

# **Seven Arguments against HS2**

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This memo advances several arguments for scrapping HS2, and in particular takes issue with its claims to save CO2. It draws partly on the dissenting report published by Lord Berkeley, who was Deputy Chair of the Oakervee Review on which the Government relied in deciding to approve HS2. It is worth noting the misgivings of many about the Oakervee Review. For example Lord Berkeley states ‘Given the noted specific areas of interest of the panel, and that the Chair was a former Chair of HS2, with the secretariat drawn largely from DfT officials, some of whom were previously working on HS2, it is difficult to argue that the Review was “independent”.’<sup>1</sup> In December 2020 he added: ‘on 14 December, Doug Oakervee explained what drove the panel to reach its conclusions earlier this year. His revelation is shocking ... stripped down to its bones Mr Oakervee says the needs of the Construction Industry were a major driver for proceeding’.<sup>2</sup>

Lord Berkeley also states ‘**I believe that Parliament has been seriously misled by the failure of HS2 Ltd and by ministers to report objectively and fairly on costs and programme changes.**’<sup>3</sup>

## **1 There is no CO2 benefit to HS2**

HS2 has been presented as saving CO2 as it would carry people who would otherwise fly or drive and would free up capacity elsewhere on the rail network. The claim is ‘HS2 will provide a cleaner, greener way to travel.’<sup>4</sup> In practise however the project is predicated on speed, not CO2 saving, and you can’t do both.

**In a paper issued by HS2 in September 2019 detailing the project’s carbon footprint HS2 admits that the carbon costs of running HS2 exceed any CO2 benefits, including all reductions in carbon emissions due to shifts of freight and passengers from road to rail<sup>5</sup>.**

**This extraordinary admission destroys any claim that HS2 is “A cleaner, greener way to travel”.**

Here are some reasons why HS2 does not save CO2:

- (a) High speed needs enormous amounts of electricity, estimated by HS2 as an extra 67% of the energy consumption of the entire existing UK railway network.
- (b) A high speed line on new land needs massive engineering. In the same 2019 paper HS2 states that **the carbon cost of construction will be 4.6 times greater even than the entire carbon footprint of the first 120 years of use.**

- (c) Research shows only 4% of HS2 passengers would otherwise make that journey by car, and only 1% of HS2 passengers would have flown. In fact it will actually facilitate air travel rather than replacing it, as it will serve Birmingham and Manchester airports, and will run very close to East Midlands Airport. It is actively being lobbied for by those airports, along with Leeds Bradford Airport, who all state that HS2 is ‘essential’ for their plans to expand international aviation.
- (d) The claim to increase capacity is disingenuous, as it suggests that notionally creating space for more trains equates to the provision of more trains. This has never been the case. In fact there is a requirement in the HS2 business case for cuts to existing services, which in the latest published business plan stand at £11.1bn. Building HS2 could mean losing existing trains and potentially losing connectivity for towns and cities not along the HS2 route. (For example when HS2 was first announced, it was shown in official documents that Coventry would lose two of its three fast services to London.)<sup>6</sup>
- (e) HS2 does little or nothing to ameliorate one major failing of the rail network – the lack of connectivity across Britain. Lord Berkeley states ‘Large journey time reductions... only apply to those cities served by HS2, and not others, such as Nottingham and Derby... because of poor locations of HS2 stations.’<sup>7</sup> For example Birmingham New Street is an important modern rail hub not just for the Midlands but with direct trains to cities including Southampton, Plymouth, Cardiff, Liverpool, Glasgow, Edinburgh, Newcastle, Manchester, York and London...but HS2 will not stop there but at its own new station, Curzon Street, about a mile away.
- (f) As many HS2 stops will be in ‘parkway’ locations, more car journeys will be required to access them.
- (g) It has been argued HS2 would enable the expansion of rail freight. The suggested benefit is that if the West Coast Main Line (WCML) ran fewer express trains (those passengers being served by HS2), then the WCML could put more freight trains in its schedule without affecting passenger trains. This is strongly disputed<sup>8</sup>. Lord Berkeley’s dissenting report states: ‘HS2 Ltd claims to free up capacity for rail freight, but DfT’s actions to date mean that this may be just an illusion, as there is no firm policy evidence of what any freed-up capacity will be used for and the extent to which this will be allocated for rail freight’.<sup>9</sup>
- (h) More people are working from home and attending meetings remotely - a trend widely expected to continue after the Covid pandemic. The capacity problems HS2 was intended to help solve have thus already been greatly reduced.
- (i) The most complete answer to the argument that HS2 expands capacity is Lord Berkeley’s conclusion:

***‘HS2 is the wrong and expensive solution to “making it faster and easier to travel for work and leisure” by providing better North South intercity services. Many more people travel to work and leisure on local or regional services, and those in the Northern Power House (NPH) and Midlands Connect (MC) areas are some of the***

*worst in the country. There is strong evidence that the greatest need and demand for improved rail services is within the regions, in particular the NPH and MC areas, since services to and from London are of better quality, and that HS2, apart from its Northern end within the NPH area, does not help this much. Its stated aim of providing better North-South links is just as likely to attract more jobs from the regions to London than the other way round.'*

So, in a nutshell, if the aim is to increase capacity and get people out of their cars, HS2 is not the way to do it.

## **2 We cannot afford it**

Even if we could have afforded HS2 once, we can't afford it now, with the UK in the worst recession for a century and Chancellor Sunak looking for services to cut and taxes to raise.

Recent cost estimates lie between **£106 billion** (leaked report from Oakervee, Feb 2020) and **£170 billion** (press release by Lord Berkeley, 3<sup>rd</sup> November 2020<sup>10</sup>). Neither of these figures includes the cost of the actual trains. Moreover costs invariably increase during a major project as technically challenging as this. If it comes to £170 billion, that is more the government's annual spend on the NHS, and more than twice its annual spend on schools.

Although a huge saving could be made by stopping the project after Phase 1 (London - Birmingham), this would be the most senseless and wasteful outcome of all. Both Oakervee and Berkeley agree the project would make no sense at all if only Phase 1 was completed.<sup>11</sup>

Lord Berkeley is highly critical of the costing and benefit estimates submitted to the Oakervee Review, and concludes 'the Benefit Cost Ratio could fall to 0.6:1, and therefore rank 'poor value for money' when using the Treasury Green Book. This means that the taxpayer would receive only 60p of return for every pound that is spent on the project'.<sup>12</sup>

## **3 There is no 'jobs' argument for HS2**

It appears HS2 will only create 2,500 net jobs (22,000 created<sup>13</sup> minus 19,500 jobs that HS2 admits would be displaced<sup>14</sup>), which means a cost of £40 million per job. At a time when numerous industries need massive government support to avoid collapse, this is insane. Also the 22,000 new jobs are mostly only for the duration of the construction.

## **4 It can be cancelled now**

One of Oakervee's main arguments for continuing with the project was the cost to the country and especially the construction industry if it was cancelled. The jobs the project creates are absurdly expensive. As regards the argument 'we have spent so much on it we might as well finish it', the sums spent so far only seem enormous if you ignore the context of the immensely greater sums yet to be spent. Bearing in mind that not a single tunnel or station has so far been constructed, no signalling installed, not a single piece of track laid, not

a single train ordered – the large sums spent so far are a drop in the ocean compared to the sums still to be spent, on a project we do not need and can no longer afford. Berkeley lists a number of schemes to improve the network that ‘are being developed in conjunction with Network Rail and former railway people; a number are ‘shovel ready’ and so could be started at an early date to provide some opportunities to the construction industry in place of building HS2.’<sup>15</sup>

A YouGov poll<sup>16</sup> of May 2020 showed public support for HS2 to have dropped to 28%. The figures are evenly spread across party preferences, and **it is even less popular in the North than in London**. In the present climate it is unlikely support will increase.

## **5 The most environmentally damaging construction project in European history**

Building for high speed requires the line to be straight and undeviating. HS2 goes straight through 693 local wildlife sites, 108 ancient woodlands, 33 SSSIs. To allow trains to travel at 250 mph, the area of felling and clearing required each side of the track is massively wide. The technical specifications prescribe 75 metres from fence to fence. That is about the width of Parliament Square Gardens. In addition the construction access roads for such a project cause as much damage as the line itself.

At a time of climate and ecological breakdown, further degradation of the UK’s catastrophic biodiversity loss is unacceptable. There are numerous cases of HS2 felling trees beyond its designated area and ignoring legally required permissions such as bat licences before destroying habitats. The network of species making up essential ecologies is destroyed even when only parts of a protected area are damaged. HS2’s careless planting of saplings is no substitute, and the saplings frequently do not survive as HS2 pays no attention to them after planting.

Not surprisingly HS2 has been called out by environmentalists such as Chris Packham and environmental charities including CPRE, RSPB, The Woodland Trust and BBOWT.

## **6 UK does not need high-speed trains**

Compared with continental high-speed trains, the distance from London to Birmingham does not justify a high-speed line. Continental high-speed trains often go 300 miles without stops, which reduces overall timings and makes them worth it.

## **7 HS2 is not the answer**

The billions spent on HS2 at a time of financial crisis will make it far less likely money will be found for the two things the UK really needs to meet its climate change obligations: a coherent national public transport network to reduce dependency on cars, and high-speed

broadband to reduce the need to travel at all. If HS2 is scrapped, a smaller expenditure properly directed could achieve a far greater benefit, and far less damage.

## **Further Reading**

Lord Berkeley’s dissenting report (5th January 2020) is worth reading. For example it goes into detail on the cheaper, far more effective alternatives to building HS2:

[https://www.tonyberkeley.co.uk/index\\_htm\\_files/rh200105%20Dissenting%20report.pdf](https://www.tonyberkeley.co.uk/index_htm_files/rh200105%20Dissenting%20report.pdf)

Account by Simon Jenkins of the project’s political background (7th June 2016):

<https://www.theguardian.com/uk-news/2016/jun/07/hs2-the-zombie-train-that-refuses-to-die>

George Monbiot article (17th May 2010): <https://www.monbiot.com/2010/05/17/fast-train-to-nowhere/>

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<sup>1</sup> Berkeley para 1.3

<sup>2</sup> [https://www.tonyberkeley.co.uk/#xl\\_xr\\_page\\_hs2](https://www.tonyberkeley.co.uk/#xl_xr_page_hs2)

<sup>3</sup> Berkeley p7, Summary and conclusions

<sup>4</sup> Saturday September 12 2020, The Times: “Trouble on the line as Extinction Rebellion protesters fight HS2”

<sup>5</sup> High Speed Two Phase 2a Information Paper E27: Carbon, Last updated 2 September 2019, Table 2:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/828986/E27\\_Carbon\\_v1.2.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/828986/E27_Carbon_v1.2.pdf)

Work stage	Life cycle stage	Tonnes CO <sub>2</sub> e	
		60 years	120 years
Construction	Before use stage	1,451,000	
Operation	Use stage <sup>10</sup>	141,000	315,000
	Benefits and loads beyond project boundaries <sup>11</sup>	-159,000	-307,000
	<b>Total residual carbon emissions</b>	<b>1,433,000</b>	<b>1,459,000</b>

The footnotes to this table are these:

10 The use stage is a net carbon emission figure, which includes a carbon sequestration benefit from tree planting estimated to be -144,000 tCO<sub>2</sub>e over 60 years and -174,000 tCO<sub>2</sub>e over 120 years.

11 The benefits and loads stage is the net carbon emission figure, which includes loads (i.e. increase in carbon emissions) from additional surface access journeys to access the Proposed Scheme, and benefits (i.e. reduction in carbon emissions) from freight and passenger modal shift

<sup>6</sup> Stop HS2 Submission to the Oakervee Review

<sup>7</sup> Berkeley para 5.6

<sup>8</sup> <http://stophs2.org/news/18285-nearly-no-modal-shift-hs2>

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<sup>9</sup> Berkeley para 2.10

<sup>10</sup> [https://www.tonyberkeley.co.uk/index\\_htm\\_files/rh201103%20Tony%20Berkeleys%20HS2%20Update.pdf](https://www.tonyberkeley.co.uk/index_htm_files/rh201103%20Tony%20Berkeleys%20HS2%20Update.pdf):

“The HS2 gravy train goes on; whereas DfT ministers try to cut back or delay expenditure on other new rail projects, including those most needed in the Midlands and North, nobody seems to care about the still escalating costs of HS2, the ongoing environmental destruction and whether the demand is still there; and of course whether the country can afford such a vanity project.”

<sup>11</sup> ‘Phase One as a standalone scheme makes little sense’ (Oakervee paragraph 2.8)

<sup>12</sup> Berkeley para 5.2

<sup>13</sup> <https://www.bbc.co.uk/news/business-54010727>

<sup>14</sup> High Speed Rail Working Draft Environmental Statement Volume 3: Route-wide effects, October 2018, Table 35

([https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/746554/HS2\\_Phase\\_2b\\_Working\\_Draft\\_ES\\_Volume\\_3\\_Route-wide\\_effects.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/746554/HS2_Phase_2b_Working_Draft_ES_Volume_3_Route-wide_effects.pdf))

<sup>15</sup> Berkeley para 6.7

<sup>16</sup> <https://yougov.co.uk/topics/politics/survey-results/daily/2020/05/18/31266/2>