Trafford Street Lighting Strategy: Consultation Responses November 2014

This report presents the full record of consultation responses made on the draft Trafford Street Lighting Strategy, which was held between Friday 17 October and Thursday 13 November 2014.

The report lists all 12 responses to the draft Strategy made over the consultation period. The Council has taken all representations received into account in preparing the revised Trafford Street Lighting Strategy.

No.	Respondent	Full Representation
1	Jonathan Symms	Whilst fully appreciating the need to save costs where possible, and that the introduction of energy efficient street lighting is one such measure, I would like to object in the strongest possible terms to any continued rollout of the bright white / blue LED street lights which seem to be being installed around the Borough, including on streets close to where we live in Timperley.
		From an aesthetic point of view, these lights are absolutely horrendous. They give the appearance of a science fiction movie or industrial park, not an established residential street, they look and "feel" extremely cold and unwelcoming, and as such they have a huge detrimental effect on the attractiveness of the local area and the local environment.
		I am also extremely concerned about the potential health risks posed by these lights: http://www.manchestereveningnews.co.uk/news/greater-manchester-news/green-light-controversial-93m-led-6311558
		In fact, I would suggest that the Council ought to <u>remove</u> any of these street lights that have already been installed and replace them with more suitable, warmer, more welcoming and more attractive light that do not damage the appearance of the Borough.
		Whilst I am no expert on the street lighting by any stretch, I do not believe that it is beyond the realms of possibility, if there is a will at the Council, to source an alternative street light from somewhere in the world that is energy efficient, which is warm and welcoming in appearance / aesthetically pleasing, and which therefore maintains or enhances the local environment and 'amenity value', rather than detracts from it, and which is no (even <i>potential</i>) risk to human health.
2	Trevor Stone	Whilst I well understand the Council's policy of looking at all ways of saving money in order to keep taxes low for

		the benefit of us all, I get the feeling the desire to do this now is being given undue precedence over the health and environmental impacts of the current generation of street-light LEDs. I live near Hartley Road in Altrincham, where you have been trialling some LED lights, and I can tell you that I and my neighbours absolutely hate them. They look awful and are out of character with the area. The clusters of LEDs emit a horrible blue/white fuzzy light that seems to scatter everywhere and is very unpleasant to walk under. Blue light is known to be bad for our health by disrupting the circadian rhythms of our bodies and blue light also spreads out more and increases light pollution. Red/orange light, as emitted by SONs, is actually the best colour to use at night in all respects. The fact of the matter today, then, is simple: LED technology is not yet ready and developed enough for this particular application. Let us look at what happened with lighting in the home. We were all keen 5 years ago to replace those 50 watt halogen spotlights in our ceilings in order to reduce our electricity bills, but it is only in the last 12 months that a true LED equivalent giving out the same coloured light, brightness and clarity as an incandescent lamp has become available. Over that period, the price of LED lamps has fallen by around 75%. Street-lighting will follow the same pattern and this is another reason why Trafford should not make the mistake of moving too soon. You should defer this project for 5 years.
3	Natural England	Natural England does not consider that this Street Lighting Strategy poses any likely risk or opportunity in relation to our statutory purpose, and so does not wish to comment on this consultation. The lack of comment from Natural England should not be interpreted as a statement that there are no impacts on the natural environment. Other bodies and individuals may wish to make comments that might help the Local Planning Authority (LPA) to fully take account of any environmental risks and opportunities relating to this document. If you disagree with our assessment of this proposal as low risk, or should the proposal be amended in a way which significantly affects its impact on the natural environment, then in accordance with Section 4 of the Natural
4	National Trust	Environment and Rural Communities Act 2006, please consult Natural England again. Vision
		The Vision is not especially ambitious and the intention merely to "seek(s) to minimise adverse impact on the built and natural environment" is particularly disappointing. There are examples of poor visual design of lamp standards and inadequately cowled luminaires; it is to be hoped, and indeed encouraged, that future replacements will be better designed and/or reduce light pollution thereby providing environmental improvements.

An ambition to seek to reduce adverse impacts on the built and natural environment and wherever possible provide an enhancement compared with the current position would be appropriate.

There is also some merit in considering the particular approach in high quality environments – i.e. where heritage assets and/or designated nature conservation sites are affected.

Objectives

The same concern as expressed above regarding minimising harm rather than seeking something that is better, also applies to the Objective relating to the built and natural environment. A suitable alternative would be:

"Minimise the adverse impact of street lighting on the natural and built environment and wherever possible seek enhancements compared to the existing situation"

Para 2.3

Similarly to above the following alteration is commended:

"Limiting negative Seeking beneficial environmental impacts, particularly in high quality environments"

Para 3.13

The Adopted Core Strategy, in accordance with national planning policy, seeks not only the protection but also the enhancement of the historic environment (that also includes not only built heritage assets but also Trafford's Registered Historic Parks and Gardens). Particular attention is drawn to the Core Strategy Vision at para 3.4, Objectives SO5 and SO8 (and the related Place Objectives), Policy L7.1 (which makes particular reference to the street scene), Policy W2.2 (specifically refers to the Public Realm in Altrincham and to its Conservation Areas), and Policy R1.2/R1.3/R1.5/R1.6 (the latter makes particular reference to skylines).

The text relating to Core Strategy Policy R1.6 is also informative:

"Para 21.16: This policy seeks to ensure that all the Borough's heritage assets are safeguarded for the future, where possible enhanced and that change is appropriately managed and tested for its impact on the historic environment, for example street furniture, street layouts and lighting."

Para 3.15

The reference in the approved Environmental Strategy to **improving** the environment is noted.

Paras 3.20 - 3.21

		The references to the programme of Conservation Area Appraisals is noted and welcomed.
		Energy Use and Carbon Emissions (Paras 4.2 – 4.3) The ambition set out here is welcomed and supported as an important contribution to addressing climate change issues.
		Efficiency Savings (Paras 4.4 – 4.7) The ambition set out here is also welcomed and supported as an important contribution to addressing climate change issues.
		Street Lighting Design (Paras 4.8 – 4.10) The approach set out here in respect of the natural environment is noted and supported.
		More disappointing is paragraph 4.10 which states no intention to seek to enhance Conservation Areas by the choice of appropriately designed and located street lighting, in particular in replacement lighting schemes. There is also an absence of any comment regarding street lighting outside Conservation Areas but affecting other designated heritage assets – careful choice of design and siting are also important in the vicinity of individual Listed Buildings outside Conservation Areas.
		Delivering the Strategy (Section 5) Overall the Strategy is welcomed and in particular the intention to address carbon emissions, energy efficiency and light pollution. However, the Delivery section also needs to include an intention to enhance the historic and natural environment through the improved design of replacement street lighting, in particular ensuring that proposed lighting columns are appropriate to the characteristics of the location where they are to be sited.
		It would sensible if the Delivery section also set out the specific targets and timescales related to the implementation of the Strategy.
5	Alan C Pickwick	Typos and Grammatical Issues
		Page 3 under-bridge. Page 5 rendering not rendition. Page 5 well-designed. Page 5 well-maintained. Page 5 night-time. Page 5 27 100 not 27,100. Page 6 no comma after relax. Page 6 Section 3.12 "overall spatial strategy" is an obscure phrase and could mean anything. Page 9 overlit or over-lit. Page 9 luminaires not luminaries. Page 11 well-designed
		Factual Flaws
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		Page 5 SOX have the highest number lumens per watt of all discharge lamps and so the phrase "higher associated energy cost" is just untrue. Page 9 The assertion that LED luminaires will have a replacement time of 20 years is not proved as none have been out in the field for anything like that time before they are obsolete. LEDs may well last 50 000 to 100 000 hours (of the order of 10 years, so 20 years at 12 hours per day) but critically the electronic control units behind them are VERY UNLIKELY to last that long. The control units use a similar technology to that of computer power supplies and compact fluorescent lamps. Day-to-day experience shows that these have a shorter lifetime than 20 years. You may want to define the end-of-life as the time the LED's output has fallen to 70% of its original value. According to the Office of Energy Efficiency and Renewable Energy (EERE) web site, that is 50 to 100 000 hours.
		Omissions:
		Page 5 Section 3.6 and Page 9 Section 4.8 - No mention of The British Astronomical Association's Campaign for Dark Skies campaign to restore our natural, starry skies, by reducing inefficient lighting. The CfDS aims to preserve and restore the beauty of the night sky by campaigning against excessive, inefficient and irresponsible lighting that shines where it is not wanted nor needed.
		Page 10 Well Lit Highways Code of Practice. This should empasise that it is the November 2004 Edition "Last updated 13 August 2013".
		There is no mention of the effect of "Power Factor" on the cost of electricity to run LED luminaires. It would be wise to check with your suppliers that their liminaires have a power factor as close to unity as possible or you will be surcharged for your electricity by the supply companies.
6	Trisha Lewis	I think it very important that the street lighting be environmentally friendly. The present lights are awful, too much light escapes into the sky creating the major worldwide issue of light pollution in the sky. It is now no longer possible in most of the UK to see a proper night sky in all of its majesty. The present lighting is so bright it still looks like daylight outside. When we look up we see a hideous orange murk instead of a proper night sky. The birds are suffering as they think it is still daylight outside, I have heard them singing at 2am due to this reason. It is very stressful for them to be having to sing for so long. It is also affecting insect life badly. All of life, humans, birds, animals and insects need to experience true darkness for reasons I can't remember off hand, ours and their health is affected by the lack of this. There are in existence street lamps designed so that all of the light goes downwards into the street and not upwards into the sky, these are the street lamps we need. You could

		save money by only having every other light on, or if they are all being replaced, only replacing half of the existing ones. There would still be enough light, we have too much at the moment. At the very least, please replace the hideous orange lights with white ones; that would be a slight improvement. If anyone thinks the high level of light we currently get from our street lighting is a burglar deterrent, this isn't the case. In real darkness, the burglar's torch would show him or her up very effectively.
7	lain Karim	I read in the local Stretford/Urmston newspapers that you were inviting comments concerning the upcoming Street Lighting consultation.
		I would like to add that articles in the same newspapers some time ago referred to a local (informed) man who had cause for concern about LED street-lighting and its effect on human circadian rhythms.
		Just a brief look online will reveal websites such as the Harvard Health Publication that highlights the issues surrounding LED lighting, blue lights in particular.
		I would welcome continued research before any proposals to operate LED lighting on our streets at night. I understand this is already being looked into by the council. Please continue.
8	Simon Nicholas	I write in response to Trafford Council's draft Street Lighting Strategy document.
		Firstly, I am staggered at the level of pro-LED bias contained in the report, and also the highly-selective presentation of information - to the point that report is totally misleading.
		I am also concerned that nowhere in the report is there any mention of the growing concern about health and environmental impacts of LED lighting, or that these impacts might be minimised through the conscious choice of specification of LED equipment.
		It must also be questioned why Trafford Council failed to draw attention to, let alone provide access to, its own Health Impact Assessment into LED street lighting.
		In respect of the specific stated objectives of the Street Lighting Strategy, I would make the following points:
		At least maintain and where possible, improve the quality and effectiveness of street lighting across Trafford. If experience of residential LED schemes elsewhere in the UK is considered, it is virtually impossible for this objective to be achieved, cost-effectively, at the current level of technological development of LED street lighting. Third parties driven solely by self-interest will inevitably attempt to convince otherwise, however Trafford would be better off studying the pitfalls and shortcomings being experienced elsewhere than believe the

unsubstantiated claims made by companies in the lighting and infrastructure industries.

• At least maintain and where possible increase the positive contribution that street lighting makes to the safety of road users, pedestrians and the community.

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- Provide street lighting appropriate to the specific natural and built environment in Trafford.
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- Minimise the adverse impact of street lighting on the natural and built environment.
 If experience of residential LED schemes elsewhere in the UK is considered, it is virtually impossible for this objective to be achieved, cost-effectively, at the current level of technological development of LED street lighting. Third parties driven solely by self-interest will inevitably attempt to convince otherwise, however Trafford would be better off studying the pitfalls and shortcomings being experienced elsewhere than believe the unsubstantiated claims made by companies in the lighting and infrastructure industries.
- Improve energy efficiency and reduce carbon emissions associated with street lighting.

 Other Councils, eg. Cardiff, Essex etc. have demonstrated that improving energy efficiency and reducing carbon emissions does not necessarily require a massive investment in an emerging technology such as LED. Moreover, academic establishments across the world are warning about the environmental damage caused by LED street lighting and recommend that Councils make energy savings through cost-effective management of their existing lighting equipment wherever possible. Such measures are the use of night time dimming and use of lower wattage lamps.
- Reduce the maintenance and operational costs associated with street lighting.

 Much PR-spin exists about 'projected' maintenance savings from the use of LED street lighting. The reality is that there is no hard data, and any projections are estimates. The LED industry propaganda suggests that with LED

		technology it is a case of 'fit-and-forget'. In the early years this may well be the case, but there no credible projections on how long the 'forget' period will be, or what maintenance costs will be incurred when that period is over. There may well be a 'honeymoon' period, but early reports from the USA suggest that L70 & L80 estimates (the time it takes the light output from LED luminaires to degrade to 70% & 80% of the original output) may well be overstated. Data from LED luminaires on Interstate 95 in Minneapolis show lumen depreciation of 18% in 5 years - suggesting that failure to meet standards will occur at between 8 and 9 years. At that stage, it is likely that the LED driver (£100) will have to be replaced (if it hasn't already failed) as well as the LED array (£100+). At this point it is highly likely that LED technology will have matured such that what is effectively prototype equipment fitted today will have been rendered redundant in less than 10 years - and a further round of expensive capital investment will be required in order to fit second generation LEDs. One final question is how Councils will be able to establish when light output from LED luminaires will have degraded to a point where minimum standards are no longer achieved. With the highly visible failure of a bulb, constant monitoring of lighting levels will be required, either that or wholesale replacement of LEDs are a predetermined time. It is notable that little consideration seems to have been paid to these issues.
		Ensure due consideration is given to possible impacts on public health. Existing sodium (and to a lesser extent) metal halide lighting poses no threat to health. An increasing body of research now exists which links high-CCT, blue-rich LED street lighting to adverse impacts on public health, such as sleeping disorders, circadian disruption, and also increases in incidence of breast and prostate cancer. If this objective is to be achieved, any LED investment will require a technical specification which is low on short wavelength blue-rich light. However the choice of a benign, low-CCT, specification will inevitably impact on the potential for energy savings at the current stage of technological development of outdoor LED light sources. Therefore, the logical conclusion is for Trafford to follow the lead of those prudent Councils who are successfully reducing energy consumption via the use of existing infrastructure, rather than those Councils who are squandering public funds on ill conceived vanity projects at a point where LED technology remains in its relative infancy and on a steep development curve.
9	Bowdon Conservation Group	Bowdon Conservation Group has reviewed the Trafford Street Lighting Strategy Draft Consultation document and has the following comments on the provision of the proposal Strategy insofar as they impact on Conservation Areas. In our view, the draft Strategy should incorporate more recognition of the specific needs of the Conservation
		Areas within the borough and in particular acknowledge that the approach taken to street lighting in Conservation Areas must be in keeping with the characteristics of the particular conservation area and may therefore differ from the approach(es)adopted elsewhere in the borough. The characteristics of Conservation Areas may require the use of traditional designs of lighting columns, as well as the use of different colour temperatures in the

lighting, which will probably be similar to the colour of the existing sodium lighting. Lighting intensity in Conservation Areas may also appropriately be lower. To achieve this, we suggest that the strategy document is amended as follows: Under para 2.2'objectives', amend the third objective to read:' Provide street lighting appropriate to the specific natural and built environment in Trafford, recognising in particular the specific requirements associated with Conservation Areas.' We suggest adding further text at the end of Para 3.20 as follows: 'There are 21 Conservation areas within Trafford. The characteristics of these areas will require special consideration in deciding on the approach to street lighting in these areas. This may involve the use of alternative, appropriate designs of lighting columns and luminaires, or the retention of existing columns and also the use of different frequency light of a warmer colour, similar to the existing sodium lighting, and/or different or reduced lighting intensity.' A new paragraph should also be added after Para 3.21 which acknowledges that not all Conservation Area Appraisals have yet been completed, published and consulted on, as follows: 'As future Conservation Area Appraisals and Management Plans are completed, they will set out in more detail the proposed approach to street lighting in these areas.' In addition to these comments which are relevant to the particular characteristics of Conservation Areas, Bowdon Conservation Group is also aware of increasing concern regarding potential negative impacts on human health and the environment of certain types of LED street lighting which emit a high proportion of short wavelength bluerich light. Should Trafford Council decide to invest in LED technology Bowdon Conservation Group would like to see explicit assurances about health and environmental impacts and for all street lighting in Conservation Areas to be Warm White(c.2700K CCT)irrespective of which technology is employed. The objective should be to ensure that if Trafford fit new lighting(of any type)it should have a CCT of between 2500Kand 2700K – which provides a satisfactory balance between visual acuity, luminous efficacy, minimisation of health and environmental damage and is commensurate with the findings of Arie Andries (Kruithof's Curve) which demonstrates a human preference for 'warmer' colour temperatures at lower lighting levels. BCG has noted that the CCT of Trafford's current LED Luminaires is 5700K Transport for Greater Thank you for your email regarding the consultation on Trafford Council's Street Lighting Strategy. 10

Transport for Greater Manchester have considered the strategy document and have no comments on the

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		annroach/measures proposed
11	Bowdon Downs Residents' Association	approach/measures proposed. Bowdon Downs Residents' Association wishes to object most strongly to the entire street lighting strategy of imposing LED luminaires upon residents, which is being proposed by Trafford Council, whether in Conservation Areas or anywhere else in Trafford. This is because The proposed Philips Stela LED model is now very old, out-of-date and unfit for purpose. It was never meant to be used on suburban residential roads as it is far too bright. The Council has obviously fallen for Philips' slick marketing techniques and ended up with them being able to off-load old and unsuitable stock at the expense of residents. The light emitted by the LED Luminaires is very harsh, dazzling, cold and very unpleasant for pedestrians and also for householders, when it floods into the bedrooms and front rooms. On narrower suburban roads, it is also too much of a glare for drivers - the LEDs being more suited to industrial estates and motorways. The Council is very well aware of all the residents' and community groups' complaints and intense dislike of the LED luminaires in the trial areas and is being unreasonable to ignore the results of these trials - arrogantly carrying on regardless. The capital costs and terrible waste of removing existing SON/SOX bulbs, which are still working and very fit for purpose, do not outweigh any savings made by LED luminaire replacements. The light pollution in the Borough needs to be reduced overall - not increased through the introduction of unnecessarily over-bright LED luminaires. Bio-diversity and protecting the local wildlife habitats should be high on the Council agenda - not stressing an already vulnerable situation through increasing light pollution.
		 already vulnerable situation through increasing light pollution. The research into the associated health risks is still ongoing and increasingly indicates there is a significant danger - especially if residents are subject to their entire area being covered. The whole proposed strategy should be binned and looked at again when more suitable and agreeable energy reducing luminaries have been introduced, rather than using out-moded, wasteful and inappropriate
		 technology rejected quite rightly as an option by many other Councils. Many light columns in residential suburbs are unnecessarily too high, meaning extra light pollution and increased cost and maintenance. When the technology is right and a major strategy is undertaken, the lamp post should be replaced with lower ones. We welcome the idea of turning off all streetlights for a few hours in the night time and understand this can be implemented without the need of a major overall of lighting. This would be a major cost and energy saving and good for wildlife too.
12	Emma Loat	In general I support the reduction of overall energy consumption, however I am concerned the environmental

effects in terms of impacts on residents in their homes as well as impact on wildlife needs to be properly understood and evaluated before any specific lighting is chosen and implemented. There have been many examples reported in the media where poorly executed LED street lightning had caused distress to residents and wildlife. Hopefully we can learn from these examples and implement a well thought out scheme.

Perhaps some individual example lights could be installed so that residents can have a meaningful part in helping to decide what is acceptable as well as allay people's fears.