



Highways England
Performance Monitoring Statements Exceptions
Year end 2016-17

Highways England 2016-17 Performance Monitoring Statements
 Company Confidential

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Version control		
V1.0	Highways England annual return published 11th July 2017	

Statement IP5: Maintenance delivery reporting - for future development by Highways England

Statement F5.1: Maintenance unit costs and volumes

Regional Maintenance (Renewals) Data

	2016/2017			2015/2016			2014/2015			2013/2014			2012/2013		
Cost of maintaining the HE motorway & A road network per lane mile	Maint costs (£m)	Number of lane miles	Result	Maint costs (£m)	Number of lane miles	Result	Maint costs (£m)	Number of lane miles	Result	Maint costs (£m)	Number of lane miles	Result	Maint costs (£m)	Number of lane miles	Result
Highways England	1,080.4	22,118	<u>48,691.52</u>	1,099.2	22,173	<u>49,572.30</u>	1,121.2	22,195	<u>50,513.02</u>	971.4	22,158	<u>43,837.33</u>	893.4	22,168	<u>40,300.88</u>
Yorkshire & North East	168.3	3,361	50,066.12	189.8	3,349	56,661.42	117.9	3,353	53,045.93	176.5	3,358	52,571.87	172.3	3,336	51,658.48
North West	126.0	3,170	39,756.37	110.8	3,170	34,962.18	101.5	3,175	31,976.22	67.2	3,176	21,166.93	72.7	3,176	22,878.00
Midlands	224.5	4,799	46,771.34	232.6	4,782	48,639.75	246.3	4,786	51,457.57	222.7	4,787	46,516.67	183.0	4,828	37,903.54
South West	121.6	2,747	44,256.61	107.7	2,766	38,922.68	127.1	2,765	45,980.76	75.3	2,765	27,211.45	95.4	2,766	34,508.07
South East	324.9	4,924	65,972.84	374.2	4,938	75,778.36	381.3	4,925	77,422.24	330.3	4,880	67,683.33	296.0	4,868	60,810.18
East	114.5	3,186	35,936.26	99.5	3,168	31,418.84	103.0	3,191	32,290.23	122.1	3,192	38,244.65	94.1	3,195	29,444.45

Note

The costs above are based on management account figures and are adjusted by an apportionment of MAC and PFI overhead.

Statement F5.2: Renewals unit costs and volumes

Predominant Intervention Type	Unit	Pre-Efficient Baseline 14-15 Unit Rate				16-17 PIT Unit Rate				16-17 Efficiency Estimate			
		Indexed Total Outturn	Number of Units	Unit Rate	No. of schemes	Indexed Total Outturn	Number of Units	Unit Rate	No. of schemes	Unit Rate Variance	Efficiency savings	Removal of Small Samples (<=5)	Removal of PIT anomalies
Roads - Drainage	Lin. M	£46,650,578	237,268	£197	133	£37,947,169	282,496	£134	131	£62	£17,595,826	£17,595,826	£17,595,826
Roads - Drainage Each	Each	£ -	-		0	£1,216,581	14	£86,899	13				
Roads - Emergency Works	Each	£ -	-		0	£ -							
Roads - Fencing	Lin. M	£2,498,371	21,614	£116	37	£3,388,024	25,998	£130	57	£-15	£-382,808	£-382,808	£-382,808
Roads - Footway	Lin. M	£ -	-		0	£291,703	1,691	£173	3				
Roads - Geotechnics	Lin. M	£12,000,218	3,598	£3,335	23	£9,548,896	27,537	£347	20	£2,988	£82,294,952	£82,294,952	
Roads - Guardrail	Lin. M	£403,734	411	£984	4	£52,928	60	£882	1	£101	£6,084		
Roads - Kerbing	Lin. M	£1,181,083	6,829	£173	8	£299,532	152	£1,971	2	£-1,798	£-273,243		
Roads - Lighting	Each	£1,864,253	1,635	£1,140	31	£15,593,777	3,997	£3,902	54	£-2,762	£-11,036,757	£-11,036,757	
Roads - Other		£ -	-		0	£597,865	10	£59,786	10				
Roads - Roadmarkings	Lin. M	£20,307,968	2,206,337	£9	97	£23,745,085	2,050,515	£12	76	£-2	£-4,871,361	£-4,871,361	£-4,871,361
Roads - Safety Barrier	Lin. M	£24,283,276	56,332	£431	53	£35,782,319	88,380	£405	79	£26	£2,316,159	£2,316,159	£2,316,159
Roads - Signs	Each	£2,360,016	687	£3,435	37	£3,017,518	851	£3,545	31	£-110	£-93,399	£-93,399	£-93,399
Roads - Traffic Signals	Each	£51,923	1	£51,923	1	£1,856,429	102	£18,253	11	£33,670	£3,424,330		
Roads - Tunnels	Each	£ -	-		0	£11,827,503							
Structures - Bridge Joint	Each	£185,282,005	1,349	£137,352	777	£198,372,688	1,781	£111,356	520	£25,997	£46,311,465	£46,311,465	£46,311,465
Structures - Waterproofing	m2	£17,029,098	471	£36,155	90	£18,515,810	264	£70,136	68	£-33,980	£-8,970,838	£-8,970,838	
Structures - Parapet	Lin. M	£25,019,075	19,927	£1,256	22	£20,075,045	26,954	£745	19	£511	£13,766,685	£13,766,685	£13,766,685
Structures - Bearing	Each	£2,494,822	2,625	£950	3	£6,407,262	2,277	£2,815	12	£-1,864	£-4,243,987		
Structures - Other	Each	£1,201,193	52	£23,100	1	£2,775,612	33	£84,109	2	£-61,010	£-2,013,316		
Structures - Edge Protection	Each	£ -	-		0	£28,189,089	169	£166,799	51				
Structures - Bearing, Joints, Water, Para, Other	m2	£ -	-		0	£ -							
Structures - Drainage	Lin. M	£ -	-		0	£8,804,580	728	£12,094	2				
											133,829,790	£136,929,924	£74,642,567
											15/16 Efficiency Estimate		£26,336,039
											16/17 Efficiency Estimate		£74,642,567
											Register Adjustments		£38,155,130
											Total Efficiency		£139,133,736

NOTE:

The calculation of unit cost for work undertaken has been applied over a series of stages to ensure the total outturn can be associated to a predominate intervention type. Therefore the total unit is different to the units extracted from the system.

This data carries significant qualification :

- > The Unit Cost information/data is not as robust as Highways England would anticipate
- > The principal data source is the financial accounting system (Oracle) which Highways England has had to adapt to capture scheme outputs.
- > Outputs started to be captured in Oracle from 2014/15 and is based on the scheme predominant intervention (principal reason for the scheme).
- > The approach of doing all relevant work whilst on site, can impact the value of the scheme unit cost recorded. This means that unit cost comparison for year on year is not likely to be on a like for like basis, in many cases.
- > Highways England has undertaken some work on the data sets in order to enable completeness and consistency to be reported where possible.
- > Highways England has made reasonable adjustment to take account of high and low cost outliers
- > The limited number of schemes for some intervention types means that the unit cost is unlikely to be statistically robust.

F6: Effect of input price inflation

The assumptions used for inflation in the funding model for RIS1, were 4% per annum for the first three years and then 5% per annum for the last two years. This was based on forecasts for future inflation from the RICS Building Cost Information Service (BCIS) and inflation studies being conducted by DfT Strategic Finance in the second half of 2014.

There is no single index that adequately tracks inflation relevant to our specific expenditure.

BCIS calculate indices for a wide range of highway resources such as labour, equipment and materials such as cement and steel. For highway works they weight these together into an index called ROCOS which measures changes in the resource cost for highway works. We have found this index to be reliable and it has been used to underpin the network valuation. Also as the majority of our expenditure is through the payment of actual costs, albeit with target cost incentives, there is merit in tracking resource costs as an indicator of HE's inflation rate.

HE tracks a number of inflation indices but uses BCIS as the principal source of inflation forecast.

Due to the different supplier incentive models for capital projects, a reasonable assumption would be that we would be impacted by 50% of any inflation variation.

In broad terms for year 1, labour costs went up, while equipment and materials went down due to reduced oil prices and the reduction in global demand for construction materials from China. This resulted in flat inflation but it is important to note that a significant proportion of capital spend in year 1 was in connection with completion of SR10 programmes.

In Year 2 oil based products have recovered slightly from a low base, but both steel and oil product prices remain below the base year of 14/15 while labour and other resource costs are recovering. The overall effect in year 2 is predicted to be +4.8%.

Variation between inflation forecast and realised has a minimal impact on the bottom up evaluation of efficiency reported but it does potentially impact unit cost movement and the value of available funding in real terms. It therefore has the potential to influence our ability to meet Delivery Plan commitments within the funding envelope provided.

Excluding SR10 spend, we calculate that cumulative inflation to the end of year two is running at £35-45m below that funded which provided us with a net benefit of circa £20-30m to after taking supplier gain share into account. This may reverse during the remainder of RIS1.

A comprehensive analysis of the inflation risk carried by us and our supply chain would be necessary to carry out detailed assessment of inflation impact. Given the uncertainty in forecasting future inflation (particularly taking Brexit into account) we do not propose to undertake this more detailed assessment at this stage.