

7. Service Specification

Route: 198 Contract Reference: QC49001

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.

Terminus Points	Shrublands, Bramble Close and Thornton Heath, High Street
Contract Basis	Incentivised
Commencement Date	29 th August 2015
Vehicle Type	87 capacity, dual door, double deck buses
Current Maximum Approved Dimensions	10.2 metres long and 2.5 metres wide
New Vehicles Mandatory	Yes
Hybrid Price Required	Yes
Sponsored Route	No
Advertising Rights	Operator
Minimum Performance Standard	Average Excess Waiting Time - No more than 0.90 minutes
Extension Threshold	Average Excess Waiting Time Threshold - 0.80 minutes
Minimum Operated Mileage Standard	No less than 98.00%

The date of Tender for this ITT is:
No later than 12 Noon on Monday 13th October 2014

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. 198.

Tenderers should note that there are no changes proposed as part of this Service Specification for Route No. 198.

Operators should provide the following prices:

1. Annual diesel price - based on minimum 5 year contract.
2. Annual hybrid price - based on minimum 5 year contract.
3. Annual hybrid price - with upfront payment of capital difference between diesel and hybrid for 5 year contract.

All tender prices should be based on the gross fuel cost exclusive of BSOG payments which will not be claimable from DfT after 1st October 2013.

Tenderers should note that if they are supplying an alternative price based on using existing vehicles, these must be refurbished in line with the revised specification dated 1st March 2014. This applies to all contracts awarded from Tranche 471 onwards.

Cash Free Boarding was extended throughout London with effect from 6th July 2014. Submitted tender prices should fully reflect the cost saving accrued from this change. Tenderers should also indicate the approximate additional cost if cash fares were still to be accepted.

3) SCHEDULE REQUIREMENTS & PINCHPOINTS

3.1) MONDAY TO FRIDAY SCHEDULE REQUIREMENTS & PINCHPOINTS

Shrublands, Bramble Close to Thornton Heath, High Street			Thornton Heath, High Street to Shrublands, Bramble Close		
First departure no later than 0455.			First departure no later than 0500.		
0450 - 0515	Every 20 minutes		0455 - 0520	Every 20 minutes	
0516 - 0545	Every 15 minutes		0521 - 0550	Every 15 minutes	
0546 - 0610	Every 12 minutes		0551 - 0615	Every 12 minutes	
0611 - 1900	Every 10 minutes		0616 - 1915	Every 10 minutes	
1901 - 2000	Every 12 minutes		1916 - 1940	Every 12 minutes	
2001 - 2015	Every 15 minutes		1941 - 2040	Every 15 minutes	
2016 - 0020	Every 20 minutes		2041 - 0025	Every 20 minutes	
Last departure no earlier than 0015.			Last departure no earlier than 0020.		
Pinchpoints					
West Croydon Bus Station	0720 - 0920	10 minutes	Addiscombe Road, Shirley Road	0725 - 0925	10 minutes
	1515 - 1645	10 minutes		1525 - 1655	10 minutes

3.2) SATURDAY AND GOOD FRIDAY SCHEDULE REQUIREMENTS & PINCHPOINTS

Shrublands, Bramble Close to Thornton Heath, High Street			Thornton Heath, High Street to Shrublands, Bramble Close		
First departure no later than 0455.			First departure no later than 0500.		
0450 - 0755	Every 20 minutes		0455 - 0740	Every 20 minutes	
0756 - 0810	Every 15 minutes		0741 - 0810	Every 15 minutes	
0811 - 0835	Every 12 minutes		0811 - 0835	Every 12 minutes	
0836 - 1755	Every 10 minutes		0836 - 1815	Every 10 minutes	
1756 - 1820	Every 12 minutes		1816 - 1840	Every 12 minutes	
1821 - 1935	Every 15 minutes		1841 - 1940	Every 15 minutes	
1936 - 0020	Every 20 minutes		1941 - 0025	Every 20 minutes	
Last departure no earlier than 0015.			Last departure no earlier than 0020.		
Pinchpoints					
West Croydon Bus Station	0915 - 1115	10 minutes	Addiscombe Road, Shirley Road	0930 - 1130	10 minutes

3) SCHEDULE REQUIREMENTS & PINCHPOINTS - continued

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

Shrublands, Bramble Close to Thornton Heath, High Street		Thornton Heath, High Street to Shrublands, Bramble Close			
First departure no later than 0605.		First departure no later than 0600.			
0600 - 0836	Every 30 minutes	0555 - 0900	Every 30 minutes		
0836 - 0020	Every 20 minutes	0901 - 0020	Every 20 minutes		
Last departure no earlier than 0015.		Last departure no earlier than 0020.			
Pinchpoints					
West Croydon Bus Station	1035 - 1135	20 minutes	Addiscombe Road, Shirley Road	1045 - 1145	20 minutes

4) OPERATIONAL CONSIDERATIONS

- 4.1) Route No. 198 should interwork with Route No. 119 between Shirley, Wickham Road and East Croydon Station during Monday to Friday peaks and interpeaks, Saturday and Sunday early mornings and Saturday shopping hours, and be best separated during all other periods.
- 4.2) Route No. 198 can suffer from unpredictable traffic delays in the Shirley and Croydon areas.
- 4.3) Significant development is planned in Croydon Town Centre over the next few years which will lead to an increase in demand on the bus network. There are potential changes to the road network in the town centre, including provision of at grade pedestrian facilities which may increase journey times. Work on this is on-going.

5) ROUTE RECORD, CURRENT PERFORMANCE, QSI BY TIME OF DAY, IBUS MILEAGE AND 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 AND QSI POINTS
As per current print out.

LONDON BUSES - ROUTE DESCRIPTION

ROUTE 198: Shrublands, Bramble Close - Thornton Heath, High Street

Date of Structural Change: 29 August 2015.

Date of Service Change: 29 August 2015.

Reason for Issue: New Tender.

STREETS TRAVERSED

Towards Thornton Heath, High Street: Shrublands Avenue, Gorse Road, Broom Road, Bridle Road, Wickham Road, Shirley Road, Addiscombe Road, George Street, Wellesley Road, Station Road, London Road, Brigstock Road, Thornton Heath High Street, Whitehorse Road.

Towards Shrublands, Bramble Close: Nursery Road, Thornton Heath High Street, Brigstock Road, London Road, North End, Poplar Walk, Wellesley Road, Lansdowne Road, Dingwall Road, George Street, East Croydon Interchange, Addiscombe Road, Shirley Road, Wickham Road, Bridle Road, Broom Road, Shrublands Avenue.

AUTHORISED STANDS, CURTAILMENT POINTS, & BLIND DESCRIPTIONS

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

SHRUBLANDS, BRAMBLE CLOSE

Public stand for two buses in turning circle on west side of Gorse Road (opposite the northern arm of Bramble Close) commencing 10 metres west of lamp standard no.19 and extending 25 metres south west.

Buses proceed from Shrublands Avenue direct to stand, departing to Shrublands Avenue. Set down in Shrublands Avenue (33165 - Shrublands / Bramble Close, Last Stop on LOR: 33165 - Shrublands / Bramble Close) and pick up in Shrublands Avenue (33165 - Shrublands / Bramble Close, First Stop on LOR: 33165 - Shrublands / Bramble Close).

AVAILABILITY:	At any time.
OPERATING RESTRICTIONS:	No more than 2 buses on Route 198 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:	Shrublands.
OTHER INFORMATION:	No toilet facilities available at present.

SHIRLEY, MONKS ORCHARD ROAD (from THORNTON HEATH, HIGH STREET)

Public stand in slip road between Wickham Road and Monks Orchard Road (west of Monks Orchard Road), commencing 20 metres north of the north kerbline of Wickham Road and extending 20 metres south.

Buses proceed from Wickham Road via Monks Orchard Road to stand, departing via Monks Orchard Road to Wickham Road. Set down in Monks Orchard Road, at Stop T (BP4433 - Wickham Road, Last Stop on LOR: 17442 - Langland Gardens) and pick up in Wickham Road (17439 - Bethlem Royal Hospital, First Stop on LOR: 17439 - Bethlem Royal Hospital).

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: Shirley.

SHIRLEY INN (from THORNTON HEATH, HIGH STREET)

Public stand for one bus on north side of West Way Gardens, commencing opposite the centre line of Spring Park Avenue and extending 10 metres west.

Buses proceed from Wickham Road via West Way Gardens to stand, departing via West Way Gardens and Hartland Way to Wickham Road. Set down in Wickham Road, at Stop B (17445 - Verdayne Avenue, Last Stop on LOR: 17445 - Verdayne Avenue) and pick up in Wickham Road, at Stop K (1554 - Shirley Library, First Stop on LOR: 1554 - Shirley Library).

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: Shirley Inn.

ADDISCOMBE ROAD, SHIRLEY ROAD (from THORNTON HEATH, HIGH STREET)

Buses proceed from Addiscombe Road via roundabout at junction with Shirley Road departing to Addiscombe Road. Set down in Addiscombe Road, at Stop F (17449 - Trinity School, Last Stop on LOR: 17449 - Trinity School) and pick up in Addiscombe Road, at Stop P (17448 - Trinity School, First Stop on LOR: 17448 - Trinity School).

AVAILABILITY: At any time.
OPERATING RESTRICTIONS: **Turning Point Only - Buses must not stand**
BLIND DISPLAY: Addiscombe Road, Shirley Road.

WEST CROYDON BUS STATION (from Shrublands, Bramble Close)

Private stand for 14 buses in West Croydon Bus Station on east side of Station Road. Buses proceed from Station Road via West Croydon Bus Station to stand, departing via West Croydon Bus Station, Station Road and North End to Poplar Walk. Set down in Station Road, at Stop B5 (R0853 - West Croydon Bus Station, Last Stop on LOR: R0852 - West Croydon Bus Station) and pick up in Poplar Walk, at Stop WD (BP1915 - Poplar Walk, First Stop on LOR: BP1915 - Poplar Walk).

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: West Croydon.

THORNTON HEATH, CLOCK TOWER (from Shrublands, Bramble Close)

Public offside for two buses on west side of the southbound carriageway of Parchmore Road commencing 5 metres north of the slip road to northbound carriageway. Buses proceed from Brigstock Road via Parchmore Road, Turn Through Central Reservation and Parchmore Road to stand, departing via Parchmore Road to Brigstock Road. Set down in Brigstock Road, at Stop D (25739 - Thornton Heath Station #, Last Stop on LOR: 25739 - Thornton Heath Station #) and pick up in Brigstock Road, at Stop C (25740 - Thornton Heath Station #, First Stop on LOR: 25740 - Thornton Heath Station #).

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: Thornton Heath Station.

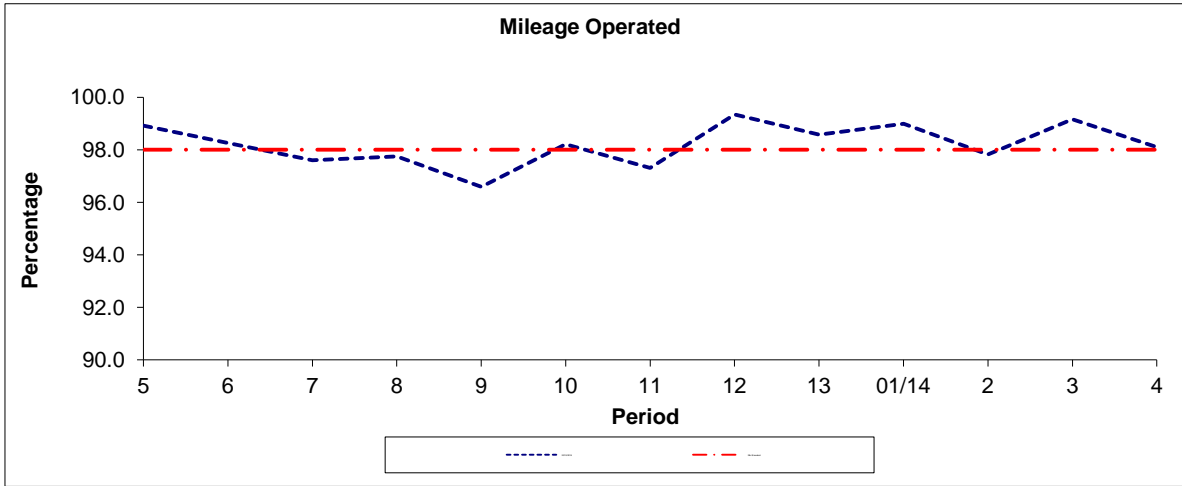
THORNTON HEATH, HIGH STREET

Public stand for four buses on west side of Zion Road, commencing at lamp standard No 7387 opposite party wall of 15/17 and extending 42 metres south. Buses proceed from Whitehorse Road via Zion Place and Zion Road to stand, departing via Zion Road to Nursery Road. Set down in Whitehorse Road, at Stop N (12921 - Talbot Road, Last Stop on LOR: 12921 - Talbot Road) and pick up in Nursery Road, at Stop L (25742 - Nursery Road, First Stop on LOR: 25742 - Nursery Road).

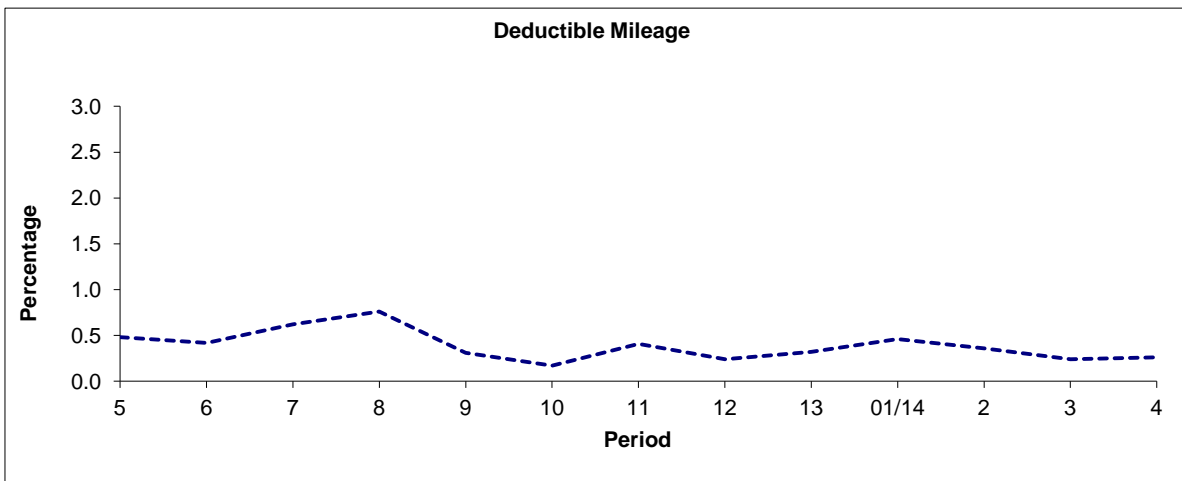
AVAILABILITY: At any time.
OPERATING RESTRICTIONS: No more than 1 buses on Route 198 should be scheduled to stand at any one time.
MEAL RELIEFS: No meal relief vehicles to stand at any time.
FERRY VEHICLES: No ferry vehicles to park on stand at any time.
BLIND DISPLAY: Thornton Heath, High Street.
OTHER INFORMATION: No toilet facilities available at present.

PART B - PERFORMANCE STATISTICS

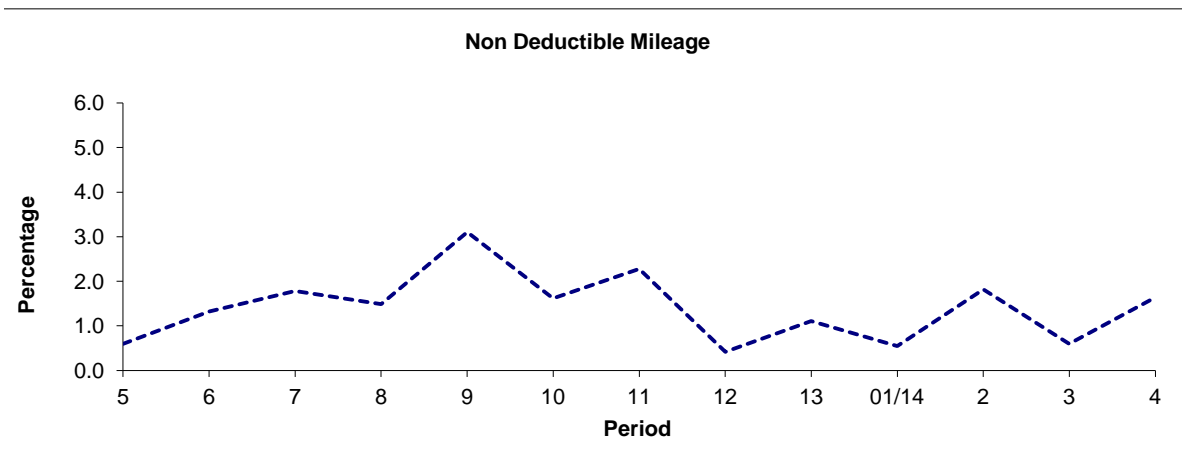
Route 198



Period	5	6	7	8	9	10	11	12	13	01/14	2	3	4
2013/2014	98.92	98.26	97.60	97.75	96.59	98.21	97.31	99.34	98.57	98.99	97.82	99.16	98.10
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



Period	5	6	7	8	9	10	11	12	13	01/14	2	3	4
2013/2014	0.48	0.42	0.62	0.76	0.31	0.17	0.41	0.24	0.32	0.46	0.36	0.24	0.26

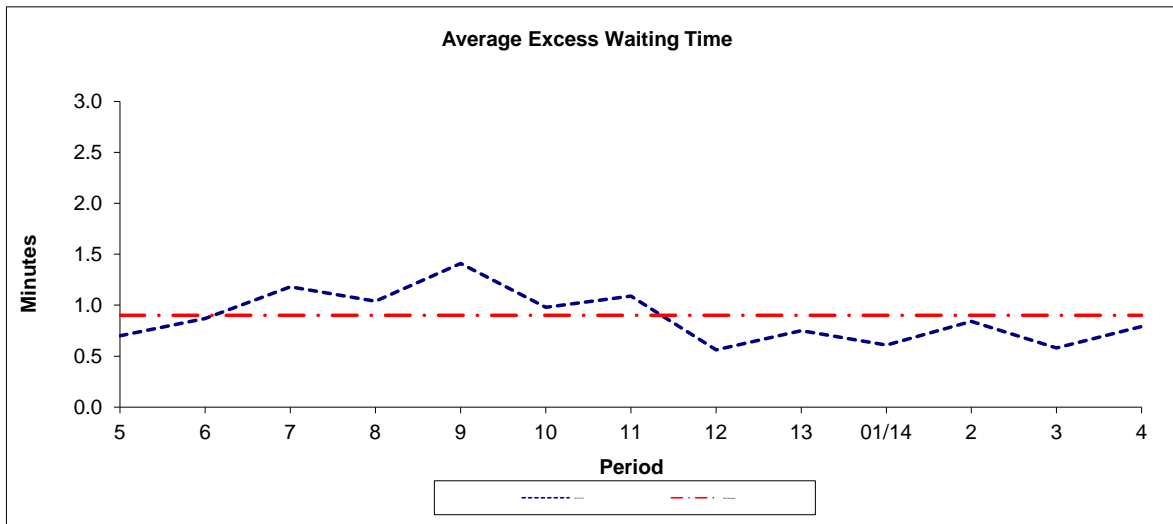


Period	5	6	7	8	9	10	11	12	13	01/14	2	3	4
2013/2014	0.60	1.32	1.78	1.49	3.10	1.62	2.28	0.42	1.11	0.55	1.82	0.60	1.64

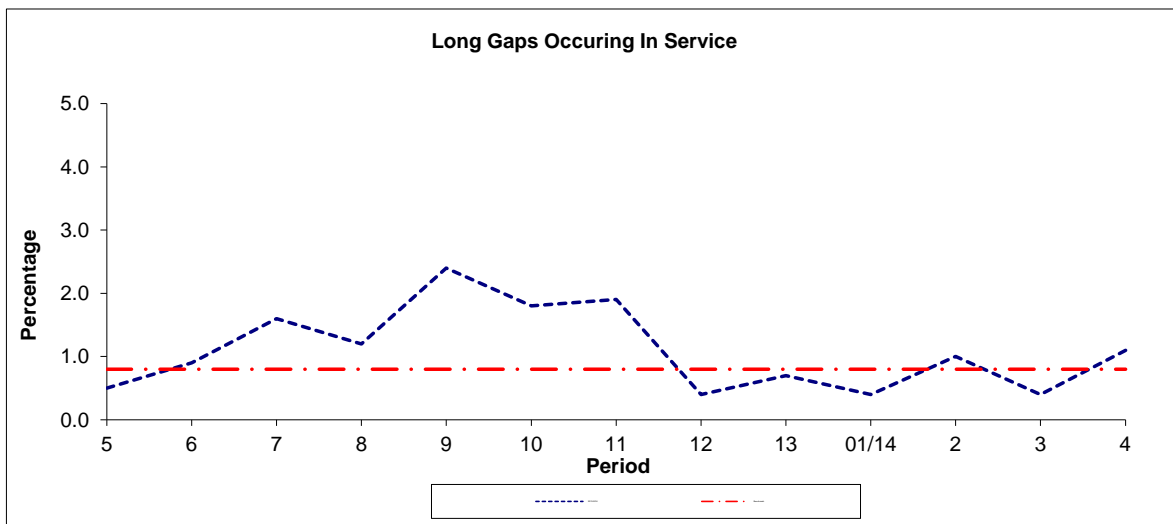
Note : Mileage is based on 4 weeks data

PART B - PERFORMANCE STATISTICS

Route 198



Period	5	6	7	8	9	10	11	12	13	01/14	2	3	4
2013-2014	0.70	0.87	1.18	1.04	1.41	0.98	1.09	0.56	0.75	0.61	0.84	0.58	0.79
Min Standard	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90



Period	5	6	7	8	9	10	11	12	13	01/14	2	3	4
2013-2014	0.5	0.9	1.6	1.2	2.4	1.8	1.9	0.4	0.7	0.4	1.0	0.4	1.1
Benchmark	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8

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

ROUTE 198 - FULL iBUS RESULTS BY TIME OF DAY
QUARTER 2 13/14 TO QUARTER 1 14/15 (22/06/13 - 20/06/14)

MONDAY - FRIDAY

Time Period	Expected Buses	On AVL (%)	Scheduled Waiting Time (SWT) (mins)	Excess Waiting Time (EWT) (mins)	Actual Waiting Time (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)
0500 - 0700	23,894.	95.4	6.99	0.59	7.58	74.9	23.8	1.2	0.1	0.1	45
0700 - 1000	54,358.	98.1	4.92	0.73	5.65	86.2	13.0	0.7	0.1	0.9	49
1000 - 1300	53,496.	98.9	4.97	0.70	5.67	86.2	13.1	0.5	0.1	0.7	72
1300 - 1600	52,280.	96.4	4.97	1.04	6.01	82.8	15.8	1.2	0.2	1.4	63
1600 - 1900	52,365.	96.6	5.00	1.40	6.40	80.1	17.7	1.8	0.4	2.2	84
1900 - 2200	36,217.	99.3	7.06	0.85	7.91	66.4	28.4	4.4	0.8	0.9	78
2200 - 2400	16,812.	102.4	10.01	0.54	10.54	51.0	41.3	7.1	0.5	0.0	64
Summary	289,422.	97.8	5.47	0.95	6.43	80.0	18.0	1.7	0.3	1.2	84

SATURDAY

Time Period	Expected Buses	On AVL (%)	Scheduled Waiting Time (SWT) (mins)	Excess Waiting Time (EWT) (mins)	Actual Waiting Time (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)
0500 - 0700	3,238.	100.2	10.00	0.24	10.24	50.5	44.2	4.9	0.4	0.0	43
0700 - 1000	8,232.	97.0	7.01	0.59	7.60	74.1	23.6	2.1	0.2	0.1	63
1000 - 1300	11,295.	98.5	4.92	0.65	5.57	87.0	12.4	0.5	0.2	0.7	50
1300 - 1600	10,890.	97.9	5.00	0.92	5.92	85.3	13.6	0.8	0.4	1.2	62
1600 - 1900	10,322.	98.6	5.20	0.70	5.91	83.8	15.0	0.8	0.4	1.1	66
1900 - 2200	5,808.	96.8	8.64	1.14	9.78	54.3	35.8	7.8	2.1	0.8	79
2200 - 2400	3,354.	101.4	10.01	0.64	10.64	50.4	40.8	7.9	0.9	0.1	83
Summary	53,139.	98.3	6.04	0.77	6.81	78.0	19.4	2.1	0.5	0.8	83

SUNDAY AND BANK HOLIDAYS

Time Period	Expected Buses	On AVL (%)	Scheduled Waiting Time (SWT) (mins)	Excess Waiting Time (EWT) (mins)	Actual Waiting Time (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)
0500 - 0700	1,263.	98.4	16.08	0.05	16.12	44.0	23.2	25.2	7.6	2.7	93
0700 - 1000	4,713.	96.6	12.97	0.64	13.61	41.8	37.5	18.3	2.4	0.0	64
1000 - 1300	6,186.	101.2	9.80	0.30	10.10	51.3	42.3	5.9	0.5	0.1	56
1300 - 1600	6,018.	100.1	9.86	0.27	10.12	51.2	43.0	5.4	0.5	0.2	55
1600 - 1900	6,010.	97.3	9.88	0.58	10.46	49.8	42.6	6.6	1.0	0.3	67
1900 - 2200	5,900.	99.4	9.92	0.73	10.65	49.5	41.0	8.5	1.0	0.2	83
2200 - 2400	3,906.	101.6	10.01	0.22	10.23	50.6	43.5	5.6	0.3	0.0	58
Summary	33,996.	99.3	10.24	0.44	10.68	49.6	41.7	7.7	0.9	0.2	93

ALL DAYS

Time Period	Expected Buses	On AVL (%)	Scheduled Waiting Time (SWT) (mins)	Excess Waiting Time (EWT) (mins)	Actual Waiting Time (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)
0500 - 0700	28,395.	96.0	7.67	0.53	8.21	71.0	26.0	2.5	0.4	0.2	93
0700 - 1000	67,303.	97.8	5.47	0.72	6.19	83.1	15.0	1.6	0.2	0.8	64
1000 - 1300	70,977.	99.1	5.50	0.65	6.15	82.5	16.2	1.1	0.2	0.6	72
1300 - 1600	69,188.	97.0	5.47	0.94	6.41	80.0	18.2	1.6	0.2	1.2	63
1600 - 1900	68,697.	97.0	5.47	1.25	6.72	77.7	19.8	2.1	0.4	1.9	84
1900 - 2200	47,925.	99.0	7.57	0.87	8.44	63.1	30.7	5.3	1.0	0.8	83
2200 - 2400	24,072.	102.1	10.01	0.51	10.51	50.9	41.6	7.0	0.5	0.0	83
Summary	376,557.	98.0	5.98	0.88	6.87	76.9	20.4	2.3	0.4	1.1	93

Transport for London - QSI Points and Live Mileage List

Route 198
 Service change 23265
 Date 3 November 2009

QSI Points are highlighted.

OUT DIRECTION				
Timing Point Code	Stop Number	Stop Name	Metres	Miles
SHRBBC S	SHRBBC S	SHRUBLANDS, BRAMBLE CLOSE		
SHRBBC	33165	Shrublands / Bramble Close	0	0.00
	33167	Gorse Road	221	0.14
	33170	Broom Road	243	0.15
	33011	Shirley Youth And Community Centre	226	0.14
	26838	Links View Road	247	0.15
	26839	Devonshire Way	505	0.31
SHIRBR	BP641	Monks Orchard Road	122	0.08
	17439	Bethlem Royal Hospital	176	0.11
	17441	Langland Gardens	417	0.26
	17443	Cheston Avenue	415	0.26
	1554	Shirley Library	328	0.20
	12886	Shirley Oaks Road	335	0.21
	17446	Upper Shirley Road	290	0.18
ADDRSR	17448	Trinity School	639	0.40
	19719	Birch Tree Way	306	0.19
	17450	Mapledale Avenue	288	0.18
	9400	Ashburton Road	287	0.18
	17452	Sandilands Tram Stop	278	0.17
	BP2359	Canning Road	287	0.18
	BP2360	Lebanon Road Tram Stop	188	0.12
ECROSN	BP2332	East Croydon Station	624	0.39
	10811	Electric House	363	0.23
	10813	Whitgift Centre	169	0.11
WCROBS	R0852	West Croydon Bus Station	507	0.32
	809	West Croydon Station	228	0.14
	15112	Montague Road	264	0.16
	4417	Sumner Road	442	0.27
	15110	Broad Green Avenue	194	0.12
	25866	Canterbury Road	198	0.12
	15108	Mayday Hospital	390	0.24
THGRLR	806	Thornton Heath Pond	311	0.19
	25729	Brigstock Road / London Road	114	0.07
	25731	Brigstock Manor / Frant Road	262	0.16
	25733	Nutfield Road	228	0.14
	25736	Quadrant Road	190	0.12
	25737	Brook Road	257	0.16
	25739	Thornton Heath Station	195	0.12
	25741	Thornton Heath Clock Tower	136	0.08
	27838	Whitehorse Lane	277	0.17
THORHS	12921	Talbot Road	200	0.12
THORHS S	THORHS S	THORNTON HEATH, HIGH STREET	0	0.00
TOTAL ROUTE MILEAGE - OUT DIRECTION			11347	7.05
			metres	miles

Transport for London - QSI Points and Live Mileage List

Route 198
 Service change 23265
 Date 3 November 2009

QSI Points are highlighted.

BACK DIRECTION				
Timing Point Code	Stop Number	Stop Name	Metres	Miles
THORHS S	THORHS S	THORNTON HEATH, HIGH STREET		
THORHS	25742	Nursery Road	0	0.00
	17890	Thornton Heath Clock Tower	358	0.22
	25740	Thornton Heath Station	193	0.12
	25738	Brook Road	227	0.14
	25735	Bensham Lane	277	0.17
	25734	Brigstock Manor / Frant Road	242	0.15
	25730	Brigstock Road / London Road	366	0.23
THGRLR	37002	Thornton Heath Pond	167	0.10
	R0525	Dunheved Road North	135	0.08
	1441	Mayday Hospital	301	0.19
	15111	Broad Green Avenue	374	0.23
	4418	Sumner Road	370	0.23
	15113	Montague Road	187	0.12
WCROSN	25946	West Croydon Station	294	0.18
	BP1915	Poplar Walk	291	0.18
	SL28	Lunar House	158	0.10
	10814	Whitgift Centre	108	0.07
	BP2129	Dingwall Road	572	0.36
ECROSN	BP2631	East Croydon Station	203	0.13
	BP2370	Lebanon Road Tram Stop	533	0.33
	17453	Sandilands Tram Stop	455	0.28
	9399	Ashburton Road	219	0.14
	17451	Mapledale Avenue	360	0.22
	19718	Birch Tree Way	408	0.25
ADDRSR	17449	Trinity School	327	0.20
	17447	Upper Shirley Road	600	0.37
	17445	Verdayne Avenue	352	0.22
	1553	Shirley Library	199	0.12
	17444	Cheston Avenue	285	0.18
	17442	Langland Gardens	373	0.23
SHIRBR	33008	Monks Orchard Road	678	0.42
	26840	Ash Road	283	0.18
	33009	Links View Road	290	0.18
	33171	Spring Park Primary School	183	0.11
	34826	Laurel Crescent	366	0.23
	34827	Fir Tree Gardens	187	0.12
SHRBBC	33165	Shrublands / Bramble Close	229	0.14
SHRBBC S	SHRBBC S	SHRUBLANDS, BRAMBLE CLOSE	0	0.00
TOTAL ROUTE MILEAGE - BACK DIRECTION			11150	6.93
			metres	miles