

HAMPSHIRE COUNTY COUNCIL

Decision Report

Decision Maker:	Executive Lead Member for Economy, Transport and Environment
Date:	10 March 2022
Title:	T21 Street Lighting Project
Report From:	Director of Economy, Transport and Environment

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Purpose of this Report

1. The purpose of this report is to advise the Executive Lead Member for Economy, Transport and Environment of the impact of not reaching an acceptable agreement in a suitable timeframe with Tay Valley Lighting (Hampshire) Limited (the PFI Service Provider) to vary the Private Finance Initiative (PFI) Project Agreement to replace approximately 12,000 high-power lamps with LEDs as part of the Transformation to 2021 savings plans. The report seeks approval for revised savings proposals to deliver the Transformation to 2021 savings.

Recommendations

2. That the Executive Lead Member for Economy, Transport and Environment approves increasing the dimming on residential and principal roads, as set out in this report, to achieve the remaining Transformation to 2021 (T21) saving from April 2022, with the previously approved savings identified from replacing high-power lamps with more energy efficient LEDs progressed subject to reaching an acceptable agreement with the Private Finance Initiative (PFI) Service Provider.
3. That the Executive Lead Member for Economy, Transport and Environment delegates authority to implement the proposals, including making minor variations, to the Director of Economy, Transport and Environment.
4. That the Executive Lead Member for Economy, Transport and Environment delegates authority to the Director of Economy, Transport and Environment, in consultation with the Executive Lead Member for Economy, Transport and Environment, to vary the dimming on all roads in Hampshire where specific circumstances arise requiring increased lighting levels.
5. That the Executive Lead Member for Economy, Transport and Environment delegates authority to the Director of Economy, Transport and Environment, in consultation with the Executive Lead Member for Economy, Transport and

Environment, to terminate negotiations to vary the street lighting PFI Project Agreement in the event that it is not possible to reach an acceptable agreement in a timely way.

Executive Summary

6. This paper sets out the status of negotiations with Tay Valley Lighting (Hampshire) Limited (the Service Provider) to vary the street lighting Private Finance Initiative (PFI) to enable high-power street lights to be replaced with more energy efficient LEDs as part of the Transformation to 2021 (T21) savings target.
7. Negotiations have progressed in accordance with the High Value Change protocol within the PFI Project Agreement. As a part of these negotiations, the Service Provider is seeking to amend the PFI Project Agreement in a way that has a potential cost to the authority.
8. There is considerable uncertainty whether an acceptable agreement with the Service Provider can be reached in a suitable timeframe, and this report recommends implementing revised savings proposals to deliver the T21 savings to prevent extended negotiations drawing funding away from other activities.
9. Terminating the High Value Change process may be the outcome if the negotiations cannot be concluded satisfactorily.
10. A decision to terminate negotiations only relates to the specific High Value change for the T21 savings, which is required because of the large scale of the LED replacement proposal. It will not prevent the future installation of energy efficient LEDs in smaller scale projects.

Contextual information

11. Street lighting in Hampshire is maintained and operated under a Private Finance Initiative (PFI). Tay Valley Lighting (Hampshire) Limited is the PFI Service Provider.
12. In March 2020, the Executive Member for Economy, Transport and Environment approved a proposal to vary the street lighting PFI to enable approximately 12,000 high-power lamps to be replaced with more energy efficient LEDs, as part of the T21 savings plans.
13. Funding for the LED replacement and associated legal work was identified from cost-of-change accruing from departmental efficiencies and transformation projects, and the investment spend was forecast over three annual programmes as follows:

Spend profile	2020/21	2021/22	2022/23	Total
Investment required for LED	1,255	1,307	644	3,206
Legal work for changes to PFI contract	260	0	0	260
Total	1,515	1,307	644	3,466

14. Since March 2020, a full business case has been developed and negotiations with the Service Provider have progressed in accordance with the High Value Change protocol within the PFI Project Agreement, but delay in reaching an agreement means that the project is unlikely to deliver savings within the original timeframe, requiring a revised programme as follows:

Spend profile	2020/21	2021/22	2022/23	2023/24
Investment required for LED	0	0	1,255	1,307
Legal work for changes to PFI contract	40	11	209 ¹	0
Total	40	11	1,464	1,307

¹ Assumes no increase in legal fee

Spend profile	2024/25	Total
Investment required for LED	644	3,206
Legal work for changes to PFI contract	0	260
Total	644	3,466

15. The High Value Change protocol within the PFI Project Agreement is required for the T21 savings because of the large scale of the LED replacement proposal.
16. The revised programme assumes that an agreement can be reached with the Service provider such that the first year's investment programme can be completed in 2022/23. This may not be possible, in which case the programme may need to be revised further.
17. The LED replacement programme will take three years to implement, with the original timing delay in achieving the full delivery of savings met from ETE's Cost of Change. The delay in the programme means the savings would not be fully realised until 2024/25 at the earliest. This would require further cash flow funding of £750,000.
18. All street lighting units in Hampshire have been fitted with a remote monitoring and control system that enables the County Council to control the light output from these units (dimming) to deliver energy cost saving.
19. Street lights on residential roads are dimmed by 45% from switch on until 23:30, 65% from 23:30 until 05.30, and then back to 45% until switch off.
20. Street lights on principal roads are dimmed by 25% from switch on until 23:30, 50% from 23:30 until 05.30, and then back to 30% until switch off. Cosmopolis light sources (approximately 18,000 units) which can only be dimmed by a maximum of 40%, are dimmed by this full 40% continuously from dusk (switch on) to dawn (switch off).
21. The value of energy savings has increased since the original T21 LED proposals were approved due to energy price inflation, with the required T21

savings now achievable through reducing energy consumption of existing street lights.

22. It is now possible to deliver the required savings by increasing the dimming on residential and principal roads as an alternative to the T21 LED project.
23. Should a satisfactory agreement with the Service Provider to vary the PFI Project Agreement be reached, it may be possible to install the LEDs proposed even if this no longer forms a T21 savings proposal, subject to identifying suitable funding at that time.
24. Should a satisfactory agreement with the Service Provider to vary the PFI Project Agreement not be reached, smaller scale projects to install energy efficient LEDs can still be implemented.

Finance

25. As part of the T21 savings proposals, a £500,000 saving is identified from street lighting, of which £50,000 has already been secured. The remaining £450,000 is associated with the LED project.
26. The delay and possible failure to reach agreement with the Service Provider to vary the PFI Project Agreement to facilitate this LED project requires that alternative savings be made.
27. It is proposed to achieve the remaining T21 saving by increasing the dimming on residential and principal roads as follows:
28. Dimming street lights on residential streets by 65% all night. Currently street lights on residential streets are dimmed by 45% from switch on until 23:30, 65% from 23:30 until 05.30, and then back to 45% until switch off. This would save £291,509 per annum, based on current energy rates. This saving takes into account the current part-night lighting in operation on residential streets.
29. Dimming street lights on principal roads by 40% from switch on until 23:30 (currently 25%). Dimming by 50% from 23:30 until 05.30, and then back to 30% until switch off (no change). This would save £202,706 per annum, based on current energy rates.
30. These changes to the current dimming arrangements would secure the required savings of £450,000 and provide a small degree of flexibility for local variation. There would be a net reduction in cash flow funding needed from Cost of Change of £50,000.

Consultation and Equalities

31. In September 2019, the Executive Member for Economy, Transport and Environment approved a number of T21 savings for the Economy, Transport and Environment department, noting that proposals that would directly affect the public would require further public consultation. In respect of street lighting, the report noted a possible requirement to extend part-night lighting for longer periods or additional areas than those introduced under the 2019 savings, and/or some additional dimming of the streetlights, as alternatives to the LED proposal.

32. There is no proposal at this time to extend part-night lighting for longer periods or for additional areas than those introduced under the 2019 savings. The revised savings proposed are limited to increasing dimming which will reduce lighting levels but is considered not to be a fundamental change requiring further detailed public consultation. Instead, a proportionate approach was adopted, aiming for meaningful engagement to inform the decision process.
33. A survey was undertaken using the Hampshire Perspective Residents Forum to seek residents' views on the proposal to lower the energy cost of Hampshire's street lighting through further dimming of street lights. Formed in September 2020, Hampshire Perspectives is the County Council's online residents' forum, a diverse group of people who share their views to help the County Council shape services and make decisions that are right for local residents.
34. The survey was live between 11 and 25 January 2022, with 650 forum members submitting a response. The responses were analysed by the Insight and Engagement team to understand key themes arising. The analysis is included in Appendix 1 to this report, with a summary of the themes in the following paragraphs (35 - 43).
35. Having read the proposal information, 44% (286) of respondents felt there were other factors that should be considered before making a decision. 56% (364) did not propose any further considerations.
36. 48% of male respondents who commented on the proposal wanted the County Council to consider alternative ways of meeting the savings, compared to 40% of female respondents. With regard to possible alternatives, men were more likely to feel LEDs should be implemented, with women suggesting considering a targeted approach to dimming. Higher levels of concern raised in comments were submitted by female respondents, particularly in regard to personal safety and noting that people could be dissuaded from undertaking activities.
37. 53% of respondents with long term illness or disability who commented on the proposal wanted the County Council to consider alternative ways of meeting the savings, compared to 41% of respondents with no disability.
38. There was no significant variance in the data by Hampshire district, age or ethnicity.
39. 21% of comments were supportive of dimming. Environmental benefits, often relating to light pollution and wildlife, were a key focus of supportive comments. The availability of alternate lighting sources was felt to make dimming more feasible.
40. 43% of comments suggested alternatives to consider. The completion of the LED implementation was felt to be most important, but a notable proportion felt that a targeted approach to dimming should also be considered, such as solar powered or motion sensors. Some respondents felt that turning off alternate street lights would be a viable alternative to dimming.

41. Around one in ten comments suggested a targeted approach to dimming e.g., considering crime or road safety or applied on non-residential roads.
42. When directly prompted to offer alternatives 34% of respondents repeated or added to previous comments, with similar themes arising.
43. 49% of comments mentioned concerns. The principal concern mentioned by respondents was the potential impacts on personal safety (31%), particularly of pedestrians and females out after dark. Many people specifically spoke about the potential for decreased visibility, with potholes, damaged pavements, and ability of cars to see other users frequently mentioned. Crime was themed separately to personal safety with comments mentioned by respondents (16%) relating mostly to burglary and anti-social behaviour.

County Council response

44. It is proposed to continue negotiations with the Service Provider to vary the PFI Project Agreement to install the LEDs originally proposed even if this no longer forms a T21 savings proposal, but it is necessary to put in place alternative savings proposals to prevent extended negotiations drawing funding away from other activities.
45. It is considered that further dimming would impact less on lighting levels than switching off alternate street lights.
46. A replacement programme for solar powered street lights would take many years to implement and could not therefore deliver the T21 saving. It may be possible in the future to install solar powered lighting, subject to funding, but a technical and financial evaluation would be required.
47. The proposed changes to the dimming arrangements would provide a small degree of flexibility for local variation or a targeted approach to dimming.
48. The police were also made aware of the proposal and invited to comment.
49. The police referred to issues around violence against women and girls and feelings of being safe, which are identified in the recently published Policing violence against women and girls - National framework for delivery. It was noted that further dimming would impact less on feelings of safety than extending part-night lighting as the street lights would remain on, albeit dimmer.
50. The police could not comment on crime and disorder without a full analytical report of crime in the community. The police advise that street lighting can be an emotive issue and increase concerns raised with them, but that the fear of the potential for crime is often greater than the actual chance of crime occurring.

County Council response

51. The County Council will increase light output in response to concerns raised by the police about night-time crime, as is currently the case with part-night lighting, when requested by the police and where evidence supports such requests.
52. The proposal would mean that street lights on residential streets in all areas of the county would be less bright between switch-on and 23:30 and between 05:30 and switch off, and street lights on the classified road network in all areas of the county would be less bright between switch-on and 23:30. This increased dimming may impact adversely on people with a visual impairment, but is considered less impactful than part-night lighting.
53. The Street lighting infrastructure enables flexibility over dimming regimes, and in the event that negative impacts are identified, this could provide options for mitigation.
54. Notwithstanding this, the changes may be reviewed once implemented, and revised proposals brought back to the Executive Member if necessary.

Climate Change Impact Assessments

55. Hampshire County Council utilises two decision-making tools to assess the carbon emissions and resilience of its projects and decisions. These tools provide a clear, robust, and transparent way of assessing how projects, policies and initiatives contribute towards the County Council's climate change targets of being carbon neutral and resilient to the impacts of a 2°C temperature rise by 2050. This process ensures that climate change considerations are built into everything the Authority does.

Climate Change Adaptation

56. The climate change mitigation tool was not applicable to the proposed further dimming because this relates to energy consumption only and not to physical infrastructure.

Carbon Mitigation

57. The revised saving proposals set out in this report will reduce energy and support the climate change target to be carbon neutral. These saving proposals are an extension of existing energy reduction measures that by the end of 2018, had more than halved the energy consumption associated with street lighting compared with 2010. The further dimming will reduce CO₂ emission by 23.73 metric tonnes per annum.

Conclusions

58. At its meeting on 7 November 2019 the County Council approved a package of proposals to meet the £80million Transformation to 2021 savings target including a £500,000 saving from street lighting through opportunities offered

from advances in technology and/or other service efficiencies including extending dimming and part-night lighting.

59. The original proposal was to replace approximately 12,000 high-power lamps with LEDs to achieve this saving, requiring a variation to the Private Finance Initiative (PFI) Project Agreement.
60. It has not yet been possible to reach an acceptable agreement with the Service Provider to vary the PFI Project Agreement and revised proposals to deliver the savings are now required to avoid the need for further financial support to cashflow the savings.
61. It is possible to deliver the required savings by increasing the dimming on residential and principal roads.

REQUIRED CORPORATE AND LEGAL INFORMATION:

Links to the Strategic Plan

Hampshire maintains strong and sustainable economic growth and prosperity:	yes
People in Hampshire live safe, healthy and independent lives:	yes
People in Hampshire enjoy a rich and diverse environment:	yes
People in Hampshire enjoy being part of strong, inclusive communities:	yes

Other Significant Links

Links to previous Member decisions:	
<u>Title</u>	<u>Date</u>
Executive Member for Economy, Transport and Environment. Transformation to 2021 – Revenue Savings Proposals	17 September 2019
County Council Cabinet. Medium Term Financial Strategy Update and Transformation to 2021 Savings Proposals	7 November 2019
Executive Member for Economy, Transport and Environment. Transformation to 2021 Street Lighting LED Replacement Project	10 March 2020
Executive Member for Economy, Transport and Environment. T21 Street Lighting Project - Update on Negotiations	11 March 2021

Section 100 D - Local Government Act 1972 - background documents

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

<u>Document</u>	<u>Location</u>
None	

EQUALITIES IMPACT ASSESSMENT:

1. Equality Duty

The County Council has a duty under Section 149 of the Equality Act 2010 ('the Act') to have due regard in the exercise of its functions to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited by or under the Act with regard to the protected characteristics as set out in section 4 of the Act (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation);
- Advance equality of opportunity between persons who share a relevant protected characteristic within section 149(7) of the Act (age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation) and those who do not share it;
- Foster good relations between persons who share a relevant protected characteristic within section 149(7) of the Act (see above) and persons who do not share it.

Due regard in this context involves having due regard in particular to:

- The need to remove or minimise disadvantages suffered by persons sharing a relevant characteristic connected to that characteristic;
- Take steps to meet the needs of persons sharing a relevant protected characteristic different from the needs of persons who do not share it;
- Encourage persons sharing a relevant protected characteristic to participate in public life or in any other activity which participation by such persons is disproportionately low.

2. Equalities Impact Assessment:

The proposal would mean that street lights on residential streets in all areas of the county would be less bright between switch-on and 23:30 and between 05:30 and switch off, and street lights on the classified road network in all areas of the county would be less bright between switch-on and 23:30. This increased dimming may impact adversely on people with a visual impairment, dimming but is considered less impactful than part-night lighting.

The Street lighting infrastructure enables flexibility over dimming regimes, and in the event that negative impacts are identified, this could potentially provide options for mitigation.

Hampshire Perspectives

Street Lighting

Findings Report



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Background



Formed in September 2020, Hampshire Perspectives is the County Council's online residents' forum – a diverse group of people who share their views to help the County Council shape services and make decisions that are right for local residents.

This report provides a summary of the key findings from the fifteenth Hampshire Perspectives survey on Street Lighting, which sought views on a proposal to lower the energy cost of Hampshire's street lighting through reducing the light output (dimming) of some streetlights on residential streets and on the classified road network.

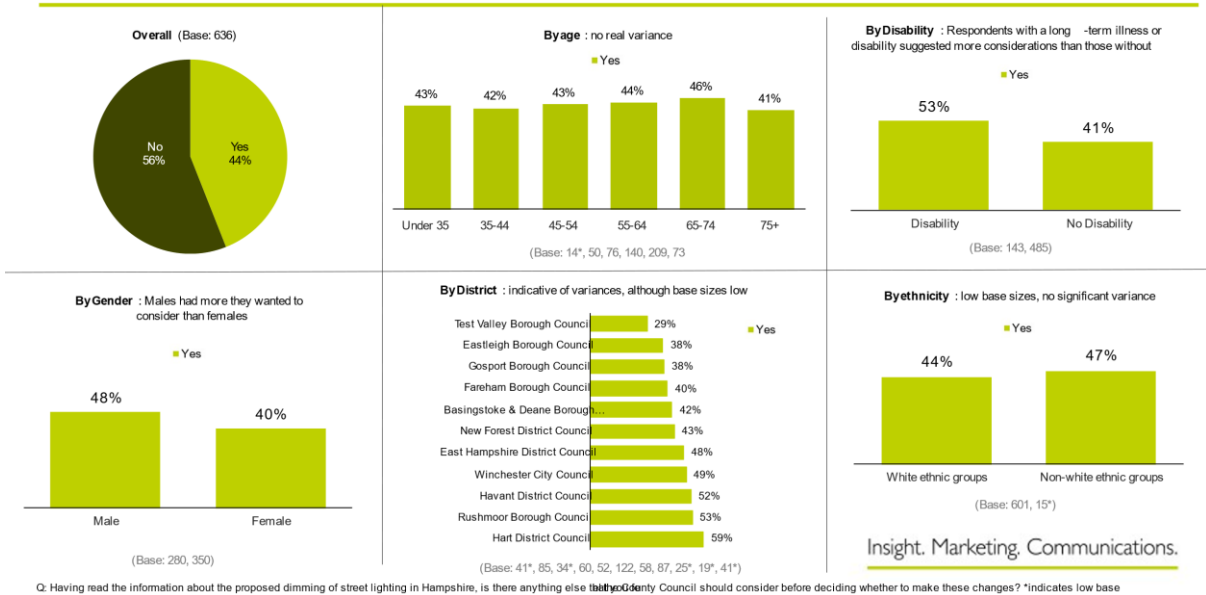
Members were provided with information relating to the proposal, how it would be implemented, potential impacts and alternatives that had already been considered – and asked if they had anything further to add.

All comments submitted have been shared with the project team for full review. Codeframes were created to understand key themes arising. This was done using an inductive approach, wherein themes were developed from the responses themselves, not pre-determined based on expectations, to avoid any bias in the analysis.

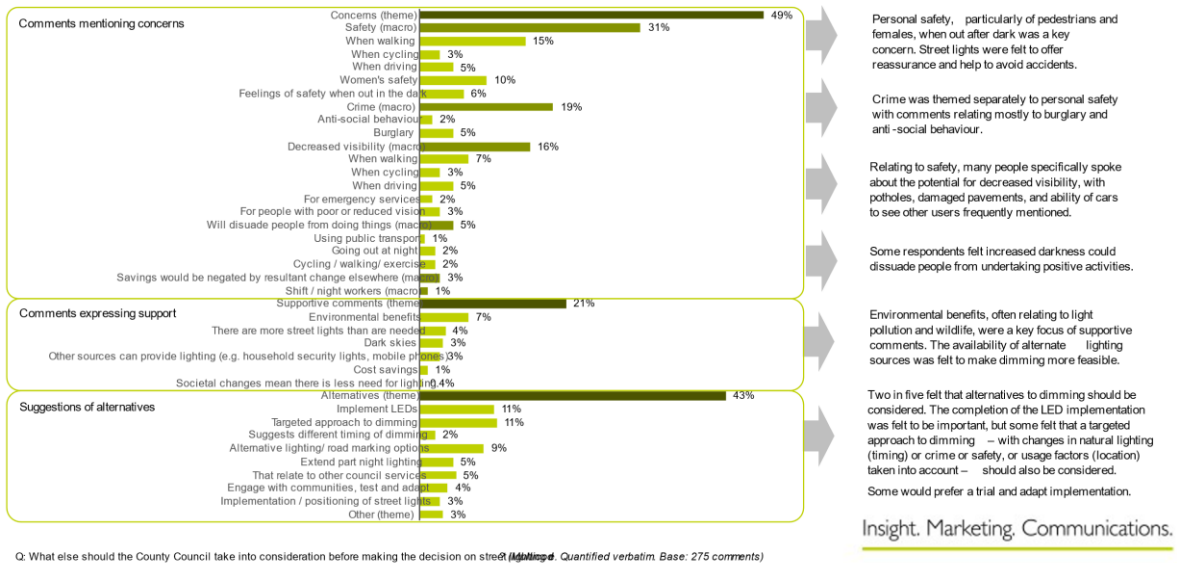
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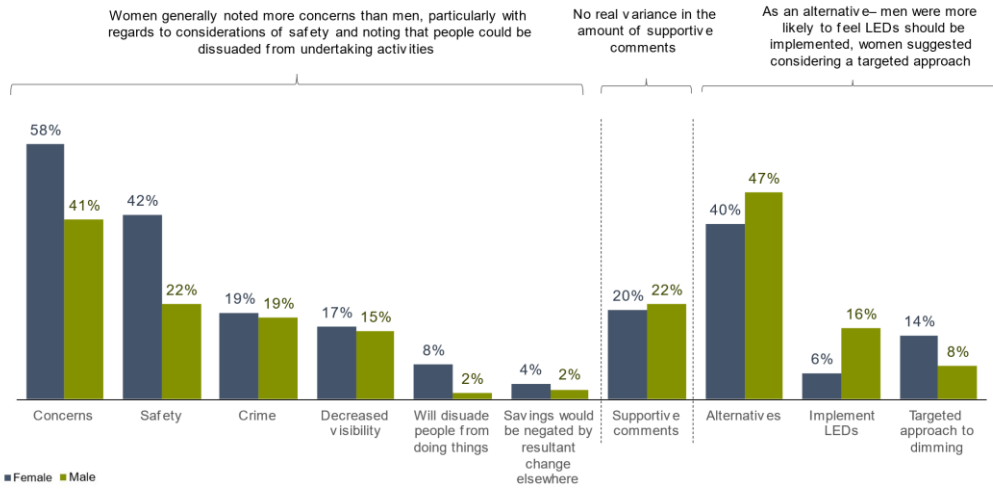
Considerations: 44% of respondents felt that, having read the information about the proposed dimming of street lighting in Hampshire, there was something else the County Council should consider before deciding whether to make the changes



Considerations: 49% of comments mentioned concerns about dimming – with potential impacts on safety being paramount. 21% suggested that the County Council should consider the benefits of dimming, whilst 43% suggested alternatives to consider.



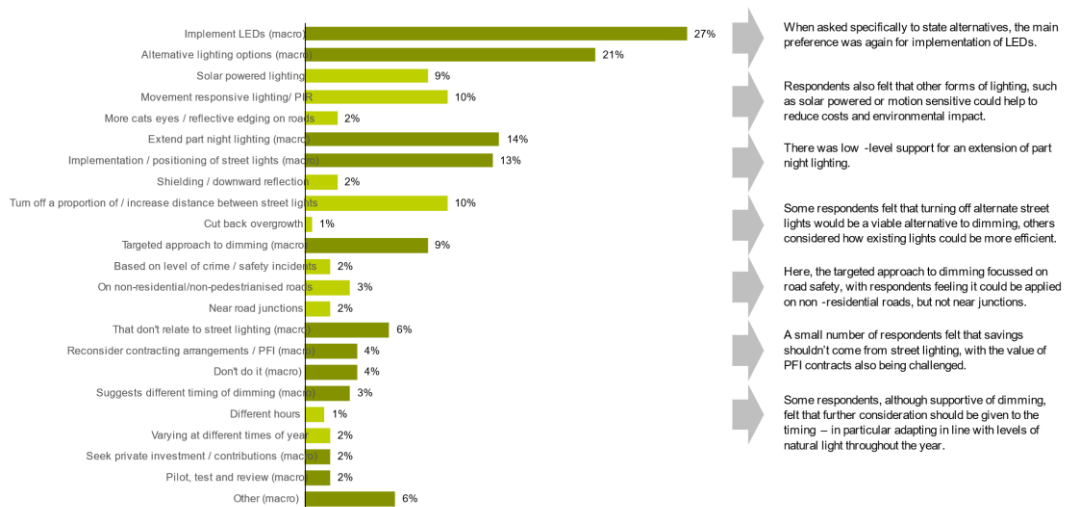
Considerations: Analysis by gender shows the higher levels of concern raised in comments submitted by female respondents – particularly in regards to personal safety



Q. What else should the County Council take into consideration before making the decision on street lighting categories by gender (Multicode Quantified verbatim. Base: 130, 139)

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Alternatives: 34% of respondents put forward alternative suggestions to dimming, with the most popular being that the County Council should implement LED lighting. Solar powered and motion sensitive options were also well supported.



Q. If you have any alternative suggestions as to how the County Council could make savings from street lighting services, please type these in the box below (Multicode Quantified verbatim. Base: 218 comments)

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