

STREET LIGHTING PFI ANNUAL CONTRACT REVIEW 2013/14

To: **Highways and Community Infrastructure Committee**

Meeting Date: **18 November 2014**

From: **Executive Director: Economy, Transport and Environment**

Electoral division(s): **All**

Forward Plan ref: **N/A** *Key decision:* **No**

Purpose: **To report to the Committee on the Street Lighting PFI Annual Contract Review 2013/14.**

Recommendation: **The Committee is invited to comment on and note the contents of the review.**

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1. BACKGROUND

- 1.1 The street lighting PFI contract with Balfour Beatty Living Places (BBLP) commenced on 1 July 2011. The contract was supported with £100 million of PFI credits from Central Government which has allowed for the Council's street lighting stock to be brought up to a suitable standard. The project brings benefits of energy reduction, maintenance savings and generally higher quality white lighting. The purpose of the contract is to upgrade all County Council street lights so that they will last for the next 30 years and to maintain all the street lighting, illuminated road signs and bollards so that 99% of the stock is always in illumination during the agreed operating periods. A replacement capital investment programme is being undertaken in the first five years of the contract. The PFI attracts credits from Government. Had the Council not entered into the PFI, it would have been faced with a deteriorating and expensive to operate lighting stock, which could only have been improved through investment using the Council's own funds.
- 1.2 During the procurement process and as part of the Comprehensive Spending Review 2010, Government required us to identify potential savings. These savings are to be made in part through reducing the number of street lights by 10% overall, which is delivering further maintenance and energy savings for the Council as well as to the Government through the PFI credits paid. Due to the requirements for higher standards on main roads, called traffic routes, which generally have more significant road safety issues, there is limited scope to reduce the number of lights on these roads and therefore a greater percentage reduction in lighting is taking place on residential streets. In some circumstances, residents can experience a reduction in lighting columns of up to 40% in their streets. Although the reduction in column numbers is mitigated to some degree by the higher quality of light and factors such as taller columns providing wider coverage, concerns have been raised by residents in a number of streets where darker patches have resulted from this policy.
- 1.3 The Committee is currently considering its Business Plan proposals, which include a further reduction in energy used by street lights. This would be achieved by switching off most street lights in residential areas during periods of low traffic use and by further dimming of lights at other times.

2.0 MAIN ISSUES

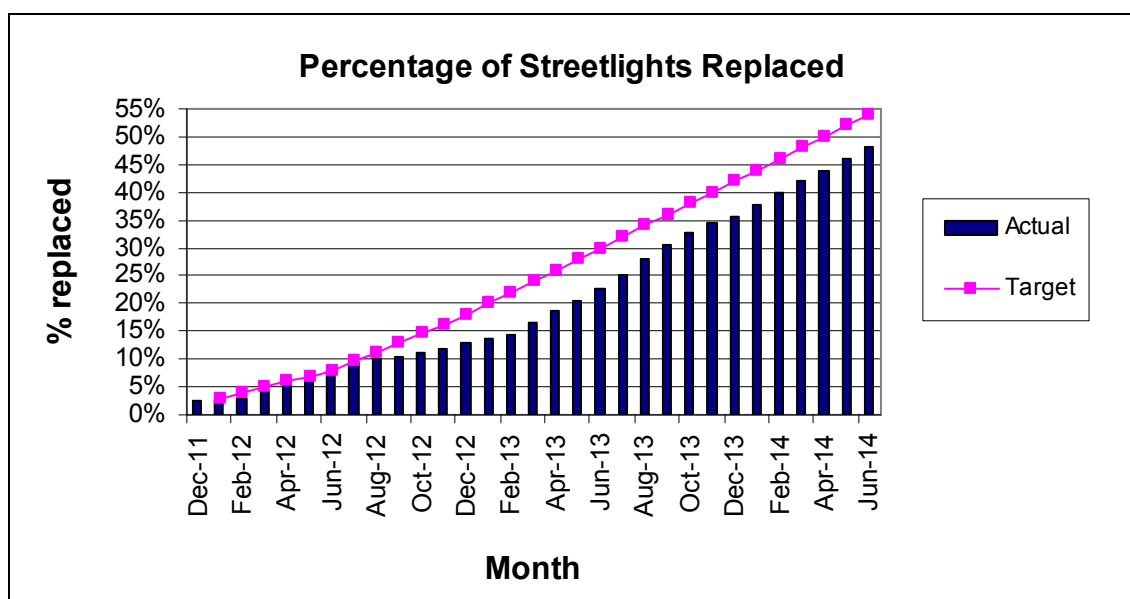
- 2.1 The contract follows standard practice for PFI outsourced contracts, with rigorous performance standards set out in the payment mechanism. Any failure to deliver on the targets results in payment deductions being made from the service provider. The three main elements of performance are outlined below:
- The progression of the Capital Investment Programme is scheduled through ten individual 6 month periods and with targets for column installations on a monthly basis.
 - The key performance measure of the maintenance regime is that 99% of the streets lights should be working.
 - Energy is monitored on an annual basis to ensure that the expected savings are being delivered.
- 2.2 Capital Investment Programme

- 2.2.1 The schedule of the Capital Investment Programme is detailed in Table 1 below, which includes each of the milestones and the percentage target to be complete.

Milestone	Milestone Completion Date (Projected)	Target
1	1 July 2011 to 31 December 2011	2%
2	1 January 2012 to 30 June 2012	8%
3	1 July 2012 to 31 December 2012	18%
4	1 January 2013 to 30 June 2013	31%
5	1 July 2013 to 31 December 2013	42%
6	1 January 2014 to 30 June 2014	48%
7	1 July 2014 to 31 December 2014	61%
8	1 January 2015 to 30 June 2015	74%
9	1 July 2015 to 31 December 2015	87%
10	1 January 2016 to 30 June 2016	100%

Table 1: Capital Investment Programme Milestones

- 2.2.2 At the end of year 2 of the programme, June 2013, Balfour Beatty had completed 22.6% of the programme against a target of 31%. In the past twelve months Balfour Beatty have worked hard to bring the programme back on target and have now achieved 48.2% of the programme at the end of year 3 (see graph 1). The County Council applied financial deductions in accordance with the contract whilst the programme was behind target. A revised programme has been agreed to enable the programme to be completed by the 30 June 2016 completion date. At the end of year 3 of the programme, June 2014, Balfour Beatty had upgraded 26,598 streetlights, 2,909 illuminated bollards, signs and feeder pillars and permanently removed 2,573 streetlights (see table 2).



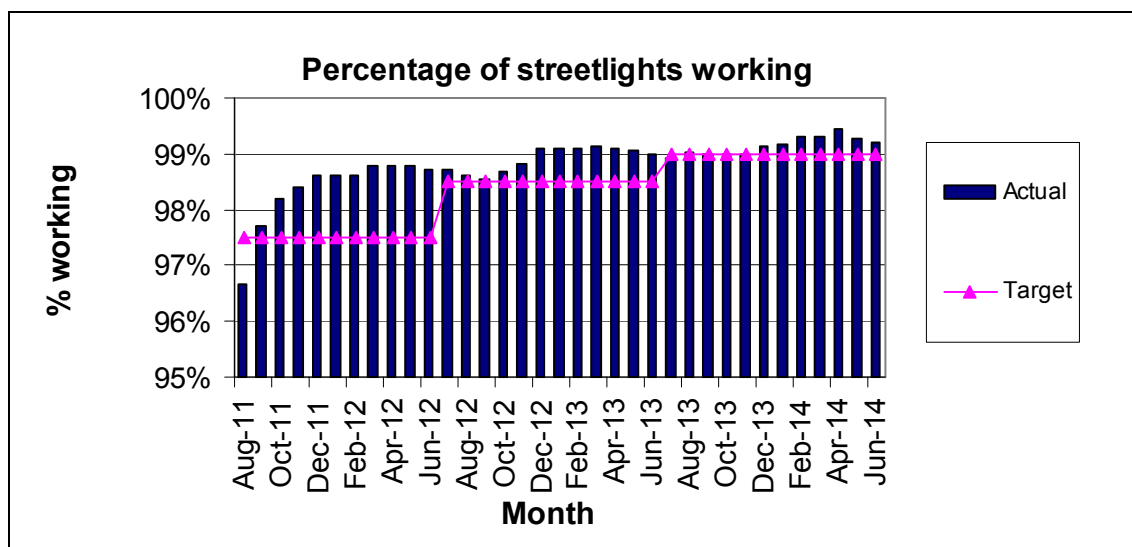
Graph 1: Percentage of Streetlights replaced

	Previous year (July 12 – June 13)	This year (July 13 – June 14)
Streetlights Upgraded	8,097	14,176
Illuminated bollards, signs and feeder pillars upgraded	1,083	1,558
Streetlights permanently removed	797	1,487

Table 2: Capital Investment Programme Annual Implementation

2.3 Maintenance

- 2.3.1 The light's in light indicator provides a percentage figure of the numbers of columns that are working. The Contract target is 99%. Graph 2 below shows the percentage of streetlights in light has remained at or above the target since September 2011.



Graph 2: Percentage of streetlights in light

- 2.3.2 During the past twelve months the total number of faults reported has reduced. This can be attributed to the benefits of the contract in replacing older, poorly performing assets with new upgraded, more efficient assets and improved technology allowing remote fault monitoring and reporting. All categories of the highest categorisation of faults have experienced a significant reduction from the previous year. The average repair times for lamps out, day burners and dimming faults have increased slightly and remained within the required contract response times (see figure 1).

Last Year (July 12 – June 13)			This Year (July 13 – June 14)		
	Qty	Average repair(days)		Qty	Average repair(days)
Lamp Out	12,534.00	4.29	Lamp Out	9,931.00	4.74
Day Burner	1,401.00	4.06	Day Burner	1,128.00	4.66
Lamp Dim	632.00	4.19	Lamp Dim	368.00	4.74
Door Off	369.00	0.37	Door Off	314.00	31 minutes
No Supply (DNO)	347.00	14.92	No Supply (DNO)	244.00	12.03

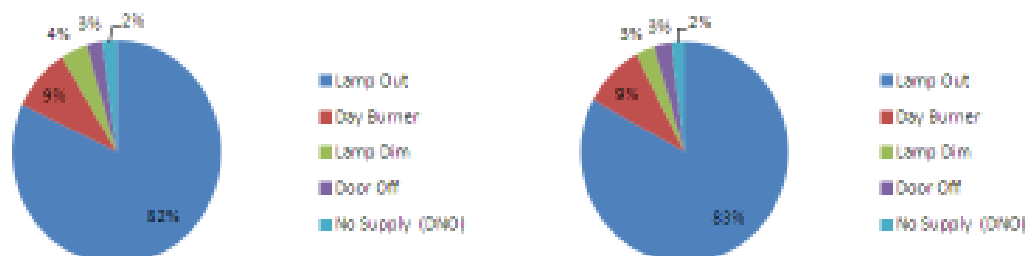


Figure 1: Faults and response times

- 2.3.3 The total number of non-emergency faults reduced from 2013/14 and is shown in table 3 below. The average response time increased slightly but remained within the required contract response times.

	Previous year (July 12 – June 13)	This year (July 13 – June 14)
Quantity	16,362	14,581
Average response time (working days)	4.14	4.25

Table 3: Non emergency faults

- 2.3.4 The total number of emergency faults increased from 2013/14 and is shown in table 4 below. This was directly attributed to the adverse weather conditions (high winds) in February (143) and March (130), which resulted in a higher than usual number of column and lantern replacements. The average response time increased slightly.

	Previous year (July 12 – June 13)	This year (July 13 – June 14)
Quantity	899	1,092
Average response time (working days)	0.41	0.45

Table 4: Emergency Faults

2.4 Energy

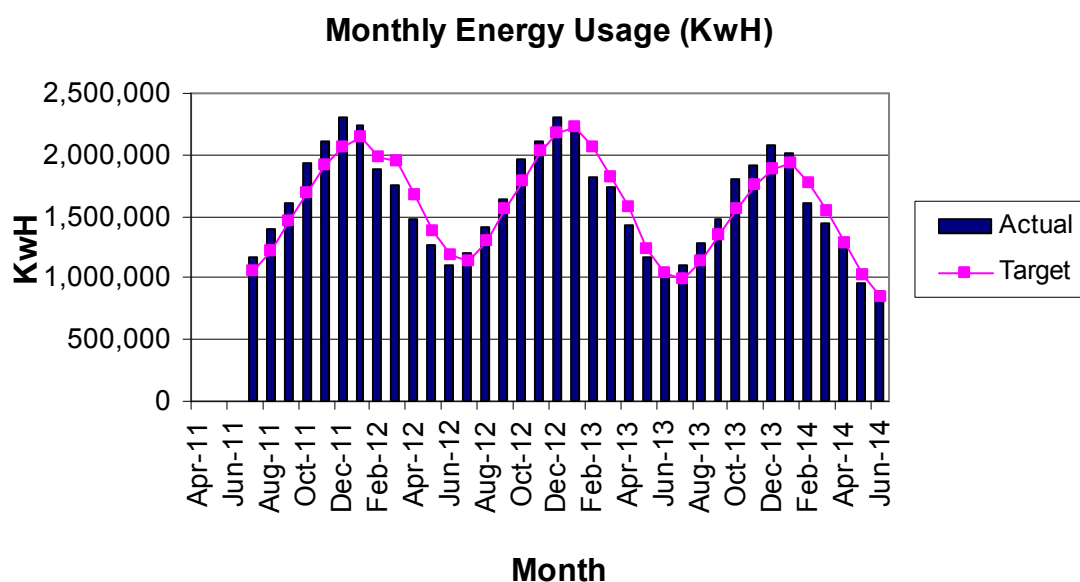
- 2.4.1 Reducing energy is an important element of the contract and this is monitored against the energy forecast model. The reductions in energy are achieved through the implementation of:

- Energy efficient lanterns
- Dimming during off-peak periods
- Permanent removal of street lights
- More effective designs on major routes

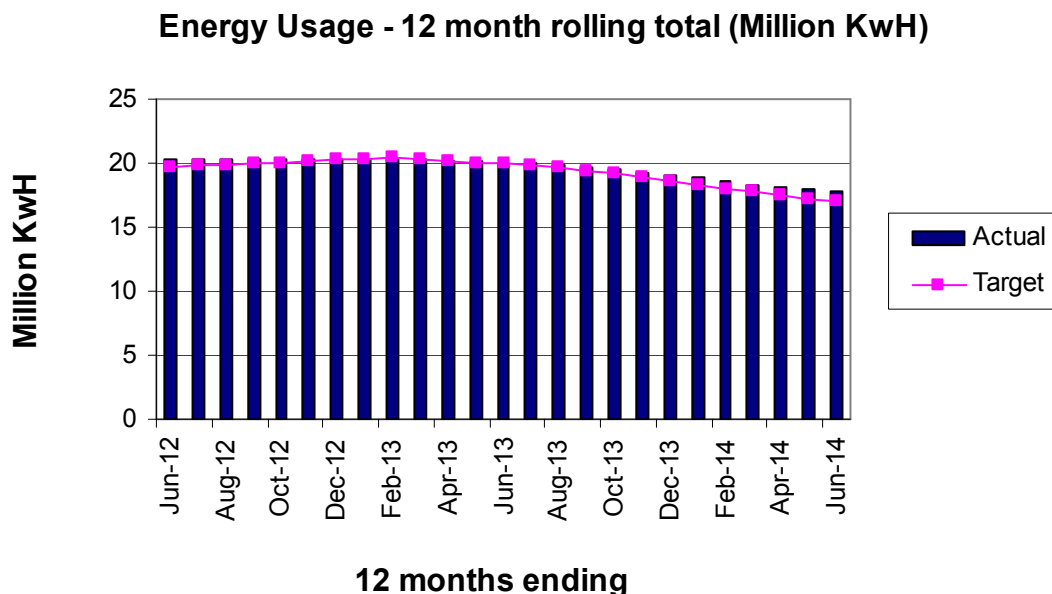
The energy costs in 2013/14 were slightly higher than expected due to a combination of two factors;

- The core investment programme being behind programme for which financial deductions were made from the service provider.
- Greater numbers of less efficient columns accrued into the contract during the period than estimated from historic developments being adopted by the County

The PFI contract is expected to deliver an estimated £1M of energy savings by the end of the core investment period. Graphs 3 and 4 show trends in energy usage.



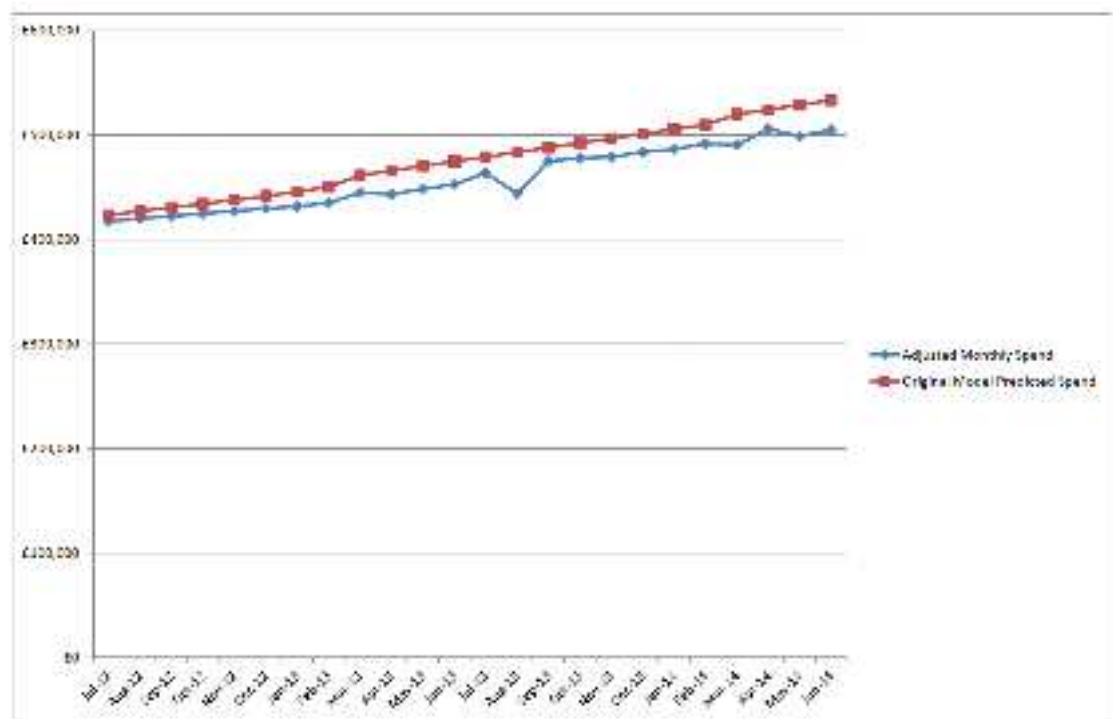
Graph 3: Monthly Energy Usage



Graph 4: Rolling 12 month Energy Usage

2.5 Contract Finance

- 2.5.1 The costs of the PFI contract are fixed for its 25 year duration during which time a fixed unitary charge is paid monthly to the service provider. This includes both the cost of the new streetlights, central management system, illuminated bollards and signs and an ongoing maintenance cost for the new equipment. Deductions are made from this for the number of streetlights, bollards and signs left to be upgraded during the first 5 year Core Investment Period and any other performance criteria not met, such as upgrade programme and faults repaired on time. This means we pay the least on day 1 of the contract (maintenance but no new streetlights, bollards or signs) but the full unitary charge at the end of 5 years (maintenance and 56,000 new streetlights plus 5,500 new bollards and illuminated signs) and ongoing thereafter. Graph 6 below compares the actual monthly payments against those that would be made if no performance deductions were made.



Graph 5: Streetlighting PFI Costs

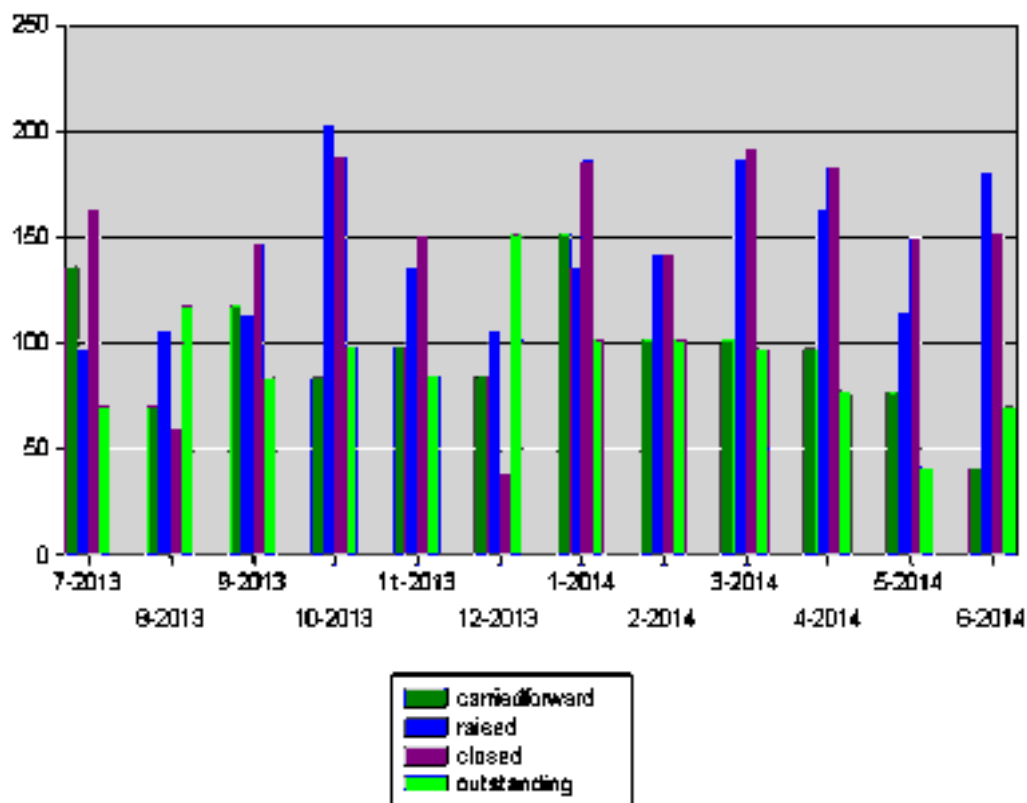
2.6 Service and Delivery

2.6.1 Implementation of the Streetlighting PFI Contract impacts on all residents and communities in Cambridgeshire. As such, delivering excellence in customer service and carrying out work with minimal disruption is a key element of this contract. Balfour Beatty and the County Council have focused resources to try to ensure that local councillors, parish councils and residents are effectively consulted during the upgrade works.

2.6.2 Balfour Beatty have introduced an improved consultation process to ensure local councillors are more involved in the improvement works and that residents are aware in advance of works taking place in their communities. This has included;

- Improved information in advance to Local Councillors and Members including;
 - Improved Councillor Information Pack
 - Improved Councillor small Information Pack
 - Draft Design Drawings
 - Understanding the Drawings Pack
 - Selection Criteria process
 - Final Design Drawings
- 65 Presentations given to Parish Council Meetings (January-June)
- 23 Attendances at Residents Meetings (January to June)
- Improved direct contact with key officers from Balfour Beatty to assist them through the project as it affects their communities.

2.6.3 Graph 6 shows the numbers of customer enquires (including complaints and representations) made in the period June 2013 to June 2014. Table 2 shows the breakdown of customer enquiries made to Balfour Beatty



Graph 6: Total Customer Enquiries

Previous year (July 12 – June 13)		This year (July 13 – June 14)	
414	Lighting Levels & Removals	752	Lighting Levels & Removals
303	Location	426	Location
73	Damage	69	Damage
57	Obstruction	78	Obstruction
56	Light(s) Out	31	Light(s) Out
44	Tree Obstruction	46	Tree Obstruction
30	Aesthetics	30	Aesthetics
27	Reinstatement	50	Reinstatement
24	Open Hole	26	Open Hole
18	Accolades	35	Accolades
16	Third Party	2	Third Party
13	Maintenance	3	Maintenance
12	Additional Light Requested	16	Additional Light Requested
6	Planning Application	1	Planning Application
5	Land Rights	4	Land Rights
4	Repair	4	Repair
1	Security	1	Security
		4	Medical
1103	Total	1578	Total

Table 5: Customer Enquiries

The total number of customer enquiries raised has increased in 2013/14 as the programme has increased intensity. Table 5 indicates that lighting levels and column removals have remained the highest category of enquiry raised by residents with nearly half of all enquiries, whilst the location of new columns is the second highest.

- 2.6.4 A customer satisfaction survey is undertaken by Balfour Beatty with all residents to gain feedback on their satisfaction on various elements of the project after works have been completed in each area. Table 3 below shows the total numbers of survey letters delivered and the response rates for the twelve months between July 2013 and June 2014.

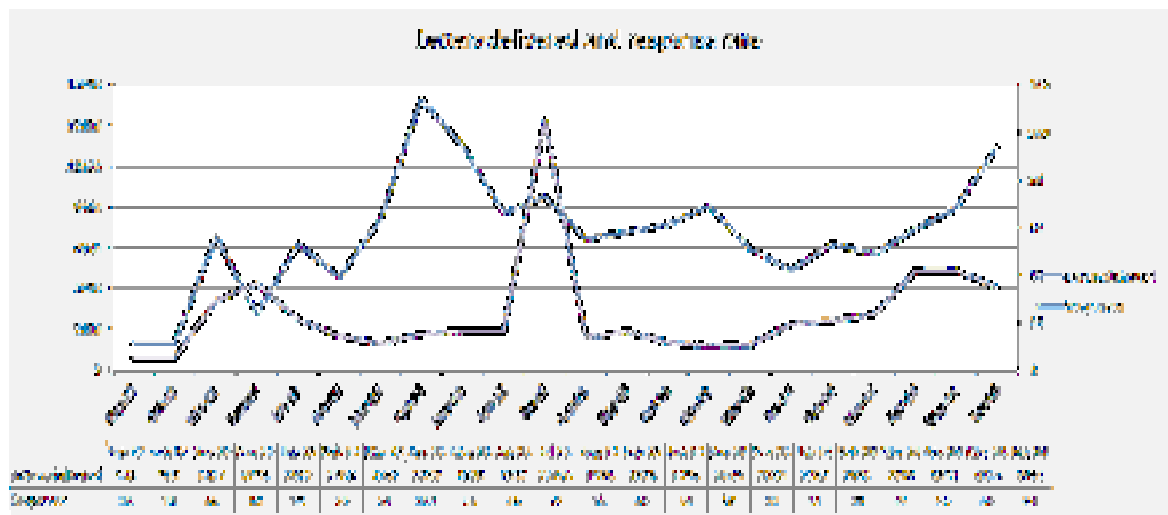


Table 3: Customer Satisfaction Survey Response Rate

Of the 40,748 surveys distributed to residents, 732 were returned. The increase in numbers issued in July 2013 was when Balfour Beatty focused on large numbers of roads requiring just lantern changes. Unfortunately, the response rate is a very low 1.8% and County Council officers are working with Balfour Beatty to identify a better way to receive feedback.

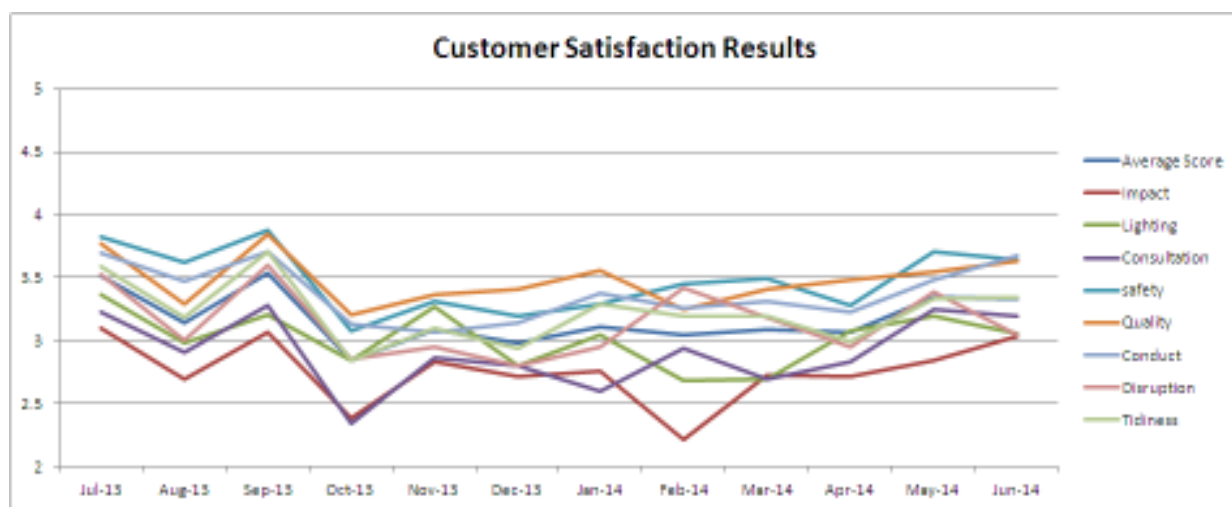
- 2.6.5 Table 4 below identifies the average scores received from the 732 surveys returned for the twelve months between July 2013 and June 2014 .

SCORE CATEGORIES	AVERAGE SCORE July 12 – June 13	AVERAGE SCORE July 13 – June 14	RATINGS
A = IMPACT	3.08	2.76	5 = EXCELLENT 4 = GOOD 3 = ADEQUATE 2 = POOR 1 = VERY POOR
B = SAFETY	3.73	3.48	
C = CONSULTATION	3.04	2.91	
D = DISRUPTION	3.53	3.14	
E = TIDYNESS	3.58	3.22	
F = QUALITY	3.72	3.48	
G = CONDUCT	3.92	3.38	
H = LIGHTING	3.28	3.02	
J = OVERALL AVERAGE	3.48	3.17	

Table 4: Average Customer feedback

The results from the annual survey indicate that residents who have responded are less satisfied with the project than they were last year in all categories. Whilst acknowledging that the response rate was only 1.8%, in 6 of the 8 categories' ratings were between adequate and good and in two they were between adequate and poor. Overall the rating was between adequate and good.

- 2.6.6 Graph 7 below indicates the monthly customer satisfaction category ratings. The graph shows that since a low point in October 2013, results have steadily increased whilst the volume of work has dramatically increased. This can be attributed to the improvements made by Balfour Beatty in the consultation process and responding to residents' concerns and complaints. In June 2014, all categories were rated between adequate and good.



Graph 7: Customer Satisfaction Results

- 2.6.7 As noted in paragraph 2.6.4, unfortunately the response rate from the 40,738 residents surveys distributed has been a very low 1.8% and therefore, perhaps, not a true representation of all the works across the whole of each community. It proposed in future to request feedback from Parish Councils directly to respond on behalf of their communities once works have been completed in each area. This will provide Balfour Beatty and the County Council with a fuller response which will enable customer service improvements to be made in future to communities as the programme progresses.

3. ALIGNMENT WITH CORPORATE PRIORITIES

3.1 Developing the local economy for the benefit of all

The following bullet points set out details of implications identified by officers:

- The project brings benefits of energy reduction, maintenance savings and higher quality white lighting.
- The contract provides the upgrading of all County Council street lights so that they will safely last for the next 30 years.

- The Contract allows for the maintenance of all the street lighting, illuminated road signs and bollards to a standard that 99% of the stock is always in illumination.

3.2 Helping people live healthy and independent lives

The following bullet points set out details of implications identified by officers:

- The contract provides the upgrading of all County Council street lights so that they will safely last for the next 30 years.
- The Contract provides for the maintenance of all the street lighting, illuminated road signs and bollards to a standard that 99% of the stock is always in illumination.

3.3 Supporting and protecting vulnerable people

The following bullet points set out details of implications identified by officers:

- The contract provides the upgrading of all County Council street lights so that they will safely last for the next 30 years.
- The Contract provides for the maintenance of all the street lighting, illuminated road signs and bollards to a standard that 99% of the stock is always in illumination
- Had the Council not entered into the PFI, it would have been faced with a deteriorating and expensive to operate lighting stock, which could only have been improved through investment using the Council's own funds

4. SIGNIFICANT IMPLICATIONS

4.1 Resource Implications

The following bullet points set out details of significant implications identified by officers:

- The contract was supported with £100 million of PFI credits from Central Government which has allowed for the Council's street lighting stock to be brought up to a suitable standard.
- Had the Council not entered into the PFI, it would have been faced with a deteriorating and expensive to operate lighting stock, which could only have been improved through investment using the Council's own funds.
- During the procurement process and as part of the Comprehensive Spending Review 2010, Government required us to identify potential savings. These savings are to be made in part through reducing the number of street lights by 10% overall, which is delivering further maintenance and energy savings for the Council. Due to the requirements for higher standards on main roads, called traffic routes, which generally have more significant road safety issues, it is necessary to weight the reduction in lighting more heavily on residential streets. Therefore, in some circumstance residents can experience a reduction in lighting columns of up to 40% in their streets. Although the reduction in column numbers is mitigated to some degree by the higher

quality of light and factors such as taller columns providing wider coverage, concerns have been raised by residents in a number of streets where darker patches have resulted from this policy.

4.2 Statutory, Risk and Legal Implications

The following bullet points set out details of significant implications identified by officers:

- Many communities believe the provision of streetlighting is a statutory function of the County Council. However, the County Council, as the Highway Authority, has no statutory obligation to provide street lighting. The law states;
 - The Highways Act empowers local authorities to light roads but does not place a duty to do so.
 - The Council has a duty of care to road users and has an obligation to light obstructions on the highway.
 - The Council has a statutory duty under the Highways Act to ensure the safety of the highway and this includes any lighting equipment placed on the highway.
 - The Electricity at Work Regulations impose a duty on owners and operators of electrical equipment to ensure its safety.

4.3 Equality and Diversity Implications

The following bullet points set out details of significant implications identified by officers:

- Whilst the provision of streetlighting is not a statutory requirement, where streetlighting has been provided many of our communities view any change to the existing service as being negative. This has been experienced strongly during the existing PFI Core Investment period which has permanently removed 10% of the County Council's existing streetlights. This has been received most negatively by communities where age, disability, rural isolation or deprivation is prevalent and it is likely that these protected characteristics will perceive an even greater negative impact to the service changes proposed.

4.4 Engagement and Consultation Implications

Implementation of the Streetlighting PFI Contract impacts on all residents and communities in Cambridgeshire. As such, delivering excellence in customer service and carrying out work with minimal disruption is a key element of this contract. Balfour Beatty and the County Council have focused resources to try to ensure that local councillors, parish councils and residents are effectively consulted during the upgrade works. Further details are contained above in paragraph 2.6.

4.5 Localism and Local Member Involvement

Implementation of the Streetlighting PFI Contract impacts on all residents and communities in Cambridgeshire. As such, delivering excellence in customer

service and carrying out work with minimal disruption is a key element of this contract. Balfour Beatty and the County Council have focused resources to try to ensure that local councillors, parish councils and residents are effectively consulted during the upgrade works. Further details are contained above in paragraph 2.6.

4.6 Public Health Implications

There are no significant implications for this priority.

Source Documents	Location
None	