THE CORONAVIRUS AND THE UNDERGROUND

What first began in China in December 2019, and has been gathering pace worldwide since, it wasn't until March that the London Underground began to be noticeably affected, by a fall in passenger numbers by an estimated 20%, later increased to be 70%, and 80% as this issue closed for press. Where possible, office-based staff who could work from home were told to do so, which was soon followed by an announcement that service levels would be reduced in accordance with Government advice. This would serve three purposes, (1) to save running "ghost trains", (2) providing a service for essential workers and (3) reducing social contact. The measures announced by TfL are summarised thus.

- · Reduction of services.
- No Waterloo & City Line from Friday 20 March.
- No Night Tube (and also no Night Overground) from Friday night/Saturday 20/21 March 2020.
- The possible closure of up to 40 (mostly) non-interchange stations:

Arsenal Chancery Lane Kilburn Park St. James's Park Barbican Charing Cross Lambeth North St. John's Wood Bayswater Clapham South Lancaster Gate Southwark Covent Garden South Wimbledon Bermondsev Manor House Blackhorse Road Gloucester Road Mansion House **Swiss Cottage** Borough Goodge Street Mornington Crescent Stepney Green Bounds Green **Great Portland Street** Temple Pimlico **Tooting Bec** Bow Road Hampstead Queensway Caledonian Road Holland Park Redbridge **Tufnell Park** Regent's Park Chalk Farm Hyde Park Corner Warwick Avenue

All of the stations are "Section 12" stations, governed by the Fire Precautions (Sub-surface Railway Stations) Regulations 2009 which means there must be a specified minimum number of staff on duty, otherwise it would be illegal to open to passengers. It will be noted that no open-air stations were included. The lesser significant of these could remain open unstaffed, as so many often are these days.

The first stages of service reductions took place from the start of traffic on Thursday 19 March 2020 with a reduced Hammersmith & City and Circle Line service in operation, in general at 15-minute intervals, the latter working the original 'all-round' principle instead of a 'pan handle' service. The Bakerloo Line also reduced to a 15-minute service too, all three lines working to a scratch timetable. The Bakerloo Line operated a reduced 'split' service from the start of the evening peak through to the end of traffic.

Stations closed on **Thursday 19 March** did not reach the 40 planned for, as staffing levels enabled most of them to remain open. Those closed were Arsenal, Barbican, Borough, Bounds Green, Bow Road, Covent Garden, Goodge Street, Hampstead and Manor House, to which Caledonian Road was added from 21.45. The Circle and Hammersmith & City lines began the day with a 'special' service – every 15 minutes Hammersmith – Barking and every 15 minutes 'all round' Circle, although this was suspended for a time because of the staffing situation. The Bakerloo Line operated a split service from 17.00 because of Train Operator shortage right through to the close of traffic.

From **Friday 20 March**, the Waterloo & City Line was suspended, which enabled their Train Operators (based at Leytonstone) to be utilised on the main Central Line. Night Tube was also cancelled from Friday night/Saturday 20/21 March, which also included Night Overground services as well. In addition to the stations listed above, Bayswater, Chancery Lane, Charing Cross, Great Portland Street, Holland Park, Hyde Park Corner, Mansion House, Pimlico and Queensway joined the growing list of closures.

Train Operator availability wise. it will be seen from the table below covering seven days how the situation had deteriorated.

The table lists the maximum cancellations per line at its maximum for no Train Operators and do not include cancellations for other problems (failures, passenger action, etc.).

However, in some circumstances, it would be difficult

MONDAY TO FRIDAY SATURDAY/SUNDAY

A Morning peak E Morning
B Midday F Middle day
C Evening peak G Afternoon
D Evening H Evening

to correctly apportion Train Operator cancellations and those cancellations affected by a separate problem. The figures also indicate the period of when the maximum cancellations occurred, indicated as shown above.

	Line	14/3	15/3	16/3	17/3	18/3	19/3	20/3
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Metropolitan	3	Н	_		3	С	4	С	5	D	15	С	12	D
Circle/H&C	6	F	2	Н	4	С	9	С	16	С	18	В	17	В
Jubilee	_		_		3	С	1	AC	5	Α	28	AC	28	Α
Northern	_		2	EF	2	С	6	С	9	В	9	D	19	CD
Victoria	7	F	8	EG	8	С	20	С	21	Α	21	Α	23	Α
District	3	Н	2	Н	1	D	11	Α	20	С	15	С	18	С
Piccadilly	6	Н	9	G	8	D	12	CD	14	С	15	Α	23	С
Central	9	GH	12	GH	7	С	9	С	12	С	15	В	†	
Bakerloo	2	F	6	Н	1	Α	4	С	6	В	15	CD	15	С
Waterloo & City	_		_		_		_		_		2	AC	#	

- † The Central Line closed early on Friday evening no trains in service.
- # Service withdrawn until further notice.

The staffing situation meant that there was no Circle Line service on **Saturday 21 March** and a 15-minute Hammersmith – Barking service on the Hammersmith & City Line. On the Bakerloo Line, a special 'split' service was operated for a while (Elephant & Castle – Queen's Park and [Kilburn High Road] – Queen's Park – Harrow & Wealdstone) but the Harrow service was withdrawn later in the day. Kenton station was also closed because of a lack of staff on the early shift. The District Line operated Ealing/Richmond – Tower Hill, Wimbledon – Edgware Road and Olympia – Upminster.

Stations-wise, out of the 40 stations listed for closure above, 36 of them were closed. The four outstanding to complete the closure list were Blackhorse Road, Lambeth North, St. John's Wood and Tooting Bec.





Above: With a reduced 'special service' in operation on the Jubilee Line, there were many trains than normal stabled in Stratford Market Depot on Friday evening 20 March 2020.

Left: The lowest numbered unit of 1996 Tube Stock in Stratford Market Depot on the same date.

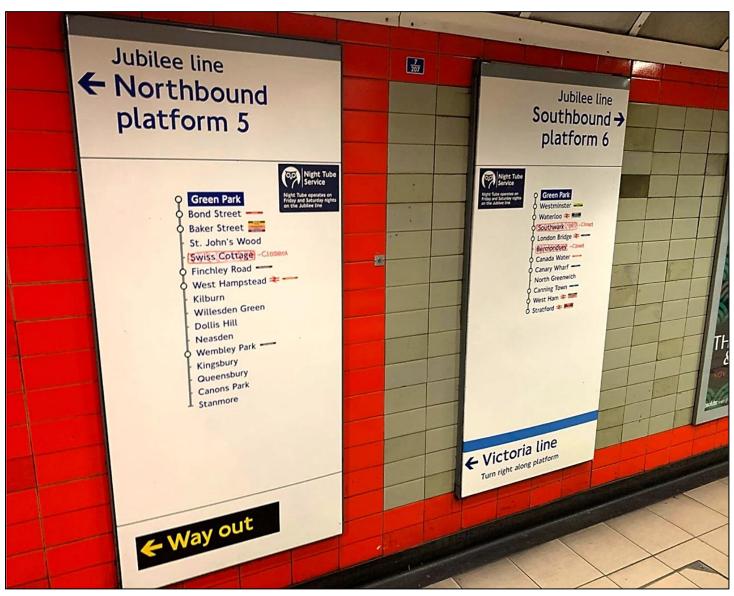
Below: (Left) DLR trains are now reserving the end sections of their trains for their train staff, the area chained off from the public.

Below: (Right) Waterloo (Bakerloo Line) on Saturday morning 21 March 2020.

Photos: LURS Collection (Below, Right) all other photos: Trevor Wright







Above: The station line diagram at platform level at Green Park on 22 March 2020 with the closed Jubilee Line stations indicated by red marker pen.

Below: Although Underground traffic significantly dropped (initially by 20% it was first reported but up to 70% at the time of these photos) but there still appear to be great fluctuations in train loadings and station usage, such as at a deserted Marylebone (Left) but a reasonable patronage on a Piccadilly Line train (Right). Because of no Night Tube, this was the later first west/northbound train and it appeared that some of them had been out all night, perhaps not practicing 'social distancing' as recommended under the circumstances!











Above: TfL (Left) and NHS (Right) posters seen on display at Liverpool Street on Monday 23 March 2020.

Below: (Left) A deserted Liverpool Street on the same date, looking east on the eastbound/outer rail platform as an S7 train departs for Barking.

Below: (Right) On Monday 23 March, Metropolitan Line trains from Amersham ran via the 'main' lines and reversed in platform 2 at Harrow-on-the-Hill. A northbound train is seen departing across No.95 crossover.

All photos: Jack Gordon





On **Sunday 22 March**, Oval station remained closed for the on-going power supply problems while Knightsbridge station closed from 13.15 until 13.50 because of power supply problems. Blackhorse Road station was closed for the first time but Lambeth North, St. John's Wood and Tooting Bec remained open. The Bakerloo Line didn't start up north of Queen's Park until 09.00 because of insufficient Train Operators. Despite all the problems, the new full service timetables for the Bakerloo and Jubilee lines officially came into operation – with cancellations because of the 'special service'.

With services depleted even further on **Monday 23 March**, all lines operated a 'special service' based on the availability of Train Operators, some being in overlapping sections. There continues to be no Circle and Waterloo & City Line services, which was expected to remain the case for the foreseeable future. Services may be summarised thus:

- **District Line**: Upminster Olympia, Tower Hill Ealing and Richmond, and Edgware Road Wimbledon.
- **Metropolitan Line**: Chesham Watford shuttle (via the North Curve), Amersham Harrow (platform 2 via the 'main' lines), Watford Baker Street and Uxbridge Aldgate.
- Bakerloo Line: Queen's Park Elephant & Castle.
- **Central Line**: West Ruislip North Acton, Ealing Broadway Hainault, Leytonstone Epping, Hainault Woodford.
- Victoria Line: Walthamstow Brixton.
- Jubilee Line: Stanmore to Stratford
- Northern Line: Edgware Kennington via Charing Cross, High Barnet Morden via Bank, Finchley Central – Mill Hill East
- Hammersmith & City Line: Hammersmith Barking.
- **Piccadilly Line**: Although advertising a 'special service', trains were running with normal timetabled numbers indicating a 'normal service' but with many cancellations. This seemed to work well as even Uxbridge was well served!

The number of trains cancelled was variable during the day, summarised thus -

Line	Maximum	Average	Line	Maximum	Average
District Line	38	30	Jubilee Line	34	26
Metropolitan Line	32	25	Northern Line	60	43
Bakerloo Line	18	16	Circle & Hammersmith	23	22
Central Line	56	40	Piccadilly Line	19	15
Victoria Line	23	20	Waterloo & City Line	5	5



Opposite: A very quiet Farringdon on the westbound platform looking east on Monday evening 23 March 2020, the evening before the 'stay at home' order was announced.

Photo: Justin Bailey

Right: King's Cross westbound SSR with a west- (later north bound) train for Uxbridge arriving. The through City service has been maintained mostly by trains to and from Uxbridge.

Below: Deserted platforms 5 and 6 at Baker Street, looking west from eastbound platform 5.

Both photos: Jack Gordon





Operational problems on 23 March included:

- Central Line suspended Leytonstone White City 07.15 to 07.55 person ill on a westbound train at Leyton.
- Piccadilly Line suspended Acton Town Uxbridge 10.55 to 12.10 points failure at South Harrow.
- Oval station opened for business at 14.10, having been closed since 14.20 on Friday afternoon 20 March 2020.

• Metropolitan Line suspended north of Harrow-on-the-Hill 17.45 to 18.30 – person ill on a northbound train at North Harrow.

An official list of stations to be closed from **Tuesday 24 March** confirms the arrangements on page 275 (with Redbridge closed for the first time) but excludes Lambeth North, St. John's Wood and Tooting Bec, making 37 in all. Wanstead station closed at 22.00, followed by Royal Oak, Goldhawk Road and Westbourne Park at 22.45, all until the end of traffic. The Bakerloo Line service north of Queen's Park continues to be 'hit and miss', often being left in the hands of London Overground.

The only operational problem was the suspension of the Piccadilly Line west of Hatton Cross from 08.40 to 09.20 because of an unattended item on the platform at Heathrow T2,3. One train was stalled after departing T4 on the loop.

The number of trains cancelled was variable during the day, summarised thus –

Line	Maximum	Average	Line	Maximum	Average
District Line	40	35	Jubilee Line	30	25
Metropolitan Line	32	24	Northern Line	63	50
Bakerloo Line	18	18	Circle & Hammersmith	23	21
Central Line	51	43	Piccadilly Line	13	9
Victoria Line	26	21	Waterloo & City Line	5	5

No service on the Circle and Waterloo & City lines.

Although Underground traffic undoubtedly has dropped considerably, there were varying reports as to how busy – or not – trains were. It would be fair to say that when a good service was being provided, the drop in passenger numbers was noticeable, but once intervals between trains became much wider, trains were inevitably more crowded. The staffing situation also means that some other stations will be closed from time to time.

The Metropolitan Line service pattern was revised from **Wednesday 25 March**, to operate –

- Amersham Baker Street: Hourly all stations.
- Chesham Baker Street: Hourly fast service.
- Uxbridge Aldgate: Every 15 minutes all stations.
- Watford Baker Street: Every 15 minutes all stations.

Services on other lines otherwise continued in the same vein with similar numbers of cancellations. Wanstead, Royal Oak, Goldhawk Road and Westbourne Park stations all opened at 07.00, having been closed from the start of traffic, while Russell Square station closed from 16.55 until the end of traffic because of staff illness. The number of planned closed stations remained unchanged although both Goldhawk Road and Wanstead continued as occasional unplanned closures from time to time. A signal failure on the eastbound at Knightsbridge from 16.05 caused delays to the Piccadilly Line, with trains passing through under failure conditions, right through to the close of traffic. The train cancellation dynamic thus changed to be attributed to a combination of (no) Train Operators and signal failure. A person trackside east of Earl's Court brought the District Line to a stand from 17.40 until 18.10.

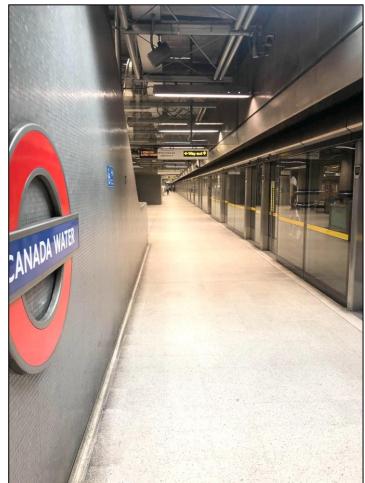
On **Thursday 26 March**, the Bakerloo Line was unable to start its two-train shuttle service between Queen's Park and Harrow & Wealdstone until 07.45 because of a late finish to Network Rail engineering between Kensal Green and South Hampstead. A person under a westbound train at Snaresbrook suspended the Central Line between Woodford and Leytonstone from 12.35 to 14.15. The service, trains cancelled and stations closed followed the pattern as on previous days. The Metropolitan Line service in general reverted to the pattern of 24 March.

Passenger action on the westbound at Wood Lane at 18.55 caused a 25-minute delay to the Hammersmith & City Line on **Friday 27 March** while police dealt with the offender, and Wanstead station closed from 22.00 for no staff and was expected to remain so for a few days. The number of trains cancelled continued to be variable during the day, some lines showing an improvement with others a deterioration, summarised thus –

Line	Maximum	Average	Line	Maximum	Average
District Line	42	34	Jubilee Line	34	28
Metropolitan Line	31	25	Northern Line	60	48
Bakerloo Line	18	15	Circle & Hammersmith	22	21
Central Line	47	39	Piccadilly Line	23	16
Victoria Line	25	20	Waterloo & City Line	5	5













Previous Page: (Top Left and Right) Views of Epping station car park on 23 and 25 March respectively, showing the contrast in two days, with people finally heeding the 'stay at home' (where possible) order. Epping station car park has the largest capacity on the network with 541 spaces.

Previous Page: (Centre, Left) An almost deserted Canada Water platform on the Jubilee Line.

Previous Page: (Centre, Right) One of several Underground stations to be closed during the Coronavirus pandemic was Chancery Lane, with one of the entrances being seen on 27 March 2020 and another entrance in the distance seen under the main roundel.

Previous Page: (Lower Left) With the 'special service' and many cancellations on all lines, some rare workings have occurred on a regular basis. For example on the Central Line, a few trains have stabled in Woodford sidings, running out of service directly into the sidings from South Woodford after detraining, hence the destination seen on these two trains.

Previous Page: (Lower Right) Similarly, White City Sidings is normally empty throughout the day but the situation dictates otherwise on a daily basis, with two trains seen stabled. It looks very much like a submarine base down there!

Photos: Nick Agnew (Top Left and Right), John Stait (Centre Left and Right), Richard Clowser (Lower Left and Right)

On **Saturday 28 March**, Wanstead station remained closed throughout the day as expected while North Greenwich remained closed from the start of traffic until 12.30. St. John's Wood station closed from 20.50 until 22.30 because of a defect on the station's fire alarm system. Operationally, a tree across the track on the westbound approach to Gunnersbury suspended the District Line to and from Richmond from 11.50 until 13.50. Two trains were stalled, both being authorised to return in turn to Turnham Green within 30 minutes. At 20.10, points failing at Watford East Junction prevented Chesham – Watford trains from operating and thus the service was rearranged to run between Chesham and Northwood until fixed at 22.30. Service-wise, the Piccadilly Line finally succumbed to a special timetable around 07.00 because of the high number of cancellations. Of course this meant no Piccadilly Line service to Uxbridge (which it had been doing so well with up until then) with a shuttle between Acton Town and Rayners Lane. The maximum number of trains cancelled on the Piccadilly Line rose sharply, with 51 early evening and an average of 37 throughout the day.

After traffic on Saturday night and without Night Tube, the clocks went forward one hour nationally as scheduled. Special timetables had been provided for the Night Tube transition on the appropriate lines but were not, in the end, applicable. However, temporary timetables were due to be introduced over two weekends on all lines. Their introduction would depend on new duty rosters being available and whether there were sufficient Train Operators to make them sustainable – but for those details we will have to wait for the next issue.

To be continued in the next issue ...