

## **State of the Market Survey 2016**

### **Local Authority Street Lighting Services**



**Briefing 16/18  
June 2016**

The state of the market survey was conducted and written by Garry Lee, Research & Coordination Officer.

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# Local Authority Street Lighting Services

## State of the Market 2016

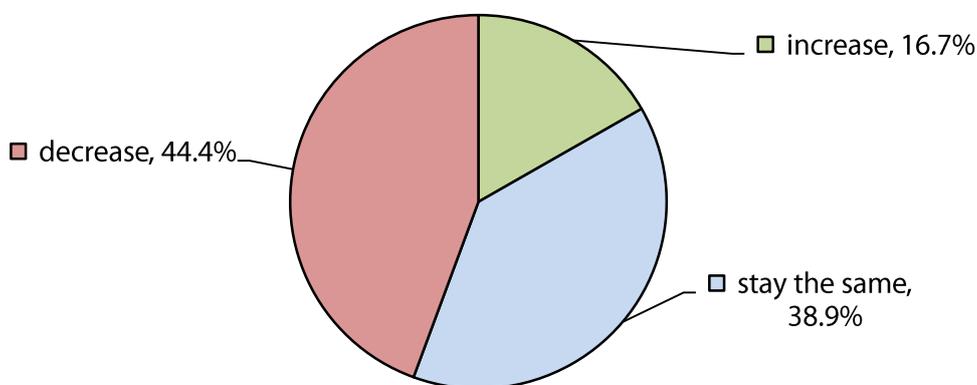
APSE conducted an online survey during April and May 2016. A series of questions were asked covering a range of issues of interest to those officers and councillors responsible for highways issues in general and street lighting specifically. There were 55 responses received from local authorities in the UK.

75 responses were received to the highways survey and a further 46 responses were received to the winter maintenance survey making a total of 176 responses to all 3 surveys.

The surveys are an attempt to understand perceptions of the market amongst people directly involved in delivering services rather than a survey of the same individuals from year to year.

## Results from the survey

### 1. How has the budget for the street lighting service changed over the past 12 months?

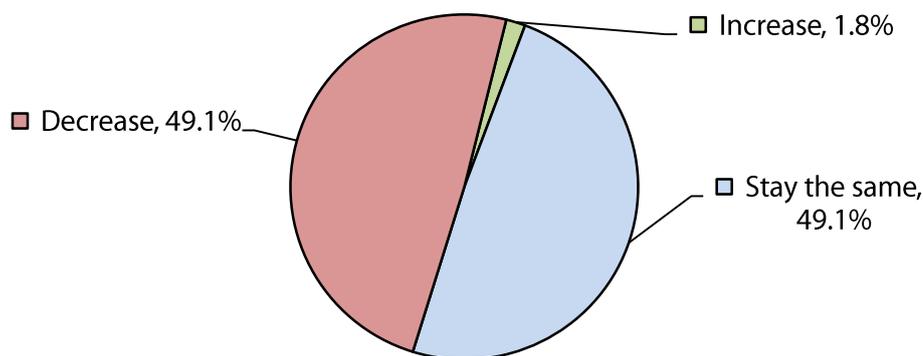


Of the 54 respondents to this question, 9 said that the budget had increased, 21 had remained the same whilst the budget had decreased for 24 respondents.

Respondents noted that budget increases were mainly due to the implementation of the ongoing LED programmes as part of local authority 'spend to save' programmes to reduce energy use; another authority noted that their budget had been increased to allow for the implementation of a Central Management System.

Those who experienced decreases noted that their capital costs had been reduced by up to 50% (likely as a result of completing LED changeovers) and others reported only receiving decreases in their energy budgets.

**2. How do you expect the budget for the street lighting service to change when allocated for 2017-18?**

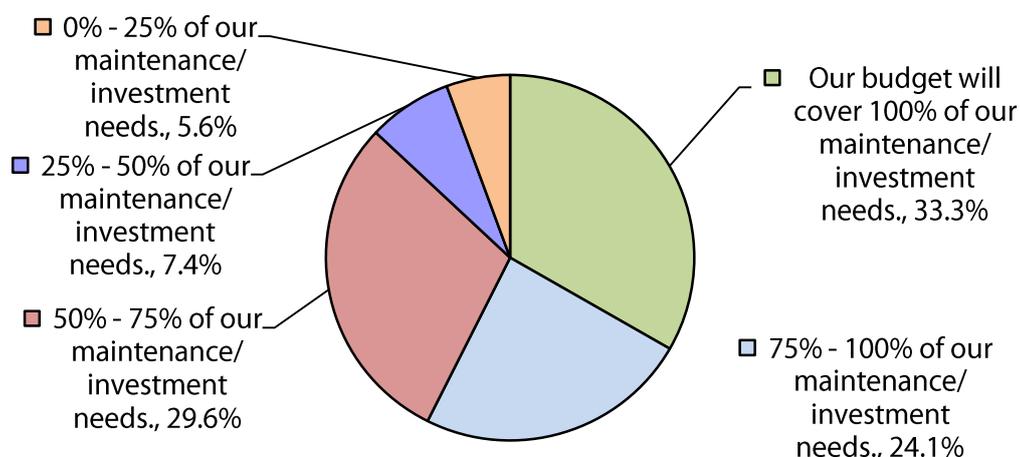


Answer options	2016 Number (%)	2014 Number (%)	2012 Number (%)	2011 Number (%)	2010 Number (%)	2009 Number (%)	% change 09-16
Increase	1 (1.8%)	4 (8.7%)	13 (31.7%)	4 (8.3%)	4 (4.9%)	12 (16.7%)	- 14.9%
Stay the same	27 (49.1%)	17 (37.0%)	17 (41.5%)	20 (41.6%)	37 (45.7%)	41 (56.9%)	- 7.8%
Decrease	27 (49.1%)	25 (54.3%)	11 (26.8%)	24 (50.0%)	40 (49.4%)	19 (26.4%)	+ 22.7%
Total	55	46	41	48	81	72	

2016's survey highlights a more pessimistic outlook for future budgets among respondents than seen in recent years with only 1 respondent expecting their budget to increase when allocated for 2017-18, a significant reduction from 13 (31.7%) in 2012's survey. As noted in the responses to question 1 on this year's budget, those expecting future decreases (27 of 55 respondents – 49.1%) have said that they expect their energy funding to be reduced as a result of LED conversion works; so this is part of planned budget reductions rather than unexpected challenges.

The same number of respondents also expected budgets to stay the same, which compared to the budget allocations expected in other services (highlighted in APSE's other State of the Market surveys), street lighting appears to have some stability.

### 3. To what extent will your 2016/17 budget for street lighting meet the need to maintain your assets and/or provide replacements where necessary?



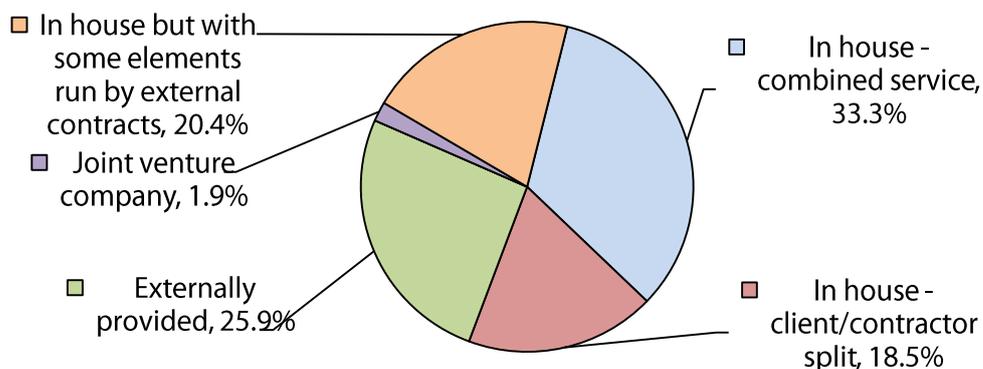
Answer Options	2016 Number (%)	2014 Number (%)	2012 Number (%)
Budget to cover 100% of maintenance/investment	18 (33.3%)	13 (28.9%)	12 (29.3%)
Budget to cover 75% - 100% of maintenance/investment	13 (24.1%)	14 (31.1%)	8 (19.5%)
Budget to cover 50% - 75% of maintenance/investment	16 (29.6%)	7 (15.6%)	9 (22.0%)
Budget to cover 25% - 50% of maintenance/investment	4 (7.4%)	6 (13.3%)	6 (14.6%)
Budget to cover 0% - 25% of maintenance/investment	3 (5.6%)	5 (11.1%)	6 (14.6%)
Total	54	45	41

Those councils where a PFI contract is in operation will of course have to allocate the budget to meet the agreed fees for the contract which means this question is not especially relevant in those circumstances and a number of those responding that the budget will meet 100% of needs are PFI contracts. With that said, the response to this question has been the most positive since the question was first asked in 2012, with 87.0% of respondents having a budget that covers 50% - 100% of their maintenance/investment needs (75.6% in 2014 and 70.8% in 2012), though the fact that 66.7% of respondents' budgets for maintaining / replacing assets falls short of the 100% figure does cause concern.

Comments to this question included many referencing issues with the replacement of columns: "we are concerned that we may not be able to fund column replacements due to aged stock", "capital funding will enable 186 obsolete concrete columns to be replaced. We would like to see them all replaced but we are proposing to replace the columns

which are in worst condition”. Other concerned comments included that “the lighting and traffic infrastructure requires a massive injection of funding to even stay at a steady rate”, “investment will not meet [our] full needs” and that while “the main budget covers 50-80% of our investment needs [and] capital covers the rest, capital investment will cease [in] 2018”.

#### 4. How are your street lighting services currently delivered?



Answer options	2016 Number (%)	2014 Number (%)	2012 Number (%)	2011 Number (%)	2010 Number (%)	2009 Number (%)	% change 09-16
In-house – combined service	18 (33.3%)	21 (45.7%)	14 (34.1%)	34 (82.9%)	35 (72.9%)	26 (61.9%)	- 28.6%
In-house – client/contractor split	10 (18.5%)	10 (21.7%)	10 (24.4%)	3 (7.3%)	8 (16.7%)	11 (26.2%)	- 7.7%
Externally provided	14 (25.9%)	12 (26.1%)	15 (36.6%)	3 (7.3%)	4 (8.3%)	4 (9.5%)	+ 16.4%
Arms length organisation	0 (0.0%)	0 (0.0%)	1 (2.4%)	1 (2.4%)	0 (0.0%)	0 (0.0%)	0.0%
Joint venture company	1 (1.9%)	3 (6.5%)	1 (2.4%)	0 (0.0%)	1 (2.1%)	1 (2.4%)	- 0.5%
In-house but with some elements run by external contracts	11 (20.4%)	N/A	N/A	N/A	N/A	N/A	N/A
Total	54	46	41	41	48	42	

The majority of respondents were received from councils with an ‘in-house – combined service’ (33.3%), while this appears to be the lowest figure recorded since the survey began in the data table above, this is due to the inclusion of a new answer option for 2016 ‘in-house but with some elements run by external contracts’ (20.4%). Otherwise, the results are broadly similar to the makeup of the last survey. Comments highlighted that respondents have contracted out a range of works which include: connections, structural testing and other asset maintenance programmes.

## 5. Do you expect the service to remain in-house over the next 12 months?

37 of the 40 respondents to this question believe that their service will remain in-house over the next 12 months.

## 6. What has happened to your training budget over the past 12 months?

37 of 51 respondents stated that their training budget had stayed the same over the past 12 months and the remaining 14 noted that this has decreased. Several respondents to the survey commented that they either do not have a training budget or that training is not budgeted and is approved on an 'as necessary' basis.

Since the majority of respondents have not had their training budgets cut in the last 12 months, it is likely that they have already been through an austerity exercise and had them cut previously.

## 7. Are you having trouble recruiting or retraining operatives or technical/managerial staff (over the past 12 months)?

Operatives							
Title	2016	2014	2012	2011	2010	2009	% change 12-16
Yes, trouble recruiting	6 (11.3%)	4 (8.7%)	2 (5.0%)	11 (10.2%)	21 (11.1%)	23 (13.7%)	+ 6.3%
Yes, trouble retaining	0 (0.0%)	3 (6.5%)	0 (0.0%)	7 (6.5%)	12 (6.3%)	7 (4.2%)	0.0%
Yes, trouble recruiting and retaining	2 (3.8%)	2 (4.3%)	2 (5.0%)	0 (0.0%)	12 (6.3%)	8 (4.8%)	- 1.2%
Technical / Managerial Staff							
Title	2016	2014	2012	2011	2010	2009	% change 12-16
Yes, trouble recruiting	8 (15.1%)	2 (4.3%)	3 (7.5%)	7 (6.5%)	33 (17.5%)	33 (19.6%)	+ 7.6%
Yes, trouble retaining	1 (1.9%)	1 (2.2%)	0 (0.0%)	4 (3.7%)	10 (5.3%)	13 (7.7%)	+ 1.9%
Yes, trouble recruiting and retaining	5 (9.4%)	2 (4.3%)	1 (2.5%)	2 (1.9%)	13 (6.9%)	22 (13.1%)	+ 6.9%
Overall							
Title	2016	2014	2012	2011	2010	2009	% change 12-16
No, we have not experienced any problems / we have not taken any staff on	31 (58.5%)	32 (69.6%)	32 (80.0%)	77 (71.3%)	88 (46.6%)	62 (39.9%)	- 21.5%

over the last 12 months							
Total	53	46	40	108 *	189 *	168 *	

\* including highways and winter maintenance staff

### 8. Do you feel staff absence levels are acceptable?

Answer Options	2016 Number (%)	2014 Number (%)	2012 Number (%)	2011 Number (%)	% change 11-16
Yes	37 (68.5%)	34 (75.6%)	30 (73.2%)	38 (67.9%)	+ 0.6%
No	17 (31.5%)	11 (24.4%)	11 (26.8%)	18 (32.1%)	- 0.6%
Total	54	45	41	56 *	

Respondents answering 'no' to this question have risen quite sharply to similar levels found in 2011 and interrupts the previous upwards trend of positive responses to this question. Comments to this question pointed to the unfortunate realities of delivering local authority services in 2016 with minimum levels of staff, saying "[we] unfortunately struggle to meet increasing public expectations [with] very little staff", and another saying they are "barely coping, [the] workload [is] extensive and [we have] problems providing cover for holiday periods".

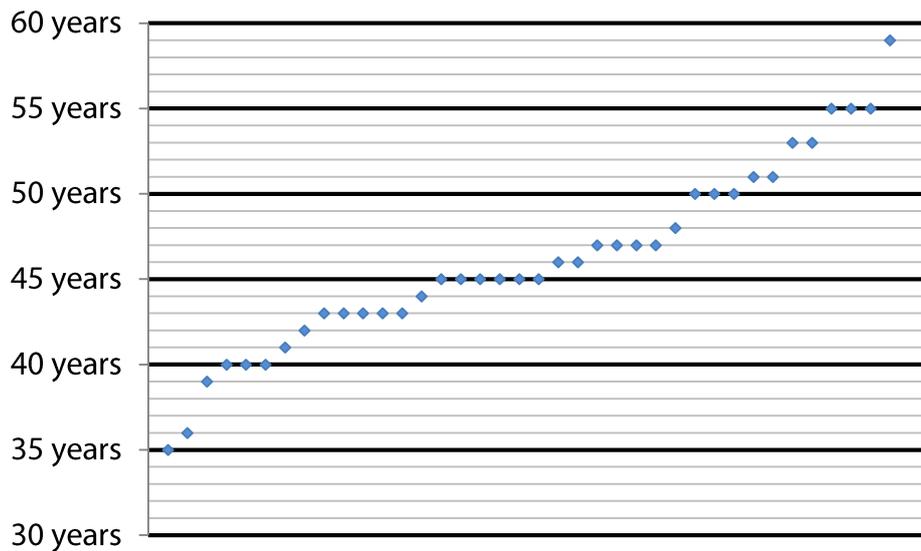
According to data collected by APSE's Performance Networks, street lighting services has a comparatively lower level of staff absence than all other services (11/12 – 2.14% with 4.09% average, 12/13 – 3.84% with 4.17% average and 13/14 – 3.71% with 4.06% average).

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

Answer Options	2016 Number (%)	2014 Number (%)	2012 Number (%)	2011 Number (%)	2010 Number (%)
Yes	11 (20.4%)	18 (39.1%)	35%	45%	33%

Only 11 respondents (20.4%) offer apprenticeship schemes either through the Council themselves or through the Council's contractors. This is the lowest figure recorded in the history of this survey. While local authorities with operational apprenticeship schemes appear to remain in the minority, there are a group of local authorities who understand the value of their apprenticeship schemes. Survey respondents reported as having a small number on their schemes, usually 1 or 2 individuals.

### 10. What is the average age of your operational staff?



The average age recorded is 46 years (from 39 responses), which is the same as the last 2 surveys, with a range of 35 to 59. 11 authorities had an average age for operational staff of 50 or over. A number of factors impact on the average age of staff such as the ability for councils to train and recruit staff, the state of the economy, how attractive councils are seen as employers and whether older staff are seen as a benefit or a drag on the workforce. Overall, the average age of the population so this may be reflected in the age of the workforce (the [Office for National Statistics](#) reported in 2015 that the median age in the UK has now reached 40 years old).

However, this issue cannot be ignored and years of experience are often lost when a single older worker takes a redundancy package. When funds are found to replace such staff it is most commonly with people who are new or relatively new to the sector and so without any experience.

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

Answer Options	2016 Number (%)	2014 Number (%)	2012 Number (%)	2011 Number (%)	2010 Number (%)	2009 Number (%)	% change 09-16
No and not considering it for the near future	14 (25.9%)	10 (22.2%)	18 (45.0%)	16 (40.0%)	17 (31.5%)	13 (29.5%)	- 3.6%
No but considering it in the near future	5 (9.3%)	3 (6.7%)	5 (12.5%)	2 (5.0%)	3 (5.6%)	4 (9.1%)	+ 0.2%
No but likely to start in the near future	1 (1.9%)	3 (6.7%)	0 (0.0%)	1 (2.5%)	0 (0.0%)	0 (0.0%)	+ 1.9%
Yes and expecting to continue	32 (59.3%)	28 (62.2%)	17 (42.5%)	20 (50.0%)	33 (61.1%)	26 (59.1%)	+ 0.2%
Yes but not	2	1	0	1	1	1	+ 1.4%

expecting to continue long term	(3.7%)	(2.2%)	(0.0%)	(2.5%)	(1.9%)	(2.3%)	
Total	54	45	40	40	54	44	

The answers above show that the majority of respondents (59.3%) are trading externally and expect to continue this long term. This type of work includes business with town councils, district councils, housing associations as well as design and installation work for private highways-related developers (e.g. lighting, traffic signals).

While the number of respondents answering 'no and not considering it for the near future' (25.9%) is higher than last year, this is still a comparatively low percentage to previous years. Reasons for this included that there was "no scope as the team is too small".

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

While the opinions of respondents may diverge and many noted that there were no opportunities for their service at present. One authority commented that "the requirement for work is more likely to increase but the budget is more likely to decrease putting further strain on the asset and resources". Here is a summary of the expected areas of growth over the next 12 months:

- The replacement of luminaries due to the introduction and advancements in LED technology – energy saving measures in general
- Private development work – design, construction/installation, maintenance and supervision services
- Maintenance work and the transition from reactive to planned maintenance activities
- Unit removals
- Structural testing
- Providing infrastructure for smart city initiatives (e.g. wifi access)

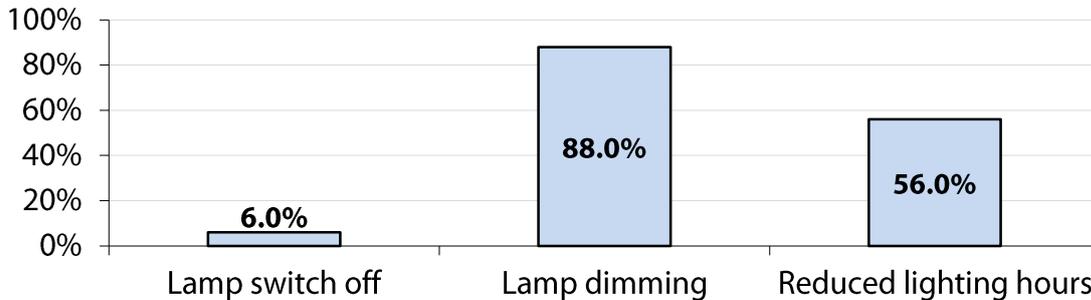
### **13. Where do you see areas where work may decrease for the service over the next 12 months?**

As above, the answers to this question differed greatly with some local authorities anticipating no areas of decrease and others experiencing significant service decreases (both in terms of funding and perceived need). The items noted will reflect circumstances in each locality. This should provide an idea of areas where the level of work is expected to change.

- Capital funded works
- Reduced levels of repairs and maintenance (both routine and reactive) due to LED conversions and replacements (e.g. expected reduction in dark light faults reported). This is also expected to lead to a reduction in the need for night time scouting

- Resident complaints will reduce as discharge lighting is phased out and part night lighting is accepted as the norm
- In-house design services

**14. Has your council undertaken any of the energy saving initiatives? (if so please provide details such as 20% dimming or switch off for 5% of lighting stock between 2am and 5am)**



Of the 50 respondees, 44 have dimmed some of their lights, 28 have reduced the hours they light and 3 have switched off some lights.

Some of the actions they have taken are as follows:

- Dimming traffic routes after peak hours
- Part night lighting on most residential roads
- Part night lighting with every other light operating between the hours of 22:00 to 06:00
- 50% dim 00:00 to 05:00 on 3% of stock
- 20% asset switch off from 00:00 to 05:30 and 15% of asset dim to 80% output at 00:00
- A large number of respondents are highlighting widespread adoption of LED lanterns with some reporting that their "lanterns are programmed to dim and through the fitting of new photocells as a control they are also able to trim the time the lights go on and off at the start and end of each day"
- LED dimable lanterns – dimming to 75% at 20:00, 50% at 00:00 and 100% at 06:00

**15. What is your council's approach to lamp replacement within your street lights (burn to extinction, planned replacement or other)?**

29 of respondents are following a policy of burn to extinction and 16 respondents carry out planned replacements. Several respondents noted that their policy position was made possible by a lighting provider, was as a result of the change to LED lighting (burn to extinction) or was dependent upon the type of lamps used (e.g. non-LED lamps are on a 6 year planned replacement cycle).

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

There were 53 responses to this question and 18 respondents (34.0%) stated that they did not scout for failures.

Comments included that:

- the regularity for this varied greatly from authority to authority, with some scouting fortnightly, once every 3 weeks or once a month
- in some authorities scouting was exclusively done in the winter months (or at least was carried out more regularly in winter)
- some respondents noted that schedule inspections were dependent on road category and priority
- inspections were not exclusively carried out by the council themselves, and this was either in part or in full carried out by contractors
- several councils noted that they do not scout for failures and rely on public reporting (in one instance, this was a result of the switch to LED lighting); one respondent stated that their service ceased this year, and another respondent expected their service to cease in the coming months; many councils noted that installation of LED lighting has reduced the need for scouting

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

8 respondents (of 50 to this question) use estimated annual consumption whilst 30 use half hourly metering. The remainder use a mixture of PECU array, pseudo half hourly or a combination of the above.

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

2 Days	3 Days	4 Days	5 Days	7 Days	10 Days	20 Days
2 (4.2%)	4 (8.3%)	6 (12.5%)	25 (52.1%)	9 (18.8%)	1 (2.1%)	1 (2.1%)

The most popular target for restoring lights is 5 days, a target adopted by 25 of the responding councils. The shortest target time was 2 days and the longest was 20 days. The average response time is 5.4 days, down from 5.8 days in 2014’s survey.

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

A variety of energy suppliers are used by the 48 respondents to this question. These are as follows:

Supplier	Respondents
EDF	27 (56.3%)
Npower	6 (12.5%)
SSE	4 (8.3%)
Laser	3 (6.3%)
Eon	2 (4.2%)
West Mercia	2 (4.2%)
British Gas	1 (2.1%)
N/K	1 (2.1%)
NEDL	1 (2.1%)
UKPN	1 (2.1%)

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

The length of current energy contracts varies greatly from authority to authority spanning from 6 months to up to 6 years, with 9 of 44 being for a single year or less and 3 being for 5 years or more. A number of respondents noted that they were unsure of an exact length due to joint arrangements with either neighbouring authorities or a national consortium.

## 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 speaking through APSE's own local authority energy collaboration, APSE Energy).

In terms of responses to this survey, 6 energy contracts are expected to end this year, 12 are expected to end in 2017, 4 in 2018, 3 in 2019 with many others ongoing.

## Conclusions

This year's survey has covered a range of questions and a wealth of information about the current state of the street lighting market from the perspective of local authority managers and officers. The issues of energy management (alleviated through the installation of LED lanterns), managed reductions in budgets (as a result of many capital programmes coming to an end) and staff pressures (with perceptions of increasing levels of staff absence and comments about the difficulty of managing to complete the work with minimal staff numbers) remain prevalent across local authorities all over the UK. The opinions on areas of growth and decline differ, and highlight that many councils are increasingly working at a different pace, each with their own issues around things like recruiting and retaining staff, operating with a maintenance/replacement budget that won't cover all of their needs or not being in a position to operate commercially regardless of the opportunities available.

There is no doubt that innovation is alive in well in local government, and there are examples within this survey to justify such a statement, but it is clear that local authorities will have a tough time meeting the challenges ahead.

## 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:-

- Building cleaning
- Catering
- Housing, construction and building maintenance
- Local authorities commercialisation, income and trading network
- Parks, horticultural and ground maintenance
- Renewables and climate change
- Roads, highways and street lighting
- Service delivery models
- Service transformation and performance management
- Sports and leisure management
- Vehicle maintenance and transport
- Waste management, refuse collection and street cleansing