

## **Cambridgeshire Highways Annual Service Review 2018/19**

### **Executive Summary**

Cambridgeshire Highways is a partnership between Cambridgeshire County Council and Skanska, underpinned by the Highway Services Term Service Contract. The value of the contract in 2018/19 was circa £50m.

Highlights throughout 2018/19 include:

- Introduction of an activity schedule to improve efficiency of pricing works below £30,000
  - Integration activities between Cambridgeshire County Council Skanska and Peterborough City Council. These include streamlining project processes, recruiting shared District Highway Maintenance Managers, a shared structure's engineer and amalgamating street works functions.
  - Purchase of two additional pothole patching vehicles (dragon patchers), capable of completing pothole repairs at a fraction of the cost of traditional methods. These supported the repair of 58,300 potholes during 2018/19.
  - Changes to methodology and materials to improve the quality of pothole repairs, including the introduction of over-banding to seal the repair.
  - Delivery of £6m of work following additional funding awarded by the Department for Transport (DfT) in November 2018, to be spent by the end of March 2019.
  - Significant improvements have been achieved against Category 1 and Category 2 defect repair timescales, scheme cost predictability, scheme delivery to programme and final account agreement timescales.
  - Introduction of Business Intelligence software to collate data from multiple sources and provide data to support management decision making and performance improvement.
  - £24.7m has been spent on local suppliers and subcontractors during 2018/19, helping to keep employment and money within Cambridgeshire. This represents 70% of the total supplier spend.
  - Focus on mental health and leaders' and managers' safety behaviours through stand ups and health and safety workshops
  - Community initiatives, such as £14,000 to be spent via the Social Value Fund and providing services to charities and public services around Cambridgeshire, such as the Prospects Trust and schools.
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## 1. Introduction

Cambridgeshire Highways is a partnership between Cambridgeshire County Council and Skanska, responsible for maintaining and developing the highway network across Cambridgeshire and providing a full range of professional and operational highway services to the County Council.

It includes work on the local network but does not include street lighting or any work on the trunk road network, such as the A14.

Cambridgeshire Highways is responsible for maintaining:

- 1,500 road bridges
- 2,500 other bridges
- 2,800 miles of roads
- 1,900 miles of footways

Cambridgeshire Highways operates a two-tier governance structure, headed by a Strategic Collaboration Board, which sets strategic aims for the service. This strategic direction is implemented by an operationally-focussed Joint Management Team. Both entities include members from both Cambridgeshire County Council and Skanska.

This report aims to give an overview of contract performance during the 2018/19 year and highlight some areas where development and improvement has occurred.

## 2. Contract Overview

The Cambridgeshire Highways partnership continued to build on the first year of the contract, focussing on improving service delivery and making efficiency savings. The value of the contract in 2018/19 was circa £50m. This included £7.2m in March alone. The breakdown of spend is as follows:

Highways - OPTION E	£5,633,348
Cyclic Maintenance	£1,126,274
Patching	£3,908,681
Schemes	£24,177,179
Winter Maintenance	£987,821
Highways - OPTION C	£8,302,441
Emergency callouts	£769,568
Design	£5,342,965

## Key staff changes

Cambridgeshire Highways welcomed John Birkenhead as Skanska Business Director in January, following a three month secondment from Peterborough Highway Services. John replaced Jim Daughton who was promoted within Skanska to the role of Operations Director for the Eastern Region and continues to sit on the Cambridgeshire Highway Services Strategic Collaboration Board.

## Activity Schedule

One of the main challenges that has been experienced is the slow delivery of schemes, in particular the Local Highway Improvement (LHI) programme. Alongside a root and branch process review of scheme delivery, has been the development of an activity schedule during 2018/19. This was introduced at the end of March 2019. The activity schedule has been introduced for works below £30,000 in value and provides a more efficient method of pricing small scale works. It is expected that the activity schedule will allow for faster pricing of work therefore reducing the time between design and ordering. This is particularly important to assist with improving the timely delivery of work.

## Integration

Integration activities have taken place throughout the year between Cambridgeshire County Council, Skanska (through the Cambridgeshire Highways partnership) and Peterborough City Council. These include:

- a. Cambridgeshire Highways projects integration – a review has been undertaken of the way we manage schemes in the partnership, by examining processes from end-to-end. Changes being implemented included the introduction of enhanced governance, the removal of duplicated roles and the reduction of inefficient activities, for instance, redesign by mitigating construction risks earlier in the project lifecycle.
  - b. Recruitment of District Highway Maintenance Managers – with vacancies across both Cambridgeshire County Council and Peterborough City Council a recruitment exercise was carried out jointly and resulted in shared resource between the two authorities. District Highway Maintenance Manager roles are now divided into three areas – Peterborough & Fenland, Huntingdon & East Cambridgeshire, Cambridge City & South Cambridgeshire.
  - c. Street Works – Cambridgeshire and Peterborough have been working together for a year to develop and implement Peterborough's Permit Scheme for Road works and Street Works. Cambridgeshire's scheme was introduced in October 2016 and following the successful first 2 years' of operation, Peterborough's scheme mirrors Cambridgeshire's. CCC and PCC are sharing resources to make Peterborough's scheme as successful as Cambridgeshire's which will ensure
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the schemes are operated consistently across both areas and expert knowledge is shared. Coordinating road works in the most effective way to drive efficiencies across the industry in this area and reduce disruption to the travelling public. The permitting schemes for both local authorities are run from Vantage House in Huntingdon.

- d. Co-location – all of Cambridgeshire Highways’ 5 office and depot locations are now fully co-located, with Skanska and Cambridgeshire County Council working alongside each other. This concluded with the reorganisation of the Whittlesford depot.

### Stakeholder survey

Cambridgeshire Highways’ first survey into the perceptions of elected members and parish councillors was carried out in early 2019. The survey revealed positive responses relating to the organisation, safety and tidiness of our work activities and the professional and courteous attitude of our staff. The positive feedback was tempered by comments challenging policy and delivery timescales, which were considered to be too long.

The areas, directly related to Cambridgeshire Highways, where improvement is required include:

- Timeliness - dissatisfaction with delivery timescales general completion timescales, especially LHIs and safety schemes.
- Communication - insufficient publicity of reporting systems to residents and insufficient feedback after an issue has been reported.
- Street Works/Traffic Management - insufficient communication around road closures. Chosen Traffic Management solution not best fit for traffic conditions. Perception of “dangerous” traffic management. *(please note that this does not distinguish between Cambridgeshire Highway work and utility work).*
- Policy – perception of inconsistent application of policy.

Other feedback received, but sitting outside the remit of Cambridgeshire Highways, include:

- Intervention levels - Dissatisfaction with agreed contract intervention levels, which are set out in the Highway Operational Standards.
- Budget Allocation - insufficient budget given over to highways improvements and safety schemes.
- Unhappiness with scoring of LHIs, including lack of feedback and ability to challenge.

The feedback from the survey will provide a benchmark with which to monitor performance in subsequent years, as well as providing evidence for where future

improvements need to be targeted. The Joint Management Team will use the results of the survey to inform the development of future service improvement plans.

## **Supply Chain**

Our supply chain help deliver our service in Cambridgeshire by providing services and materials. Almost £35.5m was spent with suppliers and subcontractors during 2018/19. Of this over £24.7m was spent with local companies, representing 70% of total supply chain spend, helping to keep employment and money within Cambridgeshire. 61% of our subcontractors are SMEs. Looking forward Cambridgeshire Highways are keen to develop closer integration and collaboration with the supply chain and there are a number of supply chain workshops in the pipeline for 19/20.

## **Audits**

The partnership has been audited several times during 2018/19. BSI have undertaken audits against Skanska's international management system standards, ISO9001 (quality), ISO14001 (environmental), ISO45001 (health and safety) and ISO44001 (collaborative working). These were very positive with findings relating to inspections and equipment calibration now addressed.

LGSS Audit have also been carrying out an open book cost management audit of the first two years of the contract. The findings and any recommendations from this audit are due to be published in the autumn of 2019. This will better inform processes demonstrating value for money and capturing efficiencies going forward.

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### 3. Maintenance

#### **Routine and Cyclic Maintenance**

Cambridgeshire Highways completed 6,090 maintenance orders throughout 2018/19. This included the repair of 58,300 individual potholes across the county.



Significant work has gone into improving the quality of pothole repairs during 2018/19. A pothole working group has been established and this has led to changes in ordering processes, use of superior materials and changes to methodology, such as the use of hot bitumen to overband the patch, ensuring that the repair lasts longer.



A great deal of work has gone into improving the timescales for responding to Category 1 orders, including pothole repairs that are deemed to require a response within 5 days. This has been achieved by Cambridgeshire County Council and Skanska staff working together to ensure orders are correctly categorised, clearly marked up, contain sufficient information and are efficiently scheduled. As a result, the percentage of Category 1 maintenance orders that have been responded to within target timescales have increased from 52% in April 2018 to consistently above the 90% target detailed in the Highway Operational Standards for the last six months of the year. This performance has been sustained throughout the winter months, despite an increase in the number of orders.



## Emergency Response

Cambridgeshire Highways' emergency response crews attended 1,063 emergency incidents between April 2018 and March 2019. 96% of these incidents have been responded to within two hours of notification.

## Winter Service

Despite the ongoing challenges of driver recruitment and retention, Cambridgeshire Highways' gritter drivers completed 33 countywide gritting runs throughout the 2018/19 winter, keeping the highway network open and safe.

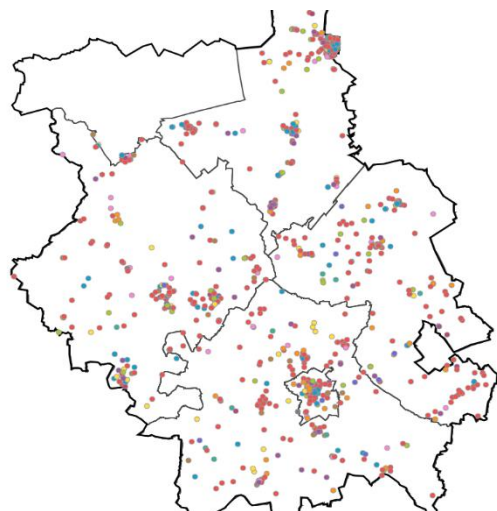
All routes were treated within the two hour target time. In addition to Cambridgeshire's fleet of gritters, quad bikes were used to treat the cycleways in Cambridge and the guided busway service track. Other areas such as town centres and footbridges are also treated.

The new Ely bypass relief route was included in the gritting routes following its opening in October 2018. Work is currently ongoing to understand the implications of closer engagement with Peterborough City Council, with the aspiration of developing a single winter plan to cover both geographical areas.

Looking forward the challenge faced is the cost associated with providing the winter service. Despite the low number of runs in 18/19, the budget was overspent by circa £76k. This was predominantly due to the replacement of loading shovels (vehicles that load the salt barns and gritters) and increased annual training costs, which ensure drivers qualifications remain in date, irrespective of the number of gritting runs. The County Council continue to work with Skanska (who provide the drivers) and ECON (who provide the gritters) to identify and drive efficiencies in the winter service.

## GIS Mapping

GIS software has been introduced in Cambridgeshire Highways' depots to assist scheduling of defects. This includes the use of handheld devices to map defects, remotely schedule repairs, time and date stamp completion, capture before and after photos and provide asset management data to support longer-term planning. This helps to speed up the process from defect identification through to repair, as well as provide an audit trail



of work to assist with performance monitoring.

#### 4. Projects

The partnership delivered a number of capital funded projects which consisted of those outlined in Table 1.

**Table 1**

Carriageway and Footway Maintenance	42
Local Highway Improvements	95
Projects – Private works	13
Delivering Transport Plan Aims	14
Bridge Strengthening	14
Road Safety	4
Traffic Signals	5
Cycling	10

#### Additional Funding

The Council was awarded and successfully delivered £6,653,000 of additional funding from the Department for Transport. This funding was received in November 2018 and had to be spent by the 31 March 2019. The agreed split by members was as follows:

- Local pothole/ patching/ crack sealing repairs - £900,000
- Additional preventative treatment programme preparation - £150,000
- Scheme delivery:
  - o Minor bridge repairs - £75,000
  - o Footway and cycleway - £900,000
  - o Carriageway £4,628,000

#### Collaborative planning for annual scheme delivery programme

Collaborative planning activities were carried out in advance of the issue of the first Annual Plan under the new contract, to optimise delivery, which includes effective programming, management of resources (including supply chain), achieving efficiencies and driving value for money.

#### Project of the Year Shortlisting

A Cambridgeshire Highways scheme at Arbury Road, Cambridge was shortlisted for the Eastern region Chartered Institute of Highways and Transportation Project of the Year and was awarded a Commendation.



## **5. Contract Performance and Improvement**

Cambridgeshire Highways' performance is measured using 18 key performance indicators (KPIs). The KPIs broadly cover the following areas:

- Timeliness of emergency response, routine and cyclical maintenance, scheme delivery and gritting
- Cost predictability – final costs to Cambridgeshire County Council compared to initial targets
- Value for Money
- Stakeholder Engagement
- Quality of work
- Efficient occupation of the highway network
- Health, safety and environmental performance
- Team integration and culture

Work has been ongoing throughout 2018/19 to improve performance in several key areas. As a result, the following has been achieved:

- Consistent meeting of targets for response to Category 1 and Category 2 reactive orders, including sustained good performance throughout the winter months.
- Significant improvements delivering schemes to agreed programme dates, such that approximately 93% are completed by or ahead of programme
- Improved consistency of accurate pricing of individual schemes, such that 93% of schemes were delivered within +3% or -10% of the target costs by the end of 2018/19.
- Faster timescales reached for agreeing final accounts. Over 90% were agreed within 3 months of completion by the end of the year.

The key target area for 2019/20 KPIs will be tightening up processes for street works notifications on use of the network for construction work, which will, in turn, enable more efficient network occupancy between Cambridgeshire Highways and other providers, such as Utilities companies and reduce Fixed Penalty Notices incurred by the service. The delivery of projects to cost and on programme will also be further improved.

### **Business Intelligence Technology**

Managing performance in 2018/19 has been partly aided by the introduction of Business Intelligence software, which has been used to provide up-to-date analysis on various aspects of the contract activities. The software collates data from various sources and is used to support management decision making. Current uses include supporting programming and scheduling of works, collating performance data and producing bespoke management and employee reports.

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Cambridgeshire Highways

working for

Cambridgeshire Highways

SKANSKA



**Business Intelligence Dashboard**



**SKANSKA**

Cambridgeshire County Council

Skanska Management Team	2.0 CCC Projects
Commercial	KPI Reporting
Scheme Delivery	Skanska LSC
Project Management	
Design	
Programme Management	
Works Order Management	

## 6. Efficiencies

Through introducing better working practices and introducing innovation in a structured way, Cambridgeshire Highways has delivered a range of efficiency savings during the year. Until the audit has been completed and report published it would be inappropriate to quote isolated savings / efficiency figures. However some of the most efficient ways of working are shown below. The contract management Performance Group is developing better processes for capturing cashable and non-cashable efficiencies from the contract going forward. The aim for future years is to develop an efficiency register that can then be included in the annual report.

### Dragon Patcher

Two new pothole patching vehicles, known as dragon patchers, were purchased in July 2018, following a successful period of sharing a vehicle with other local authorities to which Skanska provides highway services. These new vehicles are used exclusively on the Cambridgeshire highway network.



Almost half of the potholes filled during 2018/19 were completed by one of the of dragon patchers. These patchers have been able to fill potholes at less than half the cost of traditional methods. When factoring in purchase costs of the fleet, this has provided savings to the County Council of approximately £740,000. The patchers have also allowed the Council to undertake more preventative measures, prolonging the life of our assets.

## **Green Claims**

Repairs required to the network due to accidents caused by third parties can be reclaimed from insurance companies. These are known as green claims. Due to a backlog of incidents for which a green claim could be made, all opportunities to recover monies incurred were not being realised. A successful trial took place during which Skanska took over the processing of these claims using existing resource that already performs this function on behalf of Peterborough City Council. The trial has proved successful and has been extended until the end of 2019/20.

Examples of where other savings have been realised include:

- Savings on joint training
- Optimisation of road closures
- Savings achieved through resurfacing programme efficiencies
- Shared accommodation
- Recycled materials
- Supply Chain efficiencies

## **7. Safety, Health & Environment**

Cambridgeshire Highways is committed to ensuring the health, safety and wellbeing of its employees. Several initiatives have been undertaken during 2018/19, including:

### **a. Mental Health**

Mental Health Awareness week was held in May, shining a light on the high proportion of mental health issues in the construction industry.

### **b. 'It starts with me'**

Workshops for managers, supervisors and supply chain contractors working on Cambridgeshire Highways projects. The focus is on how the actions and behaviours of leaders and managers set the tone and directly influence standards on site

### **c. Injury Free Environment (IFE)**

Further training on the Injury Free Environment programme for Skanska, Cambridgeshire County Council and supply chain staff



Cambridgeshire Highways maintained its good safety record with only one incident taking place during 2018/19 that required an employee to take any time off work. In August 2019, we achieved a zero lost time injury rate based on a 12 month rolling period.

### **Environmental Awareness Training**

All Skanska staff have undertaken site or non-site applicable environmental awareness training, based on Skanska's SEATS and NEATS training programme. This is planned to be rolled out to Cambridgeshire County Council staff during 2020.

### **Environmental Recognition**

Cambridgeshire Highways was awarded a Green Apple gold award for environmental best practice for its work using recycled materials for the carriageway sub-base, reducing carbon by 33% and saving 9% (or £47k) on costs. The approach has been used on several schemes and has the added benefit of reducing programme timescales.

## **8. Community Benefit**

### **Communications Plan**

A communications plan has been produced in conjunction with the County Council's corporate comms team and Skanska's corporate comms team, which will be used throughout the coming year to communicate our activities with the public. A number of themes have been identified upon which information and key messages will be shared throughout the contract via a variety of media channels.

## Social Value Fund

The Highways Services contract includes an undertaking that Skanska pay 20% of their share of gain-share to projects that deliver social value. For 2017/18, this stood at circa £14,000. Applications have been made for a small number of projects and the bids are assessed by a panel chaired by the Highway & Infrastructure Chair and then ratified by the Strategic Collaboration Board.

## Prospects Trust

Cambridgeshire Highways employees working for Skanska and our supply chain helped out at Prospects Trust for a week in May 2018. The Prospects Trust is an organic farm in Cambridgeshire which provides young adults with disabilities the chance to learn, work and grow produce. Activities carried out included laying concrete paths to enable wheelchair users to get to poly tunnels, carrying out ground works and general maintenance.

Cambridgeshire Highways' supply chain members provided labour, plant and materials.



## Investing in the Next Generation

Our work with schools in the region continues. This year has seen staff volunteer their time for activities such as the STEM Challenge at Ramsey Abbey College, targeting 78 year 8 students with the objective to engage more girls in Science, Technology, Engineering and Maths subjects. We also helped Linton Village College by conducting mock interviews for around 40 Year 10 students.



## Summary

In summary, Cambridgeshire Highways has continued to deliver the core maintenance and improvement of our highway network throughout 2018/19, balancing the needs of residents, businesses and the travelling public. We have improved the delivery and organisation of our service through initiatives such as the development of an activity schedule, increased integration with partners, introduction of additional pothole patching machines and improved data analysis through business intelligence technology. In the course of this work, we have contributed to other Council aims by delivering efficiencies, supporting local businesses and contributing to good causes through Skanska charitable work and the social value fund.

Whilst there have been some notable successes and improvements during the second year of the contract, there remain some considerable challenges. In particular the efficient and timely delivery of schemes, identifying and capturing efficiencies and the demonstration of value for money.

In the forthcoming year, targeted focus areas are as follows:

- Open book cost management audit report published and action plan developed off the back of anticipated recommendations (needed to assess, monitor and drive value for money)
  - Improvement to KPI results (in turn resulting in an effective contract)
  - Tracking efficiencies (creation of a register – linked to county council business planning)
  - Rollout of Causeway works order management system
  - Service Improvement Plan
    - Integration opportunities throughout the business – collaborative culture
    - Operational Excellence review of the design service
    - Green Insurance Claim process trial continues
    - Tom - Tom installation on fleet
    - Joint Recruitment policy where possible
    - Combine Training across the business where applicable
    - Annual Programme of planned works
    - Supply Chain Efficiencies
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