

London Terminus talk (thumbs of the images backlit in green are on the web site)

Preamble

[00-00 Title page] 15 railway companies would converge on London, 10 within 15 years. A motley group, London's termini were not the first, nor generally the most awe-inspiring stations, but what they lacked in oomph they make up for in numbers, variety and originality. London has over time had 24 railway termini, of which 14 remain as termini. These posters represent 12 of the 13 main players. I couldn't find a poster for *South Eastern*.

To cut out repetition I'll consider the terminals together before doing a whistlestop tour of the stations in the order in which they arrived.

[00-01 players] Let me introduce the railway companies – to avoid confusing initials, I've given each a nick name. Several underwent name changes as they amalgamated and changed their focus. Some disappeared as a result of being taken over, leaving 13.

[00-02 other players] Some railway companies made use of a front company when extending their network. This allowed them to escape financial responsibility and on occasion subvert the rules regarding finance. Much of the money came from vested interests, such as contractors and solicitors and while companies claimed their investments would be profitable, they often underestimated the costs and inflated the projected traffic figures. Front companies relevant to our story are shown here.

There were, however, many other players who influenced how our railways ended up. Others with a finger in the pie included the finance companies, landowners, law firms, engineers and architects, Parliament and, of course, the current economic climate had an impact.

[00-03 time line] This time-line diagram shows the order and rate in which the terminals were built. The timescale is along the bottom, with recessions shown in grey; the period of railway mania, when parliament received 550 applications, are shown in pink.

The time between original stations and their 'replacements' varied considerably. The case with the *Great Eastern* reflected cash flow problems which were only resolved when the original *Eastern Counties* amalgamated with others to form the *Great Eastern* and concentrate on commuter services. Where stations are close on the time line it suggests a temporary station in wood designed to get the cash flowing while the main terminus was under construction, as in the case of Maiden Lane to capitalise on the Great Exhibition. Many of the temporary terminals were then closed.

[00-04 terminals map1876] A key driving force in the development of the railways was catchment. That is equally true of the termini, as companies strove to get closer to the centre to gain custom. That attraction was opposed by an almost equal force; the cost of land and buildings, which rose steadily higher towards the centre. In order to meet cash flow, many companies opened the less challenging part of their routes to generate a revenue, while developing plans to extend further in.

Routes were opportunistic: aristocratic owners of posh estates were reluctant to part with land for a railway which might devalue them. (Although Lord Grosvenor was only too happy to sell off parts of his stinky canal.) Fortunately, other sites became vacant, such as the Smallpox and Fever Hospitals which the *Great Northern* snapped up from St Bart's for King's Cross, and slum landlords, once tracked down, only too keen to turf out their poor tenants

for the sake of a profit, and routes took these opportunities into account. (St Pancras destroyed the most homes).

[00-05 terminals schematic] This schematic image shows how the terminals were interconnected. It was quite possible to go from Victoria to Broad Street, for example. As well as being encircled by railways there were eventually connections through the middle. Railway companies purchased running rights on each other's lines and there was greater connectivity than today.

[00-06 exclusion zone] Parliament also affected location. When reviewing proposed schemes, it was not concerned with strategic decisions, simply viability, public safety and compulsory purchase issues. After the deluge of applications in the 1840s mania, however, the Royal Commission on Metropolitan Termini of **1846** was set up to advise if any railway should be allowed within an area that parliament had proposed as a railway-free zone. The commission recommended that only two of the 19 projected railway lines through the centre should proceed. Both were located south of the river, and while one never got built, the other was the *South Western's* line to Waterloo, already authorised. They also suggested that one line be built across the Thames, west of Vauxhall, to link northern and southern railways. The commission recommendations were not legally binding, and you can see that the *South Eastern* and the *Chatham* got away with it wholesale, presumably because by then, commuter demands outweighed other considerations.

[00-07 revenue and assets] Revenue: The companies made their revenue in four areas: Mail & freight, long-distance passengers, commuters and hotels. The proportions varied significantly according to the part of the country served and also varied with time. Commuting turned out to be unexpectedly lucrative, until tubes and trams proved more competitive. The *South Eastern* took three-quarters of its receipts from passenger operations, the *Great Western's* revenues were split almost equally between passengers and freight and the Great Central got over two thirds of its revenue from freight. The long-distance railways were more oriented to travellers than commuters. The table I found provides some annual average statistics for 1893-1912. The railways were obliged to accept anything for transfer, provided it was safe and would go through tunnels, and had to accept customers' waggons and return them free of charge. Not all these were profitable.

Similarly, we can divide their assets into 4 areas of interest – train shed, station buildings, hotels and goods yards & marshalling. The revenue affected the relative importance and expenditure attached to each area.

[00-08 design] Engineering and Architecture:

Approaches, slopes etc.: The easiest, cheapest and most popular were on viaducts, keeping the tracks and station on a level, but raised above their surroundings to enable traffic to pass below. Charing Cross and Cannon Street had the best of both worlds – viaducts maintained a level station and tracks, yet the slope of the land up from the river meant that exit from the station was on a level with the road.

Slopes were difficult, and usually limited to 1 in 70. Subsurface stations involved a standing hill start. Euston solved this initially with cables. Going from viaduct to subsurface, some slopes were twice that, and at Kings Cross, someone was stationed there all day, scattering

sand on the tracks on the exit from the widened lines. Use later of electric traction helped considerably by distributing the load and the traction.

Track arrangements: Almost every company underestimated the effect of this on efficiency. Insufficient lines to overtake, or the crossing of tracks, especially a competitor's, led to constant delays and frustrated passengers. Most approaches got widened as traffic grew but it is only in this century, with a lot of effort and expenditure by Network Rail, that we are beginning to sort this out.

Layout/ Platforms: Most early termini for long distance had one arrivals platform in the shed with an adjacent cab rank and one departure platform with the passenger facilities and offices. Entrances for arrivals and departures were kept separate. Between were tracks rollingstock. With time, especially for commuters, this space was filled with extra platforms to improve turnaround. Platforms were, for a long time, wooden planks, often low down. Later covered by tarmac and with stone capping. Brick walls, rubble and concrete came subsequently.

Shed Roofs: design improved over the years. The Great Exhibition and Paxton made arched roofs and ridge and furrow popular. One reason for these designs was to reduce the number of supporting columns, which could get in the way and were vulnerable to accidents. The move to electric trains allowed some roofs to be replaced by reinforced ceilings to support real estate above, and nowadays computer designed glass roofs are in fashion.

Hotels: these were mainly conventional architecture of the time, typically French or Italian Renaissance, but compare St Pancras Gothic renaissance. The Barry Family had the lion's share. Most termini had a hotel, apart from Waterloo, Fenchurch Street, Ludgate Hill and Blackfriars etc..... Most were owned by the railway company, but some were independent or run by subcontract. Most were successful apart from London Bridge, which was on the wrong side of the river. Hotels were often used to hide the train sheds.

Goods yards: Every terminus had at least one, but some were located away from the station, even on competitors' lines. Yards could involve all types of materials, from stone and coal through to fish vegetables and milk. The overall effect was to improve Londoners' diets, doubling the amount of milk and fish consumed.

A large area also had to be reserved for mail and carriage, and private waggons to fulfil their legal obligations. The Rail and Canal Traffic Act of **1854** obliged the railways to accept any goods at fixed rates, (and to use and return private waggons where demanded), right up to 1953.

Design was crucial to efficiency, as we'll see at King's Cross. Location was important to limit cross contamination and security must have been a big issue.

Shunting and cartage was initially done by horses – a horse cost the same as two to three labourers but did the work of six men. At its peak in 1900, King's Cross alone had 1,200 horses requiring stabling etc.

After world war 2 transport patterns changed, and the majority of large yards became redundant, releasing valuable development land for offices, housing and recreation.

A London Bridge

[AA-01 Spa Road] London's first passenger service ran from Greenwich to London Bridge, on a viaduct, the longest in Britain at 978 arches. The two ends were the most problematic, so construction started in the middle and opened between Deptford (where a drawbridge over the Creek was required) and Spa Road, making Spa Road the first London terminal. Passengers climbed a rickety staircase to a narrow, unraised central platform to await the trains. [Deptford remains London's oldest extant station.]

[AA-02 Spa Road bridge] Very little remains. Here's a Doric arch! It was just six months before the real terminus at London Bridge opened, so let's go there now.

[AA-03 lines into London Bridge] London Bridge has had a most complex history involving frequent rebuilding, multiple and changes of ownership.

The *Greenwich* built the viaduct which was quickly shared by the *Croydon*, *South Eastern* and *Brighton*, Parliament enforcing this. The viaduct was widened first on one side then the other, the companies swapped lines and stations to avoid crossovers, demolished and rebuilt several times. The *Croydon* was absorbed by the *Brighton* and the *Greenwich* was leased by the *South Eastern*, leaving two companies with totally separate stations until amalgamation in 1923. Let's fast forward through some of these stages.

[AA-05 arriving londonbridge aerial] [AA-06 LB terminal] At the time of the opening, the original station had two platforms at the end of the viaduct, fully open to the elements without any cover passengers and trains. A wooden trussed canvas pitched roof, 17m by 65m, was constructed four years later. A mound was constructed to enable traffic from ground level, where a ground level building provided a booking hall and company offices.

[AA-07 Joint LB turner & roberts 1844] The proposed joint station lasted 5 years before demolition – the clocktower was never built

[AA-08 SE and Brighton stations 1850] Here is the *South Eastern* Station with the temporary *Brighton* Station behind. *The South Eastern* built a wall between the two.

In 1862 the *Brighton* gained the powers to enlarge the station further. Over the next few years, it built four more platforms to cope with additional traffic generated by the completion of the South London line in 1867, (London Bridge to Victoria via the inner south London suburbs). This train shed had a single-span trussed-arch roof designed by Hawkshaw and Banister.

[AA-09 Terminus hotel 1861] The *Brighton* built the Terminus Hotel in 1861 but it wasn't successful and was later turned into offices. Badly bombed in WW2 it was demolished.

[AA-10 LB_station_1888 (plan)] SER station 1864

Having gained permission to extend its line into its two new terminals in central London, the *South Eastern* rebuilt its station again in 1864 with five of the existing platforms converted into a through station at a higher level to accommodate the viaduct. You'll probably recognise the plan.

[AA-11 LB in 1922] At the beginning of the twentieth century the *Brighton's* station was again enlarged.

Southern Railway – stations reunited

[AA-12 London_Bridge_southern] The 1923 big four grouping of the railways at last brought the two stations under single ownership and the Southern Railway set to work uniting them by opening out the dividing wall and building a footbridge between the two. The layout remained confusing and congested.

British Railways station 1978

[AA-13 london_bridge_post_1978] [AA-14 london_bridge_post_1978] By the early 1970s the station could no longer cope with the volume of traffic. British Railways, responsible from 1948, undertook a major redevelopment of the station and its approaches. This included a new station concourse by N. D. T. Wikeley, regional architect for British Rail Southern. New awnings were added over the former *South Eastern* platforms, but the arched Brighton roof was retained. There was new signalling, an office block and a new frontage with bus station. It has been described as "one of the best modern station reconstructions in Britain."

[AA-15 londonbridge_shed] The original arched roof survived.

Current station

[AA-16 LB-track-layout_modification] The Government-sponsored Thameslink Programme recently transformed the station and tracks with a five-year, £1bn redevelopment, completed in 2018.

Master plan was by TP Bennett and Alan Baxter Associates with Grimshaw as designers.

Either side of the station, tracks were cleverly altered to untangle the tracks and cut delays. New track and infrastructure were added – including a major new structure called the Bermondsey Dive Under. Before it was built, the lines to Sussex and Kent criss-crossed over each other at a series of flat junctions, causing delays and limiting the number of trains that could travel per hour.

[AA-17 viaduct_plan] The Borough Market viaduct was completed in time for the new station, doubling the available tracks to the west of it.

Platforms were rearranged to accommodate Thameslink trains. 5 through platforms and 9 terminating platforms are now 9 through and 5 terminating

[AA-18 viaduct_view] Fitting in the new span was no small task.

[AA-19 borough-market_aerial] Now there are an additional 16 trains per hour though to Farringdon and St Pancras (previously 1 tph), with a new Luton to Rainham service.

[AA-20 londonbridge_aerial_before] These two aerial views show the change

[AA-21 londonbridge_aerial_after] [AA-22 aerial_London_bridge_after]

[AA-23 londonbridge_interior] The new station by Grimshaw accommodates over 90 million passengers per year. Improvements included a huge new concourse under the platforms to unify the station, with new entrances on Tooley Street and St Thomas Street, and step free access to each platform, with the installation of new lifts and escalators. The redevelopment also included the usual new shops, cafes, bars and restaurants.

London Bridge is the fourth-busiest station in the UK in terms of passenger arrivals and departures, currently handling over 54 million passenger arrivals a year, not counting those who transfer between lines there.

B Euston

[BB-00 Iron gates from old Euston Station] The second railway to arrive in London was the London and Birmingham Railway, which we shall refer to as the *North Western*.

[BB-01 euston arch] Extra land was acquired to the left of the arch to enable the *Great Western* to set up its terminal next door, but terms could not be agreed. Just as well, as the *North Western* ended up needing the space for their own 'Yorkshire' trains.

[BB-02 Euston_Station_1837] Robert Stephenson took charge as chief engineer and a simple pitched roof train shed on iron supports was built with two platforms, one for arrivals and one for departures with tracks between to store carriages.

[BB-02a Euston_Station_1892] Here's an actual photo of 1892.

[BB-03 Euston Yorkshire platforms] By comparison, a postcard view shows the later Yorkshire platforms, note the ridge and furrow style of the roof.

[BB-04 doric plan] The grand 'Doric Arch' gateway of Yorkshire stone was designed by Philip Hardwick as an impressive entrance to the terminus site. Augustus Pugin, however, described the gateway of Yorkshire stone as "A Brobdingnagian absurdity" and I agree!

[BB-05 doric] Still, here it is in all its glory! [BB-06 propyleum2]

[BB-07 euston great hall plan] By the early **1840s**, Euston was getting overcrowded, so the station began its first major expansion; the building work included the headquarters for the new company and the Great Hall by Philip Hardwick junior, situated together between the Doric Gateway and the station platforms. Either side were booking offices – note the Midland Counties, which merged with others in 1844 to form the *Midland* under G Hudson.

[BB-08 Euston Hall] This is the great hall looking north.

[BB-09 Euston Hall] And this is looking back. We've moved on to Ionic, with an amazing coffered ceiling and bas reliefs of muscular Adonis-like men by John Thomas, which must have been interesting!

[BB-10 hotel] Here from Euston Place is the front approach after the two original hotels were conjoined by a block straddling the road and blocking the vista,

[BB-11 clearing house] and here is the clearing house.

By the **1870s**, passenger and parcel traffic had once more outgrown the capacity of the station; two new platforms, additional service roads and an additional entrance were created. By the **1890s**, the Terminus had been enlarged once more, with four more platforms being created, bringing the total to 15; 14 for passengers and 1 for parcels.

[BB-12 Euston plan 1938]. Before looking at aerial photos, here is the plan of 1938 with items of interest marked in red. The two rectangles on the left are all that remain of the station today. – note the Railway Clearing House, responsible for all those railway diagrams, also the Great Hall, which we'll view in a minute.

[BB-13, BB-13a Euston aerial]. This view is taken while the area still had some elegance.

[BB-14 aerial euston before rebuild]. And here's a later view before the rebuild.

A new station

By the **1950s**, steam locomotives were being phased out, and BR's London Midland Region took the decision to completely rebuild Euston as part of the electrification of the main line between London and the North West. It was decided that a bold new station was needed which reflected a new, modern railway era.

[BB-15 euston demolition 1963] Work began in **1963**.

[BB-16 demolition w hall] Layout of the original site meant the loss of the Great Hall and the Doric Arch

[BB-17 Cruickshank salvaging stone from Euston arch] The arch was used to fill in a hole in the bed of the River Lea and here is Cruickshank rescuing a piece from the river somewhat later.

[BB-18 Euston tracks today] A total of 18 platforms were built; 15 for passengers, 3 for parcels. Notice that the platforms were extended south, encroaching towards the Square.

[BB-19 euston 2020] A spacious, open concourse over two levels provided new access to London Underground services, shops, restaurants and a new travel centre – the first 'one stop shop' concept where passengers could buy tickets, book sleeper and ferry services and hotel accommodation in one place.

[BB-20 Euston today] The station design specifically separated the movement of passengers and road traffic; vehicles circulated underneath the main concourse building. The only elements of the old station that were kept were the war memorial in Euston Square, the two lodges on Euston Road and the statue of Robert Stephenson by Carlo Marochetti which was re-erected in the station plaza. The concourse to me has some of the feel of the Great Hall – its proportions, and illumination. Despite a few design faults, such as the arrangement for motor vehicles, I think with its clean lines and clarity it is one of London's better terminuses, although not perfect, despite the strident criticism of some detractors.

[BB-21 euston-arch-hs2-proposal] With HS2 planned to terminate at a new terminus next door, John Hayes, the transport minister, has said Doric Arch may be rebuilt at the cost of £10 million as part of a major upgrade of the station area to coincide with the launch of high-speed rail services 2026. I hope not.

[BB-22 possible future Euston] It could look like this

C Paddington (1)

[CC-01 old Paddington plan] For the London terminus of the Great Western Railway (the third line to arrive), Isambard Kingdom Brunel had planned a grand building at Paddington, adjacent to the Grand Junction and Regent's canals.

[CC-02 old Paddington front] Instructed by the *Great Western* to economise owing to the soaring costs of building the line, **Brunel had to abandon his plans** and create a temporary station, using the arches of the new bridge on Bishop's Road as a façade and to provide passenger facilities under the arches. Thus, the final station was able to benefit from the experience of the Great Exhibition.

[CC-03 old paddington interior] This station opened in **1838**, and was of wooden construction. It lasted 12 years.

D Nine Elms

[DD-01 [Nine_Elms_map 1868](#)] Almost simultaneously, railway number 4 arrived. Southampton's railway grew with the port, enabled by the invention of self-propelled ships. A site was chosen at Nine Elms which did not involve the destruction of houses and the station was designed by the railway's chief architect, Sir William Tite and opened in **1838**.

[DD-02 [Nine_Elms_1838](#)] The classical station building was a far cry from the Royal Exchange, as you can see from this illustration. There were the usual two platforms, sheltered by a low wooden roof on cast-iron columns, decorated with a leaf pattern. Two steam ships took passengers on to London Bridge, and later, the omnibus.

[DD-03 [Nine_Elms_photo](#)] When concerns about catchment extended the line to Waterloo in **1848**, the station closed and converted to goods. During WW2 the station was damaged by German bombers and was finally demolished in the **1960s**, later to be replaced by the flower section of the New Covent Garden Market in **1974**.

F Bishopsgate

[EE-01 [bishopsgate](#)] in **1840** Eastern Counties Railway extended westwards from an earlier temporary terminus in Mile End to a new permanent terminus called **Shoreditch**. The station was renamed **Bishopsgate** in **1847** as it sounded nearer the City. It wasn't convenient, however, and was situated in a rough area.

In **1862**, the ECR amalgamated with a number of other East Anglian railway companies to form the *Great Eastern*. For a time, the *Great Eastern* also used Fenchurch Street, but lack of capacity eventually led them to build a new terminus for its services at Liverpool Street.

[EE-02 [b'gate goods plan](#)] Traffic was then diverted via a new low level passenger station, and the original was converted to goods.

[EE-03 [bishopsgate_old2goods](#)] As a goods station Bishopsgate employed 2,000 men and handled very large volumes of goods from the eastern ports and was arranged over three levels with turntables and hoists allowing railway wagons to be moved individually around the station for loading and unloading.

[EE-04 [bishopsgate goods2](#)] Incoming goods could be stored in the warehouse on site or transferred directly to road vehicles for onward transportation to their destinations.

[EE-05 [goods after fire 1964](#)] A fire in **1964** destroyed the station and it was closed.

F Minories

Pipped by a week, Minories opened on 6th July **1840** as a temporary terminus of the London & Blackwall Railway which we described in detail in the last talk. The service was extended into Fenchurch Street a year later. It closed in **1853**.

[FF-00 [Minories_station winding gear](#)] During the first nine years of the line when cable haulage was in use, the winding drums were located at here with the engines sited beneath the viaduct.

Subsequently, Minories goods depot opened here, later leased to the *Great Northern*. The site is now occupied by Tower Gateway Station of the Docklands Light Railway.

G Fenchurch Street

[GG-00a [early Fenchurch Street map](#)] This station for the *Blackwall* was the first to be constructed inside the City; the original station was a simple affair, designed by William Tite and opened **1841** replacing Minories.

Instead of extending the cable from Minories, the trains were released from the cable at Minories and travelled on under their own momentum. The return journey was by gravity once the staff had pushed the carriages onto the slope! This continued until **1849**.

From **1850** until the opening of Broad Street station in **1865** it was also the City terminus of the *North London*.

[GG-00b [Fenchurchstreet now](#)] The station was rebuilt in **1854**, to a design by George Berkley, including a vaulted roof and the main façade we see today. In **1858** the station also became the London terminus of the *Tilbury*. The *Great Eastern* also continued to use the station as a relief to an increasingly overcrowded Liverpool Street station until the mid-20th century. The *Blackwall* ceased passenger services in **1926**. In **1948** the *Tilbury* became the sole user of the station.

The station has a façade of grey stock brick and a rounded gable roof. In the **1870s** a structurally unsound flat awning over the entrance was replaced with the zig-zag canopy seen today. The first-floor facade has 11 round-arched windows, and above these is the station clock, which has been returned to working order in recent years. The station has four platforms arranged on two islands elevated on a viaduct. Here are some photos of the station in **1905**. [GG-01 [fenchurch_street\(c.1905\)](#)] [GG-02 [fenchurch_street\(c.1905\)](#)] [GG-03 [fenchurch_street c.1905](#)].

[GG-04 [fenchurch_street\(1961\)](#)] The station was used to capacity, as this 1961 photo shows.

[GG-05 [fenchurch_street g earth](#)] Office blocks (including the 15 floor *One America Square*) have since been built above the station platforms in two places, leaving only one short section of canopied platform and another short section of exposed platform.

Weston Williamson has drawn up proposals for an expanded replacement of Fenchurch Street Station 350m east of its current location. The terminus would be built on the existing site of Tower Gateway Docklands Light Railway (DLR) station, with trains on this line diverted to Bank. Meanwhile, the current Grade II-listed Fenchurch Street station would provide a grand focus for an elevated pedestrian walkway into London along its disused tracks.

As of **2006**, Fenchurch Street is served by c2c

H Bricklayers Arms

[HH-01 [bricklayers_Arm_Station_building_1844](#)] Meanwhile, concerns by the *South Eastern* and the *Croydon* railways about the charges being imposed by the *Greenwich* for the use of their viaduct and terminus at London Bridge led to them constructing a new, alternative passenger terminus and goods station at the Bricklayers Arms in **1843–4**. The site was selected by William Cubitt, Engineer-in-Chief of the *South Eastern* and the station was designed by Lewis. The intension was to extend the line to a new *South Eastern's* terminus at Hungerford Bridge

[HH-02 **Rolls viaduct**] It involved the construction of the Rolls viaduct, a timber structure built in the American manner by Messrs. Grissel & Peto, about a mile long to join the Croydon line at New Cross embankment.

The line was the first in the world to be controlled by a signal box. The signals and points installed were the first to contain some elements of interlocking.

When the *Greenwich* agreed to offer reasonable terms, both went back. The *South Eastern* ran both routes for a time. [HH-03 **Victoria visits**] Queen Victoria continued to use it.

Plans to extend to Hungerford Bridge were never implemented. Further plans in the early **1890s** were dropped following *South Eastern's* merger with the *Chatham*.

[HH-04 **Bricklayers_arms_goods_shed_1959**] It was used for goods until closed in **1981**

I Waterloo

[II-01 **Waterloo_station_1848**] Waterloo Station was opened in **1848** by the *South Western* as part of their two-mile extension towards the city, replacing the first terminus at Nine Elms. There were four tracks from the start. This original station, known later as 'central station', had six platforms. It was a wooden station by Tite and never intended to be a terminus, as the *South Western* planned to continue to London Bridge.

The station was very popular with race goers travelling to Epsom; the original station opening was brought forward a week to enable passengers to travel to the Derby by rail for the first time.

Thereafter, Waterloo was extended in an ad-hoc way to cope with demand. In **1860** the 'Windsor station' was opened on the north-west side of the original central platforms with its own ticket office concourse and numbering.

A south station was built in **1878** for mainline suburban trains, separate from the rest of the complex and in **1885** the 'north' station was opened, adding a further six platforms bringing the total at Waterloo to eighteen.

[II-02 **waterloo old plan**] It was a confusing station for passengers and rail staff, with platforms divided between four different sections with their own concourses, unclear platform numbering and poor information displays. There were significant delays to services as the whole station was served by just four approach lines.

[II-03 **waterloo 1900 plat 4 extn**] Here it is viewed from the tracks in **1900**.

[II-03a **Waterloo_Old connection**] A single-track link to the new *South Eastern* line out of Charing Cross was constructed in **1864**, from between platforms 2 and 3, across the concourse, station frontage and cab road to a bridge across Waterloo Road. Never heavily used, it only had two services. Very occasionally it was used by trains taking Queen Victoria to the Channel ports from Windsor.

Eventually the *South Western* was forced to rebuild and extend the main station. But first, here are some views of the station before then. [II-04 **Waterloo_Old**] [II-05 **waterloo 1900**]

The station was initially designed by JW Jacomb-Hood who had visited the States, but following his death in 1914, work was taken over by Alfred Weeks Szlumper. You can see

here the improved layout: [II-06 waterloo old plan] [II-07 waterloo new plan]. The station expanded north and south east. The new roof was twice as high as the original.

Work progressed in stages from south to north between **1900** and **1922**, wiping out the connection to the South Eastern in the process.

The facilities were much improved, two of everything, scattered symmetrically either side of the cab entrance. According to Wolmar, the men's toilets, called the Gentlemen's Court, were 820? Ft long with black and white marble floor, mahogany fittings, barber, bathrooms in addition to loos.

[II-08 wloo1912] Here it is part completed in 1912. You can see parts of the old station to the right of the photo.

[II-09 aerial 1920s] This photo in the 1920s shows it complete. As an economy measure the roof of the northern platforms (in the foreground) was retained.

[II-09a wloo aerial preEurostar] Here's a much later aerial shot, pre-Eurostar

[II-10 from bullring] Buildings were in an Imperial Baroque style out of Portland stone.

[II-11 wloo arch] The main pedestrian entrance, the Victory Arch, was designed by James Robb Scott as a memorial to *South Western* staff killed in World War I.

[II-12 wloo arch2] It is flanked by two sculptures featuring Roman goddesses: "1914" with Bellona in armour with a sword and torch, and "1918" showing Pax, the goddess of Peace.

[II-13 waterloo aerial] Much later, a new shed and facilities, designed by Grimshaw Architects with Sir Alexander Gibb & Partners, replaced the north station for Eurostar; Bovis Construction getting the construction contract. It has since been taken over by the main station, with a large Brew Dog underneath, in place of some of the Eurostar facilities.

J Maiden Lane

[JJ-00 maiden lane plan] A second main line from the north reached London in **1850** and competition brought down *North Western's* exorbitant fares. The *Great Northern* opened a temporary wooden terminus at Maiden Lane (now York Way) while its new station and the approaching Gasworks Tunnel under the Regents Canal were being constructed.

Known as the "London Temporary Passenger Station", it was opened so that the railway could earn revenue from visitors travelling to the Great Exhibition of **1851**. Covered by a double-span train shed, there were two platforms and two release roads. The main station buildings were on the down side of the station. The station served passengers for around two years before King's Cross station was opened. It subsequently served as a potato warehouse.

[JJ-01 Maiden Lane Victoria] This picture of Victoria is interesting in that it shows the earthworks for the construction of the terminal and also the *North London* in the background. Its location was part of the reason for the disastrous decision to go under the canal into the permanent station.

[JJ-02 works] This sketch shows the earthworks with the old station just visible back right.

The company sold too many tickets during the Great Exhibition and on one occasion were besieged by 3000 Yorkshire-bound passengers who found the train only held 1000. Eventually cattle trucks were found to carry them northward.

K King's Cross

[KK-01 **early kings-cross**] The 10-acre permanent terminus was built on the site of a smallpox hospital (and some roads) at the junction of four roads known as King's Cross.

The station was opened to passengers in **1852**. Designed by Lewis Cubitt to be economic, simple and functional, it was at that time the largest railway station in Britain. Two arched train sheds both 800ft long, 105ft wide and 71 ft high are closed by a plain brick screen 216ft long with two large arched windows and with a porch of six arched openings, three each side of the square Italianate clock tower 112ft high, which is the station's only ornament. The clock came from the exhibition. There were also three bells of different pitches. The whole station cost less than the Euston Arch and Great Hall combined. Architectural touches included grooved brickwork around the entrance arches, and triple Venetian style windows.

[KK-02 **inside-early-1900s**] Primarily for main line traffic, it had just the usual two passenger platforms inside, one for departures on the west side, with station facilities such as waiting rooms, refreshment rooms, a ticket office as well as company offices and the *Great Northern* boardroom. The other for arrivals on the east, where arches from the arrivals' platform led to a cab road. King's Cross had an additional six tracks for the storage and movement of locomotives and carriages in the middle.

The station was not without flaws. The original laminated wood trusses perished and buttressing proved insufficient on the east side; both problems were rectified by wrought iron replacements. The large arches on the southern end meant a draughty shed and there was little concourse space for travellers.

Throughout the nineteenth century passenger traffic into King's Cross increased significantly, resulting in eight platforms in Cubitt's original building and an additional three for suburban traffic outside.

Additional lines and tunnels, one on either side of the original, were added to the approach to increase flow and improve difficult working conditions for engine drivers.

An accident

An 'up' excursion train in **1862** failed to stop at Kings Cross, the train overrunning the buffers, mounting the concourse and continuing through the arch opposite what is now Platform 1, crossing St Pancras Road and crashing through the Metropolitan Railway construction hoardings, taking two carriages with it. The guard was found to be insensible through drink, apparently unwisely purchased for him by passengers at Peterborough.

[KK-03 **african village**] When St Pancras Arrived, the original St Pancras Road was straightened, leaving a free area in front of Kings Cross, subsequently known as the African Village.

[KK-04 **KX african vill with house**] A large number of huts and kiosks sprang there, trading on the passenger and goods traffic concentrated in the area. In the early 1970s these kiosks were cleared for a single-story travel centre, ticket office and concourse, but it made little impact on the overcrowded and restricted passenger facilities.

The Goods Yard

[KK-05 1843 1872 maps] The *Great Northern's* complex covered 134 acres and much of its profits came from freight. Here it is in 1872 by which time most was developed.

[KK-06 KX goods yard 1874] Areas for each product were segregated, with the minerals, in this case coal and York stone for pavements, as far as possible from edible produce.

[KK-07 barges] But I want to concentrate on coal. Initially *Great Northern* had it made: a ready-made canal for distribution in bulk, and a growing network of local lines for domestic distribution.

[KK-08 GNR plan 1895] When the goods yard opened, trade in coal imported to London had reached 3.5 million tons, almost all by sea. In twenty years this had doubled, with the railways capturing 60%.

[KK-09 coal drops2] The eastern coal drops were built in **1851**. The three-level design is unusual, and Plimsoll complained it damaged his softer South Yorkshire coal, causing him to construct his own. The western coal drops were completed in **1860** next to the canal basin. Initially *Great Northern* traded on its own account with a single contactor, but was forced by law to give the trade to other coal traders, and it hired out or sold to them its wagons, vans and sacks. Land at Cambridge Street was bought by Samuel Plimsoll and land in the goods yard was cleared for a viaduct to take wagons across the canal to his own drops. The canal company increased its charges, while sea vessels enlarged, improved and recaptured much of the business to the new Thames side mega-gas works. Plimsoll's drops were bought by *Great Northern* and extended, while the western coal drops were converted to goods sheds. Coal carted from the goods yard peaked at 502,000 tons in **1865**. The *Midland* captured a lot of the business and some went directly south on the *Chatham's* cross London line.

[KK-10 goods shed plan] In 1850 Kings Cross was the world's largest goods station, centred on the Inwards and Outwards Transit sheds and marshalling area between.

[KK-11 granary] The Granary which fronted the train assembly shed was completed in **1852**. Grain was stored on five floors, sacks up by lift and down by chute before being moved on by canal and road.

[KK-12 running shed] And here is the running shed where engines were maintained – a Stirling and a Sturrock in the background.

[KK-13 aerial goods yard 1945] The railway continually extended its land. In **1891** they bought the lease of Plimsoll's drops on Cambridge Street. When the Imperial Gas Works closed, they bought 5.5 acres of it in **1911** including the retorts. The German Gymnasium was bought for use as office space in **1916**. This aerial shot in **1945** shows the final extent of the railway lands, outlined in yellow; the docks were long gone.

Canal goods traffic came to an end in the 1950s and new national transport patterns and freightliner (subsequently opened to private operators) gradually spelled the death knell of the yard. BR's plans for the Channel Tunnel Rail Link terminus at Kings Cross were fought by the King's Cross Railway Lands Group and in **1994** the government ruled in favour of the terminus being at St Pancras. Argent St George were appointed developers of the King's Cross Railway Lands in **2000** and developed a Framework for Regeneration, and after a lot of argument, Camden Council provisionally agreed planning application in **2006** and clearance started the following year. Significant progress was impeded by the financial situation.

Modernisation

[KK-14 **KX waveform roof**] Congestion had bedevilled operations at King's Cross almost from the start, but that began to change with new passenger facilities and track layout.

[KK-15 **KX waveform roof**] A new steel and glass Western Concourse by John McAslan & Partners opened in **2012**, making use of the space between Lewis Cubitt's Great Northern Hotel and the offices on the western side of the station. A key feature is the structurally dramatic wave-form roof.

The historically accurate restorations and modern architecture won 35 international design awards, including the coveted Europa Nostra prize for cultural heritage.

[KK-16 **KX trains on the new platforms**]. The final phase of the redevelopment started soon after with the removal of the 1970s concourse and travel centre and all the clutter. This enabled Cubitt's original Grade 1 listed façade to be exposed once more as well as providing a square at the front of the station, creating a new public space.

[KK-17 **KX upgrade trackplan**] Network Rail engineers completed a major improvement to King's Cross station's track layout dubbed 'King's Uncrossed'; the multi-million-pound improvements formed a key part of the wider £1.2bn East Coast Upgrade.

As part of the improvements, a disused tunnel was reopened after 44 years to add two more lines into the station. Engineers carried out the replacement of over 6km of new track, 30 new sets of points, 50 new signals and 20km of new overhead wires.

Re-modelling the station throat involved replacing the Camden Sewer, that runs right across at right angles. It can carry up to 3,200 litres/second and created a 'hump' across all the tracks, resulting in a longstanding 15mph speed restriction, severely inhibiting train performance.

The King's Cross approach is now operated by signallers over 200 miles away in York's state-of-the-art Railway Operating Centre, instead of a signal-box next to the approach.

The station currently handles some 150,000 travellers a day.

L Paddington (2)

[LL-00 **paddington plans**] Brunel finally got the go ahead for his permanent station. Influenced by The Great Exhibition, on whose committee he sat, his station of **1854** had a wrought iron roof on cast iron pillars.

[LL-02 **Paddington 1854**] At the time, this was the largest train shed roof in the world, with a main span of 102 feet, (slightly less than King's Cross) and two smaller spans on either side. These spans are crossed by two 'transepts' designed to allow transporting gear to move equipment between the aisles, although not in practice used.

[LL-03 **Paddington-station roof**] Although Brunel was chief designer, he got Matthew Digby Wyatt (Secretary of the Great Exhibition) to architect the ornamentation. The ornamentation of the roof structure served to lighten the weight and provide 'hooks'

[LL-04 **screen paddington**] The filigree iron tracery on the ends had a structural function.

[LL-05 **paddington window**] The oriel window of the directors' office was influenced by Owen Jones, influential architect, designer & artist, known for his grammar of ornament.

[LL-06 **_paddington_station building**] The main station building, which included offices, the new boardroom and a royal waiting room, was constructed along Eastbourne Terrace.

[LL-07 **padd hotel**] The Great Western Hotel by Philip Charles Hardwick in the style of Louis XIV, was built along Praed Street, and opened in conjunction with the new station in **1854**.

[LL-08 **last broadgauge 1892**] Built for broad gauge, the last broad-gauge train left in **1892**

[LL-08a **paddington lawn 1920s**] The area known euphemistically as The Lawn was in fact a loading and unloading area for horses and carts, rather smelly and unpleasant. Later it became a parcels depot and eventually a concourse area for passengers.

Brunel's station was large enough to cope with the expansion over the next 50 years. But by the early 20th century, new accommodation was needed for increasing amounts of both traffic and employees.

[LL-08b **span 4**] Major changes included the building of a fourth 'span' between **1913** and **1916** which increased the number of platforms at the station, and today covers platforms 11 to 16. It was designed by *Great Western's* engineer, W Armstrong, with architectural features matching Brunel's original roof as closely as possible, but in steel.

[LL-09 **art deco building**] Further expansion of station buildings took place in the 1930s, included a striking new 'art deco' office block on the west side of the station, and remodelled passenger facilities on The Lawn as a concourse.

During the **1990s** Paddington Station was extensively refurbished, with the glass in Brunel's original roof replaced with polycarbonate, the restoration of Digby-Wyatt's ornamental tracing and significant improvements to The Lawn.

[LL-10 **paddington lawn end**] Grimshaw's 1999 master plan for the station accommodated increasing passenger numbers, with more than 70,000 people passing through the concourse each day.

A key addition is the double height structure of glass and concrete on the Lawn. The scheme restores the 1930s stone facades and provides ample space for eating, drinking and shopping. Enclosed by a lightweight roof of steel and glass, the new climate-controlled (but not pigeon controlled) area gives passengers an optimum view to relax and take in the dramatic Victorian terminus.

A proposal to take down 'Span 4' to accommodate facilities for Crossrail was dropped; the Edwardian roof was instead restored and Crossrail is housed underneath Eastbourne Terrace.

[LL-11 **paddington today**] As with King's Cross, removal of ad hoc accretions, reveals the wrought iron spans and transepts, restoring the splendour and clarity of the original design.

[LL-12 **paddington view**]

M Pimlico

[MM-00 WELCP railway] We now move south. When the Crystal Palace relocated to Sydenham Hill in **1854**, the *Brighton* connected it to their main line into London Bridge at Sydenham.

[MM-01 pimlicostation1859] Then they looked west. Soon the West End of London & Crystal Palace Railway - a front for the *Brighton* – sought a connection to the *South Western* into Waterloo. That not being forthcoming, they diverted to create their own terminus at Battersea, optimistically called Pimlico.

[MM-02 Pimlico_terminus_exterior_1858] Its 22 acres were considered spacious. It opened in **1858**, but plans were already in place for an extension to Victoria.

[MM-03 pimlico-terminus interior]

N Victoria

[NN-00 Victoria Grosvenor Map] Competing for a line into the West End of London, the *Brighton* and the *Chatham* decided to pool their resources and back the Victoria Station & Pimlico Railway. This company had been authorised to build an extension of the line from the West End & Crystal Palace Railway's 'West End' terminus at Battersea, over the River Thames to a new station at Victoria Street, just a few hundred yards from Buckingham Palace making it truly in the west end.

Access to Victoria Station was to be reached by the newly constructed Grosvenor Bridge, designed by John Fowler, the first railway bridge to cross the Thames in London, and then alongside the Grosvenor Canal. Fourteen acres of land including the canal basin had been purchased for the new terminus.

[NN-01 victoriaold] Sadly, the terminus itself was not combined and each company employed its own architect. Instead of a unified terminus under Fowler, the *Brighton* employed engineer Robert Jacomb Hood in a more prosaic design.

As a condition of obtaining the land, the railway companies had to enclose the tracks from the station back to Ecclestone Bridge, in order to protect local residents from the noise, soot and smoke. This left little funding for proper station buildings; both companies erected crude wooden huts which remained unchanged for the next forty years. Enmity between the two companies led to a brick dividing wall, rather like at London Bridge, with similar confusion. The *Brighton's* station was to some extent masked by the independent Grosvenor Hotel.

The *Brighton's* side of the station opened in **1860** and is just visible here behind the *Chatham's* station.

[NN-02 Victoria Chatham Station early] The *Chatham's* station on the east side of the site opened two years later with the arched trainshed roof by their engineer Sir John Fowler.

[NN-02a fowler roof] Historic England describes the roof as 'one of the lightest and most elegant of the major station roofs from this period.' The arches are delicate, a light filigree that belies their strength.

[NN-03 victoria-railway-station-to willesden] Here is an early train from Victoria (*Brighton*) to Willesden. Note the original transverse roof.

Both companies decided to upgrade their respective stations towards the end of the nineteenth century.

[NN-04 new brighton front] The *Brighton* moved first, buying the independent Grosvenor Hotel next to their part of the station in **1899**, and extending it to form their new frontage. Designed by their chief engineer Sir Charles Morgan, it was built in red brick with an elaborate Edwardian Baroque style to compliment the Grosvenor Hotel.

[NN-05 brighton victoria] The old trainshed ridge and furrow roof was replaced by louvred ridge roofs, parallel to the tracks, to cover new and extended platforms for longer trains. An exclusive entrance in Buckingham Palace Road was created for use by the royal family. The new station opened in **1908**.

[NN-06 victoria chatham rebuilt] Not to be outdone, the *South Eastern and Chatham*, as it was since **1899**, commissioned AW Blomfield to design a new station. The original Fowler trainshed roof was retained.

The new building was set slightly in front of its neighbour, and built in white Portland stone, to reinforce the separation between the two companies, yet with rusticated pilasters, echoing the stone on the *Brighton's* hotel front. It had 'mermaid caryatids, pediments broken and not, wreaths and more than one decorated cartouche'. This new station opened in **1909**.

[NN-07 victoria front recent] The separation of the two stations was maintained until railway grouping in **1923** when both companies became part of the Southern Railway. The *Southern* set about integrating the two stations, opening up archways in the walls that divided the two halves.

The glamour of holiday travel to Brighton and the Continent had been a feature of Victoria since the **1870s**, but it was the early twentieth century saw the heyday of travel for pleasure from the station. In the **1930s** services such as the Brighton Belle and the overnight 'boat train' services, and briefly a 'flying boat' service via the new airfield at Southampton were introduced. This connection with international travel was rejuvenated with the opening of Gatwick Airport in **1958** and the introduction of the first rail-air terminal at Victoria where passengers could check in to their flight before travelling to Gatwick. This developed into the Gatwick Express service, introduced in **1984**.

The **1980's** saw the removal of much of the *Brighton* side roof to make way for Victoria Plaza – a multi-storey office and shop complex. In **1992** the station site was tidied and enlarged, with the two concourses becoming more integrated through a series of matching shops built through the archway of the original dividing wall.

O Farringdon Street

[OO-01 early farringdon maps] Farringdon Street was the terminus of a new railway which was to connect many lines to the City, built on the land vacated by the removal of the City Cattle Market to Islington. The *Great Western* and the *Metropolitan* also leased the basement of the new central meat market at Smithfield for use as a goods depot.

John Fowler's temporary station opened in **1862**. At the same time an extra pair of tracks (known as the widened lines) were laid from King's Cross through a new tunnel to keep their tracks separate and provide proper access to their depot and the meat market.

It wasn't long, however, before powers were obtained to extend the railway and widened lines to a new terminal at Moorgate, which we shall talk about later.

Although temporary, the station was substantial; the train sheds comprised side walls built of white perforated brick with blank arcading, and timber queen-post trussed roofs, with central lantern-lights and louvres. The entrance building had a central semi-circular booking office, leading to the stairs down to the platforms on either side.

[OO-02 [farringdon st sta in 1866](#)] With the opening of the permanent through station, the temporary buildings continued to serve *Great Northern* and *Great Western* trains. It was finally closed at the end of February **1866**, and the site redeveloped as a *Great Northern* goods station.

P Charing Cross

[PP-01 [charing cross early](#)] Authorisation to build the Charing Cross Railway was given by Parliament in **1859**. This would extend the *South Eastern's* line from London Bridge over the River Thames and into a terminus located between Waterloo Bridge and Westminster Bridge, occupying the space of burned-out Hungerford Market.

Work began in **1862**. The station was designed by Sir John Hawkshaw with six platforms and a large single span trussed arched train shed roof which had a 164ft clear span and was 510ft long. Note the taxi ramp.

Opened to traffic in **1864** the station quickly became busy for both its commuter and continental departures.

[PP-02 [CHXcross hotel](#)] The station frontage was provided by the Charing Cross Hotel, designed by Edward Middleton Barry in the French Renaissance style. It soon became very fashionable.

On amalgamation of operations with the *Chatham* in **1899** the company chose to concentrate its combined continental services at Victoria Station and the overseas facilities including foreign language signs, were removed.

A disaster

[PP-03 [Charing Cross roof fall](#)] In **1905** when work was being undertaken on Hawkshaw's arched trainshed roof, a wrought iron tie rod snapped and caused a significant section of the roof to collapse, and a wall to fall onto the adjacent Avenue Theatre.

[PP-04 [smashed_train_charing_cross](#)] 6 people died in the accident.

[PP-05 [CharingCross_9-7-55](#)] What was left of the vaulted roof was taken down; as the subsequent enquiry raised questions about the original design and construction, the decision was taken to replace it with a flat ridge and furrow design.

[PP-06 [hungerfordbridge](#)] Along with the station, Hawkshaw had also designed the Hungerford Bridge access way, replacing Brunel's 1845 suspension bridge to the market. Two piers from Brunel's bridge were retained.

The lattice girder bridge was criticised as being ugly, and there were continual attempts involving parliament to have it removed and replaced by a road bridge, putting the station on the south bank. The Ministry of Transport was willing to contribute 75 percent of the costs! A double-decker bridge was also considered in **1925**. There were concerns then too

about the strength of the bridge, placing operating restrictions, and adding to the argument. The introduction of electric trains in **1926** solved that problem. Changing the bridge colour from oxide red to grey also diffused some aesthetic arguments, and in **2002** the Hungerford Bridge Millennium Project designed and built new independent footbridges either side, masking the main bridge.

[PP-07 modern charing cross] In the **1980s** the station was redeveloped and the space above the platforms used for new office accommodation. Designed by Terry Farrell, Embankment Place rests on a concrete raft put in place of the 1906 roof. The building has no supporting columns projecting into the station which allows the space to keep a sense of openness.

[PP-08 charing cross aerial] A glass roof is retained over the concourse area. Is it original?

Q Blackfriars Bridge

[QQ-01 blackfriars_bridge_etching] In the same year that the *South Eastern* opened Charing Cross, its rival, the *Chatham* reached the Thames with the two-level terminus of its City Line from Herne Hill. The temporary terminus combined passenger services with goods below. There were three passenger platforms.

When eventually St Paul's opened across the river in **1886**, the platforms and trainshed were demolished. The station remained in use as a goods depot until **1964**.

R Moorgate (Street)

[RR-01 moorgate map 1886] Moorgate Street station was opened by the *Metropolitan* in **1865** when it extended its original route from Farringdon, including the widened lines.

Not much could be found about the terminus construction, but the plan here suggests a series of pitched roofs of timber, glass and slates. Here it is in **1905** [RR-02 Moorgate 1905]

The line was originally worked by the *Great Western*. There was even a service to Windsor! Relations between the *Metropolitan* and the *Great Western* deteriorated, and the *Metropolitan* took over.

The line had connections from the *Midland* and the *Great Northern* and until St Pancras opened 10 weeks later, Moorgate Street was temporarily the *Midland's* only terminus.

[RR-03 moorgate entrance] Moorgate Street also became a terminus for the *Chatham*, and worthy to be called London Central. The station was renamed Moorgate in **1924**.

[RR-04 Moorgate-war damage] Moorgate station suffered considerable bomb damage in the war and the service wasn't reinstated until **1946**. [RR-05 old Moorgate]

[RR-06 aerial moorgate1962] [RR-07 tracks under barbican] In the **1960's** the station was completely rebuilt and extended to six platforms, going underground

[RR-08 Moorgate_station_MMB_04_A-Stock] All services terminated by **2007** and the widened lines were truncated at Farringdon in **2009** when platforms were extended there.

S Broad Street

[SS-00 **Broad Street Station Poster Postcard**] Originally constructed to connect the *North Western* to the docks, the *North London* found equal profit in peripheral suburban passenger services.

The *North Western* were keen to have a goods depot in the City, and agreed to help the *North London* fund the new extension. The 3km connecting line to Broad Street via the Kingsland Viaduct was authorised in **1861**.

[SS-01 **Broad_street_station_1865**] The station was built in a French Renaissance style to a design by William Baker and opened in **1865** with seven platforms and three approach tracks. The frontage was constructed from white Suffolk brick and Peterhead granite, with a 75-foot clock tower as a centrepiece.

The goods station was opened in **1868** next door. It was built on a deck, and a hydraulic lift was provided to move wagons down to warehouses below. This kept the land to 2.5 acres, important, given the high price of land in the City.

Broad Street was an immediate success and caused *North London's* traffic to double in a short space of time. A fourth approach line was added in **1874**, an eighth platform in **1891**, and a ninth platform in **1913**.

[SS-02 **BroadStreetStation**] In **1891** two covered stairways were added at the front of the station giving direct access between the concourse and the street, destroying the look of the station.

[SS-03 **Broad Street interior 1898**] At its peak at the turn of the **20th century**, Broad Street was the third-busiest station in London, with more than one train per minute during rush hour. The *Great Northern* also used Broad Street, as a means of freeing up King's Cross from its local services, but had to use *North London's* trains. From **1910**, *North Western* introduced a service from Broad Street to Birmingham New Street and Wolverhampton, marking the station's highpoint.

From then on, the *North London* suffered a reduction in passengers and revenue, resulting from the expansion of alternative networks. By **1913**, numbers had dropped by a half, and by **1921**, by half again.

The former *Great Northern* services were stopped in **1939** to accommodate essential war traffic, and Broad Street was badly damaged during the war. The main station building was closed in **1956**, with passengers being directed to a new concourse-level building at the platform entrance to buy tickets.

[SS-04 **broad street 1972**] The line and station survived Beeching, but service was steadily reduced. In **1967**, the major part of the train shed roof was removed for safety reasons, and goods services were withdrawn in **1969**. The station was becoming very dilapidated, as this image shows in **1972**.

By **1985**, the service to Richmond was diverted away, leaving only the peak hour Watford Junction services to continue on for just another year.

T Ludgate Hill

[T1-00 ludgate hill map plus aerial] The *Chatham* soon extended its line from Herne Hill across the Thames, up the Fleet Valley and into the City with a terminus at Ludgate Hill. How they got permission I do not know. Opening was delayed by the collapse of its glass and iron trussed roof during construction. A replacement wooden truss roof on timber columns was quickly constructed and the service was extended into the unfinished station in **1865**.

[T1-01 ludgate hill elevation] Station facilities were not ideal, as the site was cramped, hemmed in by existing developments. The station had a lively appearance, with its turrets at each corner and its decorations of poly-chrome brickwork, above the arched doorways.

[T1-02 ludgate hill 1905] The main building was sited behind a forecourt on the east side of New Bridge Street. From here, narrow steps led up to two narrow timber island platforms on the viaduct. The limitations of the viaduct restricted the platform widths to 17 feet max.

[T1-03 from snow hill] The following year (**1866, 1871** city bend), the connection to the Widened Lines was completed through the Snow Hill tunnel and passengers using Ludgate Hill increased rapidly. Apart from *Chatham* services, it was now used by the *Great Northern*, *South Western*, *Midland* and *South Eastern*. Ongoing rivalry between the *Chatham* and the *South Eastern* meant the latter's trains were permitted to disembark only.

The station was soon struggling to cope with dangerous numbers of commuters on the narrow timber platforms. In an attempt to reduce the demand on Ludgate Hill, the *Chatham* opened Holborn Viaduct in **1874**, and St Paul's in **1886**, yet conditions remained dire.

Early in the 20th century, it was decided to rebuild. Lines were rerouted, allowing the two original platforms to be replaced by one wider one 32 ft wide, providing an extra 3ft width for the stairwells. The lines without platforms took the main line express trains straight through to St. Paul's or Holborn Viaduct. A new umbrella roof was supported on central pillars.

Sadly, the heyday of cross-London suburban trains was coming to an end and the future of Ludgate Hill began to look bleak even before rebuilding was complete, many commuters deserting the station for the *Metropolitan District* and the electric tramcars.

The final blow came in **1929** following the electrification of some services. The rebuilt platform was too short to take the new 8-car trains. Surprisingly, the station restaurant in the viaduct arches remained open until **1938**, outliving the station by nine years.

[T1-04 ludgate demolition] The awning and platform buildings remained until **1960**; the platform was demolished in **1973**.

The new subterranean station of St Paul's Thameslink opened in **1990** with an entrance on Ludgate Hill.

T2 Holborn Viaduct

[T2-01 holborn via aerial] When Ludgate Hill Station had begun to struggle in the **1860s**, the *Chatham* was suffering financial problems, so, a front company was set up to construct a 300-metre branch to a new terminus, located with a frontage on Holborn Viaduct.

Holborn Viaduct opened in **1874**, for both main line and continental trains. Trains would travel as far as Herne Hill where they would split, with one portion going to Holborn Viaduct

and the other to Victoria, thus not requiring long platforms here. It was a six-platform terminus, covered by a three-roof train shed with pitched roofs.

[T2-02 [holborn viaduct hotel](#)] The hotel appeared two years later, designed by Lewis Isaacs.

[T2-03 [Holborn_Viaduct_railway_station](#)]

[T2-04 [holborn_viaduct_1913](#)] Here are the platforms in **1913**. Passenger traffic through the Snow Hill tunnel ceased in **1916** and Holborn Viaduct became a terminus for passenger services from the south only.

[T2-05 [Hv interior postwar](#)] This later view inside the shed shows it still busy after the war.

[T2-06 [holborn_viaduct_post_1963](#)] Following the end of the Second World War, more services began to be withdrawn. In **1963** the train shed was replaced by shorter platform canopies, while a new concourse was constructed within the new office building on the ground floor. The hotel, which had been heavily damaged during the Second World War, was demolished and the site redeveloped as a new 10-storey office building.

[T2-07 [holborn-viaduct- station removal](#)] In the mid-**1980s**, thanks largely to Ken Livingstone, Snow Hill tunnel was reopened as a north-south rail link. With the **1990** Thameslink plan to put much of the line below ground, with a new station called St Paul's Thameslink, Holborn Viaduct closed, and the frontage of the original station buildings were incorporated into the new station.

T3 St Paul's/Blackfriars

[T3-01 [blackfriars front](#)] Let's go back a bit. To increase the capacity of rail traffic through the Snow Hill Tunnel to the rest of the rail network, the *Chatham* opened a new bridge with a new main line station on the north bank in **1886** with the name St. Paul's. It was renamed Blackfriars along with the District line station in **1937** to avoid confusion with Central Line's St Paul's.

[T3-02 [blackfriars from river](#)] The old bridge remained in use until 1971.

[T3-03 [blackfriars_old1](#)] Here is the station from the new bridge.

[T3-04 [Blackfriars from Ludgate Hill](#)] Here it is viewed from Ludgate Hill station; note the proximity.

[T3-05 [Blackfriars 2008](#)] It was rebuilt in the **1970s**, with the addition of office space above the station and the closure of the original railway bridge, which was demolished in **1985**.

[T3-06 [Blackfriars 2010](#)] In **2009**, the station underwent major refurbishments to improve capacity, which included the extension of the platforms across the railway bridge with the help a row of supports from the old bridge, and a new station entrance on the South Bank.

[T3-07 [new blackfriars](#)] [T3-08 [new Blackfriars-inside](#)]

U Cannon Street

[UU-01 [CannonSt_across the river](#)] London Cannon Street, also known as City Terminus, with its two surviving characteristic yellow brick Wren-style towers was opened in **1866** by the *South Eastern* and was designed by Sir John Wolfe Barry and Sir John Hawkshaw. It was built to compete with the *Chatham's* city services. . The towers were reputedly functional; one containing a water tower for replenishing steam engines and powering hydraulics.

[UU-02 cannonstreet postcard] At the time of construction, it had a station roof longer than that of neighbouring Charing Cross. As you can see it totally dominated the area.

[UU-03 cannonstreet early] In its first year of operation around eight million passengers passed through Cannon Street.

[UU-04 cannonstreet hotel] The independent City Terminus Hotel fronting the station followed a year later, designed by Sir John's brother, Edward Middleton Barry.

[UU-04b cannonstreet hotel] It was taken over by the *South Eastern* in **1872**, six years later.

The opening of Cannon Street enabled services between there and Charing Cross. With a journey time of 7 minutes, it was very popular – much quicker than going by road. 7 minutes was ideal for a prostitute to satisfy a customer, and they would purchase a first class ticket. When Waterloo East opened 3 years later, this custom disappeared overnight. The journey continued to be popular for the general public until the Metropolitan District Line opened between the two stations in **1884**.

The bridge was widened in **1893**, giving it the distinction of being the widest railway bridge in the world at the time. A replacement signal box contained 243 manual levers, at the time, the most levers in any single box in Britain.

In the **1920s** the Southern Railway rebuilt the platforms, renovated and cleaned the roof, installed four-aspect colour-light signalling and reduced the number of platforms from nine to eight. In **1931** the Cannon Street Hotel was closed and turned into an office building called Southern House.

[UU-05 cannonstreet glassless] During the Second World War the glazing from the station roof was removed and stored off site in a factory to save it from damage. Unfortunately, the factory was bombed and the glazing was destroyed.

Two high explosive bombs fell on the station and hotel, severely damaging the roof and gutting two floors of the hotel with fire. Because of the destruction of the glazing and the damage to the roof, this was not replaced; the skeleton ribs of the roof were left to stand for another ten years.

In **1962** plans were drawn up for a multi-storey office building designed by John Poulson to replace Southern House and the station roof and was scheduled to be completed by **1965**.

[UU-06 cannonstreet 1978] By the late **1960s** the only original features to survive were the two towers and part of the station building side walls.

Despite rumours of closure, British Rail invested a lot of money redeveloping and restoring the station throughout the **1980s**. This included the re-decking of the railway bridge and restoring the two original Wren-style station towers, now listed.

In **2019**, as part of a £45m artwork project, Cannon Street Bridge was lit up using new LED lights. These new sequenced pattern lights reduced energy consumption and light-spill onto the river.

[UU-07 cannonstreet now] In **2007** as part of a larger regeneration programme undertaken by Network Rail to modernise and unlock the commercial potential of the main London

termini, the Poulson building was replaced by a new building designed by Foggo Associates. Hines, the US developer, led a £360 million project with a development containing more than 37,000 m² of office space alongside 1,600 m² of station retail space.

[UU-08 [cannonstreet now](#)] Today the station sees an average of 22 million passengers/ year.

V St Pancras

[VV-00 [midland extension](#)] Initially the *Midland* had agreements with the *Great Northern* that enabled it to reach London with goods and passenger traffic. By the mid-19th century, these agreements were hurting and they decided to extend their line from Bedford to London and create a grand terminus.

[VV-01 [stpancras construction](#)] William Henry Barlow, the *Midland's* consultant engineer, designed the extension route and station layout, including the single span arched train shed constructed of iron and glass.

[VV-1b [cross section](#)] At 243ft by 110ft high at its apex, it was at the time the largest ironwork structure of its kind. As the ribs were tied to the platform grid providing lateral support, the train shed area was clear and spacious compared to other termini, making the structure much more flexible and allowing for future changes. The arch was pointed to reduce wind stress and avoided sickle trusses.

[VV-02 [early st pancras](#)] As the line had to bridge the Regents Canal to the north of the station, the platforms at St Pancras were built at a high level which made it much more imposing than its Euston Road neighbours. Resting on 850 cast iron pillars, this gave the station space underneath for storage of goods. The distance between the columns was measured using one of the *Midland Railway's* most lucrative goods traffic; barrels of beer from Burton on Trent. [VV-03 [St Panc hydraulic beer lift](#)] [VV-03a [St Panc beer store](#)]

[VV-04 [stpancras hotel exterior](#)] In **1865**, George Gilbert Scott, celebrated gothic architect of his day, won the competition to design the front façade of the station including a new hotel on a ground plan by Barlow, despite his design being larger than the rules allowed.

[VV-05 [st pancras hotel interior](#)] Construction of the hotel, named the *Midland Grand*, started in **1868**, but economic downturn delayed completion to **1876** and took it well over budget. Economies lost a floor, and also the statues which were to adorn the first-floor niches. The west tower was nearly lost and Scott was finally eased out to reduce the cost of the interiors. Striking and self-confident, the station and hotel completely dominated its *Great Northern* neighbour.

[VV-06 [st pancras booking office](#)] The station buildings also had a decidedly ecclesiastical style to match the hotel. [VV-07 [ticket office](#)] [VV-08 [st pancras booking office 3](#)] The last picture shows a new ceiling.

[VV-09 [St Panc brickwork](#)] The building used products from all over Britain – bricks from Nottingham, ironwork from Derbyshire, red and grey granite from Peterhead, gritstone from Derbyshire, stone from Bramley Stall, dressings of limestone from Ancaster and Ketton, Mansfield red sandstone, slates from Wales. Brickwork was immaculate.

[VV-10 St Panc vindication] This quote by Simon Bradley informs the gothic debate:

“But the final vindication of the Midland Grand Hotel must be its success in formal and functional terms. Viewed from either direction, the clock tower is counterbalanced by the great quadrant sweeping round to the hotel entrance at the opposite end, with its twin spires framing a specially elaborate gable. The intermediate tower over the entrance roadway gives further visual anchorage to the main front (besides housing an essential facility, the water tank). Gables, oriel windows and other incidents break up the many windowed ranges between, in just the right measure to prevent monotony. Their placing is slightly irregular, depending on internal convenience rather than the dictates of external symmetry on the Renaissance model. Their size, shape and richness also vary according to the importance of the rooms within; for instance, the bay windows light the sitting-rooms of the biggest suites on each upper floor. It was an article of faith of the Gothicists that progress in architecture depended on this kind of freedom of functional expression. Likewise, the external cab ramp which rises to concourse level is folded a comfortably and asymmetrically into the angle made by the western quadrant. The assurance of Scott's composition is doubly remarkable in that neither the quadrant nor the placing of the entrance arches was his invention: both originated in W. H. Barlow's outline plan for the site, in which the arrival and departure routes for passengers and road vehicles were already worked out. So Scott's approach to design was agile and intelligent enough to turn these fixed points to advantage, rather as a landscape gardener will use existing contours and outcrops to best advantage. Those with no time for the Gothic Revival have seen only looseness, swank and clutter in all this; to others the reconciliation of art, function and materials at St Pancras make it a masterpiece.”

[VV-11 st pancras dirty] In **1923** St Pancras was transferred to the LMS, who focused its activities on Euston, and St Pancras declined over the next 60 years. In **1935** the Midland Grand was closed as a hotel; falling bookings and profit were blamed on the lack of en-suite facilities in the bedrooms, although reduced station traffic must have contributed. It was used instead as office accommodation for railway staff and renamed St Pancras Chambers.

British Railways tried to close and demolish the station a number of times. John Betjeman spearheaded a campaign to save the station and hotel, and in **1967** was successful in getting the buildings listed Grade 1 just days before demolition was due to begin.

Although the buildings were saved, their decline was allowed to continue; the hotel building was mothballed in **1985** and the train shed roof fell into a state of serious disrepair.

In **1996** Government passed the Channel Tunnel Rail Link Act authorising the construction of a high-speed line from the tunnel to St Pancras, starting St Pancras' £800 million revival.

[VV-12 st pancras shed today] In consultation with English Heritage and with painstaking reference to original detail, Barlow's original train shed roof was restored to its Victorian glory with 18,000 panes of self-cleaning glass, 300,000 Welsh slates and the iron girders stripped and repainted in their original pale blue. New oak doors for the main entrances were made, the brass furniture copied exactly from original drawings.

[VV-13 st panc new shed] To extend platforms to accept Eurostar trains, an additional train shed to the rear of Barlow's original was designed by Foster & Partners. The west wall of the station was rebuilt using 16 million bricks manufactured identically to the original.

Opening up the station under-croft, originally designed for beer barrels, allowed developers to let in the light from the roof, and the building to be seen from the new Eurostar check-in lounge, shops, restaurants and food halls, created in the space.

The new St Pancras International station was opened in **2007** with Eurostar and East Midland services, and with Thameslink services following. At the end of **2009** high speed domestic services began between St Pancras and Kent.

A £200 million refurbishment of the Midland Grand took place. The Manhattan Loft Corporation and Marriott International funded a development of private apartments, which have since been sold off – and a large part of the redevelopment now forms the Marriott Renaissance Hotel. There are 245 rooms, priced at up to £10,000 a night, mostly in the new extension round the corner.

W Baker Street

[**WW-01 Baker_Street platforms**] It is a moot point as to whether this is/was a terminus. In **1868**, a single-track branch line in a tunnel, the St John's Wood line, was opened by Metropolitan & St John's Wood Railway from Swiss Cottage to new platforms at Baker Street called Baker Street East. A junction was built with the original line at Baker Street, but there were no through trains after **1869**. In **1892-3**, after that line had been extended, the East station was enlarged. Subsequently a footbridge was built to facilitate transfers with the other lines.

[**WW-02 bakerstreet tea room**] Between **1910** and **1925** the station underwent a comprehensive rebuilding programme to bring all the lines together with a single ticket hall and the company's general offices. The work was designed by Charles W Clark, architect of the Metropolitan. A station building was erected in a restrained classical style, with a rusticated Portland stone facade. The ticket hall and concourse were laid out in the basement with stairs leading down to the Metropolitan platforms and a second concourse adjoining the Circle platforms. Fronting onto Allsop Place was a new seven-storey office building. The steel and reinforced concrete structure was clad in faience, with decorative cast-iron panels.

[**WW-03 baker street chiltern court**] Clark also designed Chiltern Court, the block of 180 luxury flats, including shops, a restaurant, and a large function hall constructed above the station in the **1930**. The block was underwritten by the Metropolitan Railway, which profited from the property development.

X Liverpool Street

[**XX-00 liverpool-street-mist**] Belatedly, the *Great Eastern* gained authorisation for an extension of their line from Bishopsgate to a new terminus just inside the City boundaries, next door to the *North London's* Broad Street station. [**XX-01 liverpool-street-mist2**] Broad Street had been built on a high level but the *Great Eastern* chose to do the reverse, taking the station to a level below the street in an effort to join with the Metropolitan Railway, which they did until 1904.

[**XX-02 liverpool street aerial 1950s plan**] The station was designed by the company's engineer Edward Wilson in an L shape with suburban services operating from the shorter platforms on the western side. This plan shows the original plus the eastern extension.

The engine shed had a long, high, iron and glass pitched roof with two aisles and two naves.

[XX-03 dual columns] Note the wrought iron with cast iron decoration, acanthus crowns and perforated spandrels. Lofty and delicate looking, it imparted a grace to the interior, giving the centre of the station a cathedral-like quality. Note the unusual arrangement of dual columns between platforms 7 and 8.

There were three buildings at the front in an unexceptional 'French Gothic' style, with white Suffolk brick and stone dressings. The station included offices for the *Great Eastern*.

The station with its ten platforms opened in **1875**. Over the next ten years demand for services, especially suburban commuter trains from north east London, soon outstripped capacity at the station. The *Great Eastern* acquired more land and extended the station to the east, opening in **1894** with 8 new platforms housed under a much plainer trainshed roof.

[XX-04 liverpool street platforms] Throughout the early twentieth century the *Great Eastern* built up a steady and solid commuter base. It looked into the possibilities of electrification which was bringing increased capacity to other London stations, but could not afford it.

[XX-05 liverpool street platforms BR] However, under its modernisation plan, British Railways electrified all suburban services and replaced all remaining steam by diesel locomotives by the end of **1962**.

[XX-06 Liverpool St 1977 - Platform 9 in the Sun] A plan to demolish Liverpool Street and its neighbour Broad Street, and replace them with an underground terminus and overhead office accommodation was first proposed by BR in **1975**. However, there was a great deal of opposition so BR sought permission to demolish Broad Street station and sympathetically redevelop Liverpool Street. Work began in **1985**.

[XX-07 liverpool st aerial view today] Liverpool Street station's plainer, 1894 eastern extension roof was demolished and overhead space was freed for office accommodation. The original trainshed roof was completely restored and extended to the south, the extension denoted by the subtly different coloured paint used on the supporting columns.

[XX-08 Liverpool-street-station today] A new light and spacious concourse was created, with a new booking office, shops, cafes and a steel and glass walkway positioned at street level.

[XX-09 Liverpool-street-station today]

[XX-10 liverpool-street-towers] The new entrances to the station at street level are marked by four new Victorian-style clock towers.

Note: all this renovation may be overshadowed. Plans are afoot to build office blocks over part of the station.

Y Marylebone

[YY-01 marylebone] The Manchester, Sheffield & Lincolnshire Railway had its own train services to and from London by arrangement with the *Great Northern* at Kings Cross. When Sir Edward Watkin became chairman in **1864** he decided to connect it to London independently, with the help of the Metropolitan south of Aylesbury, of which he was also chairman. He renamed the company *Great Central*.

Progress was delayed by objections, especially by Lord's, cricket ground, resolved there by a cut-and-cover tunnel, constructed between September and May, to avoid the cancellation of any cricket.

The station was built on a 51-acre site; more than 4,000 people were evicted from their homes; around 2,600 of them rehomed in new apartments near St. John's Wood Road.

The station opened to coal traffic in **1898** and to passengers the following year.

[YY-02 marylebone] The red brick station was designed by Henry William Braddock, civil engineer for the *Great Central*. It was modest owing to the lack of funds, although its domestic Edwardian Baroque style fits in with the residential surroundings, with Dutch gables, warm brick and cream-coloured stone.

[YY-03 marylebone] The *Great Central* crest was worked into the wrought iron railings in numerous places. A notable porte-cochere connected the station to the hotel.

[YY-04 marylebone sta 1911 plan] Only four of the intended eight platforms were built for reasons of cost, three inside the train shed and one to its west. As a result, the concourse is an odd shape, allowing for expansion.

Originally an exceedingly wide island platform to the east side had a cab road running down the middle of it (and room for a taxi rank), in line with the station's entrance arch, which is why the arch is there. Platform 1 was the designated arrival platform for long distance trains and the cab road allowed cabs arriving down a ramp from the north side of Rossmore Road bridge to meet trains, then depart through the arch.

The adjacent Great Central Hotel, by Sir Robert William Ellis, was built by a different company. It was converted to offices in **1945**, becoming the headquarters of British Rail from **1948** to **1986** before being restored as a hotel in **1993**.

A locomotive servicing area, consisting of a turntable and coaling stage remained in use until the end of steam traction at the station in **1966**.

Passenger traffic on the *Great Central* was never heavy, resulting in the quietest and most pleasant of London's termini. *Great Central* opened a new line to High Wycombe in **1906**. While passenger traffic remained relatively sparse, the line was heavily used for freight, especially coal; in **1914**, 67% of traffic was goods-related. The freight depot adjoining the station was marginally the largest in London.

The station's busiest use came after the construction of Wembley Stadium in **1923**, especially during the FA Cup Final. Special services ran from Marylebone to the British Empire Exhibition at Wembley Park the following year, but decline set in.

By **1960** all express services were discontinued, followed by freight in **1965**. Marylebone's large goods yard was closed and sold to the GLC for housing.

In **1966**, duplication with the Midland Main Line led to the closure of the line north of Aylesbury under the Beeching Axe.

In **1983**, British Rail chairman Peter Parker commissioned a review into converting Marylebone into a 'high-speed bus way', with Marylebone as a coach station and tracks converted into a road for the exclusive use of buses and coaches. Strong opposition from local authorities and the public, and the impracticalities of the scheme resulted in the project being dropped.

A sharp rise in commuters following the introduction of the Travelcard led to Marylebone being reprieved. An £85 million modernisation programme for the station was funded by selling part of the station to developers. The run-down lines into Marylebone were

modernised with new signalling and higher line speeds. Services to Banbury were extended to the reopened Birmingham Snow Hill station in **1993**, creating the first long-distance service into Marylebone since 1966.

Marylebone was expanded in **2006** with two extra platforms. built on the site of the goods sidings, and a depot was opened near Wembley Stadium railway station.

In **2011**, Chiltern Railways took over the Oxford to Bicester Town route from First Great Western, providing services from Marylebone to Oxford in **2015**.

You can compare old and new with photos. [[YY-05 marylebone2](#)] [[YY-06 marylebone shed 2](#)]

Z Moorgate (2)

[[ZZ-00 GNC excavation](#)] Finally, Moorgate 2 shows what can happen when the mainline company falls out with the front company. The *Great Northern* had always suffered from a bottleneck at Kings Cross, which was not really designed for commuter services. It sought to solve this first by using the widened lines to Moorgate, and then by making use of Broad Street, courtesy of the *North London*. Eventually, advances in 'tube' technology provided an opportunity to extend the *Great Northern* further into the City, taking it from just south of Finsbury Park, to a new underground terminus at Moorgate. Unlike the other tubes, it would be large enough to accommodate main-line coaches hauled by electric locomotives with the tunnels built at 16 feet in diameter.

In **1892** the *Great Northern and City* was incorporated to carry this out, but mounting problems raising money led to increasing disputes with *Great Northern*. They stopped playing ball, putting onerous conditions on the use of Finsbury Park and gaining Parliamentary powers to forbid any extension north of there.

[[ZZ-01 Great-Northern-City at drayton park](#)] The line to Moorgate eventually opened in **1904**. It was electrified from the outset, with a power rail outside each running rail.

While the line carried a reasonable traffic, it never made a profit, and was bought out by the *Metropolitan* in **1913**, who planned to extend it to the Waterloo and City at Bank and to the Circle Line but neither materialised.

[[ZZ-02a gt northern and city maps](#)] When the Metropolitan was absorbed by London Passenger Transport Board in **1933**, the line was transferred to the **Northern Line** for operational purposes, being renamed the "Northern City Line", but never connected to it.

When the Victoria Line was built in the **1960s**, the *Great Northern & City* station at Finsbury park was taken away and their services were cut back to Drayton Park.

[[ZZ-03 717 in passenger service at Moorgate station](#)] Eventually, in **1975**, London Underground transferred ownership to British Rail, who installed new connections to the main line south of Finsbury Park and fitted an overhead catenary system as far as Drayton Park, allowing the route to take on its original intended purpose, by providing a City terminus for *West Anglia Great Northern*, running services to Hertford, Welwyn, and Letchworth.

[Use TV remote; Wireless display adapter: windows key + K]