



**ADAPTING OUR
RAILWAYS TO AN
UNCERTAIN FUTURE –
*CREATING THE
DYNAMIC RAILWAY***

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INTRODUCTION

England's railways are facing the greatest period of change and uncertainty since their development. Our assumptions about how they are planned, delivered and used are being challenged in a way that would have been inconceivable only a few years ago. This WSP white paper considers what's ahead of us, how assumptions are changing and the need for the creation of a more dynamic and future-ready railway.

BACKGROUND

Ever since the Strategic Rail Authority published "Everyone's Railway, the wider case for rail" in 2003, the way we think about railways has been very stable. Our perceptions of the steel wheel in Britain have been guided by a set of widely held assumptions across our industry.

It is the mode of transport that is safe; it is increasingly comfortable and reliable compared with alternatives; it is quicker, kinder to the environment and can carry mass. It is a transport mode in renaissance; demand for its use has seen an ever upward trend since the early noughties. This growth has been matched with a renewal of the rolling stock fleet that means that with few exceptions, travel by train is a quality experience. If use of the railway is not always an aspirational choice, it is increasingly a positive one compared to other modes.

While there have been shocks to the system (particularly when Government has had to step in as operator of last resort), it was not until the prolonged period of challenging employee relations starting in 2016 that we saw a significant denting of public confidence in the railway.

At the same time as this disruption (and partly no doubt as a consequence) it became clear that some of our assumptions regarding ever increasing demand, particularly those built into franchise bids, were increasingly fragile. Not only has revenue been under pressure, but the assumed cost of new and replacement infrastructure has seen the need for increasing scrutiny.

More recently, the railway has been faced with two further changes. Personal safety as a result of COVID-19 is now a real and key concern for many rail passengers on busy routes. Alongside this reluctance to travel by train, the pandemic has forced a revolution in home working that is expected to have a long-term impact on the demand for work related train travel.

Now, perhaps more than ever, we need to be clear on the role of our railways, their critical function in the connectivity, sustainability and safety agendas and the part they can and do play in delivering social value, economic benefits, decarbonisation and regeneration.

A NEW AND INCREASINGLY UNCERTAIN FUTURE

England's railways are faced with a new future. Our assumptions that travel demand will mirror a growing economy need revising. Changes in passenger demand are likely to be increasingly less linear in terms of their relationship with economic growth. The impacts of COVID-19 in Britain will be far reaching. Shorter term, the economy's trajectory is down, not up; longer term, where, when and how people work are all liable to change and the shape if not the volume of rail demand will change with them. Rail's superiority as a positive choice for the passenger because of its safety record, its environmental credentials, its ability to move passengers on mass and relative low cost are all liable to be challenged by the passenger and the Treasury post-COVID-19. We need to understand this new future for rail travel and devise alternative models for how we plan, develop, deliver and operate our railways if they are to continue to perform as a key enabler of our economy.

This future needs to be put in the context of the following questions:

- The place of the railway in the UK economy?
- How the pandemic has changed the shape of future rail demand?
- Whether these are new or different challenges?
- How can we serve the customer, the farepayer and the taxpayer better?
- Is there a clear way forward, and who should lead?



THE PLACE OF RAIL IN THE FUTURE UK ECONOMY

The railway exists to move people and goods from place to place. For goods traffic, the railway is part of a distribution network moving products from point of production to the point of consumption. Passengers travel to get to their place of work, for business and for leisure. The choice to use the railway is a positive one. We use the train because it is beneficial (albeit that benefit may not always be tangible or obvious).

Rail travel is of first order importance to the UK economy. Without the option to travel by rail, users and our travel-related carbon commitments face a stark alternative. In most cases, this is to travel by a slower and often more polluting mode, or not to travel at all, therefore restricting opportunity. The railway delivers access to opportunity. While this access has been pushed beyond bounds thought possible at the time of the Railways Act in 1993, the level of service is uneven across the country. Given this unevenness, the railway has a rightful place at the heart of the Government's 'levelling-up' agenda. The access to opportunity afforded by the railway and taken for granted in most of the South East of England must be repeated elsewhere. HS2 and Northern Powerhouse Rail have the opportunity to do this both directly, by increasing capacity and cutting point-to-point journey times, and indirectly through the capacity release they will enable on the existing network.

These roles existed before COVID-19, but there are new and growing purposes for the railway as both an agent of economic recovery and as a way of accelerating the decarbonisation of the UK's transport system as we strive to achieve net zero carbon emissions by 2050.

Delivery of nationally important infrastructure in the UK has been slow, historically. However, its delivery is beneficial in terms of the business, employment and skills it creates and the direct and indirect benefits to its users. New railways create social value. This value will be critical in a post-COVID-19 UK. HS2, Northern Powerhouse Rail and schemes such as the complete electrification of the Midland Main Line and the East – West Rail scheme are essential. They will not only assist with levelling up by improving access to opportunity, they will also sustain and grow the construction and engineering sectors across the UK. The timescales of these infrastructure investments mean that these schemes must push ahead. While this will start the process, they must be accompanied by far greater certainty in terms of national-level policy and funding for their development. This is not just about the shovel ready, that will take our recovery only so far, it is about the shovel worthy as well.

Once the post-COVID-19 economy goes beyond recovery and starts to reinvent itself, our railways will be a key enabler of sustainable growth, permitting movement and growth that is in line with the UK's net zero by 2050 commitment. Those elements of the economy that continue to see demand for travel growing with the economy (such as UK-based leisure and tourism) will rely on rail increasingly to bring customers to their door.

HOW HAS THE FUTURE CHANGED?

Our future is unlikely to have changed that much. What has changed is the rate of structural movement in our economy and our ways of working. The move to more flexible and home-based working was underway pre-COVID-19; the pandemic has provided an opportunity to expose the realities and requirements of home working to all for whom this is a practical possibility. This exposure will have caused some to welcome a move to a more flexible pattern of working while others will be waiting eagerly for a return to the office (if not the commute).

While venturing to forecast the post-COVID-19 demand for rail is fraught with difficulties, it is critical to understand how rail demand will respond to the pandemic. We believe that the railway's future will have to adapt to the following:

- A future that is more liable to short-term shocks. While demand is likely to increase with economic activity, growth is more likely to be cyclical with a risk of needing to respond to a more start/stop economy, especially if we are slow to find a COVID-19 vaccine;
- A structural change in the pattern of fares bought:
 - The volume of season tickets bought are likely to reduce while the demand for more 'carnet' type travel (buy in advance and at a discount, use as you go), will increase;
 - Travel outside of the peaks will grow while the number of trips per week (especially for the commuter) are likely to decrease;
 - Peak travel demand will be slow to recover to pre-COVID-19 levels; and
 - It is probable that an eventual growth in home-based tourism will create an opportunity for growth in leisure-based, off-peak travel;
- The relative attractiveness of rail where road routes are congested (especially where inter-city routes parallel the main highway corridors) will continue. However, demand could be dampened where there is over-crowding given passengers' heightened sensitivity post-COVID-19.

NEW OR DIFFERENT CHALLENGES?

While some of the challenges facing the railway post-COVID-19 are new – passengers' expected response to overcrowded conditions is a case in point – much is about bringing known issues into sharper focus rather than struggling with new ones.

Perhaps the biggest of these challenges is the need to get to grips with the gap between the cost of operating the railway and the revenue it generates. The Office of Rail and Road's figures for 2018 show a 2:1 ratio between cost (circa £20Bn p.a.) and revenue (circa £10Bn p.a.) with a significant annual deficit. This operating deficit is not new and it seems inevitable that the railway is about to face a periodic and predictable call to justify Government's funding this gap. To be clear, this is not about investment in new railways, this is about maintaining current levels of service while reducing the costs of operation.

This funding gap will put a new impetus behind a series of well-known challenges, which will be brought into sharp focus by the next Government Spending Review. These are:

- What is the best route to delivering services? franchises, concessions or keeping operations in-house post-COVID-19?
- What is the best way to reduce operating and maintenance costs and are there efficiencies to be had?
- How do we do more for the user? and
- How do we increase revenue?

All of these questions will need to be answered in the context of how we judge the true value of the railway. All too often, the railway is judged in terms of time savings. This is a good starting point when looking at where to put new capital investment, but it is extremely challenging when trying to consider the true value of operating the main long distance alternative to the car. In examining the cost of operating today's and tomorrow's network we must grapple with the whole value presented by:

- Providing a lower carbon as well as a faster alternative to car travel;
- Removing lorry miles and replacing with rail freight;
- The productivity benefits of linking the markets for employment and consumption; and
- The regeneration and development benefits of better connected places.

We cannot understand the true value of the railway and assess the benefits it brings relative to the cost of operation without understanding the cost of the existing and future carbon it removes from our economy. Undoubtedly, there are inefficiencies in the way we operate our railways that need addressing, but it would be wrong to choose the post-COVID-19 period to reduce costs by reducing service levels. The real challenge going forward is to understand how we reduce the cost of operation per train kilometre, not how we take money out of the rail budget as a whole. We must be efficient, but we must also ensure that rail is given the opportunity to deliver its part of the decarbonisation challenge and long-term economic recovery. This is likely to require an increase in total spending, which delivers a significant increase in total benefits.

HOW TO BEST SERVE THE CUSTOMER AND SECURE THE FUTURE?

The future of the railway will be characterised by the need to solve three big challenges simultaneously:

- Solving the cost gap;
- Dealing with the changing nature of rail demand; and
- Delivering proven benefits.

They are simultaneous tasks for the railway because of the inextricable linkages between securing benefits and reducing costs and securing benefits and the changing nature of demand. All three issues exist together in a common environment. Taking action in one area will have a direct consequence on at least one of the others. Figure 1 below shows the tasks that the railway of the future faces as it seeks to address each of these challenges and how they overlap. The future railway will be a finely tuned balancing act between reducing cost and maximising revenue. This is no different to any other business, apart from the fact that instead of shareholders, there are just two ‘investors’: the fare payer and the tax payer. The former receives benefits on their investment directly through better rail services and accessibility to opportunity, the latter benefits indirectly through the impacts of decarbonisation, economic growth and cheaper products.

The reduction of cost will not be without pain. The railway industry suffers from duplication, multi layered businesses and, arguably, too many franchises. One route to efficiency must be to challenge the sheer volume of contract management that takes place and to rationalise the layers between passenger and operator and the decision makers above them. Other transport infrastructure providers have found the value in shortening the distance between the user and the board room. It not only reduces cost but can dramatically improve customer responsiveness.

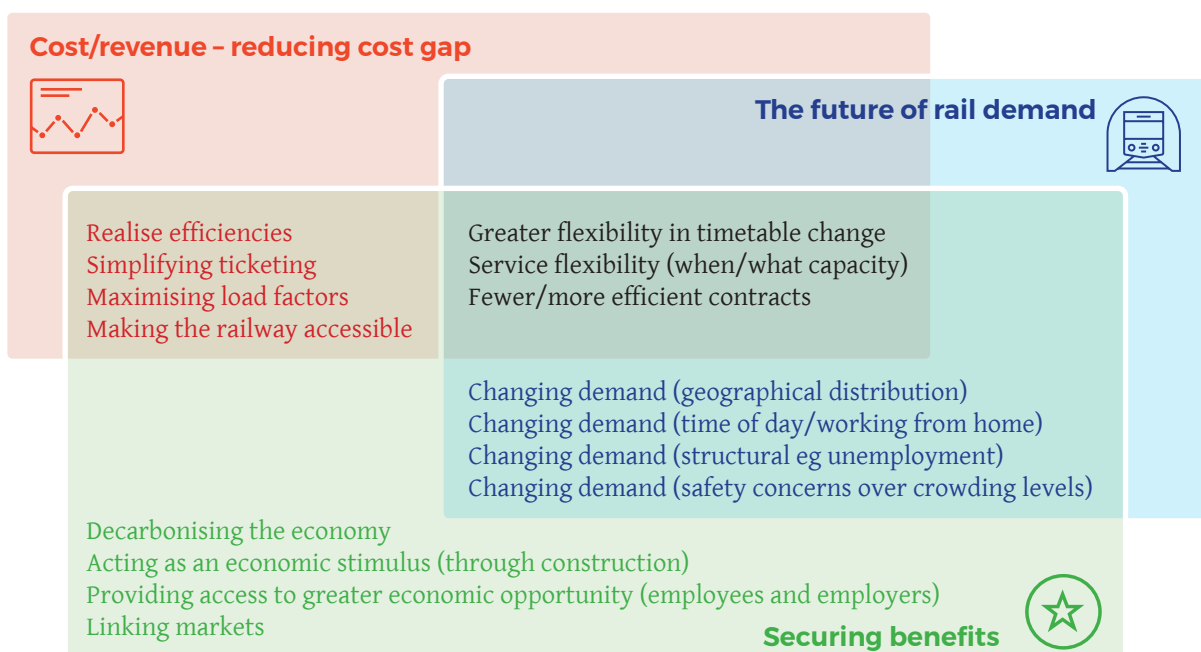


Figure 1 Delivering for the Customer

To maximise revenue and benefits we need to see a seismic shift in our industry. The railway has a reputation for being long to plan and slow to change. A pattern of regulation set at a point where Britain was a world leader in innovation in the delivery of rail services has not moved with circumstance. Figure 1 shows that the three main challenges of our industry intersect at a single point of need, namely delivery of flexibility. This is the ‘dynamic railway’. A railway that recognises our best-in-class ability to react to crises by adapting operations in the very short term and embodies this in a new way of working that:

- Allows response to changes in demand without a two-year lead in for contract renewals or re-timetabling;
- Permits rapid changes to access arrangements and the timetable;
- Allows the rapid redeployment of rolling stock;
- Has a cost-effective plan for maintenance and sticks to it;
- Allows ticketing and fares to respond to consumer demand (in the same way as its competitors);
- Makes ticketing and fares transparent, simple and easily accessible for its customers;
- Provides better access for freight;
- Generates the right level of competitive tension between the operation of services and maintenance of the railway and ensures that this tension plays through to an effective voice for each in planning the timetable and in daily operations; and
- Not only collects customer information but utilises it to drive a responsive and customer friendly railway for both passenger services and freight.

While realising economies of scale and removing inefficiency will reduce cost, by creating a dynamic railway cost will be kept under control and revenue and benefits will be maximised.

A CALL TO ACTION

As an industry, we have spent much of the last two years talking about change rather than delivering it. This change must come soon. It is unlikely that many care how the change is delivered and where responsibilities lie. What is important is that it is a brave and broad approach to change that reflects the vision of the 1993 Railways Act and which dares to forge an agenda that will deliver:

- Change to regulation to allow more dynamic working;
- Adoption of technology to create a more efficient and reliable railway;
- Rebasement of cost by copying other industries’ drive to efficiency;
- A change to the way we procure and deliver services; and
- Creation of a truly supporting policy environment.

Our current Government has proved itself bold enough to tear up the rule book in terms of its approach to many things. The railway is ripe for that approach and ready for a bold set of changes.



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