Briefing 17-06 February 2017

Street Lighting Trend Analysis 2015/16

This briefing provides details on the performance information available from APSE's performance networks service looking at performance indicators and current policy issues for councils who deliver street lighting services.

Key issues

- An average street light consumed £37.73 of energy in 2015/16.
- 46.54% of street lights are now electronically controlled.
- Typical average repair time for a broken light is 5.04 days

Overview

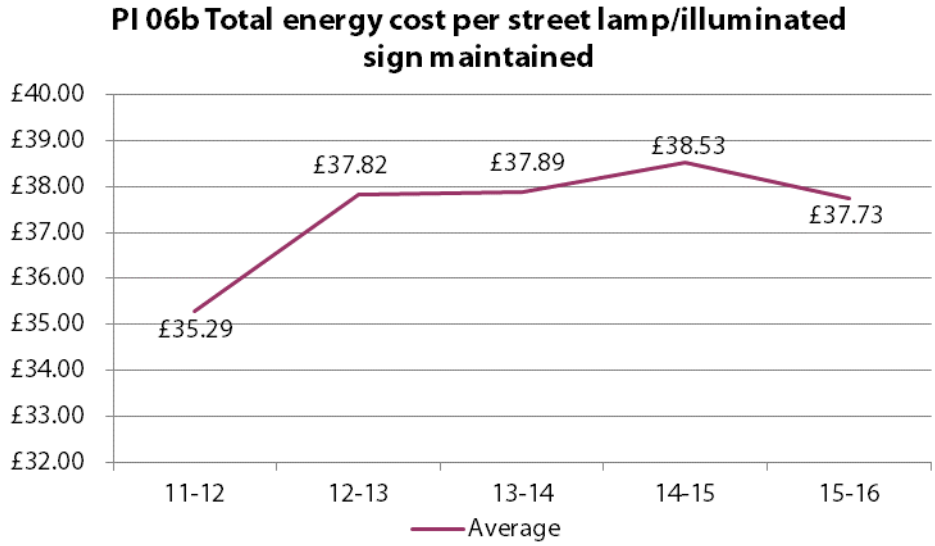
The APSE performance networks performance indicators for street lighting cover the cost, productivity and quality elements of the service. This summary aims to provide participating authorities with an overview of service trends, what this infers and what further activity and analysis individual authorities and the APSE roads/highways, winter maintenance and street lighting benchmarking group could consider.

Trend analysis

Particular points of interest are as follows:

The cost of energy used in street lamps and signs continues to be a major issue (PI 06b). The average cost has increased over the previous 4 years with an increase from £35.29 in 2011-12 to £37.82 in 2012-13 before remaining relatively constant thereafter. We can see that the average figure for 2015-16 has dropped slightly to £37.73 from last year's figure of £38.53.

Energy costs are a significant factor for all large functioning organisations and local authorities are no different. The focus on energy procurement, length of contracts and fixed rates appears to be one factor producing lower costs. Operational responses have been increases in the number of trials of dimming, trimming and switch off with many evolving into long term approaches from short term trials. These approaches will have to continue if significant reductions in energy costs are to be seen.



In Scotland through the Scottish Futures Trust, a street lighting energy efficiency programme was established in 2013 to accelerate the introduction of LED street lights in Scotland. Since it began, £7 million of savings have been realised and 27,252t CO2e reduced.

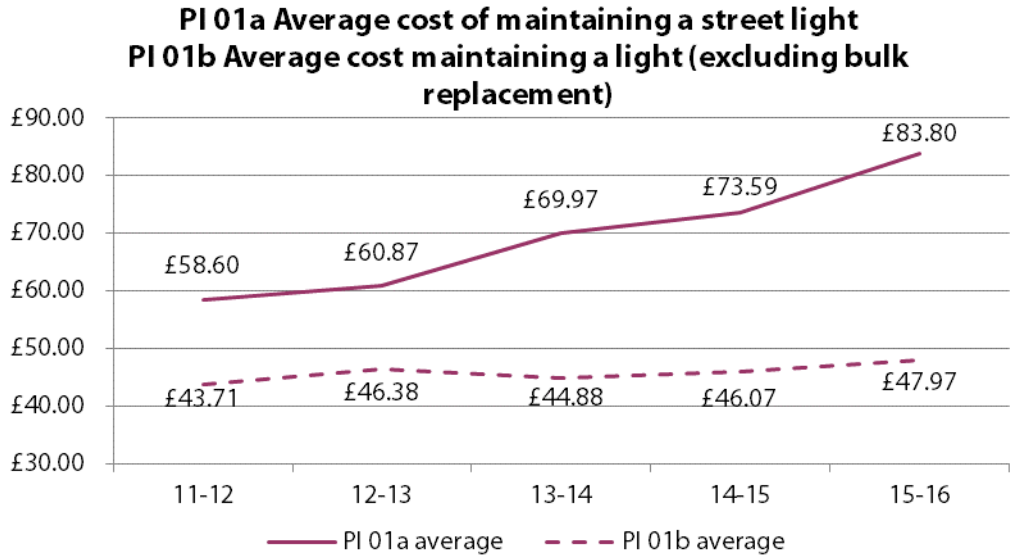
Energy suppliers have quoted green levies as the reason for pushing up energy prices even though they account for only about 7% of the bill. The level of profit remains shrouded in mystery and small suppliers still find it difficult to enter the market, however with the introduction of local authority energy companies such as Robin Hood energy it is hoped that this trend can now be changed.

These and other radical approaches are of course dependent upon political will in the local area and for many councillors turning off street lights is not an option they are willing to choose.

Even though the drop in costs last year is welcome, the trend is an upward one and costs last year are on average higher than in previous years.

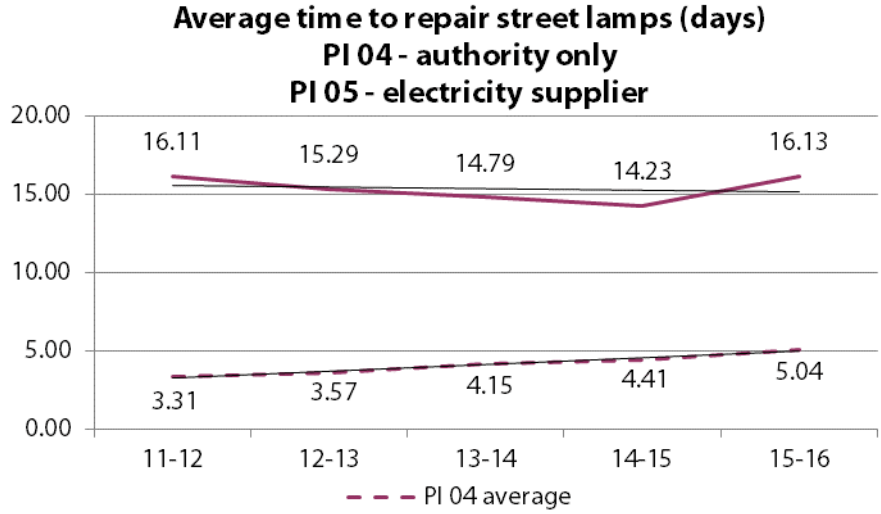
The average cost of maintaining street lights (PI 01a) has increased steadily throughout the collection period. The increase was greater over the first few years of data collection with recent increases being less pronounced. Since 2006-07 the cost has risen from £56.24 to £60.87 in 2012-13 followed by a substantial rise the following year to £69.97 (2013-14), with another smaller increase to £73.59 (2014-15) before increasing significantly again to £83.80 this year (2015-16).

The average cost of maintaining street lights excluding bulk replacements (PI 01b dotted line) decreased from £46.38 (2012-13) to £44.88 (2013-14), before seeing it rise to £46.07 in 2014-15 and then £47.97 in 2015-16.



The extra cost of bulk replacements equates to PI 01a minus PI 01b. The difference between the two has increased steadily since 2011-12 and it is now £35.83. This is a definite trend and points to either an increase in the cost of bulk replacements as a proportion of the overall cost or a reduction in the cost of maintenance. The latter had remained far more stable than the cost including bulk replacements over the years.

The trend for the average time to repair street lamps is an increasing one for those services provided by local authorities. PI 04 has increased slightly from 3.31 days to 5.04 days over the last 4 years. This is a change of almost two days on average means the average time to repair by local authorities is now longer than at any time over the past 5 years.



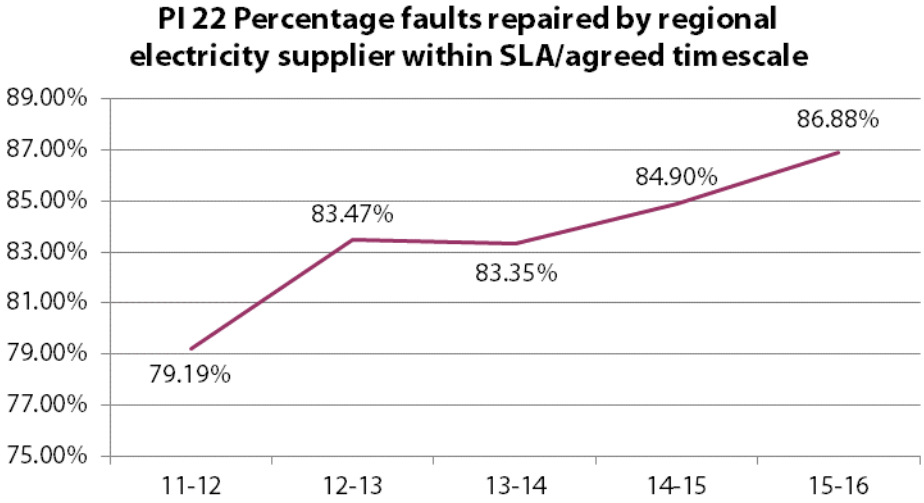
Although the figure for electricity suppliers fell from a high of over 16 days in 2011-12 to 14.23 days in 2014-15, this year has seen it rise to just over 16 days once again. It is hoped that this is not a trend set to continue and that the number of days will drop again next year.

The comparison of average times to repair street lamps (PI 04 local authority versus PI 05 electricity supplier), remains stark. The difference between the 2 performance rates has reduced from under 13 days in 2011-05 to just over 11 days in 2015-16.

This continues to be a contentious issue for local authorities and it would appear that pressure from councils and the opening up of this function to other providers, amongst other factors, has helped to reduce the difference. However, it is slightly concerning that the electricity supplier figure has jumped back up in the last 12 months.

The results from PI 03, percentage of lamps restored to working condition within 7 days, showed a rate of between 91% and 93% over the 3 years from 2011-12 until 2013-14. Last year's figure dropped to 88.55% which is significant when compared with previous years and this year it has seen a further reduction but just by 0.48% (now 88.07%). This could be due to a continuation of reductions in service levels over the past year and may be down to continued reduced budgets and the impact on front line resources.

PI 22, the percentage of faults repaired by regional electricity supplier within SLA/agreed timescale continues the trend over 5 years by showing improvement to a figure of 86.88% in 2015-16.



PI 19 highlights the percentage of street lights that are controlled by electronic gear and reflects the ability of a council to deliver dimming and partial switch off as a policy option. This figure equated to an average of 19.84% in 2011-12 and it has shown a constant increase since then. It has increased significantly to 29.6% in 2013-14 and again to 32.49% in 2014-15, and now stands at 46.54% for 2015-16, which is an increase in over 14% within the last 12 months. The overall change continues to reflect developments in technology and an 'invest to save' approach.

Clearly there will be different levels of investment in different councils but those that have taken a decision to invest either recently or over the past decade will be in a far better position to benefit in terms of energy saving and carbon reduction moving forward. A number of councils are actively involved in installing this kind of technology so there is likelihood that this will be reflected in this measure in the future. Also refer to PI 06b trend analysis above.

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