Crossrail 2 is a proposed new railway serving London and the wider South East. It would connect National Rail networks in Surrey and Hertfordshire via new tunnels and stations between Wimbledon, Tottenham Hale and New Southgate, linking with Tube, Overground, Crossrail 1, national and international rail services.

It is the only deliverable transport infrastructure project that can simultaneously tackle London’s transport challenges, address the region’s housing crisis and support economic growth and jobs across the whole country.
Crossrail 2’s objectives:

- improved capacity on the most congested parts of Underground and mainline rail routes into London, and at the most congested Tube/ national rail stations

- Improved connectivity of the network serving London’s global employment centres and areas of potential housing growth

- Improved customer experience, to make life better for people living, working and visiting London and the South East.

It would also:

- Support significant economic growth, new jobs and new housing

- Deliver on key pillars of the Government’s new Modern Industrial Strategy including infrastructure, regional growth, technical skills and procurement.
London and the South East are growing fast. The capital’s population is growing at around 100,000 each year and is now at a historic high of 8.6 million. London’s contributes 23% of UK GDP overall and almost 30% of the UK’s tax base.

As a result, there are already severe pressures on the transport network: demand outstrips supply and is causing serious crowding.
London’s transport challenge today

- On the **South West Main Line**, demand has more than doubled in the last 20 years. On a typical morning, half the people who board at places like Winchester have to stand in very crowded conditions all the way into Waterloo.

- Overcrowding on the **Tube** has reached unprecedented levels. Today parts of both the Northern and Victoria lines experience more than five passengers standing per square metre.

- **Station closures** caused by overcrowding have become more common.

These pressures will increase. By 2036 London’s **population** is projected to hit 10 million, effectively adding a city bigger than Birmingham.
Over the next two decades, these challenges will become greater as pinch points tighten, especially on the Victoria, Jubilee, District and Northern lines and on the South West mainline and Great Eastern mainline. Committed investments such as the Tube modernisation programme, Crossrail and Thameslink Programme will help in the short term. But they will not be enough in the longer term.

TfL analysis suggests that by 2031, peak demand on the Tube will have increased by more than half, and on National Rail by almost two thirds. **Rail:** By 2031, some crowding levels are predicted as greater than five passengers standing per square metre. Suburban Surrey-Waterloo services will be increasingly hard to board.

**Tube:** modelling suggests five or more people standing per square metre on large sections. This will lead to increased unreliability, with regular station closures and non-stopping trains.
Transport: pressure points in 2031

Crowding in the AM peak hour
2031 Reference Case
Model scenario: XA62IA44L
London’s housing crisis

At the same time London faces a “substantial and growing pressure on its housing supply”, according to the National Infrastructure Commission. We need new infrastructure to open up areas for housing.

There is a housing crisis across the wider South East. We are building far too few homes.

This threatens growth: more than half of firms responding to a 2015 CBI London survey said housing costs and availability are causing recruitment difficulties.
London’s future housing challenge

• The Mayor’s London Plan seeks to meet a need of 49,000 new homes/year. Not only are we not meeting that: we need up to 63,000 a year to address the backlog of demand.

• Transport links are crucial for land to be developable. Since 2000, 85% of all London’s new housing has been delivered within 1km of a station. The rate of delivery around TfL stations has been twice the rate elsewhere in London.

• The Mayor’s recent A City for All Londoners report shows that housing Opportunity Areas can be unlocked through infrastructure investment in this way – especially in the Upper Lea Valley, the largest such area (over 3,900ha of developable land), poorly underserved by rail.
Crossrail 2 and how it meets its objectives

**CAPACITY**
- Provides a 10% boost to rail capacity into central London and relieves critical constraints on the London Underground (Northern, Piccadilly, Victoria lines particularly).
- Increased frequency on the South West Mainline (50%), and West Anglia Main Lines (additional services).
- Additional interchange capacity at Euston – will support HS2.
- Relieve congestion at major interchanges e.g. Waterloo, Victoria, Highbury & Islington.

**CONNECTIVITY**
- Improved access to global employment centres. Benefits will extend to communities along the SW-NE corridor.
- Access to services will increase for some of the most deprived parts of the UK.
- Connectivity improvements will enable around 200,000 new homes and will be a catalyst for regeneration.
- Improve London’s accessible network by adding 12 fully step-free stations in the central core, all at key interchange locations.

**JOURNEY EXPERIENCE**
- Easier journeys by removing need to interchange = reduced delay from movement in station, crowding and inability to board.
- Better accessibility: all Crossrail 2 stations will have step-free access.
- Investing in public transport and associated cycling and walking infrastructure will enable sustainable travel and a greater proportion of trips to be made by these modes.

The scheme fully meets the **ACCEPTABILITY CRITERIA:**
- Is feasible and deliverable
- Has potential to offer high value for money, and add up to £102bn to UK GVA
- At the heart of key transport and planning strategies
- Will use proven technology
- Will deliver positive outcomes for communities, and a range of benefits across the South East
Crossrail 2 is far more than a London project. It is a railway for the whole of the wider South East, bringing significant journey-time savings across a swathe of southern England, from the Solent to the Wash
Housing solutions

- Crossrail 2 would make a significant contribution to addressing London and the South East’s housing crisis: it could unlock an additional 200,000 new homes – 30 per cent of them outside London.

- Crossrail 2 is routed through areas of high deprivation and development potential, especially in north-east London. Transforming connectivity will help unlock new homes there.

- With a commitment to Crossrail 2, some new homes will be built in the 2020s, well before the railway opens.
Economic benefits

Crossrail 2 will also bring huge economic benefits. It will:

• Support **200,000 new jobs** in London, by opening up a bigger labour pool. It will bring additional 270,000 people brought into central London in each morning peak.
• Support **60,000 supply-chain jobs** across the nation (estimated regional supply-chain spending at right)
• Directly support up to thousands of **apprenticeships** and extend the UK’s skills base, and support 18,000 jobs during construction
• Has the potential to **boost the UK’s GDP by around £100bn.**
Crossrail 2: progress so far

- In its March 2016 report, Transport for a World City, the National Infrastructure Commission gave its strong backing to the project, recommended that it be “taken forward as a priority”. We have since worked hard to respond to NIC and DfT recommendations:

- In May London elected a new Mayor, Sadiq Khan, with a manifesto commitment to take Crossrail 2 forward. He strongly supports the project and earlier this month warned that the capital could “grind to a halt” unless government invests in the project.

- In October 2015-January 2016 we conducted our large public consultation on the project to date, attracting almost 21,000 responses - the second-largest TfL consultation ever. Last summer we published a report on our response to issues raised by the consultation. These comments have helped inform design work since.
The revised Business Case

Crossrail 2 has already prepared a detailed Strategic Outline Business Case in June 2015. But following the NIC report, the Government asked the Crossrail 2 project team to submit a revised SOBC addressing the recommendations of the NIC.

We will submit this next month, making the following changes on previous plans:

• Budget reducing costs by £4 billion – a key government and NIC recommendation
• setting out a far more detailed funding package
• showing conclusively - against a range of strategic alternatives - why Crossrail 2 is the right project for London and for the national economy
• Setting out a plan to deliver the additional 200,000 homes Crossrail 2 will support.

We expect a decision from the Secretary of State on supporting the project further in Spring this year. We will follow this with a fresh public consultation.

The goal then will be to progress the design in order to submit a hybrid bill to Parliament in 2019, to seek the necessary consents to begin construction.
Crossrail 2 project costs

• **We have reduced capital costs** in line with central government targets: these are now forecast at £31.2bn gross (Q2, 2014 prices, inc. 66% ‘Optimism Bias’).

• If we applied the approach adopted in the HS2 Phase 2b Financial Case, which incorporates lower Optimism Bias assumptions, the estimate would fall to £29.0bn.

The total cost includes:
• almost £4bn on tunnels
• more than £9bn on stations
• more £5½ bn for on-network works
• over £1bn on rolling stock.
A key focus of the revised SOBC is the **funding package**. This should reflect the distribution of benefits between users, existing landowners and developers, businesses and the public.

- Moreover, Crossrail 2’s benefits extend beyond London: around 40% of **transport benefits** and more than 30% of new **housing** will fall outside London’s boundaries, with up to 60,000 supply-chain jobs nationwide.

- These regional and national benefits should form part of central government’s consideration of the case for a contribution from **national taxpayers** of up to half of the construction costs, as well as other project support.

- The funding streams that London is proposing would enable it to contribute **half of the cost**. But they will work only with a transformational scheme like Crossrail 2: business leaders tell us that they support funding a single scheme rather than a package of incremental improvements which may or may not get delivered.
An extensive list of funding options has been examined. While work continues on these, four principal funding sources have the support of the Mayor to deliver London’s *50% share of costs* as requested by the NIC and DfT:
Assessing Crossrail 2 against the strategic alternatives

The SOBC also makes a detailed assessment of Crossrail 2 alongside four potential strategic alternatives, as requested by the Department for Transport. We looked at how far all these options addressed Crossrail 2’s key objectives:

- Improved **capacity** on the most congested sections of London Underground lines and mainline rail routes into London and at the most congested stations

- Improved **connectivity** of the network serving London’s global employment centres, central London, and areas of potential housing growth

- Improved **customer experience** to make life better for people living, working and visiting London and the South East.

Overall, the Crossrail 2 CSO better meets the objectives than the four alternatives. While some of the other packages can meet some specific challenges more effectively, none can address the full range of capacity and connectivity challenges where they are most pronounced.
Project timeline

Key milestones:

• DfT/Treasury approved revised business case – spring 2017
• Public consultation – summer 2017
• Submit consent powers application – 2019
• Start construction – 2022
• First Crossrail 2 service – 2032-33
Conclusion

Crossrail 2 best meets the strategic objectives for London’s future transport needs, as well as delivering very substantial benefits in economic growth, jobs and housing.

• It is **affordable**, with 50 per cent of costs coming from London.

• But it will be an investment in the future not just of London and the South East but of the **whole nation**, driving growth and jobs.

• With Britain leaving the EU, the **international context** makes Crossrail 2 even more vital. London is the gateway to the UK and the nation’s only world city. Investing in such a transformational scheme will help provide the confidence for continued business investment. It will send a clear signal that we are a global trading nation, planning for growth.

• And Crossrail 2 is **deliverable**: Crossrail 1 has shown how we can deliver such ambitious projects on time and on budget.
Thank you

Dr Andrew Neather
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