

## 7. Service Specification

Route: 229

Contract Reference: QC71401

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.

<b>Terminus Points</b>	Thamesmead Town Centre and Sidcup, Queen Mary's Hospital
<b>Contract Basis</b>	Incentivised
<b>Commencement Date</b>	23 <sup>rd</sup> January 2021
<b>Vehicle Type</b>	87 capacity, dual door, double deck vehicles
<b>Current Maximum Approved Dimensions</b>	10.4 metres long and 2.55 metres wide
<b>New Vehicles Mandatory</b>	Yes
<b>Hybrid Price Required</b>	Yes
<b>Sponsored Route</b>	No
<b>Advertising Rights</b>	Operator
<b>Minimum Performance Standard</b>	Average Excess Waiting Time - No more than 1.00 minutes
<b>Extension Threshold</b>	Average Excess Wait Time Threshold - 0.90 minutes
<b>Minimum Operated Mileage Standard</b>	No less than 98%

The Date of Tender for this ITT is:

No later than 12 Noon on Monday 13<sup>th</sup> January 2020

*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. 229.

Tenderers should note that the following changes (subject to consultation) are proposed as part of this Service Specification for introduction with the new Route Agreement.

Two options are specified:

#### **Option 1**

- Monday to Saturday daytime frequencies are increased from every 10 minutes to every 8 minutes.
- The two Monday to Friday schooldays only AM journeys ex-Erith, Bexley Road/Cross Street to Sidcup, Queen Mary's Hospital are withdrawn.
- The Monday to Friday schooldays only PM journey ex-Sidcup, Queen Mary's Hospital to Erith, Bexley Road/Cross Street is withdrawn.
- The Monday to Friday schooldays only PM journey ex-Erith School to Thamesmead Town Centre is withdrawn.

#### **Option 2**

- No changes are proposed.

**Operators should provide the following prices:**

- 1. 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. Vehicles that offer genuine increased capacity and are certified as such.**
- 2. Modifications to reduce emissions and fuel consumption (including energy storage, engine stop/start, extended zero-emission range and/or energy efficient components)**
- 3. Existing vehicles. Separate costs must be provided both excluding and including the cost of upgrading to Euro VI standards. The inclusive costs should be on a per bus per annum basis. Please note that existing diesel vehicles will NOT be considered for routes which are already operated by hybrids.**

**2) NOTES - continued**

**The welfare of bus drivers during their working day is essential, and appropriate locations for sign-on and sign-off as well as meal reliefs should be identified within the bid. These locations should have appropriate facilities available for drivers at the beginning and end of shifts to carry out their duties (including fitness for duty). For breaks and periods of rest between work there should be appropriate toilet provision (including the availability, condition and cleanliness of the facilities) and suitable locations to take a break. Whilst the obligation to provide suitable facilities remains with the bus operator, if there are any risks in not being able to supply these, the bus operator must make TfL aware in their tender or at any later stage when this becomes apparent.**

### 3) SCHEDULE REQUIREMENTS & PINCHPOINTS

#### 3.1) MONDAY TO FRIDAY SCHEDULE REQUIREMENTS & PINCHPOINTS

##### Option 1

Thamesmead Town Centre to Sidcup, Queen Mary's Hospital			Sidcup, Queen Mary's Hospital to Thamesmead Town Centre		
First departure no later than 0510.			First departure no later than 0445.		
0505 - 0540	Every 15 minutes		0440 - 0545	Every 15 minutes	
0541 - 0605	Every 12 minutes		0546 - 0610	Every 12 minutes	
0606 - 0635	Every 10 minutes		0611 - 0640	Every 10 minutes	
0636 - 1915	Every 8 minutes		0641 - 1840	Every 8 minutes	
1916 - 1955	Every 10 minutes		1841 - 1920	Every 10 minutes	
1956 - 2055	Every 12 minutes		1921 - 2020	Every 12 minutes	
2056 - 0015	Every 15 minutes		2021 - 0025	Every 15 minutes	
Last departure no earlier than 0010.			Last departure no earlier than 0020.		
<b>Pinchpoints</b>					
Bexley Library	0705 - 0735	10 minutes	Belvedere Station	0710 - 0740	10 minutes
	0736 - 0855	8 minutes		0741 - 0900	8 minutes
	1505 - 1625	8 minutes		1510 - 1630	8 minutes

##### Option 2

Thamesmead Town Centre to Sidcup, Queen Mary's Hospital			Sidcup, Queen Mary's Hospital to Thamesmead Town Centre		
First departure no later than 0510.			First departure no later than 0445.		
0505 - 0540	Every 15 minutes		0440 - 0545	Every 15 minutes	
0541 - 0605	Every 12 minutes		0546 - 0610	Every 12 minutes	
0606 - 1955	Every 10 minutes		0611 - 1920	Every 10 minutes	
1956 - 2055	Every 12 minutes		1921 - 2020	Every 12 minutes	
2056 - 0015	Every 15 minutes		2021 - 0025	Every 15 minutes	
Last departure no earlier than 0010.			Last departure no earlier than 0020.		
Pinchpoints					
Bexley Library	0705 - 0855	10 minutes	Belvedere Station	0710 - 0900	10 minutes
	1505 - 1625	10 minutes		1510 - 1630	10 minutes

#### 3.2) MONDAY TO FRIDAY SCHOOLDAYS SCHEDULE REQUIREMENTS

##### Option 2 only

Erith, Bexley Road/Cross Street to Sidcup, Queen Mary's Hospital		Sidcup, Queen Mary's Hospital to Erith, Bexley Road/Cross Street	
0745	One journey	1535	One journey
0815	One journey		

Erith School to Thamesmead Town Centre	
1515	One journey

### 3) SCHEDULE REQUIREMENTS & PINCHPOINTS - continued

#### 3.3) SATURDAY AND GOOD FRIDAY SCHEDULE REQUIREMENTS & PINCHPOINTS

##### Option 1

Thamesmead Town Centre to Sidcup, Queen Mary's Hospital			Sidcup, Queen Mary's Hospital to Thamesmead Town Centre		
First departure no later than 0510.			First departure no later than 0445.		
0505 - 0610	Every 20 minutes		0440 - 0625	Every 20 minutes	
0611 - 0710	Every 15 minutes		0626 - 0710	Every 15 minutes	
0711 - 0810	Every 12 minutes		0711 - 0810	Every 12 minutes	
0811 - 0840	Every 10 minutes		0811 - 0840	Every 10 minutes	
0841 - 1840	Every 8 minutes		0841 - 1840	Every 8 minutes	
1841 - 1910	Every 10 minutes		1841 - 1920	Every 10 minutes	
1911 - 2010	Every 12 minutes		1921 - 2020	Every 12 minutes	
2011 - 0015	Every 15 minutes		2021 - 0025	Every 15 minutes	
Last departure no earlier than 0010.			Last departure no earlier than 0020.		
<b>Pinchpoints</b>					
Bexley Library	0930 - 1130	8 minutes	Belvedere Station	0930 - 1130	8 minutes

##### Option 2

Thamesmead Town Centre to Sidcup, Queen Mary's Hospital			Sidcup, Queen Mary's Hospital to Thamesmead Town Centre		
First departure no later than 0510.			First departure no later than 0445.		
0505 - 0610	Every 20 minutes		0440 - 0625	Every 20 minutes	
0611 - 0710	Every 15 minutes		0626 - 0710	Every 15 minutes	
0711 - 0810	Every 12 minutes		0711 - 0810	Every 12 minutes	
0811 - 1910	Every 10 minutes		0811 - 1920	Every 10 minutes	
1911 - 2010	Every 12 minutes		1921 - 2020	Every 12 minutes	
2011 - 0015	Every 15 minutes		2021 - 0025	Every 15 minutes	
Last departure no earlier than 0010.			Last departure no earlier than 0020.		
<b>Pinchpoints</b>					
Bexley Library	0930 - 1130	10 minutes	Belvedere Station	0930 - 1130	10 minutes

### 3) SCHEDULE REQUIREMENTS & PINCHPOINTS - continued

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

##### Options 1 & 2

Thamesmead Town Centre to Sidcup, Queen Mary's Hospital		Sidcup, Queen Mary's Hospital to Thamesmead Town Centre			
First departure no later than 0510.		First departure no later than 0445.			
0505 - 0710	Every 30 minutes	0440 - 0715	Every 30 minutes		
0711 - 0810	Every 20 minutes	0716 - 0835	Every 20 minutes		
0811 - 0015	Every 15 minutes	0836 - 0025	Every 15 minutes		
Last departure no earlier than 0010.		Last departure no earlier than 0020.			
<b>Pinchpoints</b>					
Bexley Library	1010 - 1140	15 minutes	Belvedere Station	1015 - 1145	15 minutes

### 4) OPERATIONAL CONSIDERATIONS

- 4.1) Route No. 229 can suffer from unpredictable traffic delays in the Erith and Bexleyheath areas.
- 4.2) The central section of the Elizabeth line will open between Paddington and Abbey Wood initially and there will be a six month window for delivery from October 2020. Once the central section opens, full services across the Elizabeth line from Reading and Heathrow to Abbey Wood and Shenfield will commence as soon as possible. There is potential for a change in passenger demand on Route No. 229 once the Elizabeth line becomes fully operational. A review, post opening of the Elizabeth line, will be undertaken if required.

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

- 5.1) ROUTE RECORD  
As per Busnet print out.
- 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 229: Thamesmead, Town Centre - Sidcup, Queen Marys Hospital**

**Date of Structural Change:** 23 January 2021.

**Date of Service Change:** 23 January 2021.

**Reason for Issue:** New Tender - Option 1.

#### **STREETS TRAVERSED**

**Towards Sidcup, Queen Marys Hospital:** Thamesmere Drive, Thamesmere Drive Roundabout, Central Way, Greenhaven Drive Roundabout, Crossway, Summerton Way Roundabout, Crossway, Boiler House Roundabout, Carlyle Road, Harrow Manor Way, Lensbury Way Roundabout, Harrow Manor Way, Knee Hill, Abbey Wood Road, Abbey Road, Gilbert Road, Picardy Street, Lower Road, West Street, Erith High Street, Bexley Road, Erith Road, Mayplace Road West, Arnsberg Way, Geddes Place, Market Place, Friswell Place, Arnsberg Way, Broadway, Gravel Hill, Bourne Road, Bexley High Street, Hurst Road, Station Road, Elm Road, Chislehurst Road, Frognal Avenue.

**Towards Thamesmead, Town Centre:** Frognal Avenue, Chislehurst Road, Elm Road, Station Road, Hurst Road, Bexley High Street, Bourne Road, Gravel Hill, Bexleyheath Broadway, Arnsberg Way, Geddes Place, Mayplace Road West, Erith Road, Bexley Road, Queens Road, James Watt Way, Erith High Street, Pier Road, Colebrook Street, Wharfside Close, Bexley Road, Walnut Tree Road, West Street, Lower Road, Picardy Street, Gilbert Road, Abbey Road, Abbey Wood Road, Knee Hill, Harrow Manor Way, Carlyle Road, Boiler House Roundabout, Crossway, Summerton Way Roundabout, Crossway, Greenhaven Drive Roundabout, Central Way, Thamesmere Drive Roundabout, Thamesmere Drive.



## **AUTHORISED STANDS, CURTAILMENT POINTS, & BLIND DESCRIPTIONS**

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

### **THAMESMEAD TOWN CENTRE, THAMESMERE DRIVE**

Public stand for 5 buses in lay-by on west side of Thamesmere Drive opposite Claude Ramsey Library. Overflow stand for 2 buses on south side of Thamesmere Drive turning circle.

Buses proceed from Thamesmere Drive direct to stand, departing via Thamesmere Drive and Turning Circle to Thamesmere Drive. Set down in Thamesmere Drive, at Stop C (37417 - Thamesmead Town Centre, Last Stop on LOR: 37417 - Thamesmead Town Centre) and pick up in Thamesmere Drive, at Stop A (BP1582 - Thamesmead Town Centre, First Stop on LOR: BP1582 - Thamesmead Town Centre).

AVAILABILITY:	At any time.
OPERATING RESTRICTIONS:	No more than 2 buses on Route 229 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:	Thamesmead.

### **ABBEY WOOD STATION (from SIDCUP, QUEEN MARYS HOSPITAL)**

Buses proceed from Knee Hill departing to Knee Hill. Set down in Knee Hill, at Stop G (3963 - Abbey Wood Road, Last Stop on LOR: 3963 - Abbey Wood Road) and pick up in Knee Hill, at Stop E (26601 - Abbey Wood Road, First Stop on LOR: 26601 - Abbey Wood Road).

AVAILABILITY:	At any time.
OPERATING RESTRICTIONS:	<b>Turning Point Only - Buses must not stand</b>
BLIND DISPLAY:	Abbey Wood.

### **BELVEDERE STATION (from SIDCUP, QUEEN MARYS HOSPITAL)**

Public stand for 2 buses in service road on north side of Picardy Street commencing level with lamp standard No. 6 and extending 22 metres west.

Buses proceed from Lower Road via Picardy Street and Service Road to stand, departing via Service Road, Station Road and Picardy Street to Lower Road. Set down in Lower Road, at stop H (6238 - Lower Road / Belvedere Station #, Last Stop on LOR: 6238 - Lower Road / Belvedere Station #) and pick up in Lower Road (23785 - , First Stop on LOR: 6315 - Lower Road / Belvedere 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:	Belvedere.

### **ERITH, BEXLEY ROAD**

Private stand for up to 3 buses in lay-bay on south side of Bexley Road commencing level with steps to Shopping Centre and extending approximately 30 metres eastwards.

From Sidcup, Queen Marys Hospital.

Buses proceed from Bexley Road direct to stand, departing to Bexley Road. Set down in Bexley Road, at Alighting Point (BP2250 - Erith Town Centre / Riverside, Last Stop on LOR: BP4476 - Colebrook Street) and pick up in Bexley Road, at Stop G (BP2114 - Erith Town Centre / Cross Street, First Stop on LOR: BP2114 - Erith Town Centre / Cross Street).

From Thamesmead, Town Centre.

Buses proceed from Bexley Road direct to stand, departing via Bexley Road to Walnut Tree Road. Set down in Bexley Road, at Alighting Point (BP2250 - Erith Town Centre / Riverside, Last Stop on LOR: 6254 - Erith Station # / West Street) and pick up in Walnut Tree Road, at Stop E (6255 - Walnut Tree Road, First Stop on LOR: 6255 - Walnut Tree 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:	Erith.

## **BEXLEYHEATH BUS GARAGE**

Private stand on forecourt of Go-Ahead's Bexleyheath Bus Garage on east side of Erith Road.

### From Sidcup, Queen Marys Hospital.

Buses proceed from Erith Road via Bexleyheath Bus Garage Forecourt to stand, departing via Bexleyheath Bus Garage Forecourt to Erith Road. Set down in Erith Road, at stop NS (6277 - Bexleyheath Bus Garage, Last Stop on LOR: 6277 - Bexleyheath Bus Garage) and pick up in Erith Road, at stop NW (25605 - Bexleyheath Bus Garage, First Stop on LOR: 25605 - Bexleyheath Bus Garage).

### From Thamesmead, Town Centre.

Buses proceed from Erith Road via Bexleyheath Bus Garage Forecourt to stand, departing via Bexleyheath Bus Garage Forecourt to Erith Road. Set down in Bexleyheath Bus Garage Forecourt, at Alighting Point (34461 - Bexleyheath Bus Garage, Last Stop on LOR: 6276 - Long Lane) and pick up in Erith Road, at stop NS (6277 - Bexleyheath Bus Garage, First Stop on LOR: 6277 - Bexleyheath Bus Garage).

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:	Bexleyheath, Bus Garage.

## **BEXLEYHEATH, SHOPPING CENTRE**

### From Sidcup, Queen Marys Hospital.

Buses proceed from Bexleyheath Broadway via Arnsberg Way and Mayplace Road West departing to Market Place. Set down in Bexleyheath Broadway, at Stop Y (6323 - Bexleyheath / Highland Road, Last Stop on LOR: 6323 - Bexleyheath / Highland Road) and pick up in Market Place, at Stop L (11121 - Bexleyheath Clock Tower, First Stop on LOR: 11121 - Bexleyheath Clock Tower).

### From Thamesmead, Town Centre.

Buses proceed from Market Place via Friswell Place, Arnsberg Way and Geddes Place departing to Mayplace Road West. Set down in Market Place, at Stop L (11121 - Bexleyheath Clock Tower, Last Stop on LOR: 11121 - Bexleyheath Clock Tower) and pick up in Mayplace Road West, at Stop S (29461 - Mayplace Rd West / Bexleyheath Clock Twr, First Stop on LOR: 29461 - Mayplace Rd West / Bexleyheath Clock Twr).

AVAILABILITY:	At any time.
OPERATING RESTRICTIONS:	<b>Turning Point Only - Buses must not stand</b>
BLIND DISPLAY:	Bexleyheath, Shopping Centre.

### **BEXLEY, LIBRARY (from Thamesmead, Town Centre)**

Buses proceed from Gravel Hill via Bourne Road departing to Gravel Hill. Set down in Gravel Hill, at Stop E (34277 - Gravel Hill Close, Last Stop on LOR: 34277 - Gravel Hill Close) and pick up in Gravel Hill, at Stop F (34278 - Gravel Hill Close, First Stop on LOR: 34278 - Gravel Hill Close).

AVAILABILITY:	At any time.
OPERATING RESTRICTIONS:	<b>Turning Point Only - Buses must not stand</b>
BLIND DISPLAY:	Bexley.

### **SIDCUP STATION, JUBILEE WAY (from Thamesmead, Town Centre)**

Public stand for two buses on north side of Jubilee Way, commencing 24 metres east of the station car park entrance and extending 22 metres west.

Buses proceed from Station Road via Hatherley Crescent, Faraday Avenue, Jubilee Way, Bus Turning Circle and Jubilee Way to stand, departing via Jubilee Way, Faraday Avenue, Hatherley Crescent and Station Road to Hurst Road. Set down in Jubilee Way, on stand (36002 - Sidcup Station #, Last Stop on LOR: BP2158 - Sidcup Leisure Centre) and pick up in Hurst Road, at Stop B (BP2159 - Sidcup Leisure Centre, First Stop on LOR: BP2159 - Sidcup Leisure Centre).

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:	Sidcup Station.

### **SIDCUP, QUEEN MARY'S HOSPITAL, REAR STAND**

Public stand for one bus on route 229 in marked bay on east side of entrance road from Chislehurst Road into hospital grounds, prior to hospital entrance road, and extending 13.7 metres north.

Buses proceed from Frognal Avenue direct to stand, departing to Frognal Avenue. Set down in Frognal Avenue, At Bus Stop (BP5396 - Queen Mary's Hospital / Chislehurst Road, Last Stop on LOR: BP5396 - Queen Mary's Hospital / Chislehurst Road) and pick up in Frognal Avenue, at Stop HE (35713 - Sidcup / Queen Mary's Hospital).

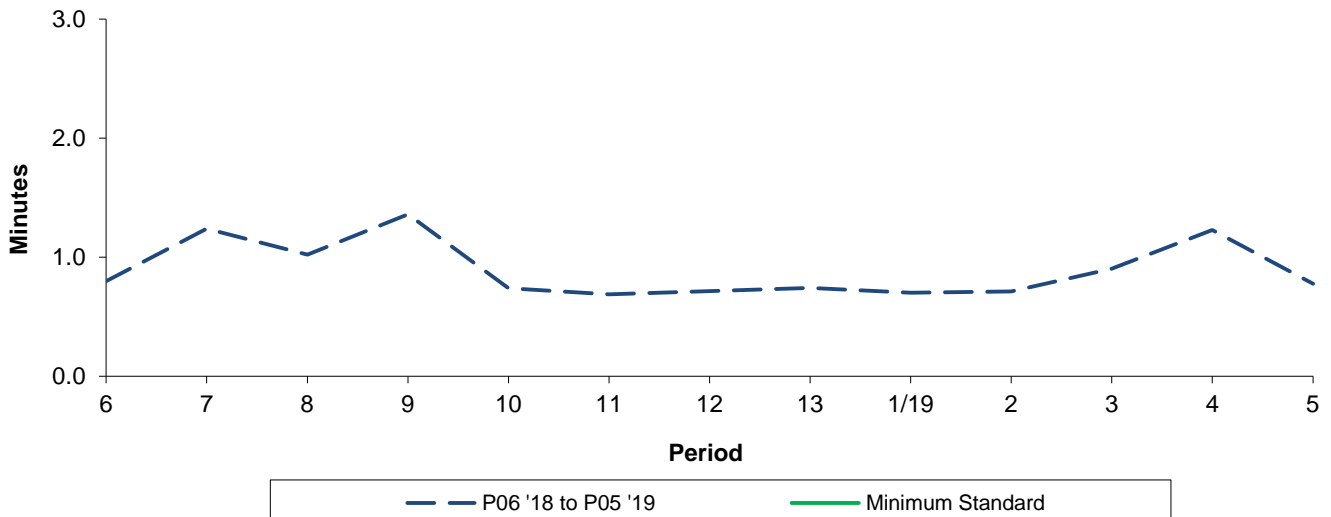
AVAILABILITY:	At any time.
OPERATING RESTRICTIONS:	No more than 1 bus on Route 229 should be scheduled to stand at any one time.
MEAL RELIEFS:	No meal relief vehicles to stand at any time.
FERRY VEHICLES:	No ferry vehicles to park on stand at any time.
BLIND DISPLAY:	Queen Mary's Hospital.

Period Trend Performance Graphs

# Route 229

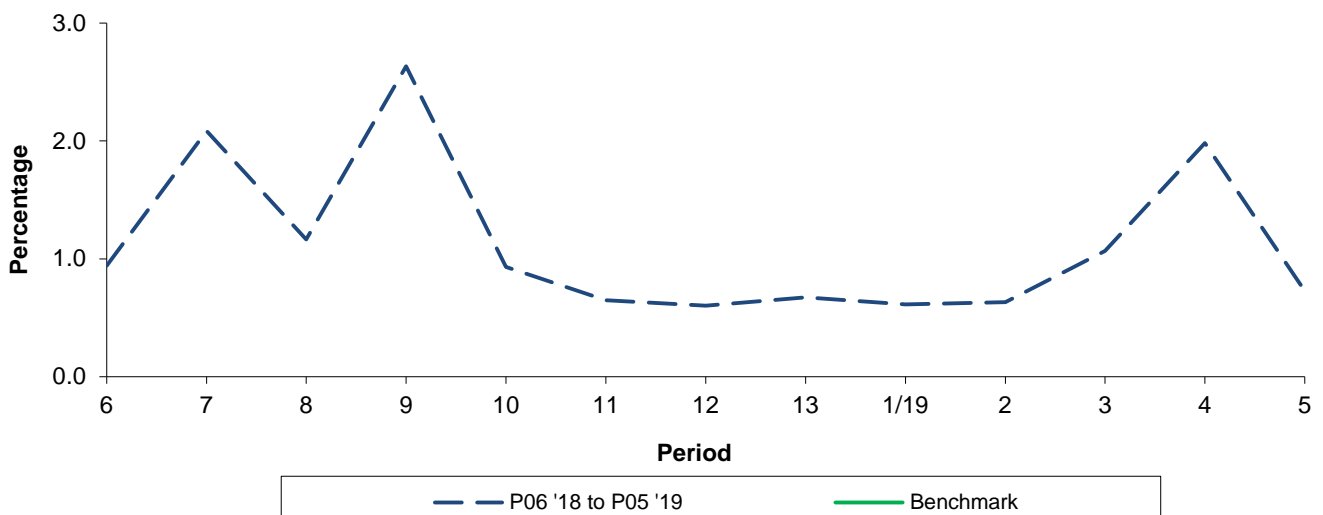
## Reliability Performance

### High Frequency - EWT (mins)



Period	6	7	8	9	10	11	12	13	1/19	2	3	4	5
P06 '18 to P05 '19	0.80	1.24	1.02	1.36	0.74	0.69	0.72	0.74	0.70	0.71	0.90	1.23	0.78
Minimum Standard													

### High Frequency - Long Gaps (%)



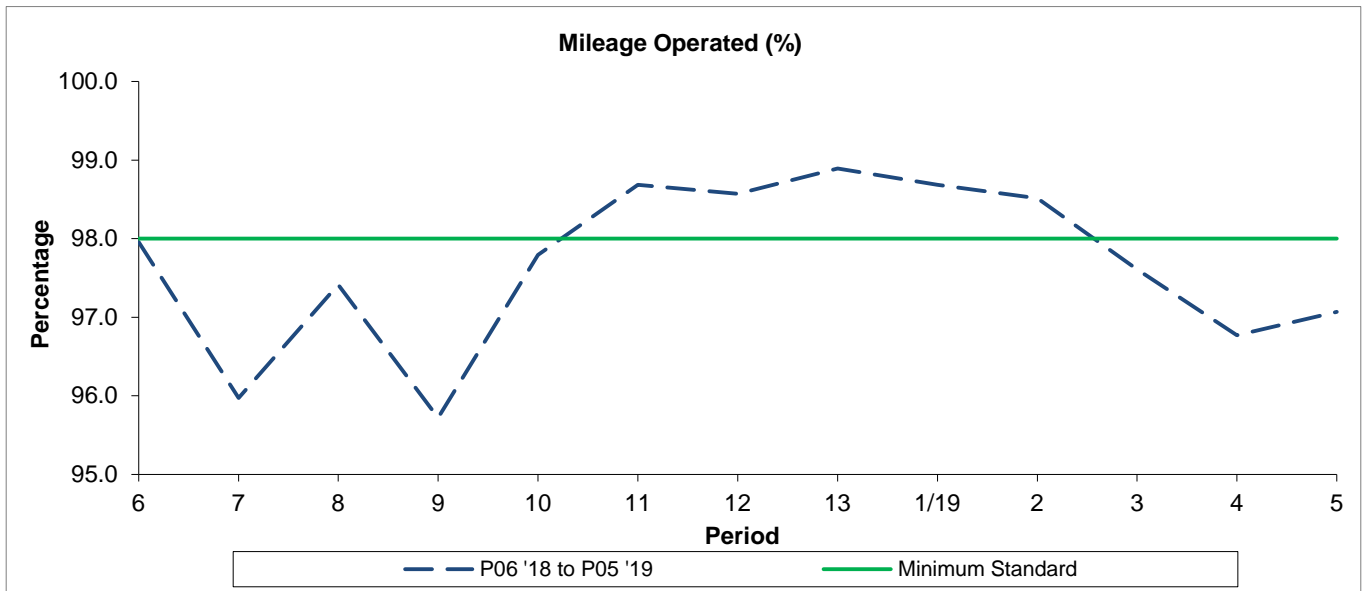
Period	6	7	8	9	10	11	12	13	1/19	2	3	4	5
P06 '18 to P05 '19	0.94	2.09	1.17	2.63	0.93	0.65	0.60	0.67	0.61	0.63	1.07	1.98	0.73
Benchmark													

Minimum Standards and Benchmarks are those applicable under the new contract.

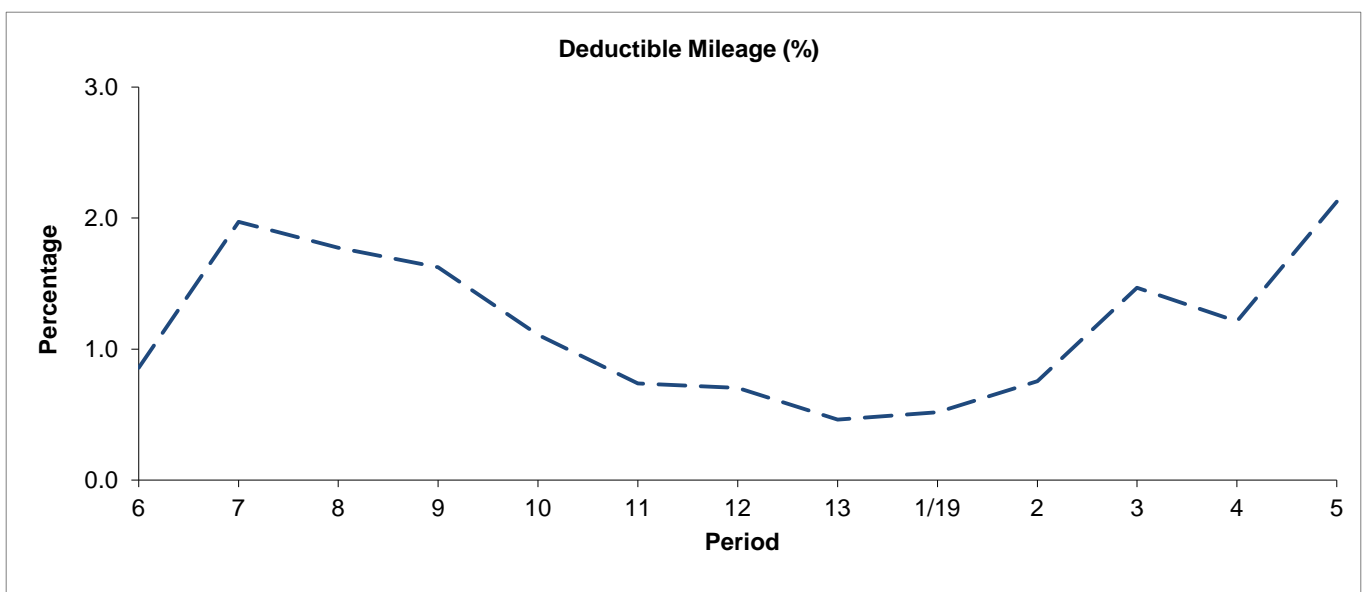
Period Trend Performance Graphs

# Route 229

## Mileage Performance



Period	6	7	8	9	10	11	12	13	1/19	2	3	4	5
P06 '18 to P05 '19	97.95	95.97	97.41	95.72	97.79	98.68	98.57	98.89	98.68	98.51	97.61	96.77	97.07
Minimum 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

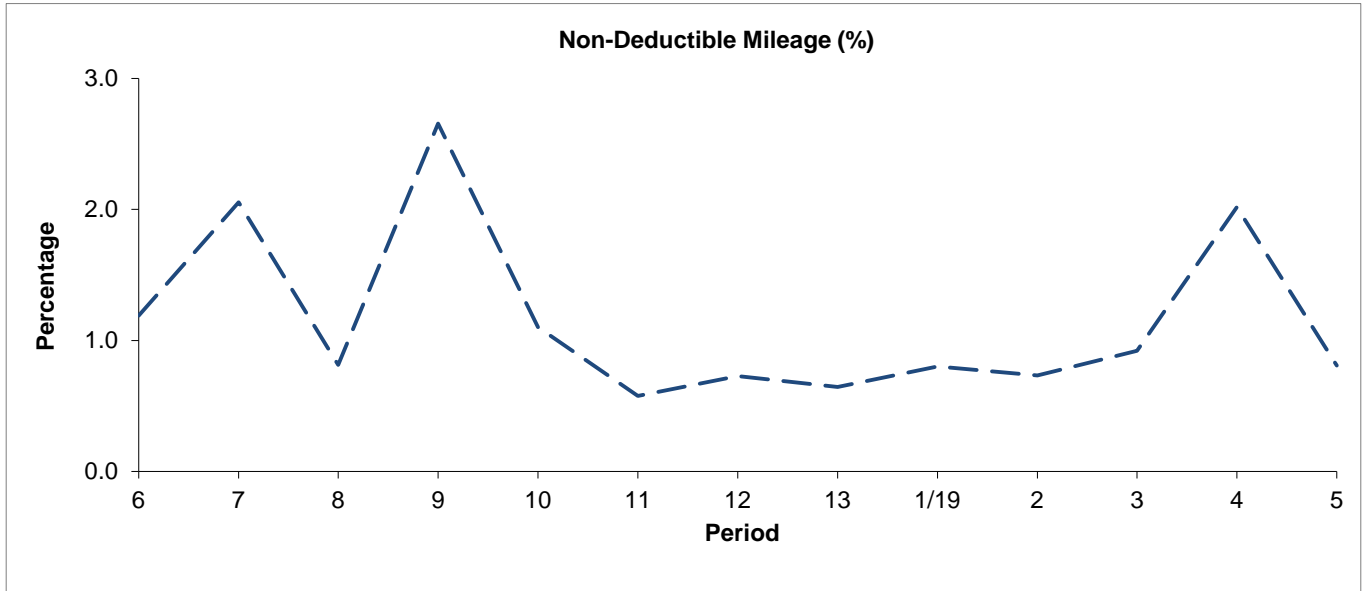


Period	6	7	8	9	10	11	12	13	1/19	2	3	4	5
P06 '18 to P05 '19	0.86	1.97	1.77	1.62	1.11	0.74	0.70	0.46	0.52	0.76	1.47	1.21	2.12

Period Trend Performance Graphs

# Route 229

## Mileage Performance



Period	6	7	8	9	10	11	12	13	1/19	2	3	4	5
P06 '18 to P05 '19	1.19	2.05	0.81	2.66	1.10	0.58	0.73	0.65	0.80	0.73	0.92	2.02	0.81

Mileage Performance figures are based on four weeks data

ROUTE 229 - FULL iBUS RESULTS BY TIME OF DAY  
QUARTERS 02/18 to 01/19 (23/06/2018 to 21/06/2019)

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	34,362	33,647	97.9	6.76	0.29	7.05	77.4	22.0	0.6	0.0	0.1	54.2
07:00 - 10:00	83,545	80,184	96.0	4.91	0.85	5.77	85.0	14.1	0.8	0.1	1.1	89.0
10:00 - 13:00	79,971	78,352	98.0	4.98	0.83	5.82	84.4	14.8	0.7	0.1	0.8	58.8
13:00 - 16:00	79,507	77,623	97.6	5.11	0.98	6.09	81.6	17.1	1.2	0.1	1.1	50.6
16:00 - 19:00	82,321	79,312	96.3	4.89	1.27	6.16	82.4	15.6	1.5	0.5	2.2	78.2
19:00 - 22:00	59,851	59,327	99.1	6.43	0.84	7.26	70.7	27.0	1.9	0.4	1.0	90.5
22:00 - 24:00	35,405	35,385	99.9	7.51	0.44	7.95	65.2	33.5	1.3	0.1	0.1	48.8
All Locations Summary	454,962	443,830	97.6	5.31	0.93	6.24	80.9	17.7	1.2	0.2	1.2	90.5

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	4,941	4,849	98.1	9.93	0.17	10.09	53.9	41.2	4.6	0.2	0.3	60.1
07:00 - 10:00	12,196	11,870	97.3	7.19	0.54	7.73	72.2	25.5	2.1	0.1	0.2	54.9
10:00 - 13:00	16,639	16,218	97.5	5.03	0.79	5.82	84.5	14.8	0.6	0.1	0.7	45.2
13:00 - 16:00	16,769	16,546	98.7	5.01	0.88	5.89	84.3	14.8	0.8	0.1	1.0	55.2
16:00 - 19:00	16,534	16,264	98.4	5.07	0.66	5.73	85.1	14.5	0.3	0.1	0.4	47.0
19:00 - 22:00	12,466	12,554	100.7	6.60	0.55	7.15	71.8	26.9	1.3	0.1	0.3	40.2
22:00 - 24:00	7,429	7,332	98.7	7.52	0.51	8.03	64.1	34.2	1.6	0.1	0.1	43.5
All Locations Summary	86,974	85,633	98.5	5.76	0.69	6.45	79.5	19.4	1.0	0.1	0.5	60.1

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	3,894	3,818	98.0	14.50	0.17	14.67	39.7	31.0	26.5	2.8	1.4	58.6
07:00 - 10:00	8,459	8,353	98.7	11.22	0.36	11.58	48.9	39.1	11.1	0.9	0.0	61.0
10:00 - 13:00	12,514	12,160	97.2	7.46	0.56	8.02	65.5	32.7	1.7	0.2	0.2	48.5
13:00 - 16:00	12,283	12,312	100.2	7.48	0.60	8.08	65.2	32.6	2.1	0.1	0.1	49.3
16:00 - 19:00	12,516	12,422	99.2	7.37	0.51	7.89	66.3	32.1	1.5	0.1	0.1	41.5
19:00 - 22:00	12,174	12,199	100.2	7.56	0.57	8.13	64.3	33.6	2.0	0.1	0.1	42.9
22:00 - 24:00	8,278	8,336	100.7	7.59	0.36	7.95	65.3	33.6	1.1	0.0	0.0	44.5
All Locations Summary	70,118	69,600	99.3	8.02	0.52	8.54	63.1	33.3	3.3	0.3	0.1	61.0

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	43,197	42,314	98.0	7.61	0.27	7.88	72.4	24.4	2.9	0.3	0.3	60.1
07:00 - 10:00	104,200	100,407	96.4	5.41	0.80	6.22	82.1	16.2	1.5	0.2	1.0	89.0
10:00 - 13:00	109,124	106,730	97.8	5.30	0.79	6.09	82.1	17.0	0.8	0.1	0.7	58.8
13:00 - 16:00	108,559	106,481	98.1	5.38	0.92	6.30	80.0	18.6	1.3	0.1	1.0	55.2
16:00 - 19:00	111,371	107,998	97.0	5.15	1.12	6.28	81.2	17.1	1.3	0.4	1.8	78.2
19:00 - 22:00	84,491	84,080	99.5	6.58	0.77	7.35	70.1	27.8	1.8	0.3	0.8	90.5
22:00 - 24:00	51,112	51,053	99.9	7.53	0.44	7.96	65.0	33.6	1.3	0.1	0.1	48.8
All Locations Summary	612,054	599,063	97.9	5.64	0.86	6.50	78.9	19.5	1.4	0.2	1.0	90.5



Transport for London - Live Mileage List

v2.0 - Mileage directly imported from Caesar

Route: 229

Service Change: 52496  
Date: 13/07/2019

QSI points are highlighted.

Thamesmead-Sidcup Hospital / Erith School	Tranche 714
Reason for Issue	New Contract

OUT DIRECTION				
Timing Point Code	Stop Number	Stop Name	Metres	Miles
THMDTC	BP1582	Thamesmead Town Centre		
	36669	Linton Mead Primary School	310	0.19
	36673	Hoveton Road	373	0.23
	36674	Nickelby Close	227	0.14
	36675	Eastgate Close	539	0.33
	36677	Lister Walk	343	0.21
	36678	Poplar Place	351	0.22
THMDCW	35406	Carllyle Road / Crossway	378	0.23
	34812	Newacres Library	782	0.49
	33040	Harrow Manorway / Yarnton Way	267	0.17
	33041	Overton Road	200	0.12
ABWDSN	35309	Harrow Manorway / Abbey Wood Station	299	0.19
	26601	Abbey Wood Road	413	0.26
	3964	Lesnes Abbey	524	0.33
	6600	Elstree Gardens	321	0.20
	6229	Tunstock Way	353	0.22
	6231	Kingswood Avenue	215	0.13
	6233	St Augustine's Road	257	0.16
	6236	Gilbert Road	224	0.14
	6315	Lower Road / Belvedere Station	422	0.26
	6239	Halt Robin Lane	247	0.15
BELVSN	6242	Poplar Mount	229	0.14
	6243	Mayfield Road	197	0.12
	6247	Lower Road / Church Manorway	565	0.35
	6249	St Francis Road	280	0.17
	6251	Winifred Road / The Ship	302	0.19
	6254	Erith Station / West Street	359	0.22
	6254	Erith Station / West Street	359	0.22
ERITBR	BP2114	Erith Town Centre / Cross Street	440	0.27
	33974	Fraser Road	297	0.18
	6260	Lesney Park	570	0.35
	6265	Carlton Road	361	0.22
BXR DNP	6266	Northumberland Park	352	0.22
	6268	Brook Street	433	0.27
	5176	Rydal Drive	382	0.24
	6272	Barnehurst Station	246	0.15
	6274	Lyndhurst Road	314	0.20
	6276	Long Lane	207	0.13
	25605	Bexleyheath Bus Garage	230	0.14
BX GR	29545	Tower Road	282	0.18
	11121	Bexleyheath Clock Tower	336	0.21
	6324	Bexleyheath / Highland Road	514	0.32
	16697	Halcot Avenue	456	0.28
	14381	Broomfield Road	176	0.11
	34277	Gravel Hill Close	426	0.26
	14379	Hartford Road	604	0.38
BXL YLB	16696	Bexley Library	298	0.19
	16694	Bexley Station	284	0.18
	35387	Bexley War Memorial	137	0.09
	35389	Woodstock Close	417	0.26
	35391	Valentine Avenue	609	0.38
	35395	Carisbrooke Avenue	294	0.18
	35393	Crofton Avenue	414	0.26
	BP3300	Penhill Road	385	0.24
	28018	Hurstmere School	468	0.29
	BP2158	Sidcup Leisure Centre	689	0.43
SIDCSN	25998	Sidcup Station	442	0.27
	15183	Station Road / Crescent Road	238	0.15
	20437	Carlton Road	580	0.36
SIDCPS	16651	The Green	138	0.09
	BP5396	Queen Mary's Hospital / Chislehurst Road	474	0.29

Total Route Mileage - Out Direction	21470	13.34
	Metres	Miles

BACK DIRECTION				
Timing Point Code	Stop Number	Stop Name	Metres	Miles
SIDCHP	35713	Sidcup / Queen Mary's Hospital		
	16648	Queen Mary's Hospital	71	0.04
	16650	The Green	364	0.23
	16652	Carlton Road	313	0.19
SIDCPS	15182	Crescent Road	571	0.35
	25848	Sidcup Station / Station Road	160	0.10
	BP2159	Sidcup Leisure Centre	409	0.25
	28017	Hurstmere School	1010	0.63
SIDCSN	26567	Eynsford Crescent	482	0.30
	35392	Crofton Avenue	246	0.15
	35396	Carisbrooke Avenue	327	0.20
	28177	Hurst Springs	285	0.18
	35390	Grange Wood	401	0.25
	35388	Parkwood Road	333	0.21
	16693	Bexley Station	355	0.22
BXL YLB	16695	Bexley Library	330	0.21
	14378	Hartford Road	289	0.18
	34278	Gravel Hill Close	672	0.42
	14380	Broomfield Road	376	0.23
BEXHSC	13510	Halcot Avenue	179	0.11
	6323	Bexleyheath / Highland Road	446	0.28
	29461	Mayplace Rd West / Bexleyheath Clock Twr	381	0.24
	6279	Forresters Crescent	334	0.21
	6277	Bexleyheath Bus Garage	225	0.14
	BP5866	Long Lane	203	0.13
	6275	Lyndhurst Road	201	0.12
BX GR	6273	Barnehurst Station	302	0.19
	6271	Rydal Drive	303	0.19
	BP4992	Brook Street	246	0.15
	27308	Mill Road	311	0.19
	2867	Northumberland Park	215	0.13
	6264	Carlton Road	473	0.29
	6261	Lesney Park	301	0.19
BXR DNP	6257	Fraser Road	483	0.30
	BP2115	Erith Health Centre	701	0.44
	BP4476	Colebrook Street	169	0.11
	34926	Erith Town Centre / Riverside	175	0.11
	6255	Walnut Tree Road	223	0.14
	35424	Erith High Street	230	0.14
	6252	Maxim Road / The Ship	392	0.24
ERITBR	6248	St Francis Road	230	0.14
	R0468	Lower Road / Church Manorway	254	0.16
	6244	Mayfield Road	590	0.37
	6241	Poplar Mount	219	0.14
	6240	Halt Robin Lane	150	0.09
	6238	Lower Road / Belvedere Station	303	0.19
	6235	Gilbert Road	311	0.19
BELVSN	6234	St Augustine's Road	280	0.17
	6232	Kingswood Avenue	342	0.21
	6230	Tunstock Way	210	0.13
	3965	Lesnes Abbey	358	0.22
	6603	Fossington Road	326	0.20
	34318	Florence Road	273	0.17
	3963	Abbey Wood Road	163	0.10
ABWDSN	TS0014	Abbey Wood Station	314	0.20
	33045	Harrow Manorway / Lensbury Way	375	0.23
THMDCW	34813	Newacres Library	399	0.25
	34918	Carllyle Road / Bentham Road	718	0.45
THMDTC	36531	Poplar Place	332	0.21
	36530	Curlew Close	301	0.19
	37181	Lister Walk	133	0.08
	36676	Manordene Road	461	0.29
	36522	Nickelby Close	394	0.24
	36529	Hoveton Road	285	0.18
	36670	Linton Mead Primary School	353	0.22
	37417	Thamesmead Town Centre	386	0.24

Total Route Mileage - Back Direction	21947	13.64
	Metres	Miles

Transport for London - Live Mileage List

Route: 229

Service Change: 52946

Date: 13/07/2019

QSI points are highlighted.

v2.0 - Mileage directly imported from Caesar

Erith School - Thamesmead	Tranche 714
Reason for Issue	New Contract

OUT DIRECTION					BACK DIRECTION								
Timing Point Code	Stop Number	Stop Name	Metres	Miles	Timing Point Code	Stop Number	Stop Name	Metres	Miles				
					ERITSC	OC581	Erith School						
						6264	Carlton Road	639	0.40				
						6261	Lesney Park	301	0.19				
						6257	Fraser Road	483	0.30				
						BP2115	Erith Health Centre	701	0.44				
						BP4476	Colebrook Street	169	0.11				
					ERITBR	34926	Erith Town Centre / Riverside	175	0.11				
						6255	Walnut Tree Road	223	0.14				
						35424	Erith High Street	230	0.14				
						6252	Maxim Road / The Ship	392	0.24				
						6248	St Francis Road	230	0.14				
						R0468	Lower Road / Church Manorway	254	0.16				
						6244	Mayfield Road	590	0.37				
						6241	Poplar Mount	219	0.14				
						6240	Halt Robin Lane	150	0.09				
					BELVSN	6238	Lower Road / Belvedere Station	303	0.19				
						6235	Gilbert Road	311	0.19				
						6234	St Augustine's Road	280	0.17				
						6232	Kingswood Avenue	342	0.21				
						6230	Tunstock Way	210	0.13				
						3965	Lesnes Abbey	358	0.22				
						6603	Fossington Road	326	0.20				
						34318	Florence Road	273	0.17				
						3963	Abbey Wood Road	163	0.10				
					ABWDSN	TS0014	Abbey Wood Station	314	0.20				
						33045	Harrow Manorway / Lensbury Way	375	0.23				
						34813	Newacres Library	399	0.25				
					THMDCW	34918	Carlyle Road / Bentham Road	718	0.45				
						36531	Poplar Place	332	0.21				
						36530	Curlew Close	301	0.19				
						37181	Lister Walk	133	0.08				
						36676	Manordene Road	461	0.29				
						36522	Nickelby Close	394	0.24				
						36529	Hoveton Road	285	0.18				
						36670	Linton Mead Primary School	353	0.22				
						THMDTC	37417	Thamesmead Town Centre	386	0.24			
					Total Route Mileage - Back Direction			11773	7.32				
								Metres	Miles				