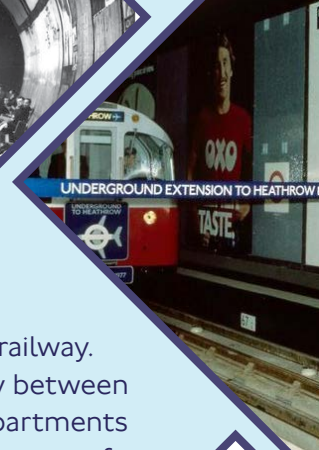


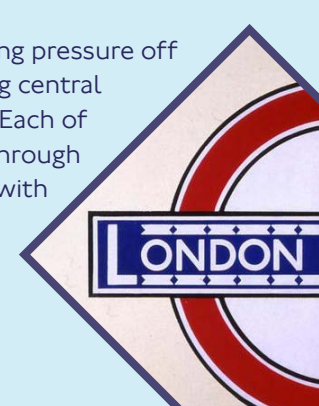


london transport museum

This year marks the 160th anniversary of public service on the world's first underground railway. On the first day of service, around 40,000 passengers rode the new Metropolitan Railway between Paddington and Farringdon Street. They were carried in first, second and third class compartments in carriages hauled by a steam engine. Today's capacious eight car electric trains and the extent of the Underground network – 11 lines, 250 miles and 272 stations – would seem miraculous to those first passengers. Here are some of the highlights from London Underground's 160-year history:



- 1863** The Metropolitan Railway opens the first underground railway in the world, between Paddington (Bishop's Road) and Farringdon Street. London Underground began with just seven stops, all of which are still in use today.
- 1870** The Tower Subway opens under the river from the Tower of London to the south side of Bridge, the first tube tunnel built using a shield. Its cable car railway operated for just a few weeks, then the tunnel became a pedestrian subway until 1894. It's now used for pipes and cables only.
- 1890** The City & South London Railway (C&SLR) opens the world's first deep level electric tube railway between Stockwell and King William Street (now mostly part of the Northern line). Access to the station platforms was by hydraulic lift.
- 1911** The first escalator on the Underground is installed at Earl's Court station.
- 1915** Women are employed on the Underground extensively, in formerly male roles, for the first time. As 'wartime substitutes', they give up their jobs as men returned from military service.
- 1916** Edward Johnston completes the design of a unique letter face for Underground signage and publicity. An amended version, Johnston100, is still used by London Underground today.
- 1933** The first printing of Harry Beck's iconic Underground diagram, an instant popular classic. It is arguably the most successful and influential map design of the twentieth century. Beck's format has been used and adapted by London Underground ever since.
- 1940-45** During the Second World War, thousands of Londoners take shelter in tube stations during wartime bombing, but the Underground continues daily operation throughout the conflict. Underground workshops and unfinished tube tunnels are used for war production, safe storage of artworks and military control centres such as anti-aircraft command.
- 1961** The Metropolitan line from Rickmansworth to Amersham and Chesham is electrified, ending the use of steam locomotives on London Transport passenger trains.
- 1968-69** The Victoria line opens between Walthamstow Central and Victoria, the first computer controlled underground railway in the world, with automatic trains and ticket gates.
- 1977** The Piccadilly line extension opens to Heathrow Central (now Heathrow Terminals 1, 2, 3), linking the Tube to the airport for the first time. Later, it extends to Heathrow T4 (1986) and T5 (2008).
- 1993** The reconstructed Angel station opens, with the longest escalator on the system.
- 2003** The Oyster card touch ticketing system is introduced.
- 2010** London Underground's first walk-through air-conditioned trains, known as S stock, are introduced, first on the Metropolitan line, and later on the District, Circle and Hammersmith & City lines.
- 2016** All-night weekend services started on some lines.
- 2022** The Elizabeth Line opens, taking pressure off the Underground by increasing central London's rail capacity by 10%. Each of its fast air-conditioned walk-through trains are nine carriages long, with space for up to 1,500 people.





The 1938 Tube stock

This beautifully restored electrified train is made up of four cars complete with green and red moquette seating, grab handles and distinctive art deco light fittings.

In the 1930s, increasing demand and ambitious expansion plans meant that the Underground needed new trains. The 1938 stock was the result of years of trials and development. Behind its smooth, rounded exterior were many innovations, including under-floor driving equipment.

Over 1,000 cars were built, running first on the Northern line, and later the Bakerloo, Piccadilly and other deep-level lines. After nearly 50 years, the last train was withdrawn in 1988.

The 1938 Tube stock was designed by a team led by William Graff-Baker, the Underground's Chief Mechanical Engineer. He believed engineering to be 'an art just as much as is the work of a painter or an architect.'

Trials with four prototypes resulted in the classic design: sleeker and smoother, inside and out, than their predecessors. This was partly due to the input of Frank Pick, London Transport's design-conscious Chief Executive.

London's narrow Tube tunnels limited the size of trains, and Graff-Baker's engineers experimented with new space-saving techniques. The control equipment that took up a quarter of each driving motor car of earlier trains was ingeniously redistributed and located below the floor, giving more room for passenger seating.

The interior design and layout were improved, with new flexible grab handles for straphangers and deep-cushioned seating, covered in woollen moquette with specially commissioned designs by Enid Marx and others. Everything was highly functional but looked surprisingly luxurious, right down to the art deco lampshades. The varnished floors combined with the red and green panels and seating to produce a warm and inviting appearance – a unique combination of quality and everyday efficiency.

After serving on the Bakerloo for several years the last of the 1938 stock were overhauled once more in the mid-1980s and moved to the Northern line. They were retired in May 1988, just short of 50 years' service.

But this was not the end – they were then sold to the Isle of Wight where they ran on the Island Line until January 2021!

This four-car unit of 1938 Tube stock was restored to operational condition in 1999 and is preserved at the Museum Depot in Acton.

London Transport Museum will be running several Heritage Train Journeys in 2023. Sign up to our newsletter to find out when future heritage events go on sale: ltmuseum.co.uk/enewsletter

Food and drink are not permitted on the train, except still bottled water.

We hope you will enjoy your journey on this special vintage train.