

Transport Select Committee Inquiry on High Speed Rail Greengauge 21 Evidence

Introduction

1. Greengauge 21 is an independent not-for-profit company which carries out research and planning on high-speed rail (HSR) in Britain. Greengauge 21 has no vested interest in High Speed Two and is not seeking to be part of any direct beneficiary (construction company, operating company etc.). The company seeks to act in the national and the public interest, by carrying out research and bringing forward evidence so that a full and open debate on high-speed rail can take place.
2. Since 2008, most of Greengauge 21's research has been supported and funded by an HSR Public Interest Group which includes city councils, regional development agencies, transport authorities and rail organisations.¹ The research and policy positions developed by Greengauge 21 have been the subject of extended discussion and debate with the Public Interest Group members.

What are the main arguments either for or against HSR?

3. High-speed rail is needed to provide additional transport capacity for Britain. Evidence, in particular from Network Rail's Route Utilisation Strategy programme, shows that the rail network continues to get busier and unless action is taken the major rail routes will be overcrowded and congested by the 2020s. By 2024, Network Rail estimates that 12% of long-distance services operating on the West Coast Main Line will be carrying standing passengers to/from London Euston. There will also be serious overcrowding on commuter services on the route. This is despite an assumed programme of continuing investment to increase capacity over the intervening years. Network Rail concludes that "thereafter the WCML, particularly at the south end of the route, is effectively full and any interventions will be disproportionately expensive compared with the benefits gained."²
4. Other modes of transport – air and road – are also facing worsening congestion but cannot deliver the additional capacity needed without unacceptable environmental costs and increased carbon emissions. Travel by high-speed rail is considerably more carbon efficient than travel by car or by air. Developing a high-speed rail network is the most effective way of delivering the required increase in transport capacity.
5. While the initial driver of the need for new high-speed railway lines is capacity, the economic benefits they bring are wider and include the effects of improved connectivity between towns and cities, with improved reliability and reduced journey times. The Eddington Transport Study³ provides extensive evidence on the need for improved connectivity to build economic growth. By providing sufficient long-term capacity and improving connectivity and journey times, Britain's international competitiveness will be enhanced, particularly with direct HSR services between Britain's major cities (including London, of course) and between them and European cities such as Paris, Brussels, Amsterdam and Frankfurt and international gateway airports, including Heathrow.

¹ The Public Interest Group membership for 2010/11 comprised: Advantage West Midlands, Association of North East Councils, ATOC, Birmingham City Council, City of London Corporation, East of England Development Agency, East Midlands Development Agency, Glasgow-Edinburgh Collaboration Initiative, Great Western Partnership, Newcastle City Council, Northern Way (the partnership led by the three northern RDAs), Nottingham City/ Nottinghamshire County Councils, PTE Group, Railway Industry Association, SEStran, Sheffield City Region, Transport for London

² Network Rail, *West Coast Main Line Route Utilisation Strategy Draft for Consultation*, December 2010, p. 8.

6. The Coalition Government has spoken of the need to re-balance the national economy. This will not happen without significant policy intervention: market forces favour development in the South East. High-speed rail brings a radical re-profiling of the national accessibility map, increasing the appeal of development outside the South East. Investment in HSR creates the real possibility that private sector investment decisions over the decades ahead will lead to a re-balancing of the economy and to substantial uplifts in productivity across the English regions and Scotland and Wales.

How does HSR fit with the Government's transport policy objectives?

7. The development of HS2 was supported by all of the main political parties in the 2010 General Election, appearing in Party Manifestos.
8. A high-speed rail network has to be seen as part of the national transport system and it fits well with Government's vision for "a transport system that is an engine for economic growth but one that is also greener and safer and improves quality of life in our communities."⁴ The timescale for delivery of a national HSR network we estimate to be 30 – 35 years and this corresponds to the commitment to reduce carbon emissions by 80% by 2050. Alongside this obligation, to which HSR can make a major contribution, is the policy aim of reducing dependence on imported oil, and enhancing energy security as a consequence.
9. The role of the high-speed rail network within the national transport system is to provide for efficient longer distance journeys between urban centres and to liberate capacity for the expansion of other rail services on the existing network. With HSR in service, the existing main lines can play an expanded role in providing for regional, local and freight services. These benefits are just as much a part of the case for HS2 as are the advantages conferred by the new HSR services themselves. They represent a highly cost effective way of securing improvements in commuting conditions, with less reliance on the use of private cars – and achieving reductions in lorry miles.
10. Greengauge 21's recent report, *Capturing the Benefits of HS2 on Existing Lines*,⁵ put forward a possible post-HS2 timetable for the West Coast Main Line (WCML), to highlight the potential wider benefits of HS2. This demonstrated that the capacity relief provided by HS2 brings substantial opportunities, especially to places between London and the West Midlands that have poor rail services today, squeezed out by the non-stopping Pendolino services on the WCML. It allows for a considerable expansion of freight services on the WCML (the busiest rail freight corridor in the country) to three trains per hour throughout the day. Services at Watford, Milton Keynes, Rugby, Nuneaton, Tamworth and Lichfield would be transformed into a pattern of frequent regular interval services, allowing them to act as major transport interchanges. Substantial increases in commuting capacity into both London and Birmingham become possible, relieving what will otherwise be conditions of severe over-crowding. New and improved services would also become possible at Northampton, Stoke-on-Trent, Coventry and the Black Country. The feasibility and value of new connections to the West Coast Main Line will be enhanced, improving the case for the East West Rail link, the Croxley Link and new services over the line between Leamington and Coventry serving Kenilworth. Ambitions for services which cannot be accommodated on the West Coast Main line today because of capacity constraints – such as from Mid/NE Wales and Shropshire and Walsall – all become feasible.
11. High-speed rail stations will need to be planned so that they integrate well with local public transport services – rail, metro, tram, bus – in order to ensure that passengers can access HSR

³ Sir Rod Eddington, *Eddington Transport Study*, December 2006.

⁴ Department for Transport (DfT), *Business Plan 2011 – 2015*, May 2011.

⁵ Greengauge 21, *Capturing the benefits of HS2 on existing lines*, February 2011.

services effectively and on sustainable modes of transport. The relevant local authorities and PTEs affected by the HSR proposals will therefore need to develop long-term strategies that take into account the impact of HSR. It is quite possible that the additional volumes of passengers attracted to high-speed rail stations will improve the case for local public transport schemes that might not otherwise be viable. High-speed rail should be seen as part of the transformation of the nation's public transport networks that is needed to meet the expectations of demand growth, given the disadvantages of attempting to expand the road network to accommodate it.

12. High-speed rail can also help the aviation sector. The global connectivity of Heathrow in particular is important to the whole of the UK and to international business competitiveness. In recent years, however, Heathrow's domestic air service network has been shrinking. To access long haul destinations, northern business travellers increasingly use the nearest available hub airports such as Amsterdam Schiphol or Paris Charles de Gaulle – and the evidence is that this leads to a further worsening in the carbon impacts from air travel. With a direct link to Heathrow Airport, as is proposed by Government in the second phase of development of HS2, high-speed rail can provide the domestic connections that are currently getting squeezed out. It may be that the experience on Britain will differ from that of other countries where the introduction of HSR led to the demise (or major cut-back) of domestic air travel: in the British case, much of the air demand is already being displaced into short-haul European feeder flights because of the constraints on runway slots at Heathrow. It will be these environmentally damaging short-haul flights that will be replaced by HSR services to Heathrow. HSR will therefore re-connect Heathrow with its wider national catchment, enhancing its role as an international hub, and reducing carbon emissions at the same time.
13. There is an excellent fit between high-speed rail and the Government's wider objectives for sustainable development. Railways have the effect of encouraging more sustainable patterns of land-use development than highways. High-density – and hence sustainable – commercial and residential development is encouraged around stations in urban centres (the Kings Cross lands and Stratford City examples being two contemporaneous HSR examples in Britain), whereas the construction of new roads (and airport expansion) virtually without exception encourages suburban and edge-city development, leading to pressure for incursions into the green belt and other protected and vulnerable greenfield sites.
14. The last Government's transport policy was very much influenced by the Eddington Transport Report. Greengauge 21 notes that the Transport Select Committee considered the case for high-speed rail in 2007 in the light of the Eddington Transport Report.⁶ Contrary to the understanding of most commentators who had presumed, based on an interpretation of his report, that he was opposed to HSR, Sir Rod Eddington made it very clear to the Transport Select Committee that he was in fact in favour. His report, he explained, was sceptical of new technologies such as Maglev, which at that time was the subject of a significant private sector lobbying effort. He had visited the Maglev system in China and rejected it for Britain: he saw it as being far too risky. But Sir Rod's evidence to the Committee was that high-speed rail would have a strong business case in the London/Birmingham/Manchester corridor, and should be progressed.⁷

Business case

15. The HSR business case prepared by HS2 Ltd is based on standard methodology and assumptions used across the transport sector and by the Department for Transport for all major transport schemes. As such, Greengauge 21 considers the forecasts and appraisal assumptions to be (appropriately) cautious.

⁶ Eddington, *op.cit.*

16. The HS2 Ltd projections of passenger demand for HS2 are based on forecasts of background growth in long-distance rail trips of 95% between 2008 and 2043, or 1.9% per annum.⁸ This is considerably lower than historic growth in long-distance rail trips, which has averaged 5% per annum since 1995 and shows no sign of market saturation, unlike long-distance car travel which has been relatively static for the last decade or so. On the WCML, the number of long-distance passengers travelling to/from London is forecast to increase by 127%, or 2.3% per annum. This is below the mid-point of the range of forecasts prepared by Network Rail in its draft West Coast Main Line Route Utilisation Strategy⁹ which suggests that that the WCML inter-regional market will grow at between 1.1% and 5.0% per annum up to 2024 (under different scenarios). Growth rates on individual city-to-city flows to/from London are forecast by both Network Rail and HS2 Ltd to be somewhat higher: for example, London-Manchester demand is forecast to increase by 3.0-3.2% per annum by Network Rail and by 2.6% per annum by HS2 Ltd.
17. With HS2 services in operation, HS2 Ltd forecasts that it will carry 150,000 passenger trips per day in 2043, a net increase of 53,000 passengers/day on the British railway network. We consider these forecasts to be conservative, and Greengauge 21's own forecasts suggest much higher demand is possible: for example, we forecast approximately 250,000 daily trips on a London-Birmingham-Manchester HSR network¹⁰ by 2055 (HS2 Ltd assumes that there will be no growth anywhere after 2043).
18. Greengauge 21 considers the economic case for high-speed rail in Britain to be strong. The Government estimates that the economic benefits of the first phase HS2 scheme will exceed costs by a ratio of 2.0:1 (or 1.6:1 excluding 'wider impacts') – a level judged to be 'good' under DfT criteria.
19. Greengauge 21's own work from 2008/09, using assumptions consistent with standard DfT methodology – and carried out by the consultants now responsible for forecasts and appraisals for HS2 Ltd – estimated a benefit:cost ratio for a comprehensive national high-speed rail network of 3.5:1.¹¹ While we did not assess the business case for a scheme identical to HS2, a high-speed railway line from London to Birmingham and Manchester was assessed to have a benefit:cost ratio of 2.9:1 (excluding wider impacts). Overall, we believe the HS2 Ltd demand forecasts and economic appraisal to be consistent with current accepted practice and prudent in approach, but cautious.
20. Greengauge 21 has considered the argument put up by anti-HS2 campaigners that the journey time benefits are overstated because business travellers work on trains and so time savings achieved by HS2 have reduced value. We agree with the point that the treatment of travel times is simplified. But Greengauge 21 countered this argument,¹² explaining that the objectors' thesis ignores the possibility that for those choosing HSR who would not otherwise travel by car or by air, the creation of HSR creates opportunities to work which in general are not otherwise available at all. It has also been demonstrated by HS2 Ltd that the combination of effects of the simplified

⁷ House of Commons, *Oral Evidence given by Sir Rod Eddington, Government Specialist Transport Advisor*, 2 August 2007.

⁸ HS2 Ltd, *Demand for long-distance travel*, April 2011.

⁹ Network Rail, *op.cit.*

¹⁰ SYSTRA/MVA (for Greengauge 21), *High-Speed Rail Development Programme 2008/09 – Principal Consultant Final Report*, October 2009, p. 46. Unfortunately, demand forecasts were not prepared for a network exactly comparable to the proposed HS2 line.

¹¹ Greengauge 21, *Fast Forward: A high-speed rail strategy for Britain*, September 2009.

¹² Greengauge 21, *Fresh light on a key issue – why it's worth saving time for business travellers*, 10 March 2011 (published at <http://www.greengauge21.net/blog/fresh-light-on-a-key-issue-why-it%E2%80%99s-worth-saving-time-for-business-travellers-2/>).

treatment of travel times and the ability to work while travelling does not weaken the case for HSR – if anything the economic case is strengthened.¹³ The HS2 Ltd response also points to the issue of crowding levels and its impact on passengers' productivity while travelling. Without HS2, crowding levels on West Coast Main Line services will worsen, and passengers will find it impossible to work while travelling.

21. While the economic case is very important it does not look specifically at effects on national productivity, or GVA (gross value added - a measure of economic output). Work carried out for Greengauge 21 by KPMG¹⁴ drew on the limited data available on GVA performance at a local level to estimate the relationships between accessibility and productivity. The KPMG analysis suggested that a comprehensive national network of high speed services could boost Britain's annual GVA in 2040 by up to £29bn, including the impacts of re-using the capacity released on existing lines. The service sector and knowledge-based businesses would particularly be expected to gain from HSR. Additional annual economic impacts on this scale could increase annual tax receipts by between £6 and £10 billion in 2040 (in 2010 prices). On this basis, HSR is an investment that delivers a good return to the Treasury and the taxpayer.
22. New high-speed rail stations can stimulate economic development and regeneration. Research carried out by Greengauge 21¹⁵ on international high-speed rail experience suggests that effects have been positive, but not uniformly so. Much depends on the relevant local authority's appetite for redevelopment and regeneration to make the most of the opportunities high-speed rail creates. The European evidence suggests that HSR stations need to be planned as part of city-wide masterplans and well integrated with local transport networks.
23. Alternatives to the national HSR network that rely on upgrades to existing lines and operation at broadly existing speeds fail to provide much of the benefit of high-speed rail and should be rejected. 'Rail Package 2', the alternative package of rail upgrades analysed by Atkins and supported by many of those opposed to HS2, only delivers an additional three peak train paths per hour (compared with up to 16 train paths provided by HS2) and does not improve services to the intermediate centres between Birmingham and London such as Northampton and Milton Keynes. Rail Package 2 also worsens services in some cases (Rugby loses its fast trains to Euston, Coventry loses one of its fast trains to London Euston), impacts adversely on the reliability of the WCML, provides no extra capacity for railfreight and would subject passengers and freight consignors to another line-of-route upgrade programme with high levels of disruption.¹⁶

The strategic route

24. Greengauge 21 supports the Government's proposals to develop a high-speed rail network in phases, and for HS2 to be the first stage. According to our research, there is an excellent case for a national high-speed rail network to deliver economic benefits and improve connectivity across Britain. We proposed a full national network in the *Fast Forward* strategy published in September 2009.¹⁷ Ultimately, the national HSR network should link London, each of the eight 'core cities' in England (Birmingham, Bristol, Leeds, Liverpool, Manchester, Newcastle, Nottingham and Sheffield), together with Glasgow, Edinburgh and Cardiff. It should also have direct connections to Heathrow, to HS1 and to the classic network so that many more places can benefit from direct HSR services.

¹³ Department for Transport/HS2 Ltd, *Economic Case for HS2*, February 2011, p. 51.

¹⁴ Greengauge 21, *Consequences for Employment and Economic Growth*, February 2010.

¹⁵ Greengauge 21, *High speed trains and the development and regeneration of cities*, June 2006.

¹⁶ Atkins, *HS2 Strategic Alternatives Study, London – West Midlands Rail alternatives – update of Economic Appraisal*, Appendix A, February 2011.

¹⁷ Greengauge 21 (*Fast Forward*), op.cit.

25. In 2007, Greengauge 21 published a report¹⁸ setting out the reasons why there is a strong case for the first stage of the HSR network to be a new route between London and the West Midlands, and these include the capacity constraints on the WCML, the route expected to have the most severe capacity problems within the next 15 years.
26. The Government's proposed configuration of the route for HS2 is welcomed. Our own research highlights the importance of high-speed railway lines serving city centres directly, as achieved by the Government's proposals for both London and Birmingham. This allows passengers to access HSR easily by public transport and other sustainable modes, and has the potential to deliver economic regeneration benefits in the city centres. The proposed route rightly, in our view, does not incorporate intermediate stations between the London and West Midlands areas; to do otherwise would compromise local planning policy and guidance, and threaten unwanted large scale development across rural areas.
27. The proposed connection between the high-speed rail network and Heathrow Airport is welcomed, although Greengauge 21 considers that a through station at the airport allowing services from the Midlands and the North to connect to the South East and South West would provide a more effective solution than a simple spur. Greengauge 21's February 2010 report *The Heathrow Opportunity*¹⁹ sets out how a high-speed rail connection to Heathrow could be developed in a way that delivers best value for money and provides wider benefits across the South East, South West and South Wales.
28. Greengauge 21's Public Interest Group has consistently highlighted the importance of operating direct HSR services between cities in the Midlands and the North of England to continental Europe, and we welcome the proposed direct connection between HS2 and HS1. Such as link should allow better use to be made of the currently under-used Stratford International station: these opportunities have not yet been examined by HS2 Ltd.
29. While there are sound reasons in the first instance for the Government to seek Parliamentary Powers for HS2 rather than for the more extensive Y-shaped network, Greengauge 21 urges that consideration is given to ensuring that along with the powers sought for HS2 there is an appropriate commitment to the development of a 'truly national HSR network', as set out in the Coalition Agreement. This may be achieved through, for example, a National Policy Statement for transport infrastructure, through appropriate wording and provisions in the Parliamentary Bill for HS2 and through appropriate arrangements under the rail industry's forward planning programme.
30. One addition to the currently proposed HS2 scheme that Greengauge 21 considers would be of substantial value is a connection to the existing Birmingham to Derby railway and onwards to the Midland Main Line. This short connection would allow through high-speed services to operate to London from the East Midlands, Sheffield, Leeds and Newcastle, further widening the benefits from the first stage of HS2 and ensuring that cities in the eastern half of the country do not need to wait until the second phase to achieve the benefits of HSR. Sheffield and Derby would have their London services speeded up by half an hour – and this could be achieved when HS2 opens in 2026.
31. There should be a long-term high-speed rail strategy for the delivery and implementation of the national HSR network. There are parallels with the planning and development of the national motorway network from the 1950s to the 1980s. In order to ensure that Britain's HSR network is developed and implemented effectively, an organisation needs to be tasked with long-term planning of HSR, developing a national long-term strategy that addresses strategic network issues

¹⁸ Greengauge 21, *High Speed Two – a Greengauge 21 proposition*, June 2007.

¹⁹ Greengauge 21, *The Heathrow Opportunity*, February 2010.

and ensuring it is integrated with local and regional spatial development plans, local transport, infrastructure and communication networks. This needs to take place alongside the detailed route planning and development work currently being undertaken by HS2 Ltd.

Economic rebalancing and equity

32. The development of a high-speed rail network has a valuable role to play in redressing the north-south divide, by better connecting the cities of the Midlands, the North and Scotland with each other as well as with London. A recent study by Chen and Hall on the impact of the Intercity 125/225 trains on Britain's economic geography²⁰ found that where enhanced rail services brought cities within a two-hour journey time from London, cities' economic competitiveness was improved, unemployment rates were arrested and average incomes increased. The researchers concluded that reducing rail journey times had a positive impact on developing local knowledge-based service economies, as long as this was accompanied by local strategies to capture the development opportunities. This economic re-balancing would contribute to addressing the inequality of opportunity, prosperity and well-being visible in the current north-south comparative statistics. In addition, the economic modelling carried out for Greengauge 21 by KPMG²¹ forecast that a national high-speed rail network would deliver larger economic impacts in the north of the country with the largest productivity and employment gains in Yorkshire and the Humber, Scotland, the North East and North West and East and West Midlands. HSR has the potential to help to spread prosperity outside beyond the South East and contribute to closing the North-South divide.
33. While the effects of HSR on the tourism sector have not yet been studied in any detail, so far as we are aware, it is clear that HSR could contribute hugely to relieving the concentration on London and spread international visitors to other parts of the country, helping in the process to create new opportunities in this significant employment sector.
34. Greengauge 21 notes that the Government's commitment of £750m to develop plans for HS2 has not been at the expense of other rail investments that also offer value for money. Electrification and regional schemes such as the Northern Hub are natural complements to high-speed rail, not alternatives to it.
35. Concerns have been expressed over whether passengers will be able to afford to travel by high-speed rail or whether it will be a transport system suitable only for wealthy business travellers. However, Greengauge 21's business case analysis, in common with HS2 Ltd's, is based on assumptions that fares paid for HSR travel will be no higher than fares paid for travel on conventional rail services. In today's prices, this means that the average fare paid for a single journey could be £40-45, which is the average fare paid today for journeys that will be typically on offer in future on high-speed rail.²² As with all competitive transport systems, much lower fares, perhaps £20-25 one-way, would most likely be available on HSR services for those willing to forgo some flexibility on travel times or able to take advantage of discounts such as from railcards.
36. Rail usage is not restricted to people with higher incomes,²³ as some have argued. Even those on lowest incomes make a significant number of rail journeys, with little difference between rail usage in the lowest 20% income band and the next two income groups. With fares for high-speed rail expected to be (on average) at the same level as those on the existing rail network, we can

²⁰ Chen, C.-L., Hall, P. *The impacts of high-speed trains on British economic geography: a study of the UK's InterCity 125/225 and its effects*. J. Transp. Geogr. (2010), doi:10.1016/j.jtrangeo.2010.08.010

²¹ Greengauge 21 (*Consequences*, 2010), *op.cit.*

²² Greengauge 21, *High-Speed Rail: Fair and Affordable*, October 2010, p. 10.

²³ HS2 Ltd, *op.cit.*, p.4.

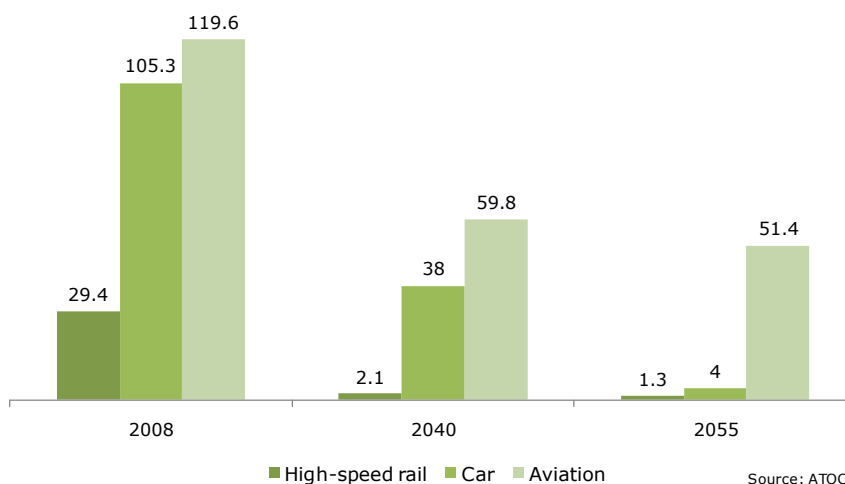
expect the same broad level of usage, right across the social spectrum and across all income levels.

- 37. HSR can also make a positive contribution to social inclusion by offering high standards of accessibility, including to the mobility-impaired, connecting seamlessly with local transport networks and offering a reliable, safe and high-quality passenger experience at an affordable price. As with today’s rail services, HSR should be available to all, including those who for whatever reason are unable to drive or are reluctant to use short-haul air services.

Impact

- 38. HSR will make a valuable contribution to a low-carbon transport system. An average HSR trip generates one-third of the carbon emissions of a comparable car journey and one-quarter of the carbon emissions of a trip by plane. As Britain’s electricity generation supply becomes progressively decarbonised in future years, the environmental advantages of HSR travel will increase, as Figure 1 below illustrates.²⁴ Greengauge 21’s work suggests that a HSR network could result in a significant reduction in carbon emissions, of up to one million tonnes of CO₂ per annum.²⁵

Figure 1: Carbon emissions per passenger-km by mode



- 39. HS2 Ltd’s work on this area is relatively cautious, focusing only on the impacts from the first stage of HS2 (which does not deliver the full potential air-rail mode shift) and not incorporating decarbonisation of the electricity supply.

Conclusion

- 40. Demand for rail travel continues to exhibit a trend apparent since the mid 1990s: it is out-pacing growth on the road sector. But the scope to accommodate ever more passengers through measures such as train lengthening is reaching an inevitable limit. Without the capacity uplift that HS2 provides, there can be expected to be widespread crowding on rail services, unless fares are increased substantially (perhaps doubled)²⁶ to choke off demand.

²⁴ ATOC, *Energy Consumption and CO₂ impacts of high-speed rail: ATOC analysis for Greengauge 21*, April 2009.

²⁵ Greengauge 21 (Fast Forward), *op.cit.*, p.22.

²⁶ HS2 Ltd, *op.cit.*, p.10. A 2% annual increase in real fares would be required to choke off demand without new capacity.

41. A national high-speed rail network will improve Britain's economic productivity and international competitiveness. It will particularly strengthen the economies of the Midlands, the North, Wales and Scotland, where there is most need, and provides the potential for inner-city regeneration around the new stations.
42. The costs of the project should be subject to continuing challenge, and Greengauge 21 believes there is scope for some reduction and efficiencies. But the overall costs involved are manageable and represent no more than a continuation of the current levels of capital spend on the rail network which will otherwise subside to much lower levels post 2014.²⁷
43. High-speed rail has been under serious study in Britain for 10 years. The evidence points consistently towards the need for HSR and the considerable wisdom of proceeding with its development. Delaying now will jeopardise progressing HS2 through the statutory consultation and parliamentary phases with no good reason.

Greengauge 21

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²⁷ New Civil Engineer, 21st April 2011, p.19 quotes David Higgins, CEO Network Rail: "The next three to four years will be our peak capacity. We'll be spending £3.5bn a year on major projects. In 10 years we won't be."