Agenda Item	21
Report	EDI
No	37/19

#### **HIGHLAND COUNCIL**

Committee:	Environment, Development and Infrastructure	
Date:	16 May 2019	
Report Title:	Lighting Policy	
Report By:	Director of Community Services	

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#### **Purpose/Executive Summary**

- 1.1 Following the redesign assessment of Street Lighting, undertaken and published in February 2017, it was identified that a review and update of the Lighting Policy should be carried out.
- 1.2 The report confirms that the review has been carried out and updated policy documents have been completed and are appended to the report for approval. These recommendations include revised dimming levels, part night switch off with community support and updated Christmas Light delivery by communities which is being reported to Local Area Committees.

#### Recommendations

- 2.1 Members are invited to:
  - i. approve the updated lighting policy regarding existing lighting in **Appendix 1**;
  - ii. note the publication of guidance (**Appendix 2**) for installation of adoptable lighting which will be regularly reviewed and updated; and
  - iii. note that, following the decision taken by Members in Feb 2018 to remove the budget for Christmas/Festive lighting, reports are being presented to all LACs to inform Members and communities of the implications for this year.

#### 3 Introduction

- 3.1 The Council has previously approved a capital programme of LED street lighting replacement. This is expected to reduce un-metered energy consumption and CO2 production by 50%. The prices for un-metered electricity is set at UK level, recent increases have been above inflation which are placing additional pressure on budgets. The Street Lighting Service assesses new technology options to manage and further reduce energy consumption, and recent technological development has enabled the Service to offer a budgetary saving through increased dimming between midnight and 06:00.
- 3.2 In February 2017 the Council's Corporate Redesign Board received the final report RDB/1/17 on the review of the Street Lighting Service. The report identified various areas, two of which were: provision of an updated lighting policy and Christmas lighting/decorations, where there are inconsistencies in respect of the approach taken, with some communities paying for provision whilst others do not, additionally, under recovery of costs from the Inverness Common Good was identified. <u>https://www.highland.gov.uk/meetings/meeting/3824/redesign\_of\_the\_highland\_council\_board</u>
- 3.3 At its meeting on 15 February 2018 the Council approved budget saving CS16 to remove funding of Christmas Lighting (Communities to provide their own Christmas lights). The full budget report is available at <a href="https://www.highland.gov.uk/meeting/3934/highland\_council">https://www.highland.gov.uk/meeting/3934/highland\_council</a>
- 3.4 In April 2018 the Lighting and Communications Service budget was reduced in accordance with saving CS16 by £35,000.
- 3.5 At its meeting on 14 February 2019, the Council approved budget saving 1.15 Street Lighting Dimming in report HC/2/19. The full budget report and appendices are available at https://www.highland.gov.uk/meetings/meeting/4084/highland\_council
- 3.6 In April 2019 the Lighting and Communications Service budget for 2019/20 was reduced in accordance with saving 1.15 by £5,000.
- 3.7 The existing Lighting Policy does not include an option for different night time dimming levels and now requires updating.
- 3.8 Each Local Area Committee (LAC) is receiving a report to inform Members and communities of the impact on the provision of Christmas lighting of the removal of £35,000. The last LAC report will be to CIAC on 30 May.

#### 4 Policy Changes

4.1 Under the Roads (Scotland) Act 1984, the Council has the power, but not the statutory duty, to provide street lighting. Under the Traffic Signs and General Directions 2016, the Council has a statutory duty to ensure that certain road signs are illuminated. Both street lighting and illuminated signs are installed to provide road or other safety benefits. The Council currently has over 53,000 street lights and 2,700 illuminated road signs.

- 4.2 The Council has a statutory duty to ensure that, once installed, road and sign lighting is maintained and operated in a manner that ensures public safety.
- 4.3 To deliver the Council's statutory duty an update Lighting Policy with associated guidance has been produced. The present policy was reviewed in 2012.
- 4.4 To facilitate budgetary, LED and other technological developments in road lighting, it is now necessary to update the Lighting Policy. The updated policy includes options for 50% dimming and part night time switch off, it also provides an assessment process to ensure road, and community and general safety issues are considered.
- 4.5 A revised lighting policy is enclosed in **Appendix 1**.
- 4.6 An updated guidance document is enclosed in **Appendix 2**.

#### 5 Implementation – Dimming and part night time switch off

- 5.1 The electrical switching and time control equipment required to provide dimming or part time switch off are different; to change from one form of control to another would involve additional costs. It is therefore intended that the majority of new LED installations will be installed with dimming, whilst switch off will generally only be considered in suitable rural areas.
- 5.2 To date new over 27,000 LED lighting units have been installed with 30% dimming set from 00:00 (midnight) and 06:00. There have been no issues concerning the level of illumination.
- 5.3 Continuing improvements in LED technology enable, for future LED installations, the option to introduce 50% dimming, from midnight to 06:00 dimming.
- 5.4 For future LED installations, an assessment process will be completed using the Guidance criteria in **Appendix 2** to identify any safety considerations. Where there are no issues, 50% dimming (00:00 to 06:00) would be installed. In other instances the level of dimming would be set at the current level of 30%.
- 5.5 An automated control system, enabling switching between various lighting levels, has been considered. However this is reliant upon a good mobile phone signal and network coverage, and there is a unit cost per lighting unit per year. The annual costs, savings and operational issues mean that a central management system is, at present, unsuitable for most locations in the Highlands however, as technology reduces costs, this option will be considered.
- 5.6 Since 2010, 215 street lighting units have been installed with part time, midnight to 05:00 switch off. There had been concerns about low level anti-social behaviour in some of the residential areas. Consequentially any future proposal would only proceed where the guidance criteria in **Appendix 2**, including consultation, are met. The consultation would be with both ward Members and the local community, with general agreement required for the introduction of part night time switch off.

#### 6 Implications

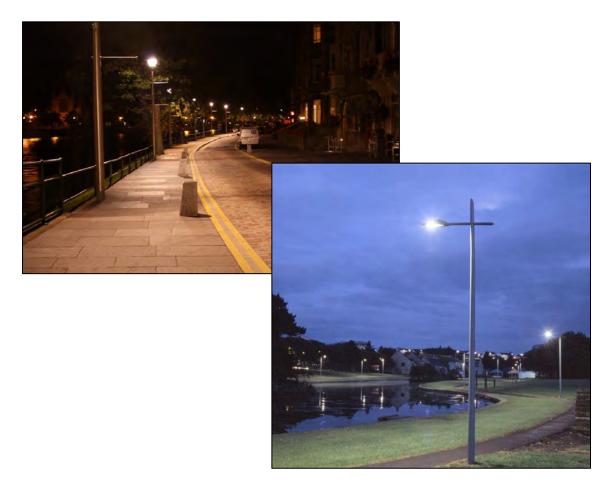
6.1 Resource – Approval of the revised policy on night time dimming of street lighting will enable further reduction in energy consummation and delivery of budgetary savings.

- 6.2 Legal There are no legal implications
- 6.3 Community (Equality, Poverty and Rural) Assessment of replacement LED lighting against set criteria will ensure that where required for safety community benefits from lighting maintained.
- 6.4 Climate Change / Carbon Clever Changes to night time dimming and or nigh time switch off will reduce CO2 production and helping in achieving the authorities carbon saving targets.
- 6.5 Risk Compliance with the updated policy will ensure that any risk is appropriately managed and mitigated.
- 6.6 Gaelic there are no Gaelic implications arising from these proposals.

Designation:	Director of Community Services	
Date:	29 April 2019	
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## **Public Road Lighting Policy**



## Community Services Roads & Transport

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#### **Document Control**

Version Number	Date	Comments
1.0	May 2019	First version of Lighting Policy



## 1.0 Introduction

- 1.1. This Public Road Lighting Policy has been prepared taking cognizance of the Institution of Lighting Professionals Technical Report 24 "Guidance on the development of a public lighting policy".
- 1.2. The purpose of this policy is to detail the requirements for the installation and maintenance of all types of external public lighting which the Council's Lighting and Communications Section are responsible for and that are in the ownership of The Highland Council. It is a master plan for all new installations, conversions, upgrades, refurbishments and asset management. The policy should be read in conjunction with The Highland Council's corporate vision and objectives.
- 1.3. The term "street lighting" encompasses all illuminated assets on the adopted road network including streetlights, signs, bollards and other street furniture.
- 1.4. Under the Roads (Scotland) Act 1984, the Council has the power, but not the duty, to provide street lighting.
- 1.5. The Council currently manages and maintains over 53,000 streetlights and 2,700 illuminated signs on the adopted road network. The inventory grows each year as new developments are built and the corresponding roads adopted.
- 1.6. The policy defines when and where public lighting may be required as well as the standards which should be applied to its design, installation and maintenance.
- 1.7. Where existing street lighting on the adopted road network is below the standards set out in this policy, it will only be upgraded to those standards where reasonably practicable and subject to available funding. For example, where it is not reasonably practicable to achieve the standards set in this policy due to the existing column spacing, the Council will strive to



get as close to the standard as possible. This may be achieved by using the most appropriate, currently available energy efficient street lights with the existing column spacing.

- 1.8. The policy further defines the standards to which all personnel must work, whether on behalf of the Roads Authority, or as private contractors or consultants constructing a new Road on which the lighting installation is to be adopted.
- 1.9. The policy will form an important part of the Council's approach to asset management and will help to increase the use of existing and new Roads after dark. The provision and maintenance of modern public lighting will give pedestrians and cyclists more confidence to use facilities and a greater sense of personal safety and security.
- 1.10. Well designed and installed public lighting, which is maintained and correctly operated, can play a substantial role by contributing to safety, reducing crime, improving commerce, improving the night scene and making sustainable non-motorised transport more attractive and user-friendly.
- 1.11. The policy will assist in the provision and maintenance of pubic lighting being carried out in a sustainable manner, taking account of the need for energy conservation and the Council's objectives in relation to sustainability and carbon management.



## 2.0 Public Lighting Policy – Main Objectives

- 2.1. The fundamental purpose of street lighting is to help create a better environment in which to live, work and play. The increased safety, greater security and enhancement of the environment provided by modern public lighting help to achieve these objectives by:
  - Providing a safe Road Network for all road users
  - Helping to reduce crime and the fear of crime
  - Providing a cost effective public lighting service
  - Enhancing the on-going operation of the service
  - Minimising the environment effect of street lighting whilst enhancing the night-time ambience
  - Ensuring that public lighting provision is in keeping with and properly integrated into the Road Network Infrastructure
  - Energy conservation and sustainability
- 2.2. The following objectives have been considered when compiling this document and are listed in priority order:

a) Road safety for all road users and the wider community

- Reduction in night-time accidents
- Motorists
- Pedestrians
- Cyclists
- The elderly
- Disabled people
- Children
- b) Security
  - Personal safety
  - Crime against property, including car crime
  - Reduction of vandalism
  - Increase the 'feel good' factor and perception of safety
  - Assist the operation of CCTV installations



c) Cost effectiveness

- Whole life costs
- Reliability and maintenance of equipment
- Energy efficiency
- d) Electrical, structural and other safety issues
  - Location and access of equipment
  - Specification of components
  - Structural and electrical testing
  - Disposal of redundant and / or obsolete equipment, including lamps
  - Passive safety
  - Innovative use of developing technology LED
- e) Visual / environment intrusion
  - Day-time appearance, improved aesthetics of equipment
  - Night-time appearance, better optical control
  - Minimising light pollution, upward and spill light
  - Limiting lighting in rural areas introduction of lighting can urbanise an area that has traditionally been dark
- f) Enhancement of the night-time environment
  - Areas of high night-time activity
  - Urban tourist area
  - Beautification
  - Environmental improvements
- g) Protection of the night-time environment
  - Conservation areas, listed buildings, ancient monuments, historic sites etc.
  - The rural environment
  - Dark landscapes/dark sky areas
  - Sensitive areas
  - Areas of outstanding natural beauty
  - Sites of special scientific interest
  - Nature reserves
  - Green belt areas
  - National parks



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## 3.0 Lighting Provision

- 3.1. The key objective is to provide an effective public lighting service that minimises the public lighting carbon footprint but without negatively impacting on community safety considerations.
- 3.2. The policy categorises the roads on usage and environmental factors.
  - Traffic Routes List of Public Roads
     Lighting only within speed controlled areas, for example, urban areas. De-restricted (speed) areas are not normally lit, however areas with special requirements, e.g. accident sites will be considered on their own merits for a site-specific treatment.
  - Subsidiary Roads & Footways List of Public Roads
     Generally any adopted road within an urban area will be lit within the limits of the available funding.
  - Public Car Parks and other Transportation Related Areas
    Lighting provision in these areas will subject to available funding
    generally follow the precedent for road lighting i.e. if area served by
    a lit road, lighting may also be provided.
  - Property Related Parking, Garage Areas, Parks and Other Council Areas
     Lighting provision will be site specific and dependant on the requirements of the responsible service. The responsible Council Service will be required to fund both the installation and maintenance. This amenity lighting may not be to road lighting standards.



- Private Roads/Areas/Un-adopted Roads
   No new lighting will be provided on private roads/areas or unadopted roads. Existing lighting currently on the lighting inventory, will continue to receive basic maintenance i.e. inspections and minor repairs. However where there is clear evidence that a third party should be responsible for the maintenance/provision of lighting then the Council will look to either transfer the asset or alternatively secure a third party agreement for funding future maintenance. Existing lighting requiring greater repairs will be referred to the owner. Any existing lighting removed on apparatus safety grounds will not normally be replaced.
- 3.3. The provision of public lighting will vary with need, location, environmental factors and cost. It is generally accepted that urban areas, and this includes residential estates of more than five houses may be provided with lighting for road safety, security and the comfort of the residents. The level and standard of lighting provided will be dependent on a number of factors.
- 3.4. For example, city and large urban areas may have relatively higher crime rates and may therefore benefit from the provision of a high level of public lighting, whereas environmental factors in rural areas may constrain the level and type of lighting or prevent its installation.
- 3.5. Therefore, in accordance with national standards each locality in the Highland Council Area is placed into one of four Environmental Zones as shown in Appendix 1.
- 3.6. All new or improved public lighting installations within the Highland Council Area shall be designed to BS5489: Part 1-2: 2013 and EN13201.
- 3.7. Under Section 35 of the Roads (Scotland) Act 1984, Highland Council has a duty to "provide and maintain lighting for roads which are maintained by them and which in their opinion ought to be lit" The definition of roads contained in the Act also means footpaths and public rights of access.



- 3.8. In pursuit of public safety and where there is a right of access, the Highland Council will:-
  - Refurbish street lighting installations as necessary, including vandalised equipment where no culprit has been identified.
  - Make the provision of lighting prospectively adoptable roads a condition of the Roads Construction Consent. The developer shall be issued with a copy of Highland Council's Specification for the Lighting of Roads in Housing and other Developments which sets out the various responsibilities and options attached to the developer in providing and installing the complete lighting system, and thereafter the maintenance of the installation until adoption by the Highland Council.
  - For proposed roads which are to be adopted but not lit e.g. where there is no other lighting adjacent to the proposed road or development and agreement has been reached between the residents to that effect, the developer will provide and install ducts and any necessary road crossings required by Highland Council of that area and to Highland Council specification in order that in future should the roads require to be lit the minimum of disruption will be caused by excavations.
  - Where a developer intends to leave the road and lighting unsuitable for adoption Highland Council will not maintain or provide new lighting unless the developer improves the lighting to adoptable standard. There must also be unrestricted and suitable access to maintain any future adoptable lighting. On adopted roads and footpaths :

a) Maintain as necessary any existing street lighting currently maintained by Highland Council and make any improvements as required.

b) Extend the service to other un-adopted roads where the lighting is of a standard acceptable to Highland Council, or after it has been brought up to such a standard by the owners.



c) Where there is no lighting consider the provision of lighting in accordance with Highland Council's Public Lighting Policy.

- 3.9. All new and improvements to existing public lighting provided on the adopted road shall be designed and installed in accordance with Current Standards and Codes of Practice including:
  - Roads (Scotland) Act 1984
  - BS5489-1: 2013-Part 1: Code of Practice for the design of Lighting of Roads and public amenity areas
  - BS5489-2: 2013-Part 2: Code of Practice for design of lighting in Tunnels
  - BS EN 13201-1:2014 Selection of lighting classes
  - BS EN 13201- 2:2015 Performance Requirements
  - BS EN 13201-3:2015 Calculation of Performance
  - BS EN 13201-4: 2015 Methods of Measuring Lighting Performance
  - MCDHW Volume 1 Series 1300 & 1400
  - The Traffic Signs Regulations and General Directions 2016
  - The Traffic Signs Manual Chapter 8 2009
  - BS7671 : Requirements for Electrical Installations
  - The Electricity at Work Regulations 1989
  - The Electrical Safety, Quality and Continuity Regulations 2009
  - Electricity Supply Regulations Act
  - New Roads and Street Works Act 1991
  - Scottish Hydro-Electric Code of Practice covering safety in Public Lighting Installation & Maintenance – G39
  - ILP Code of Practice for Electrical Safety in Public Lighting Operations – GP03
  - ILP Planned Inspection Regime Lighting Columns & Sign Posts Report No. 22
  - Highland Council Inspection & Testing Guidelines, Qualifications & Experience Requirements
  - Highland Council Quality Manual and Procedures
  - Construction (Design & Management) Regulations 2015 CDM



- Disabled Persons Act 1981
- The WEEE Regulations
- The Civic Government Scotland Act
- The Local Government and Planning (Scotland) Act 1982
- Road Hump Regulations
- The Management of Health and Safety at Work Regulations 1982
- Well Managed Highway Infrastructure Part D Lighting UK Roads Liaison Group - 2016
- Institute of Lighting Professionals Technical Report 24 Guidance in the Development of a Public Lighting Policy
- The Local Government and Planning (Scotland) Act 1982
- BSEN 60598: Parts 2 & 3: 1884 luminaires for Road & Street lighting
- BS 5649: EN40 Parts 1-6 Lighting Columns

And any other relevant standards the Council may specify for the design, installation and maintenance of public lighting in accordance with the current document including revisions

- 3.10. The actual level of public lighting to be provided shall be determined by the methods shown in the European Standard prEN13201-2:2015 Selection of Lighting Classes
- 3.11. The Institution of Lighting Professional Guidance Notes for the Reduction of Obtrusive Light provides a recognised means of zoning areas for environmental purposes when assessing lighting requirements.
- 3.12. The Lighting Design classification will require to be confirmed by the Council's Lighting and Communications Manager or the delegated responsible Lighting Service Representative.



## 4.0 Light Source

4.1. The Highland Council's preferred light source is LED (Light Emitting Diode). LEDs are rapidly maturing in the exterior lighting market providing a cost effective, highly controllable light source that for the majority of lighting requirements. LEDs produce no ultra violet (UV) light, and so these may be an alternative choice that will have a minimal impact on the insect population. LEDs provide a cost effective white light source or areas of high amenity value and residential areas, where white light is considered desirable. The use of white light (LEDs) show that lower levels of lighting can be used than with other light sources to achieve the same visual appearance. This enables the required lighting levels to be reduced within the classification.

#### 4.2. LED light source:

- Solid state semi-conductor device
- Low running cost
- Small size
- Long service life (up to 20 years)
- Excellent colour rendering
- Wide range of colours available
- Applications for attractive features or amenity lighting.

## 5.0 Obtrusive Light

- 5.1. Obtrusive light is often referred to as "light pollution" and is caused by light which falls outside the area to be illuminated and which because of its quality, direction or colour causes annoyance, discomfort or distraction, or reduces the ability to see.
- 5.2. There are three main categories of obtrusive light:
  - Sky-glow



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- Glare
- Light trespass
- 5.3. Obtrusive light can be reduced/restricted by:-
  - The control of the light source by limiting the level of light emitted by the luminaire at high angles, usually between 40 and 90 degrees.
  - The use of full horizontal cut off luminaires
  - The use of baffles on luminaires where appropriate
- 5.4. Special consideration will be given to the effect of lighting on adjacent areas used by other means of transport such as:
  - Airports
  - Railway lines
  - Harbours
  - Transport interchanges
  - Navigable waterways
  - Adjacent unlit traffic routes
  - Car parks
- 5.5. Astronomical observations can be particularly affected by obtrusive light from road lighting installations. Therefore consideration will be given to the lighting levels and type of lighting provided in close proximity to observatories to control the light output of the luminaire.
- 5.6. Early consultation will be carried out with any astronomical groups that may practice in close proximity to the road to be lit and seek to achieve a design solution that is acceptable for both parties.
- 5.7. The use of uplighters, or similar equipment intended for decorative lighting installations, will be strongly discouraged unless a significant benefit to the local community can be demonstrated which outweighs environmental concerns.



5.8. Glare, light trespass or sky glow, obtrusive light is wasted light and energy expended and carbon produced for no gain. The ILP document "Guidance Notes for the Reduction of Obtrusive Light" should be used in preparing lighting designs.

## 6.0 Dimming – Variable Road Lighting Levels

- 6.1. Electronic control gear now comes with the ability to vary the light output of the lamp as standard. Highland Council has already introduced variable lighting technology. Lanterns shall be provided with pre-set single step dimming control, the luminaires are currently dimmed by 30% between midnight and 06.00am. It is proposed however that, following consultations discussions with the Council and other stake holders, and taking safety issues into account that consideration is given to increasing the dimming figure be increased to 50% where safe to do so.
- 6.2. Part night time switch off of lighting between midnight and 05:00am or at other times and/or other reductions in lighting levels can be considered following consultation with elected members, Community Councils and other steak-holders. Lighting Designers will however ensure on a site by site basis that any reduced levels of lighting will meet the minimum lighting level requirements of BS5489.
- 6.3. It should be noted that such decisions are not part of a reversible process.
- 6.4. The introduction of the variable lighting technology will provide a significant carbon and energy reduction to Highland Council in the future and provides a more publicly acceptable alternative to switching lights off.



### 7.0 Use of New and Emerging Technologies

- 7.1. This policy is output based on where street lighting will be provided and to what standard on the adopted highway subject to available funding.
- 7.2. The Council will constantly review new and emerging technologies to ensure that the most technically and economically advantageous street lighting technology is utilised.
- 7.3. The Council already utilises LED (Light Emitting Diode) light sources.
- 7.4. Installation of a central management system (CMS) for controlling street lighting when installed with variable LED lighting units can provide the ability to vary both light levels and colour. Successful operation requires network capacity along with both a strong and continuous mobile phone signal.
- 7.5. The Council will consider the installation of CMS where it is financially beneficial and mobile phone coverage and network capacity enables.

#### 8.0 New Developments and Adoptions

8.1. The Council requires developers to follow this policy should they wish the Council to adopt street lighting. Further guidance for design and material specifications is available from the Lighting & Communications Manager or a responsible Lighting Services representative.

The design and specification of the proposed lighting should be agreed by the Council prior to installation and must be designed and installed in accordance with the specifications laid down in the Council's public lighting policy.

The Council lighting service can offer a full design service quoting for the design, supply of materials, electrical labour and application for electricity connections on the developers' behalf. This service offers many benefits to



developers as it ensures from the onset that the design meets Council requirements for Road Construction Consent and Planning. It also ensures the correct specification of material is utilised, is installed to adoptable standards and enables the final adoption to be a straightforward process.

The Council will ensure that any public lighting equipment adopted is added to its Asset Management inventory at the earliest opportunity.

- 8.2. Material specifications all materials used in new developments shall comply with the Highland Council's Specification and will require to be approved in advance by the Lighting & Communications Manager or a responsible Lighting Services representative.
- 8.3. The manufacture, supply and verification of lighting columns and bracket arms shall be subject to a National Quality Management Scheme. Copies of certificates of conformity affirming compliance with the scheme shall be provided to the Lighting & Communications Manager or a delegated responsible Lighting Services representative.
- 8.4. The following items shall be supplied with an EC Declaration of Conformity (CE Mark):
  - Luminaires for Road, Amenity and floodlighting schemes
- 8.5. The following items should only be used when supplied by a BASEC accredited manufacturer; the cable should be marked with the BASEC logo:
  - Specification for PVC-insulated cables (non-armoured) for electric power and lighting
  - Specification for PVC-insulated cables for electric supply

#### 9.0 Sensitive Areas

9.1. For the purposes of this policy Sensitive Areas are defined as:



- Statutory Conservation Areas, Scheduled Ancient Monuments, Listed Buildings and their settings.
- Non-statutory historic or heritage areas and older urban regeneration areas, identified by the Local Planning Authority.
- 9.2. All areas have a unique character and it is important that lighting arrangements are tailored accordingly, rather than being "standardised" towards the enhancement of the area in respect of any works carried out.
- 9.3. All proposals and improvements will be the subject of a lighting design brief and, where these comply with the agreed brief, they will be adopted by The Highland Council.
- 9.4. Lighting improvements should form an integral part of all environmental enhancement schemes.
- 9.5. The design brief should comply with Highland Council's Quality Assurance Procedures and should also take into account the views of interested outside bodies to ensure that the appropriate environmental and lighting design solutions are achieved.
- 9.6. The declaration of a Conservation Area does not by itself establish a need for period or ornate style lighting. In general, lighting will be provided to the requirements of BS5489: 2013 Part 1, but the manner in which this is delivered will be discussed and agreed with the Council's Conservation Officer in each case.



## Appendix 1 – Environmental Zones

The Environmental Zones are as follows:

## Zone E1: National Parks, Areas of Outstanding Natural Beauty, Sites of Special Scientific Importance and other Dark Areas

Roads in Zone E1 are defined as all roads within designated boundaries excluding roads in urban areas.

The general presumption is that street lighting should not be provided in Zone E1 areas due to light pollution and loss of amenity unless there is an overriding road safety issue which cannot be overcome by other means such as improvements to the carriageway delineation by reflective road studs, carriageway markings and improved signing.

#### Zone E2 - Areas of Low District Brightness (Rural Locations outside Zone E1)

Residential areas of villages and settlements within a Zone E2 area are generally provided with lighting in accordance with the relevant minimum British Standard applicable to the type and use of the adopted highway. Adopted footpaths and cycle tracks will only be lit where there is high night-time use, fear of crime issues and no alternative route.

On roads between villages and settlements in Zone E2 areas, lighting will only be provided where there is a known night-time road safety problem that cannot be controlled by other methods such as improvements to the carriageway delineation by reflective road studs, carriageway markings and improved signing.

#### Zone E3 - Areas of Medium District Brightness (Urban Locations)

Urban roads within a Zone E3 area are generally provided with lighting in accordance with the relevant minimum British Standard applicable to the type and use of the adopted highway.

Adopted footpaths and cycle tracks will only be lit where there is high night-time use, fear of crime issues and no alternative route.

#### Zone E4 - Areas of High District Brightness (urban Centres with high nighttime usage)

Urban centres within a Zone E4 area are generally provided with lighting in accordance with the relevant minimum British Standard applicable to the type and use of the adopted highway.

Roads in such areas that carry high traffic volumes will be treated as traffic routes and lit accordingly.





## Public Road Lighting Policy Guidance Notes



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#### **Document Control**

Version Number	Date	Comments
1.0	May 2019	Final version of Lighting Policy Guidance



## 1.0 Assessment of Public Lighting Schemes

#### 1.1. New lighting schemes

- 1.1.1. This guidance sets out where street lighting may be provided and to what standard subject to available funding.
- 1.1.2. One of the methods of determining whether or not a road merits lighting, this does not include footpaths, is based on night-time accidents, particularly fatalities and a formula relating them to the cost of all injury accidents based on Department of Transport research figures.
- 1.1.3. However, there are important contributory factors which also influence the decision on provide lighting:
  - Accident reports which indicate the risk of further accidents at the locus which might be resolved by the installation of lighting
  - Traffic volumes and road configuration
  - Police reports of assaults, car theft, burglary and vandalism
  - Requests from the local Community Councils
  - Safer routes to school and active travel route.
- 1.1.4. Additional factors which may add value to the case for lighting may include the following:
  - New developments out with currently lit areas, are there more than 15 houses planned.
  - Village path area layout and population
  - Are there pavements in the village.
  - Destination of path
  - Does the road have a poor geometric alignment.
  - Proximity of a school.
  - Is there a community hall, meeting place or licensed premises.
  - Is there a doctor's surgery.
  - Is there a telephone kiosk.
  - Is there a bus stop / shelter.
  - Is there a school crossing / pedestrian crossing.
  - Is there an ageing population or sheltered housing.
  - Is the road to be upgraded in the near future.



- Are the energy network provide SSE proposing to underground their overhead network in the near future
- Capital cost and whole-life maintenance cost of installation
- Environmental protection
- Energy conservation
- Commercial and economic regeneration
- Are there objections to the installation of lighting?
- CCTV installation in the area
- There is another lit area within 300 metres
- Is there a history of anti-social behaviour in the area
- Investigation of night time accident statistics indicate that lighting is justified as an accident remedial measure

# 2.0 Replacement and Refurbishment of Existing Lighting

- 2.1. Where existing lighting is being assessed for replacement or refurbishment, the actual condition of the equipment will be the major factor in determining the priority for replacement. However, in addition to secton 1, consideration will be given to the undernoted factors when assessing the need for replacement or refurbishment of a lighting installation, if best value is to be achieved:
  - Column structural inspection results
  - Electrical test results
  - Night-time personal injury accidents, compared with daytime rates
  - Recorded crime statistics
  - The condition and standard of existing lighting equipment
  - The needs of the at-risk population
  - Rates of vandalism of equipment
  - Maintenance or energy costs
  - Traffic flows



## 3.0 Consultation in Respect of Requests for New/ Improved Lighting

- 3.1. Consultation shall be carried out to gain information in relation to:
  - The level and standard of the lighting required
  - The value and cost of the lighting including energy costs
  - The effect on crime and the fear of crime
  - The effect on road safety and the level of night time accidents
  - The effect on the environment both by day and night
  - The level of residents satisfaction with the provision
- 3.2. The information shall be collected by means of consultation where appropriate with the following groups/ organisations:
  - Residents/ members of the public
  - Community Councils
  - Elected members
  - Police
  - Civil Aviation Authority, where applicable
  - Any other relevant or interested parties

## 4.0 Removal of Street Lighting

- 4.1. Where an existing street lighting unit is no longer specifically required and replacement or upgrading is scheduled, then removal will be considered based on a risk assessment.
- 4.2. In general street lights that are not required by the Policy are mainly those on roads with a de-restricted speed limit between settlements in rural areas. Such sections of road would not normally be lit unless required under section 1.0.



- 4.3. Local Members and Community Councils will be consulted on the risk assessment to ensure that it reflects all relevant factors before a determination is made.
- 4.4. Where lighting is not required, a community can request retention if they are prepared to fund any street lights that are not required by this policy.
- 4.5. Illuminated signs will be removed or de-illuminated in accordance with The Traffic Signs Regulations and General Directions 2016 and as permitted by the Highland Council's policy, following a site specific Risk Assessment.

#### 5.0 Cycle ways, Footpaths and Alleyways

- 5.1. Public safety is of major importance to users of this type of facility. In these locations lighting, whether on adopted paths or alleyways, will be risk assessed on a case by case basis to determine if it should be provided.
- 5.2. In areas where access is an issue raise and lower hinged columns will be installed for safe maintenance of the lanterns.

## 6.0 Maintenance Requirements

- 6.1. There is no statutory obligation to provide street lighting; however, local authorities have a duty of care to ensure Road electrical equipment is maintained in a safe condition. All systems of public lighting will be maintained to a standard that ensures its safe, economic and effective operation.
- 6.2. The maintenance of an up-to-date electronic-based inventory of all units to ensure satisfactory management of the maintenance process and to enable the annual assessment of the energy charge to be obtained. This information



is currently held on the Council's Lighting Asset Management System database.

- 6.3. Fault repairs: We currently aim to repair all known street lighting faults within five working days but this is under review due to the lower incidences of failures with LED lanterns. However, efforts are made to group faults into geographical areas in order to maximize the efficiency of our repair crews.
  - CATEGORY 1: Emergency danger to members of the public RTA affecting electrical street furniture – lighting columns & illuminated signs Lantern hanging from lighting column Door missing from lighting column Wilful damage to equipment – vandalism Section of lights out Control pillar – door open / damage Dalfaber Level Crossing – crossing / railway signal equipment fault Navigation light fault

The target attendance on site is within 3 hours of fault report but due the geographical challenges in the Highlands this is not always achievable. A Duty Officer is available for handling Out of Hours calls and will assess if any reports out with normal office opening times can be held to the following day such as sections of lights out in non-urban remote locations such as small villages.

CATEGORY 2: non – emergency i.e. - not covered in CATEGORY 1, including: Random repairs of defective lamps Those defects which can be included in a regular programme of repair work.



- 6.4. Electrical Inspection:
- 6.4.1. Electrical inspection and testing of all street lighting shall be carried out every 6 years in accordance with the current requirements of BS7671. All test results will be held on the Council's Asset Management database.
- 6.5. Structural Inspections and Risk Assessments:
- 6.5.1. Structural inspections and risk assessments will be undertaken on a regular basis, during the course of planned maintenance programmes, to ensure all equipment is in a safe condition. The inspection programme should be carried out in line with the ILP Technical Report Number 22 "Lighting Columns and sign posts": Planned Inspection Regime document.
- 6.5.2. The results of these inspections will be recorded on the Council's Asset Management database.
- 6.5.3. Where equipment is found to have a serious structural defect then such equipment will be replaced as soon as possible.

