

Cycle Superhighways

London, United Kingdom

QUICK FACTS

Project Type

Bicycle lanes, segregated from motor vehicle traffic, called "cycle superhighways"

Location

London, United Kingdom

Usage

East–West Superhighway planned capacity of 3,000 cyclists/hour; North–South Superhighway planned capacity of 2,500 cyclists/hour

Length

East–West Superhighway will be 18 miles (29 km), from Barking to Acton; North–South Superhighway will be three miles (5 km), from King's Cross to Elephant and Castle

Year Constructed

Construction began in the spring of 2015; scheduled to be completed in the summer of 2016

Project Cost

£160 million (US\$240 million)

Funding

Public transit fares, London Congestion Charge, government grants, borrowing, and income from advertising and property rental

Organizational Lead

Transport for London

Maintenance and Upkeep

Shared among Transport for London, the 32 London boroughs, and the city of London



A rendering of the East–West Cycle Superhighway along a portion of Victoria Embankment in central London shows the planned separation of bicycles, vehicular traffic, and pedestrians. (Transport for London)

IN SPRING 2015, construction began on two cycle superhighways that will connect central London and outlying areas of the capital with bicycling routes that are largely physically segregated from motor vehicle traffic. Also known as “Crossrail for Bikes,” a name evoking the east–west commuter rail line that is being built underneath central London, the new cycle routes are meant to be used as alternatives to driving or taking public transportation.

In addition to road safety benefits and an increase in the proportion of bicycle commuters, the £160 million (US\$240 million) investment in the creation of the cycle superhighways is spurring new residential and commercial development along the routes.

Project Background

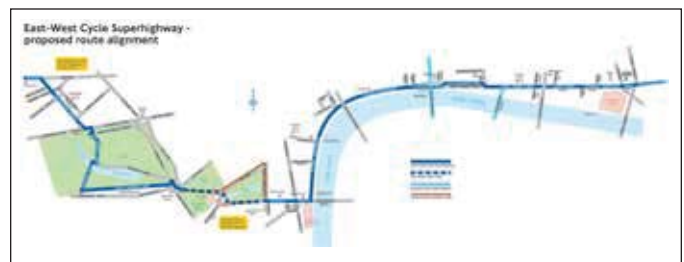
Bicycling in London. The demand for a system of cycle superhighways and the shift to bicycle-friendly development projects are a reflection of the changing landscape of transportation in and around London. Between 2001 and 2011, the number of Londoners who cycled to work more than doubled from 77,000 to 155,000, and bicycles now make up nearly a quarter of vehicles on the road during rush hour in central London. London is also home to more than 700 “Santander Cycles” bike-share stations with over 10,000 bikes available for short-term rentals.

In an effort to cater to existing bike commuters and further expand the number of cyclists in London, Ken Livingstone, the former mayor, and Transport for London, the local governmental body responsible for transportation throughout the region, began working in 2008 to create commuter cycling routes across London, a project that continues under Mayor Boris Johnson.

As of 2015, four cycling routes have been completed, but they have been criticized for their lack of physical separation from motor vehicle traffic. Six bicyclists were killed on the route known as “CS2” between 2011 and 2015.

Creating new cycle superhighways. The two new cycle superhighways scheduled to open in the spring of 2016 differ in that paths and bike lanes will largely be segregated from motor vehicle traffic, helping decrease the likelihood of cyclist injuries and deaths. In addition, CS2 is being reconstructed to improve its safety by providing separated tracks along most of its route.

More than 30 of London’s most dangerous intersections will be improved along the two brand-new cycle superhighways routes, with the aim of reducing cyclist fatalities and conflicts with large trucks, which make up only 5 percent of vehicles on the road but cause over 50 percent of all cyclist deaths. There also will be significant benefits to pedestrian safety, because the superhighways will result in more than 16,000 feet (4,900 m) of new sidewalk space and 22 new pedestrian crossings.



Top: London’s 18-mile (29 km) East–West Cycle Superhighway will link Tower Hill to Lancaster Gate. It is scheduled to be completed by summer 2016. (Transport for London)

Bottom: London’s three-mile (5 km) North–South Cycle Superhighway will link Elephant and Castle to Stonecutter Street, near Holborn Viaduct. It is scheduled to be completed by spring 2016. (Transport for London)



Above: Features such as dedicated signals for cyclists at intersections will improve the safety of bicycling around central London. *(Transport for London)*

Right: A cyclist rides along a segregated cycle track on Victoria Embankment in central London. *(Transport for London)*



The cycle superhighways will cost £160 million (US\$240 million), with funding coming from Transport for London, whose revenue is generated through a mix of public transit fares, the London Congestion Charge (a fee charged on most motor vehicles entering central London during the day on weekdays), government grants, borrowing, and income from advertising and property rental.

The new cycle superhighways will traverse London 18 miles (29 km) from east to west, between Barking and Acton, and three miles (5 km) north to south, between King's Cross and Elephant and Castle, creating connections among residential areas, transit stations, places of employment, and parks.

Along the cycle superhighway routes, bike riders will pass near landmarks, such as Hyde Park, Buckingham Palace, the Houses of Parliament, and the Tower of London. The first nearly mile-long (1.6 km) section opened in November 2015, with the remaining construction scheduled to be completed by the summer of 2016.

Improved design features of the cycle superhighways will include physical separation from motor vehicle traffic, signalized cycle crossings to allow cyclists to safely cross busy roads, traffic signal changes to allow cyclists to proceed before other traffic, and new LED lighting.

Development, Quality of Life, and Economic Impacts

The increasing popularity of bicycling in London has positive economic implications for the region and the United Kingdom as a whole. The London School of Economics found in 2011 that cycling generates nearly £3 billion (US\$4.32 billion) for the U.K. economy each year.

Mayor Johnson has championed the economic and quality-of-life benefits of bicycling and the cycle superhighways, noting that they are an essential part of the city's effort to accommodate residential growth and development. He has said, "With London's population growing by 10,000 a month, there are only two ways to keep traffic moving—build more roads, which is for the most part physically impossible, or encourage the use of vehicles, such as bikes, which better use the space on the roads we've already got."

Building the cycle superhighways is expected to benefit London by reducing traffic congestion. Transport for London estimates that the new east-west bicycle superhighway will be able to accommodate up to 3,000 people an hour, which would be equivalent to adding 41 fully loaded double-decker buses to the route that parallels the superhighway. The north-south route is expected to carry up to 2,500 cyclists an hour, equivalent to

the capacity of 34 extra buses. Given that the routes also largely align with London Underground transit lines, these superhighways are expected to take many commuters off the trains, reducing transit congestion and increasing travel capacity into central London.

Due to the reduced traffic congestion and increased physical activity that the cycle superhighways are expected to produce, Transport for London predicts that improved public health and environmental outcomes will lead to a net £76 million (US\$110 million) economic benefit for London over the next 30 years.

The economic benefits of the cycle superhighways also extend to new development projects, since coordination among Transport for London, local governments, and area developers has led to plans for new apartments, offices, shops, restaurants, and bars along the routes.

Examples of developments along the planned cycle superhighways include the following: Elephant Park, a 2,500-unit residential development at the southern end of the north-south route that will include cycle paths that connect to the superhighway and 250 City Road, a 930-unit apartment development close to the cycle superhighways, which will include 1,486 bicycle parking spaces (see 250 City Road profile).

The combination of the growing number of commuter cyclists in London and the increasing popularity of bicycle-friendly development projects has significant positive implications for the health, safety, livability, and economy of London.

As the city's population continues to grow, providing safe and convenient bicycle infrastructure can help reduce traffic congestion and catalyze new development opportunities that leverage the shift toward active transportation throughout London.