

# High Speed 2

## A Briefing Note



October 2011

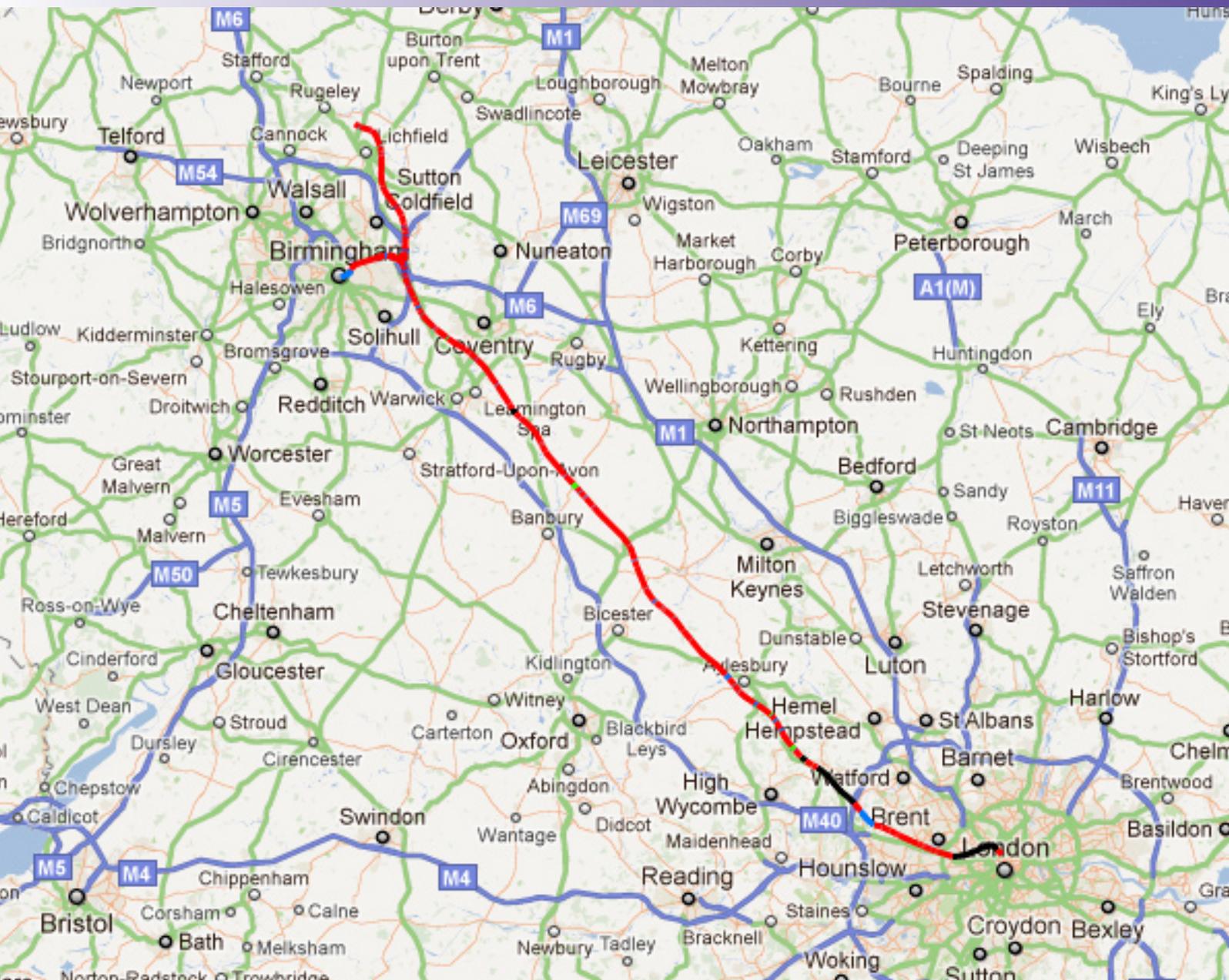
- The country cannot afford £32 billion in the current economic climate. There are better ways to invest in our future economic prosperity.
- There are better and hugely cheaper alternatives to improve our rail infrastructure to meet our future needs as and when required that can be in place sooner.
- The project will not bridge the North - South divide. At best it will benefit the cities directly on the route, to the detriment of their surrounding areas. Local and regional investments are proven to do much more.
- The business case is seriously flawed with unsupported economic benefits and key costs excluded. Even on this basis the project offers very poor value for money, requiring a £17 billion subsidy from taxpayers.
- The project is not green or sustainable and will increase Green House Gas emissions.
- It will do irreparable harm to our national heritage.

**The Government has carried out a five month consultation exercise on proposals for a new High Speed Rail network (HS2). The project would create high speed rail links between London and Birmingham, later extending to Manchester, Leeds, Edinburgh and Glasgow.**

The final decision on HS2 will be made towards the end of this year. Concern over the HS2 project is growing over the full implications of the proposals, particularly questions on the robustness of the business case and its failure to contribute to the nation's carbon reduction targets. Above all, the matter of greatest concern is that the country cannot afford it. While we struggle with the worst recession in peace-time, this one project will cost at least £32 billion.

Eighteen councils, collectively known as "51m", have come together to challenge the evidence base about the HS2 project. They are known as "51m" because that represents how much HS2 will cost each and every Parliamentary Constituency...£51million.

This Briefing Note has been produced to highlight the key areas of concern.



**Proposed HS2 route**

# Questions that need to be asked about HS2 -

## 1. Can we afford such a major project?

HS2 would be the biggest rail investment on a single project this country has ever made, some £32bn. Crucial details on what is proposed have not been made public including the route north of Birmingham to Leeds and Manchester, yet the decision as to whether to proceed or not is to be made at the end of the year.

A report published by the Institute of Economic Affairs in July said that the government is on the cusp of committing very large amounts of taxpayer money to support a very 'grand design'. An independent report commissioned by MPs on the Transport Select Committee published in June said there was a degree of uncertainty around the financial benefits of HS2.

The economy is flat lining and will take a number of years to recover. The case for HS2 is based on GDP growth significantly above the current level and even with this optimistic assumption it requires £17bn of public subsidy.

The cost does not include key elements of infrastructure such as major underground enhancements that TfL have identified at Euston to deal with the dispersal of passengers, which will cost some £9 billion.

Understandably cities and towns coming out in support of HS2 are bringing their own shopping list of infrastructure investments to enable them to advantage of the project. As with any major infrastructure project costs will inevitably grow as the detail is developed.

It's extremely optimistic to assume that funding HS2 will not impact adversely on other infrastructure investment during this time of unprecedented constraint.

Instead of this single project, we need to invest in improved connectivity between our major cities to secure the greatest good for the many. In short, we need a different pattern of investment flowing from a national transport strategy.

## 2. So is there any alternative?

In HS2 The Department for Transport has presented a proposal without engaging the public in an informed national debate to reach an evidence-based conclusion essential for such a vital issue.

51m believes the head-long rush to arrive at HS2 has meant that alternatives that offer far better value for money have not been properly assessed. Given the present economic difficulties we are facing this omission is a matter of the deepest concern.

As the debate evolved, the case for HS2 is now more about the need to double rail capacity by 2043 than high speed.

...our fear is that, like the Channel Tunnel Rail Link, HS2's demand modelling is over-optimistic, with the inevitable result that there is call on the public purse to ultimately subsidise operations

**Conservative Transport Group  
Submission to the High Speed Rail  
consultation July, 2011**

...a potential white elephant that will drain resources from the existing network and the wider economy which is likely to require continuing subsidies from future generations.

**High Speed 2: the next government  
disaster - Institute of Economic  
Affairs July, 2011.**

Our figures show that as the line goes beyond Birmingham, it will need a new tube line in London, passing through Euston...at current prices in the order of £6-9 billion.

**Daniel Moylan, Deputy Chairman  
of Transport for London Transport  
Select Committee July, 2011**

Uncomfortable fact No 1 is that the railway is already relatively a rich man's toy

**Philip Hammond, Transport  
Secretary, Transport Select  
Committee September, 2011**

In the consultation evidence for HS2, the DfT's consideration of alternatives is poor...cost benefit analysis is a good tool for assessing which alternative offers best value for society and how different groups are affected. It is not, however, a good tool to use for assessing whether one option in isolation delivers best value.

It is claimed that existing parts of the network, such as the West Coast Main line (WCML), will soon be at full capacity. Yet HS2 offers no solution to overcrowding for to Birmingham for 15 years and to Manchester and Leeds for 22 years. If capacity is an urgent priority what reason can there possibly be for not tackling the problem for so long?

More than enough capacity to meet forecast demand can be produced on the relevant parts of the rail network by taking simple and far cheaper steps than HS2. Just by extending and reconfiguring trains you can double the capacity on WCML Pendolino trains.

This approach has four major advantages over HS2. First, because the investments are incremental there is no wasted investment if the significant demand growth forecast by HS2 does not materialise. Second, it is far cheaper than HS2. Third, improvements can be introduced much more quickly than HS2, to deal with existing overcrowding problems, rather than having to wait until 2026 (at the earliest). Fourth, the approach is very low risk and more likely to be commercially justified. With targeted investment in infrastructure in the order of £2bn, a trebling of capacity can be achieved.

Once the project shifts to being more about capacity than speed, the need for a straight line route to achieve speeds in excess on 400 kph, ceases to be the key determinate. Consequently, alternatives must be given full consideration.

In September MPs on the Transport Select Committee raised the same issue - if the scheme represents a step change in capacity, would some reduction in this respect enable more flexibility regarding the route and the provision of intermediate stations.

### **3. Will it reduce the North - South divide?**

It is claimed that HS2 will transform economic imbalances across the United Kingdom and bridge the North - South divide. Spain and France have used similar arguments to justify high speed rail lines. But there is no evidence of a silver bullet effect.

The claimed regeneration benefits are highly speculative and will be far less effective in achieving the objective of rebalancing the economy than cheaper, more affordable regional investments. These would give greater benefits in economic, transport/ accessibility, social and sustainability terms. HS2 is contrary to the policy priorities of the Northern Regions Development Agencies. The evidence of Professor Tomaney submitted to the Transport Select Committee in July recognises that the likely impact of such a new railway would be to benefit the dominant city at the cost of the regions.

Even with HS2's own figures, 70% of the jobs created will be in London/South East and twice as many trips generated will be to London compared with trips from London. Moreover, with its focus on London, Birmingham, Leeds and Manchester, HS2 will have the effect of harming regional economies such as Wales and the South West not directly served by the route.

The alternatives considered alongside HS2 should be equally bold, creative and comprehensive.

***The New Economics Foundation  
July, 2011***

The cumulative capacity increases of these measures over the 2007/08 base would be in the order of trebling the capacity (of the WCML) at a capital cost in the region of £2 billion

***51m Submission to the High Speed  
Rail consultation July, 2011***

The evidence for high-speed rail to transform the economic geography of the UK is fairly weak. It is very difficult to find and we have looked hard for it.

***Professor John Tomaney Transport  
Select Committee July 2011***

We have to be careful when we talk about the number of jobs created by high speed rail. Some will result from displacement with jobs moving from area to another, so will not be new.

***Professor Roger Vickerman Transport  
Select Committee September, 2011***

There would be a relative benefit to places that are served by high speed rail compared with a relative downside or areas that are not.

***Sir Brian Briscoe, Chairman of HS2  
Ltd Transport Select Committee  
September, 2011***

As with the impact of the TGV in France, evidence from the Channel Tunnel high speed link shows that away from HS1, services on the classic network in Kent have deteriorated.

#### 4. Does the Business Case stand up to scrutiny?

The DfT case is fundamentally flawed in a number of key respects and has not been adequately scrutinised or tested. This is an even greater concern because of the long history of over optimistic forecasting by the rail industry, both in terms of passenger forecasts and costs. The Eurostar forecasts anticipated that demand would now have reached about 25 million passengers, whereas actual traffic has grown only slowly with around 9 million passengers nearly 15 years after the original forecasts. Despite the undertaking given to the Select Committee, it appears that the Department for Transport has not learnt from past failings.

A corner stone of the business case for HS2 is the benefits from journey time savings, on the basis that time on trains is non productive. HS2 have now accepted that the journey time on trains is productive which means that there any inherent benefit in high speed over the classic services is at best marginal. Any benefits that may exist will diminish as a result of further technological advances such as telepresence. It is important to emphasise that this issue alone significantly undermines the case for HS2, as without the claimed benefits from journey time savings, estimated in £ billions for the business case, the key stated advantage of HS2 fails.

Another crucial component of the case for HS2 is based on the service being able to deliver 18 trains per hour (tph), a figure which has not been achieved anywhere in the world for high speed rail infrastructure. Not being able to operate 18 tph has serious consequences for the business case if some of the services proposed by HS2 do not run, thus reducing the frequency to cities such as Leeds, Manchester and beyond. The HS2 services to these cities from London will have to be reduced even further if there are to be services serving Heathrow and/or HS1 directly.

#### 5. How green are HS2's carbon credentials?

HS2 does not just encourage people to travel more, it relies on them doing but with a relatively small modal shift. In this respect, only 7% of the demand comes from car and 6% of the demand from air. This is contrary to any sustainability objectives which should, wherever possible, encourage fewer trips and more use of alternative technology.

Government statements have characterised HS2 as green and claimed that even the London – Birmingham (Phase 1) will be broadly carbon neutral. Their analysis rests entirely on high assumptions about modal shift from air and most critically on making the assumption that airport slots which are freed up by the reduction in domestic flights would not be re-used. In reality, those slots, particularly at Heathrow, will be filled with long haul flights which are both more profitable and much more carbon emitting.

'The Department (DfT) told us that it has now learned from all this experience, and that the next time it considered undertaking a major transport project, it would factor more severe downside assumptions into its business case analysis'.

**Transport Select Committee  
Report 2006**

Between 2004 & 2010 the proportion of business travellers indicating their time on the train was wasted went down from 13% to 8%.

**University of the West of  
England, national survey of  
rail passengers, 2011**

A high speed line (operating 18 train paths per hour), nowhere in the world. The Japanese are running 12 trains per hour. We are considering next December 13 trains per hour, and nobody does more.

**Pierre Messulam, Rail Strategy &  
Regulation Director, SNCF French  
National Railways, Transport Select  
Committee June, 2011**

...if the initial publication had been accompanied by a commitment to have open meetings and open debate, both with locals and with national groups, and with others with a more strategic perspective, we might have got further with the important issue of whether this is the right route and how to make it, as we would say, the greenest ever.

**Dame Fiona Reynolds Director  
General National Trust Transport  
Select Committee September, 2011**

Given the massive public investment in the scheme, the importance of addressing climate change and the need to reduce carbon emissions, it is completely unacceptable to support a scheme with no carbon benefit.

## 6. Shouldn't we be keeping up with the neighbours?

Other countries have built or are building high-speed rail lines. The Dutch HSR has financial problems, the Chinese have just lowered speeds to reduce energy costs, the Taiwanese and Spanish HSR are not attracting the forecast passengers and SNCF has stated that the normal rail network is decaying as investment is focused on TGV lines. We could be susceptible to the same problems others have faced and with construction costs of £160 million per mile, between two and eight times more than other networks, the degree of risk could be much greater.

In contrast to the slow classic European networks, the WCML is already a modern high speed railway that has just had £9bn spent on it. As the distances between cities are smaller in this country, the 'gain' of high speed rail travel is far less clear-cut. The time saved by HS2 must be put in the context of connectivity to other transport networks in the cities concerned in order to provide the full travel picture for passengers. Looking at the time saved in isolation, rather than 'door to door' times, is a false context that exaggerates the benefits of high speed rail.

HS2 could open up direct rail connections to Europe but in most instances it will not be attractive to use rail as opposed to air. Using HS2 to travel from Edinburgh or Glasgow to Paris or Brussels will still take more than six hours and thus not make high speed rail an attractive alternative to flying. In addition, each train travelling from the north to the continent directly would take up one train path, further reducing the core frequencies of services from cities to London.

## 7. How will the majority of cities benefit from HS2?

HS2 would provide faster journey times between London, Birmingham, Manchester and Leeds but will benefit very few other cities and towns across the Midlands and the North.

Most towns and cities currently served along the WCML will be bypassed by HS2 (eg Coventry, Stoke, Stafford, Derby, Nottingham, Sheffield, Wilmslow etc) meaning that passengers will have to either drive to a parkway station or have to catch a connecting train to an HS2 station thus negating most if not all the benefits of high speed. As an example the total elapsed time for a journey from Wilmslow to the centre of London is currently 136 mins and with HS2 it will be 126mins but travellers will have to catch a train into Manchester first to catch HS2 as opposed to the existing direct service from Wilmslow to London.

We cannot see any justification for the claim that HS2 as proposed will reduce emissions

***IET & Royal Academy of Engineering Consultation Submission July 2011***

..because the UK is already well connected, the key economic challenge is therefore to improve the performance of the existing network...large projects with speculative benefits and relying on untested technology, are unlikely to generate attractive returns.

***Department for Transport, The Eddington Transport Study, 2007***

Parts of Britain, for example, fear that a new zippy railway will create a second tier of cities supplied by fewer and slower trains. High-speed lines, like other regeneration projects, often displace economic activity rather than create it.

***The Economist September, 2011***

Many cities north of Manchester and Leeds will have less capacity to London in 2033 than they will have on the current network in 2013. This is because only short (200m) HS2 trains will be able to run on the classic network to cities such as York, Newcastle, Liverpool, Preston and Glasgow and these will have less capacity than the Pendolino or new ECML trains. Given that DfT predicts significant growth on the railways this seems a completely flawed strategy, even if some of the journeys were slightly quicker there would be no capacity.

## 8. How much disruption will HS2 cause to the existing network?

It is said that any alternative to HS2 will cause major disruption to the WCML similar to that caused by the major upgrade in the early years of this millennium. This is very misleading as the improvements required are at a few specific pinch points where much of the work will be undertaken off line.

By comparison HS2 requires the complete rebuilding of Euston station over a period of 7/8 years. This will cause major disruption to all Euston services and HS2 have recently stated that "We believe that the redevelopment of Euston station could be accomplished while maintaining at least the current off peak service level, and there may be some minor alterations to the timetable. There would be some instances of disruption to services where, for example, the station would be closed for a few days over the holidays". Since the off peak services are some 40% less than the peak services, this implies major over-crowding and no additional capacity, on the already congested commuter services for up to 8 years. With 30 million passengers using Euston in 2010, the reality is that the disruption will be massive, potentially much greater on large numbers of commuters than was the case with the WCML upgrade.

## 9. Is it in the national interest?

It is claimed that HS2 is in the national interest. So what is the cost to our heritage? The preferred route cuts through the Chilterns Area of Outstanding Beauty. 30 hectares of ancient woodland will be lost and important habitats will be destroyed. 160 wildlife sites will be affected. In April the Right Lines Charter was published representing an agreement between an alliance of organisations including The Wildlife Trusts, Greenpeace, Friends of the Earth, RSPB, The Woodland Trust and the Campaign to Protect Rural England, to hold the government to account on HS2.

314 grade II listed buildings are within the 350-metre "buffer zone" either side of the planned route. A further 16 grade II listed buildings would be "physically impacted" – most likely demolished. They include six grade II buildings and structures in the areas around the line's London terminus at Euston and various historic farms and buildings across the rural Midlands. Five Scheduled Monuments lie within the zone.

If you're a Welsh taxpayer, you're thinking, we're going to be paying £1.5bn towards this £32bn scheme, and we're going to be short changed by 21,000 jobs and the Bristol/South-West region by 40,000 jobs, so we're thinking that's not really good enough."

**Mark Barry Cardiff Business Partnership Transport Select Committee September, 2011**

The project is "open heart surgery on a conscious patient"  
**Delegate at a High Speed Rail Conference February, 2011**

It has been described to me as a Berlin wall for wildlife  
**Steve Rodrick, Chief Officer Chilterns Conservation Board, Transport Select Committee September, 2011**

And that is only the beginning. Many thousands of home will significantly affected with countless communities changed for ever

## 10. Want to join us?

An often repeated phrase is that HS2 is 'a once in a generation opportunity'. If the decision is that important then why is there no national transport strategy already in place to set the framework for the high speed rail's contribution? 51m believes if we get this decision wrong, many future generations will be paying for the mistake.

We should never accept that it is right to pursue a project in the name of national interest if the fabric of the nation's heritage is devastated as a result and so many assumptions of the supporting case fail as soon as they are tested.

We believe that making the right call with respect to HS2 is vitally important to the future of this country. 51m will not cease to challenge the project with all vigour.

There is a significant risk that HS2 will become the latest in a long series of government big-project disasters with higher-than-forecast costs and lower-than-forecast benefits  
***Institute of Economic Affairs***  
***report July, 2011***

Join us today by calling **01296 383793**.

Please visit our website – [www.51m.co.uk](http://www.51m.co.uk) to read our submissions to the public consultation exercise on high speed rail and to the Transport Select Committee.

