



TRAFFORD COUNCIL

STREET LIGHTING STRATEGY

December 2014

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1.0 Introduction

- 1.1 Effective street lighting enables safe use of the highway for road users and pedestrians and supports strong and safe communities. It represents a key part of the streetscene, can provide an area with a strong visual identity and support economic growth objectives. However it is also a significant consumer of energy and contributor to carbon emissions and light pollution.
- 1.2 The Trafford Street Lighting Strategy (the Strategy) provides a framework for the provision and maintenance of street lighting across the Borough over the next ten years. It balances the need to provide for the safety of road users and pedestrians and support for safe communities with the need to reduce the energy usage and cost associated with street lighting.
- 1.3 Within the Strategy the term street lighting encompasses lighting provided on the public highway and within public open spaces owned and managed by the Council. It includes high mast and off highway lighting installations, subway lighting, under-bridge lighting, and lighting of surface car parking.

2.0 Vision and Objectives

2.1 The vision of the Strategy is:

“To provide appropriate street lighting in an efficient and cost effective way that seeks to minimise adverse impact on the built and natural environment, takes advantage of any opportunities to deliver improved street lighting design, and ensures safety for road users, pedestrians and communities”.

2.2 The objectives of the Strategy are to:

- At least maintain and where possible improve the quality and effectiveness of street lighting across Trafford.
- At least maintain and where possible increase the positive contribution that street lighting makes to the safety of road users, pedestrians and the community.
- Provide street lighting appropriate to the specific natural and built environment in Trafford, recognising the specific requirements of Conservation Areas.
- Minimise the adverse impact of street lighting on the natural and built environment and where possible seek to deliver improved street lighting design.
- Improve energy efficiency and reduce carbon emissions associated with street lighting.
- Reduce the maintenance and operational costs associated with street lighting.
- Ensure due consideration is given to public health issues in implementing the strategy.

2.3 To achieve the vision and objectives of the Strategy, new street lighting and improvement schemes within the Borough should be undertaken in accordance with the following key guiding principles:

- Seeking to ensure the safety of road users
- Seeking to prevent crime and the fear of crime
- Limiting negative environmental impact
- Conserving energy
- Delivering value for money
- Improving the condition of street lighting stock
- Increasing the life expectancy of street lighting installations and their components
- Contributing to delivering economic growth

3.0 Developing the Strategy and Policy Context

Street Lighting in Trafford

- 3.1 In Trafford there are approximately 27,100 street lighting units on the highway network. The stock is of mixed age, condition and specification. The lighting units are predominantly SON (High Pressure Sodium) or SOX (Low Pressure Sodium) luminaries (lamps). SOX luminaries are no longer in widespread use nationally due to their higher associated operational costs compared to alternative options.
- 3.2 Street lighting that is modern, well-designed and well-maintained can provide significant benefits including:
- Supporting 24 hour use of the road network where appropriate
 - Promotion of sustainable transport modes where appropriate
 - Assisting the successful operation of the emergency services
 - Reduction in crime and the fear of crime
 - Enabling the effective operation of CCTV services after dark
 - Supporting the vitality of town centres and the development of the night-time economy when and where appropriate
- 3.3 The provision of effective street lighting is therefore a key component in the delivery of a safe, secure and prosperous Borough.

Drivers for Change

- 3.4 There are a number of drivers for change in relation to street lighting.
- 3.5 Street lighting is a significant contributor to carbon emissions in Trafford. There is a requirement to work towards the reduction of carbon emissions in line with the objectives and provisions of the Climate Change Act 2008 and enable the Council to respond positively to the challenge of climate change.
- 3.6 Poorly designed street lighting can have a negative effect on the natural and built environment; for example street lighting is one of the primary sources of light pollution, which can have a negative impact on residents, wildlife, ecosystems and the ability to view the night sky. Poorly designed street lighting can also have a negative impact on areas of special interest or designation, including conservation areas.
- 3.7 The Council needs to develop more efficient ways of working in response to economic pressures; the energy costs associated with the operation of street lighting are significant and have been increasing in recent years. As further development takes place within the Borough there will be a corresponding increase in the need for street lighting and its associated costs.
- 3.8 Emerging technology, such as Light Emitting Diode (LED) street lights, may provide opportunities to reduce energy consumption and improve efficiency and value for money, whilst improving lighting output and colour rendering.

Policy Context

- 3.9 The Strategy supports the delivery of aims and objectives of other local and sub-regional strategies.

Trafford Council Annual Delivery Plan

- 3.10 The Council's six corporate priorities, as set out in the Annual Delivery Plan 2014-15, are:

- Low Council Tax and Value for Money
- Economic Growth and Development
- Safe place to live - fighting crime
- Services focussed on the most vulnerable people
- Excellence in Education
- Reshaping Trafford Council

- 3.11 The Strategy will contribute to the achievement of the Council's corporate priorities by providing better value for money, improving community safety and supporting wider economic growth.

Trafford Core Strategy

- 3.12 The Trafford Core Strategy (adopted 2012) provides the overall spatial strategy for the Borough and sets out what change is necessary, where and when, and how it is going to be managed and delivered. It establishes a balance between growth, regeneration and environmental protection and improvement to ensure that Trafford becomes a place where people want to live, learn, work and relax in the period up to 2026 and beyond.

- 3.13 The Strategy will contribute to the achievement of a number of the Strategic Objectives in the Core Strategy, including:

- Improving the physical and environmental fabric within the Borough
- Supporting the revitalisation of town centres
- Promoting and securing sustainable travel
- Protecting the historic built environment

Trafford Environmental Strategy

- 3.14 The Trafford Environmental Strategy (2014-2017) is built around seven environmental priorities that provide a framework for the protection of the environment and sets out a vision for a cleaner, greener and more sustainable Trafford, contributing to the economic and social wellbeing and health of those who live and work in the Borough.

- 3.15 The Strategy will contribute to the achievement of a number of the environmental priorities, including:

- Maintaining and improving the environment

- Responding to the challenge of climate change by reducing greenhouse gas emissions and becoming more energy and resource efficient
- Reducing the environmental impact of transportation by improving sustainable travel choices

Sustainable Trafford Strategy

- 3.16 The Sustainable Trafford Strategy (2013-2020) is an over-arching strategy setting out Trafford’s approach to achieving a proportion of the Greater Manchester Climate Change Strategy, which sets a target of a 48% cut in carbon emissions by 2020 on a 1990 baseline. It includes a Trafford specific target set at 29% reduction in carbon emissions, based on quantified carbon reduction opportunities in the borough.
- 3.17 The Strategy will contribute to a reduction in carbon emissions by supporting the delivery of more energy efficient street lighting in Trafford.

Trafford Community Strategy

- 3.18 The Trafford Partnership’s Sustainable Community Strategy (2010) sets the vision for Trafford by 2021 as follows:

“Trafford is thriving, diverse, prosperous and culturally vibrant. A Borough at the heart of the Manchester City Region celebrated as the enterprise capital of the North West and home to internationally renowned cultural and sporting attractions.”

- 3.19 It identifies seven key objectives to improve the quality of life for Trafford residents. The Strategy will contribute to a number of these, including:
- Delivering a safe place to live, reducing crime and fear of crime
 - Supporting a stronger economy
 - Reducing the impact on the climate

Conservation Area Appraisals

- 3.20 There are 21 conservation areas within Trafford. The characteristics of these areas will require special consideration with regards to the design and siting of street lighting. No programmed replacement of street lighting will be undertaken in these areas, unless urgent health and safety issues require immediate replacement, until Conservation Area Appraisals and Management Plans have been completed.
- 3.21 The Altrincham Conservation Area Appraisals identify the five Conservation Areas within Altrincham Town Centre, namely, George Street; Goose Green; The Old Market Place; The Downs and; Stamford New Road. The draft Conservation Area Appraisals were subject to public consultation in February/March 2014. Once they have been adopted the specific Management Plans will follow setting out in more detail the approach to street lighting in these areas.

- 3.22 As future Conservation Area Appraisals and Management Plans re completed they will set out in more detail the proposed approach to street lighting in these areas.

Greater Manchester Local Transport Plan

- 3.23 Greater Manchester's third Local Transport Plan (2011/12 – 2015/16) contains the policies of Transport for Greater Manchester for the provision of safe, integrated, efficient and economic transport to, from and within the Greater Manchester area. The Strategy will support the delivery of a number of priorities set out in the Local Transport Plan, including:

- The delivery of a high-quality, reliable and serviceable highway network.
- The improvement of street lighting design to provide enhanced personal safety and security.
- Ensuring a safe and attractive walking and cycling environment.
- The incorporation of low-energy street lighting solutions.
- The potential to reduce energy costs in street lighting by utilising the latest techniques for switching on/off and dimming where appropriate.
- The use of central management systems, where appropriate, to actively control and monitor street lighting and maintenance requirements.

4.0 Opportunities

4.1 The Strategy provides a number of opportunities for positive change in Trafford.

Energy Usage and Carbon Emissions

4.2 Trafford has a commitment to contributing to a Greater Manchester target of 48% reduction in carbon emissions by 2020, with a Trafford specific target of a 29% reduction. Street lighting constitutes approximately 60% of the Council's carbon emissions (excluding schools).

4.3 To minimise energy usage and reduce carbon emissions the Council will consider:

- Proposals to ensure that roads/areas are not over-lit.
- The potential for part night switching/dimming via a Central Management System (CMS), where appropriate.
- The potential to adopt LED luminaires across the Borough, where appropriate.

Efficiency Savings

4.4 Street lighting constitutes a significant proportion of the Council's electricity expenditure, and energy costs have increased significantly in recent years. As further development takes place in the borough there will be a corresponding increase in the costs associated with street lighting.

4.5 New and replacement street lighting in the Borough should take into account whole life cost, including repair, vandal resistance, energy consumption, other lighting styles in the vicinity and on-going cyclical maintenance.

4.6 The replacement of existing SOX/SON luminaires in Trafford with LED luminaires alongside the possible introduction of a CMS has been identified as a potential approach to deliver sustainable financial savings associated with street lighting. LED luminaires have a substantially lower energy usage than either SOX or SON luminaires; the types of lighting units predominantly used in Trafford at present. If LED luminaires are installed it is anticipated that they will last significantly longer than either SOX or SON luminaires before requiring replacement.

4.7 Photo electric cells are currently utilised as the means of controlling street lighting and their hours of operation. A photo electric cell is calibrated to turn lights on once the illumination level drops below a certain lux (ie sunset) and to switch off when light levels increase above a certain lux (ie sunrise). Due to their relatively low cost and reliability photo electric cells have become a widely accepted means of controlling modern street lighting systems. CMS will also be considered to provide the remote control of lighting hours operations.

Street Lighting Design

- 4.8 Street lighting should take account of both the impact on the natural environment and seek to reduce light pollution. Street lighting also has an impact on the appearance of the built environment. Design standards used in the provision of new and replacement street lighting should be in accordance with the requirements of BS 5489 and BS EN 13201.
- 4.9 The Council currently uses the policies, procedures and standards outlined in the document “Well Lit Highways Code of Practice for Highways Lighting Management” November 2004 (last updated August 2013) as produced by the UK Lighting Board, as a guide to good practice.
- 4.10 Where street lighting is to be provided in a conservation area the policy for street lighting column and luminaire design will be incorporated into the relevant Conservation Area Management Plan. This will seek to deliver appropriately designed and located street lighting.
- 4.11 Where street lighting affects any designated heritage asset careful consideration should be given to both design and siting.

Crime and Safety

- 4.12 Street lighting should promote the safety of all users of the highway, with particular consideration for vulnerable user groups. The presence of appropriate street lighting can have a positive impact on the safety of road users and pedestrian and can reduce both the risk of traffic accidents and also their severity.
- 4.13 Improved street lighting can have a positive effect in reducing crime and fear of crime. Appropriate street lighting can help to increase surveillance, ‘guard’ locations and help to deter potential offenders. The installation of enhanced street lighting can also make a location more welcoming and signal investment in the locality, increasing community pride.

Supporting Economic Growth

- 4.14 Appropriate street lighting can play an important role in creating the conditions that support economic growth. It can support the development of the evening economy, particularly in town centres. It can also facilitate the effective 24 hour use of the highway network by businesses, where appropriate, that seek to make use of night time distribution and work related travel.

5.0 Delivering the Strategy

- 5.1 The Strategy has been developed after a review of current street lighting practice in Trafford. It provides a clear vision and will facilitate the delivery of new and enhanced street lighting across the Borough on a consistent basis.
- 5.2 Through the identified objectives and key principles as set out in the Strategy Trafford will seek to provide a modern, well-designed and well-maintained street lighting stock that delivers better value for money, reduced energy usage and carbon emissions, a safe environment for road users pedestrians and the community and supports economic growth.