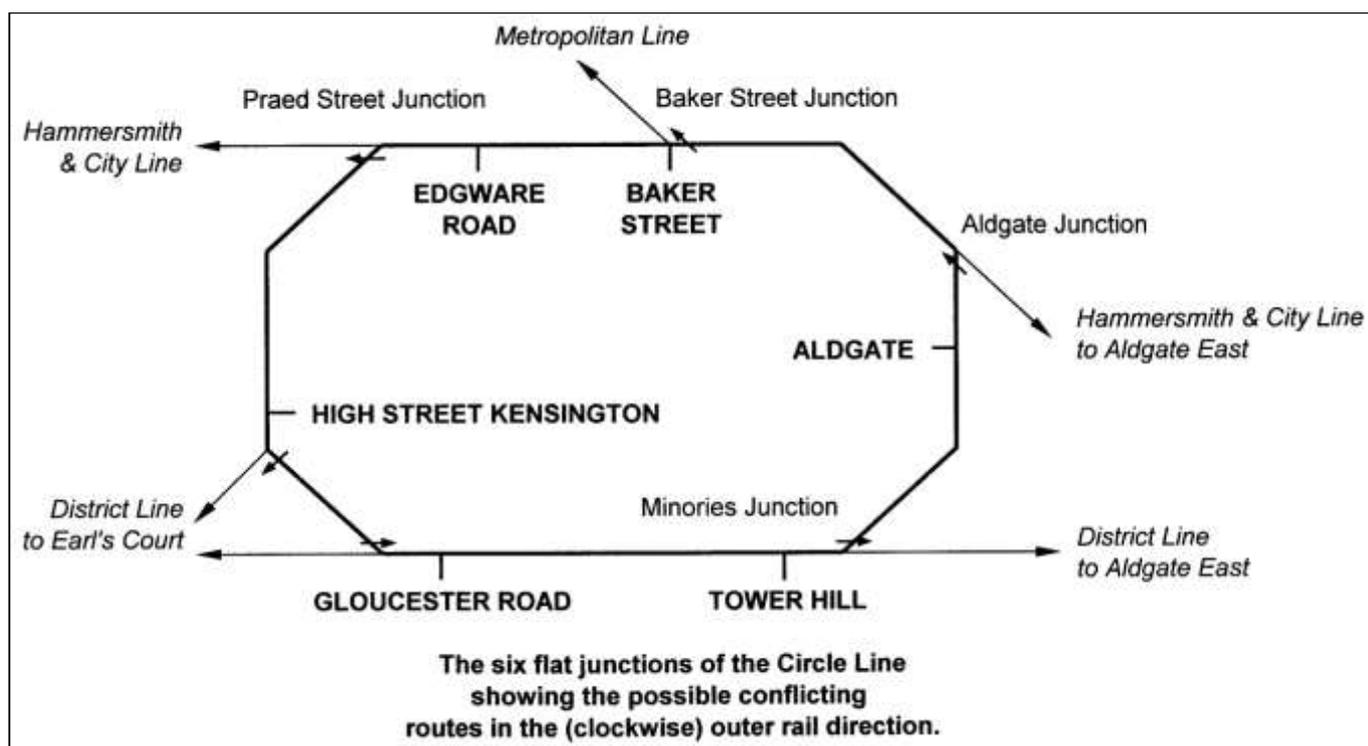


GETTING A HANDLE ON THE CIRCLE

Since the Circle Line was completed in 1884, closing the gap between Mansion House and Tower Hill, its operation has remained basically unchanged both in steam and electric days, mostly because there was only one logical service option – one that goes round and round! It is, however, how frequent that the service is and the inbuilt 'stand' or 'recovery' time, that depends on its success or otherwise.

More often than not, London's Circle Line is not an operational success for various reasons, the most obvious probably being the number of conflicting 'flat' junctions – six of them – but perhaps the outer rail is more susceptible to disruption because of services that have the potential to cross over in front of it travelling in the opposite direction at each of the six junctions. The inner rail trains on the other hand "just have to wait their turn". What has changed, however, are the trains and the running times allowed.

Back in the 1960s, the 7½-minute peak and off-peak service on weekdays was allocated 52½ minutes running time, the 10-minute service 50 minutes, and on Sundays, when the service was every 12 minutes, four trains per circle did the round trip time in 48 minutes. And on Christmas Day at the time, when several stations were closed, three trains per circle provided a 15-minute service with a round trip time of 45 minutes.



An experiment from October 1967 saw the Monday to Friday midday off-peak Circle Line service improved from 7½ to 7-minute intervals with a round trip time of 49 minutes, which was when the current train numbering system was introduced, 201-207 for outer rail trains and 211-217 for inner rail trains¹. A year later saw the 7-minute service start at 12.00 but was abolished altogether from February 1970.

¹ It is believed that the second digit '0' denoted 'outer rail' trains and the second digit '1' denoted 'inner rail' trains in the then new train set numbering scheme – seems simple and sensible!.

From the end of November 1970, the peak service was marginally reduced to 8-minute intervals with a round trip time of 56 minutes. This meant an even 2-minute service between Baker Street and Liverpool Street, and between Gloucester Road and Tower Hill in the peaks, eliminating the 1½/2/2/2-minute pattern (i.e. four trains every 7½ minutes).

The allowances have been further increased in later years to 56 minutes (daytime off-peak), 59½ minutes (peaks), both patterns of which still require seven trains per circle. When a 10-minute service is scheduled for special events or engineering work on neighbouring lines, six trains per circle are required, with a roundtrip time of 60 minutes.

The Circle Line service was operated by both the Metropolitan and District but from November 1926, when the District service was extended from High Street Kensington to Edgware Road, that line's weekday involvement ceased². District trains and crews continued to share the Circle Line on Sundays, right up to May 1990.

Readers may recall the experiments which took place in 1990 in attempt to improve the Circle Line's reliability. This was the so called "pan-handle" service, which was trialled at the August Bank Holiday weekend. Trains departed from Hammersmith, ran around the north side of the Circle, around to the south (District) side of the Circle and continued for a second time along the north side of the Circle as far as Liverpool Street and thence to Whitechapel. The length of the journey time for each train and with limited reversing time at Whitechapel, plus the fact that it was trialled on the Notting Hill Carnival weekend, really made it a non-starter with much late running, disrupted train crew reliefs and, of course, the conflicting flat junctions were still there! The idea of the 'pan handle' service wasn't new – it had been suggested on several occasions years before, including pre-war.

The intention to "do" something about the Circle Line has rumbled on ever since to a greater or lesser degree. After rumours and counter rumours London Underground has finally bitten the bullet and 'come clean' and has officially announced that from 13 December 2009 a new Circle Line service pattern will be introduced. Before that, however, trials of it will also take place at selected weekends in the summer (believed to be 27/28 June, 4/5 July and 24/25 October 2009). Whether this will be a 'true' trial is open to debate because engineering work on neighbouring lines has been scheduled on all three weekends, so a 'full' service trial probably won't be possible.

This is what we have so far from various sources. You will be able to make you mind up whether it will be a good thing or not and, of course, time till tell.

THE PROS (according to London Underground)

The key change is that the Circle line will start at Hammersmith (H&C) and join the current Circle Line at Edgware Road and make a single loop, terminating at Edgware Road and then returning in the opposite direction.

The benefits will include:

DISTRICT LINE –

² District Line trains were extended from Edgware Road to Aldgate during the afternoon on the day before a Bank Holiday until the early-1960s, and extended variously to Moorgate, Liverpool Street and Aldgate on Saturdays between 12.15 and 14.15, and from 17.15 to 19.15, between October 1968 and February 1972.

- An enhanced service on the most heavily used routes on SSR, improving the reliability of train services on SSR and keeping the number of dissatisfied passengers to a minimum.
- Alleviation of the reliability challenges at Aldgate junctions because the new SSR timetable will remove the late running of Circle Line trains waiting for a gap to proceed, thereby freeing up the movement of trains through this junction for the District, Metropolitan and H&C trains.
- Wimbledon to the city services will increase from 7 to 9 trains per hour during the peak.
- There will be altered run and dwell times on the District which will extend the service end to end across all branches by four minutes. However it will ensure improved reliability and increase regularity through more trains being on time.
- An extra train will be added to the timetable so there will be increased capacity to cope with these changes
- Evening peak timings will move 15 minutes and will run from 16.15 to 19.15.
- 13 additional Train Operators will be recruited to cope with the timetable changes.
- Service control will benefit from the increased reliability factor on the C&H lines.
- Stations will benefit from a more reliable trains service from their stations.

CHANGES TO THE DISTRICT LINE –

- Wimbledon to Edgware Road service will be reduced from 7 to 6 trains per hour but Wimbledon to the city services will be increased from 7 to 9tph during the peaks.
- Barking and Plaistow will experience a slight decrease in service during the off-peak going from 3¾ to 3tph – but services between Plaistow and Whitechapel will experience an increase in the off-peak going from 3¾ to 6tph because there will no longer be any (scheduled?) reversing at Whitechapel.
- Passengers across the District Line will have a reduced frequency early and late stage of the peak but at the height of the peak, the frequency will remain the same.
- Extended running times – four minutes extra end to end on every branch to manage the extended dwell times as a result of increased passenger demand.
- One extra train in service throughout the day – the stock requirement will go up from 77 to 78 trains in service.
- Timings of the PM peak shifts by 15 minutes from 16.00 – 19.00 to 16.15 – 19.15.
- A 28 trains per hour city service will be maintained by putting an additional push-in train from Upminster to Richmond during the morning peak to meet demand.
- The Olympia service will be reduced to 3 trains per hour – using one train to run a 20-minute shuttle service instead of two trains every 15 minutes This train will be double-ended (i.e. a Train Operator at each end) to provide quick turn-round times. It will also eliminate the two 34-minute gaps to Olympia during the morning peak.
- Increased resource – 13 additional Train Operators will be employed and they are likely to go to Acton Town depot.

CHANGES TO THE C&H –

- H&C route will have 12 trains per hour from Hammersmith (H&C) which will continue on to Liverpool Street.

- Passengers travelling around the Circle Line from Aldgate to Gloucester Road will have a frequency of 6 trains per hour (peak and off peak).
- Passengers travelling from the Wimbledon branch to High Street Kensington will have a frequency of 6 trains per hour. (It doesn't say what proportion will serve Edgware Road – rumour has it that it will be 3tph off-peak to give some 'breathing space' at Edgware Road.
- There will be no through service from the south side of the Circle, i.e. Gloucester Road clockwise to Liverpool Street. All passengers making that journey will need to change at Edgware Road.
- With the introduction of the extended Circle Line pattern there will be a need to direct eastbound passengers at Paddington to the H&C platforms.
- H&C trains will no longer be scheduled to terminate at Whitechapel and will be run through to Plaistow and Barking.

The introduction of the new timetable and service pattern will improve the service by:

- Increasing running times to reflect growth in demand.
- Re-arranging and improving service frequency to match the growing demand on the most used routes.
- Improving reliability of the service by providing extended run and dwell times and improved facility for reversing and changeover.
- This change will affect the train service on all SSR lines as it incorporates planned run-time alterations for them all and an increased peak services on all SSR lines for all City routes. As with any service pattern change there will always be winners and losers but the biggest winner will be improved service reliability.
- The net service benefits are considerable and this service change fits in with the upgrade and is part of planning for a better service for everyone in the future, once the upgrade is complete.
- The service pattern change is being separated from the introduction of the new S Stock so that any teething problems associated with this can be resolved prior to the introduction of the new trains.
- The Circle Line will not be changing its name because of its timetable and service pattern changes.

THE CONS – ANOTHER VIEW

- Getting 12 tph to reverse at Hammersmith with crew changes.
- Getting 12 tph to reverse at Edgware Road with crew changes.
- Shunting all the passengers coming into Paddington Main Line over to the suburban station over the footbridge with their cases.
- Getting all the people off Edgware Road reversers over the footbridge to the eastbound platform.
- Still calling it a Circle when it isn't a Circle any more – confused or what?

It will probably not be any worse really but it will just look worse. We must feel sorry for them as live at High Street Kensington, Notting Hill Gate and Bayswater, as they will have to change on every train going east.

The real problems will be at Paddington, where everyone goes to the Circle to get to Baker Street etc. Instead, they will have to drag their bags over the footbridge to the rather inadequate 'suburban' platform, if they can find it. The other issue will be at Edgware Road, where the interchange for reversing trains is 50/50 at best³. Plus,

³ 50 per cent cross-platform and 50 per cent over the footbridge.

they struggle now with 7tph reversing there so how will they cope with 12tph? Throw in the crew changes just to put more petrol on the fire and you've got a nice conflagration.

The 'spin' suggests that Circle Line trains terminating at Edgware Road will offer cross-platform interchange wherever possible. This is operationally unlikely to be achievable in reality, but even if it was, what about the District Line punters heading east who would have to interchange via the footbridge more often than not. In the opposite direction, the boot would be on the other foot, with passengers for the westbound District Line having cross-platform interchange at Edgware Road and those for the inner rail Circle Line having to cross the bridge!

If service intervals are to be maintained (i.e. trains are equally spaced wherever possible), then late running will inevitably set in. The maximum reversing times possible (at Edgware Road 7½ minutes and Hammersmith 12½ minutes) on the 'extended' Circle Line will be insufficient for 'serious' disruptions. Moreover, this will create crewing problems because trains and crews will be in the wrong place at the wrong time.

It is the current practice to 'reform' Circle Line trains to timetable at Edgware Road (outer rail) and Aldgate (inner rail). This puts them 'right' within one timetabled round trip. If there is any 'bunching', selected trains may be reformed and others short-tripped or taken out of service for part of a trip.

Under the new set up, if a Circle Line train departs Hammersmith late, the only realistic location for 'short-tripping' would be Moorgate (Edgware Road will already be far too busy and a shunt to the sidings there would only disrupt things further, and both platforms are [currently] required at Aldgate). But a short-trip at Moorgate would mean the loss of a huge chunk of passenger running (Moorgate – Edgware Road via the District Line and back). However, such a train could reverse at Moorgate and then proceed back to Edgware Road to take up its next trip on the inner rail.

Similarly, if a Circle Line train was to depart Edgware Road very late, it would arrive at Hammersmith similarly late, if not more. There are no suitable reversing locations in the inner rail direction except Mansion House and Edgware Road is out of the question as it would be full to capacity reversing east to west and outer to inner.

Then, you get a feel for the stock position. The District needs another train for service – it is assumed it is another D Stock. Whether this extra train comes from the Olympia service remains to be seen (the Olympia service is to be reduced to one train every 20 minutes with trains 'double-ended' – i.e. a Train Operator at each end), or whether it will really be an extra train from the available fleet (which will actually make two extra trains on the 'main line' service).

The loss of Whitechapel as a reversing point also means that another C Stock to work the Hammersmith & City Line service will be required. But perhaps the most telling about the LU organisation is that each staff newsletter has a different spin on it about the changes and different information. It takes a long time to put it all together to get a picture of what's happening. Even then, there is nothing on the H&C service patterns.

Of course, LU are between a rock and a hard place. The changes were started at a time when traffic was rising and they were desperate to find ways of easing the problems. Now, traffic is falling and they will probably drop about 10% over the next year. They may not need the changes anyway. Perhaps they should have held off

until the S Stock is in service. Then they could do it properly and not struggle with the tight stock allocation they have now.

The success of the 'extended' Circle Line will depend on two important factors: (1) Management communicating effectively with the staff that have to operate it, and (2) the enthusiasm of the staff that have to embrace it – the will to do something different, or in the words of one supermarket giant, “try something different today”.

Certainly the Jubilee Line has achieved success with its 24tph peak service, but even so, the slightest “wobble” in the service can shatter the goals for that particular peak period. And rumours are abound that in early 2010 the Jubilee Line will be operating a 27tph peak. Whether this will be with the new signalling or not remains to be seen – again, we wait and see.

DESTINATIONS

It will be interesting what destination blind rules will be applied to C Stock. Yes, at present, trains leave both Barking and Hammersmith in the morning showing “Circle Line” and regular passengers know that the train (from Hammersmith) will carry on eastbound at Edgware Road, or (from Barking) turn right at Aldgate East, but I doubt strangers do so – this itself is less than ideal.

In the future at some point Outer Rail trains will have to have the blind changed from “Circle Line” to “Edgware Road”, and Inner Rail trains from “Circle Line” to “Hammersmith via Shepherds Bush (sic)”. Ditto the automatic DVA will have to change message to reflect the position/routeing of the train.

And how will the platform dot matrix indicators cope with this? We're often told that the District Line train description apparatus is so archaic that extra destinations cannot be accommodated, so can “Edgware Road” be added in or will it replace “Circle Line” between, say, Tower Hill and Gloucester Road?

Ditto the platform line diagrams. Will all these be replaced or amended across parts of the District and Hammersmith & City lines? A lot were changed to reflect the launch of the separate 'pink' H&C identity in 1990, but there are still some signs going back to the 1950s and 1960s dotted around if you know where to look. I wonder if this change will finish these off, together with the few remaining “black glass” train indicators?