

# HS2

Getting the best out of  
**the Digital sector**





High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

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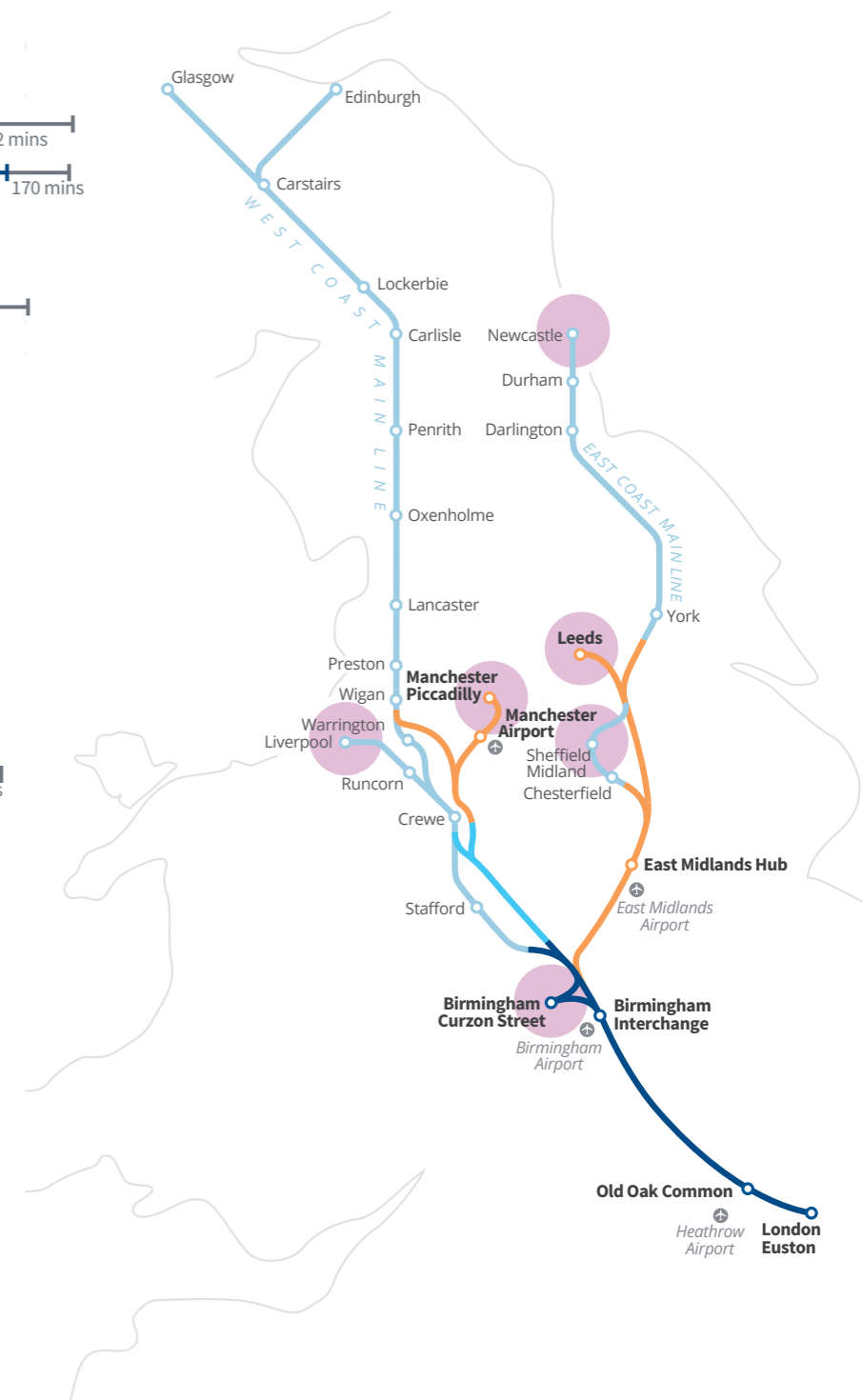
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All times compare fastest HS2 service (full network) with current fastest time.



### HS2 Route Map

- Destinations served by HS2
- HS2 line (Phase One – Completed 2026)
- HS2 line (Phase 2a – Completed 2027)
- HS2 line (Phase 2b – Completed 2033)
- HS2 services on existing network
- Highlighted Digital Clusters





## HS2 will improve access to the finance, mentorship and professional networks that are vital for small businesses, start-ups and entrepreneurial firms to grow

Small and medium-sized enterprises (SMEs) employ the majority of the UK private sector workforce. British digital businesses are especially dynamic, with 17% of digital businesses with 10 or more employees classified as high growth, compared to 10% of businesses of the same size in non-digital sectors<sup>1</sup>. However, the UK is near the bottom of The Organisation for Economic Co-operation and Development (OECD) rankings of the percentage of start-up businesses across all sectors that grow to more than 10 employees after three years<sup>2</sup>.

Growth finance, and the mentoring and advice that investors often provide for small and high growth businesses, is more readily available in London and the South East than in other parts of the country. HS2 will provide fast, frequent and reliable transport links between London-based investors and businesses in the Midlands and North, helping to narrow the regional financing gap. HS2 will connect with the wider transport network, including improvements to regional transport links being taken forward by Midlands Connect and Northern Powerhouse Rail<sup>3</sup>. This will spread the benefits of HS2 to digital businesses across the Midlands and the North of England.



Image: Cavan Images

## The Midlands and the North of England are home to fast-growing clusters of digital businesses

The digital sector is a significant source of growth and employment in the UK, employing over 1.6 million people and with turnover that grew by over 20% between 2011 and 2015<sup>4</sup>.

The North of England is home to digital clusters that employed over a quarter of a million people in 2014<sup>5</sup>:

- » Manchester is the largest digital cluster outside of London by number of employees<sup>6</sup>.
- » Leeds has expertise in health technology, Big Data and FinTech<sup>7</sup>.
- » Newcastle is home to thousands of software, electronic gaming and creative businesses<sup>8</sup>.
- » The Sheffield City Region is home to over 5,000 technology companies<sup>9</sup>.
- » Liverpool has strengths in the areas of gaming and connected devices<sup>10</sup>.

The Midlands has established strengths in digital and technology sectors, including a globally competitive space technology sector and a leading cluster in medical technologies<sup>11</sup>:

- » Birmingham's digital cluster is bolstered by 18 universities, all within an hour's drive of the city<sup>12</sup>.
- » Digital businesses in Nottingham employ almost 20,000 people and the city is increasingly popular with healthtech start-ups<sup>13</sup>.

The success of these digital clusters is supported by access to high quality teaching and research universities:

- » The University of Leicester boasts an award-winning data centre, a high performance computing research lab and offers support for spinout companies<sup>14</sup>.
- » Sheffield's two universities have strong departments in Design (Sheffield Hallam), Games Development (Sheffield Hallam) and Engineering (University of Sheffield)<sup>15</sup>.
- » The University of Sunderland and Sunderland College are partners in Sunderland Software City, which has supported the growth of over 500 software companies in the North East of England<sup>16</sup>.



## The digital sector is at the cutting-edge of developing and adopting new technologies, yet face-to-face contact remains crucial for tech businesses and relies on high quality transport links

Digital businesses rely on networking events and trade fairs to source new business and collaborate on developing innovations. Communications via email and video conferencing can help digital businesses to stay in contact with staff, suppliers and customers, but in many instances they do not offer an effective alternative to face-to-face contact. The sector uses agile ways of working, built on flexible and collaborative working, to drive business growth in an uncertain and fast

changing environment, requiring physical proximity and the 'personal touch'<sup>17</sup>. HS2 will deliver improved transport links to foster these in-person contacts between digital clusters. HS2 can help cities such as Leeds, Manchester, Newcastle and Birmingham to strengthen their offers as destinations for conferences and business visitors, providing networking opportunities for local businesses.

International Convention Centre, Birmingham





## The Digital sector

### Despite the strong growth of digital clusters in the Midlands and the North, tech businesses outside of the South East report difficulties in accessing growth finance

Digital businesses in the North of England report that it is possible to source start-up funds from local investors. In Manchester, there is the emergence of a second generation of tech entrepreneurs who have sold their original businesses and are seeking new investment opportunities. There is also a trend towards venture capital funds establishing a local presence in northern cities<sup>18</sup>.

However, in a survey conducted by TechCity in 2016, 28% of digital businesses surveyed in Manchester and 37% of digital businesses surveyed in Newcastle reported limited access to finance as a barrier to growth<sup>19</sup>. According to investment data provider Pitchbook, there were 471 investment deals by business angel investors and venture capital investors in 2016 for

London-based tech businesses. There were just 27 in the North of England<sup>20</sup>. Technology businesses located in London and the South East received over 60% of the amount of private equity and venture capital investment in the sector in 2016, while the Midlands received 14%, the North West received 12% and Yorkshire and Humberside received 4%<sup>21</sup>.

The link between investors, and the businesses in which they invest, is often more than financial. Many investors are former entrepreneurs who bring mentoring and advice to the businesses in which they invest. Business angel investors are wealthy individuals who invest their own money directly into start-ups. Angels often serve as mentors for the start-ups in which they invest<sup>22</sup>.

Gateshead Millennium Bridge, Newcastle



Image: HS2 Ltd



Image: Alamy Stock Photo



## HS2 will bring digital businesses in the Midlands and the North closer to London-based investors, helping them to bridge the finance gap

Distance can act as a barrier to securing growth finance. A survey of UK-based business angel investors conducted in 2008 found that these investors have a preference for investing locally. Nearly three in 10 reported that they will only invest within 50km of their home location. Forty-three per cent of these investors were prepared to invest within 250km<sup>23</sup>.

For businesses seeking to access private equity and venture capital, London remains the centre of the UK's financial sector. Around 25 venture capital funds were established in London between 2010 and early 2015, helping to cement London's status as Europe's leading venture capital centre<sup>24</sup>. Tech firms based in London have this wealth of investors on the doorstep – London has been ranked the number one city in Europe for access to capital for start-up and scale-up digital businesses<sup>25</sup>.

Growing tech businesses located in the North West, Yorkshire and the North East report the need to travel frequently to London to meet venture capital funds and secure investment. In some instances, investors may require these businesses to establish a permanent presence in London, which risks a loss of entrepreneurial talent from northern digital clusters.

By cutting journey times and providing frequent and reliable services, HS2 can help digital businesses in the Midlands and the North to meet regularly with London-based investors. This offers benefits when digital businesses are seeking new financing deals. Once financing deals are in place, HS2 will support businesses to meet regularly with their investors to benefit from advice and mentoring and to allow investors to monitor their investments. HS2 will deliver journey times to and from London of 45 minutes for Birmingham, 1 hour and 7 minutes for Manchester and 1 hour and 21 minutes for Leeds, making a round trip in half a day for meetings feasible. HS2 will offer the high levels of reliability and punctuality that international high speed networks routinely deliver<sup>26</sup>, allowing small business owners and their investors to rely on HS2 to deliver them on time for those meetings.

<sup>^</sup> HS2 is capable of a journey time of 49 minutes for services directly between Birmingham and Leeds that travel entirely on the high speed line. The 2017 HS2 business case showed such services routed via Sheffield.

<sup>1</sup> High growth businesses are defined as businesses whose growth in annual turnover places them in the top 10% nationally. Source: 'TechNation 2017', TechCity.

<sup>2</sup> 'Small Business Finance Markets 2015/16', British Business Bank.

<sup>3</sup> 'High Speed Two: From Concept to Reality', Department for Transport, July 2017.

<sup>4</sup> 'TechNation 2017', TechCity.

<sup>5</sup> 'The Digital Powerhouse: The Innovation Potential of Tech Clusters in the North', Tech North, May 2016.

<sup>6</sup> 'TechNation 2016', TechCity.

<sup>7</sup> 'Leeds City Region Strategic Economic Plan 2016-2036', Leeds City Region LEP.

<sup>8</sup> 'TechNation 2016', TechCity.

<sup>9</sup> 'Digital: A Snapshot of the Creative Digital Scene in Sheffield', University of Sheffield and Creative Sheffield, June 2017.

<sup>10</sup> 'TechNation 2017', TechCity.

<sup>11</sup> 'The Midlands Engine Vision for Growth', Midlands Engine, September 2017.

<sup>12</sup> 'TechNation 2017', TechCity.

<sup>13</sup> 'TechNation 2017', TechCity.

<sup>14</sup> 'TechNation 2017', TechCity.

<sup>15</sup> 'Digital: A Snapshot of the Creative Digital Scene in Sheffield', University of Sheffield and Creative Sheffield, June 2017.

<sup>16</sup> <http://www.sunderlandsoftwarecity.com/about-sunderland-software-city/>.

<sup>17</sup> 'Why personal touch still matters in the virtual tech world', Financial Times, 2 May 2017.

<sup>18</sup> 'TechNation 2017', TechCity.

<sup>19</sup> 'TechNation 2017', TechCity.

<sup>20</sup> <https://technorthhq.com/investment/top-9-investments-in-northern-tech-in-2016/>.

<sup>21</sup> 'BVCA Private Equity and Venture Capital Report on Investment Activity 2016', British Private Equity and Venture Capital Association (BVCA), Summer 2017. Table 16.

<sup>22</sup> 'Digital Entrepreneurship: An 'Idea Bank' for Local Policymakers', Nesta, December 2016.

<sup>23</sup> Wiltbank, R. E., 'Siding with the Angels: Business angel investing – promising outcomes and effective strategies', Nesta, 2009.

<sup>24</sup> 'Venture capital funds sprout amid rush to invest in London tech', Financial Times, 5 February 2015.

<sup>25</sup> European Digital City Index 2016. Available at: <https://digitalcityindex.eu/>.

<sup>26</sup> 'The strategic case for HS2', Department for Transport, 2013.

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