

# BRITAIN'S RAILWAYS



MUCH MORE FOR MUCH LESS

***rail***future



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Front cover picture of Siemens Desiro electric train at Northampton by Philip Bisatt  
Rear cover picture of Glasgow by Network Rail

The Railway Development Society Limited  
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[www.railfuture.org.uk](http://www.railfuture.org.uk)

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## INTRODUCTION

Railfuture is Britain's only completely independent voice on railway development. We are not affiliated to or supported by any political party, trade union or by private industry. We receive almost no funding from any source other than our members.

We are convinced that in the current economic climate rail travel and rail freight represent wise investments for the future of this country. We are pro-rail but not anti-road. We believe that all transport modes have their place in a vibrant, modern, integrated, environmentally efficient market economy.

We believe that investment can be made sensibly and cost-effectively to achieve:  
*Britain's Railways – Much More for Much Less.*

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## COSTS

### INDUSTRY COSTS – MYTH AND REALITY

We need to emphasise that there is a significant difference between the gross and net costs of the rail industry after allowing for money paid to government from Corporation tax, Industrial Buildings tax, fuel tax, Community Infrastructure Levy, VAT, Uniform Business Rates and income tax from a combined workforce of about 150,000 people, together with premium payments and revenue sharing agreements paid by the train operating companies. Investment should be excluded from annual costs since rail projects have a very long payback period.

### WHOLE LIFE COSTS

Must be considered equally with capital costs.

### FUNDING ENHANCEMENTS

The previous government's preference for funding rail enhancements from interest-bearing loans rather than direct grants, as would normally be the case with road improvements, places a significant burden on the rail industry with Network Rail now having to pay over £1bn a year in interest charges. The overall cost of the rail industry is therefore strongly influenced by the previous government's chosen method of funding.

### NEW FUNDING METHODS

Better ways of funding rail and light rail investment must be found. The development of Tax Incremental Funding (borrowing against higher property values following infrastructure enhancements) could provide a way forward, as could the encouragement of initiatives like Evergreen 3 facilitated by longer dynamic franchises. The formation of stand-alone companies to attract private capital and build and operate large infrastructure projects like High Speed 2 should be actively pursued.

### TRANSPORT TAXATION

In principle, transport taxation should be aimed at discouraging use of environmentally damaging modes while encouraging the least damaging. Allowing for inflation, the lower cost of cars and more fuel-efficient engines, the real cost of motoring has fallen by 17% over the past 30 years, and the cost of flying, aided by unsustainable tax concessions, has fallen even more while rail fares have increased by

49% in real terms over the same period. Clearly, there is something seriously wrong with our current tax system. The road fuel tax escalator has been all but abandoned and HGV excise duty had been frozen since the year 2000, having been dramatically reduced as an ill-advised response to the fuel tax protests at that time.

## AVIATION

Allowing for radiative forcing, the effect of emissions at high altitude, aviation is unquestionably the most environmentally damaging transport mode per passenger km. In spite of this, aviation fuel remains tax free and the aviation industry is zero rated for VAT. This enables it to reclaim an estimated £2bn of input taxes from the Treasury each year whilst it pays nothing. Even private executive jets enjoy this privilege. As a first step to establishing a more equitable situation we would suggest the industry should become exempt from VAT, which would mean it could no longer reclaim input taxes. In the absence of an aircraft carbon tax, above-inflation increases in airport passenger duty should be applied in line with rail fares.

In contrast to aviation, it should be noted that the rail industry pays VAT at the standard rate on everything except fares income. Industrial buildings tax is applied to such structures as tunnels, viaducts and embankments and the community infrastructure levy will increase the cost of rail enhancement projects such as the rebuilding of Euston station.

The proposed road fuel tax stabiliser would be both environmentally and economically damaging since, over time, the price of oil can only increase. In effect, inflation would reduce the cost of motoring in real terms still further, road congestion would increase and the Treasury would see tax revenue fall at a time when the economy can ill afford tax concessions.

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## INFRASTRUCTURE INVESTMENT AND ELECTRIFICATION

### INVESTMENT

This should aim to improve efficiency and reduce costs. For example, modern signalling increases capacity and is less labour intensive. Raising line speeds to shorten journey times makes more productive use of rolling stock by reducing turn back times. Wherever possible, enhancements should be combined with renewals rather than like for like renewals.

For example, when the flat crossing at Newark falls due for renewal, this would provide the opportunity to replace it with a flyover which would increase capacity on the East Coast main line and the Nottingham-Lincoln line and raise the line speed on the main line to 125mph. This would save energy by removing the need for trains to reduce speed just to negotiate the present crossing.

We would urge a reassessment of the Thameslink scheme, in particular the need for automatic train operation in the core area. Will automatic train operation guarantee a flawless service? The core area covers a relatively short distance, and taking into account the flat junctions and service difficulties south of Blackfriars, can the level of investment proposed in such a limited automatic train operation installation be cost-effective? What thought has been given to route structure, so do we really need 24 trains per hour? We believe that a conventional signalling solution would be more than adequate and would represent a considerable saving in project costs.

### ELECTRIFICATION

This is essential for a number of reasons. Most importantly, the rising cost of oil will soon begin to make diesel traction less and less competitive. Electrified railways can provide a vital transport network that is not reliant on imported energy, particularly with the planned expansion of renewable energy in mind. It

is noticeable that the Department for Transport does not yet seem to acknowledge the imminent danger of oil cost escalation.

That apart, the benefits of electrification are too important to ignore and include more efficient use of energy, lower carbon emissions, greater reliability and availability, lower maintenance costs, enhanced performance and shorter journey times compared to diesel powered trains. However, there remains an urgent need for more rolling stock and new diesel trains will be necessary in the short to medium term, pending extension of the electrified network. These new diesel trains would therefore need to be made easily convertible to electric operation when needed, and we note that Bombardier is already working on such a project.

We believe that the Great Western Electrification should proceed as planned but in an affordable phased programme. The first phase to be wired should be limited to an expanded Crossrail, taking trains out to Reading, Newbury and Oxford (see our later comments regarding the Crossrail project). We would also advocate a modest first phase extension of electrification on the Midland Main Line from Bedford to Kettering and Corby and the incorporation of Corby services into Thameslink. The proposals to electrify lines in the North West should also proceed as the operational and cost advantages more than justify these projects.

We support the intuitive and imaginative approach taken by Transport Scotland to well-managed, phased electrification of key lines, particularly in the Edinburgh to Glasgow axis.

## INFILL SCHEMES

Electrification should be planned so that efficient use of available resources is maximised. For example, fill-in schemes such as Gospel Oak-Barking and Ashford-Hastings could be operated simply by extending existing electric services. This would free up diesel units for use elsewhere. In some cases, few, if any new trains would be required. Making use of currently unused trains, such as the class 508s, would minimise the cost of such electrification schemes, e.g. the Uckfield line,<sup>β</sup> which would also cascade valuable modern diesel units for use elsewhere. A rolling programme for electrification is urgently needed and, like rolling stock acquisition, continuous extension of electrification produces cost savings and maintains essential skills.

## CONGESTION RELIEF

The redevelopment schemes for Birmingham New Street and Reading represent sound investment to relieve congestion and encourage rail use. We would also urge the start of the Northern Hub scheme in Manchester for the same reasons as early as possible in Control Period 5 which commences in April 2014.

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# NETWORK DEVELOPMENT

## REOPENINGS

We would advocate the immediate study of closed and mothballed routes, building on the recent Association of Train Operating Companies report, to assess their economic viability for reopening to passenger and freight operation. Part of this study could include the invitation of private companies to undertake the work and then operate and maintain the routes with suitable reimbursement. Some routes may lend themselves to operation by Heritage Line groups who should be given the opportunity to submit business cases.

## ENVIRONMENTAL SERVICE DEVELOPMENT

Immediate measures to cut costs should include the cancellation of the Luton-Dunstable busway and an invitation to private industry to develop the route for light-rail operation or tram-train conversion.

A major review should be undertaken to consider other urban connector routes for similar treatment where practicable and where value for money can be demonstrated.

## CROSSRAIL

Serious and immediate consideration should be given to extending Crossrail services to Reading, Oxford and Newbury in the west, to Chelmsford and Southend (Victoria) in the east, and to Ebbsfleet in the south-east. This would greatly enhance the value for money credentials of this new line as a true RER\* type regional service, rather than a somewhat expensive metro.

\* Réseau Express Régional (Regional Express Network)

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## TRACTION AND ROLLING STOCK

### NEW TRAINS

Follow-on train orders for existing designs will always be more cost effective than development of unique new trains such as the bi-mode intercity express programme and the proposed inflexible fleet of fixed formation 8 or 12 car trains for Thameslink services, for which no suitable maintenance facilities exist. Thus the cost is further inflated by having to build dedicated facilities. A more cost-effective solution for the latter would be of a follow-on order for an updated version of the class 377, many of which are already in service on this route and are also used in large numbers on neighbouring Southern services. Existing maintenance depots would also be able to service these trains in 4 and 8 car formations. Further cost savings would be achieved by not running fixed 8 or 12 car formation trains in the off-peak periods.

### LONG-TERM PLANNING

This is essential in order to save money. Interruption of production lines causes cost increases and skills may be lost as a consequence. The 'feast and famine' rolling stock procurement that characterised the early years of privatisation and which caused factory closures and job losses must be avoided. Sustained levels of train production should be aligned to a rate measured to maintain the average age of the train fleet at acceptable levels. It would also give the UK a much better chance to break back into the international rolling stock market.

### QUICK WINS

Immediate measures to cut costs should include cancellation of the intercity express programme and its replacement with off-the-shelf designs instead. For example, although not in current production, the class 180 Adelante coach body, manufactured by Alstom, would make an ideal replacement for the British Rail mk3 coach and provide the same route availability. This would avoid the cost of infrastructure alterations that would have been required for operation of the IEP. The class 180 coach body could be married to the Bombardier Ecco Flex bogie in a joint venture with Alstom to produce a high quality lightweight intercity coach at much lower cost than the proposed 26 metre long IEP vehicles. New trains formed of such rolling stock could be powered by off-the-shelf locomotives such as the Bombardier Trax design, modified to comply with the UK loading gauge.

There is considerable surplus rolling stock available which could be utilised at a huge saving over and above new build. For example, there are a number of mk3 coaches surplus to requirement in the Irish Republic which could be used after simple and relatively low cost re-gauging.

The cost of major projects like Thameslink and Crossrail could be reduced if a common train fleet (such as an updated version of the Bombardier class 377) was used.

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# FREIGHT

## A SUCCESS STORY – BUT MORE TO COME

Rail freight is one of the great successes of the privatisation of the rail network. This success has been a fairly long evolutionary process which, among other investments, has seen the building of a series of rail-served distribution terminals. A network of sustainable intermodal freight train services for both international trade and domestic distribution has developed to serve these terminals. Much of the capital needed for this has been privately provided. The next stage of this privately funded development faces great difficulties as it confronts the need to create terminals in the south east around London, the largest national market. We appreciate the need for the local interest to be generally paramount in the planning process but now and again the national interest must over-ride local interest. The need for intermodal distribution terminals in the London area is one such case and we urge the Government to be active in providing the necessary planning procedures to enable the further development of privatised rail freight. This will bring additional benefits of rail freight to the nation in the form of reduced carbon emissions, less road traffic over long distances, the discipline of rail timetables to freight movement. The need to spend additionally on extra road capacity will be avoided in the short to medium term.

Rail's great strength is 'volume and velocity', so we further recommend that the planned national rail strategic freight network be developed to its fullest extent to take advantage of this attribute. This will enable many more freight trains to be operated particularly to/from the ports and between existing and new terminals. For the relatively small amounts of national investment being planned, this rail freight network will be able to absorb increases in the amount of freight being carried and for the short/medium term minimise or avoid expenditure on much more expensive road capacity enhancements, as for example the 21 miles of the A14 between Cambridge and the A1M near Huntingdon. This short piece of road will cost £1.3bn, compared to the £291m for capacity enhancements for the entire length of the parallel railway, much of which is already spent.

## ROUTE ENHANCEMENT

Continued investment to enhance the loading gauge on strategic routes together with longer freight loops and by-pass lines will improve the efficiency and competitiveness of rail freight to the benefit of the nation as a whole.

## CONTINENTAL FREIGHT

Active steps should be taken to encourage the use of the Channel Tunnel for direct freight movements. The tunnel is an asset which is severely under-used for freight traffic.

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# FRANCHISING, INDUSTRY STRUCTURE AND ORGANISATION

## INDUSTRY STRUCTURE

Overall the industry is still too fragmented and leaderless. There are too many contractual interfaces leading to high legal and consultancy costs. Incentives to encourage closer working relationships are needed. As a first step to fill the leadership vacuum, Railfuture would like to see a National Rail Council created to bring together Association of Train Operating Companies, Rail Freight Operators Association, Rail Safety and Standards Board, Office of Rail Regulation, Network Rail, Passenger Focus, London TravelWatch, Passenger Transport Executive Group, Transport for London, Department for Transport, Heritage Railway Association, Transport Scotland and the Welsh Assembly Government. Whilst the council should be based on statutory provision, it should not be a QUANGO but self-financing through modest membership fees paid by all members. The initial role of the council would be to represent all sectors involved in the rail industry and to act as a centre of information and best practice. However

its role could be expanded later by mutual agreement. It might also be a possibility that the British Rail residuary and property boards functions should eventually come under its control.

We would also suggest that the Rail Accident Investigation Board, along with the air and maritime equivalents, be placed under the jurisdiction of a single autonomous UK-wide National Transport Safety Agency.

## COMPETITION

Greater emphasis should be placed on the encouragement of open access operators to further develop real competition and cultivate a real spirit of entrepreneurial development.

## NETWORK RAIL STRUCTURE

Among changes to Network Rail governance, annual bonus payments should be determined by an independent body such as the Office of Rail Regulation. Consideration should be given to restructuring Network Rail into a small (executive) National Board and an Operational Board. Below the Operational Board, create fully autonomous regions such as for Scotland and Wales, etc. Ensure that train and freight operators have an adequate but NOT a controlling say in management. Place work where it can best be handled, in-house or with the private sector.

## ASSOCIATION OF TRAIN OPERATING COMPANIES

We believe that the Association of Train Operating Companies (as the representative body of franchised operators) should not be involved in the running of industry-wide operational services. Thus, Railfuture would strongly recommend that the Rail Settlement Plan Ltd, Rail Staff Travel, Railcards and the National Rail Enquiries Service be placed into a streamlined single autonomous Rail Services Agency within the Office of Rail Regulation. We also question the policy of the Association of Train Operating Companies limiting full membership to franchised operators and effectively relegating Open Access Operators to second class associate membership. We would advocate that the Association of Train Operating Companies be placed on a statutory footing to ensure full and equal representative membership for all passenger operators.

## FRANCHISING

The franchising system needs to be simplified and Railfuture will be responding separately and comprehensively to the Department for Transport consultation. However, some brief initial thoughts are: longer franchises to encourage investment and entrepreneurial flair. Perhaps fewer franchises would produce economies of scale where synergies exist. For example, Southern and South Eastern and Northern with TransPennine, could be combined into regional franchises without compromising competition. Regionally aligned franchises could be identified with their own liveries, as with ScotRail.

## PREMIUM PAYMENTS

While we would welcome longer franchises, premium payment agreements will become unworkable as it will be impossible to predict economic performance over such long periods in advance. Perhaps premium payments should be replaced with profit sharing agreements with Network Rail rather than the Department for Transport. This would help to establish a much needed incentive for Network Rail to work more closely with the train operating companies and government would benefit from a reduction in the need for grants paid to Network Rail. Longer franchises should be accompanied by changes in scope, for example stations should be let on the basis of a full repairing lease and train operating companies should be encouraged to procure rolling stock themselves.

## PUBLIC PERFORMANCE MEASURE

The manner in which the public performance measure is calculated needs to be changed so that punctuality at intermediate station stops and missed connections is included. This would help improve



cooperation between train operating companies and avoid padding out the timetable on the last lap simply to register an on-time arrival even though a train may have been late at the preceding stops.

## COMPENSATION

Under the present industry structure, the need for compensation to be paid to train operating companies when services are disrupted inflates the cost of enhancements, even when the benefits from the work are mutual. Some form of financial ties between the train operating companies and Network Rail should be devised to reduce the need for compensation.

## RAIL REPLACEMENT BUSES

Use of these is costly as most rail passengers will decide not to use rail at times when services are replaced by buses. Ticket checks on these buses are often not carried out and some passengers could be travelling without a rail ticket. Alternative rail routes should be used instead and this may require closer cooperation between train companies and Network Rail.

## DEVOLVED GOVERNMENTS

Railway policy and franchising in Scotland and Wales should be fully devolved. If Network Rail were to be divided into operationally autonomous regions as we have already suggested, the regions in Scotland and Wales should receive their policy direction and funding from the respective devolved governments. The quid pro quo must of course be that each devolved government assumes full budgetary responsibility.

## FARES, TICKETING AND INTEGRATION

*Simplification, Integration, Smart Tickets.*

The national rail fares structure is still too complicated and customers still feel unsure as to whether they are getting the best deal possible. This partly results from the close relationship between the seller of fares and railway companies. Our suggestion of splitting rail fares and ticketing from Association of Train Operating Companies and into an independent agency should go some way to alleviating this. However more work is needed to ensure a fares system that is transparent and fair to all, within a privatised commercial environment.

Much more work is needed to ensure closer integration of rail, coach, tram and bus fares. Similarly we believe that rail fares should be far more modally integrated to include for example cycle hire or even car hire at destinations. Technically there is no reason why domestic air travel should not form part of an integrated fares and ticketing package with rail, particularly if an integrated smart ticketing system is introduced.

More emphasis needs to be given to effective revenue protection. Whilst gating can contribute to such protection in an urban context, there is no substitute for thorough on-train inspection.

Train companies need to look at measures to encourage off-peak leisure travel rather than penalise passengers with excessive fares. Train companies also need to come up with innovative pricing to encourage travel outside the peaks to relieve congestion.

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## HIGH SPEED 1

### COMPETITION

It is essential that High Speed 1 be fully exploited. To this end the operational and safety aspects of the Channel Tunnel should be widened to allow operation of services by other operators to a greater variety of destinations. As a first step Deutsche Bahn should be permitted to operate services into St Pancras

International and encouraged to target popular destinations such as Cologne, Frankfurt, Munich and Berlin. Eurostar should also be encouraged to exploit the liberalisation of the European rail market to compete and serve a greater variety of destinations. Similar encouragement should be given to operators in the Netherlands, Switzerland and Italy to serve London. This should be seen as a precursor to a comprehensive array of direct destinations from London.

## BEYOND LONDON

A review should once again be made of the obstacles to through services from north of London via High Speed 1 to European destinations. Services from the European mainland to places like York and Edinburgh would also benefit the UK tourist industry. This should also be taken in context with the planning for High Speed 2.

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## HIGH SPEED 2

### HIGH SPEED RAIL

Railfuture is concerned about the head-long rush into the advocacy of High Speed 2 before all possible improvements have been made to the classic network.

Planning for High Speed 2 should continue but construction deferred pending an independent value for money study which should also consider the most cost-effective routes to both the North West and the North East, and examine the pros and cons of connections to Heathrow, given that most domestic flights to and from London do not go via Heathrow. We are mindful of the initial findings and on-going study by Lord Mawhinney. Congestion relief and connectivity with the existing rail network must be considered as the primary function of High Speed 2.

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## APPRAISAL

### NEW APPROACH TO APPRAISAL

Recent and proposed changes to New Approach to Appraisal could boost the business case for rail investment. These changes should include lower values for small time savings for motorists, removal of road fuel tax revenue from appraisal and a higher price for carbon. The environmental benefits of rail over roads and aviation will need to be emphasised, particularly to the Roy McNulty review. The current Optimism Bias at 66% also needs to be reviewed as it could jeopardise the prospects for scheme approval and act as an inducement to inflate project completion costs.

### VALUE FOR MONEY

The Credo Group study for Invensys Group also needs to be given the widest consideration since it found that investment in railway signalling and rolling stock produced the best value for money of any transport investment, including motorway widening, and procured more long-term jobs than like for like investment in roads.

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## SAFETY

### HEALTH AND SAFETY

The Roy McNulty review should also consider the influence that the Disability Discrimination Act 1995 and health and safety legislation has had on rail industry costs. A review of the work of the Health & Safety Executive is currently taking place and this would seem an appropriate time to raise this matter. As

an example, when John Armitt was Network Rail Chief Executive he drew attention to the requirement for six men to carry out a rail welding operation where it had previously been accomplished by two. The four extras were all look-outs including one to warn of trains approaching on the line that was not being worked on. Another example concerns restrictions on single line working when track maintenance is being carried out on adjacent tracks.

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## **ENVIRONMENTAL**

### **WASTE**

Attention should be paid to avoiding waste wherever possible. For example, a considerable amount of discarded rails are left lying around track sides and in long disused sidings. Much of this could be sold for use by heritage railways or sold for scrap. Whilst we strongly support the safeguarding of land in railway ownership for future use should redundant routes be reopened, there remain considerable holdings of other land and buildings that could be sold for development or other uses without prejudicing any future route reopenings.

### **ELECTRIC CARS**

There can be no justification for using public money to help fund the purchase of private cars. Without a massive increase in power generation from renewable sources, the electric car cannot be considered to be a green alternative to present day small cars. The proposed subsidy for electric cars should be abolished.

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## **ROAD-RAIL INTEGRATION**

### **MOTORAIL**

Train operating companies should be encouraged to restore this network of useful services which represented a perfect synergy of road and rail travel. Equally, the opportunity should be explored to study the feasibility of a European motorail network encompassing the UK, rather than just the present limited vehicle shuttle service through the tunnel.

### **PARK AND RIDE**

Provide increased secure car and bicycle parking facilities at stations.



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