

Hampshire County Council Future Services Consultation Proposals relating to street lighting

Proposals relating to street lighting

What is the current situation?

The main street lighting cost that we can control is for energy. Currently, energy for street lighting costs the County Council approximately £4.2 million per year.

Since 2010, we have reduced the brightness of streetlights by dimming them, in residential streets^[1] as well as on the classified road network^[2] and we have also switched some streetlights off during periods of the night. This has resulted in us reducing the cost of energy for streetlights by over half in that period.

Following public consultation, we also introduced part-night lighting in 2019. This involved switching off some streetlights on residential streets for part of the night (1am to 4am). This saves a further £230,000 per annum (based on current prices).

You can read more about street lighting in Hampshire at:

hants.gov.uk/transport/roadmaintenance/streetlighting

with further details about part-night lighting provided at:

hants.gov.uk/transport/roadmaintenance/streetlighting/part-night-lighting

What is being proposed?

We are proposing to extend the time streetlights are switched off at night and to reduce their brightness at certain times. Doing this could save the County Council £500,000 each year.

1. We are proposing that on residential streets where we already switch off streetlights between 1am and 4am, we extend this period by two hours per night so that lights are switched off from midnight until 5am. This would not include the night of 24 December into 25 December, nor the night of 31 December into 1 January, when the lights would remain on all night.

NB: No additional streetlights would be turned off. This proposal would only impact those which are already switched off for a period at night.

[1] Residential streets are roads that are used for accessing homes, including housing estates and similar roads, rather than commercial properties.

[2] You can read more about road classification at: gov.uk/government/publications/guidance-on-road-classification-and-the-primary-route-network/guidance-on-road-classification-and-the-primary-route-network

2. For streetlights in residential streets, we are proposing to increase the level of dimming as follows:

Time	Current Dimming	Proposed Dimming
Dusk – 11.30pm	65%	No change
11.30pm – 12 midnight	65%	80%
5am – 5.30am	65%	80%

For streetlights on the classified road network, we are proposing to increase the level of dimming as follows:

Time	Current Dimming	Proposed Dimming
Dusk – 11.30pm	30%	45%
11.30pm – 5.30am	50%	No change
5.30am – dawn	25%	40%

There may be times when we would not switch off streetlights or reduce their brightness. We have produced a list of avoidance criteria^[3] which if present means some or all lights in a road may be left on or remain at their current lighting levels. This may be due to the presence of traffic calming, or concerns raised in discussion with Hampshire and Isle of Wight Constabulary (the police) or the County Council’s Road Safety Team about a potential for an increase in either road accidents or crime.

Why is this being proposed?

Until a sustainable long-term national funding solution can be found to address the intense financial pressures facing not only the County Council, but also wider local government, we have no choice but to consider changing or reducing services in some areas and propose options for savings.

Extending the existing part-night switch-off times in residential streets by two hours and reducing the brightness of streetlights would contribute towards addressing the County Council’s overall anticipated £132 million budget deficit from April 2025.

[3] hants.gov.uk/transport/roadmaintenance/streetlighting/part-night-lighting

Up to £500,000 per annum could be saved by extending the existing part-night switch-off times in residential streets by two hours combined with reducing the brightness of streetlights. People are less likely to be travelling around residential areas between the hours suggested. Due to this, switching the lights off would have a less significant impact than other alternatives considered.

As well as this, energy price rises over the past few years have seen us spending more than we expected to run our streetlights. This proposal would help reduce the impact of future price rises.

How would the proposal be implemented?

If approved, the extension in the time streetlights are turned off and the reductions in streetlight brightness would be implemented from April 2025.

These changes would not require physical interaction with streetlights and could be controlled remotely and adjusted in real time if necessary.

We would continue to consider a wide range of factors when deciding where and when to switch off streetlights or reduce their brightness. This includes feedback from this consultation and the needs of businesses or other critical services which may continue to require street lighting.

What are the potential impacts?

Likely positive impacts are:

- reduced energy consumption and costs
- reduced carbon emissions
- reduced light pollution, which can benefit wildlife and human health^[4]

Potential negative impacts are:

- reduced visibility for those walking, wheeling, cycling, and driving, which could lead to increased accidents and injuries
- increased fear of crime – NB: there is no evidence that the proposed changes would lead to an increase in actual crime, however they may result in an increased fear of crime

[4] academic.oup.com/icb/article/61/3/1160/6206372

- reduced sense of safety for residents – particularly those more likely to travel at this time such as shift workers
- negative impact on businesses which operate in residential areas late at night or early in the morning, e.g., convenience stores or takeaways, as customers may be less likely to visit businesses in poorly lit areas

There is already an agreed process with Hampshire and Isle of Wight Constabulary (the police) by which they can request lights to be turned on throughout the night. As well as this, emergency procedures are in place for situations in which lights need to be turned on in response to an immediate incident. Both procedures have been in place since 2019 and take into account our responsibility to respond to ongoing and emerging issues (such as tackling serious violence and violence against woman and girls).

Negative impacts would be mitigated where possible through ensuring the views and thoughts of those living in potential areas of impact are fully considered, and that any potential impacts are understood and fully reviewed.

What alternatives have been considered?

There are other approaches that we could take that are not proposed at this time. In developing this proposal, we have also considered the following:

Maintain current streetlighting spend: This option is not being proposed because of the scale of the budget pressures faced by the County Council and the legal requirement to operate within budget. If we maintained current levels of spending, it would put additional pressure on other statutory^[5] or critical services to deliver increased savings. This may impact levels of service in these areas and our ability to operate within our budget.

Switching off streetlights for longer than present but less than the proposed two hours: This would not lead to substantial savings.

Switching off streetlights in areas not currently included in the existing programme: Many of these lights would be on the classified (A, B and C) road network where most night-time road accidents occur. For that reason, these roads have been excluded.

Switching streetlights off for longer – extending the switch-off period earlier (before midnight): People visit local night-time businesses (such as theatres, pubs, restaurants) and return home during the late evening hours. As people are likely to be using residential roads before midnight (as evidenced by Hampshire County Council traffic data), turning streetlights off during this period may result in safety issues.

[5] Services we are legally required to provide.

Extending the switch-off period later (after 4am): During the late spring and summer months, the sun comes up earlier therefore the streetlights are switched on for a shorter amount of time. Streetlights would therefore only be turned off for longer during the autumn and winter months which would not lead to substantial savings.

Switching to LED (Light Emitting Diodes) lighting: We are currently in the process of negotiating contracts to upgrade some A, B and C classified roads to LED lighting. If a suitable agreement can be reached within the timescales required, any savings secured would contribute towards addressing the County Council's overall anticipated £132 million budget deficit from April 2025.

Using solar powered^[6] lighting: There are challenges with using solar power for streetlights as the daylight is much shorter in the autumn and winter months. Streetlights are therefore on for much longer, making it difficult to generate and store the energy needed to guarantee the lights full operation from dusk to dawn. The cost of the equipment needed along with the size of battery and panels would not be outweighed by the energy saved.

Motion-sensing switches^[7]: Such as those which operate security lights, have been considered, but most of the street lighting in use today requires a warm-up period of several minutes to reach full output and is not suitable for this type of switching. There are also concerns about potential uneven lighting for drivers and disturbance for residents.

Turning off every other streetlight: This would only generate half of the savings compared to the current proposal. As well as this, lighting systems are designed to provide consistent levels of light in a road. Turning off every other light is not only likely to create dark areas, but also make it harder for the eyes to adjust and see clearly between lights.

A targeted approach (e.g., on residential streets but not near junctions): Lighting systems are designed to provide consistent levels of light in a road. The high frequency of junctions on residential estates means this approach would not only create dark areas, but also make it harder for the eyes to adjust and see clearly between lights.

[6] Solar powered lighting is a system that uses energy from the sun to generate electricity and power lighting devices.

[7] Motion-sensitive lighting is a system designed to automatically turn on or brighten when it detects movement within its sensor's range and to turn off or dim when no motion is detected.