

# London Councils' Transport and Environment Committee

## Traffic Signals Budget 2017/18

Item No: 11

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**Summary:** This report sets out the cost to boroughs of maintaining traffic signals in London in 2017/18.

**Recommendations:** The Committee is recommended to:

- agree the cost to boroughs for maintaining traffic signals in London in 2017/18, which is £11,377,024.49; and
- agree that this cost is apportioned between boroughs, as shown in the attached table at Appendix 1.

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### Background

1. Under the terms of the GLA Act 1999, Transport for London (TfL) recharges the London boroughs its reasonable costs of operation for traffic signals works on borough roads.
2. Payments for traffic signals are calculated using a number of factors. For signals installed before 2005, costs are apportioned on population figures. For signals installed after 2005, costs are apportioned based on the actual number of aspects. An aspect is a bulb or component in a traffic signal array. For example, a red / amber / green signal head is comprised of three aspects. As such, removal of old signals and/or installation of new signals causes a change to the proportion of costs paid by the borough in which the change takes place.

### Traffic Signals Budget 2017/18

3. In the year 2015/16 a significant discount was applied to the traffic signal maintenance costs for London Boroughs arising from the savings generated by the letting by TfL of the TCMS 2 contracts for the provision and maintenance of traffic control equipment across London.

The revised rates and savings continued to apply in the current 2016/17 year, subject to inflationary increases and as such, have been rolled over again into the costs for 2017/18 budget.

4. In the last year, the total number of traffic signals aspects increased across all boroughs by 2.23%. The contractual inflation rate applied to the contract rates for 2017/18 is an Retail Price Index (RPI) figure of 2.04%.
5. The total cost to boroughs of maintaining traffic signals in London for 2017/18 is calculated to be £11,377,024.49, representing a 1.4% increase on 2016/17 costs.
6. The table in Appendix 1 shows how the cost shall be apportioned to each borough in accordance with the agreed formula.

### **Maintenance Calculations**

7. Appendix 2 provides further detail on how the figures for the estimated costs of maintenance for the coming financial year are determined and the values behind the final costings.

### **Financial Implications for London Councils**

8. There are no financial implications for London Councils. This report concerns payments from the boroughs to TfL that are required under the GLA Act 1999 (see below).

### **Legal Implications for London Councils**

9. Section 275 (3) of the GLA Act 1999 states that in relation to the Transfer of London Traffic Control System to Transport for London: "Any expenses reasonably incurred by or on behalf of Transport for London in the exercise, in relation to roads which are not GLA roads, of the functions transferred by this section may be recovered by Transport for London from the London borough councils and the Common Council in such proportions as may be agreed between Transport for London and those authorities or, in default of agreement, as may be determined by Transport for London."

### **Equalities Implications for London Councils**

10. There are no equalities implications arising from this report.

### **Appendices**

Appendix 1: Traffic Control Maintenance Costs for 2017/18

Appendix 2: Traffic Control Maintenance Calculations for 2017/18

## TRAFFIC CONTROL MAINTENANCE COSTS FOR 2017/2018

## Final Payment 2017/2018

Borough	Final Payment 2015/2016	Final Payment 2016/2017	Adjusted Final Payment 2017/2018
	[E]	[F]	[R]
Barking & Dagenham	£272,727.88	£270,561.27	£285,710.83
Barnet	£434,018.81	£429,738.34	£443,271.44
Bexley	£311,311.75	£307,131.18	£330,858.59
Brent	£390,372.92	£392,606.75	£403,221.06
Bromley	£417,194.90	£438,059.79	£442,848.52
Camden	£318,170.31	£334,376.29	£348,002.56
City of London	£60,220.37	£60,944.90	£74,651.19
Croydon	£480,106.92	£479,944.00	£486,045.74
Ealing	£439,613.80	£445,861.06	£451,997.27
Enfield	£383,562.33	£389,530.64	£423,180.46
Greenwich	£340,205.31	£328,921.63	£349,136.51
Hackney	£314,660.40	£317,752.25	£332,659.71
Hammersmith & Fulham	£244,211.50	£247,242.48	£263,630.95
Haringey	£320,631.53	£324,240.08	£332,633.38
Harrow	£296,484.76	£297,403.79	£299,830.17
Havering	£350,579.58	£354,764.05	£363,826.30
Hillingdon	£382,485.48	£373,011.81	£383,965.58
Hounslow	£301,796.88	£305,345.08	£317,012.95
Islington	£260,603.23	£269,725.51	£273,200.92
Kensington & Chelsea	£225,911.76	£226,959.74	£243,126.15
Kingston	£214,103.61	£217,733.04	£240,281.15
Lambeth	£401,760.95	£397,411.22	£419,932.68
Lewisham	£343,441.96	£352,679.46	£355,088.88
Merton	£280,124.59	£289,904.28	£303,054.47
Newham	£406,822.20	£403,659.10	£409,700.96
Redbridge	£365,108.68	£374,841.87	£389,661.07
Richmond	£264,098.21	£270,001.36	£268,423.27
Southwark	£367,209.53	£380,149.16	£372,742.71
Sutton	£249,675.12	£257,677.23	£259,843.96
Tower Hamlets	£289,565.10	£289,837.64	£305,503.51
Waltham Forest	£358,394.04	£355,259.45	£374,659.59
Wandsworth	£369,826.04	£374,920.88	£388,014.11
Westminster	£408,463.27	£425,746.29	£441,307.85
<b>Total</b>	<b>£10,863,463.73</b>	<b>£10,983,941.61</b>	<b>£11,377,024.49</b>

## Notes:

- The Final Payments for 2016/2017 **[F]** were based on:
  - signal aspect changes as a forecast up to 31 March 2016,
  - an adjustment for the difference between actual aspect changes for 2015/2016 payment and the changes that had been forecast, and
- The discount of 18% based on the significant savings generated by the letting of the new TCMS2 contract first applied to the 2015/2016 costs **[E]**, was imbedded in the running figures for calculations at that time and as such rolls over again into the costs for 2017/2018.
- Year-on-year charges have increased 3.58% pan-London, against a background of pan-London signal aspect growth at 2.23% on applicable borough sites. The inflationary increase applied to determine the costs for 2017/2018 is 2.04%.
- The Adjusted Final Payments for 2017/2018 **[R]** are based on:
  - signal aspect changes as a forecast up to 31 March 2017,
  - an adjustment for the difference between actual aspect changes for 2016/2017 payment and the changes that had been forecast

## TRAFFIC CONTROL MAINTENANCE CALCULATIONS FOR 2017/18

- 1) Each year, the traffic control maintenance calculations take into account changes (increases and decreases) in aspect counts for sites that exceed 10% of the count prior to the change. Where works on existing sites are developer-led and lead to a qualifying decrease, the resultant saving is passed on to the borough. Where works are developer-led and lead to an increase and TfL has/will receive a commuted sum for maintenance, then these will not qualify as 'borough funded' for the duration the commuted sum covers. (An aspect is any lit element of a traffic signal site – a red man, an amber signal, a No Right Turn Box Sign, a Pedestrian Countdown unit, a wait indicator)
- 2) The age of a site (date of initial commissioning) impacts on how the costs are determined by two categories:
  - a) For borough funded sites - first commissioned before 01 April 2005, remains based on the per capita charge from 2005; therefore each borough paid an amount for all the signals in their borough based on the human population.
  - b) For new aspects – on both sites first commissioned on or after 01 April 2005 or for new aspects at other sites, there is a per aspect charge which means net increases in aspects at sites that fall in the borough.
- 3) Aspect changes are sampled on six-monthly timeframe:
  - Item 1)** actual changes for October-March of last Financial Year
  - Item 2)** actual changes for April-September of the current Financial Year
  - Item 3)** estimated changes between October-March of the current Financial Year

As an example of how these data sets affect the figures, the following model is applied:

Costs for Financial Year	Calculation Date	Six month period for aspect change figures								
		01/04/2013	01/10/2013	01/04/2014	01/10/2014	01/04/2015	01/10/2015	01/04/2016	01/10/2016	01/04/2017
2014/2015	Nov-13	ACTUAL	ACTUAL	ESTIMATE						
2015/2016	Nov-14			ACTUAL	ACTUAL	ESTIMATE				
2016/2017	Nov-15					ACTUAL	ACTUAL	ESTIMATE		
2017/2018	Nov-16							ACTUAL	ACTUAL	ESTIMATE

- For **Item 1)** and **Item 2)**, "Actual" aspect changes are determined from TfL's asset database records.
  - An "Estimate" of undelivered aspect changes is identified from up-coming projects within TfL's Delivery Team's Programme.
  - **Item 1)** corrects for any error in the previous year's **Item 3)** when applied to the calculation (see the Calculation table below).
- 4) These aspect figures are used to determine the quantity of aspects that qualify in category **a)** or **b)** for the charges. The per capita charge and per aspect charge are index-linked and uplifted each year by September's RPI value (published in or around mid-October).
    - For category **a)** the cumulative reduction in aspect count for changes over time is used to determine the remaining percentage of aspects at older sites.
    - For category **b)** the count of all aspects added and the count of those removed from sites first commissioned after 01 April 2005 are added and multiplied by the per aspect rate.
 Therefore, any changes in the charges are caused by RPI and the estimated increase/decrease of traffic signal aspect totals under category **a)** and **b)**.

On this basis, each year TfL determine the final costings as the sum of these two calculations:

Calculation	Six month period / changes logged for 2017/2018 Figures
Estimated Charges for coming financial year on the basis of anticipated aspect totals at the start of the April in the coming year	01 October 2016 – 31 March 2017 Estimated Changes ( <b>Item 3)</b> )
	01 April 2016 – 30 September 2016 Actual Changes ( <b>Item 2)</b> )
Adjustment for the equivalent period that was estimated for the current year's costs	01 October 2015 – 31 March 2016 Actual Changes ( <b>Item 1)</b> )

Each part of this calculation is derived using the applicable charge/rate for the year in question (i.e. the adjustment uses current year, not future year rates for the re-calculation).

$$\left( \frac{\text{Qualifying count of aspects at sites first commissioned before 01-APR-2005}}{\text{Count of qualifying aspects as at 01-APR-2005}} \times \text{Per capita charge} \right) + \left( \text{Qualifying count of aspects added since 01-APR-2005} \times \text{Per aspect rate} \right)$$

## TRAFFIC CONTROL MAINTENANCE COSTS FOR 2017/18

Final Payment for 2017/2018 = Estimated payment for 2017/2018 with adjustment to 2016/2017 Charges (adjustment based on ACTUAL figures)

Borough	2016/2017 Costs				
	ESTIMATED total cost of signal maintenance 2016/2017 (£) based on estimated values for 6 months to 31-MAR-2016	ACTUAL total cost of signal maintenance 2016/2017 (£)	DIFFERENCE in costs of signal maintenance arising from correction for actual values up to 31-MAR-2016	Estimated payment 2017/2018	Adjusted payment 2017/2018
	[G]	[O]	[P]	[Q]	[R]
	(Estimated (un-adjusted) Payment calculated for current financial year) as per last year's costings approved by TEC*	(based on all actual additions / removals* to 31-MAR of current calendar year)	(Estimated Cost last year less Actual Cost for last year)  (Column [O] - Column [G])	(based on actual additions / removals* up to 30-SEP of current calendar year and estimated additions / removals* for the following six months)	(Column [Q] adjusted by Column [P])
Barking & Dagenham	£273,664.47	£274,046.52	£382.05	£285,328.78	£285,710.83
Barnet	£434,103.85	£434,103.85	£0.00	£443,271.44	£443,271.44
Bexley	£309,742.24	£309,579.73	-£162.51	£331,021.10	£330,858.59
Brent	£394,854.16	£394,854.16	£0.00	£403,221.06	£403,221.06
Bromley	£433,686.33	£433,533.51	-£152.82	£443,001.34	£442,848.52
Camden	£329,146.30	£331,403.59	£2,257.30	£345,745.26	£348,002.56
City of London	£60,092.65	£60,092.65	£0.00	£74,651.19	£74,651.19
Croydon	£483,810.74	£481,594.85	-£2,215.89	£488,261.63	£486,045.74
Ealing	£439,315.10	£439,773.56	£458.46	£451,538.81	£451,997.27
Enfield	£386,995.91	£386,995.91	£0.00	£423,180.46	£423,180.46
Greenwich	£336,081.44	£337,304.00	£1,222.56	£347,913.95	£349,136.51
Hackney	£316,614.97	£321,271.05	£4,656.09	£328,003.62	£332,659.71
Hammersmith & Fulham	£247,692.04	£250,224.36	£2,532.32	£261,098.62	£263,630.95
Haringey	£324,164.26	£325,619.40	£1,455.14	£331,178.24	£332,633.38
Harrow	£298,901.37	£296,034.34	-£2,867.02	£302,697.19	£299,830.17
Havering	£354,915.69	£356,291.07	£1,375.38	£362,450.92	£363,826.30
Hillingdon	£374,907.27	£375,121.49	£214.22	£383,751.36	£383,965.58
Hounslow	£306,709.82	£304,407.23	-£2,302.58	£319,315.54	£317,012.95
Islington	£269,420.06	£269,420.06	£0.00	£273,200.92	£273,200.92
Kensington & Chelsea	£227,166.20	£229,993.37	£2,827.17	£240,298.98	£243,126.15
Kingston	£217,733.04	£218,282.02	£548.98	£239,732.17	£240,281.15
Lambeth	£397,487.04	£397,945.50	£458.46	£419,474.22	£419,932.68
Lewisham	£352,224.55	£350,008.66	-£2,215.89	£357,304.77	£355,088.88
Merton	£286,756.82	£286,756.82	£0.00	£303,054.47	£303,054.47
Newham	£402,749.27	£402,115.16	-£634.12	£410,335.08	£409,700.96
Redbridge	£374,538.60	£374,691.42	£152.82	£389,508.25	£389,661.07
Richmond	£270,304.63	£268,012.33	-£2,292.30	£270,715.57	£268,423.27
Southwark	£382,351.69	£371,959.93	-£10,391.76	£383,134.47	£372,742.71
Sutton	£256,009.22	£255,245.12	-£764.10	£260,608.06	£259,843.96
Tower Hamlets	£289,913.46	£294,039.60	£4,126.14	£301,377.37	£305,503.51
Waltham Forest	£354,652.90	£357,938.53	£3,285.63	£371,373.96	£374,659.59
Wandsworth	£375,375.80	£375,834.26	£458.46	£387,555.65	£388,014.11
Westminster	£434,487.13	£404,806.61	-£29,680.52	£470,988.37	£441,307.85
<b>Total</b>	<b>£10,996,569.00</b>	<b>£10,969,300.66</b>	<b>-£27,268.34</b>	<b>£11,404,292.85</b>	<b>£11,377,024.51</b>

Notes:

	Inflationary increase in total cost of maintaining signals installed before 01-APR-2005	Cost Per Aspect
2017/2018	2.04%	£77.97
2016/2017	0.78%	£76.41
TCMS2 Savings	-18.00%	£75.82
2015/2016	2.30%	£92.46
2014/2015	3.20%	£90.38
2013/2014	2.65%	£87.58
2012/2013	5.59%	£85.32
2011/2012	4.60%	£80.80
2010/2011	0.00%	£77.25
2009/2010	4.37%	£77.25
2008/2009	2.70%	£74.01
2007/2008	2.50%	
2006/2007	1.90%	

\*Additions and removal of aspects is calculated on the basis that more than 10% of aspects added or removed from the site and / or civil engineering work which is paid for by the borough is required