History of London Underground

It was the dawn of 1863, and London's not-yet-opened subway system, the first of its kind in the world, had the city in an uproar. Digging a hole under the city and putting a railroad in it seemed the stuff of dreams. Pub drinkers scoffed at the idea and a local minister accused the railway company of trying to break into hell.

Most people simply thought the project, which cost more than 100 million dollars in today's money, would never work. But it did. On January 10, 1863, 30,000 people ventured underground to travel on the world's first subway on a four-mile stretch of line in London. After three years of construction and a few setbacks, the Metropolitan Railway was ready for business.

The city's officials were much relieved. They'd been desperate to find a way to reduce the terrible congestion on the roads. London, at the time the world's largest and most prosperous city, was in a permanent state of gridlock, with carts, costermongers, cows, and commuters jamming the roads. It'd been a Victorian visionary, Charles Pearson, who first thought of putting railways under the ground.

He'd lobbied for underground trains throughout the 1840s, but opponents thought the idea was impractical since the railroads at the time only had short tunnels under hills. How could you get a railway through the centre of a city? The answer was a simple system called "cut and cover." Workers had to dig a huge trench, construct a tunnel out of brick archways, and then refill the hole over the newly built tunnel.

Because this was disruptive and required the demolition of buildings above the tunnels, most of the line went under existing roads. Of course, there were accidents. On one occasion, a heavy rainstorm flooded the nearby sewers and burst through the excavation, delaying the project by several months. But as soon as the Metropolitan Railway opened, Londoners rushed in to ride the new trains.

The Metropolitan quickly became a vital part of London's transport system. Additional lines were soon built, and new suburbs grew around the stations. Big department stores opened next to the railroad, and the railway company even created attractions, like a 30-story Ferris wheel in Earls Court to bring in tourists by train. Within 30 years, London's subway system covered 80 kilometres, with lines in the centre of town running in tunnels, and suburban trains operating on the surface, often on embankments.

But London was still growing, and everyone wanted to be connected to the system. By the late 1880s, the city had become too dense with buildings, sewers, and electric cables for the "cut and cover" technique, so a new system had to be devised. Using a machine called the Greathead Shield, a team of just 12 workers could bore through the earth, carving deep underground tunnels through the London clay. These new lines, called tubes, were at varying depths, but usually about 25 meters deeper than the "cut and cover" lines.

This meant their construction didn't disturb the surface, and it was possible to dig under buildings. The first tube line, the City and South London, opened in 1890 and proved so successful that half a dozen more lines were built in the next 20 years. This clever new technology was even used to burrow several lines under London's river, the Thames.

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I am a Reporter



L.I. I can report and find the main facts / key details in a text and write them down.



1. In what year was the world's first subway line completed?

1763	1840
1863	1893

2. How long was the first line?

1 mile	2 miles
4 miles	5 miles

3. On the first day, how many people travelled on the line?

10,000	13,000
25,000	30,000

4. Select the two methods used to build the subways.

Dig deep	Bore tubes
Cut and cover	Shovel and ship

5. When did the world get its first tube line?

Early 19th Century	Mid-19th century
After the 19th Century	Late 19th Century

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