## **Transport for London**



## **TfL Corporate Archives Research Guides**

## Research Guide No 31: A Brief History of the Bakerloo Line

The Baker S treet & Waterloo Railway, as it was originally known, was one of the tube railways promoted by the American financier and stockbroker Charles Tyson Y erkes. It was designed to connect the Baker S treet area with Waterloo, and after its establishment by an Act of Parliament in 1893, tunnelling work commenced in 1898. S taging was set up in the Thames close to Hungerford Bridge with two vertical shafts sunk into the bed of the river. It was the third deep-lever 'tube' line to pass beneath

the river.

In 1900, authorisation was secured for extensions northbound to Paddington and southbound to Elephant & Castle. As such, the new tube would serve two important railway terminals (plus Charing Cross) and connect with the vast tramway network of south London.

The line opened between Baker S treet and Kennington R oad (soon to be renamed Westminster Bridge R oad, later Lambeth North) in March 1906, and was extended to Elephant & Castle in August of that year. In July 1906 the contraction 'Bakerloo Tube' was officially adopted, allegedly following a suggestion from an *Evening* 

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First directors								31
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Election of directors								

News columnist, despite objections from traditionalists.

The line was extended to Great Central in March 1907 to connect with the Great Central terminus at Marylebone, which had only opened in 1899. As such this was a rare example of a tube station not being named after the locality it served. It was renamed Marylebone in April 1917.

An extension to Edgware Road opened in June 1907, and in July 1910 the Bakerloo, together with the Hampstead and Piccadilly tubes, was amalgamated into the London Electric Railway (LER) as a subsidiary of the Underground Electric Railways of London Ltd (also including the District Railway and London United Tramways). Paddington was reached in December 1913. Originally there was a flat fare of 2d (less than 1p) but differential fares were soon introduced, traffic being short of expectations.

The Bakerloo saw the only tube extensions carried out during the First World War, Queen's Park being reached in February 1915. Initially, all three intermediate stations - Warwick Avenue, Maida Vale and Kilburn Park - were staffed entirely by women, a first for the network.

In May 1915, through-running commenced over the tracks of the London & North Western Railway (LNWR) to Willesden Junction, the first time that a tube line (as opposed to surface lines) had been physically connected to a main-line railway. This parallel running has, to an extent, been part of the Bakerloo story ever since.

From April 1917, services were greatly extended over the LNWR tracks out as far as Watford Junction. Meanwhile the LNWR had been busy electrifying its suburban services, including Broad Street to Richmond and to Watford Junction/Croxley Green via Queen's Park, which was completed in 1922.

The standard fourth-rail arrangement of current collection was adopted on the Bakerloo from the outset, but leakage from the outside (positive) rail, which was close to the cast-iron tunnel linings, was causing problems. The solution was to reverse the polarity so that the centre negative rail became the positive. This remained the position until the 1917 Watford extension, by which time advances in technology made it possible to overcome the original problems.

As part of the 1935-40 New Works Programme and to relieve congestion on the Metropolitan between Baker Street and Finchley Road, new tunnels were dug between these two points for the Bakerloo, which was later further extended to Wembley Park from November 1939 and Stanmore. Thus the Bakerloo settled down to operate at its maximum extent from Elephant & Castle to Watford Junction and Stanmore.

The early stations with surface buildings were designed by Leslie Green in a distinctive style with ruby-red glazed blocks, and they were strong enough to permit the construction of offices etc on top at a later date. Platforms were also decorated in a different colour to aid recognition by passengers.

Original multiple-unit rolling stock was built in the USA by the American Car & Foundry Company. These were of nearly all-steel construction and were exported in sections for assembly in Britain. There were 36 motor cars and 72 trailers to be worked in 3- or 6-car trains. Each car carried an attendant, and a guard or conductor travelled in the first car. The rolling stock ordered for the Watford service was unusual, being a joint design of the LER and LNWR and painted in the latter's livery. Differences in platform heights on the main-line stations had to be overcome in different ways to prevent a trip hazard.

For many years, services on the line were maintained by London Transport's long-lived 1938 stock. Later,1949 stock was also used. Until the opening of the Jubilee line in 1979, 1972 stock was used alongside the 1938 units, the 1972 units being transferred to the Jubilee. 1959 stock was drafted in from 1983, the final 1938 stock trains being finally withdrawn two years later. Mk 2 1972 stock from the Jubilee line then took over.

With the opening of the new Jubilee line in May 1979, the whole of the Baker S treet to S tanmore section was handed over to the Jubilee. The Bakerloo's Trafalgar S quare station (and S trand station on the Northern line) was amalgamated into a new station complex named Charing Cross. In turn, Charing Cross on the Bakerloo, District and Circle lines, which in 1976 had reverted to its pre-1915 name - Charing Cross Embankment - became simply 'Embankment'.

Today, the much-simplified Bakerloo operates solely from Elephant & Castle to Harrow & Wealdstone, the former British Rail services between Queen's Park, Harrow & Wealdstone and beyond are now part of the Overground network.

## Key archival records

Ref No	Title	Date
LT001503/001	Baker Street and Waterloo Railway Act	1893
LT000346/090/010	Short History and Description of the Baker Street & Waterloo Railway by Sir Edwin Cornwall MP	1906
LT000346/009/090	London Electric Railway (Bakerloo Line) Extension from Edgware Road to Paddington	1913
LT001208/114	Golden Jubilee of the Bakerloo	1956
LT000512/001-002	Development Proposals — Possible Extension beyond Elephant & Castle	Circa 1930
LT001087/011	Planned Extension to Camberwell & over Southern Railway Routes - Statistics, Correspondence and Maps	Circa 1930
LT002032/104/003	Maida Vale Station Drawings	nd

LT001893/002	A Brief History of the Line	1973
LT000287/217	Opening of Booking Hall at Charing Cross	1983
LT000254/1864/001- 002	Bakerloo Line Rolling Stock Formations	1960-1978
LT000261/020	One-person Operation of Trains on Bakerloo: Authority for Station Works, Conversion of Rolling Stock and for Installation of Train Radio North of Queen's Park	1987
LT000044/015	Booklet commemorating opening of new Piccadilly Circus station December 1928; Press Information in connection with modernisation of stations at Waterloo (1962/67) and Marylebone (1963)	1928; 1962- 1967
LT00254/1545	Proposed Extension to Camberwell: Civil Engineering, Rolling Stock Requirements and Cancellation thereof	1930-1951
LT000740/015	London Passenger Transport Pool: Report to Standing Joint Committee on Construction of New Line between Baker Street and Finchley Road, Resignalling of Existing Bakerloo Line	1937
LT000694/678	Proposed Camberwell Extension	1931-1955
LT000239/018	Correspondence, Reports, Maps and a Copy of an Agreement on the Proposed Camberwell/Peckham Rye Extension	1971-1978
LT000294/103-107	Proposed Peckham Extension	1969-1974
LT000345/017	Report on Tube Extensions in South London	1957
LT000341/159/011	Flood Gates on the Bakerloo Line	1939
LT000294/100	Cancellation and Re-instatement of Services North of Queen's Park	1982-1986