

# Delivering a Sustainable Railway

## Summary





## Present success, future ambition

*Delivering a Sustainable Railway* is the most positive statement about the growth and development of rail for over 50 years. It is a vote of confidence in the future of Britain's railways.

Too much of the past ten years needed to be spent repairing the problems of a flawed privatisation and addressing the legacy of past under-investment. But the Government took the necessary and decisive action. It created Network Rail as a not-for-dividend company to put right the failures of Railtrack. In 2005 it legislated to improve industry co-operation, strengthen its independent regulation and deliver strategic leadership. And the Government provided the funding – over £18 billion in the past five years alone – to support the industry through this difficult period.

Britain now has a railway that carries more people and more freight than it has in over 50 years. It is safer than ever before. Reliability, which declined sharply after the tragic accident at Hatfield, is now good and improving on most lines. And the finances of the industry are stable and improving. Network Rail is on course to improve efficiency by nearly one-third in five years, and strong growth in demand means that passenger services require less subsidy from the tax payer.

These are substantial achievements. The story of the railway used to be about managing decline. Now it is about enabling growth.

Passengers want a railway that is reliable and represents value for money, is comfortable, accessible and easy to use. The public as a whole wants a railway that contributes to economic growth and helps us meet the environmental challenges ahead.

The railway can only meet these goals if it has the capacity to carry the passengers who want to use it. Rail has seen record levels of growth – over 40 per cent in the last decade – so in response the railway is running more services than before, and has provided more trains. But capacity has not kept pace with record demand across the network, and crowding on some of the busiest services has got worse. The priority for the Government's rail strategy is to tackle these trends.

We can do so because we have laid the foundation of operational and financial stability. This gives us the confidence to invest. On top of the record sums already committed until 2009, the Government will invest a further £10 billion in delivering enhancements alone over the following five years. This is the first plan for major growth since the 1950s. The plans are real and deliverable; the investment is committed; and the independent regulator will ensure that the budget is sufficient to deliver the investments we promise.

Our ambition for the future is for a railway that:

- Can handle double today's level of freight and passenger traffic;
- Is even safer, more reliable and more efficient than now;
- Can cater for a more diverse, affluent and demanding population; and
- Has reduced its own carbon footprint and improved its broader environmental performance.

## Getting the basics right

These ambitions will only be realised if the railway continues to get the basics right.

The recent accident at Grayrigg demonstrated that the railway can never afford to take safety for granted. The railway has consistently improved its safety record. It is past the point where big step-change investments in safety are necessary or would deliver. But it cannot stand still. The Government is therefore specifying by 2014 a further three per cent reduction in the risk of death or injury to passengers and employees from rail accidents. This is incremental – but important nonetheless and challenging, given the progress already made.

Reliability has also improved steadily since 2001, despite the railway getting busier. Passengers give the railway credit for this improvement. But there are still lines on which reliability is unacceptable. And there are still too many delays caused by basic problems with track and signals. Reliability currently stands at 88 per cent. The Government wants to secure an improvement to 92.6 per cent by 2014. The Government also wants to see a 25 per cent reduction in the number of delays over 30 minutes – those which inconvenience passengers most.

## Enabling growth

Between now and 2014, the Government will invest in more trains and more capacity to enable growth and to start to tackle overcrowding.

The Government will buy an additional 1,300 new carriages. Over 300 of these will address the rapid growth in demand seen in cities such as Birmingham, Cardiff, Leeds and Manchester. The new carriages will be targeted at the most crowded services, but all major cities and services to most London stations will see improvements.



Dominic Burke/Alamy

To accommodate growth and reduce crowding, over 1,300 carriages will be delivered by 2014

On some lines, provision of additional capacity will require new infrastructure. This ranges from the £5½ billion Thameslink Programme, through the £600 million to tackle congestion at Reading station and Birmingham New Street, to a large number of relatively modest individual schemes to lengthen platforms, upgrade electricity supply and provide sufficient depots. The Government is funding these improvements.

These increases in capacity make a good start on tackling crowding for some of the busiest services, while enabling the railway as a whole to accommodate another seven years of record growth. And further improvements will follow – this is a long-term strategy, not one that stops after just seven years.

For regional and rural lines, the focus is also on growth. There will be no line closures over this period.

## Improving quality

It is not enough simply to provide a railway of sufficient size – it must also be accessible and easy to use.

The fares system will be simplified, so passengers have greater confidence that they are being sold the right ticket for them. Smartcards will be able to be used in all major cities, and inter-city fares will be purchasable on mobile phones. This will cut queues at ticket offices and free staff to assist passengers and enhance their sense of security.

£150 million is earmarked to modernise 150 stations across the country. The industry has committed to a robust delivery plan working with local authorities and harnessing developer contributions. The delivery of this plan will be overseen by the independent regulator. This investment will focus on medium-sized stations that are run down or lack basic facilities and addresses an area that the railway has neglected for too long. It will be backed up by 'travel plans' to improve access to stations, and by a better deal for cyclists.

## Delivering rail's environmental potential

The biggest contribution rail can make to the environment is to expand its capacity to accommodate those who want to make 'green' travel choices and to provide the quality of service necessary to retain their customers.

This is true for freight as well as passengers. The Government is also committing an additional £200 million to enable work to start on a strategic freight network to provide attractive choices for shippers that do not mean putting more lorries on the road.



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A Strategic Freight Network will bring economic and environmental benefits

Rail must also reduce its own carbon footprint. The industry has committed to setting itself targets for reducing CO<sub>2</sub> emissions, to be published next year. The Government will encourage progress by funding research and will write environmental objectives into passenger franchises. But the Government will not subsidise train operators to undertake efficiency measures that pay for themselves via reduced fuel bills. Train operators must take responsibility themselves.

## Stable funding

Ambitions of this scale require sustained investment to match. The Government is providing this, supported by the revenue earned through strong passenger growth.

Over £10 billion will be invested in enhancing capacity between 2009 and 2014, with overall Government support for the railway totalling £15 billion. The total investment in rail improvements will be greater than in 2004–09.

This investment is not being bought through any changes to fares policy. Fares where the industry has a monopoly position – that is over 40 per cent of all fares – will continue to be regulated as now at 1 per cent over the rate of inflation each year to help support growth. Other fares will continue to be set commercially by the operators, just as they are on other transport modes. Having paid the bills in the difficult years when costs rose and under-investment needed to be tackled, we can now ease back the burden on the taxpayer – to somewhat close to its historic level.

Growth on the railway has started to provide the means for its improvement. Franchising keeps industry costs down. And Network Rail is on course to deliver 31 per cent efficiencies in just five years, with more to follow. Each pound spent in taxes or fares in the next seven years will buy that much more than it did previously.

## A long-term strategy

These firm and costed plans to 2014 are set in the context of a long-term strategy that looks forward over 30 years. This is essential because trains ordered now will still be in service in 30 years' time, and other assets will last even longer. But it is also challenging because it is impossible to forecast accurately demand that far into the future. Some cities and regions will grow faster than others. People and firms are likely to respond to the challenge of global warming by changing travel patterns and ways of working. The pace of technological change is unpredictable.

Forecasts have been wrong before, and any strategy that tried to build a rigid investment programme based on fixed long-term forecasts would inevitably be wrong again. To overcome this challenge, the guiding principles in this strategy are:

- To invest where there are challenges now, in ways that offer the flexibility to cope with an uncertain future; and
- To put in hand the right preparatory work so that, as the future becomes clearer, the necessary investments can be made at the right time.

These principles are illustrated by the preparatory work on a new Intercity Express train, with a design which will give flexibility on power supply and train formation. They are also evident in proposals to prepare for the next generation of signalling, which will make a difference in the middle part of the next decade. The Government is investing over £1/3 billion in these preparatory projects alone. But it would not be prudent to commit now 'all-or-nothing' projects, such as network-wide electrification or a high-speed line, for which the longer-term benefits are currently uncertain and which do not reflect today's priorities.

## The decade beyond 2014

Investments that start before 2014 will deliver their full benefits in later years.

The final part of the Thameslink Programme will be completed by the end of 2015. It will deliver 12-carriage trains, running through central London at a frequency of 24 trains per hour. It represents a step change in capacity. Subject to Parliamentary approval and decisions on financing, Crossrail has the potential to make as big a difference to east–west travel in London as Thameslink does on the north–south corridor. In other cities, we will continue to grow the railway by lengthening and renewing trains. Infrastructure bottlenecks will be tackled and modern signalling introduced to improve reliability. Cities and regions will increasingly be able to take their own view on the role of rail in supporting their needs and economies.

Now that the West Coast modernisation is nearing completion, there will be a need for modernisation and enhancement of other main lines, the East Coast and Great Western main lines in particular.

The flagship Intercity Express trains will enter service from 2015, starting on the East Coast and Great Western main lines. They will be more environmentally friendly than current long-distance trains. They will also be longer and capable of carrying significantly more passengers. By 2014, Network Rail will have done the work necessary to enable operators to run the new trains, improving track conditions suitable for lighter and more energy-efficient vehicles. Other rolling stock will also be replaced using similar modern approaches. This will start with the next generation of regional 'go-anywhere' trains that will replace diesel and electric multiple units. By 2020, all trains will be fully accessible for disabled people and others with mobility problems.

In the decade beyond 2014, modern, cab-based signalling will be implemented on a greater proportion of the network. This will increase capacity by allowing a higher frequency of train service while maintaining safety. Trains will 'know' the position and speed of the trains in front of them, and will not require the 7½ mile gaps between services that are standard on inter-city routes today.



Paul Images

Meeting the aspirations of passengers will become increasingly important

Stations and customer services will continue to improve. Within 10 years, rail travel and tickets could be combining with other services in the use of 'e-money'. The £370 million Access for All programme, to provide a network of stations with step-free access, will be completed in 2015.

For the five years after 2014, the Government will have robust enough information to set a credible environmental output for rail, with the same status as those for safety, capacity and reliability. And the network will be being renewed to new severe-weather standards, improving its resilience to climate change.

## Anticipating the very long term

The Government believes that the investments it proposes would enable the railway by 2030 to deliver twice the passengers of today in more comfort than today.

But it is possible that demand could grow even faster. This would require accelerating investment and looking at more radical options beyond those currently considered. The first areas where additional interventions might be required are on the London–Birmingham–Manchester corridor and on London's busiest commuter routes.

For London, work with Network Rail suggests strongly that extra-long trains (of up to 16 carriages) provide a bigger increase in capacity than double-deck trains at a similar cost. On inter-urban routes, the current evidence suggests that maglev and dedicated freight lines are not appropriate solutions – both are too inflexible, and maglev is too expensive to represent value of money. If demand requires it, the better solution is likely to be a new conventional line, preferably exploiting an existing unused railway alignment, such as the Great Central route. And before we commit to any such interventions, the key criteria of capacity, value for money and carbon efficiencies will need to be rigorously assessed.

Just as future growth rates are uncertain, so is the way in which people use rail. Land-use, housing and education policies will all have impacts on where people live and work. This could result in moves toward a '24/7' society with more dispersed patterns of life and travel. That is why rail must plan now against the future need for it to operate more consistently throughout the day and week, and one reason why the Government is supporting the development of local services.



Rail Images

Rail provides an important transport link in many regional and rural areas

## **A sustainable railway**

Sustainability is at the heart of the improvements we are delivering between now and 2014, and it is integral to the Government's long-term rail strategy.

Sustainability demands a broader look at priorities for the railway alongside other modes, to find the best balance between the needs of the economy, society and the environment. Our ambitions are for a railway that contributes to the economic success of the nation by enabling more people to travel in a way that minimises the environmental impact; a railway that is flexible enough to adapt and respond to social changes, protecting the network and improving its ability to operate for longer in the day and more consistently over the working week; a railway that is easy and accessible to use. And one that is built on stable foundations of safety, reliability and sound finance.

This is the Government's strategy: to deliver a sustainable, modern, railway.

This summary provides a brief overview of the Rail White Paper. If you would like to view the White Paper itself, it is available as free downloads from our web site, **[www.dft.gov.uk](http://www.dft.gov.uk)**, or as a priced publication from **[www.tsoshop.co.uk](http://www.tsoshop.co.uk)**.

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