Briefing 17-53 December 2017

Street Lighting: Trend analysis 2016/17

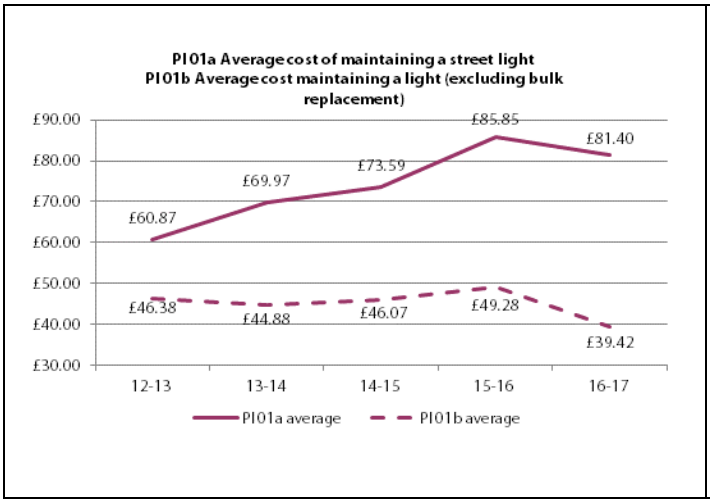
This briefing provides details on the performance information available through APSE Performance Networks for Street Lighting. It aims to provide an overview of service trends focused on performance indicators based on Cost and Productivity and is based on averages across all family groups.

Key issues

- Almost all Performance Indicators measuring costs have fallen in 2016/17.
- Most significantly, the total investment in infrastructure per street light has fallen by approximately 10% (revenue allocation) and 22% (capital allocation) and the annual cost of night inspecting a street light (PI34a) has fallen by 40%.
- 2016/17 has also seen an improvement in the average number of days taken to restore a lamp to working order.

Cost

Headline figures: In 2016/17, the average cost of maintaining a single street light was £81.40 and per street light, the average figure for investment in street lighting infrastructure was £82.45. The total energy cost per street light/illuminated sign maintained was £36.43 and the average cost per routine fault repair was £107.26.



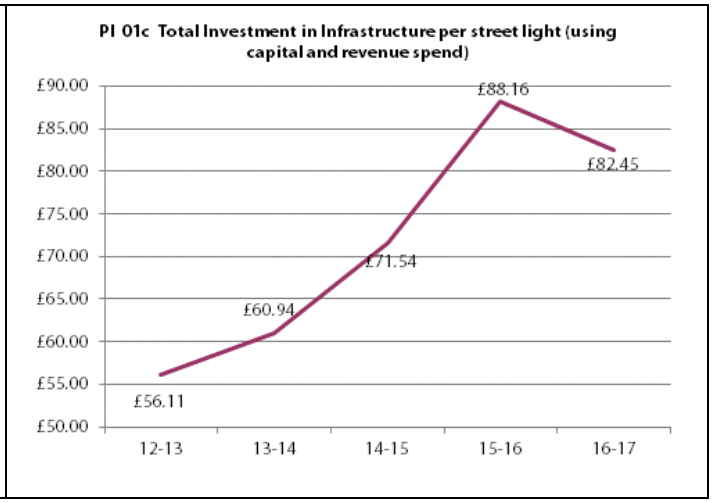


Figure 1- Cost: Headline figures

Investment: The total investment in infrastructure per street light can be broken down in to an average investment of £34.46 in Capital expenditure and £28.70 in Revenue expenditure. These figures have fallen this year and capital allocation in particular, varies significantly across local authorities with those authorities in the quartile 1, investing less than £14.07 per street light and those in quartile 4 investing more than £54.99 per street light.

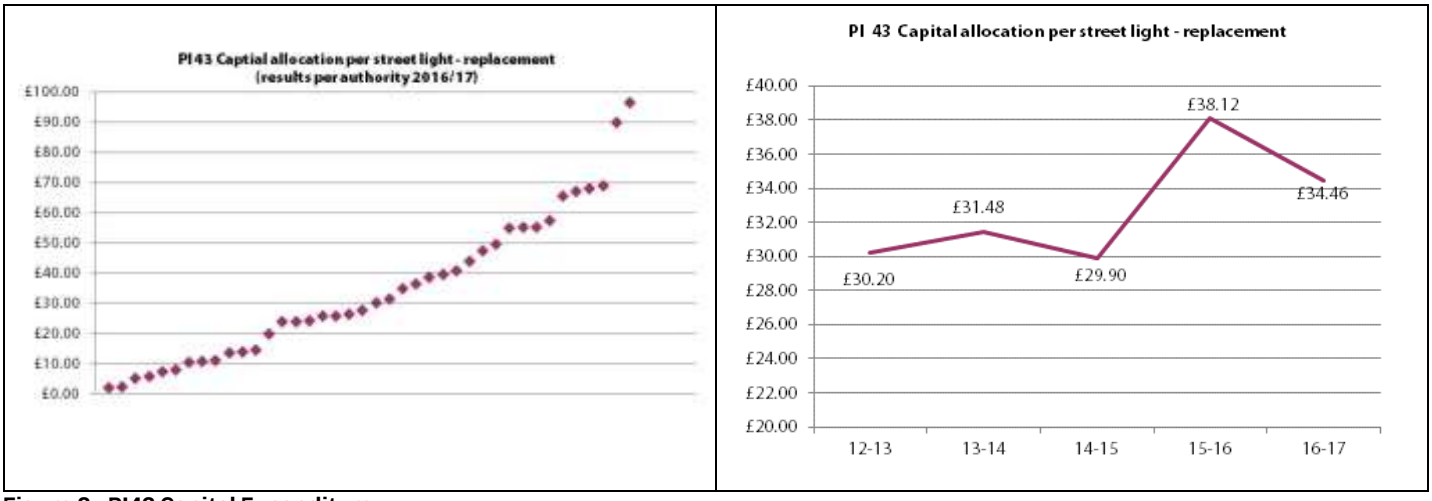


Figure 2 - PI43 Capital Expenditure

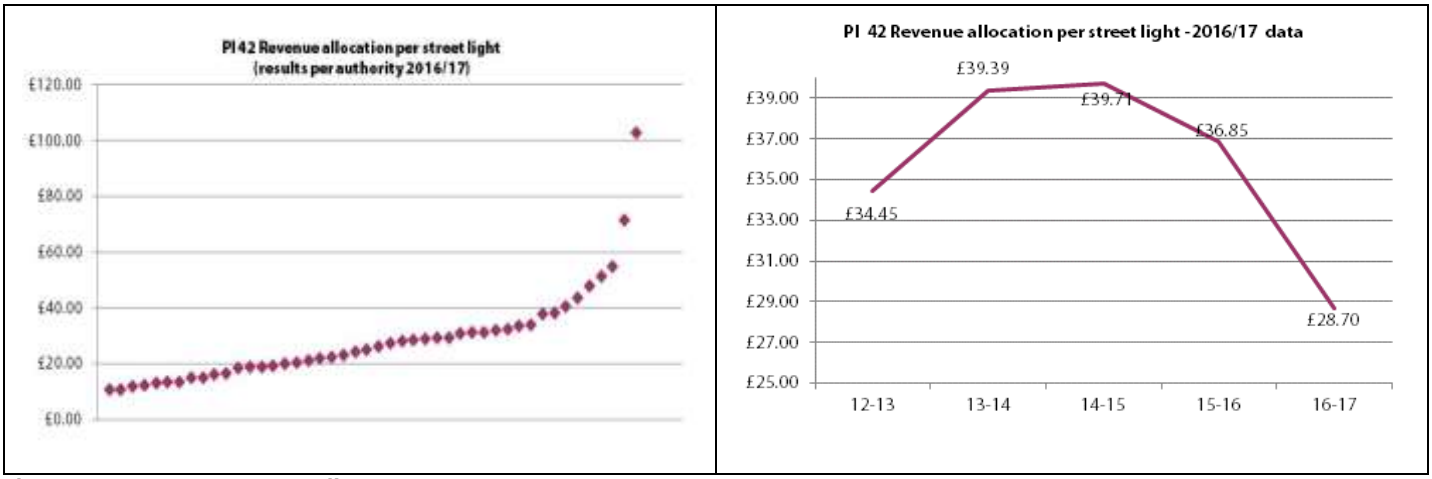


Figure 3- PI42 Revenue expenditure

The average depreciated replacement cost (DRC) as a percentage of gross replacement cost (GRC) in 2016/17 was 51.84%. This was an increase on the 2015/16 figure of 10% and is a return to the 2012/13 figure of 51.58% after a 9% dip in 2013/14.

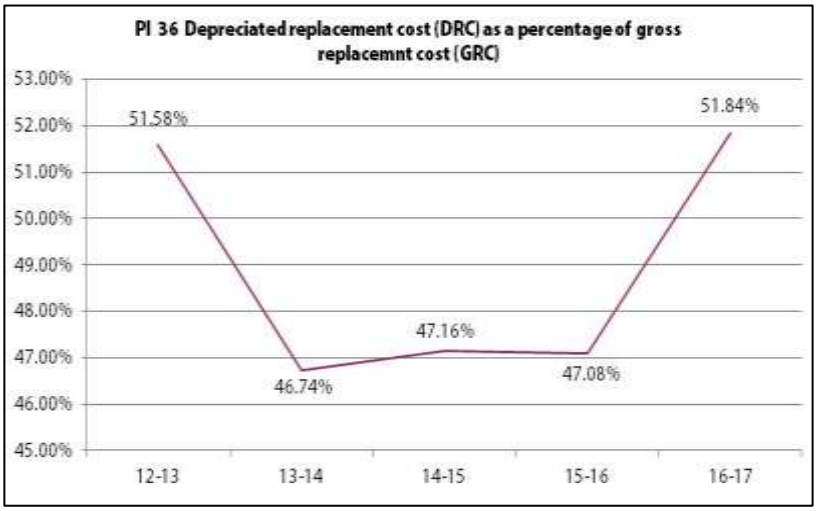


Figure 4- PI36

Costs of Inspection: Over recent years, there has been little variation in the individual cost of night inspecting a street light, which was £0.05 in 2016/17 and the same figure was recorded in 2015/16. However, the annual cost of night inspecting a street light has significantly dropped in 2016/17 by 40%, implying fewer inspections are being undertaken. This figure also varies significantly between authorities lowest spending quartile spending less than £0.44 per street light and the highest spending quartile spending over £0.92 per street light.

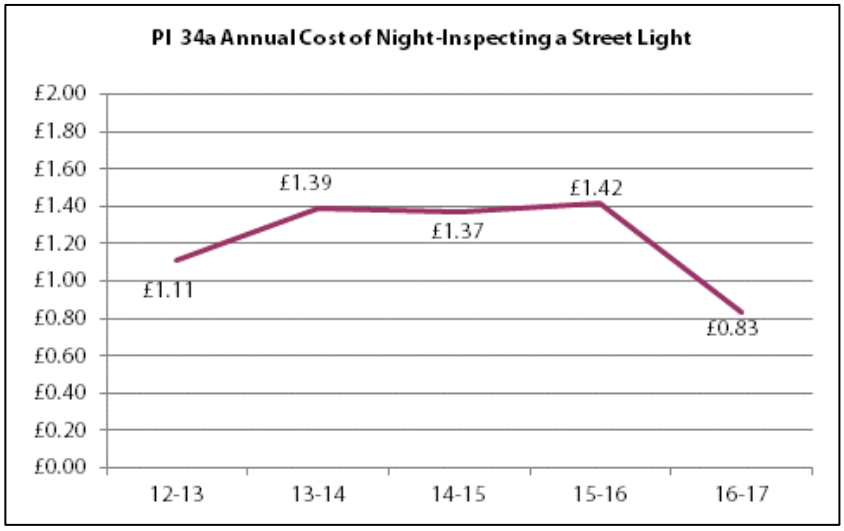


Figure 5- PI34

Overall, costs associated with Street Lighting appear to have significantly fallen in 2016/17. The average cost of maintaining a street light has fallen, the average figure for a local authority's total investment in street lighting stock has fallen, energy costs have fallen and inspection costs have fallen.

In part this is due to the impact of recent investment in stock upgrades to LED lanterns, meaning less energy is required to meet lighting requirements, maintenance costs have fallen due to newer columns and lanterns, less prone to faults and need of repair and new asset management systems, simultaneously implemented may mean that less inspection data is collected on site and more monitoring can be undertaken from a central hub, thereby reducing inspection costs.

This recent investment in infrastructure may also explain why there has been less invested in 2016/17 for the simple reason that there may have been less need for upgrades or significant repair.

Productivity

2016/17 has seen an improvement in the average number of days taken to restore a lamp to working order. In 2015/16, the average length of time taken was almost 7 days (6.91) and in 2016/17, the average figure was closer to 6 days at 5.86. Fig. 6 shows the trend data for this performance indicator over the last 5 years and Fig. 7 shows how the results differ for those repaired by authorities and those repaired by electricity suppliers.

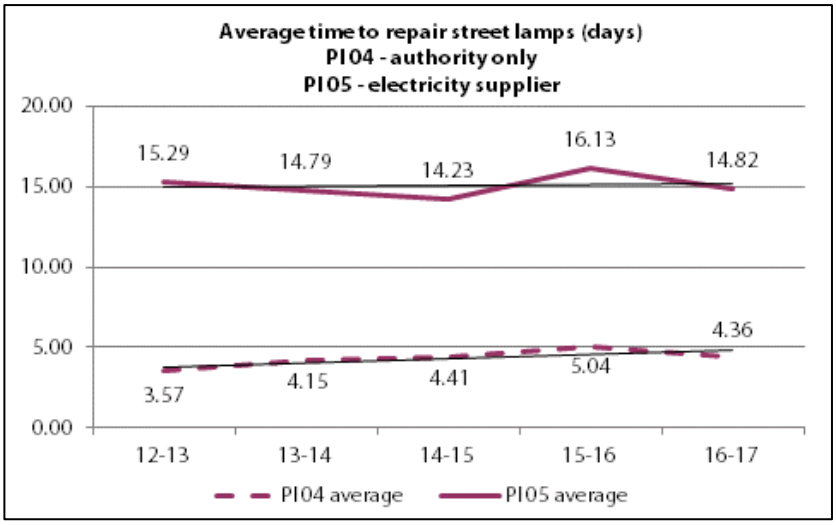


Figure 5- PI04 & PI05

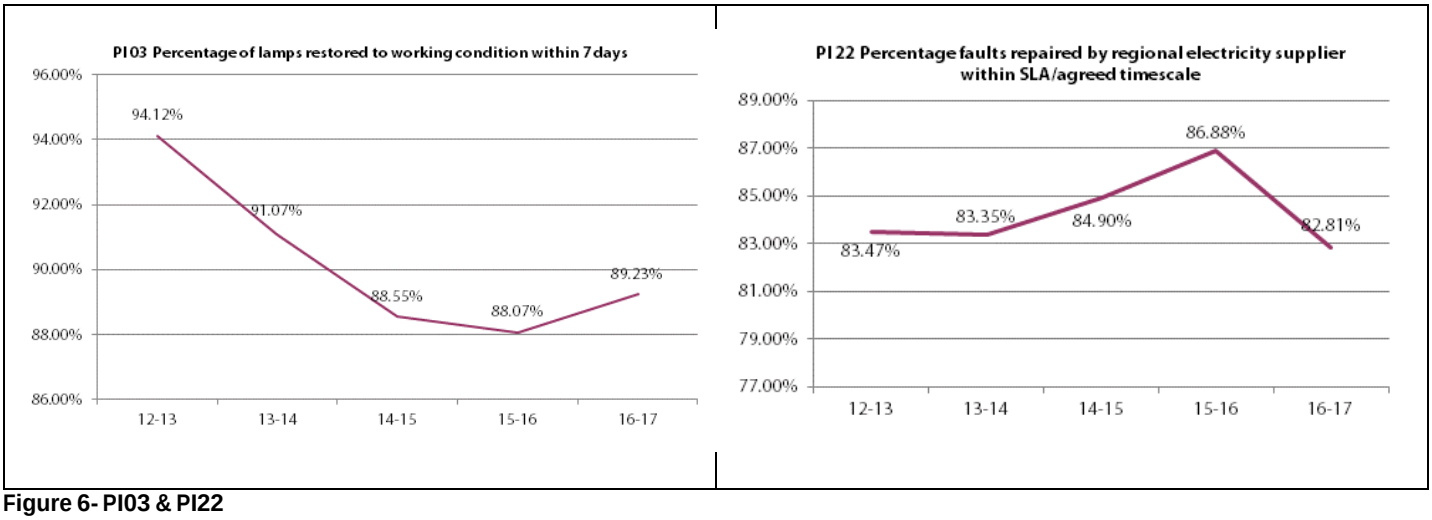
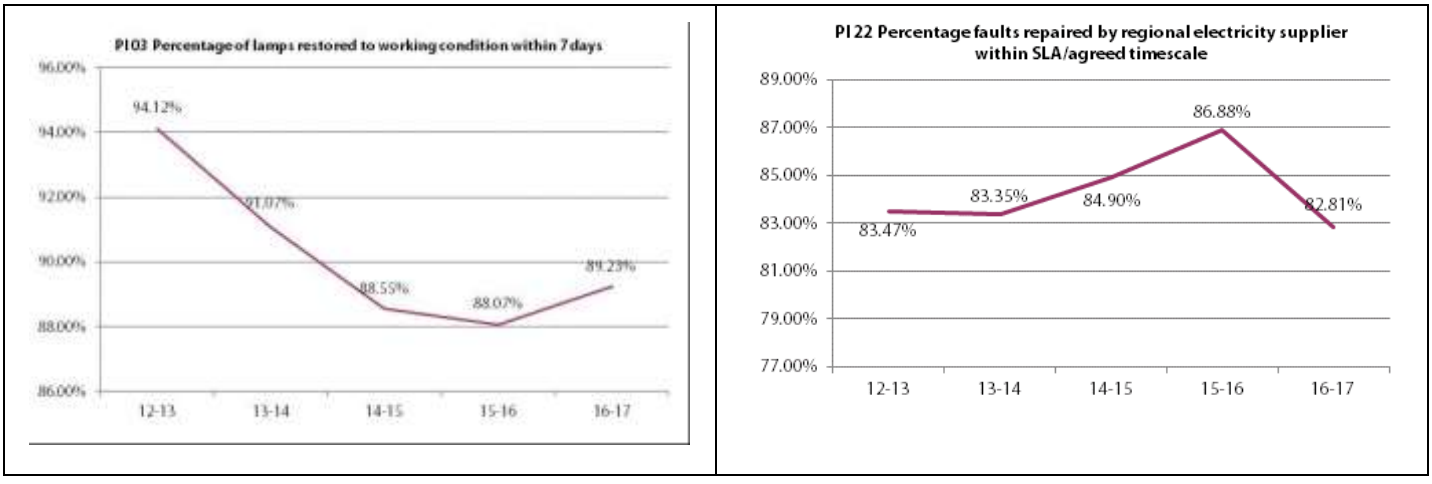


Figure 6- PI03 & PI22

Correspondingly, we have seen a reduced percentage of lamps restored to working condition within 7 working days. Further the percentage of faults repaired by the regional electricity supplier within the SLA/agreed timescale has slightly reduced too.



APSE Local Authority Energy Collaboration

APSE Energy works with over 70 local authorities who are seeking faster progress on the green economy in general and energy in particular. Their vision is the municipalisation of energy so increasing the role of the local authorities within the local energy sector. In other words, the public and community, as well as private, ownership and managerial control of local energy generation, distribution and supply as well as the delivery of energy efficiency works. APSE Energy provides capacity to its members to enable them to keep up to date with the rapidly developing energy agenda, has an advocacy role to promote the work of councils in this sector and can help with consultancy support for specific projects including street lighting projects. APSE Energy members have significant expertise within the energy sector and sharing this expertise is a function of the group. You can view more details about APSE Energy here.

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