



ON TRACK

Crossrail, the £15bn cross-London rail link, is now 75% complete. Some 31km of the 42km of tunnels that make up the line that runs from Reading in Berkshire to Shenfield in Essex have now been constructed. Susan Freeman, partner at law firm Mishcon de Reya and undisputed queen of networking, donned a hard hat and some hi-vis garb to find out how collaboration is at the heart of the project

When it opens in 2018, Crossrail – or the Elizabeth Line, as it will be known – will really matter to London, says chief executive Andrew Wolstenholme. And to the South East, and the UK.

Wolstenholme is a man with big ambitions. When he arrived at Crossrail five years ago, fresh from delivering Heathrow's £4.3bn Terminal 5, Crossrail's vision was to deliver a world-class railway, but that wasn't enough for Wolstenholme. He wanted Crossrail to "move London forward", to deliver not just a world-class railway but a legacy and capability to deliver many more crossrails.

Wolstenholme saw that, unless Crossrail challenged the norms, the project was unlikely to be delivered on time or on budget. It had to be innovative. And that meant collaboration.

To him, Crossrail is the "embodiment of collaboration". Sponsored by the Department for Transport and Transport for London, its delivery requires collaboration

between some of the UK's top supply chains, as well as working closely with local authorities to make sure that areas around the station are ready for the arrival of the new service. Collaboration with its development partners – for oversite development at stations and other work sites – is also vital.

Wolstenholme cites Canary Wharf as an example. Canary Wharf Group invested £150m in the building of the Canary Wharf Crossrail station box and won the opportunity to deliver a 100,000 sq ft shopping destination and rooftop park above. "Without everyone working in a single team environment, it is unlikely that you could ever deliver a project as complex as Crossrail," he says.

Wolstenholme recognises the responsibility of passing the learning from Crossrail on to other programmes. A number of the core team will also work on Crossrail 2 – which will serve stations throughout the South East, linking south-west and north-east London, as well as destinations in Surrey and Hertfordshire – and other similar

TRANSPORT



CROSSRAIL IN NUMBERS

- > Crossrail is Europe's largest construction project – work started in May 2009 and there are more than **10,000 people** working across over **40 construction sites**
- > More than **100m working hours** have been completed on the Crossrail project so far
- > Crossrail will increase central London rail capacity by **10%**
- > There will be **40 Crossrail stations** including new stations at Paddington, Bond Street, Tottenham Court Road, Farringdon, Liverpool Street, Whitechapel, Canary Wharf, Custom House, Woolwich and Abbey Wood
- > Crossrail will bring an **extra 1.5m people** to within 45 minutes of central London
- > An estimated **200m annual passengers** will use Crossrail
- > Construction of the new railway will support regeneration across the capital and add an estimated **£42bn to the economy** of the UK
- > The total funding envelope available to deliver Crossrail is **£14.8bn**
- > For just over three years, eight giant tunnel boring machines burrowed below the streets of London to construct **42km of new rail tunnels**
- > Each tunnelling machine was a **1,000-tonne**, 150-metre underground factory with 20-person "tunnel gangs" working in shifts around the clock between 4 May 2012 and 26 May 2015
- > More than **3m tonnes** of excavated material from the tunnels was shipped to Wallasea Island in Essex to create a new 1,500-acre RSPB nature reserve

LUCY YOUNG/REX/SHUTTERSTOCK

projects. The firm's Learning Legacy scheme has recorded all the know-how picked up during the construction of Crossrail and aims to disseminate good practice, lessons learnt and innovation across the industry.

"Passing on the lessons and good practice that we have learned at Crossrail is an absolutely essential part of raising the bar in the delivery of major projects," says Wolstenholme of Learning Legacy. "With an unprecedented number of infrastructure schemes around the corner, now is the time to start sharing what we have learnt, so the UK can build on its reputation for delivering on time and on budget."

Among those lessons is how a project with a strong London and South East focus can benefit the whole country. Some 62% of suppliers for Crossrail are based outside London and an even more

encouraging 63% are small- and medium-sized enterprises.

With less than two years until the first Crossrail trains start running, does Wolstenholme think he has created a network system that will "move London forward" and that will really matter to London, the South East, the UK and the industry?

He is convinced. He says passengers will be impressed by the state-of-the-art, walk-through, air-conditioned and WiFi-enabled trains. "Even at this late stage, I would like to surprise Londoners with this fantastic transformative asset that the capital is going to receive and that can act as a benchmark for future programmes," says Wolstenholme.

Make up your own mind about the project, watch a tour of the vast tunnels being built at www.egi.co.uk/news/tunnel-vision-4

