

7. Service Specification

Route: 161

Contract Reference: QC59802

This Service Specification forms section 7 of the ITT and should be read in conjunction with the ITT document, Version 1 dated 29 September 2011.

You are formally invited to tender for the provision of the bus service detailed below and in accordance with this Service Specification. Tenderers must ensure that a Compliant Tender is submitted and this will only be considered for evaluation if all parts of the Tender documents, as set out in section 11, have been received by the Corporation by the Date of Tender. The Tender must be fully completed in the required format, in accordance with the Instructions to Tenderers. A Compliant Tender must comply fully with the requirements of the Framework Agreement; adhere to the requirements of the Service Specification; and reflect the price of operating the Services with new vehicles.

Route Number	161
Terminus Points	Chislehurst War Memorial and North Greenwich Station
Contract Basis	Incentivised
Commencement Date	17 th March 2018
Vehicle Type	87 capacity, dual door, double deck vehicles
Current Maximum Approved Dimensions	10.5 metres long and 2.55 metres wide
New Vehicles Mandatory	Yes
Hybrid Price Required	Yes
Sponsored Route	No
Advertising Rights	Operator
Minimum Performance Standard	Average Excess Wait Time - No more than 1.20 minutes
Extension Threshold	Average Excess Wait Time Threshold - 1.10 minutes
Minimum Operated Mileage Standard	No less than 98%

The Date of Tender for this ITT is: No later than 12 Noon on Monday 20th March 2017

Tenderers should refer to section 3 of Part A for the Service Specification Explanatory Notes and Appendix B of section 5 for the Example Service Specification of the ITT document.

SERVICE SPECIFICATION

- 1) SERVICE SPEC - ROUTE SPECIFICATION INFORMATION
- 2) NOTES
- 3) SCHEDULE REQUIREMENTS & PINCHPOINTS
- 4) OPERATIONAL CONSIDERATIONS
- 5) ROUTE RECORD, CURRENT PERFORMANCE, QSI BY TIME OF DAY, IBUS MILEAGE & QSI POINTS

2) NOTES

Proposed Changes:

At this time, no changes are proposed to the existing service for introduction prior to the commencement of the new Route Agreement for Route No. 161.

Tenderers should note that there are no changes proposed as part of this Service Specification for Route No. 161.

Operators should provide the following prices:

1. Annual diesel price - based on minimum 5 year contract.
2. Annual diesel-electric hybrid price - based on minimum 5 year contract.

Tenderers are encouraged to offer alternative vehicle options in accordance with Part 9 of their tender, including but not limited to:

1. New two door, single staircase vehicles inspired by the New Routemaster in respect of both their external and internal design, to the appropriate specification agreed between TfL and the manufacturers.
2. Vehicles that offer genuine increased capacity on two axles and are certified as such.
3. Modifications to reduce emissions and fuel consumption (including energy storage, engine stop/start, extended zero-emission range and/or energy efficient components)
4. Existing vehicles.

3) SCHEDULE REQUIREMENTS & PINCHPOINTS

3.1) MONDAY TO FRIDAY SCHEDULE REQUIREMENTS & PINCHPOINTS

Chislehurst War Memorial to North Greenwich Station, Bus Station			North Greenwich Station, Bus Station to Chislehurst War Memorial		
First departure no later than 0430.			First departure no later than 0520.		
0425 - 0510	Every 20 minutes		0515 - 0600	Every 20 minutes	
0511 - 0555	Every 15 minutes		0601 - 0645	Every 15 minutes	
0556 - 1900	Every 10 minutes		0646 - 1945	Every 10 minutes	
1901 - 0025	Every 12 minutes		1946 - 0115	Every 12 minutes	
Last departure no earlier than 0020.			Last departure no earlier than 0110.		
Pinchpoints					
Woolwich Arsenal Station	0740 - 0910	10 minutes	Eltham Station	0730 - 0900	10 minutes
	1505 - 1635	10 minutes		1500 - 1630	10 minutes

3.2) MONDAY TO FRIDAY SCHOOLDAYS SCHEDULE REQUIREMENTS

Chislehurst, War Memorial to North Greenwich Station, Bus Station			North Greenwich Station, Bus Station to Chislehurst War Memorial		
First departure no later than 0430.			First departure no later than 0520.		
0425 - 0510	Every 20 minutes		0515 - 0600	Every 20 minutes	
0511 - 0555	Every 15 minutes		0601 - 0645	Every 15 minutes	
0556 - 1445	Every 10 minutes		0646 - 0700	Every 10 minutes	
1446 - 1545	Every 8-9 minutes (7 buses per hour)		0701 - 0800	Every 8-9 minutes (7 buses per hour)	
1546 - 1900	Every 10 minutes		0801 - 1945	Every 10 minutes	
1901 - 0025	Every 12 minutes		1946 - 0115	Every 12 minutes	
Last departure no earlier than 0020.			Last departure no earlier than 0110.		
Pinchpoints					
Woolwich Arsenal Station	0735 - 0905	10 minutes	Eltham Station	0735 - 0835	9 minutes
	1525 - 1625	9 minutes		0836 - 0905	10 minutes
	1626 - 1655	10 minutes		1500 - 1630	10 minutes

3) SCHEDULE REQUIREMENTS & PINCHPOINTS - Continued

3.2) SATURDAY AND GOOD FRIDAY SCHEDULE REQUIREMENTS & PINCHPOINTS

Chislehurst, War Memorial to North Greenwich Station, Bus Station			North Greenwich Station, Bus Station to Chislehurst War Memorial		
First departure no later than 0430.			First departure no later than 0520.		
0425 - 0730	Every 30 minutes		0515 - 0745	Every 30 minutes	
0731 - 0830	Every 15 minutes		0746 - 0845	Every 15 minutes	
0831 - 1645	Every 10 minutes		0846 - 1750	Every 10 minutes	
1646 - 0025	Every 12 minutes		1751 - 0115	Every 12 minutes	
Last departure no earlier than 0020.			Last departure no earlier than 0110.		
Pinchpoints					
Woolwich Arsenal Station	0935 - 1105	10 minutes	Eltham Station	0930 - 1100	10 minutes

3.3) SUNDAY AND PUBLIC HOLIDAYS (EXCEPT GOOD FRIDAY AND CHRISTMAS DAY) SCHEDULE REQUIREMENTS & PINCHPOINTS

Chislehurst, War Memorial to North Greenwich Station, Bus Station			North Greenwich Station, Bus Station to Chislehurst War Memorial		
First departure no later than 0620.			First departure no later than 0605.		
0615 - 0850	Every 30 minutes		0600 - 0905	Every 30 minutes	
0851 - 0935	Every 15 minutes		0906 - 0935	Every 15 minutes	
0936 - 0025	Every 12 minutes		0936 - 0115	Every 12 minutes	
Last departure no earlier than 0020.			Last departure no earlier than 0110.		
Pinchpoints					
Woolwich Arsenal Station	1030 - 1130	12 minutes	Eltham Station	1035 - 1135	12 minutes

Tenderers must identify the cost of the Boxing Day element of this service separately.

4) OPERATIONAL CONSIDERATIONS

- 4.1) Route No. 161 can suffer unpredictable traffic delays in the Eltham, Woolwich Town Centre and Chislehurst War Memorial areas.
- 4.2) There can be unpredictable traffic delays and congestion around the A102 flyover and Woolwich Ferry due to traffic seeking alternative routeing if there are problems on the A2.
- 4.3) Football matches at Charlton Football Club can also cause traffic congestion in the Woolwich Road area.
- 4.4) Crossrail will connect the City, Canary Wharf, the West End and Heathrow Airport to commuter areas east and west of the capital. Major construction of the railway began in 2010, with the first services expected to commence through the central London tunnelled section in late 2018. The full Crossrail service will be operating from Heathrow and Reading to Abbey Wood and Shenfield in late 2019. The construction impacts of Crossrail could affect Route No. 161 and it is anticipated that some passenger demand for Route No. 161 may shift to this line when it opens. Route No. 161 will be reviewed after the opening date.

5) ROUTE RECORD, CURRENT PERFORMANCE, QSI BY TIME OF DAY, IBUS MILEAGE & QSI POINTS

- 5.1) ROUTE RECORD
As per Busnet printout.
- 5.2) CURRENT PERFORMANCE
As per current print out.
- 5.3) QSI BY TIME OF DAY
As per current print out.
- 5.4) IBUS MILEAGE & QSI POINTS
As per current print out.

LONDON BUSES - ROUTE DESCRIPTION

ROUTE 161: Chislehurst, War Memorial - North Greenwich

Date of Structural Change: 17 March 2018.

Date of Service Change: 17 March 2018.

Reason for Issue: New tender.

STREETS TRAVERSED

Towards North Greenwich: Pound Way, Royal Parade, Centre Common Road, Chislehurst High Street, Red Hill, White Horse Hill, Mottingham Road, Court Road, Court Yard, Well Hall Road, Well Hall Roundabout, Well Hall Road, Shooters Hill Road, Baker Road, Stadium Road, Ha Ha Road, Woolwich New Road, Grand Depot Road, Woolwich New Road, Beresford Street, Woolwich High Street, Woolwich Church Street, Woolwich Road, Horn Lane Roundabout, Peartree Way, Commercial Way, Southern Way, Pilot Busway, Edmund Halley Way, North Greenwich Bus Station.

Special Journey towards North Greenwich between Woolwich New Road and Woolwich Road:

Special journey, when Woolwich Ferry Roundabout is blocked. operate from Woolwich New Road, then via Vincent Road, Burrage Road, Plumstead Road, Woolwich New Road, Ha Ha Road, Repository Road, Hillreach, Little Heath, Charlton Park Road, The Village, Charlton Church Lane, Anchor And Hope Lane rejoining line of route at Woolwich Road.

Towards Chislehurst, War Memorial: North Greenwich Bus Station, Edmund Halley Way, Pilot Busway, Southern Way, Commercial Way, Peartree Way, Horn Lane Roundabout, Woolwich Road, Woolwich Church Street, John Wilson Street, Castile Road, Monk Street, Calderwood Street, Thomas Street, Woolwich New Road, Ha Ha Road, Stadium Road, Baker Road, Shooters Hill Road, Well Hall Road, Well Hall Roundabout, Well Hall Road, Court Yard, Court Road, Mottingham Road, White Horse Hill, Red Hill, Chislehurst High Street, Centre Common Road, Bromley Lane, Pound Way.

Special Journey towards Chislehurst, War Memorial between Woolwich Road and Castile Road:

Special journey, when Woolwich Ferry Roundabout is blocked. operate from Woolwich Road, then via Anchor And Hope Lane, Charlton Church Lane, The Village, Charlton Park Road, Little Heath, Hillreach, Artillery Place, John Wilson Street rejoining line of route at Castile Road.

AUTHORISED STANDS, CURTAILMENT POINTS, & BLIND DESCRIPTIONS

Please note that only stands, curtailment points, & blind descriptions as detailed in this contractual document may be used.

CHISLEHURST, WAR MEMORIAL

Private stand for 2 buses on south side of Pound Way between the two arms of Royal Parade.

Buses proceed from Pound Way direct to stand, departing to Pound Way. Set down in Pound Way, at Stop T (33313 - Chislehurst War Memorial, Last Stop on LOR: 33313 - Chislehurst War Memorial) and pick up in Pound Way, at Stop T (33313 - Chislehurst War Memorial, First Stop on LOR: 33313 - Chislehurst War Memorial).

AVAILABILITY:	At any time.
OPERATING RESTRICTIONS:	No more than 2 buses on Route 161 should be scheduled to stand at any one time.
MEAL RELIEFS:	No meal relief vehicles to stand at any time.
FERRY VEHICLES:	No ferry vehicles to park on stand at any time.
BLIND DISPLAY:	Chislehurst, War Memorial.
OTHER INFORMATION:	No toilet facilities available.

MOTTINGHAM VILLAGE (from NORTH GREENWICH)

Buses proceed from Court Road via Mottingham Road, Grove Park Road and Mottingham Road departing to Court Road. Set down in Mottingham Road, at Alighting Point (14386 - Mottingham Road / Court Road, Last Stop on LOR: 9818 - Mottingham Station #) and pick up in Court Road, at Stop ML (7584 - Court Road / Mottingham Road, First Stop on LOR: 7584 - Court Road / Mottingham Road).

AVAILABILITY:	At any time.
OPERATING RESTRICTIONS:	Turning Point Only - Buses must not stand
BLIND DISPLAY:	Mottingham.

ELTHAM STATION

Private stand for up to 9 buses in bus station adjacent to Eltham Station on east side of Well Hall Road, facing west in centre parking area.

From Chislehurst, War Memorial.

Buses proceed from Well Hall Road via Eltham Bus Station to stand, departing via Eltham Bus Station to Well Hall Road. Set down in Eltham Bus Station, at Alighting Point (40082 - Eltham Bus Station #, Last Stop on LOR: 26665 - Eltham Church / Well Hall Road) and pick up in Well Hall Road, at Stop E (25751 - Eltham Station # / Lassa Road, First Stop on LOR: 25751 - Eltham Station # / Lassa Road).

From North Greenwich.

Buses proceed from Well Hall Road via Eltham Bus Station to stand, departing via Eltham Bus Station to Well Hall Road. Set down in Well Hall Road, at Stop D (25749 - Eltham Station # / Sherard Road, Last Stop on LOR: 25749 - Eltham Station # / Sherard Road) and pick up in Well Hall Road, at Stop C (37421 - Eltham Station # / Sherard Road, First Stop on LOR: 37421 - Eltham Station # / Sherard Road).

AVAILABILITY:	At any time.
OPERATING RESTRICTIONS:	Unscheduled curtailments only.
MEAL RELIEFS:	No meal relief vehicles to stand at any time.
FERRY VEHICLES:	No ferry vehicles to park on stand at any time.
BLIND DISPLAY:	Eltham Station.

WOOLWICH COMMON, QUEEN ELIZABETH HOSPITAL

Public stand for 7 buses in marked areas in Bus Parking Area on east side of Stadium Road opposite Ranken House.

From Chislehurst, War Memorial.

Buses proceed from Stadium Road via Bus Standing Area to stand, departing via Bus Standing Area to Stadium Road. Set down in Stadium Road, at Stop H3 (BP2729 - Queen Elizabeth Hospital / West Entrance, Last Stop on LOR: BP2729 - Queen Elizabeth Hospital / West Entrance) and pick up in Stadium Road, at Stop H4 (35591 - Queen Elizabeth Hospital / West Entrance, First Stop on LOR: 35591 - Queen Elizabeth Hospital / West Entrance).

From North Greenwich.

Buses proceed from Stadium Road via Bus Standing Area to stand, departing via Bus Standing Area to Stadium Road. Set down in Stadium Road, at Stop H2 (35503 - Queen Elizabeth Hospital / Main Entrance, Last Stop on LOR: 35503 - Queen Elizabeth Hospital / Main Entrance) and pick up in Stadium Road, at Stop H3 (BP2729 - Queen Elizabeth Hospital / West Entrance, First Stop on LOR: BP2729 - Queen Elizabeth Hospital / West Entrance).

AVAILABILITY:	At any time.
OPERATING RESTRICTIONS:	Unscheduled curtailments only.
MEAL RELIEFS:	No meal relief vehicles to stand at any time.
FERRY VEHICLES:	No ferry vehicles to park on stand at any time.
BLIND DISPLAY:	Queen Elizabeth Hospital.

WOOLWICH, BERESFORD STREET (from Chislehurst, War Memorial)

Public stand for ten buses on south side of Beresford Street and Woolwich High Street in 3 parts:

1. For two buses commencing 25 metres south east of Macbean Street extending 31 metres south east.
2. For three buses as an overflow stand commencing 4 metres north west of lamp standard 06A0121 extending 36 metres south east.
3. For five buses as an overflow stand commencing 4 metres west of lamp standard 16AA1549 extending 61 metres east.

Buses proceed from Beresford Street direct to stand, departing via Beresford Street and Woolwich High Street to John Wilson Street. Set down in Beresford Street, at Alighting Point (32784 - Beresford Street / Mcbean Street, Last Stop on LOR: 3681 - Beresford Sq / Woolwich Arsenal Stn [dlr]) and pick up in John Wilson Street, at Stop Y (37259 - John Wilson Street / Powis Street, First Stop on LOR: 37259 - John Wilson Street / Powis Street).

AVAILABILITY:	At any time.
OPERATING RESTRICTIONS:	Unscheduled curtailments only.
MEAL RELIEFS:	No meal relief vehicles to stand at any time.
FERRY VEHICLES:	No ferry vehicles to park on stand at any time.
BLIND DISPLAY:	Woolwich.

CHARLTON, ANCHOR & HOPE LANE (from Chislehurst, War Memorial)

Public stand for two buses on east side of Anchor & Hope Lane, commencing 89 metres south of and opposite Bugsbys Way extending 20 metres north.

Buses proceed from Woolwich Road via Anchor And Hope Lane to stand, departing via Anchor And Hope Lane to Woolwich Road. Set down in Woolwich Road, at Stop F (18828 - Charlton Station # / Woolwich Road, Last Stop on LOR: 18828 - Charlton Station # / Woolwich Road) and pick up in Woolwich Road, at Stop E (26701 - Charlton Station / Woolwich Road, First Stop on LOR: 26701 - Charlton Station / Woolwich Road).

AVAILABILITY:	At any time.
OPERATING RESTRICTIONS:	Unscheduled curtailments only.
MEAL RELIEFS:	No meal relief vehicles to stand at any time.
FERRY VEHICLES:	No ferry vehicles to park on stand at any time.
BLIND DISPLAY:	Charlton Station.

NORTH GREENWICH STATION

Private stand in three sections for 21 buses in Bus Parking Areas within North Greenwich Bus Station complex:

1 - offside facing south commencing 6.7 metres south of lamp standard No. NG18 and extending 51.8 metres north.

2 - facing north commencing 11.5 metres north of lamp standard No. NG07 and extending 95.8 metres south.

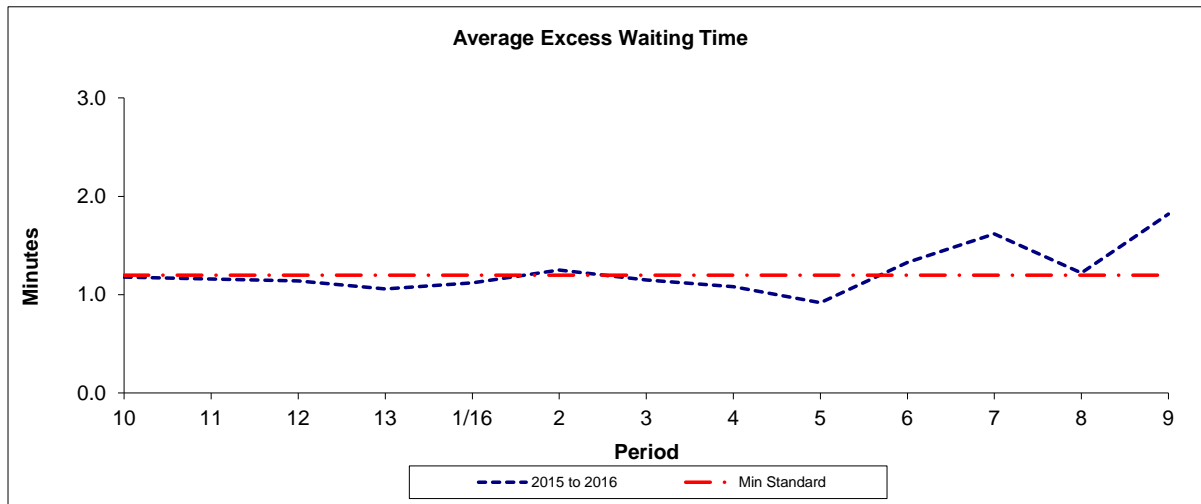
3 - offside facing north opposite Section 2 stand and extending 87.3 metres south.

Buses proceed from North Greenwich Bus Station direct to stand, departing to North Greenwich Bus Station. Set down in North Greenwich Bus Station, at Stop E (BP2277 - North Greenwich Station <>, Last Stop on LOR: BP2277 - North Greenwich Station <>) and pick up in North Greenwich Bus Station, at Stop A (BP2273 - North Greenwich Station <>, First Stop on LOR: BP2273 - North Greenwich Station <>).

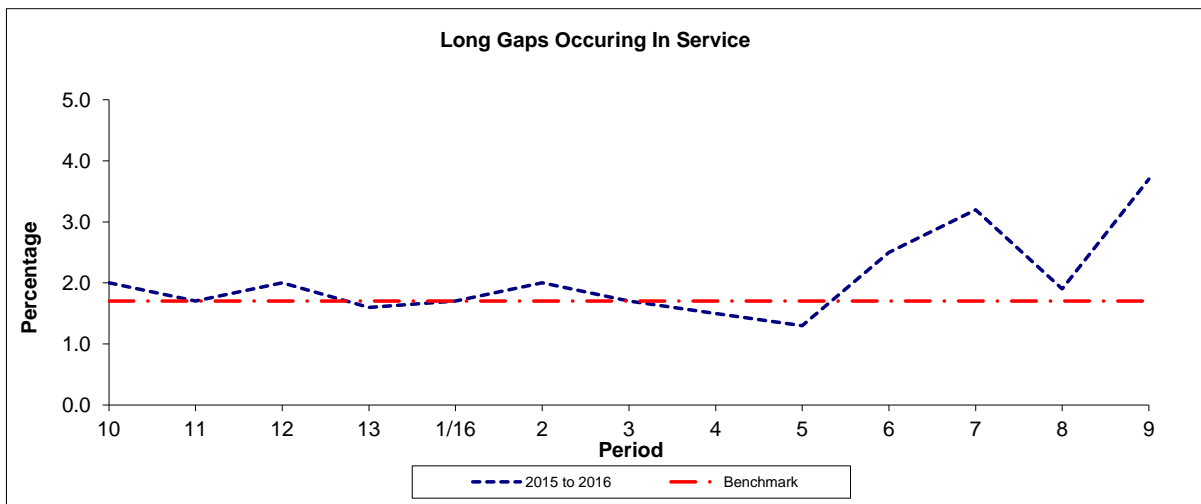
AVAILABILITY:	At any time.
OPERATING RESTRICTIONS:	No more than 2 buses on Route 161 should be scheduled to stand at any one time.
MEAL RELIEFS:	No meal relief vehicles to stand at any time.
FERRY VEHICLES:	No ferry vehicles to park on stand at any time.
BLIND DISPLAY:	North Greenwich.
OTHER INFORMATION:	LBSL toilet facilities available 24 hours.

PART B - PERFORMANCE STATISTICS

Route 161



Period	10	11	12	13	1/16	2	3	4	5	6	7	8	9
2015 to 2016	1.18	1.16	1.14	1.06	1.12	1.25	1.15	1.08	0.92	1.33	1.62	1.22	1.82
Min Standard	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20



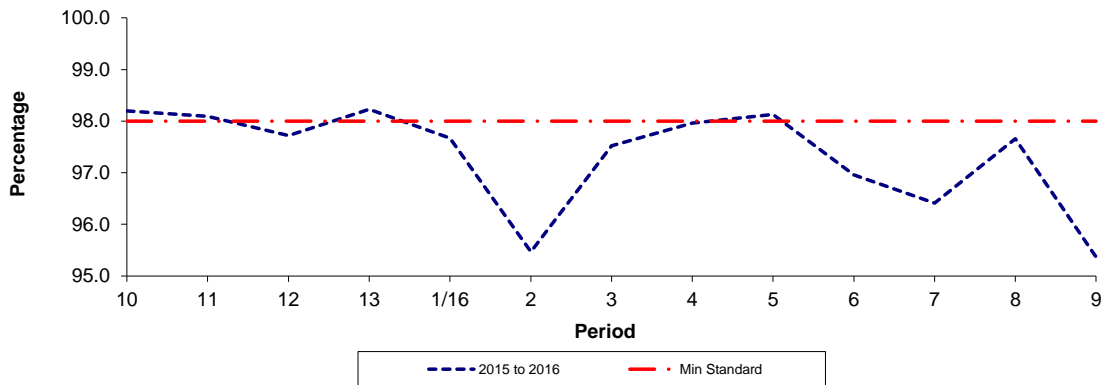
Period	10	11	12	13	1/16	2	3	4	5	6	7	8	9
2015 to 2016	2.0	1.7	2.0	1.6	1.7	2.0	1.7	1.5	1.3	2.5	3.2	1.9	3.7
Benchmark	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7

Note : Reliability is actual performance under full iBus (4 weeks data).
Minimum Standards and Benchmarks are those applicable under the new contract.

PART B - PERFORMANCE STATISTICS

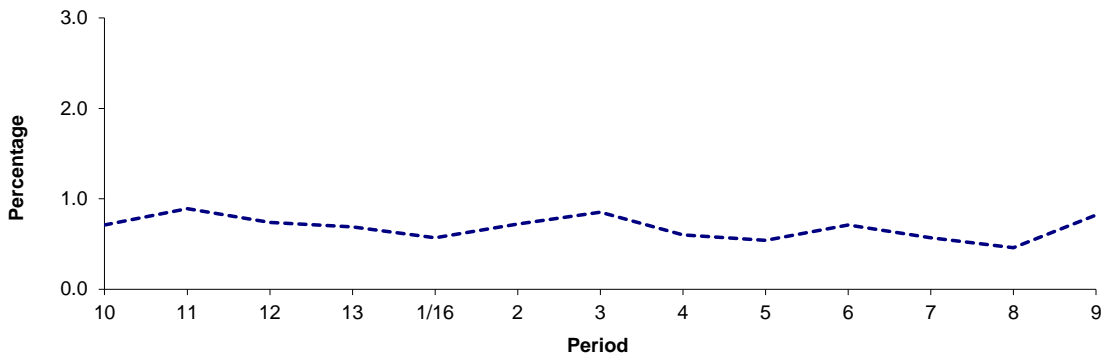
Route 161

Mileage Operated



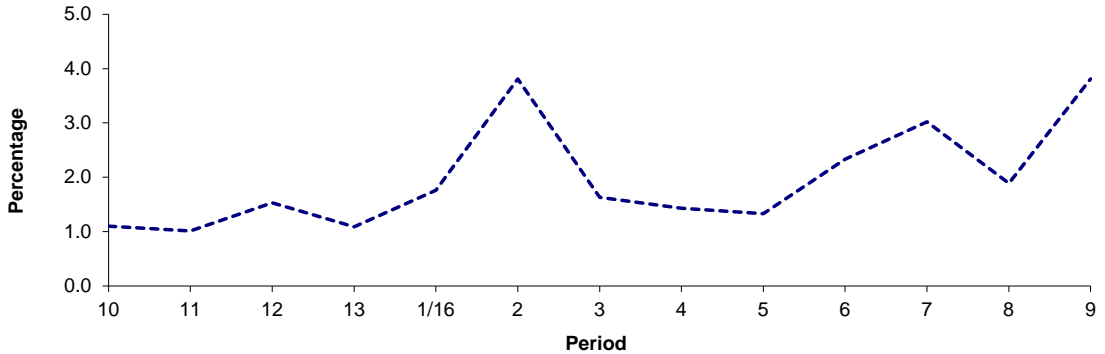
Period	10	11	12	13	1/16	2	3	4	5	6	7	8	9
2015 to 2016	98.20	98.09	97.72	98.23	97.67	95.47	97.52	97.96	98.13	96.96	96.41	97.66	95.37
Min Standard	98.00	98.00	98.00	98.00	98.00	98.00	98.00	98.00	98.00	98.00	98.00	98.00	98.00

Deductible Mileage



Period	10	11	12	13	1/16	2	3	4	5	6	7	8	9
2015 to 2016	0.71	0.89	0.74	0.69	0.57	0.72	0.85	0.60	0.54	0.71	0.57	0.46	0.82

Non Deductible Mileage



Period	10	11	12	13	1/16	2	3	4	5	6	7	8	9
2015 to 2016	1.10	1.01	1.53	1.09	1.76	3.81	1.63	1.43	1.33	2.33	3.02	1.89	3.81

Note: Mileage is based on 4 weeks data

ROUTE 161 - FULL iBUS RESULTS BY TIME OF DAY
QUARTER 3 15/16 TO QUARTER 2 16/17 (19/09/2015 - 16/09/2016)

MONDAY - FRIDAY

Time Range	Expected Buses	Observed Buses	Observed Buses (%)	SWT (mins)	EWT (mins)	AWT (mins)	Probability of Waiting < 10 mins (%)	Probability of Waiting 10-20 mins (%)	Probability of Waiting 20-30 mins (%)	Probability of Waiting > 30 mins (%)	Long Gaps (%)	Maximum Gap (mins)
05:00 - 07:00	31,382	30,712	97.9	7.52	0.51	8.03	72.7	24.4	2.7	0.2	0.6	47
07:00 - 10:00	80,807	77,020	95.3	4.93	1.31	6.24	81.2	16.6	1.9	0.4	2.3	64
10:00 - 13:00	78,936	77,664	98.4	5.00	1.03	6.03	82.8	15.9	1.1	0.2	1.3	97
13:00 - 16:00	81,223	78,012	96.0	4.85	1.37	6.23	80.3	17.5	1.8	0.3	2.5	57
16:00 - 19:00	79,429	74,789	94.2	4.99	2.02	7.02	75.1	20.6	3.5	0.7	4.3	66
19:00 - 22:00	71,250	71,625	100.5	5.52	1.07	6.59	78.1	20.1	1.6	0.2	1.3	85
22:00 - 24:00	45,658	45,560	99.8	5.81	0.61	6.42	80.1	19.3	0.6	0.0	0.2	41
All Locations Summary	468,685	455,382	97.2	5.14	1.36	6.50	79.1	18.4	2.1	0.4	2.4	97

SATURDAY

Time Range	Expected Buses	Observed Buses	Observed Buses (%)	SWT (mins)	EWT (mins)	AWT (mins)	Probability of Waiting < 10 mins (%)	Probability of Waiting 10-20 mins (%)	Probability of Waiting 20-30 mins (%)	Probability of Waiting > 30 mins (%)	Long Gaps (%)	Maximum Gap (mins)
05:00 - 07:00	3,524	3,335	94.6	14.55	0.66	15.20	39.0	31.8	25.5	3.7	1.4	65
07:00 - 10:00	10,994	10,962	99.7	8.10	0.43	8.53	70.2	25.6	3.7	0.5	0.1	50
10:00 - 13:00	16,605	16,145	97.2	4.95	0.74	5.69	85.4	14.0	0.6	0.0	0.6	32
13:00 - 16:00	16,323	16,014	98.1	5.01	1.22	6.23	81.1	17.3	1.4	0.3	1.6	55
16:00 - 19:00	15,404	14,909	96.8	5.30	1.19	6.50	78.4	19.2	1.9	0.4	1.9	62
19:00 - 22:00	13,817	13,788	99.8	5.99	0.99	6.98	75.9	21.9	1.8	0.4	1.0	60
22:00 - 24:00	9,474	9,250	97.6	5.80	0.68	6.48	78.9	20.5	0.6	0.0	0.2	33
All Locations Summary	86,141	84,403	98.0	5.85	0.95	6.79	78.2	19.2	2.3	0.4	1.1	65

SUNDAY AND BANK HOLIDAYS

Time Range	Expected Buses	Observed Buses	Observed Buses (%)	SWT (mins)	EWT (mins)	AWT (mins)	Probability of Waiting < 10 mins (%)	Probability of Waiting 10-20 mins (%)	Probability of Waiting 20-30 mins (%)	Probability of Waiting > 30 mins (%)	Long Gaps (%)	Maximum Gap (mins)
05:00 - 07:00	1,642	1,572	95.7	14.97	0.26	15.23	55.2	19.2	21.8	3.7	7.9	59
07:00 - 10:00	7,858	8,059	102.6	12.41	0.05	12.46	49.1	35.0	13.8	2.1	0.0	66
10:00 - 13:00	15,436	15,069	97.6	6.09	0.58	6.67	77.6	21.5	0.7	0.1	0.3	55
13:00 - 16:00	15,605	15,487	99.2	5.96	0.88	6.84	76.4	21.9	1.4	0.3	0.8	64
16:00 - 19:00	15,872	15,776	99.4	5.90	0.73	6.63	77.4	21.5	1.0	0.1	0.4	40
19:00 - 22:00	15,937	15,922	99.9	5.92	0.67	6.59	78.4	20.5	0.9	0.1	0.5	42
22:00 - 24:00	10,474	10,382	99.1	5.95	0.75	6.71	77.4	21.3	1.2	0.2	0.5	42
All Locations Summary	82,824	82,267	99.3	6.77	0.65	7.43	74.1	22.8	2.7	0.4	0.6	66

ALL DAYS

Time Range	Expected Buses	Observed Buses	Observed Buses (%)	SWT (mins)	EWT (mins)	AWT (mins)	Probability of Waiting < 10 mins (%)	Probability of Waiting 10-20 mins (%)	Probability of Waiting 20-30 mins (%)	Probability of Waiting > 30 mins (%)	Long Gaps (%)	Maximum Gap (mins)
05:00 - 07:00	36,548	35,619	97.5	8.56	0.51	9.07	68.7	24.8	5.8	0.7	1.0	65
07:00 - 10:00	99,659	96,041	96.4	5.56	1.18	6.74	78.6	18.2	2.6	0.5	2.0	66
10:00 - 13:00	110,977	108,878	98.1	5.13	0.93	6.06	82.6	16.3	1.0	0.1	1.1	97
13:00 - 16:00	113,151	109,513	96.8	5.01	1.29	6.30	80.0	18.0	1.7	0.3	2.2	64
16:00 - 19:00	110,705	105,474	95.3	5.12	1.80	6.92	75.7	20.6	3.1	0.6	3.6	66
19:00 - 22:00	101,004	101,335	100.3	5.64	1.01	6.65	77.8	20.4	1.5	0.2	1.1	85
22:00 - 24:00	65,606	65,192	99.4	5.83	0.64	6.47	79.5	19.8	0.7	0.0	0.3	42
All Locations Summary	637,650	622,052	97.6	5.40	1.24	6.63	78.5	18.9	2.2	0.4	2.0	97

Transport for London - QSI Points and Live Mileage List

v2.0 - Mileage directly imported from Caesar

TRANCHE 598

Route 161

Service change 29293

Date 16/03/2013

Reason for Issue

New Contract

QSI Points are highlighted.

OUT DIRECTION				
Timing Point Code	Stop Number	Stop Name	Metres	Miles
CHISWM	33313	Chislehurst War Memorial		
	17522	Centre Common Road / War Memorial	218	0.14
	17524	Chislehurst / Ashfield Lane	425	0.26
	17526	Chislehurst Sainsbury's	296	0.18
	17528	Ingleby Way	469	0.29
	17530	Oakdene Avenue	413	0.26
WTHHEL	17532	Elmstead Lane	447	0.28
	17534	Mottingham Road / Ravensworth Rd	445	0.28
	17536	Mottingham / Prince Of Wales	377	0.23
	7584	Court Road / Mottingham Road	340	0.21
MOTTSN	17729	Mottingham Station	543	0.34
	17728	Royal Blackheath Golf Club	758	0.47
	14709	Eltham Church / Court Yard	464	0.29
ELTMCH	26665	Eltham Church / Well Hall Road	137	0.09
ELTMSN	37421	Eltham Station / Sherard Road	437	0.27
	25748	Well Hall Road / Kidbrooke Lane	221	0.14
	25747	Well Hall Road / Well Hall Roundabout	265	0.16
	26661	Dickson Road	275	0.17
	26659	Arbroath Road	270	0.17
	26657	Well Hall Road / Dunblane Road	307	0.19
	26655	Well Hall Road / Broad Walk	359	0.22
SHOOPS	3165	Shooters Hill Road / Well Hall Road	265	0.16
	BP2823	Greenwich Heights	690	0.43
WCOMHP	BP2729	Queen Elizabeth Hospital / West Entrance	302	0.19
	35589	Queen Elizabeth Hospital / Main Entrance	168	0.10
	35505	Ha Ha Road / Repository Road	365	0.23
	26645	Gunner Lane	607	0.38
	26644	Naafi Messing Store	383	0.24
WOOLAS	BP5481	Woolwich Arsenal Station	564	0.35
	3681	Beresford Sq / WoolCh Arsenal Stn	302	0.19
	26687	Woolwich Ferry	551	0.34
	26693	Kingsman Street	507	0.32
	18834	Prospect Vale	302	0.19
	18832	Warspite Road	341	0.21
	29687	Cleveland Close	337	0.21
	14452	Thames Barrier	131	0.08
	34292	Woolwich Road / Charlton Lane	229	0.14
	BP2409	Stone Lake Retail Park	156	0.10
CHARAH	18828	Charlton Station / Woolwich Road	272	0.17
	10439	Woolwich Road / Gallions Road	325	0.20
	29161	Woolwich Road / Victoria Way	132	0.08
	18822	Rainton Road	254	0.16
GNCPSY	BP2402	Sainsbury's At Greenwich Peninsula	791	0.49
	BP2783	Odeon Cinema	218	0.14
	BP2462	Millennium Village South	306	0.19
	BP2460	Millennium Village / Oval Square	304	0.19
NGNHSN	BP2277	North Greenwich Station	1305	0.81

Total Route Mileage - Out Direction	17573	10.92
	Metres	Miles

BACK DIRECTION				
Timing Point Code	Stop Number	Stop Name	Metres	Miles
NGNHSN	BP2273	North Greenwich Station		
	BP2463	Millennium Village / Oval Square	993	0.62
	BP2461	Millennium Village South	301	0.19
	BP2782	Odeon Cinema	297	0.18
GNCPSY	BP2401	Sainsbury's At Greenwich Peninsula	221	0.14
	26703	Rainton Road	632	0.39
	18823	Woolwich Road / Victoria Way	308	0.19
	18825	Woolwich Road / Gallions Road	315	0.20
CHARAH	26701	Charlton Station / Woolwich Road	215	0.13
	BP2408	Stone Lake Retail Park	330	0.21
	26699	Woolwich Road / Charlton Lane	159	0.10
	29851	Eastmoor Street	226	0.14
	37977	Warspite Road	498	0.31
	R0563	Frances Street	444	0.28
	26692	Kingsman Street	179	0.11
	35487	Woolwich Ferry	203	0.13
	37259	John Wilson Street / Powis Street	313	0.19
	36810	Calderwood Street	439	0.27
WOOLTS	BP5479	Woolwich Arsenal Station	299	0.19
	26642	Claydown Mews	463	0.29
	44027	Gunner Lane	260	0.16
	35502	Ha Ha Road / Grand Depot Road	303	0.19
	35503	Queen Elizabeth Hospital / Main Entrance	747	0.46
WCOMHP	35591	Queen Elizabeth Hospital / West Entrance	303	0.19
	BP2824	Greenwich Heights	185	0.11
	19689	Shooters Hill Road / Baker Road	398	0.25
SHOOPS	4662	Shooters Hill Road / Academy Road	303	0.19
	26653	Well Hall Road / Shooters Hill Road	168	0.10
	26656	Well Hall Road / Broad Walk	234	0.15
	26658	Well Hall Road / Dunblane Road	203	0.13
	26660	Arbroath Road	385	0.24
	26662	Well Hall Road / Well Hall Roundabout	267	0.17
	25746	Well Hall Road / Kidbrooke Lane	361	0.22
ELTMSN	25749	Eltham Station / Sherard Road	349	0.22
	25751	Eltham Station / Lassa Road	162	0.10
ELTMCH	26666	Eltham Church / Well Hall Road	261	0.16
	9817	Eltham Church / Court Yard	131	0.08
	17727	Royal Blackheath Golf Club	509	0.32
MOTTSN	9818	Mottingham Station	637	0.40
	14387	Mottingham Road / Court Road	723	0.45
	17537	Mottingham / Prince Of Wales	366	0.23
	17535	Mottingham Road / Ravensworth Road	339	0.21
WTHHEL	17533	Elmstead Lane	473	0.29
	17531	Oakdene Avenue	371	0.23
	17529	Ingleby Way	450	0.28
	17527	Albany Road	291	0.18
	17525	Chislehurst / Ashfield Lane	311	0.19
	17523	Centre Common Road / War Memorial	602	0.37
CHISWM	33313	Chislehurst War Memorial	162	0.10

Total Route Mileage - Back Direction	17089	10.62
	Metres	Miles