
Cambridgeshire Highways Annual Service Review 2017/18

Executive Summary

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 County Council.

The value of the contract in the first 9 months was £22.4m, with an annual total (including 3 months of the previous contract) of £35.4m.

1. New Highways Services Contract

The new Highways Services Contract was awarded to Skanska. The contract commenced on 1st July 2017. Immediate priorities were ensuring there was no loss of service. A business continuity plan was essential and the main focus of the mobilisation was to ensure continuity of service on 1st July going forward.

2. Continuity of Service

Although the new Highways Services Contract was awarded to the incumbent provider, some significant changes occurred as a result of the new contract.

One of the most visible changes was the relocation of all head office staff to a new office building in Huntingdon. This has allowed Cambridgeshire County Council and Skanska staff to co-locate in the same premises. The relocation involved moving some key front-line teams, such as the Integrated Highway Management Centre (IHMC), street works team and Skanska's scheduling and emergency response call handlers. Despite the scale of the relocation, these functions continued to be delivered seamlessly with no disruption to services. It is widely acknowledged, by all parties that the new Highways headquarters in Huntingdon has proven to be a success and puts us in a strong position moving forward.

There has been more collaborative working across the county with staff at all four depots now also co-located, and the introduction of a collaboration tool For Projects for sharing documents across both organisations, as well as Skanska having access to CCC facilities.

3. Transition

Following the initial mobilisation phase a transition plan was developed which ensured those elements that still required implementation were not over looked. To date the following has been implemented:

- Highway Operational Standards
- Health and Safety Plans
- Environmental Management Plans
- Winter Service Plan
- Contract Management Groups
- Joint Management Team, Highways Contract Strategic Collaboration Board
- For Projects Collaboration software
- Improvement Experience training, management team workshop to develop processes mapping and lean thinking methodologies, to support the business going forward, to improve efficiency and effectiveness of the services we deliver.

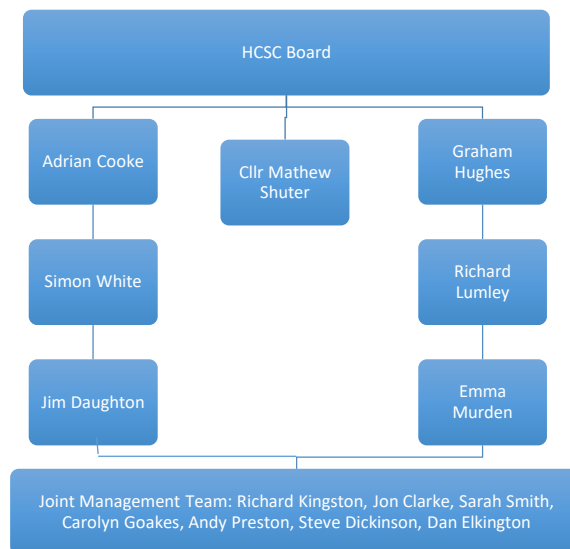
A refreshed plan is being developed where there are a few outstanding actions which are nearing completion.

4. Governance

The new Highways Services Contract has brought changes to the governance of Cambridgeshire Highways. The basic two-tier structure of a Strategic Board and Joint Management Team remains.

The main changes are to the make-up of the Highways Contract Strategic Collaboration Board, with greater senior representation. Cllr Mathew Shuter, Chair of the Highways & Community Infrastructure Committee, provides a more direct link to members, chairs the Board, whilst Graham Hughes, Executive Director of Place and Economy provides more strategic alignment with the wider Council. The Board meets on a quarterly cycle and provides focus and strategic direction for the highways partnership.

The Joint Management Team has remained largely consistent, meeting on a monthly basis to provide operational management of the service and implement the strategy defined by the Strategic Collaboration Board.



The Joint Management Team is supported by four inter-organisational, cross-functional contract groups. These have been established as part of the new arrangement, highlighting concerns and implementing the plans of the Joint Management Team in four key areas:

- Commercial – focussing on pricing, value for money and commercial issues
- Performance – focussing on KPIs, efficiencies and service improvements
- Culture – focussing on cultural improvement and communication,
- Safety, Health & Environment – focussing on work safety and environmental matters

5. **Asset Management**

The Highway Asset Management Policy has been revised to take account of recommendations in the latest national *Code of Practice for Well Manged Highway Infrastructure*. The Cambridgeshire Asset Management Policy has been renamed *Highway Operational Standards*, to better reflect its content. The new Policy contains fewer prescriptive standards and promotes a more flexible approach to maintaining the highway network. This updated approach was approved by the Highways & Community Infrastructure committee in March 2018 and implemented April 2018.

A key element of the flexible approach is the introduction of an on-site risk assessment of potentially hazardous defects. The implementation and the development of associated new defect repair standards was carried out with close liaison between

Cambridgeshire County Council and Skanska teams, thus ensuring that the new standards are deliverable in an efficient manner and avoiding potential unintended consequences of setting policies in isolation of those who will ultimately deliver the works.

6. **Asset Resilience**

Routine & Cyclic Maintenance

Cambridgeshire Highways completed over 2,750 orders between July 2017 and March 2018.

Over the course of 2017/18, over 33,500 potholes have been identified and repaired.

Two new pothole patching vehicles will be a permanent fixture on Cambridgeshire's highway network from July 2018. These 'Dragon Patchers' have been purchased to provide a more proactive approach to repairing the carriageway before defects deteriorate. The vehicle also provides significant efficiency improvements and reduced costs. This follows a successful period of sharing a similar vehicle with other local authorities to which Skanska provide highways services. Additional benefits include increased asset life, reduced waste and a safer working environment for operatives.



Photo 1: Dragon Patcher

Emergency Response

Between July 2017 and March 2018, Cambridgeshire Highways attended over 1,000 emergencies, with the majority of responses occurring within two hours of notification.

Winter Service

The worst weather since 2012/13 saw temperatures below zero for 40 consecutive nights through February into March. The end of this period culminated in the Beast from the East and Storm Emma. Cambridgeshire Highways completed 79 gritting runs ensuring that Cambridgeshire remained 'open for business'.

All routes were treated within the target times. Quad bikes were used to treat the cycleways in Cambridge City and the service track at the side of the guided busway. We also treated other areas, such as town centres and footbridges.

Pothole Action Plan

The severe weather resulted in a significant increase in the number of potholes across the network. The increased volume highlighted a number of issues with our approach to dealing with this, specifically quality of work, inconsistent approach to identification and poor engagement with local members and the public. However a considerable amount of work has taken place to review our process, resulting in the Pothole Action Plan. This set out a series of actions aimed at introducing clarity and consistency across the county, improving quality of the workmanship and greater levels of engagement and communication. The action plan was presented to members at a seminar in May and the feedback has been positive with a noticeable improvement across the network.

7. Projects

The Partnership delivered a number of capital funded projects which consisted of those outlined in table 1

Table 1

Carriageway and Footway Maintenance	15
Local Highway Improvements	63
Delivering Transport Plan Aims	7
Cycling	6
Traffic Signals	4

Drought Damage Road Repairs

In 2017, Cambridgeshire County Council and Peterborough City Council jointly submitted a bid to the Department of Transport (DfT) to fund the reconstruction of 21 sections of road that have been damaged by drought. The roads chosen for this scheme are fen roads which were built on peaty soil and are poor at bearing heavy loads. The foundations of these roads have now deteriorated to the point that speed restrictions, road diversions and closures are becoming necessary. This is leading to growing disruption for local residents and increasingly frequent reactive and thus expensive road repairs.

The DfT confirmed the success of the bid late 2017, resulting in a challenging delivery period for these schemes. The first Cambridgeshire scheme was completed at Mildenhall Road, Littleport in April. The construction approach of this project is utilising innovative solutions to solve the issue with the fen soils, including the recycling of 12,000T of material, resulting in both environmental and financial savings. The remaining Cambridgeshire schemes are to be completed this year.

For further information, see <https://www.cambridgeshire.gov.uk/residents/travel-roads-and-parking/transport-projects/drought-damaged-road-repair-scheme/>



Photo 2: Challenge Fund - Mildenhall Road

8. Performance & Improvement

Key Performance Indicators

Since the beginning of the new Highways Services Contract, Cambridgeshire Highways' performance has been measured using 18 key performance indicators (KPIs). The KPIs broadly cover the following areas:

- Timeliness of emergency response, routine and cyclical maintenance, and scheme delivery
- 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

We achieved at least 90% of the respective KPI targets in four-fifths of the KPIs measured during the first 7 months of the contract. Particularly strong areas of performance include

- Health & safety,
- Response to emergency callouts,
- Cyclic maintenance activities,
- Gritting
- Cumulative accuracy of pricing across annual programmes.

Target areas for performance improvement over the coming year where improvement plans and action groups have been identified include:

- Response to Category 1 reactive orders, response times and better collation of data.
- Delivery of schemes against programmed dates, especially where multiple orders occur in sequence, such as resurfacing and lining.
- More consistency in accurately pricing individual schemes, although holistic cost predictability is good.

Benefits cards

Cambridgeshire Highways has identified a number of opportunities to develop and improve the service by providing efficiencies and better value. These have been captured in 35 Benefits Cards, outlining proposals and likely cost savings. These improvements have been prioritised and implementation has begun, with benefits expected to be realised over the coming months and years of the contract. These will be included in the Service Improvement Plan which looks to enhance and develop the business to achieve the required outcomes. The Dragon Patcher has already been introduced on to the contract and there are future proposals being worked on at the present time.

Stakeholder survey

In Summer 2018, Cambridgeshire Highways will be conducting a stakeholder survey, compiling data from residents, elected members, businesses, parishes and the travelling public, to develop a holistic feedback mechanism for the service.

9. Efficiencies

Procurement Savings

The procurement of the new highway service contract built in savings of £800k (revenue) for year 1 and a further £2.2m (£1.7m capital & £500k revenue) for year 2. The year 1 saving has been achieved and we are on track to achieve the year 2 savings. Some of the areas that have contributed to these savings include:

Fee Comparison

Within the overall savings, circa £19m spend was delivered under Option C and £11.2m under Option E. When comparing the fee applied from the previous contract, this generated a saving of circa £305,000.

Relocating to Vantage House

The annual overhead cost (inc. fee) associated with the provision of the Girton office was payable to Skanska. This ongoing cost was reduced with the delivery teams relocating to Vantage House in Huntingdon, effectively this has showed a reduction in cost to the service of £120,000.

Dragon Patcher

Implementation of the Dragon Patcher earlier than previously planned delivered savings of circa £113,000 versus traditional methods.

Target Cost Gains (Option C)

In terms of closed works orders to end March 2018, orders to the value of circa £4.2m were raised to Skanska. Against these orders, circa £3.8m was paid to Skanska, including any associated pain/gain. This resulted in an overall saving to CCC in target cost efficiencies of £378,695.

10. Supply Chain Strategy

Engagement with the supply chain and local SME's is essential to the delivery. Placing the highest risk, highest criticality work activities with strategic partners yields commercial, technical and cultural benefits, as set out in table 2 below.

Table 2

Area	Benefits
Commercial	Relationships are sufficiently mature to support collaborative contract terms, open book cost management, gain share and shared risk arrangements, programme involvement, early contractor involvement, innovation and efficiency savings
Technical	Proven technical capability and experience in relevant fields of activity, including similar types of contracts
Cultural	Co-located, integrated teams. Shared processes and systems for Health & Safety, quality assurance, training and Corporate Social Responsibility initiatives. A shared culture aligned to Cambridgeshire Highways value streams. Collaborative relationship underpinned by principles of BS11000 relationship management plans

11. Safety, Health & Environment

Improving Safety Performance

In order to improve our safety performance, a significant amount of focus has been given to behavioural elements through the incident Free Environment (IFE). Our health and safety statistics have improved significantly since this began, with only one accident occurring since July 2017 that resulted in any time off work. Despite this better performance, we will be continuing to work to maintain and further improve our safety record.

Mental Health

In the construction industry, an additional focus this year has been on mental health awareness. Cambridgeshire Highways has carried out a number of presentations and events to encourage staff to discuss and debate mental health. Mental Health Ambassadors have been established across the organisation.

Environment

Sampling and Analysis Plan

Updated contract sampling and analysis plan was launched to assist designers (client and Skanska) in identifying the correct sampling and provide clarity on when sampling should be undertaken. In addition to the sampling and analysis plan, a sampling instruction form has been produced, in addition to a process map for clarity. The aim is to prevent delays to works, unnecessary costs and maximising opportunities to reuse materials and minimise waste.

Environmental Design Process and Design Checklist

A designer's environmental checklist was launched in January 2018 to ensure detailed environmental checks are being undertaken in regards to designated areas, sampling and waste forecasts, cultural heritage and ecological features. This identifies environmental risk and enables the appropriate checks, permits and licences to be in place prior to works commencing, preventing delays to works and ensuring the target cost is met.

Innovative Materials Research and Trails

Research into more sustainable materials has been undertaken locally and by Skanska's materials specialist team. These are being considered on a trial basis and more information is to follow. Innovative construction methods are also being explored, such as in-situ and ex-situ recycling which equate to significant programme and cost savings. Ongoing, trial of plastic asphalt planned for end of 2018.

12. Community Engagement

A Communication Plan for Cambridgeshire Highways has been developed, the draft has been submitted to Board and the document is being finalised. It is envisaged a rollout of the document will happen over the summer. Work is ongoing across the contract to provide greater transparency to our customers in respect of the works we are carrying out, with updates on progress and outcomes.

Some good news stories from the contract are outlined below.

Cycleway schemes recognised as considerate

December 18, 2017 – Infrastructure Services

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The two schemes located in Cambridgeshire both achieved a Considerate Constructor Scheme (CCS) assessment score of 72 per cent.



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The Cambridgeshire Highways maintenance team was praised by the assessor for ‘having the highest levels of safety’. They were also commended for engaging with the community by working with the local college, despite being ‘short-term projects’.

Peter Nicholas, Scheme Delivery Manager, commented: “The team has done a great job to achieve such high standards, while working in close proximity to residents and local communities. Achieving ‘Performance Beyond Compliance’ is a great testament to their hard work and how we are always striving to build for a better society. Well done to everybody involved.”

For more information about the Considerate Constructors Scheme, please visit the [Community Investment](#) section on OneSkanska or email: community@skanska.co.uk

We will remember them

November 16, 2017 – Infrastructure Services

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The Cambridgeshire highways maintenance team helped to keep people safe while they paid their respects to the UK's fallen heroes.



Each year, the UK marks its respects and falls silent for two minutes

On Remembrance Sunday, members of the team gave up their time to put two road closures in place near memorials located in Harston and Melbourn.

Steve Lander, Schemes Manager, commented: "This is the fifth consecutive year that we have helped the parish councils and The Royal British Legion, so that local residents can remember and honour those who have sacrificed themselves to secure and protect our freedom.

"I would like to thank everybody who gave up their time to put the road closures in place."

Sarah Adam, Parish Clerk at Melbourn Parish Council, commented: "On behalf of the council, may I thank you and your team from Skanska for providing excellent road traffic management for the Remembrance Day Parade. The day was a complete success and we have received many positive comments."

Council wins award for innovative recycled road scheme

November 15, 2017 – United Kingdom

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Cambridgeshire County Council, and its highways maintenance contractor Skanska, have won a Green Apple Award for Environmental Best Practice.



The highways maintenance team with their award that was won for using a specialised technique called Regan

The team attended an awards ceremony in London, where they picked up the award for using a specialised technique called Carriageway REGEN. A technique that is used to recycle the existing road surface on site.

Working with members of the supply chain, Stabilised Pavements, Atkins and Asphalt Reinforcement Services, the technique was developed to save time, carbon emissions and money.

Peter Nicholas, Scheme Delivery Manager, explained: “By adapting the existing In Situ technique to suit the specific type of road, the team saved 17,600 tonnes of material going to landfill. This meant the need for 880 vehicle trips to take away the material was removed. It also saved over 500 tonnes of carbon, the equivalent of 100,000 miles of air travel.”

The county has an extensive network of rural roads used by large vehicles such as tractors and heavy good vehicles to access farms and businesses. Due to the heavy traffic using these roads, remedial work was required to make them structurally safe and keep them running.

Cambridgeshire County Council’s Chair of the Highways and Infrastructure Committee, Councillor Mathew Shuter said: “The team worked together to come up with a sustainable solution that saved time, money and significantly minimised disruption to motorists who rely on these roads.

“Winning this award is a great testament to the team’s innovative and collaborative way of working and the way everybody involved is always thinking of better solutions to improve the road network across Cambridgeshire.”

Delivering a strong performance for customers

July 5, 2017 – Infrastructure Services

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Members of the Cambridgeshire highways maintenance team hosted a visit from its customer, Cambridgeshire County Council.



Cllr Lynda Harford was shown first-hand, how the specialist treatment team works to keep the county’s roads running

Cllr Lynda Harford, who is responsible for the Bar Hill division in Cambridgeshire, was shown, first-hand, how the specialist treatment team works to keep the county’s roads running.

Martin Holmes, Specialist Treatment Manager, explained: “The council spends about £4 million per year on this type of work, which is vital to keep the roads in a good state of repair.

“The budget for this has grown by 800 per cent over the last four years and it is important that we demonstrate to our customers that we are delivering a strong performance, minimising disruption to motorists and spending taxpayer’s money efficiently.”

Cllr Lynda Harford, said: “I was impressed, not only by the efficiency of the maintenance team carrying out the much needed re-surfacing work, but also their stoicism on such a hot day.”