The Strategic Case for HS2

Our rail network needs extra capacity...

There is fast growing demand for rail travel

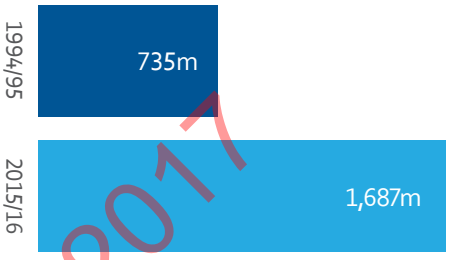
- **Passenger numbers** across Great Britain have more than doubled in the past two decades.
- This has been particularly strong on long distance routes – for example, passenger journeys on West Coast, East Coast, Midland and Cross Country rail corridors have increased by more than 150% since 1994/95.
- This pressure is leading to **over-crowding** on trains (for example, three-quarters of weekday PM peak services leave London over 80% full in standard class, with many passengers having to stand).
- **Rail freight** has increased by 37% since privatisation and is anticipated to grow by 90% by 2033 compared with 2011.
- Infrastructure constraints in parts of the network make it difficult to add new train services – with additional pressure on the network is causing **delays** and **reduced reliability**.

... incremental upgrades are no longer enough to meet the long term growth in demand in some areas of the network

There have been significant investments already to expand existing services with more trains on some lines (such as the WCML) to help meet increased demand. There are also plans underway or planned across parts of the network.

However on the existing WCML we are reaching the end of our ability to squeeze more trains on to the existing rail network.

Rail journeys have more than doubled in the past two decades



of the intercity peak capacity provided by recent WCML upgrades has already been used.

These upgrades took years to complete and were the cause of significant disruption.

HS2 will also release capacity on the conventional rail network for new local and regional services or freight

Over 300,000 passengers

a day on HS2 services, with connections to the rest of the rail network

3x the number of seats

leaving Euston daily

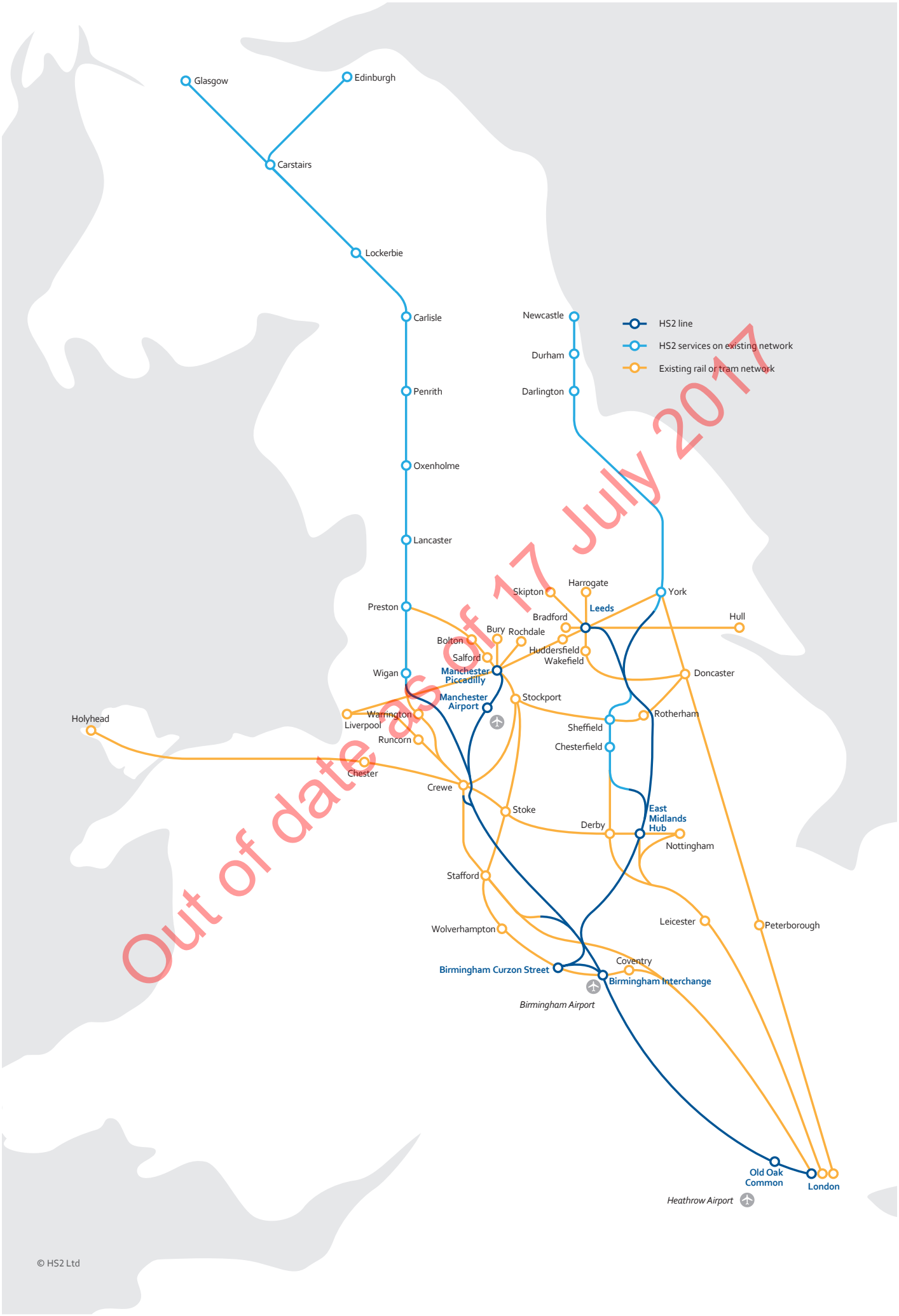
Up to 18 HS2 trains

per hour, out of London Euston

800 lorries, on average, each day

could be taken off the road by additional freight paths on the WCML

"Only HS2 can deliver the step change in long-term rail capacity that is needed." *DfT 2016 Business Case – Command Paper*


Glasgow
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Carstairs
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Chester
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Manchester Airport
Stockport
Newcastle
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Darlington
Skipton
Harrogate
Leeds
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Bradford
Hull
Huddersfield
Wakefield
Doncaster
Rotherham
Sheffield
Chesterfield
Stoke
Derby
East Midlands Hub
Nottingham
Stafford
Wolverhampton
Leicester
Peterborough
Birmingham Curzon Street
Coventry
Birmingham Interchange
Birmingham Airport
Old Oak Common
London
Heathrow Airport
HS2 line
HS2 services on existing network
Existing rail or tram network
Out of date as of 17 July 2017
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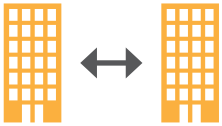
HS2 will form the backbone of our future rail network – delivering faster, more frequent and more reliable services, and transform connectivity across Britain

HS2 will not just connect the cities of Birmingham, Manchester, Leeds and London – it will run services to more than 25 stations across Britain and integrate with the rest of the rail and transport network.

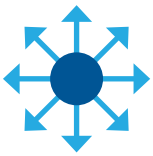
100 cities and towns

could benefit from new or improved rail connections



Directly link 8

of the UK's largest 10 cities



Transform connectivity across Britain

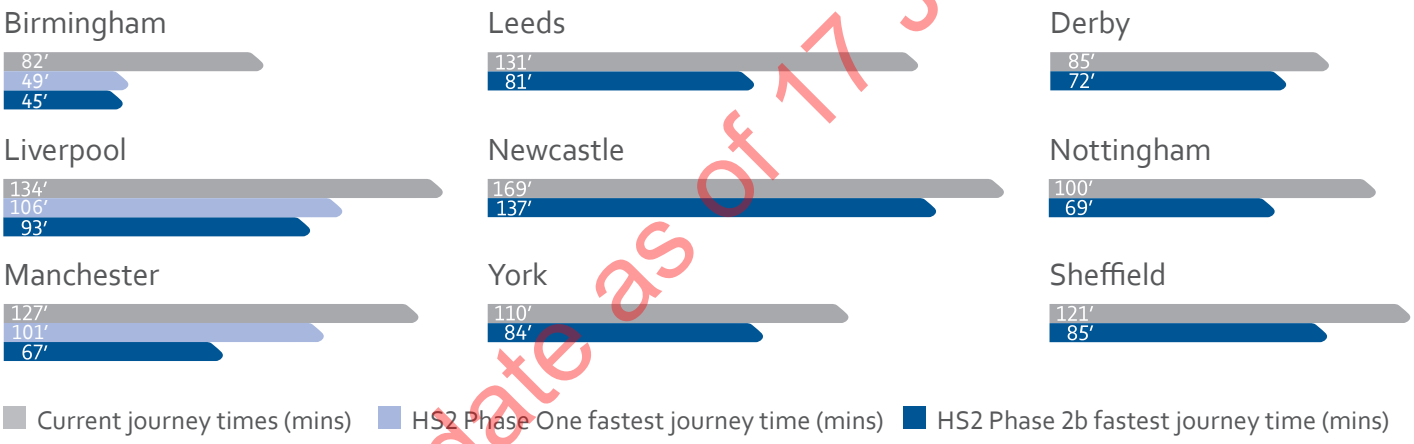
supporting regional economies and rebalancing of the UK economy

Around 350 miles

of new track

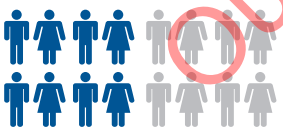
HS2 will provide faster journey times...

London to:



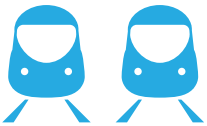
...but the benefits are not just about speed

More than half of the benefits from HS2 come from:



reduced crowding on trains

improved reliability



increased frequency of services

reduced waiting and interchange times

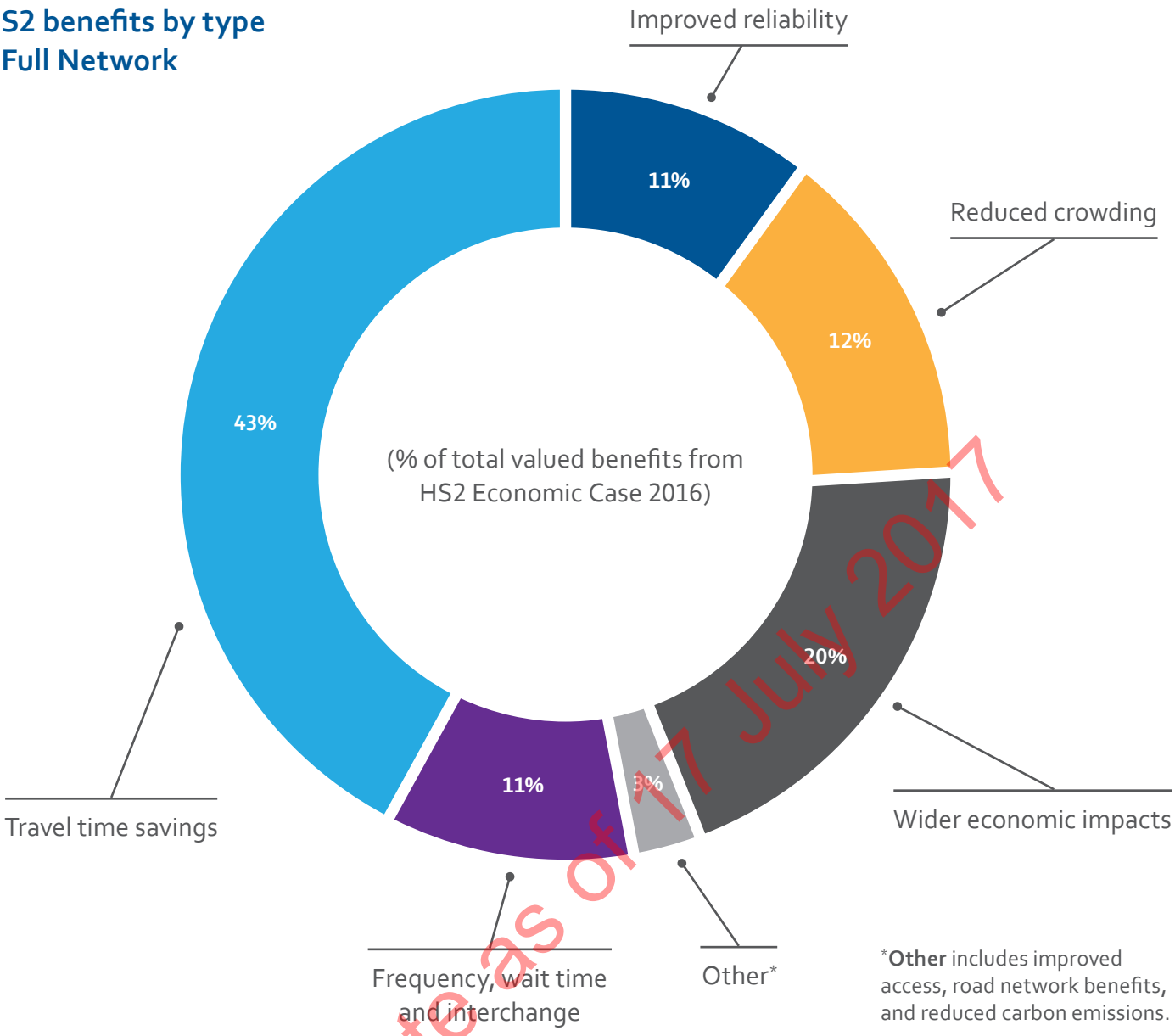
benefits to road users

reduced carbon emissions

'Wider Economic Impacts'

including improvements in connectivity, productivity and access to skills and markets.

HS2 benefits by type – Full Network



*Other includes improved access, road network benefits, and reduced carbon emissions.

HS2 will be the largest infrastructure investment project in Europe with a budget of £55.7 billion over the next two decades (including contingency).

HS2 represents HIGH value for money with a Benefit Cost Ratio of 2.7

This means that the **benefits will outweigh the costs**, with HS2 expected to deliver **£2.70** worth of benefits for every **£1** spent.

Source: HS2 Economic Case (2016). (BCR includes Wider Economic Impacts)