

**Meeting: Cabinet**

**Date: 21 September 2021**

**Wards Affected: All Wards**

**Report Title: Street Lighting Infrastructure Action Plan**

**Is the decision a key decision? No**

**When does the decision need to be implemented? Immediately**

**Cabinet Member Contact Details:** Cllr Mike Morey Cabinet Member for Infrastructure Environment and Culture.

**Supporting Officer Contact Details:** Ian Jones – Head of Highways, Fleet and Transport (SWISCo)

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## **1. Background and Introduction**

- 1.1 SWISCo currently operates the street lighting service on behalf of Torbay Council who are the client and the highway authority. The Highway Street lighting service comes under the Highway Asset Management Team based within SWISCo.  
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- 1.2 Torbay Council, as the Local Highway Authority (LHA) does not have a statutory duty to provide street lighting to its highway network, however where any such system of street lighting has been implemented, then the LHA has a statutory duty to ensure that the apparatus is maintained as part of the highway asset and for the safety of the highway user. As Torbay is a mainly urban network, street lighting is provided to the majority of its streets and is a requirement within any new residential or commercial developments.
- 1.3 Torbay Council also operates a significant number of lighting assets within non-highway areas including Parks, Gardens Promenades and Car Parks, as well as the harbour estate. Whilst these also provide an important public amenity, they are not subject to the same statutory requirements in terms of maintaining operation, as those assets upon the public highway. It is therefore a decision for Torbay Council as to whether lighting is operational in these areas. Maintenance spending in these non-statutory areas of public lighting has suffered in recent years as the Council has strived to manage a balance budget and support critical services.
- 1.4 Torbay Council has been actively replacing its street lighting lanterns with low energy LED units. This has provided significant savings in energy usage and carbon emissions but has also enabled change from a previous cost saving policy of providing 'part night lighting' in residential areas to a system of providing lighting level reductions during the early hours of each day. This replacement programme remains ongoing as part of normal replacement works.

1.4 The highway street lighting asset in Torbay has however suffered from reduced investment over many years and currently there is a significant maintenance backlog associated with the replacement of ageing lamp columns. Any future investment into the street lighting asset will therefore need to consider this as a priority as this affects the ability to upgrade older lanterns to newer LED lanterns and also, columns that have exceeded their residual lifespan are likely to become a significant public safety issue which could potentially become a legal liability issue for the authority.

## **2. Reason for Proposal and associated financial commitments**

2.1 At a meeting of the Cabinet on 23<sup>rd</sup> March 2021 it was agreed that ***'In light of the issues arising from the murder of Sarah Everard, the Cabinet wanted to take the opportunity to review community safety within Torbay'***. The Cabinet noted the report that was circulated prior to the meeting and requested that a further report be presented to Cabinet post the Community Safety Partnership meeting on 29<sup>th</sup> April, with a clear action plan as to how the Council and the Community Safety Partnership will be progressing matters.

2.2 At the meeting of the Cabinet on 15<sup>th</sup> June 2021 the following actions were agreed:

- i) The contents of the report be noted and future updates requested to monitor progress;
- ii) The Director of Place work with Cabinet Member for Infrastructure, Environment and Culture to continue to pursue future funding opportunities to improve the street lighting infrastructure and the Director of Place to come back in September with a clear action plan to tackle any significant backlogs of works that need factoring into our future capital plans

This report has therefore been produced to advise the Cabinet of the current position with respect to street lighting in Torbay.

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## **3. Recommendation(s) / Proposed Decision**

3.1 That the Action Plan attached as Appendix 1 be noted and the Director of Place to work with the Cabinet Member for Infrastructure, Environment and Culture to continue to pursue future funding opportunities to improve the street lighting infrastructure across Torbay.

## **Appendices**

### **Appendix 1 Street Lighting Infrastructure Action Plan**

### **Background Documents**

## Section 1: Background Information

1.

### What is the proposal / issue?

Torbay Council commission SWISCo to undertake the management of its public highway network, including the highway street lighting asset.

There are also significant elements of non-highway lighting within other Council owned areas, such as Parks, Promenades and Car Parks. These are managed by the responsible departments within SWISCo and the service managers within Torbay Council, however SWISCo's Highways Asset Management Team currently manage a street lighting contract, which may also be used for maintaining some, but not all, non-highway lighting units as well as all units on the public highway.

### Maintenance

The bulk of street lighting maintenance activities are carried out by an outside contractor, SSE Contracting Ltd who are less than one year into a ten-year contract at the time of reporting. The service they provide includes an emergency call out response, regular scouting to identify street lighting outages, the fixing of said outages, replacing obsolete lighting columns (as directed by client), cleaning of assets, bulk changing of lighting units, carrying out electrical testing at specified intervals and conducting structural tests on columns to assure safety and stability of these.

### The Asset - Lamps

For the purposes of this exercise, only the street lighting assets are listed below, these being the lighting columns and the lighting units affixed to them. However, there are other assets such as Belisha Beacons, illuminated bollards, illuminated traffic signposts and school crossing patrol flashers that can also come under the lighting contract.

- Street Lights – there are some 15,800 of these with the vast majority being on street lighting columns. There are a few examples of wall mounted units or lamps on telegraph poles.

The street lights come into different categories which are presented below in simplistic groupings:-

- LED streetlights with a set dimming regime – 13,396
- Non-LED lamps with a set dimming regime – 2,804
- Non-LED lamps under a part night lighting regime – 2,400

The use of LED lamps on the network was first introduced in Torbay in 2014 in order to substantially reduce the energy costs associated with lighting. By using 'Salix' funding in order to carry out two phases of LED installations there have been significant savings in both energy consumption and carbon emissions. The early start of this programme of change has put Torbay Council at the forefront of this initiative.

2.

### What is the current situation?

### **Part Night Lighting**

Some lamps will not stay on all night, which was brought in intentionally as a cost saving initiative prior to the adoption of LED lighting units. The premise being that a streetlight would be set to turn off in the early hours after midnight and turn back on an hour before dawn. Thus there would be a period of 5 hours overnight when the street would be in darkness. This was consulted on before implementation and was not universally popular with residents. The trend now is to change 'part night' to newer 'all night' LEDs as units fail or following reports of crime increases in a street.

We do receive some outage reports from residents who may not have been aware that they are in a 'part night' street or who have just moved to the area. However, most people accept the premise even if they don't necessarily always agree with this system.

### **All Night Lighting**

There are two versions of this, one being on main roads where streetlights are set to dim by 30% after 0030 hours, the other being in residential areas where lights will dim to 50% of normal output throughout the early hours. A few residents may complain after 'all night' lighting is re-introduced but these are a minority group who are vastly outnumbered by residents preferring this system

### **The Asset – Columns**

The table below indicates the current age of street lighting columns within the Torbay inventory. Best practice, suggests that these have a design life expectancy of 25 years with bulk changes being required as they surpass this age.

Age	Number of Columns
<10 years	2474
10 – 20 years	3369
20 – 25 years	1534
25 – 30 years	2785
30 – 35 years	2342
35>	2342

### **Cyclical Activities – Outages and Faults**

If we are made aware of a column with a missing door or exposed wires or one that has been damaged by a vehicle, we have a 2-hour emergency response to get these made safe. Whereas a typical outage report will be attended to within 5 working days. The standard procedure now being that an older non-LED lamp will automatically be changed out for an LED unit with a dimming regime for 'all night' lighting.

If a new column is required, the contract states that this will be done within 20 working days but this is not always possible at the current time with steel and material shortages being reported. However, our contractor will always try to meet this target.

Unfortunately, not all street lighting issues fall within our immediate control. A common scenario is that a series of lights on a single street will all fail at the same time. This is invariably down to cable faults from the electricity supplier, who will be Western Power Distribution (WPD). When a supply cable fault is checked by our contractor, details will be passed to WPD who will again check for faults and change any blown fuses. If it is more than that required,

	<p>the New Roads and Street Works Act allows them 28 days to attend. If it then turns out to require a road closure, they will have to book road-space, that can then theoretically take a further 3 months. Accordingly, the continuing outage reports will come to us, but we cannot speed up the repairs in these cases, as this is outside of the authority's control.</p> <p><b>Outages Customer Reports</b>  We have an on-line street lighting reporting tool that allows members of the public to contact us to report streetlights being 'out'. These reports are then issued to our contractor.  The current reporting system has been used for a number of years, and a replacement system is being considered for implementation in the near future which may enable reports to be automatically input at source, which will improve efficiency in the future.</p> <p><b>Non-Contract Lighting Repairs</b>  The current street lighting contractor can also be used by other Council departments for electrical and lighting works. Whilst standard outage repairs and some private network cables can be accommodated within contract rates, the use of different lighting units and columns will mean that separate estimates will need to be sought from the contractor prior to works.  The highway streetlights are in the main being standardised to a few different types of lighting units with 6 metre columns being the default height for most residential streets. There are a few heritage lamps on the network that will be retained where possible if their location demands, this being the case for conservation areas, sea fronts and some town centre settings.</p> <p><b>Lighting in Parks and Open Spaces</b>  The Head of Parks and Green Infrastructure (SWISCo) advises that as part of ongoing improvements to lighting in Parks and Open Spaces, the Highway Street Lighting contractor has now been commissioned to carry out regular night scouting inspections of lighting in Parks from September 2021 and any repairs resulting from this will follow on a priority basis.  In addition:</p> <ul style="list-style-type: none"> <li>• 18 new lanterns have now been installed at Youngs Park, Goodrington.</li> <li>• The Parks lighting columns which were most contentious have been fixed (Paignton, Torwood Gardens, Tunnel in Victoria Park)</li> <li>• Preston remains an issue as we have not been able to identify the fault. SSE, Havills and Western Power all involved and is ongoing.</li> </ul>
<p><b>3.</b></p>	<p><b>What options have been considered?</b></p> <p>Further investment to replace the older style lanterns to lower energy and dimmable LED lighting has been considered as a priority, due to the benefits in terms of lower energy costs, lower carbon emissions and the ability to provide ambient lighting levels during the early hours of the day. However simply replacing lanterns on columns, which are beyond their residual lifespan will not overcome a potentially higher risk to the authority of failing lighting columns.</p>

	<p>The levels of Structural Maintenance Capital funding invested in lighting column replacements has been increased in recent years. However, this inevitably has not been sufficient to provide a significant improvement to the overall asset condition, and also further limits any available capital funding to invest in carriageway reconstruction and resurfacing works. It is therefore recommended that additional funding sources are considered for investment into column replacement.</p>
4.	<p><b>What is the relationship with the priorities within the Partnership Memorandum and the Council's Principles?</b></p> <p>Investment into the authorities Lighting infrastructure supports the principles of 'Thriving Economy' and a 'Council Fit for The Future' improving Torbay's highway network and maintaining its lighting assets to a safe standard.</p> <p>The scheme contributes to the principle of 'Tackling Climate Change' by continuing to reduce energy usage through new technology within its lighting assets.</p>
5.	<p><b>How does this proposal/issue contribute towards the Council's responsibilities as corporate parents?</b></p> <p>The proposal does not directly contribute towards the Council's responsibilities as Corporate Parents.</p>
6.	<p><b>How does this proposal/issue tackle poverty, deprivation and vulnerability?</b></p> <p>The proposal does not directly tackle poverty. Deprivation and vulnerability however the provision of appropriate levels of street lighting in our residential areas will assist in providing an environment that limits opportunities for crimes against persons or properties in these areas.</p>
7.	<p><b>How does the proposal/issue impact on people with learning disabilities?</b></p> <p>The proposal does not directly impact on people with learning disabilities.</p>
8.	<p><b>Who will be affected by this proposal and who do you need to consult with? How will the Council engage with the community? How can the Council empower the community?</b></p> <p>The public highway provides essential services and accessibility to all sectors of the community.</p> <p>There is no specific duty upon the authority to consult the community regarding essential maintenance, however any investment into the highway</p>

	<p>and its associated lighting asset would be a useful opportunity to promote the benefits of improved lighting to members of the communities affected.</p>
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## Section 2: Implications and Impact Assessment

### 9. What are the financial and legal implications?

The replacement of overage columns will be the most important activity associated with lighting maintenance for a number of years given the current rate of investment. This is therefore a significant risk for the authority, if there was to be an incident involving injury to highway users as a result of a column failing and potentially falling on a vehicle or pedestrian.

Currently it typically would cost approximately £1,000 per unit to replace a column. It is therefore recommended that a programme of replacement of lighting columns is considered as a priority for any future investment opportunities.

In the 2020-21 financial year, in addition to conducting standard cyclical works, it was possible to replace some 210 of the eldest and most fragile columns using the 'deteriorated equipment' element of our budget together with a capital investment from the maintenance budget of £150,000.

A similar investment is expected this year which will then allow a further 200+ units to be renewed this financial year. However, this will still leave us with a legacy of almost 1,950 columns that are more than 10 years past their anticipated renewal date and 5,100 that are between 5 and 10 years past this recommended figure.

This equates to a maintenance backlog of £2m to replace the most vulnerable columns. However, a more realistic backlog figure would equate to around £4m, which takes into account replacing around 4000 of the 7000 older columns identified above.

In addition to the column replacements, a further £550k would be estimated to be required to replace the remaining no-LED lighting units and remove the existing areas affected by part night lighting.

#### Legal

The authority has a statutory duty under the Highways Act 1980 to maintain the highway network to a safe standard, including its street lighting asset.

A local highway authority does not have a statutory duty to provide street lighting upon its highway network, however, where provided, it does have a statutory duty to maintain its street lighting asset in accordance with the Act and to ensure public safety.

### 10 What are the risks?

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The presence of street lighting apparatus, which is beyond its recommended residual lifespan, will increase the likelihood of structural failure and the likelihood of damage or harm to persons or property, for which the authority may be held liable.

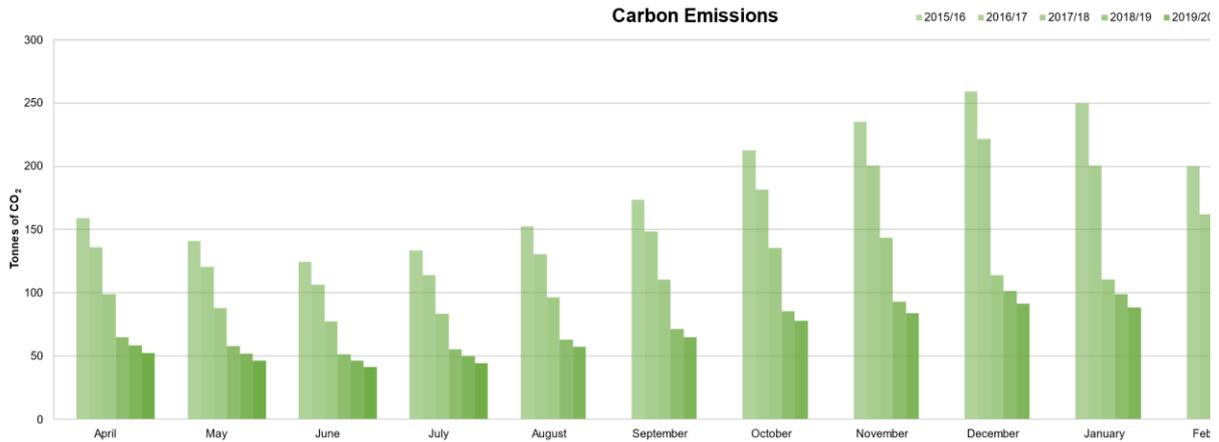
If part night lighting continues to operate in some residential areas, there is likely to be an increase to feelings of anxiety for personal safety and security in these areas during the hours of darkness.

There is a risk that any delays to the continued replacement of older street lighting lanterns to LED lanterns, may impact on the authority achieving its carbon reduction targets.

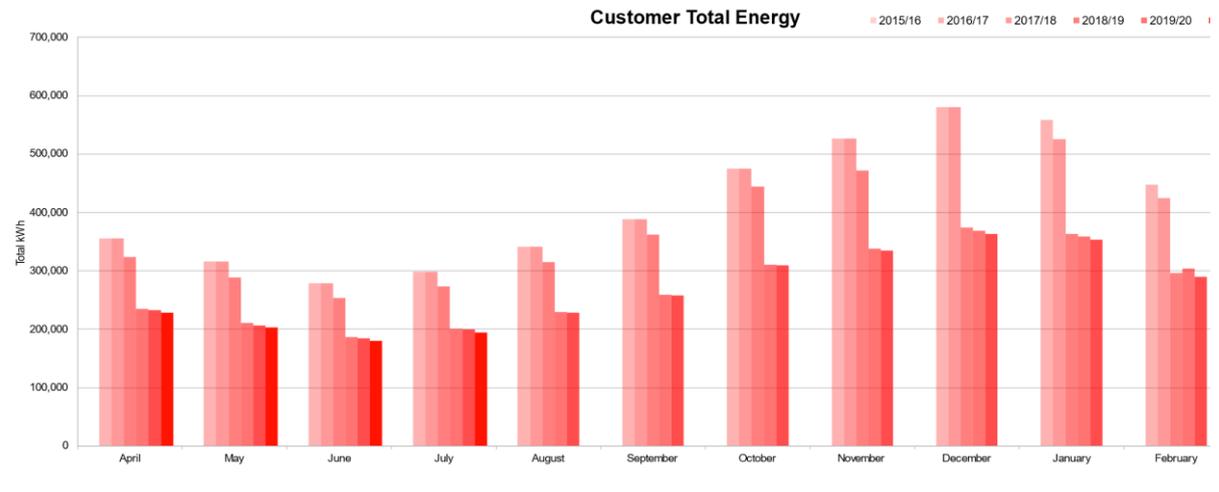
**11 Public Services Value (Social Value) Act 2012**

**Carbon Emission & Energy Consumption Reductions**

The graph below shows the downward trend of carbon emissions within streetlighting. They are mainly attributable to changing to led lighting but have had an additional boost by being served by a supplier with greener energy credentials.



The following graph shows the reduction in energy consumption following the adoption of led units. A further boost being attributable to getting the unmetered energy supply inventory fully updated and validated by Western Power Distribution. This now requires monthly reports to WPD to agree any changes to the network, as more roads are adopted or where lamps are changed out.



**12 What evidence / data / research have you gathered in relation to this proposal?**

Evidence to support this report has been gathered through the use of appropriate Asset Management and associated inventories and records. Costings have been

	estimated using appropriate rates within the existing Street Lighting Maintenance Contract.
<b>13</b>	<b>What are key findings from the consultation you have carried out?</b> <ul style="list-style-type: none"><li>No specific consultation has been carried out, however complaints and service enquiries from the community demonstrates that defective street lighting does create a significant level of concern to the community.</li></ul>
<b>14</b>	<b>Amendments to Proposal / Mitigating Actions</b> <ul style="list-style-type: none"><li>No amendments have been made to the proposal.</li></ul>

## Equality Impacts

15.	Identify the potential positive and negative impacts on specific groups			
		Positive Impact	Negative Impact & Mitigating Actions	Neutral Impact
	Older or younger people			There is no differential impact
	People with caring Responsibilities			There is no differential impact
	People with a disability			There is no differential impact
	Women or men			There is no differential impact
	People who are black or from a minority ethnic background (BME) <i>(Please note Gypsies / Roma are within this community)</i>			There is no differential impact
	Religion or belief (including lack of belief)			There is no differential impact
	People who are lesbian, gay or bisexual			There is no differential impact
	People who are transgendered			There is no differential impact
	People who are in a marriage or civil partnership			There is no differential impact
	Women who are pregnant / on maternity leave			There is no differential impact

	Socio-economic impacts (Including impact on child poverty issues and deprivation)		There is no differential impact
	Public Health impacts (How will your proposal impact on the general health of the population of Torbay)		There is no differential impact
16.	<b>Cumulative Impacts – Council wide</b> (proposed changes elsewhere which might worsen the impacts identified above)	Additional investment into the street lighting asset is likely to reduce the risk of compensation claims or prosecution against the authority due to defective apparatus.	
17.	<b>Cumulative Impacts – Other public services</b> (proposed changes elsewhere which might worsen the impacts identified above)	Additional investment into the street lighting asset is likely to improve public safety and reduce the authorities carbon footprint.	