Peterborough Highway Services

Annual Report 2016/17



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1. Introduction

- 1.1 Peterborough Highway Services is a partnership between Peterborough City Council and Skanska. The contract was awarded on 15th August 2013 and the contract started on 1st October 2013. Peterborough Highway Services is responsible for improving and maintaining Peterborough's highway network including roads, drainage, street lighting and bridges.
- 1.2 The Peterborough Highway Services contract is now into its fourth year, and the partnership between Peterborough City Council and Skanska is now well embedded within the way that Peterborough Highways Services works.
- 1.3 The partnership had an ambition to move to a shared depot facility at Dodson House, this was explored in 2015 and a planning application was submitted towards the end of last year with a view to moving operations there in 2016. The application was successful and the new depot became operational in May 2016. The shared depot accommodates both office and depot staff and will leave a legacy for Peterborough City Council.
- 1.4 The partnership operates a simple governance structure comprising the Peterborough Highways Strategic Board (PHSB) and the Peterborough Highways Operations Team (PHOT). The purpose of the Strategic Board is to provide strategic direction and monitor the performance of the contract. The Operations Team are responsible for leading and managing all aspects of service delivery and performance, influence and inform strategic direction and direct delivery teams.
- 1.5 This report covers the 12 month period from 1st April 2016 to 31st March 2017.

2. Maintenance Activities

- 2.1 During 2016/17, Peterborough Highway Services completed highway and structures maintenance projects and undertook 51 winter service gritting runs.
- 2.2 In addition, to improve the operation and performance of the highway maintenance delivery and the Winter Service, a number of improvements have been implemented along with a trial of innovative products.

Maintenance Schemes

- 2.3 During 2016/17, Peterborough Highways Services responded to
 - 845 emergency call outs, where the highway or street lighting attended to within a maximum of 2 hours
 - 400 Category 1 (CAT1) defects which need to be repaired within 24 hours, of which 212 were highways related and 188 were for street lighting
 - 9,949 Category 2 (CAT2) defects which need to be repaired within 7, 14 or 28 days or 3 months depending on the nature of the defect and the timescale given on the order raised. Of these, 6,989 were highways and 2,960 were for street lighting

New Highways Depot

- 2.4 From the early days of the Peterborough Highway Services partnership, there was an ambition to move to a shared depot facility at Dodson House. This was explored in 2015 and a planning application was submitted towards the end of 2015 with a view to moving operations there in 2016. The application was successful and the new depot became operational in May 2016. The shared depot accommodates both office and depot staff and will leave a legacy for Peterborough City Council.
- 2.5 The new depot provides savings and income of £41k and £15k respectively plus utility bills, through monthly savings on the lease cost and business rates.



New Salt Barn at Highways Depot

2.6 As part of the new highways depot, a new salt barn was successfully launched in September 2016. The salt barn, which holds 3,500 tonnes of salt was procured from Sweden at a saving of £71,000 compared to a similar UK design. The salt barn is a large canvas construction with minimum 30 year life span and was constructed in about a week.

Winter Service

- 2.7 Peterborough Highway Services has the responsibility to provide the Winter Service for the Peterborough City Council area. The Winter Service is provided by six purpose built gritters which operate on 5 different routes across the city area and car parks. Amey provides the Winter Service in the city centre on behalf of Peterborough Highway Services. As highlighted above, in 2016/17, 51 precautionary treatment runs were undertaken.
- 2.8 The brine tank reinstalled at the new depot site has enabled PHS to continue to carryout prewetted operations. The benefit of pre-wetted operations is it accelerates the traditional processes that occur with dry salt. In addition, it means less salt is used in the gritting process and therefore is better for the environment.
- 2.9 The winter service fleet consists of 5 vehicles, purchased in 2015/16:
 - 2 x 26t dedicated Mercedes Arocs Gritters
 - 3 x 18t Quick Change Body Gritters and Tippers
 - 1 x 7.5t Multispread Gritter for the car parks within Peterborough
- 2.10 The benefit of the changeable 18t bodies is that the Lorries are used for the full year rather than just the gritting season and so the overall number of vehicles in the fleet can be reduced.



Winter Service Fleet

Innovation

2.11 Peterborough Highway Services continued to drive innovation during 2016/17 and actively trialled new products and materials to make maintenance activities more efficient.

Swedish Pot Hole Machine – 'The Dragon'

2.12 In 2014 representatives of Peterborough Highway Services attended a Skanska maintenance event in Oxfordshire, examining alternative approaches to winter maintenance and pothole repair. The event was an opportunity to share working practices with teams from other countries Skanska

operate.

- 2.13 Teams from Sweden and Poland delivered presentations explaining how activities are carried out in their respective countries. As a result, Peterborough Highway Services were able to trial a pothole repair machine 'The Dragon' which is used in Sweden. This approach reflects Peterborough City Council's approach to asset management and preventative maintenance. In 2016/17, Peterborough Highways Services were allocated six weeks to use the 'Dragon'.
- 2.14 The 'Dragon' was in Peterborough for 3 weeks in June 2016 and again for 3 weeks in October 2016. During both of these visits the 'Dragon' completed 25 repairs. The scheme has proved so successful that the machine is again programmed to be in Peterborough for six weeks this financial year.



Dragon Patcher

'GritCam'

- 2.15 PHS have used innovation through the development of 'Gritcam'. Gritcam utilises precautionary gritting treatments to capture asset data and in particular the reflectivity of Road Markings, Studs and Signs. An HD quality camera has been fitted to the dashboard of a 26ton gritter to record the route being travelled on each precautionary treatment.
- 2.16 The precautionary gritting routes are carried out in the normal way and the dashcam which is angled to capture as much of the highway asset as possible records the route using GPS data to log the precise location and is time and date stamped. This information is then utilised by the inspectors to primarily assess the reflectivity of the Road Markings, Studs and Signs.
- 2.17 Incorporating the night time reflectivity survey within the gritting operation brings about a number of benefits:
 - Cost savings
 - Reducing risk exposure to Highway inspectors
 - Increased use of Technology

Cost Savings

- 2.18 The camera removes the need to have two highway inspectors out on the network at night. The footage taken is interrogated in the safety and comfort of the office the following day and any defects noted and works orders raised.
- 2.19 The savings made by the two inspectors not having to carry out the visual night time inspection equates to approximately £142.10 per hour. In total, taking in to account the vehicle and five gritting routes this returns a saving of approximately £2,500.

Safety

- 2.20 Incorporating the night time reflectivity survey within the gritting operation takes out the risks associated with night working and driving for the highway inspectors. The video recordings taken by "Gritcam" can be viewed by an inspector from the safety of the office.
- 2.21 The video recordings also provide Peterborough Highway Services with valuable data should there be any incidents with the gritter whilst it is completing precautionary treatments.

Technology

- 2.22 The HD quality cameras produce excellent footage which has wider benefits than just reflectivity. The video recordings give the inspectors the opportunity to be able to use the footage when they receive reports from members of the public regarding defects. If the defect is on a gritting route it is a reliable source of information which can save the inspector having to visit site depending on the relevant details.
- 2.23 The route driven is GPS tracked through the Camera unit and is date and time stamped for clear identification of defects.



'GritCam'

3. Schemes and Improvements

Introduction

- 3.1 Since the commencement of the contract in October 2013, Peterborough Highway Services has been actively involved in designing and delivering highway maintenance and improvement works across the city. Beneath are a few examples of Peterborough Highway Services major improvement works and scheme successes during 2016/17.
- 3.2 In April 2016, a major projects team was formed to enable Peterborough Highway Services to deliver major schemes across the area rather than require the procurement of other contractors. The benefit of having a major projects team is that the partnership can now deliver transport schemes from initial option development right through to construction of the scheme.

Junction 20 Improvement Works

- 3.3 The Junction 20 Improvement Works commenced in July 2016 and were completed in March 2017. Peterborough Highway Services staff were responsible for the design and delivery of the scheme including construction.
- 3.4 Junction 20 is a key interchange in Peterborough's parkway network which links the A1, A47, A15 and A16. In 2016, peak hour traffic through the roundabout was approximately 4500 vehicles, with an 8% increase expected by 2031. The junction exceeded capacity in both the AM and PM peak periods with considerable queuing on A47 approaches.
- 3.5 The improvement works consisted of implementing fully signalised junction with an associated increase in lanes on the approaches to and on the roundabout circulatory. Other works included carriageway resurfacing and the installation of LED street lighting.



Junction 20 Improvements

- 3.6 It is expected that the scheme will reduce journey times and increase capacity at the interchange to cater for Peterborough's growth up to at least 2031. The scheme will also help unlock the delivery of two new residential development areas at Paston Reserve and Norwood (total 2,500 dwellings)
- 3.7 The scheme has increased the number of lanes approaching and on the roundabout, as well as implemented full traffic light signalisation. Other works included carriageway resurfacing and the installation of LED street lighting.

Lower Bridge Street Public Realm Improvements

- 3.8 The purpose of the public realm improvements is to improve the environment of Lower Bridge Street and bring it in to line with the public realm improvements previously carried out on Bridge Street, Long Causeway, Cathedral Square, St John's Square and Cowgate in the city centre.
- 3.9 The scheme started on 9th January 2017 on the Rivergate Gyratory part of Lower Bridge Street and included the refurbishment of the traffic signals adjacent to the police station and Old Customs House including the road layout in this area. Paving between East Station Road and the Old Custom House was also improved.
- 3.10 Other improvements delivered on Lower Bridge Street include:
 - Upgraded LED Lighting with coloured uplighting to trees
 - New Seating
 - Increased cycle parking with a new covered shelter
 - New paving
 - LED lighting in a passageway connecting to Rivergate
 - Improved lighting and surfacing in the underpass linking to the River and Embankment
 - Raising the pedestrian/cyclist crossing point to improve the route leading to The Lido, County Court and the Embankment.
 - New pedestrian railings a the Bourges Boulevard Road crossing by the Magistrates Court
 - Resurfacing of the footpath alongside Poundland
- 3.11 The scheme's final phase began in March 2017, with resurfacing works on Town Bridge. The scheme is expected to be completed in summer 2017.

Peterborough Highway Services



Lower Bridge Street Improvements

Bishop's Road Improvement Works

- 3.12 The Bishop's Road Improvement Scheme started in summer 2016 and will deliver approximately £1.3m of improvements.
- 3.13 The purpose of the improvements is to resolve peak hour congestion at the Rivergate roundabout which is caused by vehicles queuing along Bishop's Road, as well as congestion where westbound traffic is waiting to turn right in to the Bishop's Road car park.
- 3.14 The scheme will relocate the existing pedestrian crossing 65m to the east of its existing location and two eastbound lanes will be created east of the crossing to enable the provision of a dedicated right turn in to the car park.
- 3.15 Improved cycling provision along Bishop's Road and Lido Gardens will also be delivered, and the footway on the northern side of Bishop's road will be widened and provide designated shared use for pedestrians and cyclists.
- 3.16 Improved crossing points will be implemented at the Car Haven Car Park entrance and at the Bishop's Road/Vineyard Street Roundabout.
- 3.17 The scheme is due to be completed in autumn 2017.

Aqua House Demolition Works

- 3.18 The demolition of Aqua House (former offices of Environment Agency) began in March 2016, and is the first stage in the building works for the £120m Fletton Quays development on the south side of the River Nene. Peterborough Highways Services undertook this project on behalf of Peterborough City Council, which generated £178k of revenue.
- 3.19 Bricks and concrete from Aqua House will be reused in the construction works for the Fletton Quays development which will provide 280 high quality homes, up to 166,000 square feet of office

space alongside other leisure and retail opportunities.

3.20 This also includes Peterborough City Council Offices.

Thorpe Road Improvements

- 3.21 The improvements to Thorpe Road included new traffic lights at the junction with Thorpe Lea Road incorporating a pedestrian crossing across Thorpe Road. The work also included removing an existing layby and relocated the bus stop and delivered a new bus shelter.
- 3.22 Improvements were also made to the crossing points at the junction of Thorpe Road and Midland Road, with new parking bays installed on Midland Road.
- 3.23 The improvements were made in advance of the redevelopment of the former district hospital site and ahead of the new primary school close to the Thorpe Road/Midland Road junction. These improvements will help ensure that traffic continues to flow along a key access route to the City Centre, particularly when the developments are complete.
- 3.24 The £460,000 scheme was funded by the Local Enterprise Partnership as part of its Local Growth Fund and by payments from developers under Section 106 community contributions. The scheme started in February 2016 and was completed by the July 2016.

Street Lighting Design

- 3.25 Peterborough Highways Services street lighting team have been involved in a number of design works over the past year, including:
 - A15 Yaxley Footpath lighting (new lighting)
 - Crescent Bridge Roundabout (Lighting replacement/improvement scheme)
 - Network Rail Junction/Bourges Blvd (Lighting replacement/improvement scheme)
 - Henry Penn Walk (new lighting)
 - PCC LED city wide lantern replacement project (Lighting replacement/improvement scheme)
 - Nene Parkway, (Lighting replacement/improvement scheme)
 - Longthorpe Parkway (Lighting replacement/improvement scheme)
 - St Pauls Road Crossing point (new lighting)
 - Westgate (Lighting replacement/improvement scheme)
 - Queensgate Bridge Lighting (Lighting replacement/improvement scheme)
 - Westlake Crossing point (new lighting

LED Replacement Project

- 3.26 In 2016, Skanska as part of Peterborough Highway Services were procured to undertake the conversion of remaining street lanterns to energy efficient LED units.
- 3.27 Much of the existing infrastructure was installed in the 1970s as part of the New Town Phase of development and coming to the end of its design life with cable faults occurring in many places. The replacement programme will deliver energy saving benefits and reduce future maintenance liabilities.
- 3.28 The project will install over 19,000 LED energy saving units over a three year period, due for completion circa August 2019. All units will be linked to a Central Management System (CMS) in order for Peterborough Highways Service to monitor the assets and carryout remote and cyclical maintenance more efficiently
- 3.29 The project commenced in October 2016 delivering LED lantern conversions only, column and private cable network replacement will begin in July 2017 with Nene Parkway. The project will deliver the wards sequentially starting with the "can do areas" of North, Park and Central wards.

- 3.30 It is anticipated all the design works will be completed by August 2017, including all wards and the Parkway Network.
- 3.31 To date, circa 2000 units have been completed and with new supply chain on board the project is gathering pace. The figure below shows the completion against ward at the end of March 2017.



Figure 3.1 – Progress on LED Project

Westwood Railway Footbridge

- 3.32 Westwood Railway Footbridge is a key link in the city's walking and cycling network, it forms part of the Airfield Cycle route on the Peterborough Cycle Network and provides a link across the East Coast Main Line.
- 3.33 Changes to the electrification of the lines below this bridge required the parapets on this bridge to be increased in height. The original solution, proposed by Network Rail, would have cost the council close to £1m. However by working with Network Rail and Skanska, Peterborough City Council developed a solution that was designed and constructed by Peterborough Highway Services for a cost of approximately £250k.
- 3.34 As well as providing the increased protection required, the opportunity was also taken to provide additional capacity for service ducts across the bridge. This will relieve pressure for space within the congested carriageway on the adjacent road bridge. The scheme also enabled improvements to the bridge to be made for pedestrians and cyclists, as shown below in the before and after photos.



Westwood Railway Footbridge - Before



Westwood Railway Footbridge - After

4. Health and Safety

Introduction

4.1 Peterborough Highway Services have adopted Skanska's Injury Free Environment (IFE) culture, and this provides the behaviours and values through which health and safety is managed within the contract.

Injury-Free Environment (IFE)

4.2 All staff within Peterborough Highway Services work under the principles of IFE, which is a concept that has been adopted from Skanska, and is defined as being:

"More than safety, a culture of care and concern for people, which encourages everybody to accept responsibility for their own and their colleague's well-being...The aim is to engage with the entire workforce and extend all of our behaviours such that we look out for one another to ensure that everyone returns home from work safely to their family and friends."

4.3 The IFE culture empowers staff to take personal responsibility for their own safety, and that of their colleagues, both in work and at home. The Values are shown below.





IFE Update

New IFE leadership and team

4.4 Peterborough have revamped the IFE team and started a new directive and approach to branching out IFE. The process now uses an ideas page format that is displayed in all offices and depots and each month there are 2 topics that people are asked to write down any concerns or good practices they have relating to the subject matters on the ideas page. The IFE representatives then bring in these pages to the meetings to be discussed by the group.

Free Fruit

4.5 IFE have secured a free delivery of fruit to all depots and offices across Peterborough, this is no added expense to employees and they are free to help themselves as they please. This delivery takes place every first Monday of the month. This is a great way of encouraging and promoting healthy eating and a great gesture from Skanska to promise for all employees not only for Skanska but Council employees and supply chain.

IFE Events

- 4.6 The IFE team organised and supported many events throughout the previous year focussed on building relationships between everyone involved in Peterborough Highway Services and beyond. Building relationships is a value at the heart of all IFE activities and provides the ideal format for sharing best practice throughout the contract.
- 4.7 In September 2016, an IFE Well Being Safety Stand Up was held for all personnel covering the topic of mental health which Skanska feels should be seen as a positive and not a negative. The stand-up event aimed to increase everyone's understanding of how good mental health can make a positive and proactive difference.

Accident Details

- 4.8 Between January and December 2016, there were no RIDDOR (reporting of injuries, diseases and dangerous occurrences regulations) incidents which required reporting to the Health and Safety Executive. In fact, the health and safety performance of the contract continues to be positive with no RIDDORS since the start of the contract in October 2013.
- 4.9 Lost time injuries relate to staff who are injured and required to take a certain number of days to recover. The Lost Time Injuries Frequency Rate is currently 0, and has been for the past 20 months,
- 4.10 Service strikes occur when an operative strikes a utility cable under the highway. There has been a total of 5 service strikes, these have been mainly BT, Virgin Media and Water utilities. Due to the number of service strikes, extra training has been given on use of avoidance tools, using trial holes and markings across the site. Fortunately there were no injuries arising from the service strikes.
- 4.11 Near miss reporting by all Peterborough Highway Services staff is encouraged. In addition, Peterborough Highway Services request that all sub-contractors undergo a formal approval process before they can undertake work on the highway network.
- 4.12 When incidents do occur, a review is undertaken as to why the incident occurred and what actions can be undertaken to prevent it from occurring again. This information is communicated to all Peterborough Highway Services staff through regular staff briefings.

5. Improving the Way we Work

Introduction

5.1 Since the first year of the contract, Peterborough Highway Services has actively sought to introduce a culture of business improvements, where employees are empowered and promote improvements to daily activities. During 2014, we have implemented a systems thinking approach to a number of projects/processes within Peterborough Highway Services. The systems thinking approach helps to create efficiencies within the contract by improving processes, removing waste and also creating a culture of innovation and continuous improvements

Systems Thinking

- 5.2 Systems thinking is a discipline that concerns an understanding of a process by examining the linkages and interactions between the components of that defined process. Systems thinking has been defined as an approach to problem solving by viewing problems as part of an overall system rather than reacting to a specific part or outcomes.
- 5.3 During the first six months of the contract, Skanska enrolled the management team and a number of representatives from across Peterborough Highway Services onto an Improvement Experience. This is a Skanska bespoke three day training programme introducing the concept of 'systems thinking' to the partnership.
- 5.4 As the contract has developed so too has a culture of open collaboration with issues discussed and solutions develop systemically. In addition to the more significant improvement projects a number of smaller initiatives have been led by members of staff to improve performance and develop the contract.

Project Identification and Progress

- 5.5 Since 2014, Systems Thinking has been integrated in to the contract and Peterborough Highway Services has undertaken a number of improvement projects.
- 5.6 As well as larger projects, smaller workshops have also been held where staff work together to address issues that are occurring. For example the Street Works and Depot Teams have met on a number of occasions to understand how processes in each team works, and to share challenges and then work together to find agreed ways of working within constraints put on both teams.
- 5.7 Some of the larger systems thinking projects were ongoing when the Business Improvement Manager at the time left the contract in June 2016. With no improvement coach in post, these projects have found it difficult to progress.
- 5.8 With this in consideration, the new Business Improvement Manager; appointed in April 2017, is currently in the process of engaging with key individuals to understand what improvement projects are in need of further work. By meeting with these key individuals, the Business Improvement Manager Aims to gain an understanding of what work has been completed to date and what the purpose, goals and benefits of any future work would be. If it is mutually agreed that there is a need to undertake further work, a 'Plan on a Page' documenting the planned approach will then be written-up. In addition to the proposed approach to the work, the 'Plan on a Page' also outlines the improvement team, the goals and benefits (purpose) for doing the work, current performance (where available) and estimated timescales for carrying out and completing the project.
- 5.9 Once a plan has been prepared for each improvement project, the Business Improvement Manager will engage with the Peterborough Highway Services Leadership Team to prioritise the work and with that develop a programme of improvement activities. This is on track for completion by the end of June 2017.
- 5.10 The following are the improvement projects that the need for additional work is currently being assessed:
 - Section 38/ 278 Adoption
 - Role of a Highways Inspector
 - Street Lighting (maintenance)
 - Street Works
- 5.11 In addition to the completion of unfinished improvement projects, the Business Improvement Manager is also in the process of planning 'Continuous Improvement Reviews' for process improvement projects that were successfully completed in 2014 and 2015. The primary aim of these reviews is to review the process; and identify/ capture any changes, review current performance; latest process and performance data, and identify any opportunities for further improvement.
- 5.12 These are the improvement projects that have been identified for a 'Continuous Improvement Review':
 - Emergency response
 - CAT 1 defects
 - Defect ID and repair

Environmental Performance

- 5.13 A key component in improving the way we work is consideration of our environmental impact on all activities undertaken.
- 5.14 In 2016, Peterborough Highway Services has concentrated on managing our carbon emissions to improve our environmental performance throughout the life of the contract.
- 5.15 During 2016, Peterborough Highways Services achieved two Great Green Stars at the Investors in Environment accreditation scheme administered by Peterborough Environment City Trust (PECT). The awards were presented for achieving above and beyond the green criteria through management, communication and performance in terms of carbon savings for example. Peterborough Highway Services was viewed as an individual entity from Skanska, hence the award for small-medium business.
- 5.16 Peterborough Highways Services also won a "Global Bronze Winner" at the Green World Awards in December 2016. The partnership between PCC and Skanska was commended for its use of green solutions and for diverting 97% of waste from landfill and reducing the projects embodied carbon by 14%.

Carbon

5.17 Over the past 12 months we have continued to monitor and record our direct carbon emissions on the Peterborough Highways contract. The overall aim is to achieve a 5% year on year reduction in emissions comparative to Year 1 baseline data measured against turnover. Figure 5.1 below shows tonnes of CO2 per month.



Fig 5.1 - Total Actual Carbon Emissions for 2016 – 2017 financial year: 413.68 Tonnes C0₂ (e)

5.18 Figure 5.2 shows the bulk of the contracts direct carbon emissions come from the use of fleet vehicles, with 61% of emissions from this aspect alone. The second most intensive emitter is the electricity at the highways depot, which makes up 12% of emissions. Reducing the consumption of fuel in these areas is a difficult challenge due to the nature of works undertaken by the contract, however this is where the contract has been focusing efforts to improve over the past 12 months.



Fig 5.2 - Breakdown of carbon emission contributors

Two methods have been used in an attempt to reduce our fuel consumption this year:

- New efficient EURO6 fleet vehicles have been introduced on the contract, delivering better fuel economy and cleaner exhaust emissions. As well as reducing our impact on climate change, the EURO6 fleet helps work towards cleaner air emissions within the city of Peterborough, delivering health benefits for all residents.
- GPS tracking for all fleet vehicles has been installed. As diesel use is the largest contributor to our direct emissions, it is expected that the GPS tracking system could save between 5-10% of our annual CO2 emissions. This efficiency study hasn't been completed enough to release the data, however findings will be published shortly. Driving behaviour can also be studied and efficient driving can be promoted using positive feedback.
- Additionally, quotes have been obtained for replacing the electric heaters in the highways depot for a more efficient source of heat. These will be installed in the next financial year.
- 5.19 Taking all the data into account and "normalising" the data to remove any perceived emission reductions from undertaking less/more gritting runs in a single year, results in a figure against turnover for this year (2016/17) of 0.73 tonnes of carbon emitted per £100,000 spend. A comparison study is currently being carried out to see if removing the LED project will make a significant difference.
- 5.20 There has been a significant drop from the 2.74 tonnes/100k reported in the 2015/16 results and represents a 44.5% reduction in carbon emissions for this year, significantly better than the 5% target. A new target for the 2017/18 business year will be agreed shortly and the contract will continue to strive towards lower carbon emissions.

Peterborough Highway Services



Fig 5.3 - Tonnes of C02 emitted per £100k spent

Water

5.21 Potable water consumption has been continually monitored throughout this year and the data is currently being compiled. Rainwater harvesting is currently being installed in the highways depot and a target for reduction will be agreed at the next KPI performance group.



Fig 5.4 - Litres of water used

Waste

5.22 Waste continues to be managed successfully on the contract, with an average of 98.3% of waste diverted from landfill over the past 12 months.

Peterborough Highway Services



Fig 5.5 – Waste produced/waste diverted from landfill

Sub Contract

5.23 Peterborough Highway Services monitors the amount of spend on subcontract procurement across the contract with the aim of delivering over 50% of spend on SMEs within the LEP area. Over the past 12 months Peterborough Highway Services has achieved 61% of spend within the LEP region achieving over the 50% added value target.

Materials

5.24 Sustainable procurement of materials from the local economy is just as important for the region as subcontract spend. This year Peterborough Highway Services achieved 72% spend of materials provision from within the LEP area, under the 80% added value target by 8%.

Transport

5.25 Across the contract we monitor the total business miles driven within the city, in addition to this we also monitor the trips with single occupancy. This data shows us that only 7% of the trips made within the city were single occupancy. The majority of the single occupancy trips were made by a limited number of contract staff using company vehicles.



Fig 5.6 - Total miles travelled within the contract

Community Engagement

5.26 This replaces the previous KPI of employment, as the appropriate number of staff have now been employed. The new community engagement KPI is 250 hours contributed to the community, including sub-contractors. For the financial year 2016-2017, 332 hours were contributed from Skanska and subcontractors, exceeding the target by 34%.

Target	250
Community Hours Achieved	335

Fig 5.7 – Community Engagement Hours

6. Efficiency Savings

Introduction

- 6.1 Reporting to the Peterborough Highways Operations Team are a number of Performance Groups that focus on key areas for the partnership. One of these areas is contract efficiencies. The Efficiency Group consists of representatives from across the partnership and meets monthly. The group captures efficiencies introduced since the previous meeting and plans target areas for future improvement. Every quarter, the group is expanded to include a wider number of employees from the partnership to assist in the culture of contract efficiencies. These efficiencies are identified on the contract efficiency route map that determines where the potential savings can be generated and then records actual savings achieved against this target. The route map is owned by the Operations Team and monitored during the monthly management meetings and presented to the Supervisory Board in the quarterly Board Reports.
- 6.2 During the last year the group have been focusing on:
 - 3rd party income generation/opportunities
 - Contract integration
 - Coordination of programme
 - Cheaper solution to the provision of the salt barn at the new highways depot
- 6.3 In 2016/17, the Efficiency Group has identified projects and conducted high level option evaluation to help identify the best projects to take forward to maximise efficiency savings. The three projects take forward for further investigation were Street Lighting, standardisation of products and Permanent signs for North Bank diversion.
- 6.4 In the 2016/17 financial year, circa £26m worth of work will have been delivered through the contract, meaning an efficiency of over £160k will be returned to Peterborough City Council in April 2017.
- 6.5 In the last financial year we have generated £2,548,783 of efficiencies, broken down as detailed in table 6.1 below:

Road Map Item	Cashable	Cost Avoidance	Notes
Co-ordination of Programme	£5,439	£652,134	Utilising the traffic management of other PCC partners (e.g. Amey & Balfour Beatty) & stakeholders (e.g. Anglian Water) in order to avoid the need to utilise chargeable Skanska traffic management.
			Includes £68,441 of contractual costs for traffic management that Skanska have not billed
Contract integration - operatives	£35,220		Savings made through sharing a surfacing crew with Cambs CC to ensure they are fully utilised
Integrated contract management	£33,948		Savings made through sharing Skanska support staff with Cambs CC to ensure they are fully utilised
3 rd party works	£30,556		Completing works for other customers – be it public or private sector customers - % fee

Peterborough Highway Services

			returned to PCC
Increase in turnover	£29,527		1% rebate for every additional million through the contract above the £10m threshold
Systems thinking projects		£26,109	Systems thinking – project and business process improvement approach. Delivered efficiencies in the way the emergency response process is delivered
Infrastructure renewals – new products		£5,538	The use of new products to extend the life of gully gratings
Abnormal load management	£1,224		Savings made through sharing Skanska support staff with Cambs CC to ensure they are fully utilised
Delivery of major schemes	£109,689		1% management fee
Winter		£92,000	Agreement to make winter maintenance lump sum rather than target cost
Incident Response		£58,001	Agreement to make incident response lump sum rather than target cost
New Depot Location	£51,660		Monthly savings on rent and rates
New Depot Lump Sum Savings		£1,200,000	Lump sum saving: provide lease to buy arrangement that will enable PCC to retain the depot facility at the end of the contract
Major Schemes Management Fee	£90,000		
New ITS contract saving		£6,736	ITS Team's involvement with the new traffic signals contract
50K saving annually on structures	£50,002		PCC reduced budget by this figure
Remove the contractual requirement for a salt barn (providing cheaper solution)	£71,000		
Total	£508,265	£2,040,518	

Table 6.1 – efficiencies generated

Delivering to other authorities/third party work

- 6.6 During 2016/17, Peterborough Highways Services have undertaken work for other local authorities who have contracts with Skanska, and also for third parties within Peterborough. This work has included the following:
 - Undertaking street lighting design and installation work for private developers
 - Undertaking snagging works on roads before adoption by the City Council
 - Design of new junctions for private developers
 - Working on transport planning and delivering schemes for Peterborough schools
 - Transport planning studies for other local authorities
 - Transport planning advice for private developers in Peterborough

6.7 With a dedicated team in place, third party work is where we see future savings to be made. Over the past year, Peterborough Highway Services has worked with O&H Hampton to design a fourth arm to the existing A15 Eagle Way junction and a new section of road off it, and also worked with Peterborough Investment Partnership for the design of the Fletton Quays Spine Road.

Co-ordination of Programme

- 6.8 When implementing a scheme or undertaking inspections, traffic management is often needed to enable the work to be undertaken and protect the workforce. Traffic management can be very expensive, and often forms a significant part of the costs for a scheme.
- 6.9 A number of efficiency savings realised are due to the co-ordination of our delivery programme to ensure any schemes requiring traffic management in the same area are undertaken at the same time. Co-ordination of our delivery programme has also been undertaken with other contractors (such as Amey) so we are able to deliver schemes using traffic management provided by them, which in turn results in an efficiency saving.

7. Contract Performance

Introduction

- 7.1 The performance of the Peterborough Highways Contract is monitored through a series of Key Performance Indicators (KPIs) and customer feedback surveys.
- 7.2 The performance of the contract is reviewed by the Peterborough Highways Strategic Board. Regular reviews of contract delivery are undertaken by the Peterborough Highways Operation Team in order to monitor progress, capture lessons learned and support continuous improvement of the process.

Key Performance Indicators

- 7.3 Prior to the commencement of the contract a series of 27 KPIs were established, to be monitored and reported on a monthly basis. These KPIs were split into four categories, Operational Delivery Customer Service, Commercial and Financial, and Added Value. The current set of contract KPIs in Table 7.1, note that this list is currently under review.
- 7.4 The performance against each of the KPIs between April 2016 and March 2017 is detailed in **Appendix B.** In 2016/17, performance on the majority of KPIs has remained consistent or has improved, with consistent good performance on the following KPIs
 - OP13 Defined cost within +/- 10% of target cost per scheme
 - OP2 Percentage of emergency work instructions closed within agreed timescales
 - OP3 a + b Percentage of Highways/Street Lighting CAT1 work instructions attended to within agreed timescales
 - OP5 winter maintenance
 - OP10 Percentage of work passing inspection
 - CS4 b + c Satisfaction of members and public
- 7.5 In a similar manner to the Efficiency Group, A KPI group was established to record, monitor and review the KPIs. The group reports directly to the Peterborough Highways Operations Team and consists of representatives from across the partnership.
- 7.6 The current contract KPIs are shown in Figure 7.1 below.

Domain	Reference	КРІ
	OP1	Number of cyclic maintenance activities completed against programme
	OP12	Number of schemes completed against programme
/ery	OP13	Defined cost within +/-10% of target cost per scheme
Delliv	OP2	Percentage of emergency work instructions closed within agreed timescale
ional	OP3a	Percentage of Highways CAT1 instructions closed within agreed timescale
perat	OP3b	Percentage of Street Lighting CAT1 instructions closed within agreed timescale
Ō	OP4a	Percentage of Highways CAT2 instructions closed within agreed timescale
	OP4b	Percentage of Street Lighting CAT2 instructions closed within agreed timescale
	OP5	Winter Maintenance - Precautionary treatment runs completed within the

		agreed timescale
	OP10	Percentage of work passing inspection
_	OP6	Lost time incident frequency rate (LTIFR) To measure the employee time lost following an incident per 100,000 hours worked
h and ety	OP7	Accident Frequency Rate (AFR) to measure the number of reportable accidents per 100,000 person hours worked.
Healt	OP8	Number of near misses reported
	OP9	Number of service strikes
ler SS	CS3	Number of satisfaction surveys completed for (a) client (b) Members and (c) the public (returned)
storr	CS4 b & c	Satisfaction scores for (b) Members and (c) the public
ບິ່	CS5	Number of commendations minus number of complaints
cial al	CF1	% of accounts approved and paid within agreed period
nmer and nanci	CF3	% of cashable efficiencies compared to turnover (in current financial year)
Con	CF5	Value from other revenue streams
	AV1	Reduction in carbon emissions arising through energy and fuel use in buildings and vehicles against target
	AV2	Install rainwater harvesting and establish new baseline in 2016/17 with target to be set in April 2017
alue	AV3	Diversion of waste from landfill: as a percentage of total waste produced over rolling 12 month period
ed Va	AV4	Percentage of material procurement spend within LEP area
Add	AV5	Percentage of SME contractors procurement spend within the LEP area
	AV6	Reduction in single occupancy car travel through the application of transport hierarchy
	AV7	Support development of local skills provision directly and indirectly (supply chain)

Table 7.1 – current contract KPI's

Communication

- 7.7 The Council has a Highway Asset Management Policy and Strategy that was adopted in 2016 and within this document sits the PHS Communications Strategy. The Communication Strategy states that information will be available on the Council's website and that we will continue to use social media to update users. Customers are able to contact the Council / PHS through a number of ways including online, telephone and email.
- 7.8 In addition, the Council is using three main methods of customer data collection so that we can monitor our performance, can learn where we have done well or where improvement is needed, and in the future it will help inform the Council when it is setting its level of service for each of the highway assets.

Customer Contact

- 7.9 At present customers can raise Highways queries using the Peterborough App, website, email and by phone to the Customer Service Centre. The Customer Service staff then log this information using a sharepoint site called the Highway Log and the Highways Inspectors access this through the intranet when they are in the office. The customers and the Customer Service Centre do not get any automated updates to these enquiries.
- 7.10 Over the next few months we will link the CRM software in the call centre with the Highways Confirm system and customer enquiries will pass directly between the systems. The calls will then

be auto allocated to the correct inspector and will appear to them as a new enquiry on their iPad even whilst out of the office. These cases will then be automatically updated as works progress and the CRM will receive the updated information.

7.11 If the customer has provided an email address then they will receive emailed updates automatically in response to their enquiry. Following completion of the works it is intended that the customer will receive a link to a Google Survey. This information will then be used to monitor and potentially improve service levels.

Scheme feedback cards

- 7.12 For all carriageway and footway resurfacing schemes we send out customer feedback cards on freepost self-addressed cards. These feedback cards are sent out once the works are complete and all the responses are collated and comments, negative or positive are recorded. These comments are also passed on to the contractor to either follow up, or pass on to the operatives doing the work. At the end of each month the figures are then sent across to a PHS working group to show the customer satisfaction of the works completed for the past month.
- 7.13 Going forward as well as sending out the feedback cards to residents we will be sending out electronic surveys to the Councillors where the works fall within their wards. This will be the first year that we will be doing these electronic surveys. In addition, we will investigate whether feedback cards or online surveys should be rolled out to other highway works, such as major schemes.

The National Highways & Transport (NHT) surveys

- 7.14 The NHT annual surveys capture public satisfaction on services delivered by local authorities. We have participated in the survey in 2012, 2015, 2016 and it is our intention to continue to do these surveys annually.
- 7.15 In terms of performance against each of the transport themes, we performed well in 'tackling congestion' and in particular 'efforts to reduce delays in traffic' which ranked at no. 6 out of 106 highway authorities that took part. For highway maintenance/enforcement we also performed well in 'keeping drains clear and working' (5 out of 106) and as well as 'condition of highways' (8 out of 106).
- 7.16 However, we ranked at 71 out of 106 for 'accessibility' which was our lowest ranked theme and it was the same case nationally with many other local authority's results having declined. Although we performed well nationally in the 'walking and cycling' theme (ranked at 20 out of 106) there were areas for improvement such as 'overgrown footpaths and bridleways' (ranked no. 84) which we could look to address with our partner Amey and also better promoting the My Peterborough online reporting app to local residents.
- 7.17 Further, to help improve our response rate for the 2017 NHT survey we plan to widen our promotion to target many of the different community groups through the use of Connectors who communicate through social media of upcoming events and news.

8. Innovation & Good News Stories

Introduction

8.1 During 2016/17, Peterborough Highway Services has had success in winning a number of awards and worked on a number of projects within the local community.

Winning Awards

8.2 Peterborough Highway Services alongside Serco (Peterborough City Council's procurement provider) won a prestigious national GO Award in March 2017. The GO Contract Management Initiative of Year Award recognises the initiative was singled out by judges not only for delivering savings of £1.85m, but also for its strong management of environmental impacts, including successful delivery of a commitment to reduce carbon emissions by 15% over the first three years of the contract.



PHS and Serco Team collecting the GO Award

- 8.3 In August 2016, Peterborough Highway Services successfully received its second Investors in Environment audit at green level accreditation (highest level). The audit covered all of the sustainability KPIs undertaken as part of the contract and assess the quality of evidence provided by the contractor. The partnership provided such a robust response to the audit that the Investors in Environment have sated they will not need to return to audit again for another two years.
- 8.4 Peterborough Highway Services has also won a Green World Environment Award in the international campaign to find the world's greenest countries, companies and communities. The contract competed against more than 500 other nominees in the Green World Awards for the Environmental Best Practice. As a result of this success, the winning paper is published in The Green Book, the leading international work of reference on environmental best practice.
- 8.5 An Institution of Civil Engineering (ICE) award was received in September 2016 for the team delivering the Central Avenue Parking Bays team. The scheme was highly commended in the sustainability category for delivering a sustainable drainage solution whilst constructing the bays in

an underused area adjacent to a row of shops and opposite a school.

8.6 The 'Gritcam' was a finalist in Winter Service Category of the 'APSE' awards in March 2017.

Working with the Local Community

- 8.7 Skanska and a number of their key supply chain partners sponsored the Peterborough Eco Education Awards for the third year, which aims to raise awareness and encourage schools across the city to develop projects that improve the environment. The scheme runs over a number of months and culminates in an award ceremony where each school presents their project and they are judged with associated awards given out. Skanska and their partners provided financial funds and several staff members attended the awards ceremony and acted as judges for the event.
- 8.8 In November 2016, representatives from Peterborough Highway Services attended the Circular City 'Smart Supper' along with a number of other organisations from across Peterborough.
- 8.9 Three proposals were presented by schools across Peterborough, however the last pitch caught the eye of Skanska. The pitch was about making the Stanground underpass more colourful and brighter to make it safer and more pleasant to use. Skanska agreed that as part of their engagement in the community, to work with the school children to translate their idea in to an actual plan that can be implemented by Skanska using their volunteer days and with assistance from the supply chain.
- 8.10 Skanska also continue to support the Skills Service but providing staff to assist students at local secondary schools by giving them interview experience and feedback ways in which they could develop these skills further.
- 8.11 As part of Skanska's 'Living our Values' week, a team of staff used their volunteer day to assist a local charity, Railworld, to help deliver improvements to the site, such as rebuilding a stream, and bricklaying. A team of operatives also surfaced a footpath ramp that runs from the footpath along the River Nene in to the Railworld car park. The ramp had been built by volunteers over the past year to a design that had been developed previously. Skanska provided the man power and skill to lay a tarmac surface on the footpath, whilst Aggregate Industries provided the asphalt free of charge. Brain Pearce from Railworld said 'Brilliant! Please thank all you wonderful people at Skanska for making today possible'.

Peterborough Highways Excellence Award

- 8.12 In July 2016, two operatives working as part of team placing signs for an ongoing improvement scheme, and whilst doing so they heard a cry for help and observed a lady lying face down at the roadside. They immediately went to her aid and discovered that the lady had some minor injuries which needed attending too. They reassure and comforted her whilst applying emergency first aid. After contacting the lady's carer they helped the lady and her possessions in to the vehicle so she could be taken to hospital.
- 8.13 The incident was an example of what living our values means and clearly demonstrated that Highways staff operating on the Peterborough contract show concern and compassion for the safety and wellbeing of not only friends and colleagues but the general public too. To recognise their efforts, both members of staff were awarded an excellence certificate.

PHS Running Club

8.14 The Peterborough Highway Services Running Club was successfully launched in the summer of 2015 and is still growing strong. The club meet after work twice a week, and has up to 20 runners attend during the summer months. The club helps members of the contract to stay fit and healthy, and is a great opportunity for staff to bond outside of work. All abilities are represented and there have been some fantastic personal success stories already, including members who had never run before completing a 5 kilometre route.

8.15 Members from the running club participated in two Bear Grylls survivor challenges involving a 5k run and tackling an obstacle course. The team raised in excess of £300 for the Free Kicks Foundation, a charity to provide football related activities for the ill, bereaved and deserving children, to give them a day to remember with their favourite football club.

9. Summary

- 9.1 Peterborough Highway Services, a partnership between Peterborough City Council and Skanska. Commenced on 1st October 2013. Peterborough Highway Services is responsible for improving and maintaining Peterborough's highway network including roads, drainage, street lighting and bridges. This report provides a summary of the performance of the contract between January and December 2015.
- 9.2 During 2016/17, Peterborough Highways Services responded to
 - 845 emergency call outs, where the highway or street lighting attended to within a maximum of 2 hours
 - 400 Category 1 (CAT1) defects which need to be repaired within 24 hours, of which 212 were highways related and 188 were for street lighting
 - 9,949 Category 2 (CAT2) defects which need to be repaired within 7, 14 or 28 days or 3 months depending on the nature of the defect and the timescale given on the order raised. Of these, 6,989 were highways and 2,960 were for street lighting
 - During 2016/17, Peterborough Highway Services completed highway and structures maintenance projects and undertook 51 winter service gritting runs.
- 9.3 Peterborough Highway Services is also actively involved in the design and delivery of major highway schemes, including Junction 20, Lower Bridge Street Public Realm Improvements and Bishop's Road.
- 9.4 The new highways depot and salt barn were successfully launched in 2016. The Swedish Pot Hole Machine (The Dragon) was used successfully By Peterborough Highways Services and will return for a further six weeks in 2017/18.
- 9.5 Health and Safety is an important part of the culture within Peterborough Highway Services. The partnership has adopted Skanska's Injury Free Environment (IFE) approach for managing health and safety within the contract. All staff work under the principle of IFE and it is mandatory for all new employees and supply chain partners to attend an IFE induction. In 2016/17, there were no RIDDOR (reporting of injuries, diseases and dangerous occurrences regulations) incidents which required reporting to the Health and Safety Executive. In fact, the health and safety performance of the contract continues to be positive with no RIDDORS since the start of the contract in October 2013. However there were 5 service strikes.
- 9.6 Environmental impact and performance forms a key component of the Peterborough Highway Services contract. In 2016, Peterborough Highway Services has concentrated on managing our carbon emissions to improve our environmental performance throughout the life of the contract. Peterborough Highways Services achieved two Great Green Stars at the Investors in Environment accreditation scheme administered by Peterborough Environment City Trust (PECT).
- 9.7 Reporting to the Peterborough Highways Operations Team are a number of Performance Groups that focus on key areas for the partnership. The Efficiency Group captures efficiencies introduced since the previous meeting and plans target areas for future improvement. There are a number of areas that the group have seen success on during the year. In 2015/16, the Efficiency Group have tracked and logged a total saving of £2,548,783.
- 9.8 This includes:
 - £30,556 as a fee on third party work delivered by Skanska
 - £657,573 of cost savings have been generated via the co-ordination of traffic management with other providers
 - £71,000 savings in the provision of the salt barn

- 9.9 The performance of the Peterborough Highways Contract is monitored through a series of Key Performance Indicators (KPIs). The KPIs are split into four categories, Operational Delivery, Customer Service, Commercial and Financial and Added Value.
- 9.10 In 2015/16, performance on the majority of KPIs has remained consistent or has improved, with consistent good performance on the following KPIs
 - OP13 Defined cost within +/- 10% of target cost per scheme
 - OP2 Percentage of emergency work instructions closed within agreed timescales
 - OP3 a + b Percentage of Highways/Street Lighting CAT1 work instructions attended to within agreed timescales
 - OP5 winter maintenance
 - OP10 Percentage of work passing inspection
 - CS4 b + c Satisfaction of members and public
- 9.11 Peterborough Highways Services has been successful in winning a number of awards in 2016/17, including a Green World Environment Award in the international campaign to find the world's greenest countries, companies and communities and an Institution of Civil Engineering (ICE) award was received in September 2016 for the team delivering the Central Avenue Parking Bays team. The scheme was highly commended in the sustainability category for delivering a sustainable drainage solution whilst constructing the bays in an underused area adjacent to a row of shops and opposite a school.
- 9.12 In March 2017, Peterborough Highway Services alongside Serco (Peterborough City Council's procurement provider) won a GO Award. The contract was singled out by the judges not only for delivering savings of £1.85m, but also for its strong management of environmental impacts, including successful delivery of a commitment to reduce carbon emissions by 15% over the first three years of the contract.
- 9.13 Peterborough Highway Services has worked closely with the local community by supporting local initiatives and working with local partners, this has included sponsorship of the Peterborough Eco Education Awards by Skanska and a number of their key supply chain partners. In addition staff have supported events held by The Skills Service and the 'Smart' Supper held as part of Peterborough Circular City Week in November 2016. The event involved groups of young people from schools in Peterborough presenting their ideas for a Circular City. Since the event Peterborough Highway Services are working with one of the groups to develop their ideas further without charge.