

**Communities Overview & Scrutiny Committee  
19 September 2012**

**Review of the Performance of the 2011 Highway  
Maintenance Contract and associated prioritisation of  
highway maintenance schemes by County Highways**

**Report of the Strategic Director for Communities**

**Recommendation**

That :-

1. Members are invited to make comments on the performance of the 2011 Highway Maintenance Contract as summarised in this report.
2. Members comment upon the processes in prioritisation of highway maintenance schemes and required flexibility necessary to enable County Highways to maintain safe roads in Warwickshire.

**1. Background**

- 1.1 The 2011 Highway Maintenance Contract (HMC) was awarded to Balfour Beatty (BB) and commenced on the 5<sup>th</sup> May 2011. Details of the comprehensive procurement and award processes of the contract are set out in the Cabinet report titled 2011 HMC, dated 14<sup>th</sup> October 2010.

The procurement process focused on a contract that would encourage sub-regional working that would deliver cost certainty, quality and value for money services.

A simple price list is used to ensure clarity and cost certainty for all the works.

Sections 1-3 of this report consider the Mobilisation and Year 1 Performance of 2011 Highway Maintenance Contract (HMC). Section 4 outlines how County Highways prioritises maintenance schemes and explains why some schemes need to occasionally be accelerated to maintain safe roads in Warwickshire.

Between the award of the contract and 5<sup>th</sup> May 2011 detailed mobilisation activities were undertaken between WCC and BB to avoid any dip in service. The mobilisation involved the TUPE transfer of 105 staff from Carillion to BB and supply of a new fleet of vehicles and other resources. The Mobilisation was reviewed by the Communities Department - Project Coordination Group in detail in November 2011.

- 1.2 The HMC is an innovative project in that it allows other Local Authorities to use a single provider to deliver a wide range of highway services and offer efficiency savings. Coventry City Council (CCC) participated in the procurement and has used the HMC to deliver its planned works from the 5<sup>th</sup> May 2011. Solihull Metropolitan Borough Council reviewed the benefits and costs of the HMC, and their Members approved joining the HMC from April 2013.
- 1.3 The performance and general management of the 2011 HMC is scrutinised by a Strategic Partnering Board (SPB) that met monthly for the first year and now meets every three months. The Board consists of two WCC members, two Heads of Transport and Highway Services from WCC and CCC, and senior representation from Balfour Beatty and County Highways. From September 2012, Solihull MBC will have representation at the Strategic Partnering Board (SPB) meetings.

## 2.0 KPI Performance for Year 1

- 2.1 Under the HMC, service delivery is managed through a set of 18 Key Performance Indicators (KPI's) to ensure Service, Quality and Value, as set out in Appendix A. The contractor is required to achieve the threshold of at least 13 KPI's to be granted a "credit" of a two year extension to the initial 5 year contract period.
- 2.2 Currently, 14 out of the 18 KPI's have been achieved to the satisfaction of the SPB. The SPB have yet to consider a final Sustainability Report for Year 1 produced by BB that captures the carbon footprint of the Highway Services.
- 2.3 For the purpose of this report a general overview of the Year 1 KPI's is made against the main types of work activity as follows:-

**Routine Maintenance** - Under the HMC 14 two man gangs are employed as Area Maintenance Teams (AMTs) that repair minor highway defects and provide a 24/7 Emergency Response. Five (5) further drainage gangs undertake small to medium sized drainage repairs and ditching works.

KPI's 1 and 2 respectively relate to the emergency response and repair of highway defects to specific timescales carried out by the AMT's. The KPI 1 result of 88% for 2358 category 1 incidents and road traffic incidents fell short of the threshold value of 96% those requiring a one hour response time due to a number of factors not totally in the control of the Contractor. Demand when dealing with multiple incidents, mainly in times of flooding, gales and winter conditions or incidents can exceed resource levels agreed with the client and is the main factor for falling below the threshold value.

KPI 2 recorded a performance of 93% for the repair of some 5825 highway defects being dealt within the 1, 7 and 28 days' time criteria and exceeded the threshold of 90%.

**Winter Service** – KPI 3 relates to the percentages of winter grits that are successfully mobilised. Of 54 gritting call outs, many of which were carried out

between midnight and the morning rush hour, some 1469 gritted routes were carried out successfully, with just 8 routes exceeding the 3 hour completion criteria.

KPI 14 tracks the amount of actual salt used during gritting operations to a tolerance of + or – 10% of the theoretical usage. The actual salt usage of 13756t compared to 12,707t was within the specified range, confirming that the winter fleet vehicles were calibrated and operated effectively.

**Gulley Maintenance** – KPI 6 tracked the delivery of some 81502 gullies cleansed in Year 1 with some 93.3% deemed as clean and running at the first visit. The result exceeded the threshold of 85% which was based upon performance of the former HMC. The SPB have agreed to increase the Year 2 KPI 6 threshold to 90% as part of on-going service improvement targets.

**Street Lighting Service** - Year 1 data collected for KPI 7 records that 99.0% of the 5149 street light faults were repaired within 5 days, which exceeds the threshold value of 98.5%. The average repair time is just over 2 days. During Year 1 the street lighting team received 4 independent WOW awards.

**Quality of Planned Works** - KPI 13 tracks the quality of site works through the use of visual audit forms jointly used between the Client and BB. Some 534 audit forms were completed by both WCC and CCC staff in year 1 on surface dressing, micro asphalt, structural repairs to roads and footpaths works, street lighting and bridgeworks with the average score of 85% meeting the desired threshold of 85%. Apart from difficulties experienced with a road lining subcontractor, schemes have been delivered to the required quality. Following the programme of work, County Highways has received extensive positive public feedback.

KPI 5 tracks the quality of materials used in the planned works with a result of 98%, which exceeds the threshold of 95% The “concentrated” result data from May – August 2011 and February to March 2012 reflects the programming of certain works.

KPI 12 tracks the percentage of projects done to timescale with no defects identified after 1 month, for which the threshold is 95% and target of 98%. Of 827 schemes over £5000 in value one structural maintenance scheme required rectification works to rectify correct road camber levels and some 15 surface dressing sites are being monitored giving a result of 98% which passes the threshold value.

**Management of Streetwork Noticing** is monitored by KPI11 that tracks the number of notices served correctly. The Traffic Management Act (TMA) places a significant administrative burden on highway authorities. In year 1, some 7583 TMA notices are recorded against which 32 fixed penalty notices were issued by WCC giving a performance of 99.6%, which exceeds both the threshold of 95% and target of 98%.

Year 1 has been a learning curve for all parties and is reliant on developing new ICT systems to ensure the requirements of the TMA are fully met. It was jointly

agreed between WCC and BB that due to IT system and operational reasons the KPI would not apply for the first 5 months of Year 1.

**Member and WCC Staff satisfaction surveys** - KPI 15 recorded the average Member satisfaction level of 94% against a set of 6 questions. KPI16 involved a more detailed staff questionnaire to WCC staff who are involved in the HMC recorded a positive satisfaction level of 82%. Both KPI 15 and 16 results passed the 75% threshold value. (Target 100%)

**Safety Inspections** - Under the HMC a number of new working practices have been introduced with 4 "Find and Fix" gangs that also undertake planned safety inspections. KPI 9 is a new performance indicator that tracks and ensures the set inspection frequency regimes for A roads (6 weeks), B roads (12 weeks), C and D roads (24 weeks) are adhered to. Getting the right balance of Find and fix work and ensuring the safety inspection regime caused some early problems in achieving this KPI for the first two months. Weather conditions in January and February 2012 also impacted on results. The full year result of 82% fell short of the 98% threshold. The first year has enabled us to get the right balance and understanding to ensure safety inspections are done to required timescales in Year 2.

**Health and Safety of the contractor's workforce** is monitored by KPI 8 which records any serious accidents per 100,000 work hours that warrant more than 3 days off work. In Year 1, a pragmatic and joined up approach to Health and Safety has been implemented by BB and no reportable incidents to the Health and Safety Executive (HSE) have been made. The result of 0.0 compares very well to the threshold of 0.75 and 0.2 Target values of serious accidents /100,000hrs.

**Cost Certainty, Commercial Risk Management and Innovations.**

The HMC adopted a new NEC3 form of contract with a Price List, compared to the former Target Cost Contract. KPI 4 was created to track the accuracy of estimated and actual costs to a tolerance of + or - 5 percent. The KPI is now recognised as being of little value in Year 1, with many projects coming in more than 5% under estimate but still having a negative impact on the KPI. For year 2 a new criteria to agree and invoice all site works within 60 days has been set by the SPB.

KPI 10 records that the early warning and associated compensation events have been managed to timescale in Year 1 with major financial claims being avoided. The result of 99.2% exceeds the threshold of 98% being dealt in 90days

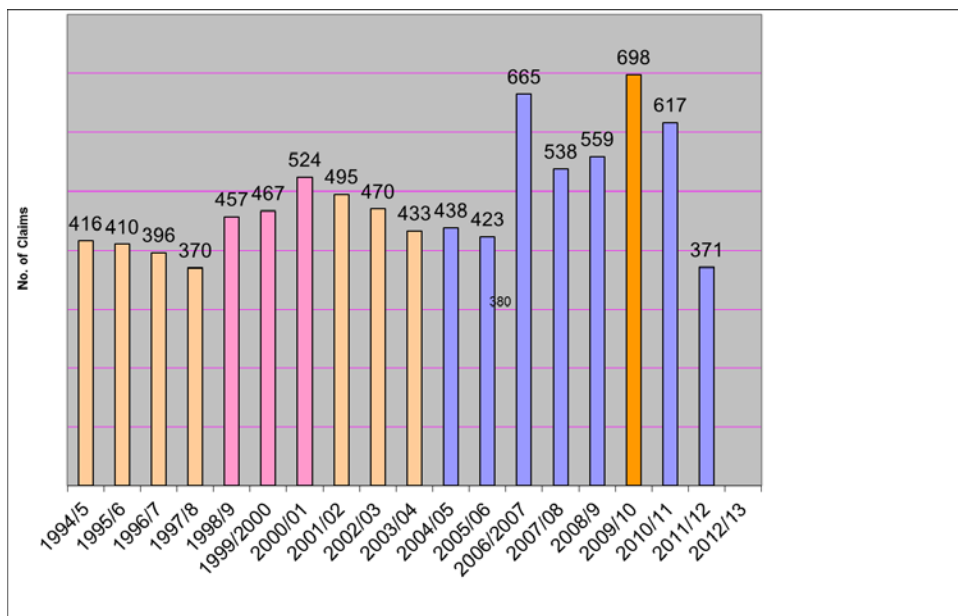
**Innovation and Efficiency Savings.** KPI17 requires the contractor to deliver efficiency and innovation savings totalling some £50,000 per annum. The threshold is five ideas with a target of 8 ideas. Whilst the number of ideas was not achieved, the SPB has accepted a report on the general savings to WCC and CCC. The undertaking of the £5M Olympic works and developing of details with Solihull MBC were two areas of savings. The introduction of Handipic system to record before and after photographs of work carried out by BB safety teams has helped reduce and repudiate insurance claims.

**Sustainability and the Environment.** The SPB agreed to adopt an amended KPI 18 requirement for Year 1 which required BB and WCC to work together to prepare a detailed Sustainability Action Report and Action Plan for County Highways ( Originally the KPI required 'The % reduction of fuel consumption of contractor's vehicles on a year on year basis'). The report captures for the first time the carbon footprint of highway services of over 24,000 tonnes of CO2 and outlines a series of actions to focus on more sustainable processes and operations in future years. Switching off street lights between midnight and 5a.m. will contribute significantly to reducing CO2 emissions.

### 3.0 Public Contacts and Insurance Claim Trends

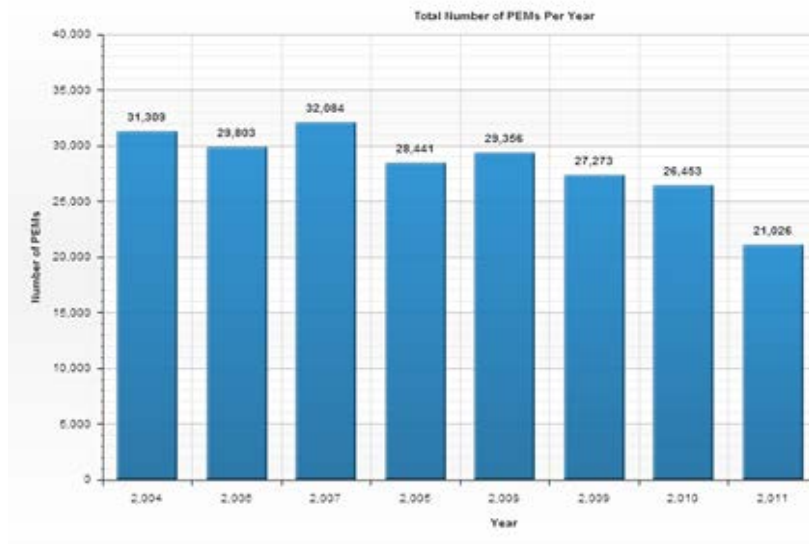
Two important data sets monitored by County Highways are the annual trend in highway insurance claims and total number of customer contacts, the latter can be further analysed by types of highway defects to help target resources.

A profile of registered highway insurance claims made over an 18 year period (Table1) shows the lowest number of claims were received in 2011/12. The current 379 claims represent a drop of some 37% compared to 2010/11 data, or a 27% reduction compared to an annual average of 484 claims.



**Table 1 Number of Insurance Claims per annum.**

3.1 In 2011, the total number of public contacts was down by some 22% from 26,453 to 21,026 as indicated in Table 2:



**Table 2 Number of Public Contacts per annum**

The trend in reduced public contacts helps demonstrate that there was no dip in service during the mobilisation and first year's operation of the HMC.

The trend supports the proactive management of highway activities using the targeted KPI's and service delivery activities of the HMC outlined in section 2.3

Other successes under the HMC include:-

- Full programme of 196Km of Surface Dressing completed
- The 57Km of structural road improvements is the largest programme delivered in 7 years.
- Significant refurbishment of some 45 bus shelters carried out
- The HMC gave Coventry City Council a contract mechanism that delivered some £5M of Olympic works which was delivered on time and budget.
- Extensive surface dressing in Coventry has been delivered for the first time in some 20 years.
- 4 new apprentices appointed in Year 1 and plans to employ more in Year 2.
- Over 105 staff were TUPE'd from Carillion to Balfour Beatty and no redundancies have been required.
- Some 40 small – medium companies are employed by BB on the contract in delivering the £20M programme of works
- The HMC was short listed as a finalist in the 2012 MJ Awards in the Innovative Procurement category.
- Detailed sustainability report produced to capture the carbon footprint of the HMC.
- A comprehensive audit of the HMC was completed in April 2012 and concluded there were robust risk management processes in place.

## **4.0 Prioritisation of Highway Maintenance Schemes**

- 4.1 The main objectives of the highway maintenance service are:-
- (i) To keep the network, carriageway and footways, free from dangerous defects.
  - (ii) To maintain and improve the structural condition (asset value) of the network.
  - (iii) To improve public satisfaction with the network.
- 4.2 The revenue and capital budget allocations are distributed across a wide range of routine and planned activities to achieve the maintenance policies and objectives. Structural maintenance allocations to each area are broadly based on lengths of roads and footways, but are also influenced by overall road condition.
- 4.3 The condition of the network is established through a regime of both visual and machine based surveys undertaken across the whole carriageway network of some 3825km, over a rolling two-year cycle. These surveys follow nationally defined criteria (United Kingdom Pavement Management System – UKPMS) to produce comparable condition data for each length of network.
- 4.4 The results from these surveys enable us to monitor and report the condition of the network, both at a national and local level, and assist us in directing available budgets towards carrying out suitable works in the most appropriate locations.
- 4.5 Data gathered from the surveys is used as a starting point in determining what the spending priorities should be and is used to establish a list of sites for further consideration by County Highways engineers. In addition, this list is also populated with sites identified through representations made by the public, Members and Locality Officers. This list is often referred to as a ‘five year programme’, but in reality is a list of sites requiring treatment, from which annual programmes of work are formulated.
- 4.6 In formulating these programmes of work, engineers will use their experience and judgement to determine the most appropriate treatments and the relative priorities of sites that have been identified as being in need of some treatment intervention. Four main factors are considered for each assessment: condition, safety, ride/walk quality and the risk of delaying treatment, both in cost and in safety terms.
- 4.7 The condition of the network is updated and reported annually, based on the latest available survey data. Any reported changes in the condition of the network over time will influence the sites included in the ‘five year programme’ and the relative priority of each. In addition, any new representations received for sites to be considered will also influence this programme.

4.8 Other factors which can and do influence the annual programmes and require a refresh of work priorities include other works on the highway (such as major utility work and development) and the effects of any extreme weather, which can cause rapid deterioration and necessitates earlier intervention.

## 5.0 Summary

- 5.1 This report shows that the first year of the 2011 HMC has been successful in terms of delivering Service, Quality and Value. Mobilising a major contract is challenging and the Year 1 outcomes give a good foundation for Year 2 and beyond. The KPI's and other management data demonstrate there was no dip in service, and in certain areas of highway service a significant improvement.
- 5.2 The Strategic Partnering Board offers a robust management structure that can challenge performance.
- 5.3 The HMC has fostered collaborative working during a period of austerity that is offering financial savings to three neighbouring authorities, sharing of best practice and delivering positive outcomes.
- 5.4 Members are invited to comment upon the processes in prioritisation of highway maintenance schemes and required flexibility necessary to enable County Highways to maintain safe roads in Warwickshire, as set out in Section 4.

	<b>Name</b>	<b>Contact Information</b>
Report Author	Andrew Savage	<a href="mailto:andrewsavage@warwickshire.gov.uk">andrewsavage@warwickshire.gov.uk</a>
Head of Service	Graeme Fitton	<a href="mailto:graemefitton@warwickshire.gov.uk">graemefitton@warwickshire.gov.uk</a>
Strategic Director	Monica Fogarty	<a href="mailto:monicafogarty@warwickshire.gov.uk">monicafogarty@warwickshire.gov.uk</a>
Portfolio Holder	Cllr Peter Butlin	<a href="mailto:cllrbutlin@warwickshire.gov.uk">cllrbutlin@warwickshire.gov.uk</a>



Warwickshire KPIs -Year 1- 2011/12

2011/2012 Performance data.

Description	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	11 month total	Thres-hold met?	Thres-hold	Target	report frequency
<b>Core KPI</b>																
<b>1- AMT Emergency Response</b> % incidents/Emergency responded to within 1 hour	95%	93%	95%	90%	80%	81%	85%	87%	79%	89%	92%	88%	no	96%	97%	M
<b>2- AMT Defects Repair</b> % defects repaired within time (24 hrs, 7 or 28 days)	N/Ap	95%	86%	95%	96%	96%	93%	92%	86%	95%	88%	92%	yes	90%	97%	M
<b>3- Winter Service</b> % priority routes treated within specified times	N/Ap	N/Ap	N/Ap	N/Ap	N/Ap	N/Ap	100%	100%	99%	99%	100%	99%	yes	99%	100%	M
<b>4- Schemes (activities) Performance</b> % of Schemes completed to agreed budget +/- 5%	N/Ap	26%	27%	29.0%	4.0%	17.0%	40.0%	55%	26%	68%	64%	39%	no	95%	98%	M
<b>5- Material testing-Schemes</b> % of Material tests adhering to the specification	100%	100%	83%	100%	N/Ap	N/Ap	N/Ap	N/Ap	N/Ap	100%	100%	98%	yes	95%	98%	M
<b>6- Gully emptying</b> Gully cleaned & running against annual Programme	95%	95%	94%	95%	97%	96%	91%	93%	91%	94%	90%	93%	yes	85%	95%	M
<b>7- Street Lighting</b> % of outages/faults fixed within 5 working days	88%	98%	100%	100%	99%	100%	100%	98%	100%	99%	100%	99%	yes	98.5%	99%	M
<b>8- Health &amp; Safety</b> - Accident Frequency Rate for Contractor and supply chain	0.00		0.00				0.00			0.00		0.00	yes	0.75	0.20	Q
<b>9-Safety inspections</b> - % of safety inspections carried out to timetable	20%	75%	75%	85%	83%	100%	100%	100%	95%	94%	100%	82%	no	98%	100%	M
<b>10-Finance</b> -Compensation Events & disputed task orders resolved within 90 days of issue being raised.	100%	100%	100%	100%	100%	100%	99%	99%	99%	99%	99%	99%	yes	98%	100%	M
<b>Non -Core KPI</b>	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	11 month	70% Core KPI met.			
<b>11: Street works</b> - % of TMA notices served correctly (Post October 2011)	N/Ap	N/Ap	N/Ap	N/Ap	N/Ap	100%	100%	98%	100%	100%	100%	100%	yes	95%	98%	M
<b>12:Performance</b> - % Schemes completed within planned timescales with no defects identified after 1 month	100%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	yes	95%	98%	M
<b>13: Quality (Schemes &amp; Activities)</b> -% of In-progress checks passing the minimum quality threshold	91%	87%	95%	58%	61%	88%	98%	91%	93%	88%	85%	85%	yes	85%	90%	M
<b>14: Winter Service</b> - Spread rate compliance- Actual salt used against estimate.	N/Ap	N/Ap	N/Ap	N/Ap	N/Ap	N/Ap	110%	107%	113%	107%	108%	108%	yes	90%	95%	M
<b>15: Customer satisfaction</b> - Members satisfaction with highways service (Annual survey)	N/Ap		N/Ap				N/Ap			94%		94%	yes	75%	100%	Q
<b>16: Customer satisfaction</b> - Staff satisfaction levels (Annual Survey)	N/Ap		N/Ap				N/Ap			82%		82%	yes	75%	100%	Q
<b>17: Innovations</b> - Number of innovations/ Efficiency implemented by contractor with value of £10k or more	Review in April 2012													5	8	A
<b>18:Environment</b> - Revised KPI 18 Action plan to be reviewed by SPB in Jan-Feb 2012	Report and Action plan to be presented to the SPB in March 2012													2%	3%	A
Red: below threshold, Green: met target													100% non-Core KPI met			