

## State of the Market Survey 2018

### Street Lighting



**Briefing 18-42**

**November 2018**



The state of the market survey was conducted by Rob Bailey, APSE Principal Advisor with assistance from Lorna Holland

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# **Street Lighting Services**

## **State of the Market 2018**

APSE conducted an online survey during April and June 2018. A series of questions were asked covering a range of issues of interest to those officers and councillors responsible for Street Lighting services.

The surveys are an attempt to understand perceptions of the market amongst people directly involved in delivering services.

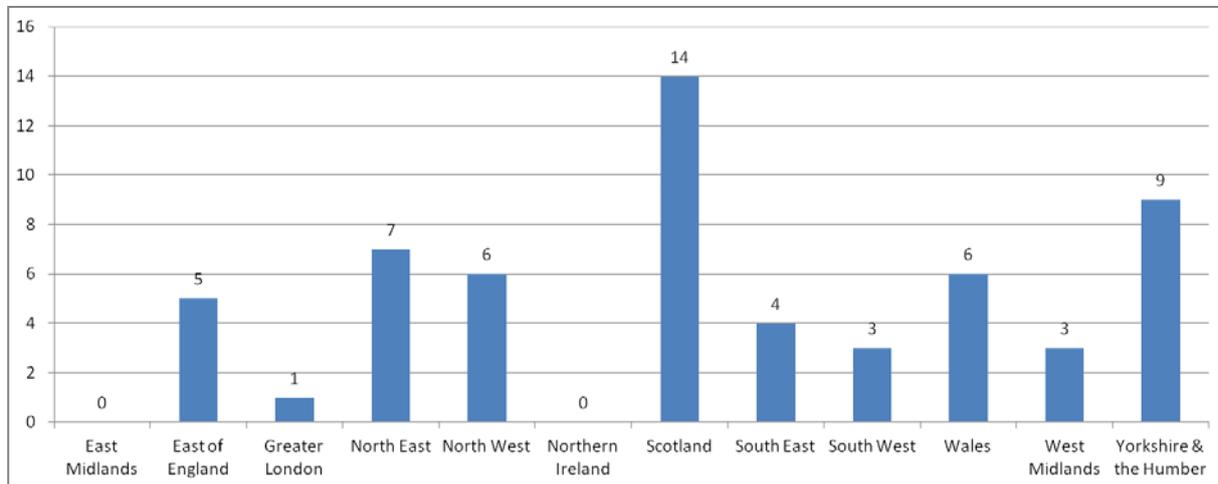
## **Methodology**

At the end of April, an email invitation was sent out to all APSE colleagues who deal with Street Lighting. This contained 26 questions on various different issues faced by those involved, 23 of which will be used for this report. The sample size of responses contained in this report is 58.

No questions were mandatory, so the total amount of responses differs from question to question. This report will state the total that answered each question in the results. Respondent's information has been kept confidential, with identifying information being limited to the general area of the U.K. the respondent is from.

# Results from the Survey

## 1. Where in the United Kingdom do you work?

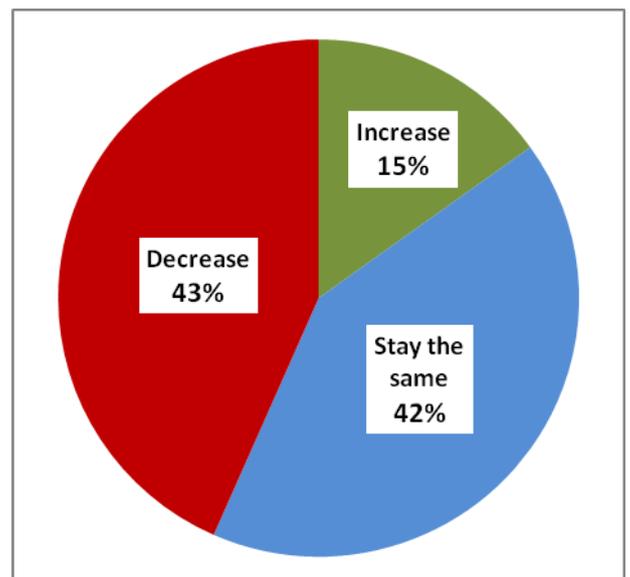


Respondents represent variety from across the whole of Great Britain. England accounts for 38 of respondents, with 6 from Wales and 14 from Scotland. This gives a total sample of 58. Responsibility in Northern Ireland rests with the Department for Infrastructure.

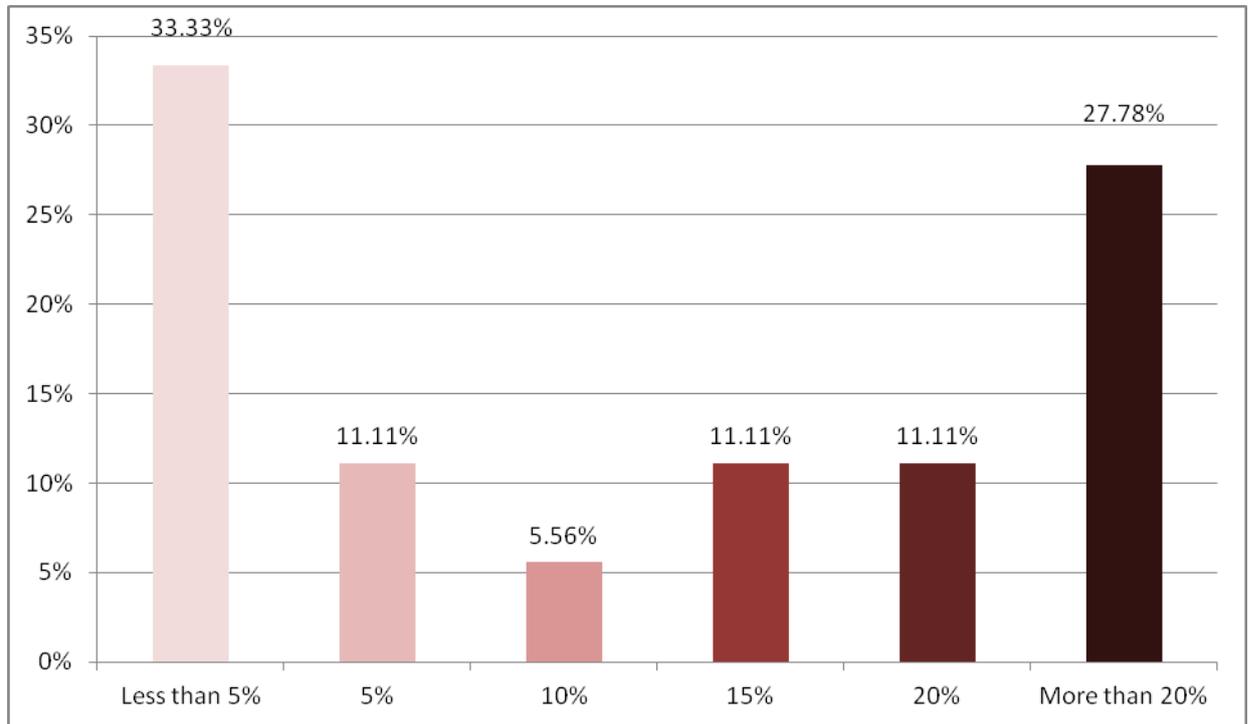
## 2. How has the budget for the street lighting service changed from 2017-18 to 2018-19?

Of the 53 people that answered this question, only 8 believed that their budget had increased since 2017-18. 23 felt it had decreased.

In the comments two respondents explained their costs had increased due to charges raised within their PFI contracts. Three explained that their budget had decreased due to the recent completion of LED upgrade projects and/or column replacement programmes. However one cited their LED upgrades as a cause of a budget increase and another indicated their budget had increased due to the cost of electricity increasing significantly.

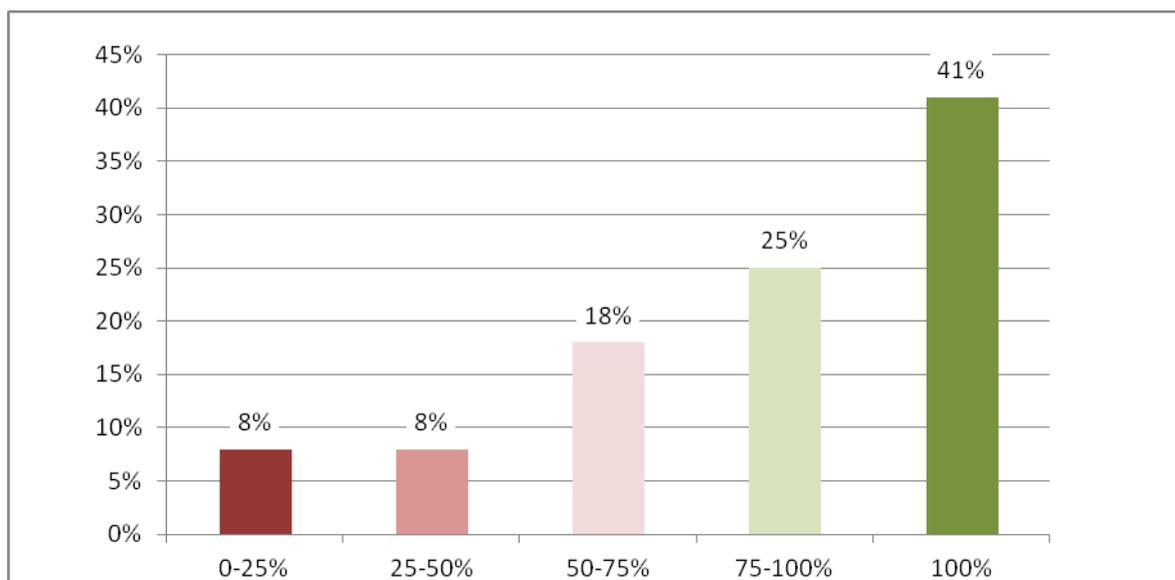


**3. If your budget has decreased from 2016-17 to 2017-18, how much has it decreased by?**



Of the 18 responses to this question, half said their budget had decreased by 10% or less. 5 people had experienced a budget cut in excess of 20%.

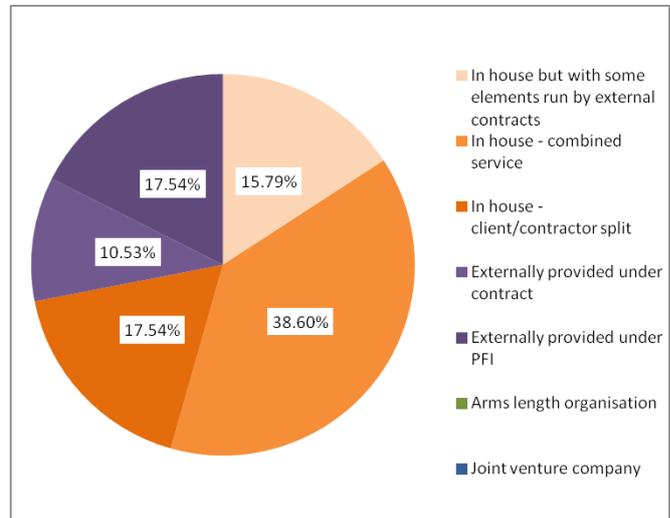
**4. To what extent will your 2018/19 budget for street lighting meet the need for maintenance/investment?**



Of the 49 respondents, 9 felt that their budget would meet 100% of the need for maintenance/investment and a further 20 felt the budget would meet 75%-100% of the need. 8 felt that the budget would meet less than 50% of the need.

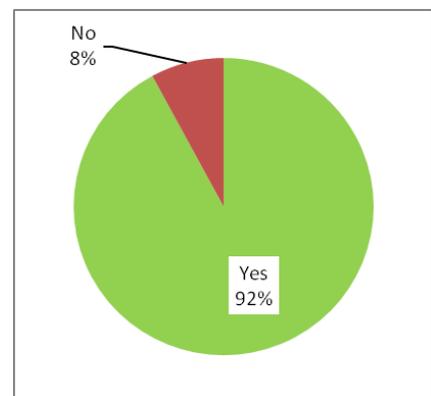
**5. How are your street lighting services currently delivered?**

A clear majority responded that their services were delivered at least in part In-House (41 out of 57). Of this, a combined service was the most popular option. No respondents indicated their service was delivered through a joint venture company or an arms length organisation.



**6. If the service is currently provided in-house, do you expect the service to remain in-house over the next 12 months?**

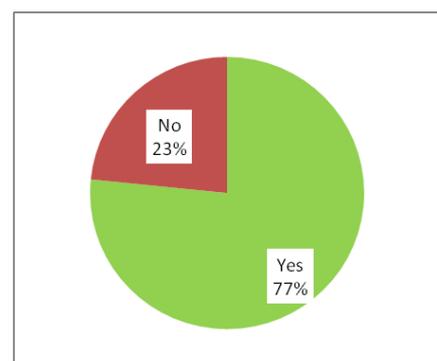
Of the 39 people that answered this question, only 4 said that they did not expect the service to stay in-house over the next year.



**7. Do you personally feel staff absence levels are at an acceptable level?**

36 of 47 people felt that absence was at an acceptable level. Two who answered 'No' commented on having an 'aging workforce' indicating this as a causal factor for an unacceptable level of staff absence.

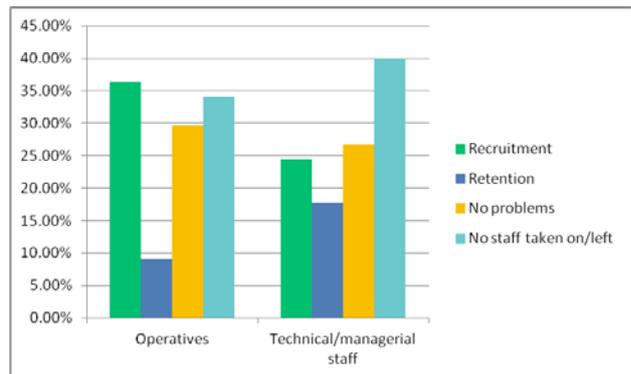
These figures are more positive than the 2017 survey and the 2016 survey, which had Yes at 70% and 69% respectively.



**8. Where have you had difficulty recruiting or retaining staff? (over the past 12 months)**

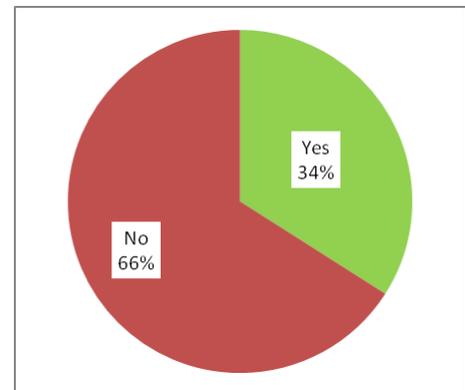
Of the 47 respondents, 36% reported difficulty in recruiting operatives and 9% reported difficulty in retaining operatives.

With regards to technical/managerial staff, 24% reported difficulty in recruiting technical/managerial staff and 17% reported difficulty in retaining technical/managerial staff.



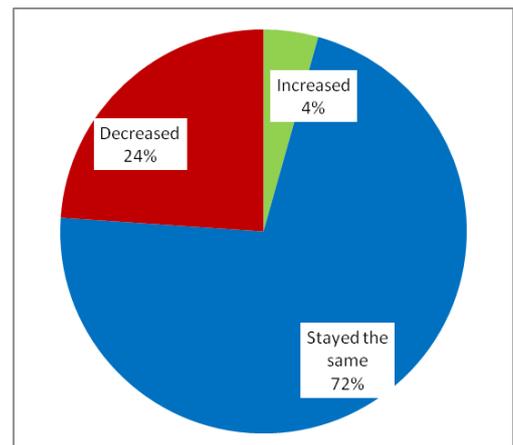
**9. Do you run an apprenticeship scheme?**

The majority of people (31/47) said that they did not run an apprenticeship scheme. Some who said 'No' mentioned that whilst there weren't apprenticeships available in street lighting, specifically there are within the wider Highways service.



**10. What has happened to your training budget over the past 12 months?**

Of the 46 responses, only two said that the training budget had increased. The majority (33) indicated that the budget hadn't changed. Approximately 20% of respondents reported a decrease in training budgets.

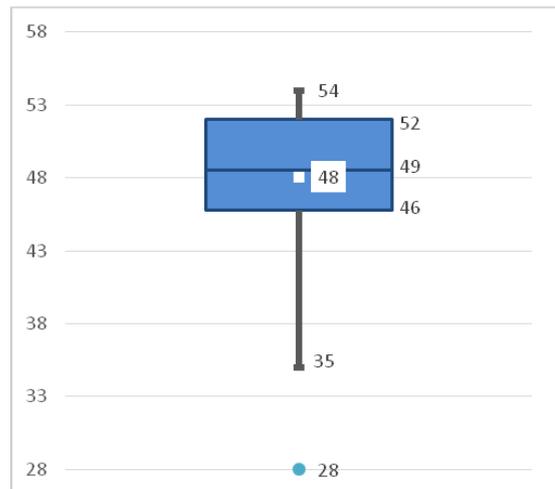


### 11. What is the average age of your street lighting operational staff?

The estimated average (mean) age of operational staff is 48 years old. Half of all respondents who were able to give an age placed the average age of staff within the range of 45 - 52 years old.

The oldest average reported was 54, and the youngest 28.

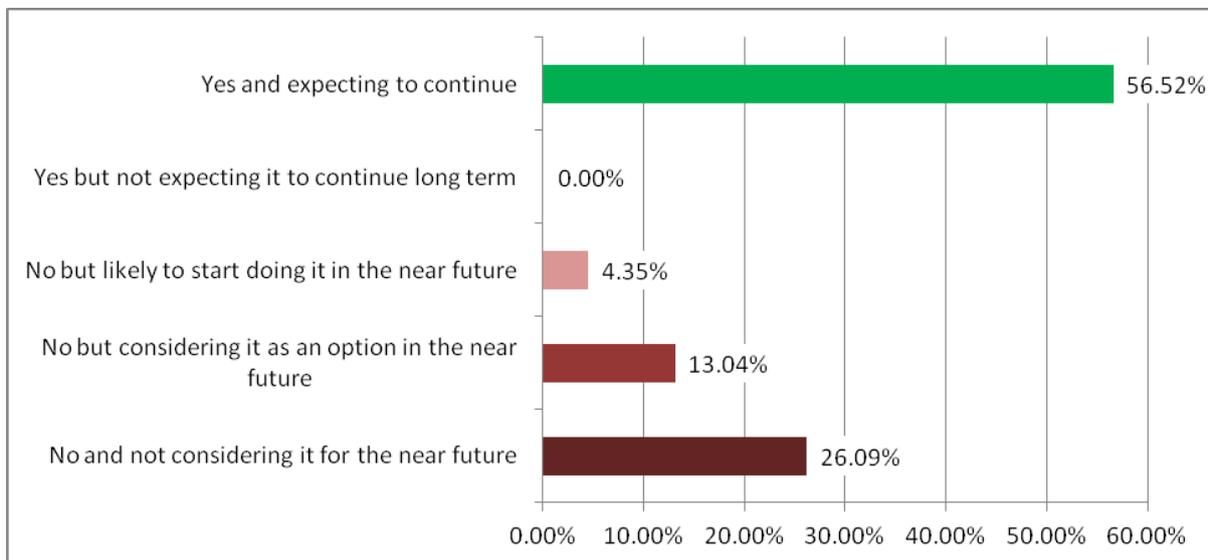
In 2017, the estimated average (mean) age of operational staff was slightly lower at 46 years old and half of all respondents who were able to give an age placed the average age of staff within the slightly higher range of 42-50 years old.



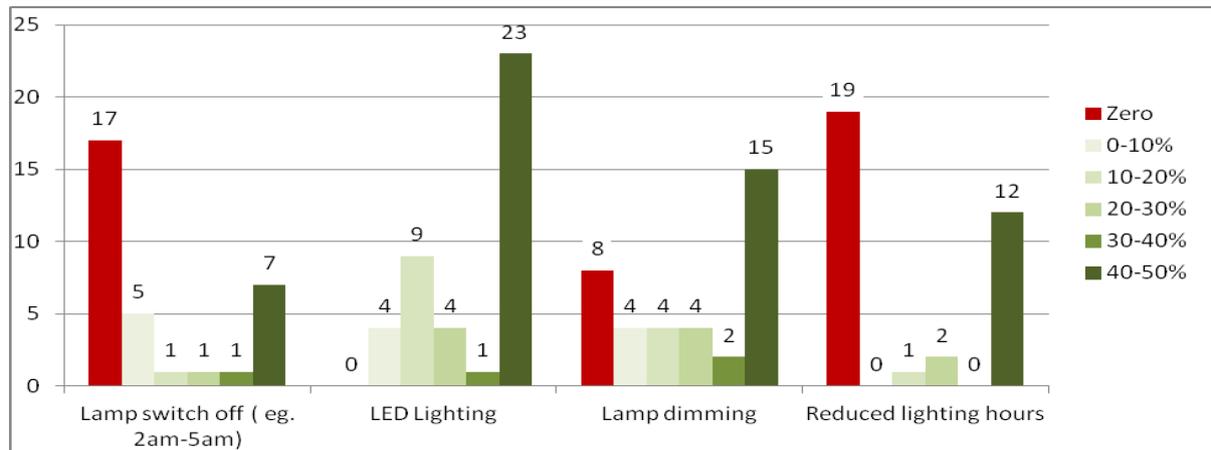
There were 22 valid responses to this question.

### 12. Do you currently sell your services to organisations external to the council?

The majority of councils (26 out of 46) sell their services to external organisations and expect this to continue. A further 8 were either likely to start or were considering this as an option. This leaves 12 (26%) that do not sell services and have no plan to do so.



### 13. What energy saving initiatives have you undertaken and what proportion of the lighting stock do you estimate is affected?



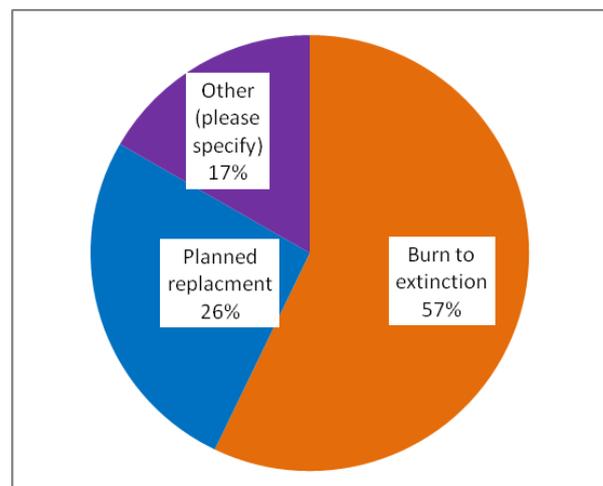
There was a total of 42 responses to this question. Almost all indicated they are implementing LED lighting (41) and the majority Dimming (29). 35% of all respondents indicated their Council has implemented 'Reduced lighting hours' and 'lamp switch off', which in the case of Lamp switch off was a slight increase on that recorded last year (up from 29%). In the comments, two respondents indicated their Council has implemented the following additional energy saving initiatives:

'Changing signs and bollards to high reflective and making them unlit'

'The Council's default position is that lighting of new residential estates is not required unless a highways safety need is identified'

### 14. What is your council's approach to lamp replacement within your street lights?

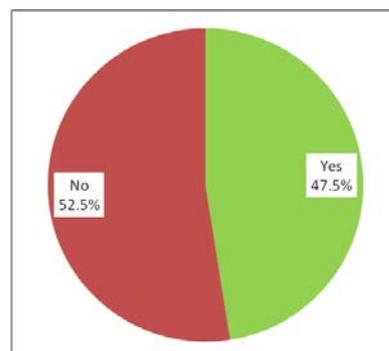
Of the 42 responses, 24 said their policy was to burn to extinction. 11 said that there was a planned replacement. Several indicated that these options have been superseded by the opportunities presented by LED upgrades in conjunction with the implementation of a CMS system.



### 15. Do you have a CMS System?

Just under half of the 40 respondents indicated they have a central management system (CMS) in place within their street lighting stock.

When asked what proportion of the stock the CMS system covers, there was a range of responses with 6 respondents indicating 90% of the stock or more, 5 respondents indicating figures in the range of 10% & 65% and 2 respondents indicating 1% or less.

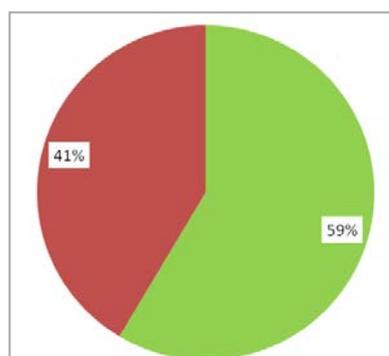


### 16. Does your council scout for failures?

Of the 41 respondents, 24 said that their council scouts for failures, compared with 17 who said they did not.

Comments indicated the frequency of inspections:

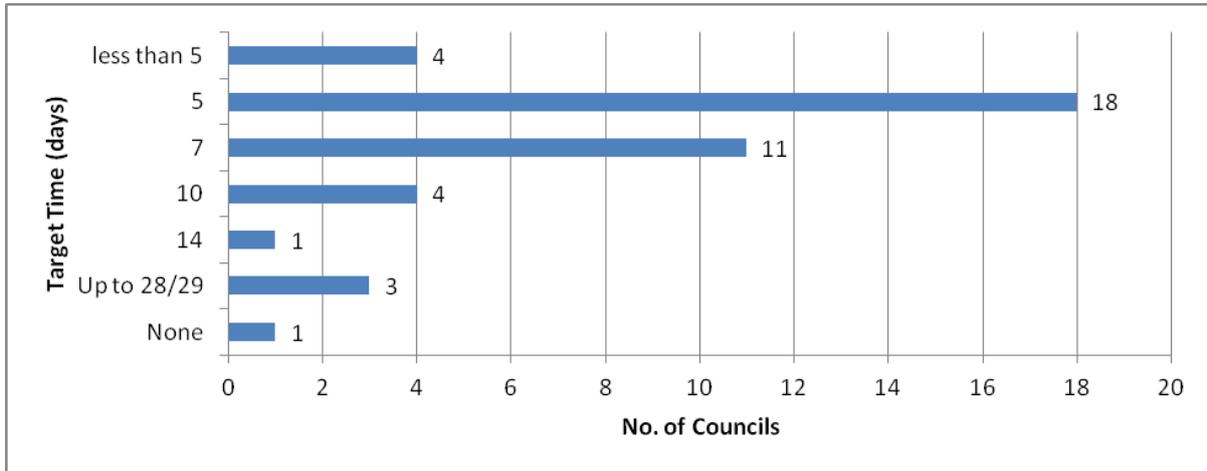
- 5 respondents indicated they inspect the lights every four weeks with one doing so in winter only, with no inspections in the summer whilst another in summer only, increasing inspections to every two weeks during the winter.
- 2 respondents indicated they inspect lights quarterly
- 2 indicated they inspect the lights intermittently/on occasion.
- 1 indicated they inspect lights not managed by a central management system only, whilst another main roads only and another signs and bollards only.
- 1 indicated every light is inspected 17 times a year and another that they scout for failures every two weeks.



### 17. How does your council track energy usage (by half hourly metering, estimated annual consumption or other)?

Of the 42 respondents, over half (23) indicated they use half hourly metering whilst 9 indicated they use estimated annual consumption. Of those who use half-hourly metering, 5 indicated they use a photo-electric control unit (PECU) and two indicated they use this approach in conjunction with a CMS system while another in conjunction with non-half hourly metering. 3 explained that they track energy usage through a CMS system only and another didn't indicate the method of tracking energy usage but simply stated their readings are taken by an independent meter administrator. Further responses included: 'Monthly forecast vs actual reconciliation', 'monthly reports', 'hourly metering', 'both of the above but also some metered'.

**18. What is your council's target time for restoring street lights to working order (in days)?**



Of the 42 people responses, 22 respondents indicated a target time of 5 days or less, 11 a target time of 7 days, 4 a target time of 10 days, 1 a target time of 14 days and 2 a target of 28 days, whilst one had a target time of 29 days. Of those with a target time of 5 days, one stated an extended time of 25 days for DNO faults. Finally, one did not have a stated target for repairing the fault but rather a target for attending to the fault since several factors may affect the time to restore the street light to working order, outside of the local authority's control.

**19. Which energy supplier do you use?**

The table below gives a summary of the responses received.

Supplier	Amount
N power	14 (37%)
EDF	10 (26%)
Northern Power	3 (8%)
Scottish Power	2 (5%)
Total Gas and Power	2 (5%)
British Gas	1 (3%)
Other/Misc.	6 (16%)

**20. What is the length of your current energy contract?**

The table below gives a summary of the responses received:

<b>Contract length</b>	<b>Amount</b>
1 year	1 (7%)
2 years	8 (26%)
3 years	4 (13%)
4 years	4 (13%)
5 years	3 (10%)
6 years	2 (6%)
9 years	1 (3%)
Other	5 (16%)
Unknown	3 (10%)

Of those included as “other” 2 indicated they procure their energy through Procurement Scotland and another through LASER.

## **21. When does your current energy contract end?**

As expected, contracts end at various times and are being negotiated on a continuous basis, with many arrangements being carried out through purchasing consortiums. There is always further room for collaboration in the procurement of energy (including many liaising through APSE’s own local authority energy collaboration, APSE Energy <http://www.apse.org.uk/apse/index.cfm/local-authority-energy-collaboration/> )

Where respondents stated a contract end date, 10 respondents indicated that their contract was ending in 2019, 6 in 2020 and 1 in 2021.

## **22. Where do you see growth areas for the street lighting service over the next 12 months?**

In answer to this question, 16 respondents indicated that they see work installing and upgrading to LED lighting schemes as a growth area for their service and six referenced the implementation of a CMS system. In addition, several respondents referenced ‘Working with developers/new housing developments’ as a further growth area.

Further responses received are included below:

- ✓ Column replacement schemes following structural testing programmes..
- ✓ Connectivity. Design & replacement

- ✓ Replacing existing assets with the latest technology and removing our low pressure sodium lanterns, Internet of Things, development of the infrastructure
- ✓ Increase in Section 38 Works
- ✓ Seeking affordable investments to save energy costs
- ✓ Energy Saving, Internet of Things and new builds
- ✓ Infrastructure replacements
- ✓ Smart Cities and Internet of Things
- ✓ Testing, Inspection - Structural faults - Column Replacement
- ✓ Removals and LED replacements, signs and bollards being changed for high reflection and being unlit.
- ✓ Work on infrastructure projects
- ✓ replacing structurally failed lighting columns and underground cable network.
- ✓ Use of SMART technology and ability to sell the services to external, commercial and retail organisations
- ✓ focus on electrical and structural testing
- ✓ External Income
- ✓ Capital and Development work.
- ✓ private new builds
- ✓ Offering developers 278 & section 38 Smart cities Electric car charging points
- ✓ Unfortunately due to the surge on LED lighting the only growth area in this part of the country will be due to the upturn in the new housing market.
- ✓ External works as above
- ✓ Maintenance of parish/privately owned lighting

### **23. Where do you see areas where work may decrease over the next 12 months?**

The majority of respondents (21) indicated an expectation of a decrease in repairs and maintenance work due to LED upgrades and newer lighting stock, requiring less repair.

Further responses received are included below:

- ✓ Capital works
- ✓ LED lantern replacement schemes..
- ✓ Energy Efficiency replacements as funding dries up
- ✓ I don't believe that this are will decrease only the opposite.
- ✓ Designs/construction for capital and revenue schemes.
- ✓ Lamp changes for non-LED units
- ✓ BCC & Night patrols
- ✓ Signs and bollards being changed for high reflective and moved to unlit.
- ✓ LED replacement as we have completed 95% of our stock.
- ✓ Night surveys, work at height

## **Local Authority Street Lighting Services**

### **State of the Market 2018**

#### **The Association for Public Service Excellence**

APSE member authorities have access to a range of membership resources to assist in delivering council services. This includes our regular advisory groups, specifically designed to bring together elected members, directors, managers and heads of service, together with trade union representatives to discuss service specific issues, innovation and new ways of delivering continuous improvement. The advisory groups are an excellent forum for sharing ideas and discussing topical service issues with colleagues from other councils throughout the UK.

Advisory groups are a free service included as part of your authority's membership of APSE and all end with an informal lunch to facilitate networking with peers in other councils. If you do not currently receive details about APSE advisory group meetings, and would like to be added to our list of contacts for your service area, please email: [enquiries@apse.org.uk](mailto:enquiries@apse.org.uk).

Our national advisory groups include: -

- FM & Building Cleaning
- Catering (school meals)
- Cemeteries and Crematoria
- Environmental Health
- Highways and Street Lighting
- Housing Construction and Building Maintenance
- Local Authorities Commercialisation, Income and Trading Network
- Parks, Horticulture and Grounds Maintenance
- Renewables and Climate Change
- Sports and Leisure Management
- Vehicle Maintenance and Transport
- Waste Management, Refuse Collection and Street Cleansing
- Highways and Street Lighting
- Housing Construction and Building Maintenance
- Local Authorities Commercialisation, Income and Trading Network
- Parks, Horticulture and Grounds Maintenance
- Renewables and Climate Change
- Sports and Leisure Management
- Vehicle Maintenance and Transport
- Waste Management, Refuse Collection and Street Cleansing