



# Rolling Stock

## **Better trains, more capacity, less crowding**

Crossrail would provide more choice, better connections and faster links to destinations across the Capital and beyond. The new Crossrail services would deliver significant improvements to journey times and provide major benefits to London's transport network by relieving crowding on existing routes.

An important feature of Crossrail would be the design of its trains. We want people to enjoy travelling on Crossrail. The system would use specially-designed trains (or rolling stock, as it is often called) to provide a comfortable, safe and effective way to travel.

The focus is on making Crossrail journeys safe, easy and enjoyable for all passengers. The Crossrail team is keeping up to speed with developments in health and safety and would ensure that Crossrail trains meet all of the appropriate design standards when they are manufactured.

## **What would the trains look like?**

Crossrail would choose a train design from one of the various train manufacturers and include appropriate ideas to match the needs of the public at that time.

As with all forms of transport, from cars to aeroplanes, advances in design make it difficult to say exactly how the new trains would look. It is likely that the Crossrail trains would be similar in many ways to the new rolling stock that is currently being introduced across many parts of the existing London commuter network. Crossrail services would use tried and tested technology and manufacturing methods to ensure a reliable and comfortable travelling experience.

## **What about comfort and safety?**

All Crossrail carriages would be air-conditioned to provide a comfortable environment for passengers all year round. The provision of air-conditioning systems would set Crossrail apart from existing underground services in London.

As well as comfort, practicality and safety would be at the heart of the Crossrail carriage design. Each car would combine comfortable seats with enough space in the aisles and door areas so that people can get on and off quickly and easily.

We are aiming for an average waiting time of 45 seconds at each central London station for passengers to get on and off the trains. It's important, therefore, to design the carriages so that passengers can board and leave the trains easily to keep the services running reliably and on time.

Connections and visibility between carriages could be far better on Crossrail services than many passengers would be used to. It would be easy and safe to move, for example, from carriage to carriage when the train is moving.

Wide gangways between the carriages would enable people to see clearly from one carriage to the next, an important security aspect and a reassurance for passengers travelling late at night or on their own. There would be on-board CCTV.

All Crossrail carriages would have high levels of fire resistance built into the design. This not only means fire retardant seats and equipment, but that the design and construction of the carriage itself offers protection from any fire risk.

## Good communications

Visual displays and audio announcements would ensure that service information is available for all passengers. In the event of any delays, on-train public address could be used to provide up-to-the-minute information to passengers. The Crossrail carriages would have communications equipment to enable two-way conversations between passengers and the driver in the event of an emergency.

Staff at the new Crossrail control centre would be able to make announcements in the train and provide text messages through the visual display units in each carriage, as and when required. This offers benefit in terms of safety and would ensure that passengers can receive timely and accurate information in the unlikely event of an emergency.

## Easy to use facilities

Crossrail trains would be easy to use and accessible. For mobility impaired passengers, for example, Crossrail carriages would offer the benefit of step free access between the trains and station entrance at all newly built stations. There would also be priority seating and wheelchair berths.

At the same time, and in line with best practice, the carriage designs would have high-visibility grab rails and door markings. For passengers travelling with luggage, as you would expect with services connecting a major airport and rail terminals across London, Crossrail trains would provide luggage racks where suitcases and bags can be stowed safely and clear of the gangways.

## How many trains would there be?

As Crossrail services are rolled out, we expect to introduce about 70 new trains in stages. This means 700 new carriages would be needed to form Crossrail's train fleet.

## Crossrail train data

- Typically, trains would consist of 10 carriages made up of two separate five-carriage units. The total length of each 10-car train would be 200m, providing far greater capacity than trains on the existing London Underground network and suburban railways served by Crossrail

- The new services would be branded in the Crossrail livery, giving them a distinctive look and identity
- Through central London, the trains would be powered via an overhead electrification system similar to the Heathrow Express services. They would also have the capability to operate over the third rail electrified routes
- Crossrail trains would travel on the surface at speeds up to 100 mph (160 kph) and underground at up to 60 mph (100 kph)
- Each train could carry 1500 seated and standing passengers

## Further information

For further information, visit our website at [www.crossrail.co.uk](http://www.crossrail.co.uk) We will be continuing our programme of public consultation along the proposed route of the scheme with further Information Centres and Exchanges. Keep up-to-date on opportunities to find out more and to have your say via the website, by e-mailing us on [helpdesk@crossrail.co.uk](mailto:helpdesk@crossrail.co.uk) or by calling the Crossrail Helpdesk on 0845 602 3813 or write to us at: Consultation Team, FREEPOST NAT 6945, London SW1 0BR.

[Crossrail's Round 2 Public Consultation ends on 27 October, 2004.](#)

