

How many does it take to change a light?

Not many now...

Hampshire County Council has improved services and made substantial financial savings on street lighting and highways maintenance by implementing the findings of an innovative productivity improvement programme called CLIP. The County Council sees the project as a model in meeting the requirements of the Gershon review of public sector efficiency. Alan Mills, assistant director of environment at Hampshire CC, explains the rationale which underlies CLIP and how it works in practice.



Improving services at no extra cost is a tough proposition. At Hampshire County Council (HCC), prompted by the challenges of the efficiency agenda, we set out to do just that, starting with the street lighting and highway maintenance contracts.

Bob Hall, the former chief executive of Southern Electric Contracting (SEC), one of our main contractors, recommended the Construction Lean Improvement Programme (CLIP) which is run by the independent research consultancy BRE, and supported by the DTI. The outcome was so good that the CC now sees the approach as a model for future projects.

Our story begins in 2004. Prompted

by the challenge of Sir Peter Gershon's *Releasing Resources to the Frontline* report, which makes the case for focused spending on priority services, we asked Southern Electric Contracting and Raynesway Construction to examine the way they were delivering their respective contracts for street lighting and highways maintenance.

Identifying waste

Southern Electric Contracting has a five year contract with the council which involves maintaining around 146,000 lighting units. It is one of the largest street lighting contracts in the UK. Bob Hall recommended the CLIP programme after hearing how its

unique approach, based on studies of the renowned efficiency of Japanese car manufacturing, were yielding startling business improvements in the construction sector.

CLIP is not about making cuts and squeezing more out of what's left - instead CLIP techniques enable organisations to identify and minimise activities that fail to add value, leaving more time for those that do.

Working with the CLIP engineer, we examined the street lighting contract and broke it down into its constituent processes, identifying wasteful and non-value adding activity. It emerged that SEC were wasting a lot of time and effort travelling to and from site

when they were replacing a column and its associated fittings.

SEC had three specialist teams visiting the same site at different times. This meant they were making up to 10 visits to replace a street lighting column, leaving the street light out of order for almost a month. It also meant potentially digging up the same area of pavement on up to four different occasions.

Replacing lights and old practices

Focusing firmly on one area is key to the success of lean thinking, so SEC started by re-examining how they change a street lighting column. SEC replaced the three specialist teams with a single multi-tasking team of three individuals with complementary skills. They take the specialised vehicles with all the equipment they need to get the job done in the minimum number of visits.

HCC tracked the improvements made on each phase of the work, using key performance indicator graphs. The results in terms of efficiency and productivity were truly amazing. We found we had reduced the site visits required to replace a street column from as many as 10, down to just two. This means it takes only nine man hours to replace a column instead of up to 22. As SEC maintains around 146,000 lighting units, the actual savings are significant. Both the County Council and SEC benefit. In addition, by altering processes, we have improved the quality of work. Making fewer visits to site reduces the amount of waste and the impact we make on the environment.

CLIP champions

Obviously we needed to involve more than just the Partnering Board (comprising directors from both the CC and SEC) in rolling out this important change. So we formed sub-groups, appointed CLIP champions in both SEC and HCC and held regular workshops with the CLIP engineers to ensure that everyone involved was clear about what we were doing, why we were doing it and the results we were achieving.

Setting up CLIP did take us some time but it has been worth it. A closer partnership between HCC and SEC has developed, which has improved communication, saves time by reducing duplication of work and enhances the speed and quality of decision making.

Another CLIP case

Raynesway Construction Southern (RCS) has worked for HCC in an informal partnership for the past eight

years to deliver highway maintenance services. Two years into the current contract, the HCC and RCS Partnering Board wanted to improve integration through enhanced collaborative working. The overall aim was to improve the efficiency of works delivery.

A CLIP engineer was enlisted to help the partnership improve the structure, organisation and operation of the highways term maintenance contract. The decision was made to devise a three-phase programme of improvement, supported by CLIP.

Five areas: 'A' roads inspection, emergency repair, surface dressing, winter maintenance and works orders of maintenance works - were assessed and a multi discipline team established for each area, comprising members from both organisations. A member of the Partnering Board became a member of each team. Designated as team champions, they were able to coordinate the work of the five teams and help manage the change process.

By deploying CLIP principles, we analysed how well the current processes were operating, identifying areas of duplication, delay, bottlenecks and inefficiencies. We challenged the status quo with the aim of eliminating wasteful activities and making value adding work more efficient. A variety of improvement opportunities were identified and several have been implemented.

Saving man hours

It is estimated that the level of value adding activity will improve from around 30 per cent to as much as 60 per cent. We expect a 50 per cent reduction in the time to deliver the surface dressing programme, a reduction of approximately 40 per cent in man hours to deliver the maintenance service and we aim to reduce travel time and mileage between 35 per cent and 65 per cent.

The list of additional benefits is extensive. It includes improved collaborative working; clearer joint understanding; improved planning, coordination and service delivery; better records and data management; improved order accuracy and programming. We are better able to assess training and development requirements, make more efficient use of resources within the partnership and we have improved budget predictability.

The partnership is currently working with CLIP on the second phase of the improvement programme. The focus will be on the diagnostic and improvement of key maintenance



Above:
Alan Mills with
Bob Hall
Opposite page:
Process mapping
Raynesway
project

delivery processes, making a more detailed analysis to help define the best way to carry out maintenance.

Further use of CLIP

Would Hampshire County Council use CLIP again? The answer has to be a resounding 'YES'. We have seen that the programme works and is adaptable. The principles applied to one area of work transfer successfully to another. This is why the DTI gives its backing to lean improvement programmes across 15 UK industry sectors including aerospace, ceramics and manufacturing.

CLIP is financially supported by the DTI, which means that organisations setting out along the CLIP route can implement lean thinking without paying commercial consultant rates. In situations such as ours, where the focus is on providing public sector services, the affordability of CLIP consultancy is vital, particularly during the early stages before the cost benefits have fed through.

Already, it is very clear that expenditure on CLIP has been far outweighed by the time and money saved for Hampshire County Council, Southern Electric Contracting and Raynesway Construction and the new business processes introduced will go on yielding cost savings and efficiency improvements well into the future.

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