

London

London is the main driver of demand for much of the national railway system. Radial routes emanate in all directions from the capital, serving the following stations in the city centre:

- St Pancras International, for High Speed One, the Midland Main line and Thameslink North
- King's Cross, for main line and outer suburban services on the East Coast Main Line (ECML)
- Moorgate, for inner suburban services towards Welwyn and Hertford
- Liverpool Street, for the West Anglia and Great Eastern routes
- Fenchurch Street, for services on the London, Tilbury and Southend route
- London Bridge, for services to south and south east London, Kent, Surrey and Sussex.
- Cannon Street, for services via London Bridge
- Blackfriars, for services to Thameslink South
- Charing Cross and Waterloo East, for services via London Bridge
- Waterloo, for South West Main line services
- Victoria, for the Brighton Main line, Chatham Main line and south and southeast London suburban services
- Paddington, for Heathrow Airport, the Thames Valley, the Cotswolds, the West of England and South Wales
- Marylebone, for services on the Chiltern route
- Euston, for the West Coast Main line.

The majority of overcrowding problems nationally are related to the London morning and evening commuter peak periods, with around half a million commuters travelling on trains into the centre of the capital each weekday. Providing additional capacity in response to this issue is therefore a major part of our Control Period 4 plan.

The Mayor's London Plan identifies a number of opportunity and intensification areas, where future economic and housing growth is anticipated. These include areas such as the Thames Gateway, Docklands and the Lea Valley. Many of our enhancement schemes are targeted at these areas.

The two biggest railway enhancement schemes nationally are the Thameslink Programme and the Crossrail project. These will provide additional capacity into the capital and new rail opportunities across it, avoiding the need for passengers to change onto London Underground services. This will in turn alleviate crowding on the underground network, especially the Northern and Central lines.

The Thameslink Programme will be delivered in two stages.

Key Output 1 will provide 12-car capability through the core route by December 2011, with peak services running via Herne Hill. Blackfriars and Farringdon stations will be significantly upgraded.

Key Output 2 to be delivered during Control Period (CP) 5 will involve the remodelling of the London Bridge station area and the approach tracks leading up to it, including a new viaduct in the Borough Market area. The additional trains through the Thameslink core that this enables will allow services to run onto the ECML, freeing up capacity at King's Cross.

The complex Thameslink construction works at London Bridge will be a particular challenge. These will potentially reduce the overall capacity available for an extended period, commencing during CP4. Work remains ongoing to optimise the construction programme and minimise adverse impacts.

Crossrail will run from Maidenhead and Heathrow to Shenfield and Abbey Wood by 2017. As part of this project we will be delivering major infrastructure enhancement works on the Great Western, Great Eastern and North Kent lines

In addition to these two major projects many of the capital's suburban routes will benefit from longer trains as a result of Network Rail's CP4 commitment to lengthen platforms. The principal routes covered by the platform extension programme are as follows:

- Lengthening from 10-car to 12-car on suburban routes into Charing Cross and Cannon Street
- Lengthening from 8-car to 10-car on suburban routes into Waterloo, including conversion of the mothballed Waterloo International terminal.
- Lengthening from 8-car to 10-car on routes into Victoria via Balham
- Lengthening from 8 to 10 car on suburban routes into London Bridge
- Lengthening from 8 to 12 car on services from East Grinstead to London Bridge and Victoria
- Lengthening from 8-car to 12-car on routes into Fenchurch Street via Grays
- Lengthening from 8-car to 12-car on West Anglia routes into Liverpool Street.

The platform lengthening schemes will facilitate growth and enable the HLOS peak capacity metrics to be met. However the relevant Route Plan and CP4 Project Definitions should be consulted for more detailed information.

Improvements to stations throughout the capital are planned during CP4. These include major redevelopments of many of the busiest stations, one of the most significant being the redevelopment of King's Cross, where a new western concourse will be provided. Thameslink and Crossrail will fundamentally improve many other stations in central London.

Smaller scale station schemes include an expansion in the number of places where there is step-free access between the station entrance and platforms, and National Station Improvement Programme works at many locations. Station development schemes in London will include coordination with Transport for London's "Oyster" ticketing plans.

Orbital routes in London are increasingly important, avoiding the need for journeys via the city centre. Most of these routes are now operated by Transport for London, through their London Overground concession. Within the next few years the extended East London Line will join this orbital network, running from Dalston Junction/Highbury & Islington to New Cross, West Croydon, Crystal Palace and Clapham Junction.

Access to London's airports is an important role for rail. Heathrow will benefit from Crossrail and potentially AirTrack services. Gatwick and Luton will both benefit from improved accessibility and additional capacity through the Thameslink Programme. Stansted will benefit from additional capacity on the West Anglia Main Line in CP5.

The East Coast Main Line upgrade will provide additional capacity in north London, leading towards six tracks being available for passenger trains between Alexandra Palace and Finsbury Park. Together with other planned enhancements this will allow improved peak period frequency on King's Cross/Moorgate services.

Capacity for freight is an important consideration within London. Many of these services run from the Haven Ports, Thameside or the Channel Tunnel. Our CP4 plans seek to provide routes avoiding London where possible, for example upgrading the Felixstowe to Nuneaton route will free up capacity on both the Great Eastern and North London Lines.

Traction power supply constraints are a common problem in the London area. Our CP4 plans will reduce or eliminate some of these problems.

Our national Seven Day Railway programme will consider particular issues of relevance to the suburban area, where passenger demand

characteristics differ to those relevant to main line operations. We recognise that running bus replacement services in a city with a congested road network is particularly unpopular with customers.

Rail will play an important role in delivering spectators to the London Olympics in 2012. Olympic transport routes to the main Stratford site will include the Great Eastern Main Line, West Anglia route Stansted Airport to Stratford, the upgraded North London Line, a St Pancras International – Stratford shuttle service on High Speed One and East London Line services. Many other routes will be important, for example Paddington will see increased usage for Heathrow Airport and Slough, Taplow and Windsor for rowing events at Dorney Lake, whilst Weymouth will benefit from sailing events. Our delivery plans seek to maximise benefits deliverable before the Olympics.

The RUS programme has covered many issues in the London area, drawing on work undertaken by Transport for London where necessary. In CP4 we will continue our close working relationship, as we deliver the commitments outlined in the Delivery Plan and plan for CP5.

The map on the next page summarises the major schemes within the GLA area. Where letters are shown these relate to the tables at the back of the relevant route plan where a detailed description can be found.

London area enhancement schemes

