reduction scheme as part of its overall carbon reduction programme to help make North Yorkshire greener.

The County Council has successfully completed the scheme in Harrogate, Knaresborough and Scarborough.

Works will commence in the Hambleton area over the next few months. This phase will be in partnership between North Yorkshire County Council and Hambleton District Council.

There are three new options for street lighting across the County.

1 Part-night lighting

Street lights in North Yorkshire currently switch on at dusk and off at dawn. The new NYCC and HDC policies could see approximately 60 per cent of the street lights switching off in the early hours of the morning, most likely between midnight and 5am, when road use is at a minimum.

2 Dimming

NYCC plan to install dimming technology in some of our brighter lanterns. This will reduce the level of illumination when road use is at a minimum and at the same time reduce energy consumption by 15 per cent. We expect that this will affect approximately 4 per cent of NYCC street lights.

3 Removal of street lighting

This will only take place in areas where road safety will not be compromised and is likely to affect less than 2 per cent of the NYCC street lights across North Yorkshire

Areas that will not be affected by these proposals include:

- those with high levels of night-time activity such as town centres;
- areas suffering from crime and anti-social behaviour;
- areas which suffer or have suffered from night-time road traffic accidents; and
- areas where road humps or other traffic calming measures are used.

Why are we doing it?

The aim of our street lighting energy reduction scheme is to reduce energy consumption and carbon emissions.

Saving carbon

30 per cent of the UK's carbon emissions come from fossil-fuelled electricity generation. As a result, the Government has introduced a carbon tax for large private and public sector organisations called the 'Carbon Reduction Commitment' which is intended to encourage energy/carbon saving initiatives.

North Yorkshire County Council's annual carbon emissions total around 78,000 tonnes across the County of which 16 per cent or 11,200 tonnes come from street lighting. Hambleton District Council's total carbon emissions are 4,100 tonnes. We estimate that the joint changes described in this leaflet could save some 3,200 tonnes of CO₂ per year (which is around 27 per cent of current street lighting carbon emissions). These emissions savings will help to meet both the local and national emissions reduction targets.

Factfile:

	NYCC	HDC
Number of street lights	50,000	4,000
Electricity consumed annually	20 million kWh	1.2 million kWh
Per hour	4,830 kWh	282 kWh
Carbon emissions	11,200 tonnes	644 tonnes
Annual electricity cost (2010/11)	£1.6 million	£102,000
Equivalent number of average North Yorkshire homes annual energy consumption	4,000 homes	240 homes
• The cost to convert a street light to part-night lighting is between £20 and £30 which will be offset by the energy saving within three years		