



# Rich man's toy: The case for scrapping HS2

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High Speed 2 is part of the Government's effort to increase rail capacity between the North and South of England and to deliver greater economic growth in the North of England.<sup>1</sup>

Phase one, from London to the West Midlands, is expected to begin construction in 2017 (presuming Royal Assent is received in December 2016) and open in 2026 with further extensions to Crewe expected to open in 2027 and Manchester and Leeds connections in 2033.

Greater capacity to meet future passenger demand and improved connectivity are supposed to enable economic growth. There are however many reasons to be sceptical about the building of a high speed rail line to achieve this aim.

There has been significant opposition to the project and this briefing paper covers the main arguments that have been put forward.

## Key findings

- Projected costs are rising and are likely to be at least £88 billion
- Timely delivery of the project is far from certain
- The assumptions made in the business case are flawed and significantly overstate the case for HS2
- Demand for travel on HS2 is uncertain
- There are other alternative proposals which provide greater value for money than HS2's Phase One
- HS2 may not help develop the economy of North of England to the extent that has been suggested
- The need for increased travel capacity could well be met by new technologies such as autonomous vehicles

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<sup>1</sup> McLoughlin, 30 November 2015, Written Statement, *HS2 and the Northern Powerhouse*, Department for Transport

## Section One – Costs and delivery

### Rising costs

A 2010 assessment of the total cost of HS2 was £30 billion with a further £3 billion anticipated cost for the rolling stock.<sup>2</sup>

By 2013, the estimate had risen to £50.1 billion in 2011 prices (including the rolling stock).<sup>3</sup>

And in the 2015 Spending Review, the total funding envelope for the project was revised to £55.7 billion in 2015 prices.<sup>4</sup>

The National Audit Office (NAO) report *Progress with preparations for High Speed 2* notes that the £55.7 billion would also not include the funding for all of the development required in order for the full economic benefits to be achieved.<sup>5</sup> For example this does not include the cost of regeneration around stations. If other such aspects of the project are not undertaken, many of the benefits of HS2 may not be and so it should be assumed that these other costs will arise.

- As a consequence, it is better to use independent estimates of the total cost which include other extraneous items and indicate the cost could be as high as **£80 billion**<sup>6</sup>
- Once adjusted for inflation to 2015 prices this is **£87.95 billion**
- Given the recent rises it should be assumed that this will rise higher
- Additionally, the National Audit Office reports that Phase One of the programme is already expected to cost **£204 million** more than the funding made available in the 2015 Spending review.<sup>7</sup>

The change in forecasts costs is detailed below.

Estimate	Cost	Date of estimate	Notes
Department for Transport <sup>2</sup>	£30 billion	March 2010	Excluding £3 billion cost of rolling stock
Department for Transport <sup>3</sup>	£50.1 billion	October 2013	2011 prices, including rolling stock
Department for Transport <sup>4</sup>	£55.7 billion	November 2015	2015 prices, including rolling stock, excluding regional development costs
Wellings <sup>6</sup>	£80 billion	August 2013	Including rolling stock and regional development costs
TaxPayers' Alliance	£87.95 billion	July 2016	DfT 2013 with Wellings' additions, updated for 2015 prices

<sup>2</sup> Department for Transport, March 2010, *High Speed Rail*

<sup>3</sup> Economic Affairs Committee, 2015, *The Economics of High Speed 2*, House of Lords

<sup>4</sup> HM Treasury, 2015, *Autumn Statement and Spending Review*

<sup>5</sup> National Audit Office, 2016, *Progress with preparations for High Speed 2*

<sup>6</sup> Wellings, August 2013, *The High Speed Gravy Train: Special Interests, Transport Policy and Government Spending*, Institute of Economic Affairs

<sup>7</sup> National Audit Office, 2016, *Progress with Preparations for High Speed 2*

International comparisons have shown HS2 to be significantly more expensive than other high speed rail projects.

Country	Cost per km (£ millions)
Turkey	4.9
Spain	6.6
Japan	7.0
France	7.3
China	12.9
Germany	21.2
South Korea	24.6
Taiwan	33.5
Italy	43.4
UK (current)	51.3
UK (planned)	78.5

Source: *The Daily Telegraph*<sup>8</sup>

And, despite the massive cost increases, HS2's functionality has been significantly reduced. There was originally to be a direct link to HS1, allowing through trains to Europe from Birmingham, Manchester and Leeds, and similarly a direct link to Heathrow. Both links have now been cut from the project, despite originally being presented as strategically vital.

### Bold assumptions

The Government includes an 'optimism bias' when estimating the costs of large capital projects. This is a form of premium applied during the planning stages to the project's cost to account for the routine underestimation of the eventual costs by the relevant department.

- Recommendations stipulate a **68 per cent** optimism bias is applied to have 90 per cent chance of on-budget delivery<sup>9</sup>
- This would mean that cost estimates should be increased by 68 per cent in order for there to be just a ten per cent chance HS2 will over budget
- However this level of optimism bias has not always been applied
- e.g. optimism bias has been reduced to 34 per cent<sup>10</sup>

So funding allocated to certain areas may be too low, which in turn may mean that the funding envelope is an underestimate of final costs.

Moreover, the official £55.7 billion funding envelope includes:

- Making **£1.47 billion** of savings through efficiencies in both design and construction
- Further savings of **£550 million** "although there are not yet firm plans for how these savings will be achieved"<sup>11</sup>

<sup>8</sup> The Telegraph, November 2015, *Revealed: HS2 'abysmal value for money' at 10 times the cost of high-speed rail in Europe*

<sup>9</sup> Department for Transport, 2004, *Procedures for dealing with optimism bias in transport planning, Guidance document*,

<sup>10</sup> Department For Transport, 2012, *The Economic Case for HS2: Value for Money Statement*

<sup>11</sup> National Audit Office, 2016, *Progress with preparations for High Speed 2*

It will be very important to achieve these savings if the project is to be delivered on budget.

Further possible costs have been identified.<sup>12</sup>

- The Government has signalled that it supports further investment of up to **£500 million** in the station at Crewe - a commitment that is currently unfunded
- There are concerns that the proposed Manchester Airport station, like the Crossrail connection to Heathrow, will not be entirely privately funded putting further costs into the millions of pounds onto taxpayers.

### Uncertain delivery

Current plans to open the line gradually from 2026 are the same targets set in 2010 but there are still significant challenges to face.

- It should be of great concern that the Infrastructure Projects Authority's 2016 report has given HS2 an **Amber-Red** delivery confidence assessment
- In its opinion "successful delivery of the project is in doubt, with major risks or issues apparent in a number of key areas. Urgent action is needed to address these problems and/or assess whether resolution is feasible"<sup>13</sup>
- There is only one worse rating that HS2 could fall within, (Red) where "successful delivery of the project appears to be unachievable"<sup>14</sup>

This reflects HS2 Ltd.'s acknowledgment that there is a **40 per cent chance** that they will fail to deliver Phase One by the target date of 2026.

- The Public Accounts Committee (PAC) was warning about this scenario as early as 2013<sup>15</sup>
- The PAC has also asked HS2 Ltd. to assess the impact of extending the opening of Phase One by 12 months

Given these uncertainties and concerns, it seems likely that there will be delays to the delivery of the project.

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<sup>12</sup> *Ibid.*

<sup>13</sup> Infrastructure Projects Authority, 2016, *Annual Report on Major Projects 2015-16*

<sup>14</sup> *Ibid.*

<sup>15</sup> National Audit Office, 2016, *Progress with preparations for High Speed 2*

## Section Two – The business case

While there are concerns that the project will not be delivered on time and within budget, the business case for HS2 has also received significant criticism.

### The Benefit-Cost Ratio

The benefit-cost ratio (BCR) is calculated by dividing the net benefits of the project by the net costs to taxpayers. It can be used as a guide to the relative value of a project.<sup>16</sup>

- Excluding the wider economic impacts, the BCR is estimated by the NAO to be **1.8**
  - With the wider economic impacts included, the BCR is estimated to be **2.2**
- Above 2 is considered high, between 1.5 and 2 is considered medium and below 1.5 is considered low
- Phase One may only have a BCR of **1.4** to **1.7** when considered on its own
- Much of the economic benefit is due to be realised on completion of the northern connections into the 2030s

It is notable that there are several alternative proposals which would deliver significantly greater BCRs than the proposed Phase One.<sup>17</sup> These typically do not involve significant speed increases (compared to traditional rail lines) but come at much lower cost.

These are compared in the table below to the latest estimates for both Phase One and the full network.

Proposed alternatives	BCR with Wider Economic Impact
Package 2	4.66
Package 2a	3.11
51M	6.06
Phase One 2013 Business Case	1.7

- Package 2 has modest speed improvements on the West Coast Main Line as well as increased frequency of train services (up to 16 per hour) and several infrastructure upgrades.
- Package 2a is the same as Package 2 but with different assumptions of journey time.
- 51M was proposed by a group of local authorities and is based on Package 2 with several differences, including operation of 12 car trains, a reduction in the proportion of first class seats, and targeted infrastructure investment to eliminate a small number of capacity “pinch-points”.<sup>18</sup>

The **alternative proposals for Phase One have significantly higher BCRs** than the current plans.

<sup>16</sup> *Ibid.*

<sup>17</sup> Atkins, 2012, *High Speed Rail Strategic Alternatives Study - update following consultation*, Department for Transport

<sup>18</sup> For further detail see Atkins, 2012, *High Speed Rail Strategic Alternatives Study - update following consultation*, Department for Transport

## Criticism of government BCR assumptions

The methodology the government has used to calculate the BCR has been accused of being simplistic and as a consequence fails to capture all associated costs and benefits, or allocates them unduly.

- Transport user benefits are supposed to yield benefits of just over £40 billion, and around £20 billion of these are specifically related to business travel<sup>19</sup>

However there are inherent flaws in the assumptions that the Department for Transport (DfT) make to arrive at this benefit.

- DfT assumes that journey time saved is time that would now be spent in the workplace<sup>20</sup>
- This fails to recognise that workers typically spend a fixed amount of time in work and reduced journey times will likely mean that journeys will be started later rather than at the same time and work will commence earlier

It is also a questionable assumption that passengers are not productive while travelling.<sup>21</sup>

- With the improved access to wireless communications, passengers are increasingly using their travel time to work. Accepting this further harms the argument for reduced travel times

This significantly undermines the argument for improved travel times HS2 will offer, as much of the £40 billion benefits may not be realised.

## Inappropriate discount rate

A discount rate is applied to future costs and revenues of a project (in this case HS2) in order to work out what they are worth today so that the BCR can be calculated. This is to take account for the fact that £1 received today is more valuable than £1 received in a year's time.

This is necessary because inflation reduces the value of £1 between today and then and it is uncertain that you will receive that £1 in a year's time (e.g. if the person who owes you £1 cannot afford to pay).

The discount rate applied to calculate the present value of the costs and benefits was 3.5 per cent.<sup>22</sup>

- This has been described by Europe Economics as an **inappropriately low rate for capital projects** as it does not make any allowance for "the cost of systematic risk, despite the fact that systematic risk is a key driver of the cost of capital in the private sector"<sup>23</sup>
- The 2003 Green Book removed the cost of systematic risk from the standard discount rate.

<sup>19</sup> Department for Transport, 2013, *The Economic Case for HS2*

<sup>20</sup> Wardman, Batley, Laird, Mackie, Fowkes, Lyons, Bates & Eliasson, 2013, *Valuation of Travel Time Savings for Business Travellers*, Annexes to main report, Prepared for the Department of Transport, Institute for Transport Studies

<sup>21</sup> *Ibid.*

<sup>22</sup> Department for Transport, 2012, *The Economic Case for HS2: PFM v4.3: Assumptions report*

<sup>23</sup> Topping, 2015, *Smoke and mirrors: how the cost of systematic risk has vanished from public sector appraisals and evaluations*, Europe Economics

- Systematic risk is uncertainty from which there is little opportunity to mitigate and would affect the entire market. E.g. An event that would affect the entire transport sector
- Removing systematic risk brought the **6 per cent** discount rate down to **3.5 per cent**
- The 3.5 per cent rate is supposed to be **adjusted as appropriate** to account for systematic risk associated with a particular project
- This appears **not to have been done** for HS2's BCR
- Europe Economics argue that failing to adjust the 3.5 per cent rate for systematic risk will **"tend to make it easier for public expenditure projects and policy proposals to pass a cost-benefit test"**<sup>24</sup>

An inappropriate discount rate may mean that the present value of the benefits and costs have been misrepresented and that the **BCR analysis is flawed**.

### Developing the North of England

The 'Northern Powerhouse' programme is intended to "transform northern growth, rebalance the country's economy and establish the North as a global powerhouse"<sup>25</sup>, but doubts have been cast over whether HS2 will help achieve this.

Reduced transport costs between London and the North of England may actually increase disparities rather than reduce them.

- This is because greater access runs both ways, and larger businesses in the major urban areas (e.g. in London) will be able to increase their competitiveness in harder to reach markets<sup>26</sup>
- This increases competition for regional businesses and can hold back their growth and the economic growth of the surrounding area

There is also international evidence of rail infrastructure's failure to spread economic growth (e.g. in South Korea and France<sup>27</sup>).

- In a poll of members of the Institute of Directors (IoD), 64 per cent thought that either London (**34 per cent**) or the West Midlands (**30 per cent**) would benefit the most from HS2<sup>28</sup>
- They report that "IoD members doubt the potential for HS2 to have a transformative effect on the UK's worryingly imbalanced economic geography"
- DfT's own 2013 analysis estimates that **London will receive a greater proportion of the benefits** of the full HS2 network than the **North East, North West and Yorkshire and the Humber combined**<sup>29</sup>

Whether or not the development of the Northern Powerhouse strategy is of merit is immaterial; its creation is being used as part of the justification for the HS2 project, and yet there is strong evidence that HS2 will have the opposite effect.

<sup>24</sup> *Ibid.*

<sup>25</sup> HM Government, 2015, *The Northern Powerhouse: One Agenda, One Economy, One North, A report on the Northern Transport Strategy*.

<sup>26</sup> Sivaev, 2013, *HS2 Policy Briefing*, Centre for Cities

<sup>27</sup> *Ibid.*

<sup>28</sup> Silvester, 2014, *High Speed 2: on the wrong track*, Institute of Directors, IoD Snapshot

<sup>29</sup> Department for Transport, 2013, *The economic case for HS2*

## Demand for HS2

Lower demand outturn would have obvious negative effects on the project's value for money. This is a very real possibility.

- Demand for the French TGV has been **24 per cent lower** than that originally forecast<sup>30</sup>

## Forecasting demand

Forecasting issues affect the 'demand cap' - the point where demand is deemed to stop growing to account for uncertainty. The later this is set, the greater the demand at the point the cap is set and so the greater the benefits derived.

- If demand is capped in 2027, there is a **66 per cent chance that the project will have low value for money**
- If it is set in 2040, just thirteen years later, there is a **95 per cent chance that the project will be high value for money**<sup>31</sup>

This shows that it is very significant at what point the demand cap is set and reflects the uncertainty of the business case.

- Opponents of HS2 also argue that the demand forecasts are based on projections from recent years which have seen a significant increase in demand for rail travel and there is no certainty that this increase will continue<sup>32</sup>
- Unpredictable technological progress, such as the development of autonomous vehicles (see section 3), may also hinder current efforts to forecast future demand

Because of the inherent uncertainties in the method of forecasting demand, and the large impact that changes in demand could have, the BCR analysis is unconvincing and a poor indicator of how valuable the project could be.

## Demand based on GDP

There is a very strong link between long-term GDP growth and the value for money of HS2.

- DfT forecasts show that the chance of achieving high value for money is much higher if long-term UK GDP growth is between 2 per cent and 3 per cent per annum
- However, if long-term GDP growth is between 1 per cent and 2.25 per cent, the most likely scenario is that it will achieve low value for money<sup>33</sup>

This highlights that there are significant unknown factors when value for money is considered.

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<sup>30</sup> House of Lords, 2015, *The Economics of High Speed 2*, Economic Affairs Committee, 1<sup>st</sup> Report of Session 2014-15

<sup>31</sup> Wishart, *End of the line for HS2? A review of the UK Government's Cost Benefit Analysis*, University of East Anglia

<sup>32</sup> Overman, *HS2: assessing the costs and benefits*, Centrepiece Winter 2011/12

<sup>33</sup> Department for Transport, 2012, *The Economic Case for HS2: Value for Money Statement*

### Benefit/Cost Ratio conclusion

- Other analysis based on more conservative assumptions has suggested that the BCR for Phase One of HS2 could be as low as just 0.5 (i.e. the costs will be double the benefits)<sup>34</sup>

It is not surprising that there are differences of opinion between analyses, but the extent to which the BCR of Phase One can be reduced with revised assumptions is indicative of the sensitivity of the forecasts to either optimism or pessimism.

Scepticism of the assumptions made and the analysis done by the government makes it seem likely that the BCR does not reflect the true facts of the matter.

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<sup>34</sup> Castles & Parish, 2011, *Review of the Economic Case for HS2: Economic evaluation London – West Midlands link*, RAC Foundation

## Section 3 – Is High Speed 2 the technology we need?

### Capacity vs Speed

HS2 is something of a misnomer. The increased speed was originally a significant factor in the project, but the primary benefit is now argued to be increased capacity between London and the North of England and vice versa. Yet the infrastructure has been designed to deliver the highest speeds anywhere in the world, at disproportionate cost – possibly appropriate for the long distances in China, but not relevant in Britain.

- In 2010, then Secretary of State for Transport, Philip Hammond, emphasised how HS2 would tackle the North/South divide by “bringing our major conurbations closer together” – a clear allusion to a desire for shorter travel times<sup>35</sup>
- However in 2016, Secretary of State for Transport, Chris Grayling, said “the thing that’s important for people to understand is that HS2 is not simply a speed project, it’s a capacity project”<sup>36</sup>
- This is also the emphasis given in the 2013 Economic Case for HS2, and marks a significant departure from the focus on speed<sup>37</sup>

If increased transport capacity from the South to the North is needed, is large-scale investment in rail the solution?

### Autonomous vehicles

There is currently a clear preference for non-rail long-distance travel.

- **80 per cent of journeys** between 50 and 150 miles are made by car or van (with around 15 per cent by rail)<sup>38</sup>

The use of autonomous vehicles could extend this preference for road travel.

- Autonomous vehicles allow productive journeys – currently an advantage of train travel
- They allow platooning and reduced gaps between cars increasing the road capacity
- They will also potentially allow people who cannot currently drive themselves, or do not hold licences, to travel door to door simply and conveniently

This may undermine demand for HS2 and reduce ticket sales revenues and in turn increase HS2’s net costs and lower the BCR.

So, within the context of spending almost £90 billion on a single rail network, the prospect of the disruptive influence of autonomous vehicles should give pause for thought.

- The Institution of Mechanical Engineers expect that **the earliest that a near 100 per cent highly automated UK car fleet could exist is 2040**<sup>39</sup>

<sup>35</sup> Hammond, 20 December 2010, Oral Ministerial Statement on High Speed Rail, Department for Transport

<sup>36</sup> BBC Radio 4 interview quoted in The Times, 18 July 2016, *Heathrow ruling may come in weeks, says Grayling*

<sup>37</sup> Sivaev, 2013, *HS2 Policy Briefing*, Centre for Cities

<sup>38</sup> Department for Transport, 2015, National Travel survey, Long distance trips within Great Britain by main mode and length: England 2010/14

<sup>39</sup> Institution of Mechanical Engineers, 2016, *Autonomous and Driverless Cars*

- This is not long in the context of HS2 - **only seven years from the expected completion of the full HS2 network**

However, it could be even earlier that autonomous vehicles become commonplace.

- Companies such as Tesla and Google aim to have **autonomous vehicles on the road by 2020**<sup>40</sup>
- Adoption by one large commercial operator would drive competition in such services and induce a rapid increase in autonomous vehicle use

It can be demonstrated that there is significant scope for travel capacity increases with the introduction of autonomous vehicles. For example:

- Typical motorways comprised of only human-driven vehicles have a maximum flow of around 2,200 per hour per lane<sup>41</sup>
- And it is estimated that a highly automated fleet could increase capacity by up to 80 per cent, indicating total lane capacity per hour of just under 4,000 cars
- The Average Annual Daily Flow of the M40 in the East Midlands in 2015 was **86,454** vehicles<sup>42</sup>, equivalent to **1,200 per hour per lane**
- This is **just over half of maximum capacity under current conditions** and **less than thirty per cent of full capacity** with the widespread use of highly autonomous vehicles

This means that there is **significant spare capacity within the road network**, which could be exploited in the event of autonomous car use becoming ubiquitous.

Much of the benefit of HS2 will be increased capacity and mobility rather than slightly shorter journey times. Autonomous vehicles will deliver increased capacity before the completion of HS2 and so its business case will suffer as ticket receipts fall. This will be exacerbated as such vehicles become a greater proportion of road traffic.

<sup>40</sup> www.Techinsider.io, 7 April 2016, *Here are all the companies racing to put driverless cars on the road by 2020*

<sup>41</sup> Pinjari, Augustin & Menon, 2013, *Highway Capacity Impacts of Autonomous Vehicles: An Assessment*, Center for Urban Transportation Research, Department of Civil and Environmental Engineering, University of South Florida

<sup>42</sup> Department for Transport, 2015, Annual Average Daily Flow

## Section 4 – Is our current approach to infrastructure spending coherent?

The UK will need to consider its approach to continued necessary deficit reduction carefully. However, it is worth reviewing the approach taken over the past six years.

- Much of the fiscal consolidation has been through reductions in capital rather than current spending
- In 2015 prices, Public Sector Gross Investment **fell by over £16 billion** between 2009-10 and 2015-16
- Meanwhile, current spending rose in real terms by **over £15 billion**
- Since the early 1990's, current expenditure has outstripped investment by around **£9 to £1**.<sup>43</sup>

That we appear to have underinvested in infrastructure (certainly compared to our current spending) does not, however, make any project inherently worthwhile.

### Opportunity cost

That HS2 is expected to cost a very large amount of taxpayers' money is a problem as there may be better uses for it. This opportunity cost arises because money spent on the relatively poor value for money HS2 cannot be spent on projects which may have stronger business cases.

- The TaxPayers' Alliance has previously suggested that the electrification programmes on suburban routes into major cities or major road and motorway improvements across the country should be prioritised ahead of HS2<sup>44</sup>
- The House of Lords' suggestion that the government has **failed to consider whether improving regional transport links may be of more benefit than HS2**<sup>45</sup>
- They particularly suggest this as transport links between North and South are already relatively good, but **East-West are relatively poorly served**

### Where we spend on transport

The case can be made that there are greater advantages to improving regional transport links in the North rather than improving a relatively well-served area.

This is further shown by total capital spending on transport by region:<sup>46</sup>

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<sup>43</sup> Office for Budget Responsibility, 2016, *Public Sector Finance Aggregates Databank*

<sup>44</sup> TaxPayers' Alliance, 2016, *Britain after Brexit: A positive vision for taxpayers*

<sup>45</sup> House of Lords, 2015, *The Economics of High Speed 2*, Economic Affairs Committee, 1<sup>st</sup> Report of Session 2014-15

<sup>46</sup> HM Treasury, 2015, *Public Expenditure Statistical Analyses 2015*,

Identifiable expenditure on economic affairs (of which: transport) by country and region	2010-11 to 2014-15 cumulative outturn - £ millions	Population 2015 (ONS)	Spending per capita (£)
North East	1,653	2,618,710	631.2
North West	5,739	7,132,991	804.6
Yorkshire and the Humber	4,150	5,360,027	774.2
East Midlands	3,021	4,637,413	651.4
West Midlands	4,007	5,713,284	701.3
East	5,348	6,018,383	888.6
London	15,605	8,538,689	1,827.6
South East	6,200	8,873,818	698.7
South West	3,293	5,423,303	607.2
England	49,013	54,316,618	902.4
Scotland	6,636	5,347,600	1,240.9
Wales	2,836	3,092,036	917.2
Northern Ireland	1,483	1,840,498	805.8

- The North East and South West, in particular, have had relatively little investment

It is also the relatively affluent who use rail travel the most

- Households in the **highest income quintile** took almost **double** the number of national rail trips per year (**43**) than the fourth quintile (**22**) and four times more than the lowest income quintile (**10 trips per year**) in 2104<sup>47</sup>
- The new Chancellor of the Exchequer, Philip Hammond, once acknowledged that rail users tend to be relatively wealthy, saying that trains are “rich man’s toys”<sup>48</sup>

It is likely that use of HS2 will reflect this.

It is arguable that spending tens of billions of pounds on enhancing the lives of some of the richest people in the country is a poor use of taxpayers’ money

- This is especially true when the primary alternative, motor travel, is subject to one of the most regressive taxes – fuel duty<sup>49</sup>

<sup>47</sup> Department for Transport, 2015, Rail Users factsheet, Rail use by household income, occupational group and region, 2014/15

<sup>48</sup> Quoted in The Daily Telegraph, 13 September 2011, *Trains “rich man’s toys” admits Transport Secretary*

<sup>49</sup> Fairhead, 2015, *Distribution of tax burdens and benefit receipts*, The TaxPayers’ Alliance

## Other considerations

### Freight

It has also been suggested that a potential benefit of HS2 would be to increase capacity for freight on the existing rail network, encouraging modal shift from road to rail.

However, the planned continued operation of fast passenger trains on the existing network will prevent operation of additional freight trains, as there will still be a massive difference in speeds between freight and passenger services. The claimed capacity benefits for freight are illusory.

### Euston

- The redevelopment of Euston Station in order to prepare it for HS2 will, according to local MP, Sir Keir Starmer, cause “decades of blight”<sup>50</sup>
- The construction work will also permanently reduce the capacity of the existing route, with fewer approach tracks and platforms. There will have to be a reduction in train services to and from Euston throughout the 7 - 8 year construction programme, and rail industry modelling also forecasts a massive reduction in punctuality and reliability throughout this period
- Euston is now expected to be finished in 2033, a full seven years after Phase One is expected to be completed
- The new Mayor of London, Sadiq Khan, has called for the redevelopment to be put on hold until less disruptive plans can be made<sup>51</sup>

The problems at Euston will either cause significant local disruption, could delay the project or could force increased use of the Old Oak Common station which is not as conveniently located for London travellers.

## Conclusion

HS2 promises to be an enormously expensive rail line that will cost taxpayers dear and benefit the relatively affluent most at the expense of those on low incomes. The benefit-cost ratio and the business case are based on assumptions which do not seem to be robust and are likely to be found wanting. There is a significant chance that the project will be undermined by future technological developments, most notably by autonomous vehicles but also by the increased access to wireless communications that is already taking place. There are good reasons to be sceptical over the propensity for HS2 to deliver greater economic growth in the North of England and any need for greater rail capacity can be delivered at lower cost.

**In summary, before any more money is wasted on this project it should be shut down and the earmarked funds should be spent on more useful projects that offer greater value for money for taxpayers.**

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<sup>50</sup> Quoted in BBC.co.uk, 15 September 2015, *Euston station HS2 plans 'should be scrapped'*

<sup>51</sup> Evening Standard, 19 May 2016, *Sadiq Khan calls for rethink over HS2 terminus at Euston*