

# **SIGNS OF THE TIMES**

## **A SHORT HISTORY OF UNDERGROUND SIGNS**

**by Kim Rennie**

### **1. LINE DIAGRAMS**

#### **INTRODUCTION**

The London Underground has a long tradition of using high-quality vitreous enamel signs. The appearance of these, invariably featuring versions of the Johnston typeface, has helped shape the visual image of the Underground and the city it serves.

Although the same can be said for the graphic design used on, say, the New York Subway or Berlin U-Bahn, for London it all started a lot earlier. The bedrock was laid in the early 20th Century, with the first use of the roundel<sup>1</sup> and 'Underground' brand in 1908, whilst the Johnston typeface had arrived by 1916. Beck's iconic map appeared in 1933 and together, all have had an influence on how travel information has been displayed to the public over the years. One aspect I will not cover in these articles are exterior and platform name roundels, as they have been covered in other articles and publications over the years.

#### **THE UNDERGROUND GROUP**

By the early-1920s, the Underground Group had devised a standard format for signs giving passenger directions at its stations. These were lettered in black upper-case Johnston type upon a white background. On line diagrams, 'minor' stations were in a smaller 'outlined' or 'cased' font, and all shown in order-of-travel. There was no 'this station' indication on signs then, so the first stop listed was always the adjacent one. Direction arrows, where needed, were of the so-called 'Mexican Arrow' type and usually carried four 'flights'. Most signs also incorporated a brown border around the edge and were set within a wooden frame.

Towards the end of the 1920s, a revised design of arrow appeared, where the shaft appeared to pierce a circle (clearly referencing the roundel) and there were only three 'flights'. These arrows were normally in black but with the circle coloured red. There is no obvious cut-off date between these two types of early standard arrow, with both being used simultaneously for a time. Sometimes a white 4-'flight' arrow was placed across the bar of a roundel as a direction pointer, and there were other 'playful' or inconsistent uses of the latter symbol too.

In the 1930s, the background colour of signs varied and could now be light blue, cream or even in bronze (e.g. at Piccadilly Circus), as well as the more usual white, and any surrounding frame was now metal.

#### **THE CARR-EDWARDS REPORT**

In 1938, an attempt was made to introduce a more consistent set of standards with the Carr-Edwards Report produced by Lord Ashfield's secretary W.P.N. Edwards and Publicity Officer Henry Carr. This encompassed direction signs, line diagrams, car diagrams, exterior roundels, entrance fascias, and other notices on the Underground.

One recommendation was that station line diagrams use the same linear presentation style as on car saloon diagrams (and on the Beck map), as it was felt people could read such signs quicker than a simple list of station names. So, the 'line diagram' as we know it today was born, initially in a black 'cased' form with 'bulges' representing station stops. Interchanges with other lines were shown by placing the station name on a line-coloured background.

If a station interchanged with two other lines, then the background was divided either horizontally or vertically between the two colours – e.g. on a Northern Line diagram, King's Cross St. Pancras would be shown in blue & green; and Bank as green & red (note: both the District Line and Metropolitan Line used the colour green then).

The flaw in this was that it relied on a good passenger knowledge of line colours, as there was no explanatory guide, and it would have been difficult to represent an interchange with three (or more)

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<sup>1</sup> Although the LT 'bar & circle' device was known as the 'bullseye' (or 'bulls-eye') for much of its existence, the term 'roundel' has become the accepted name in more recent years, and so I have used this title throughout regardless of the period concerned for the sake of consistency.

other lines – not that there were any in 1938. The line name (or names) was now included on line diagrams, which had not always been the case before. Trains were now described as travelling ‘northbound’ or ‘southbound’ etc., in a slightly transatlantic way; instead of being ‘trains going north’ or ‘trains going south’ as previously. The outbreak of war meant that not all the recommendations of Carr-Edwards were fully implemented. Whether the total elimination of all previous signage was originally envisaged is unclear, but in the event it did not occur.

## THE HUTCHINSON REFORMS

Following the end of the Second World War, continuing austerity meant LT had less money to spend. New signs tended to be restricted to lines being extended by such parts of the 1935-40 New Works Programme that were still going ahead. Carr-Edwards was amended in 1948 and the ‘cased’ black vertical element of line diagrams replaced by solid line colour(s) as used today. Stations were now shown as single ‘ticks’, or ‘double ticks’ at the end of lines, both devices clearly lifted from the Beck diagram. (Note: The current TfL Line Diagram Standard refers to this symbol as a ‘tab’). A ‘this station’ indication was introduced, with a red & blue 2-‘flight’ arrow pointing to the ‘host’ station, the latter appearing on diagrams for the first time. Interchange stations were represented by a dot in the colour, or colours, of the line(s) intersecting at that point. A separate ‘colour key’ served to explain which colour referred to what line. Despite LT now being under the control of the British Transport Commission together with British Railways, there was no attempt yet to include interchanges with the main line railway.

The new Publicity Officer, Harold F. Hutchinson, who had joined the LPTB in 1947, simplified the direction arrow in 1949, redesigning the arrow head and reducing the ‘flights’ down to two. Hutchinson also disliked the traditional over- and underlining (or ‘pecking’) on roundels and removed these on exterior signs, which he stipulated should only ever be lettered ‘London Transport’ and not ‘Underground’, even if the premises were a railway station and not a bus garage! His attempt to eliminate the 40-year old ‘Underground’ brand ultimately failed and in 1957 it was brought back, albeit in plain block, though with large initial/final ‘U’ and ‘D’ letters.

In 1951, a number of wall-mounted glass signs were installed at a few central area stations in connection with the Festival of Britain. These had a semi-opaque appearance but were not designed to be backlit. Known examples were at Charing Cross [Embankment], Elephant & Castle and South Kensington. A longer-lasting innovation was the introduction of possessive apostrophes on signs (and maps) for many place names, so Earls Court became Earl’s Court and St. Pauls was now St. Paul’s etc. The decision of whether to add an apostrophe or not was governed by the accepted historic spelling of the place name itself, so Barons Court and Parsons Green remain apostrophe-free, whilst Colliers Wood gained one but subsequently lost it again.

Hutchinson was keen to introduce lower-case lettering on signs and towards the end of the 1950s began to use this on line diagrams for non-interchange/non-terminal stations. He also changed lettering, numerals and arrows from black to blue. End-of-line terminal stations now used an ‘arrow into a circle’ device instead of a ‘double tick’. His ‘spiky’ and generally unloved version of the Underground diagram was launched in 1960, and its awkward acute-angled corners, and black squares for BR interchanges, also influenced the appearance of line diagrams installed during this period.

Many new signs now had radiused corners, dispensed with metal surround frames and stood slightly proud of the wall. These were sometimes referred to internally as ‘table top’ signs given their similarity in appearance to an old-fashioned white enamel-surfaced kitchen table.

## THE GARBUTT INFLUENCE

Paul E. Garbutt designed a new Underground diagram in 1964 to replace the unsuccessful and unloved Hutchinson version of only a few years’ earlier. One change was the use of a black dot on white within a black circle to show a BR interchange. This concept was also introduced on line diagrams around the same time. The idea worked well enough if the station only had an interchange with BR, but if there were connections with other LT lines as well, the black dot and white circle were surrounded by line colours and thus barely discernible. The use of lower-case and blue lettering on signs and maps was dropped and constituted another reversal of a Hutchinson policy.

## VICTORIA LINE

Misha Black was appointed a consultant for the future Victoria Line in 1964. The project was to be treated as a single entity for design, with station décor and platform furniture, signage and even rolling

stock being coordinated in appearance. The overall theme was of a stripped-back image. Trains would be unpainted with minimal external logos and lettering. Platform areas were to be in white and shades of grey, items such as litter bins and headwall cabinets left in unpainted metal; and just the occasional colour accent provided by seating area tiled murals bespoke to each station.

## **BACK TO BLACK**

After the Victoria Line project, Black and his Design Research Unit external agency were engaged to update the whole LT corporate identity. In 1972, the bullseye was redrawn to the dimensions used today and rechristened as the 'roundel'. The new symbol was, wherever possible, unlettered and in one colour only. The rationale behind this being that it was deemed strong enough to represent the brand on its own, in the same way the Queen's head on a definitive postage stamp signifies the UK. Exceptions were soon made for the red & blue station platform name signs and nor was there any attempt to replace the older platform name friezes (though this did commence in the 1990s). The idea of all-red exterior roundels to indicate Underground stations was soon dropped, but a small number of signs were modified in this way. When Pimlico station opened in 1972, further revised design guidelines for line diagrams became apparent. The 'this station' arrow changed from red to black and the 'arrow into a circle' end-of-line symbol reverted back to the 'double tick' used on the Underground diagram. The biggest change was the removal of the interchange coloured circles and their associated 'colour key'. These were replaced by lettered coloured rectangles (officially 'interchange flag boxes') adjacent to station names, together with combined black circles and line-coloured 'tabs' on the vertical line. 'British Rail' and its double arrow symbol also made an appearance. This pattern of line diagram became the new standard and continued in use until the end of the 1980s.

Historically, amendments to line diagrams were carried out using metal plates riveted-on (e.g. when stations were renamed, or new lines created additional interchange options). In a few cases they were altered by sign-writers from the Works & Building Department using paint. A large number of existing signs had plates fitted to accommodate the opening of Stage 1 of the Jubilee Line in 1979. Prior to this a few new line diagrams had been installed showing forthcoming interchanges with the Fleet Line. These were later modified using plates or vinyl stickers.

## **THE YEARS OF DECLINE**

In 1983, the Underground map began indicating irregular or rush hour services by the use of a 'pecked' or hatched line. This feature was belatedly incorporated onto line diagrams some years later (e.g. on the Hammersmith & City Line between Whitechapel and Barking, and the Piccadilly Line west of Rayners Lane). In most cases, later service enhancements have rendered these signs obsolete and the majority have since been replaced.

By the time the Docklands Light Railway arrived in 1987, what was now London Regional Transport had resorted to updating signs in a cheaper way. The new Underground-to-DLR interchanges at Tower Hill, Shadwell, Bow Road and Stratford were added (if added at all) to line diagrams by means of small glued-on plates, not all of which survived the attention of 'sticky fingers'. A similar situation arose in 1990, when the Barking – Hammersmith section of the Metropolitan Line was renamed the Hammersmith & City Line and adopted a light pink colour. Many signs were replaced in their entirety on the line-of-route, but numerous others elsewhere were never modified to reflect the change. The shade of pink also varied, with an initial salmon pink giving way to a fuchsia pink later, and which provided yet more variety. The same occurred when the East London Line colour changed from 'cased' maroon to solid orange, also in 1990. Most signs on the line itself were replaced, but many others across the rest of the network were ignored. History repeated itself in 2007 when the London Overground brand was launched, with existing signs updated inconsistently, incorrectly (if at all) and often by the use of incorrectly sized paper stickers. The Johnston typeface had been progressively redesigned by Eiicho Kono from 1979 onwards as New Johnston, but was slow in being adopted across much of LT/LRT, no doubt in part due to the inherent conservatism that existed in many parts of the organisation.

## **MODERNISING THE BRAND**

The style of line diagram and general signs in use today on London Underground, and in modified form by the DLR, TfL Rail, London Overground and London Tramlink, have developed from those installed experimentally at Victoria station in late-1987. There, the existing signs were all replaced by new designs. These predominantly featured lower-case New Johnston lettering in blue. The 'this station' arrow was abolished and replaced by displaying the 'host' station name in white-on-blue. Misha Black's

1960s directional arrow was retained but reduced in length. Signs relating to Underground lines carried appropriate line-coloured stripes along their top edge and this replaced having the line name written in white (or black) on a line-coloured rectangle. This was also when LRT began using a small letter 'l' for the official names of lines – i.e. 'Victoria line' and not 'Victoria Line' (though many, including this journal editor and this author, have never accepted that change!). The numerals '1' and '4' were redrawn, with the former gaining a serif (or 'tick'), and both no longer followed the pure form of Edward Johnston's original drawings. Signs referring to British Rail or Victoria Coach Station were in plain white and without an upper stripe. All wall-mounted signs now sat within a grey frame. 'Way out' signs were now lettered yellow on a black rectangular patch and set upon a white background. Upper-case text was restricted to platform name roundels and friezes, and on the external fascia signs provided at station entrances. The latter remained white-on-blue but lost their traditional small white roundels and 'District, Circle & Victoria Lines' supplementary names. One innovation which did not last long was presenting station names in alphabetical order on some signs, a reversion to early-1930s practice. These were reported as causing total passenger confusion and were soon covered over by more usual line-of-route versions in vinyl, before being replaced.

## THE WAR ON THE PAST

With the new designs subsequently adopted as the future corporate standard, a programme began that appeared to attempt the replacement of the entire LU station signage stock, no matter how old, recent, or historic. The policy followed over decades of only replacing signs when absolutely necessary, or during station modernisation work, was abandoned. This even applied to Grade II-listed buildings from the Holden and Heaps eras, many of which still carried original signs integral to their design. At the eleventh hour, the combined forces of The Thirties Society, The Victorian Society and others intervened and helped stop their wholesale removal, in one case through a court order preventing the sale of many historic items by auction at Chiswick Works. An element of sanity returned, and it was decided that certain 'heritage' signs would be retained at a number of locations. Although some items were subsequently reinstated, much of interest and irreplaceable value was lost during this period.

## THE PRIVATISED ERA

The use of the 'British Rail' name had ceased after the privatisation of its passenger services in 1996. This initially caused some confusion as to how LU connections with the main line railways should be indicated in future. In 1999, signs on West Ham's new Jubilee Line platforms were lettered 'Way out and to Main Line trains', whilst those at Waterloo had just an arrow and 'Trains'. The term 'National Rail' was later adopted to represent the services of all Train Operating Companies in Britain and this then began to appear on LU signs. The majority of references to British Rail have now disappeared from the network, either through the use of vinyl overlays or by the replacement of older signs.

## UNDER NEW MANAGEMENT

The advent of Transport for London in 2000 and its takeover of London Underground in 2003 did not result in any significant changes to design standards. However, the ill-fated PPP period led to the needless replacement of older, and sometimes not so old signs, as both Tube Lines and Metronet found station makeovers an easier task to carry out than the more complicated engineering projects which they had deferred towards the end of their expected 30-year franchises.

At one stage, an Underground 'Heritage Committee' was established to oversee conservation issues under the chairmanship of LU Managing Director Tim O'Toole. Alas it did not survive his departure from the organisation in 2009.

Changes since 2000 include the removal of the 'tabs' either side of the interchange circles and the introduction of selected pictograms, such as those indicating interchanges with coach, tram or river services. Coloured 'flag boxes' are still placed in alphabetical order, lettered in white lower-case, except for the Circle, Hammersmith & City and Waterloo & City lines, which use blue for legibility. These are followed by other TfL modes, such as the DLR or London Overground. If a National Rail station is within walking distance and has a different name, the name is carried in an outlined 'flag box'. If the interchange is direct, then a simple National Rail double arrow in red suffices.

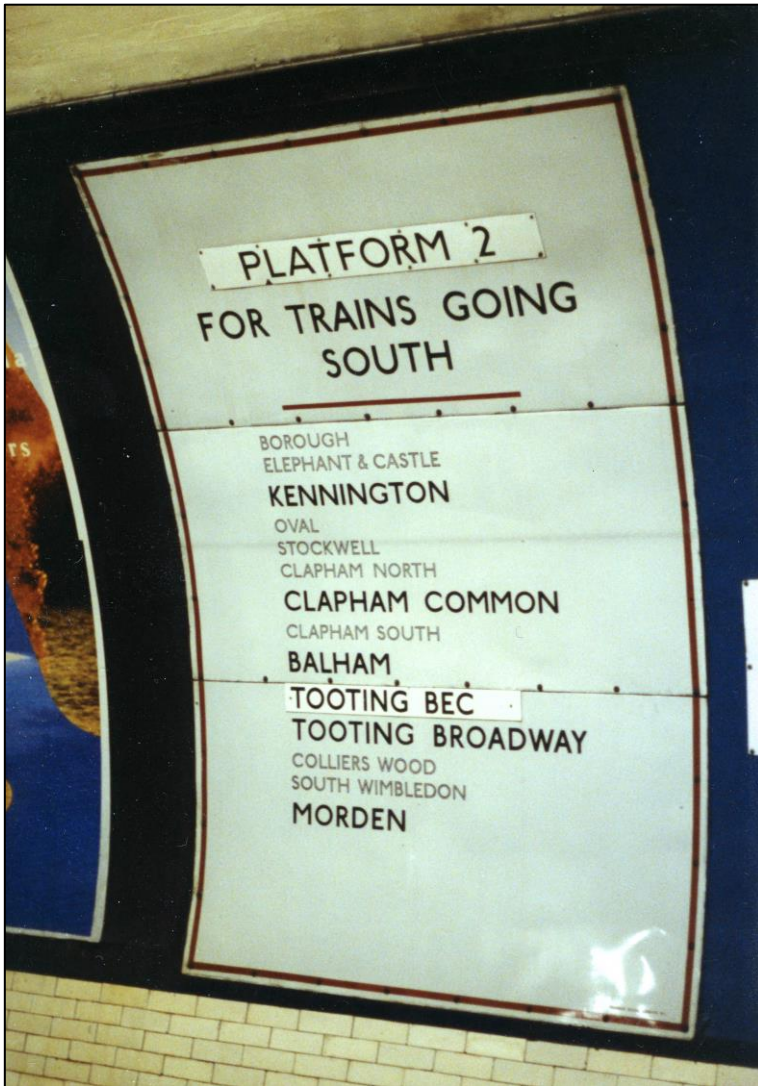
In 2016, a revised version of New Johnston appeared to mark the typeface's 100th anniversary. 'Johnston 100' includes the '#' and '@' symbols to cater for the digital age. As several characters had



been subtly altered over the years in redesigns, the opportunity was also taken to return these closer to their original form.







**Above Left:** The first standardised design of line diagram, seen here at Waterloo.

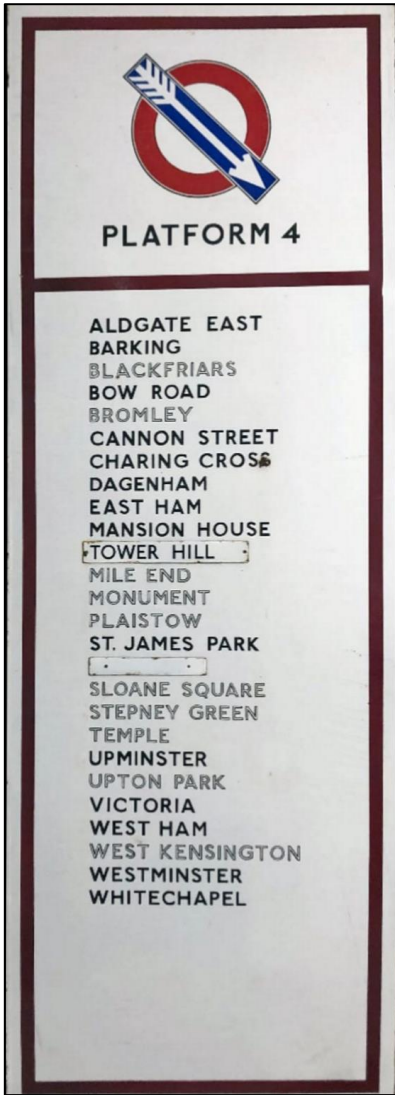
**Above Right:** The same design used at South Wimbledon.

**Left:** London Bridge. Note the addition of the platform number, and a Tooting Bec plate fitted over Trinity Road (Tooting Bec) in 1950.

**Below:** An early-1920s wooden-framed sign with a 3-flight arrow at Mansion House. Subsequently modified to reflect the renaming of Mark Lane in 1946 and re-extension of services to Upminster from 1932.

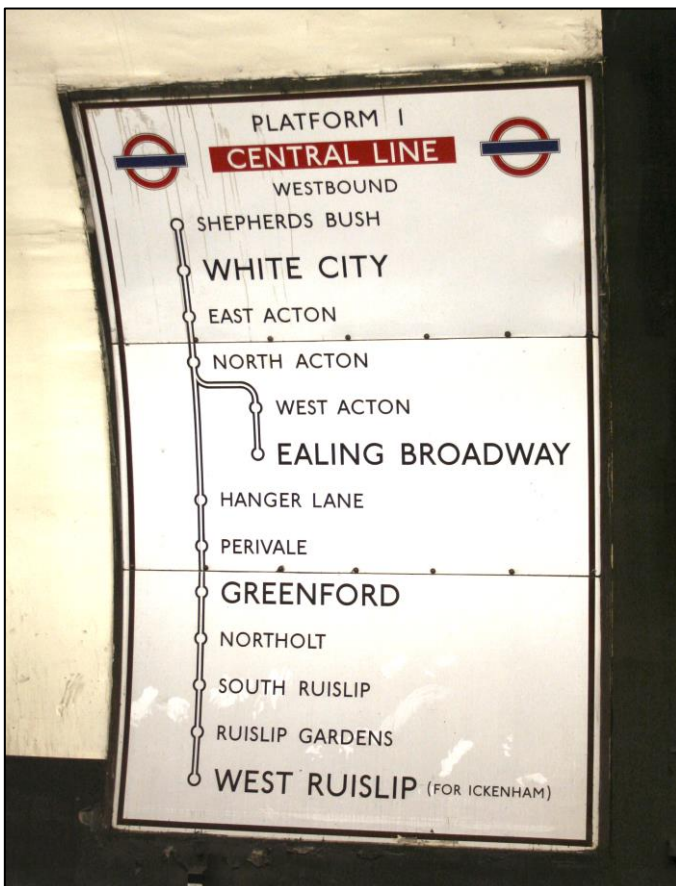






**Top Left:** Kilburn Park with the addition of a direction arrow. **Top Right:** A similar sign at Warwick Avenue. Both are plated due to the renaming of Charing Cross as Embankment in 1976 and Trafalgar Square as Charing Cross in 1979. **Left:** A 1932 sign from Hammersmith (D&P). Stations listed alphabetically but those on the more frequent Piccadilly Line omitted. Tower Hill plated over Mark Lane and St. Mary's blanked off. **Above Centre:** 1933 sign at Ealing Common. **Above Right:** 1932 sign at Ealing Common with a less accurate rendition of Johnston.



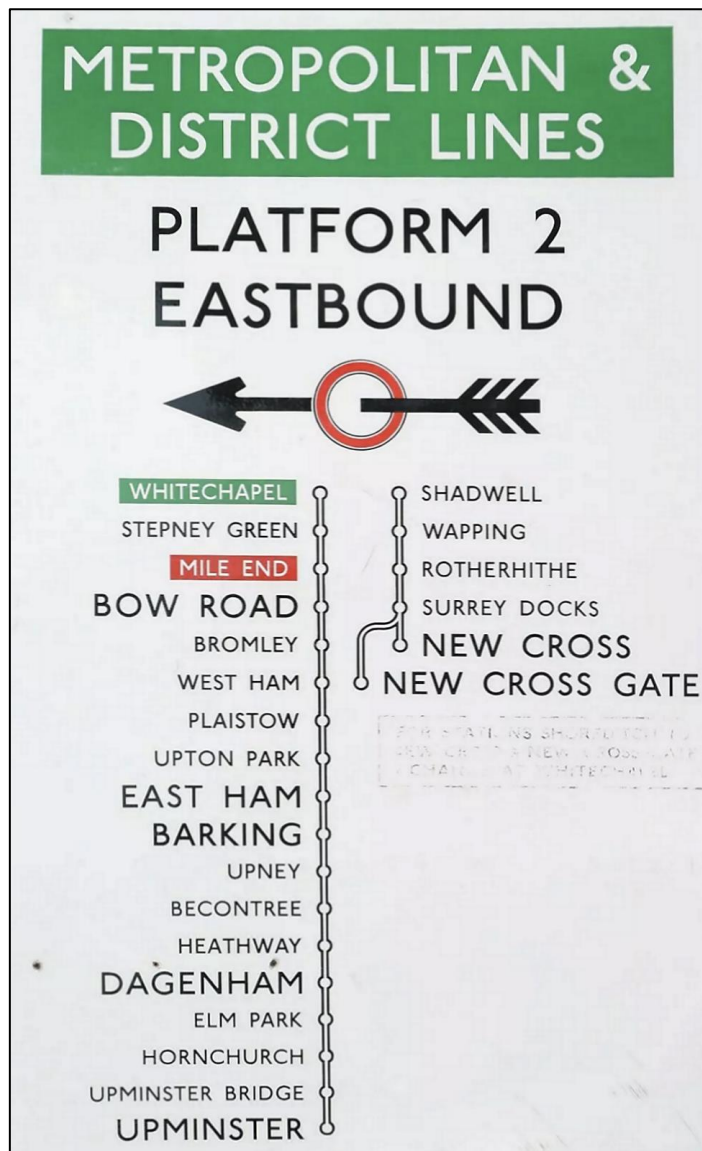
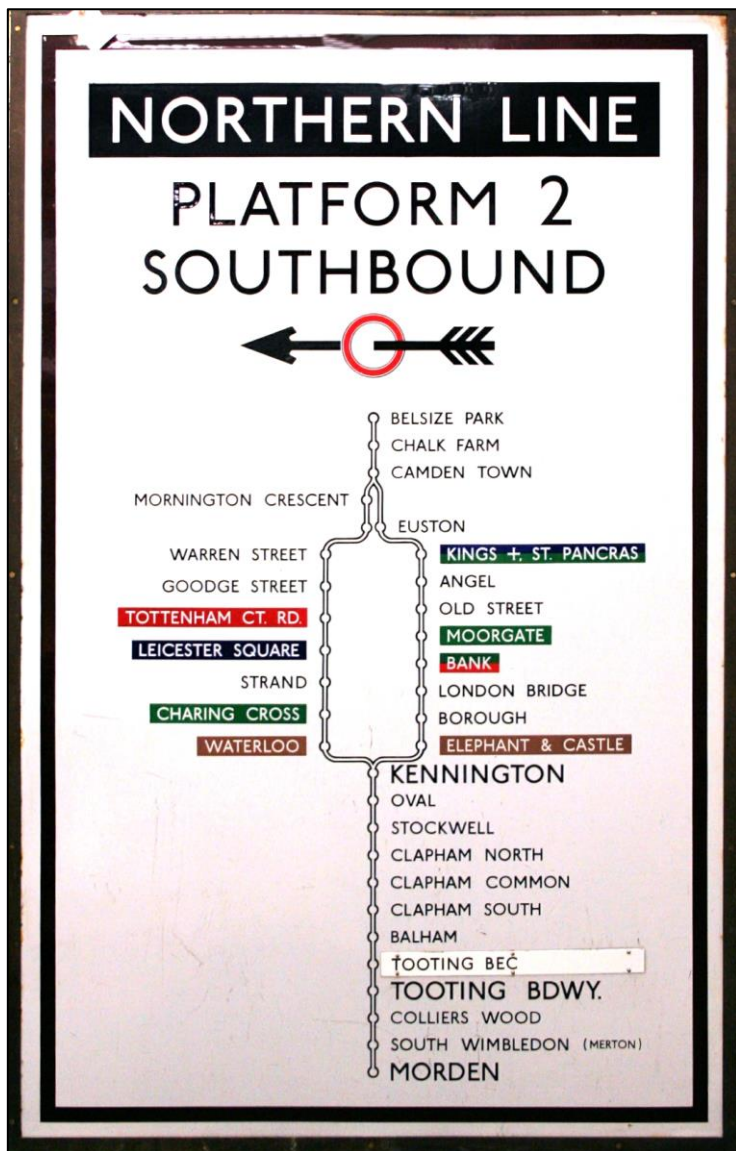


**Above Left:** This sign, once installed at Holborn and now in an American restaurant, dates from the opening of the Central Line platforms in September 1933, following the closure of British Museum, the same month that 'Central London Line' was adopted in place of 'Central London Railway'. Here we see the line name is now included on signs, and possibly influences the colour of the border too. The use of 'open' type for less busy stations has ceased. Although Post Office was renamed St. Paul's in 1937 (and the 'Central London Line' to plain 'Central Line') the sign may have survived until the western extensions opened from 1947.

**Above Right:** A 1930s paper line diagram in a disused part of Holborn station. Stations are shown as 'dots' on a vertical line with diverging branches when appropriate. Specific details of interchanges with other lines are not given, but such stations are shown as diamonds instead of circles, a device Beck used on his diagrams between 1935 and 1937.



*Previous page (Lower left): The next development was a hollow 'cased' black line with stations marked as open 'blobs', as at Holland Park. Though no interchange with the District Line is indicated at Ealing Broadway, it may be that passengers were directed via Notting Hill Gate. Regular termination points are still shown in a larger font, including Greenford, where trains could reverse until 1960, and the brown border is retained.*

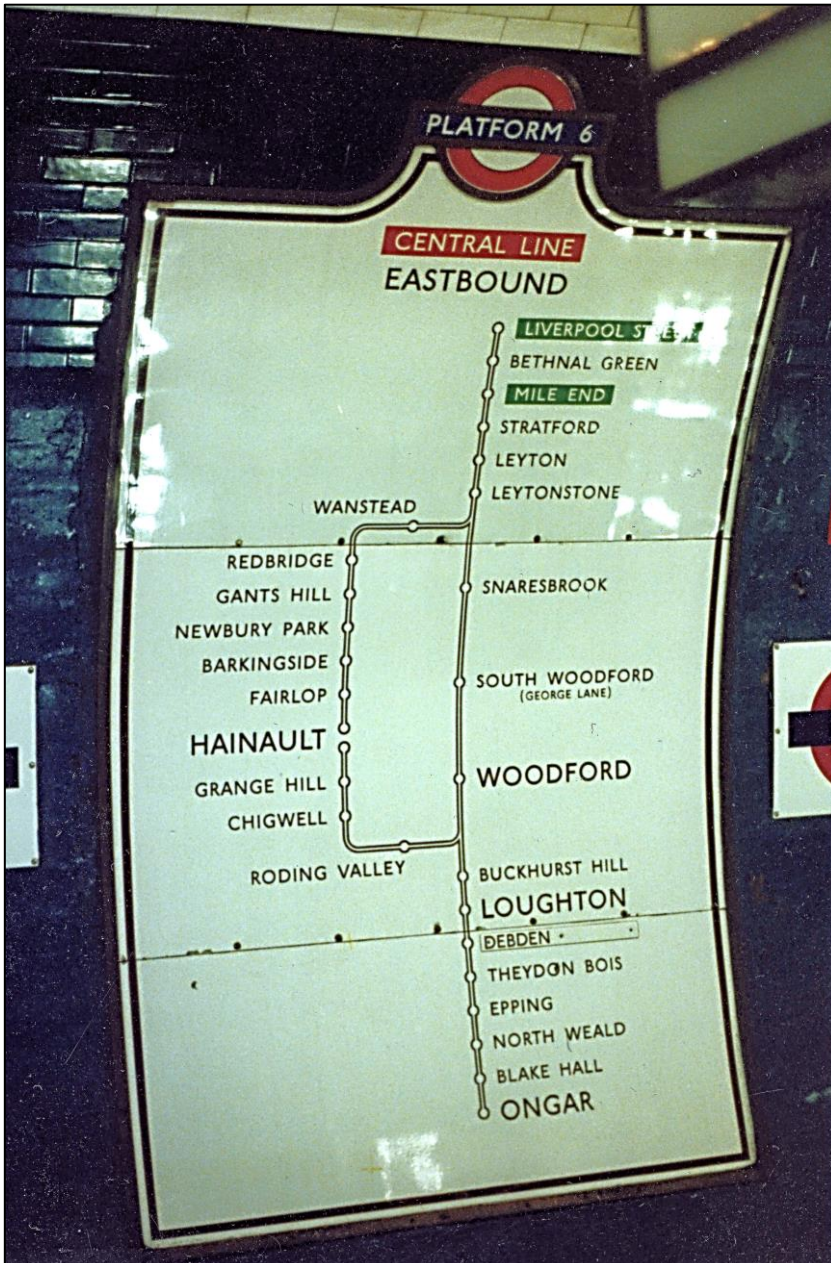
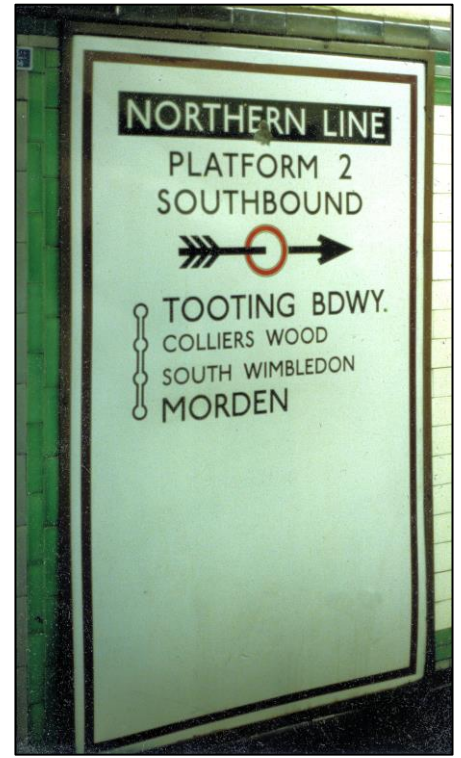


**Above Left:** A 1938 Carr-Edwards standard design for a line diagram at Hampstead. Interchanges have the station name in white on a coloured background. This assumed a good passenger knowledge of line colours and it is fortunate that interchange with three (or more) lines was not possible in those days.

**Above Right:** A sign from the 1938-rebuilt Aldgate East in the same style. The sub-surface lines had all been shown in green since 1937. Included is the through service to New Cross/New Cross Gate withdrawn in 1939. Wartime delays meant that the Central Line interchange at Mile End was somewhat premature.

**Left:** This sign is likely to have been installed at Monument in 1933 following the construction of the escalator link to Bank. In 1937 the 'Morden - Edgware Line' was renamed the 'Northern Line' and the 'Central London Line' as plain 'Central Line'.



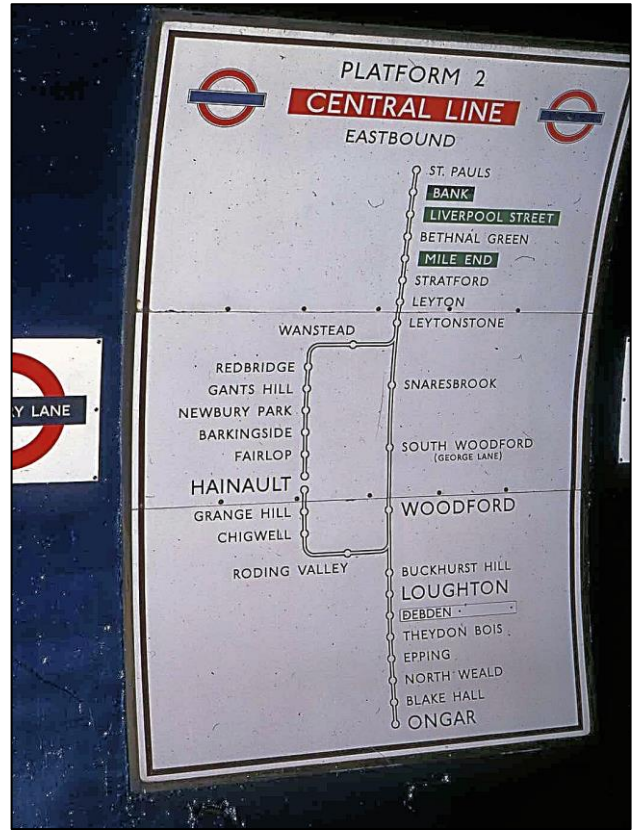


**Above Left:** A post-1937 sign at Chancery Lane produced in anticipation of the completion of the Central Line eastern extensions. Redbridge is shown as Red Bridge, Chigwell Lane was renamed as Debden in 1949 and then plated accordingly, but there is a suggestion of a through service to Ongar.

**Above Centre and Above Right:** Former signs at Balham and Tooting Bec provided after the renaming of the Morden – Edgware Line. Trinity Road (Tooting Bec) had its name changed to plain Tooting Bec in 1950 and an amendment plate (since removed) was fitted. In both cases, scheduled termination points are shown in a larger font. Note that trains are now 'southbound' and not 'going south'.

**Left:** A variation of the standard late-1930s line diagram at Bank, with the platform number at the top incorporated within a roundel. As at Chancery Lane, Chigwell Lane is now Debden and a through service to Ongar is again implied, but Redbridge is spelt as one word.





**Above Left:** A 1930s application at Hammersmith (D&P). The later Piccadilly Line extensions to Heathrow Terminals 123 and then Heathrow Terminal 4 have been added on a faithfully matching plate. There was never any mention of the erstwhile District Line service to Hounslow though, possibly due to its irregularity, and the fact that the Piccadilly Line provided a more frequent alternative.

**Above Right:** Chancery Lane again. Why the top part of the sign differs from that at Bank is a mystery, given that they would have been installed at roughly the same time.

**Left:** After the war, amendments to the Carr-Edwards Report led to the appropriate colour being used for the vertical aspect on line diagrams, which was now solid instead of 'cased', and used single

or double 'ticks' for stations as on the Beck diagram. Interchanges are indicated by coloured circles, which could be bi-coloured or tri-coloured in the case of links with more than one line. The brown borders were omitted, and a new, plainer 2-flight arrow made its appearance. Another new idea was the 'this station' 2-flight arrow showing the passenger's current location. No mention is yet made of the new British Railways. Neither Shepherd's Bush nor St. Paul's are spelt with apostrophes, a grammatical practice not adopted by LT until 1951. The closure of Blake Hall in 1981 was subsequently accommodated by means of a metal plate, but the end of Epping – Ongar services in 1994 had to make do with a sticker. These examples from circa-1949 survive at West Acton.

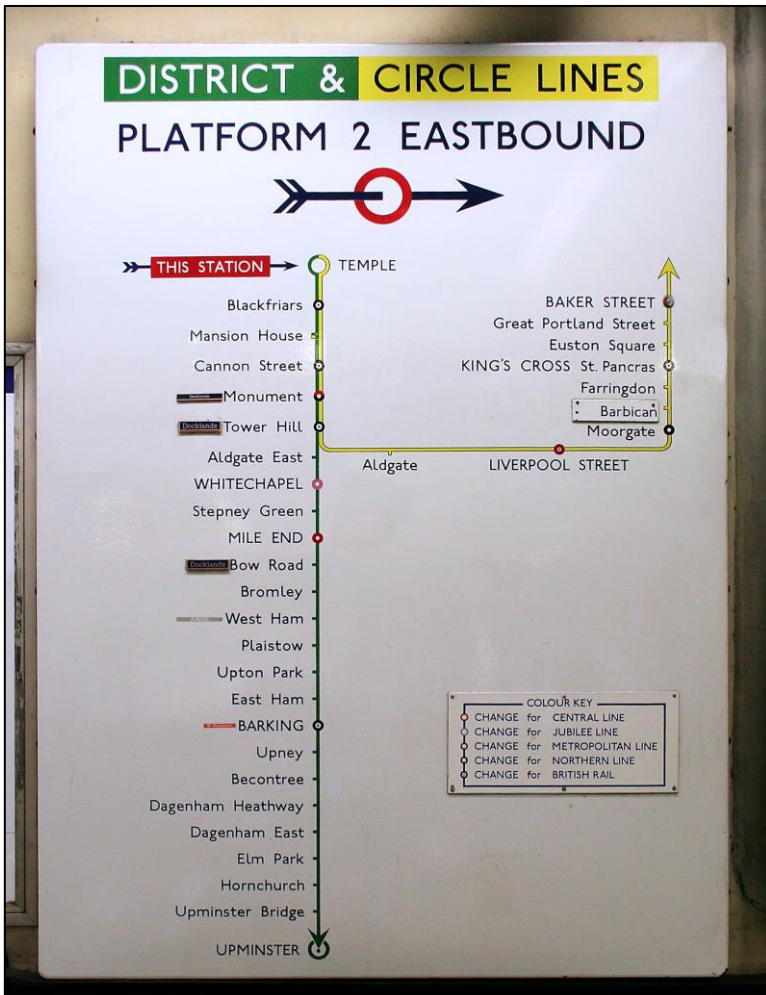




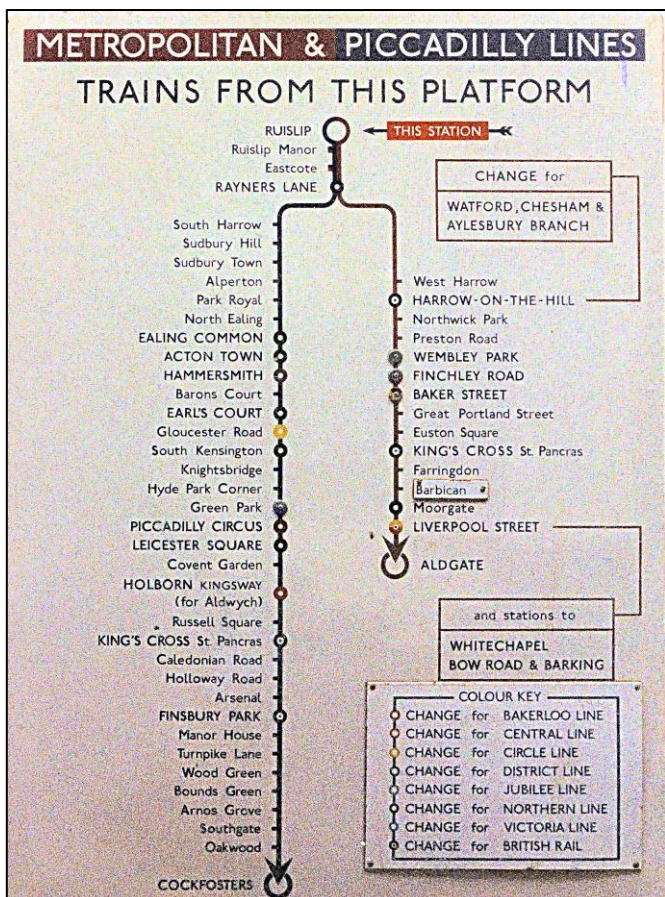
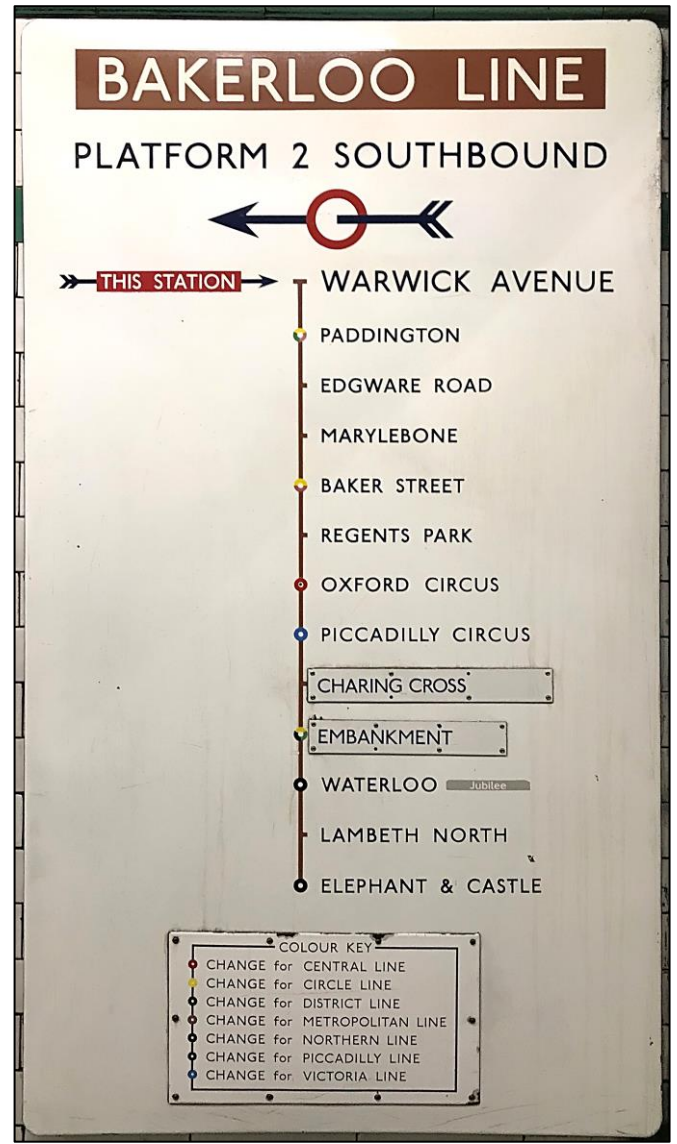
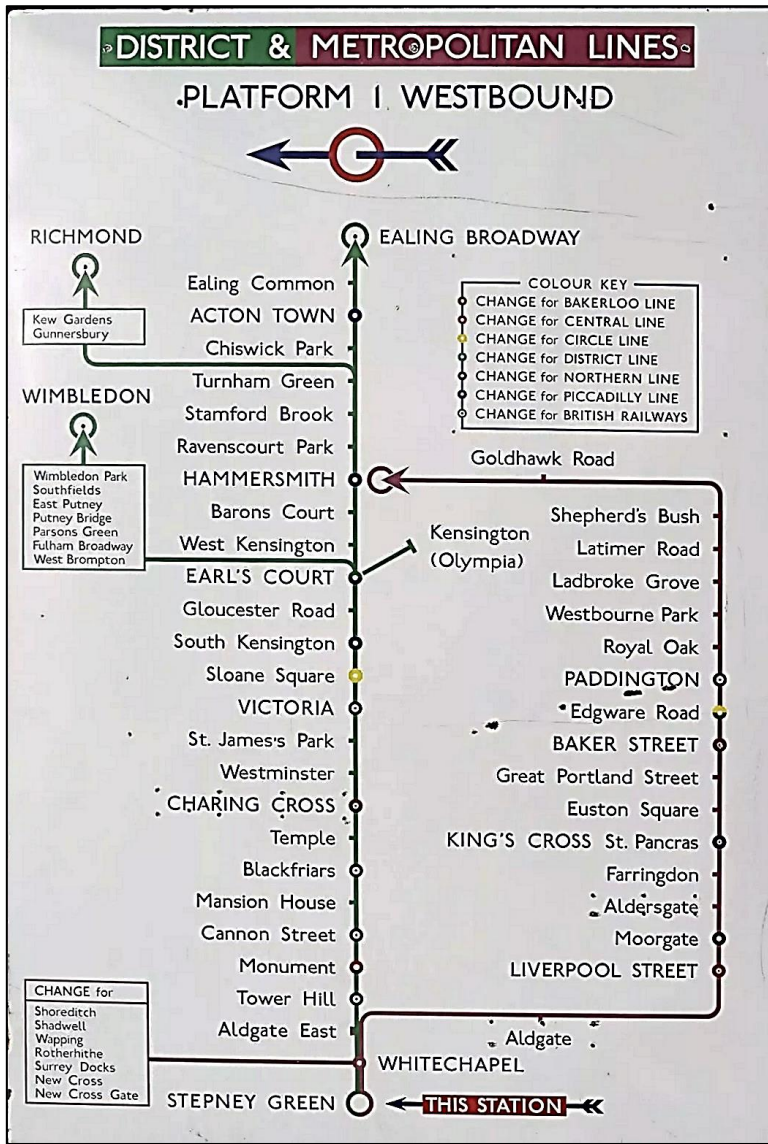
**Left:** A 1949 sign at White City. The advent of the Victoria and then Jubilee lines meant that a light blue & brown circle was fixed over the original one at Oxford Circus, and a light grey one added at Bond Street. This meant the 'colour key', another innovation, was expanded twice, both times by means of riveted-on metal plates. The subsequent arrival of the DLR, closure of Blake Hall and then the Epping – Ongar branch, and arrival of London Overground were depicted less diligently. The sign was replaced under the Metronet refurbishments of the 2000s.

**Below Left:** In 1964 Paul E. Garbutt introduced the idea of a black dot within a circle to indicate interchange with BR, whilst the use of lower-case for 'minor' stations had been an earlier innovation under Harold F. Hutchinson, so together they give some clue to the age of this sign at Temple. Aldersgate has been renamed Barbican in 1968, and the original Jubilee Line is well catered for, but its extension to Stratford; the DLR, and London Overground have been crudely added.

**Below Right:** Another mid-1960s sign, this time at Ladbroke Grove. Note how the joint D&P Line names are not shown alphabetically, but rather with the main service provider given precedence. The 'arrow into a circle' device at the end of lines was also a new feature.





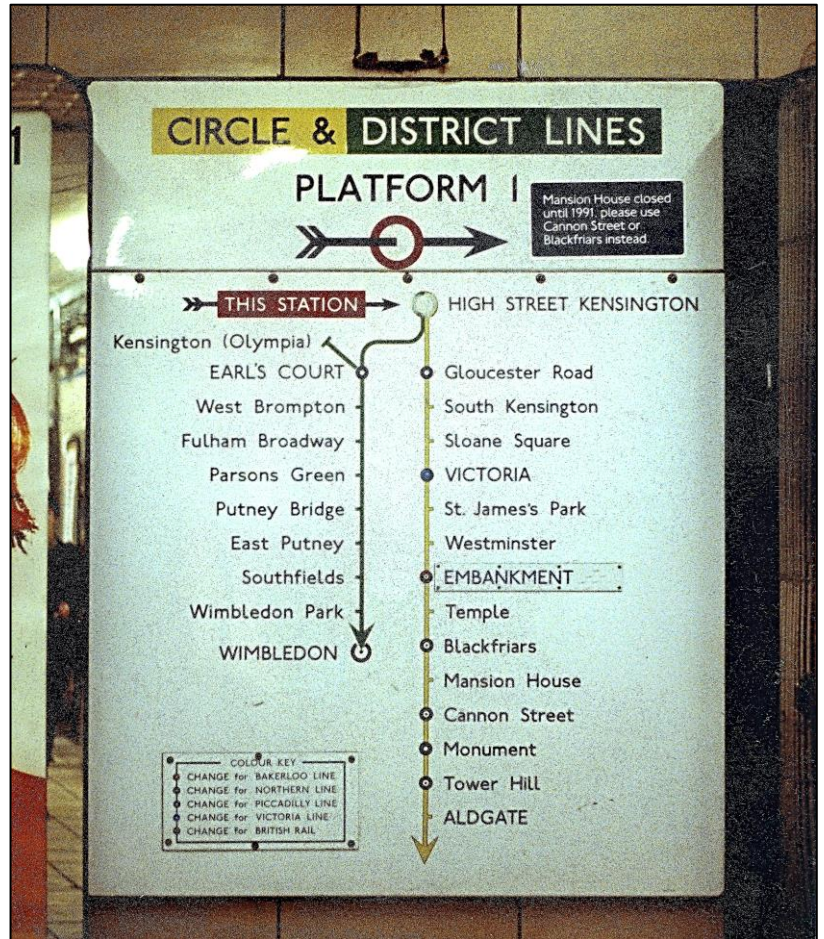


**Above Left:** A sign from Stepney Green. The part-use of lower-case type and absence of the Victoria Line suggests a date of circa-1960. Amendment plates (since removed) once reflected the renaming of Aldersgate and Charing Cross. Note the erroneous 'Aldgate' between Aldgate East and Liverpool Street and later blanked-off. The use of boxes to list certain stations was similar to how Beck treated the east end of the District Line on maps until 1954.

**Above Right:** A 1948-50 sign at Warwick Avenue. Upper-case lettering throughout and no apostrophes or mention of BR. Trafalgar Square and Charing Cross are plated over, but no sign of a Jubilee Line or Hammersmith & City Line at Baker Street.

**Left:** An incredible survivor for many years at Ruislip was this mid-1950s example that still showed the LT service to Aylesbury that ceased in 1961. Boxes are again used to show branches on the peripheries. Both the Victoria and Jubilee lines had been added correctly. That lower-case type was now being used for line diagrams, yet only upper-case appeared on maps, was surely because Hutchinson was unable to get his hands on the latter until Beck relinquished control in 1960.



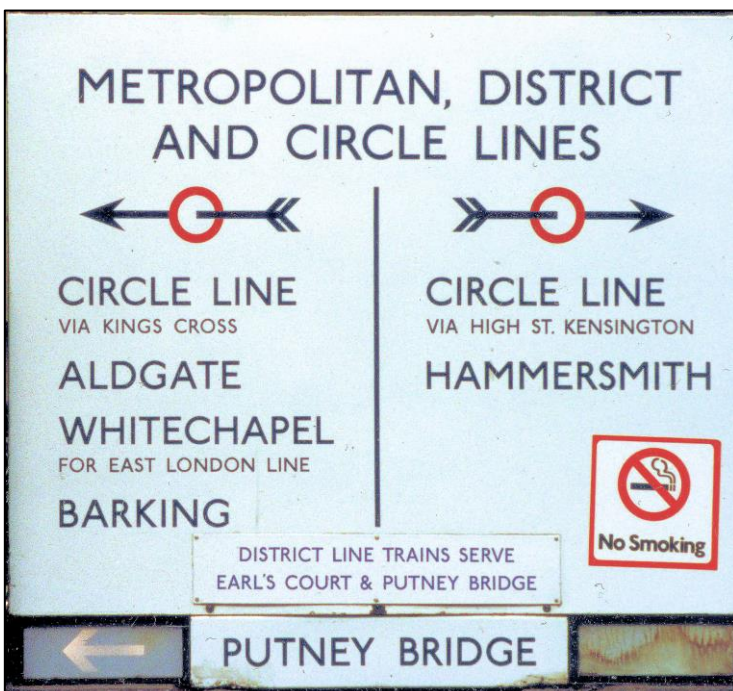
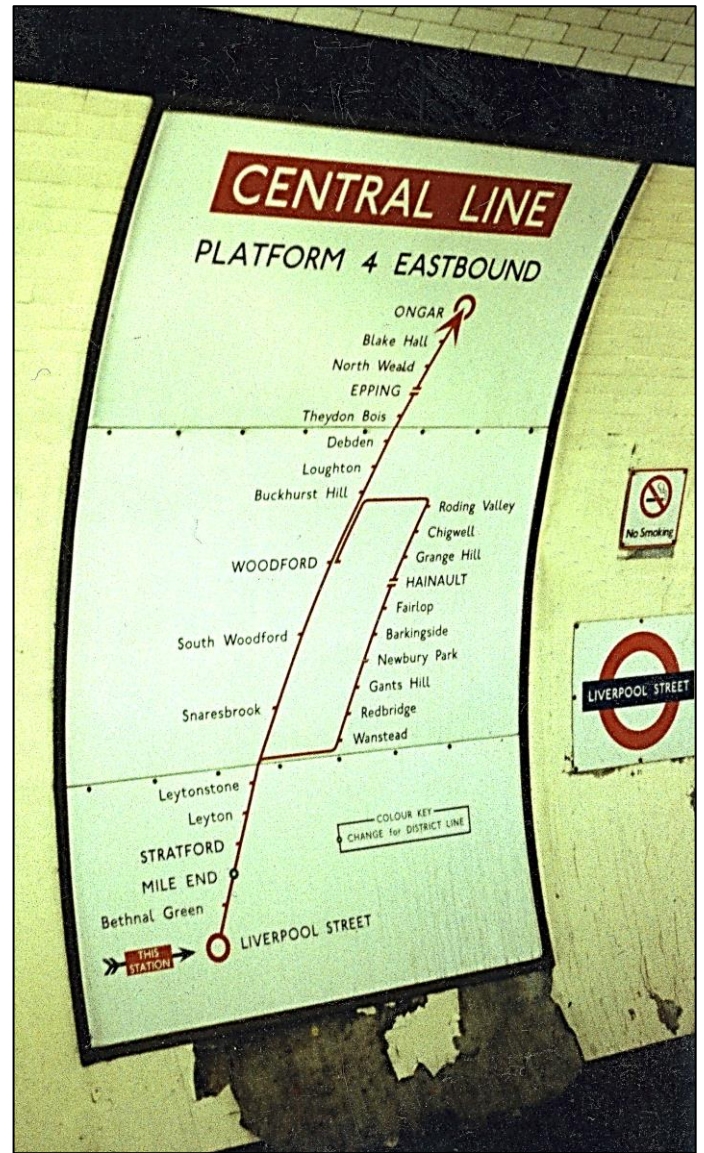
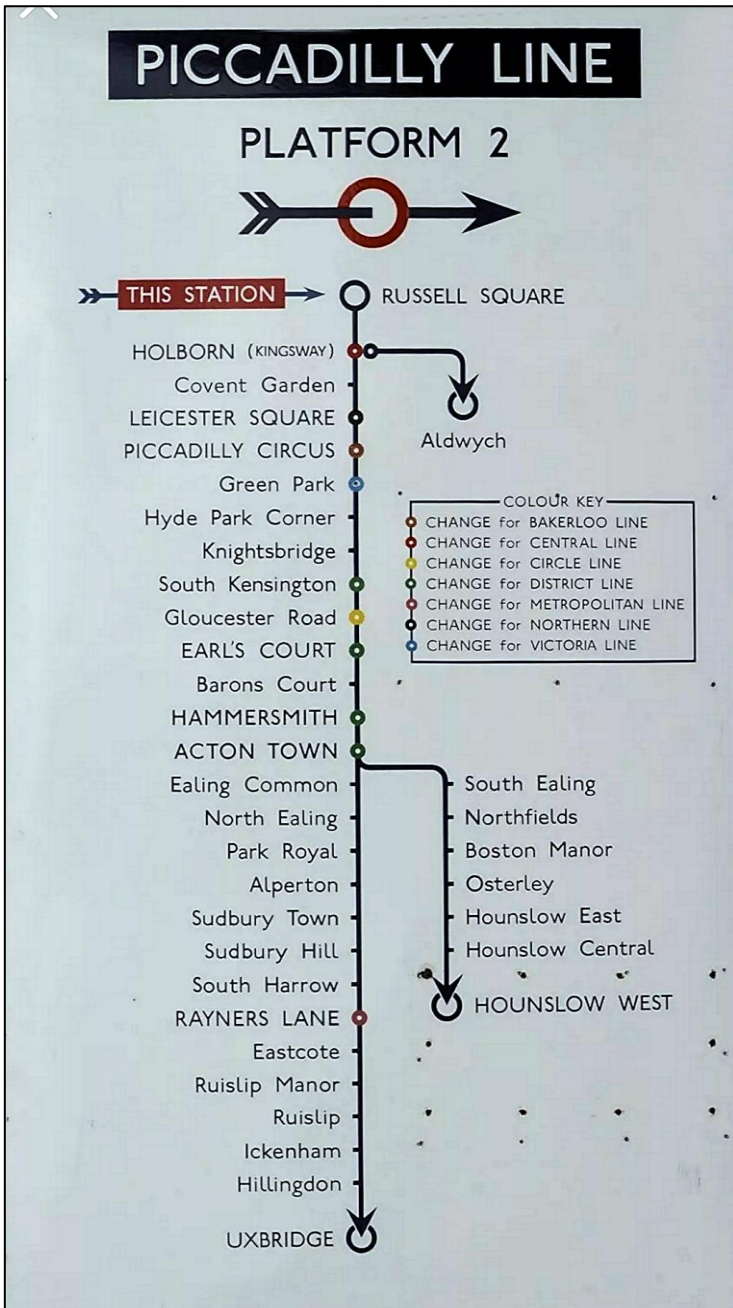


**Above Left:** An unusual convex sign in the lower circulating area at Embankment. This dated from between the first use of yellow to indicate the Circle Line in 1949 and the renaming of Walham Green as Fulham Broadway in 1952. The original station name has been plated over, and a light blue interchange circle added at Victoria upon the arrival of the Victoria Line in 1969. The Victoria Line was added to the 'colour key' by an expanded version riveted-on and an Embankment plate is fixed over Charing Cross. The former District Line branch to Hounslow West has been crudely painted out in black, and there is still no mention of BR.

**Above Right:** Another early-1960s sign at High Street Kensington with the changes at Charing Cross and Victoria added later. The Circle Line name takes precedence even though the District Line was marginally the greater service provider.

**Left:** One of a small number of signs made of glass in 1951 in connection with the Festival of Britain. Almost certainly the very last in position was this example at Elephant & Castle. The dilapidated station environment is typical of late-1980s LRT.



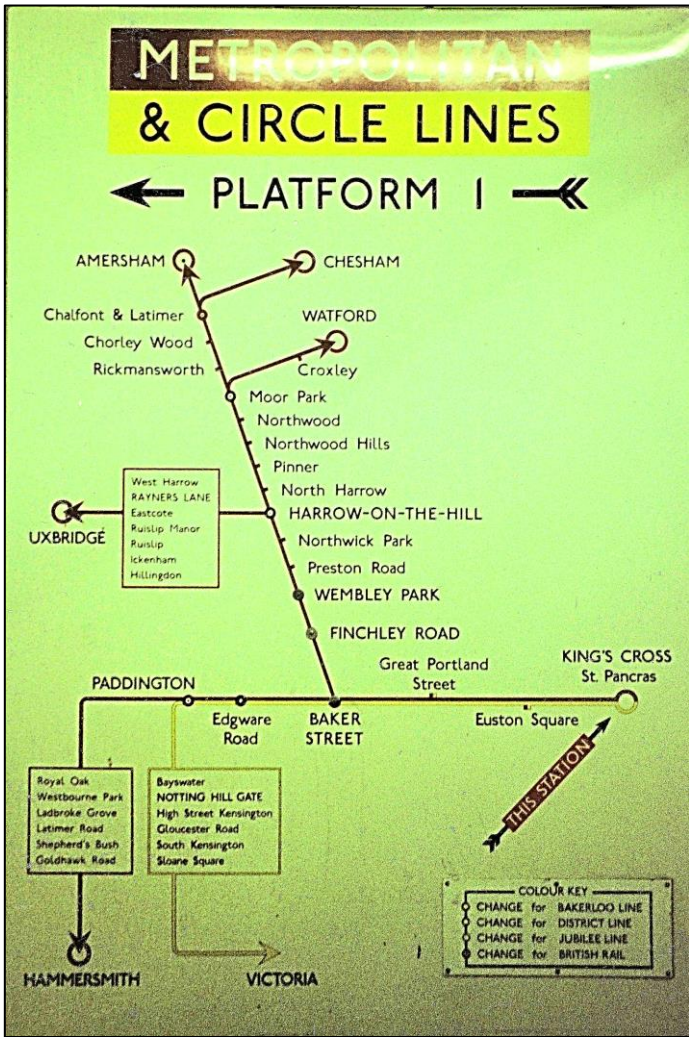


**Above Left:** The presence of the Victoria Line as originally manufactured places this sign as 1960s, though the continued use of a 2-'flight' arrow suggests it appeared before the opening of the line in 1968. Another item in private hands, the plates added to show the Jubilee Line, and the various Piccadilly Line extensions beyond Hounslow West, have since been removed.

**Above Right:** A short-lived fad was this type of diagonal sign, first used in 1964, where to an extent there was an attempt to portray geography on the diagram. There is no longer any suggestion of a through service to Ongar (or Chigwell) now though. The absence of a BR interchange at Stratford is probably due to it being thought easier done via the main line station upstairs.

**Left:** A combined direction sign and 'first train out' indicator at Edgware Road (Met.).



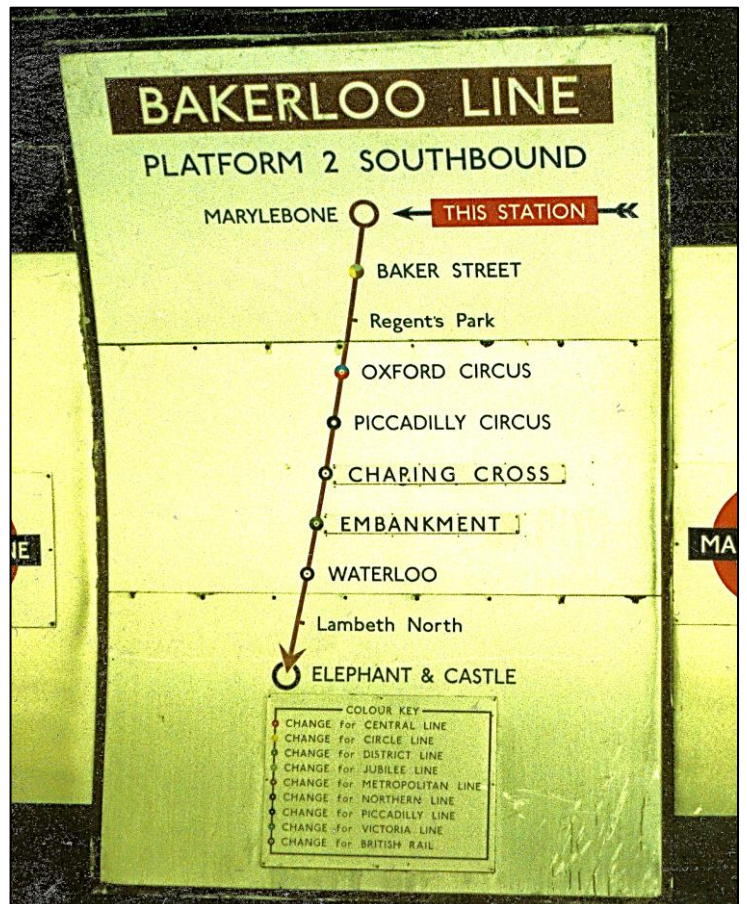
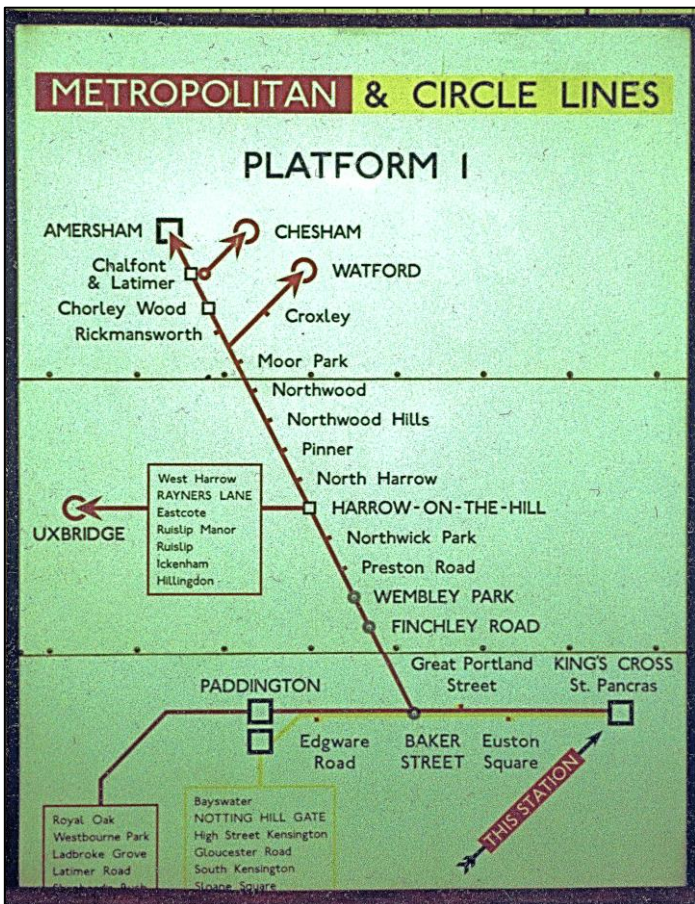


**Left:** Another of the 'diagonal' line diagrams that were briefly in vogue in the mid-1960s, in this case at King's Cross following the electrification to Amersham in 1961 and consequent cessation of Metropolitan Line trains to Aylesbury. As a space-saving measure, a number of stations appear in boxes. The coming of the Jubilee Line is marked by the revised circles fitted at Baker Street, Finchley Road and Wembley Park. Chorleywood would officially be spelt as two words by LT until 1964.

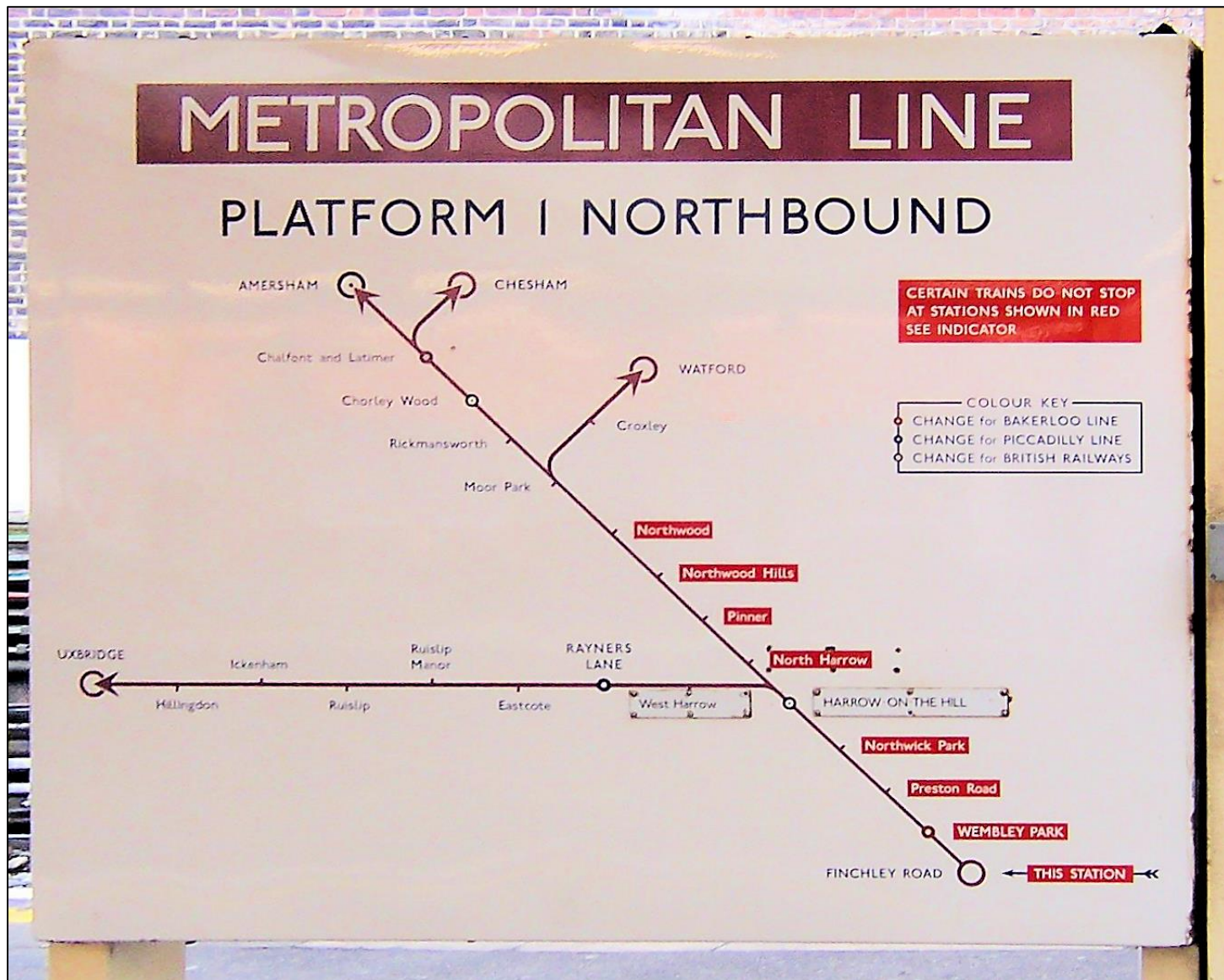
**Below Left:** A similar sign at King's Cross St. Pancras but with some differences. Interchanges with BR are indicated by black squares instead of a circle, a device introduced by Hutchinson on the Underground map in 1960. The sharp corners on the Hammersmith branch are also reminiscent of his generally unpopular 'spikey' system maps. The treatment of Paddington on the two diagrams is quite different. On the previous sign Moor Park is shown as a BR interchange, whereas here this is omitted, and Chorleywood and Chalfont & Latimer are added as BR interchanges instead.

**Below:** Another use of the 'diagonal' line diagram concept, this time at Marylebone, although of course the southbound Bakerloo Line runs geographically from north west to south east and not as suggested here. Revised interchange circles have been added at Baker Street and Oxford

Circus, and Trafalgar Square and Charing Cross are again plated over with their new names. No fewer than nine other Underground lines, plus BR, appear on the 'colour key' plate.





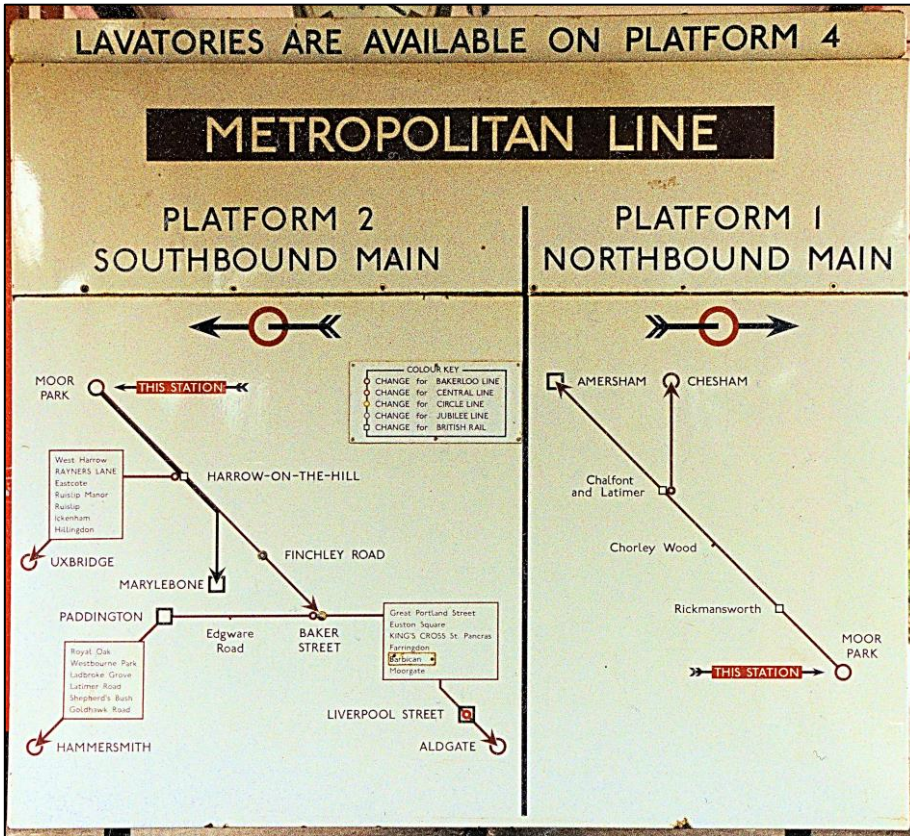


**Above:** The regular operation of fast and semi-fast services on the Metropolitan Line was, for a time, indicated by showing stations that could be non-stopped in white-on-red, as on this circa-1961 sign at Finchley Road. After 1974 trains no longer non-stopped West Harrow or Harrow-on-the-Hill, and such signs were amended accordingly. The former Bakerloo Line interchange at Wembley Park remains unaltered though. For some reason North Harrow has also been removed from the list of stations non-stopped at one point.

**Below:** Not a line diagram in the generally accepted sense, this probably pre-war sign hung above platforms 1 & 2 at Earl's Court until at least the late-1980s. The 'minor' Bow Road station only appeared by virtue of once being a scheduled reversing point, and through services to Baker Street and the north side of the Circle Line had long ended. The 'Embankment' sticker covering 'Charing Cross' has been peeled off.



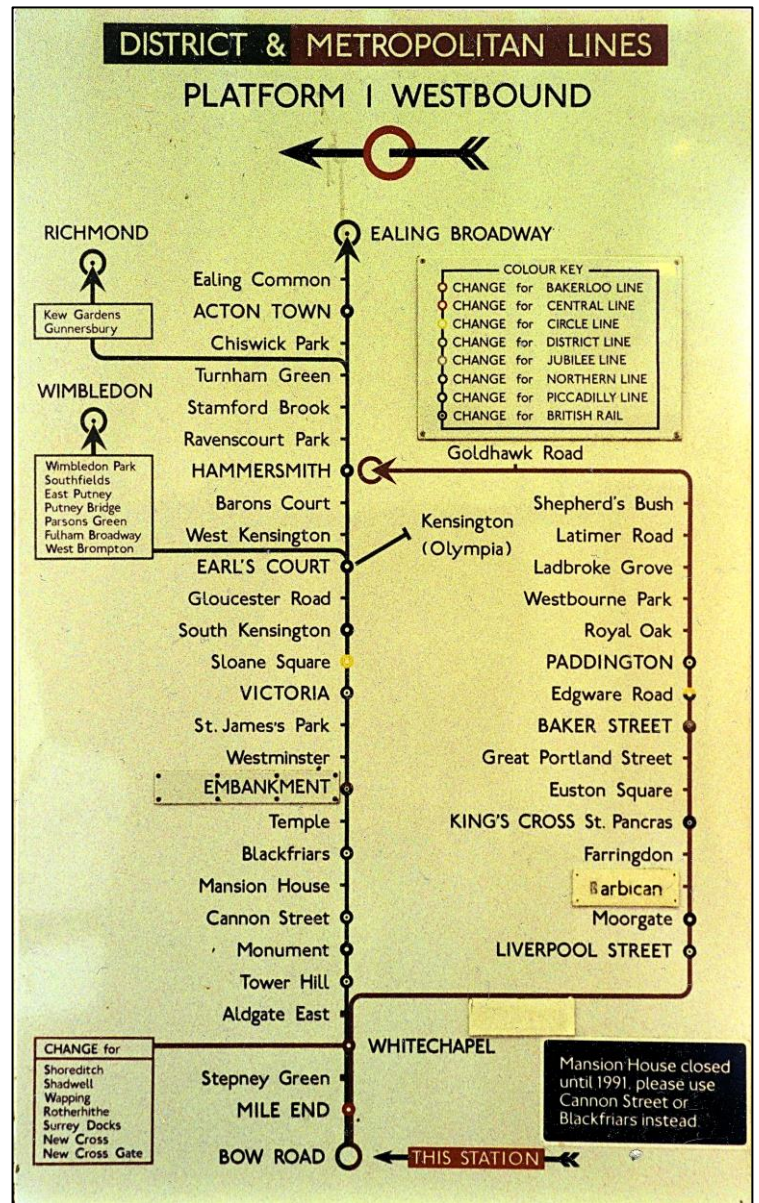
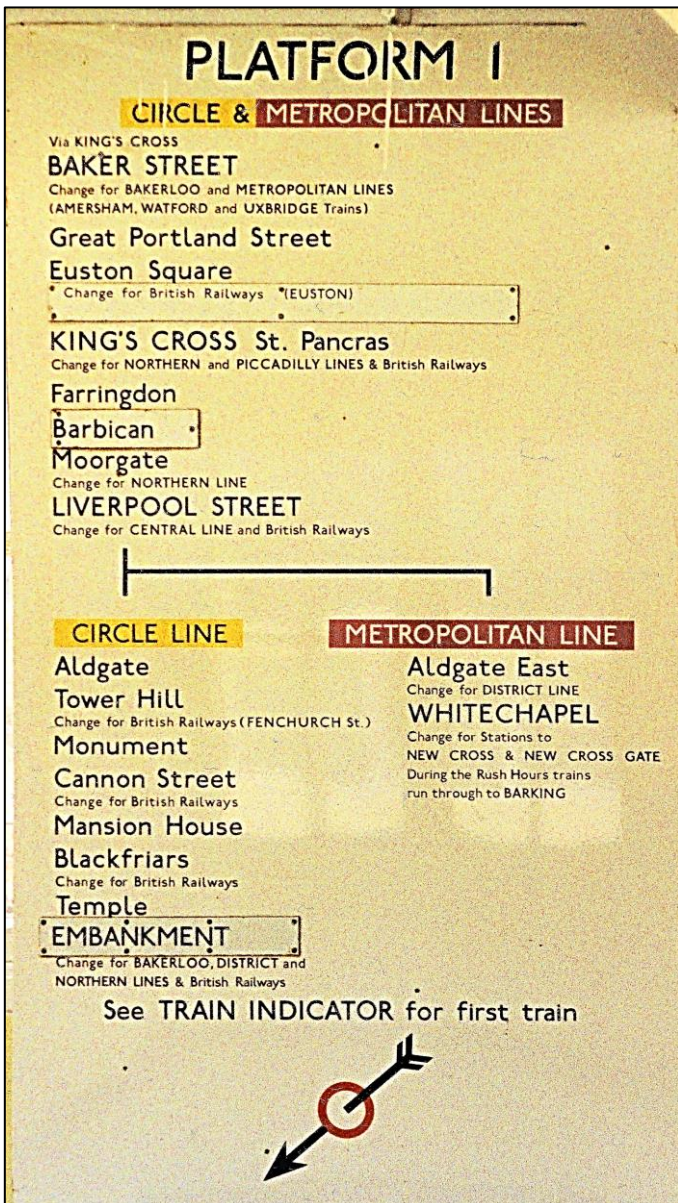




**Left:** Moor Park was rebuilt in 1961 and new signs provided. This stood at the head of the stairs on platforms 1 & 2. A typical Hutchinson design with acute angle curves and black squares for BR interchanges. Note the separate BR line into Marylebone. The treatment of Liverpool Street is particularly odd.

**Below Left:** This sign, once at Edgware Road (Met.), dates from the end of Aylesbury services in 1961 and the Victoria Line opening in 1968-9. The blanking plate below Euston Square covered the former out-of-station interchange with the Northern Line at Warren Street.

**Below Right:** An almost identical sign to that at Stepney Green with the blanking plate over a rogue 'Aldgate' still in place.







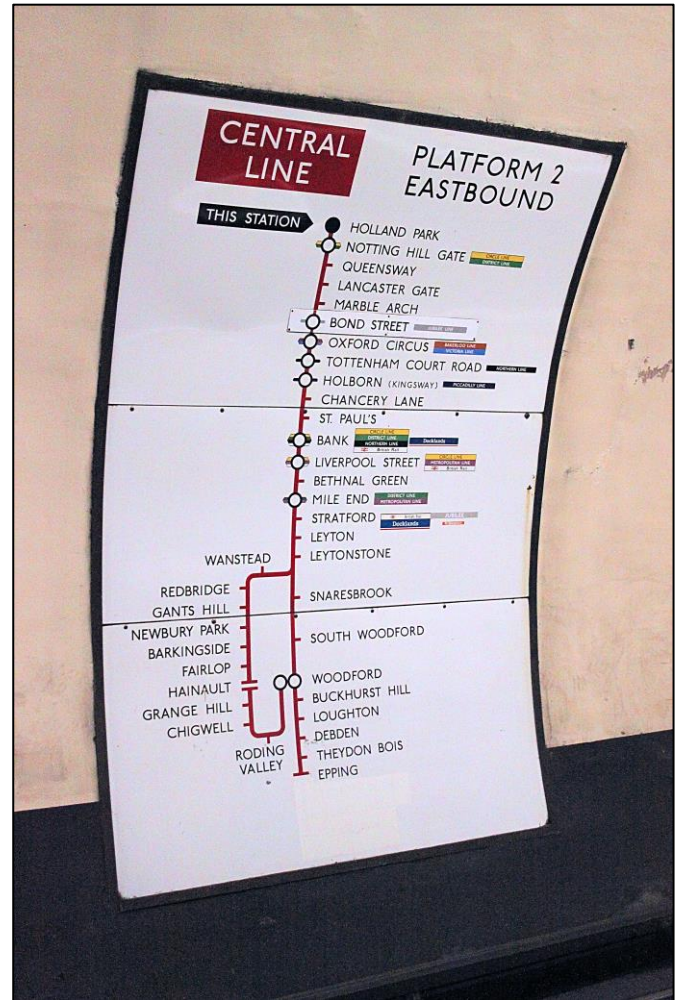
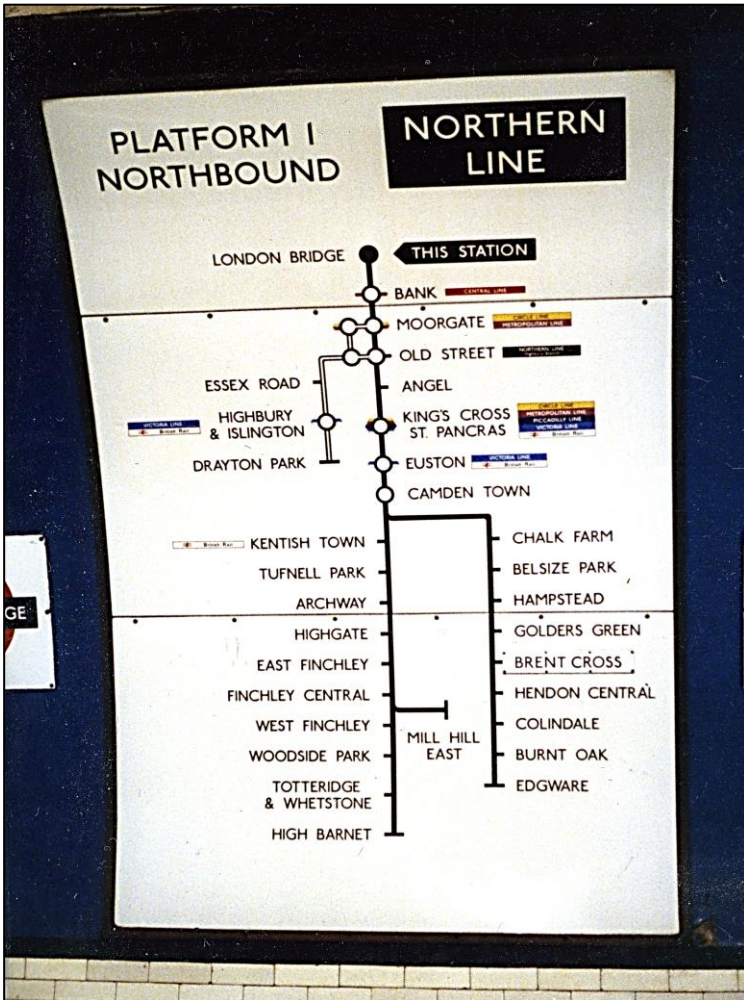
**Above Left:** In 1964 Misha Black was appointed as a design consultant responsible for all aspects of the new Victoria Line and this included signage. This is one of the original line diagrams installed at Euston in 1968. Though similar to the previous design, station names are now all in upper-case again and the 'this station' arrow has been simplified. BR had begun referring to itself as 'British Rail' from 1965 but LT preferred to use the more formal 'British Railways'. Although difficult to discern, the former Northern City Line is still shown at Highbury & Islington.

**Above Right:** When Pimlico opened in 1972, further revised design standards had been introduced. The 'this station' arrow had changed from red to black, the 'arrow into a circle' end of line symbol had reverted back to the 'double tick' used on the Underground diagram, and the line name was now offset and on two levels. The most obvious change was the abolition of the interchange coloured circles and associated 'colour key', and their replacement by line-coloured rectangles adjacent to station names, plus a combined black circle and line-coloured 'tab' on the vertical line itself. 'British Rail' and its double arrow have also made an appearance. This would become the standard line diagram design for the next twenty-odd years. This particular sign was made of melamine, a material that was briefly popular with LT in the 1970s as an alternative to vitreous enamel but did not wear well. The amendment plate at Green Park records the arrival of the Jubilee Line in 1979, whilst that at Highbury & Islington is due to the closure of the Northern City Line and start of BR's Great Northern Electrics service in 1976. London Overground has been added at Euston and Blackhorse Road (and incorrectly at Finsbury Park) but not at Highbury & Islington. The later expansion of LO to include the West Anglia Inner Suburban Lines had not occurred when this photo was taken.



**Left:** A close-up of a 'colour key' amendment plate made to add the Victoria Line to an existing line diagram in 1968-69. Coloured circles were used to indicate interchange stations from the late-1940s until the early-1970s.



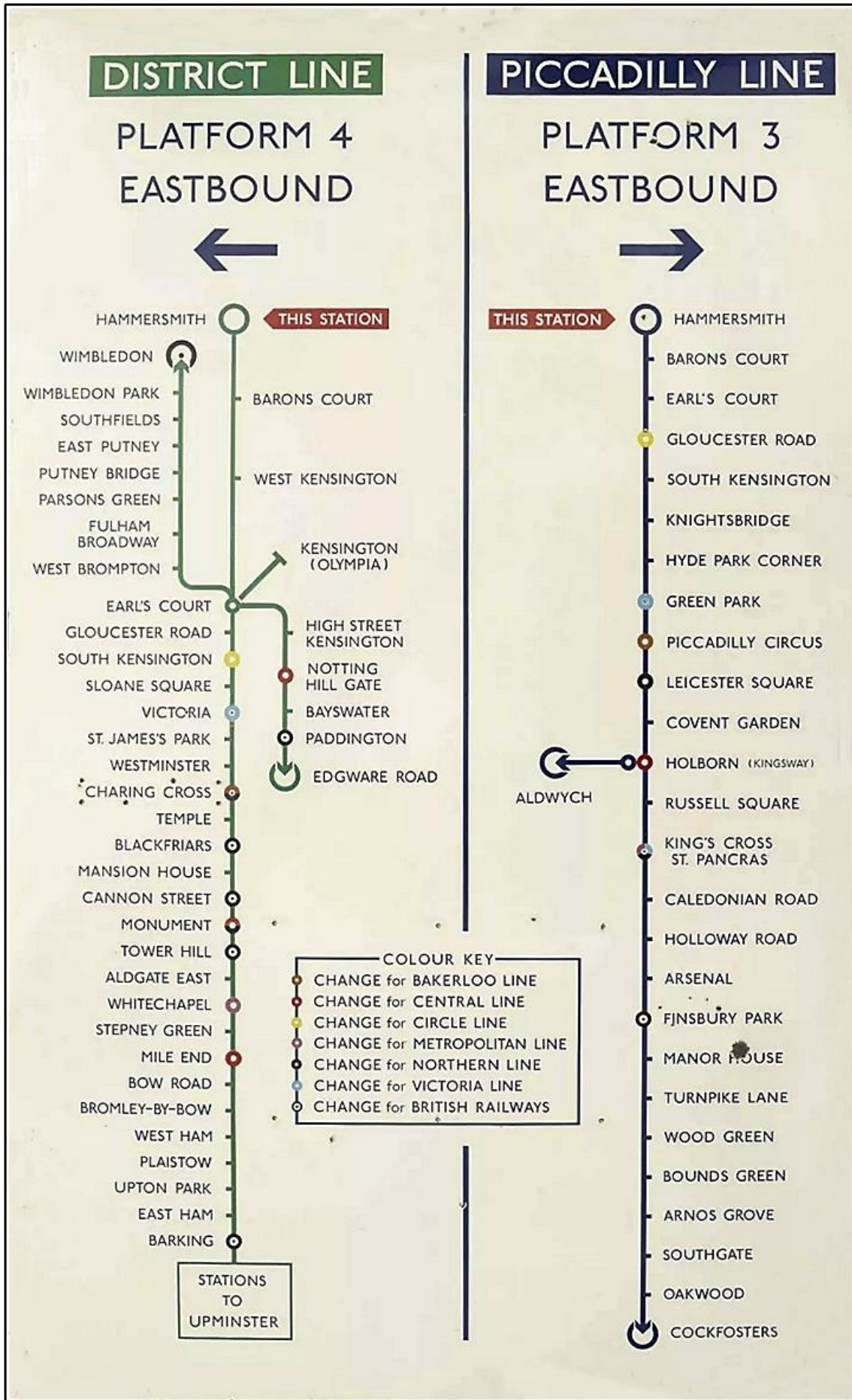


**Above Left:** London Bridge circa-1990. The right-angled 'corners' are an early feature of this type of sign. This diagram was provided circa-1968 in connection with the Victoria Line. Brent was renamed Brent Cross in 1976 and a modification made, but the Northern City Line remains, despite being transferred to BR the year before; and Old Street still has an interchange with the 'Northern Line Highbury Branch'.

**Above Right:** A later sign with more radiused 'corners'. Bond Street was plated to add the Jubilee Line, but the DLR at Bank and Stratford had stick-on plates, the Jubilee Line and London Overground at Stratford used stickers, whilst Epping – Ongar was simply painted out. Holborn retains a late 'Kingsway' suffix, BR is still shown at Bank and there is no mention anywhere of the Hammersmith & City Line.

**Left:** The Bakerloo Line was withdrawn between Stonebridge Park and Watford Junction in 1982, but extended back to Harrow & Wealdstone in 1984, when this sign probably appeared. The Jubilee Line has since been obscured at Charing Cross, again there is no Hammersmith & City Line, and the orange London Overground stickers should only have been applied at Queen's Park, Willesden Junction and Harrow & Wealdstone. The painted-over area on the lower left referred to the restricted service north of Queen's Park.



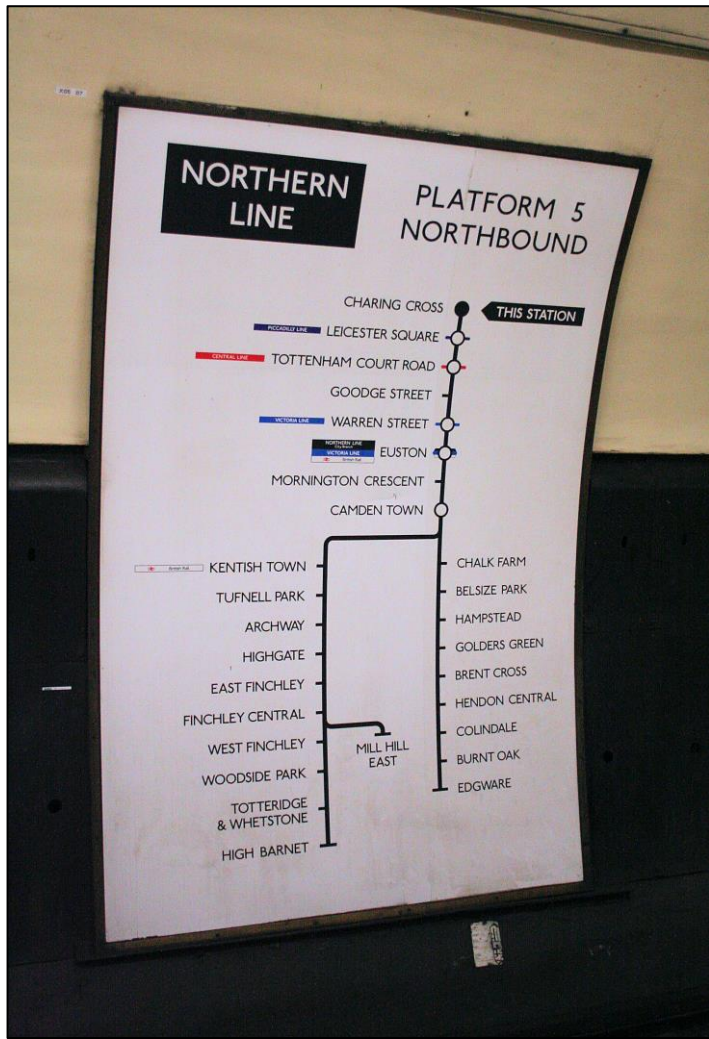


This sign on the eastbound platform at Hammersmith (D&P) was probably installed around about the time the Victoria Line was being opened in 1968-69. Note that Holborn retained its 'Kingsway' suffix at this time. Charing Cross was plated over with Embankment in 1975, and in 1979 a revised joint grey/light blue interchange circle was added at Green Park, and an expanded 'colour key' provided, both to

accommodate the new Jubilee Line. The amendment plates have since been removed under private ownership.



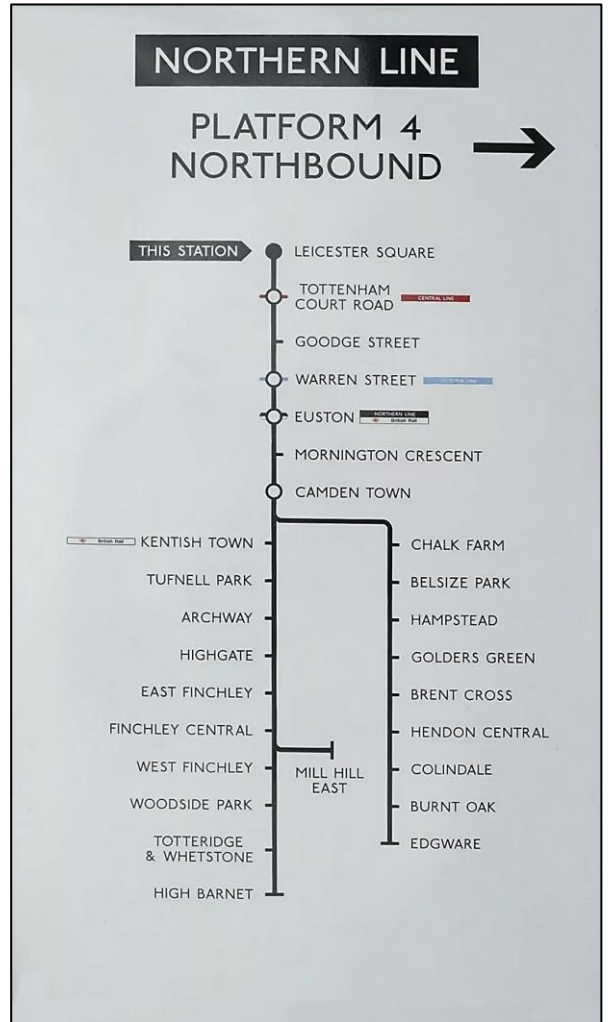
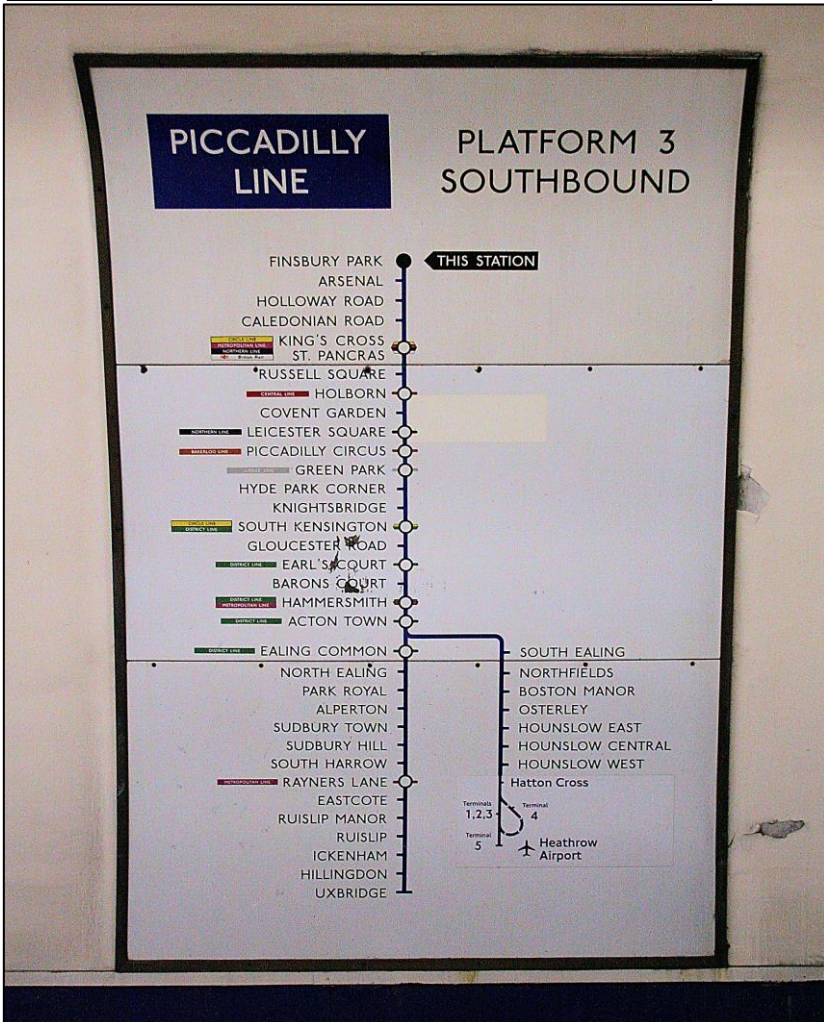




**Above Left:** A line diagram from the 1970s at Waterloo.

**Above Right:** A line diagram at Baker Street installed during the refurbishment of the Bakerloo platforms in the late-1970s. The once infrequent service between Queen's Park and Watford Junction is indicated by a 'cased' line in brown. The section beyond Harrow & Wealdstone was painted over after the withdrawal of peak hour Watford Junction trains in 1982. BR interchanges are numerous despite the abolition of that entity years earlier and again there is a surfeit of orange London Overground stickers.

**Left:** This 1979 sign at Charing Cross remained at time of writing in original condition. Note the interchange with a 'Northern Line City Branch' at Euston, despite 'via Bank' being the official designation nowadays.



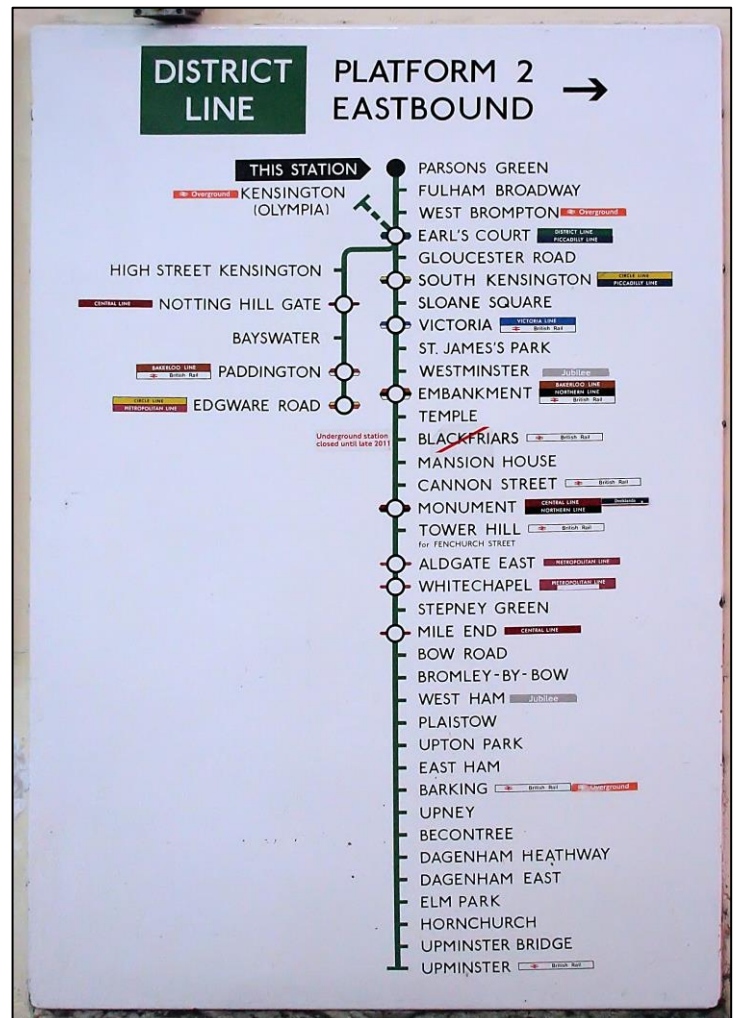
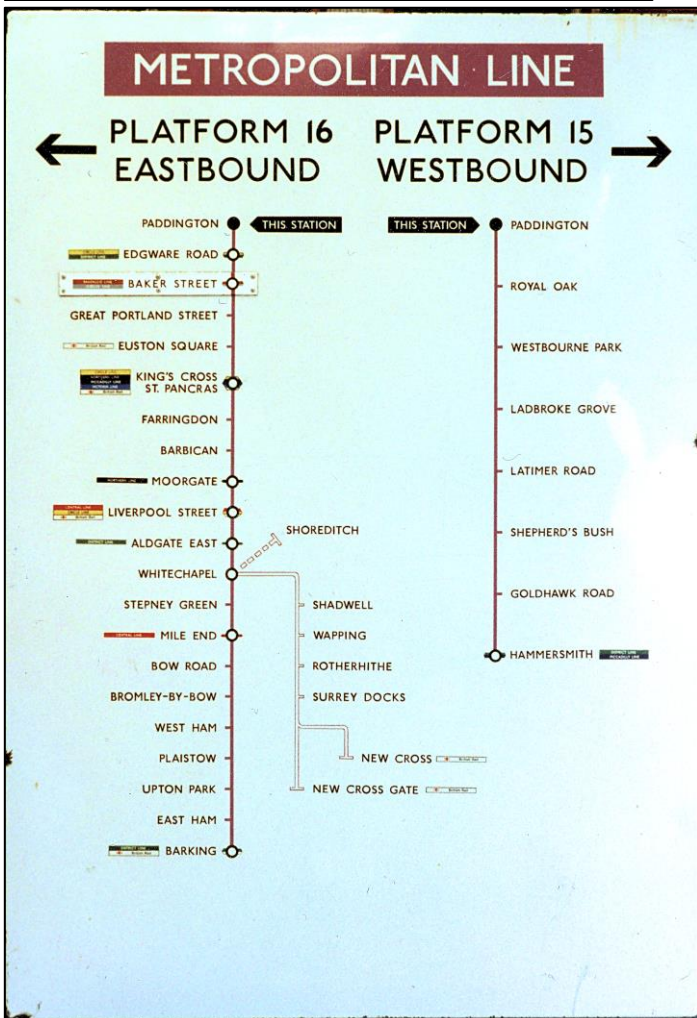




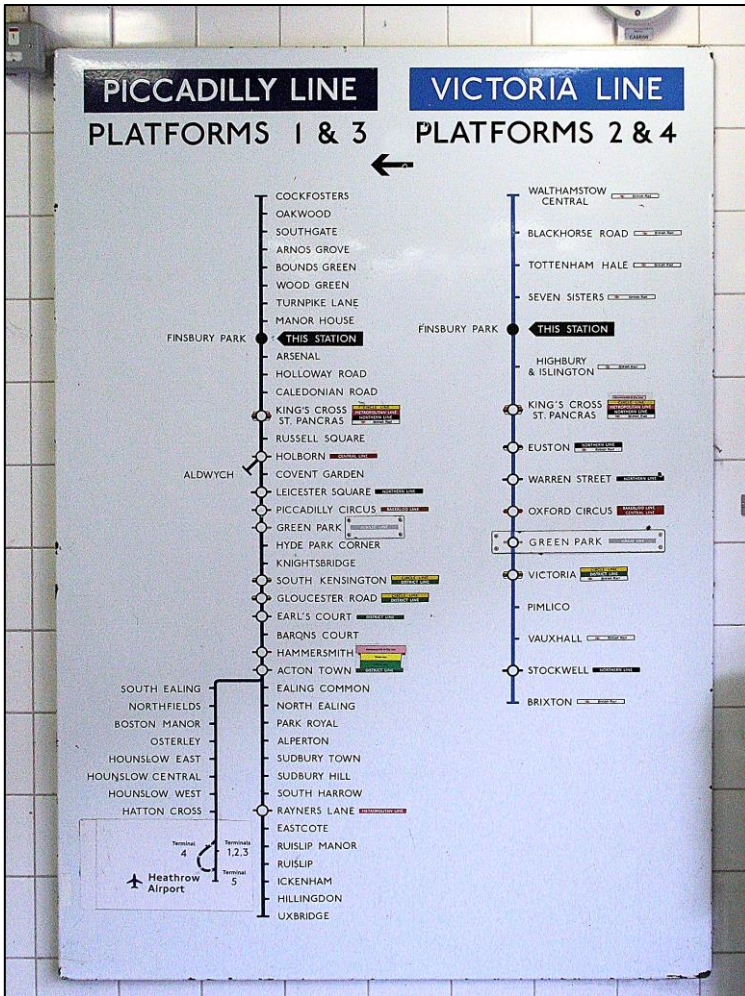
**Above Left:** A sign at Finsbury Park, which is difficult to date. The centre panel includes the Jubilee Line at Green Park so is circa-1979, but the bottom section included Heathrow Central as new, which would mean 1977 at the earliest. Given the slightly different colour of the top panel, it is possible that those below are replacement items fitted later at different times. As is often the case, the introduction of a Hammersmith & City Line taking over the Hammersmith – Barking service of the Metropolitan Line in 1990 has not been reflected. Note the ‘southbound’ directional designation, despite the Piccadilly Line officially being an east – west railway.

**Above Right:** Another example of the sharp-angled corners used on some 1970s signs. A Northern Line Interchange appears at Euston but this time without a ‘via City’ or ‘Bank Branch’ qualification.

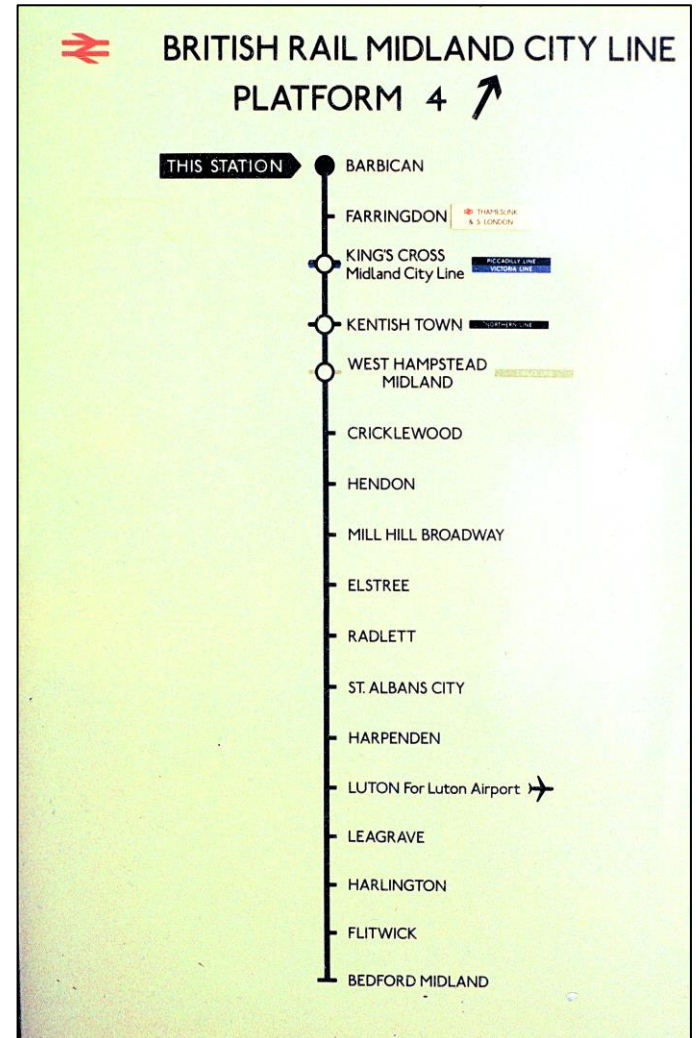
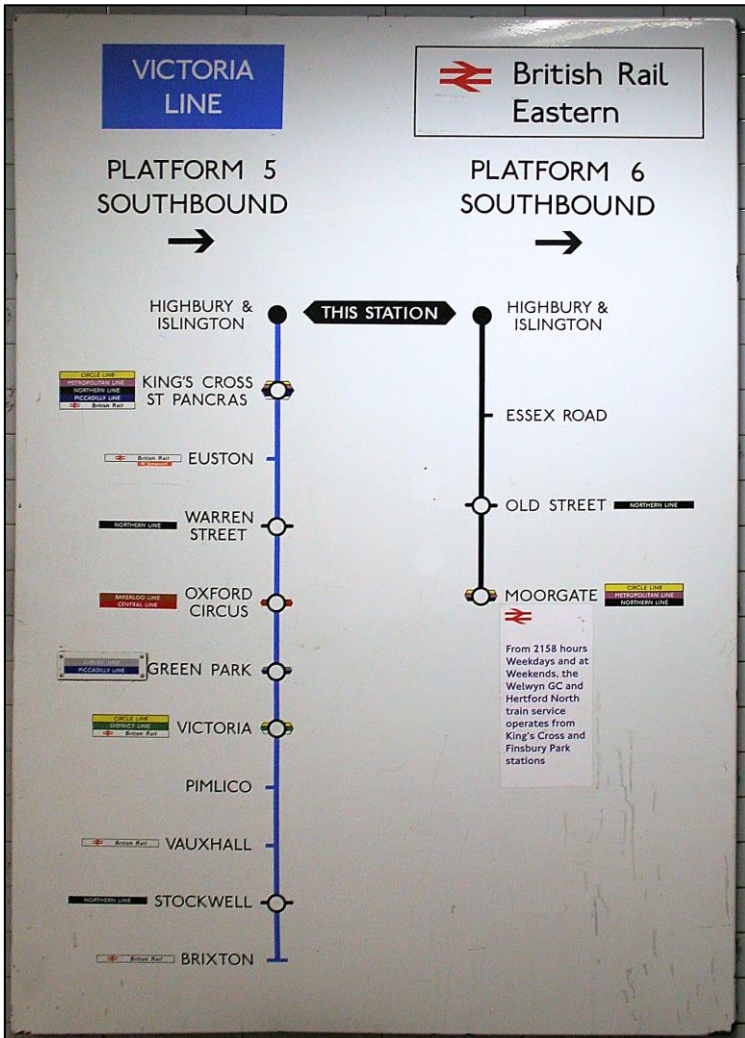
**Left:** One of the original 1972 melamine signs that survived at Pimlico until the 2010s. An attempt has been made to add the Jubilee Line and London Overground using stickers but, once again, the Hammersmith & City Line is the loser, and it seems that British Rail still reigns supreme.







**Above Left:** This sign at Paddington (Suburban) can be dated as after 1971, when the East London 'section' of the Metropolitan Line first appeared in 'cased' maroon, and before the Jubilee Line in 1979. Like many, it was replaced after the Hammersmith & City Line was launched. **Above Right:** Parsons Green was once host to this diagram. The presence of the maroon East London 'section' at Whitechapel (now part-obscurd) puts it in the 1971-79 period. A stuck-on metal plate adds the DLR at Tower Hill, but Bow Road and Monument are ignored, meanwhile the Jubilee Line and London Overground again make do with stickers. **Left:** A very comprehensive combined sign at Finsbury Park that showed the entire Piccadilly and Victoria Lines. Note that Green Park (Piccadilly Line) has a Jubilee Line over-plate but also existing grey 'ticks' either side of its interchange circle, revealing it was originally lettered 'Fleet Line'. Crude metal plates add the Circle and Hammersmith lines at Hammersmith (and the existing District Line), whilst the Hammersmith & City Line sticker added at King's Cross (Victoria Line) is akin to Sellotape. Changes at Heathrow are catered for by two successive vinyls, one laid over the other.







**Above Left:** Highbury & Islington retained a number of interesting and obsolete signs into the mid-2000s. This was installed in 1975 in connection with the start of BR's Great Northern Electrics on the former Northern City Line, and once more the Fleet Line was prematurely added at Green Park. A tiny sticker for London Overground is just visible at Euston, whilst a much larger one draws attention to the gradual run-down of services to Moorgate that had occurred since. The Hammersmith & City Line is, as usual, ignored.

**Above Right:** BR 'Midland City Line' trains served Barbican from 1982 until 2009, and a number of signs were provided by LT to their standards. A stuck-on plate reading 'Thameslink & S. London' has been added at Farringdon from 1988. King's Cross Midland City closed in 2007 (as King's Cross Thameslink), and many other stations have since modified their names. In later years Thameslink trains (as they had become) only served Barbican in the Up/eastbound direction and this platform became disused.

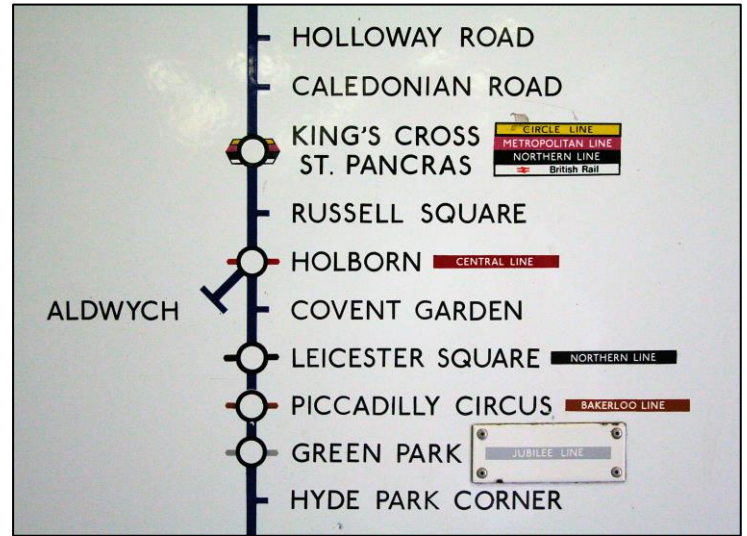
**Left:** An original 1979 Jubilee Line sign in melamine remaining at Charing Cross (disused). No attempt was made to show the Hammersmith & City Line at Baker Street despite it coming into being nine years before these platforms closed to passengers in 1999.







**Above Left:** A 1979 melamine diagram with a plate added in 1990 showing the new Hammersmith & City Line colour. This was originally nearer to salmon pink than the light pink used later. **Above Right:** This diagram at Aldgate from about 1980 implies some trains non-stopped Harrow-on-the-Hill and West Harrow, which ceased in 1974, so was probably an update of a previous sign. **Left:** Another sign adapted to include the H&C in 1990, with an expanded line names plate fitted and small metal plates glued on to differentiate the Met and H&C Line branches. The painted-over lower red section referred to non-stopping trains. **Below:** A close-up of the Fleet Line interchange at Green Park on the Finsbury Park sign (page 27, bottom left).



**Left:** Part of a 1990s sign installed during the modernisation and widening of the Northern Line platforms area at London Bridge. Note the 'host' station indicated in white-on-blue. At this time the coloured 'tabs' were still used on either side of the interchange circles. The DLR 'flag box' at Bank bears the logo used immediately prior to its adoption of a TfL-themed identity. Privatisation has seen the demise of the British Rail name and main line interchange is now shown by a red 'National Rail' double arrow.

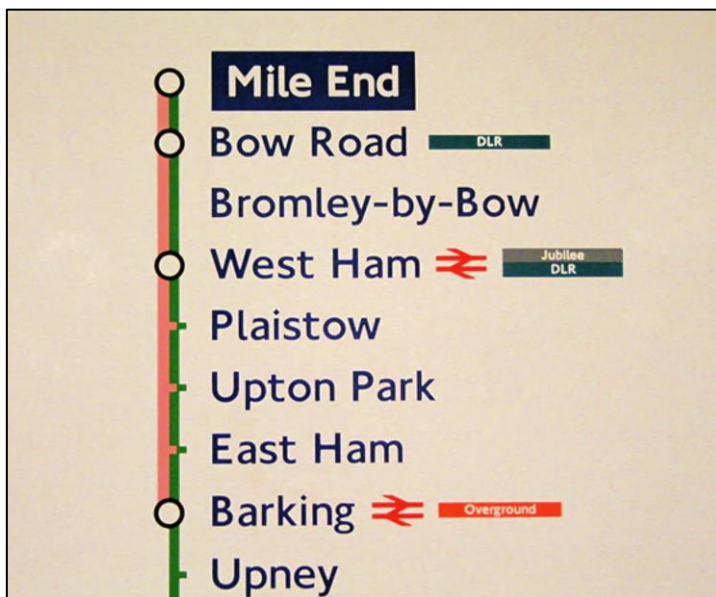




**Left:** The section of the District Line between Cannon Street and Mile End on part of a line diagram from the early-1990s. The East London Line colour changed to orange in 1990 and the Waterloo & City Line transferred to LUL in 1994, which narrows down the date. The interchange circles retain their 'tabs' and the DLR is using its intermediate 'flag box' logo.



**Left:** The same area of line portrayed on a sign from the late-2000s. The interchange symbols have been simplified into plain black circles and the DLR 'flag box' now follows the standard LUL pattern. The East London Line at Whitechapel has been replaced by London Overground and the associated 'flag box' rendered in a darker shade of orange. It has also gained a National Rail symbol which may not be strictly correct for this location. A pictogram of a boat indicates interchange with London River Services at Tower Hill. Aldgate East has gained an interchange with the Hammersmith & City Line, which was not deemed necessary on the older sign for some reason.



**Left:** A section of a line diagram at Mile End dating from around 2010. The coloured 'tabs' formerly on each side of the interchange circles are again omitted. The Docklands Light Railway 'flag box' is again lettered 'DLR' in New Johnston following the introduction of TfL corporate identity guidelines. Note the erroneous lack of a station 'tick' at Bromley-by-Bow.





**Left:** A current style of line diagram at Finsbury Park in 2013. A blue wheelchair pictogram sticker (?) has been added to illustrate step-free access between street and platform. An outlined 'flag box' with aircraft symbol is used to indicate a 'railway interchange with service to airport' at Tottenham Hale, though should refer to Stansted Airport not Luton. As the initial London Overground network was already in operation by this time it should have been shown as an interchange at Blackhorse Road in place of the double arrow.



**Left:** A modern sign at Harrow-on-the-Hill with a section of 'pecked' line showing that fast trains are now restricted to peak hours only. The line-coloured stripe across the top was first introduced at Victoria in 1987. Most of the London Overground 'flag boxes' have additional wording referring to stations with a different name that are within walking distance. National Rail has replaced British Rail to designate non-TfL railway services. As seen earlier, mistakes on line diagrams have sadly become common in recent years and here we see a misspelling of Stoke Mandeville and a totally out of place Winchester instead of Wendover. Also odd is the Circle Line interchange at Aldgate. As this could involve having to transfer platforms via two sets of stairs, normal practice is to omit this and encourage passengers to change trains at Liverpool Street instead.

**To be continued ...**