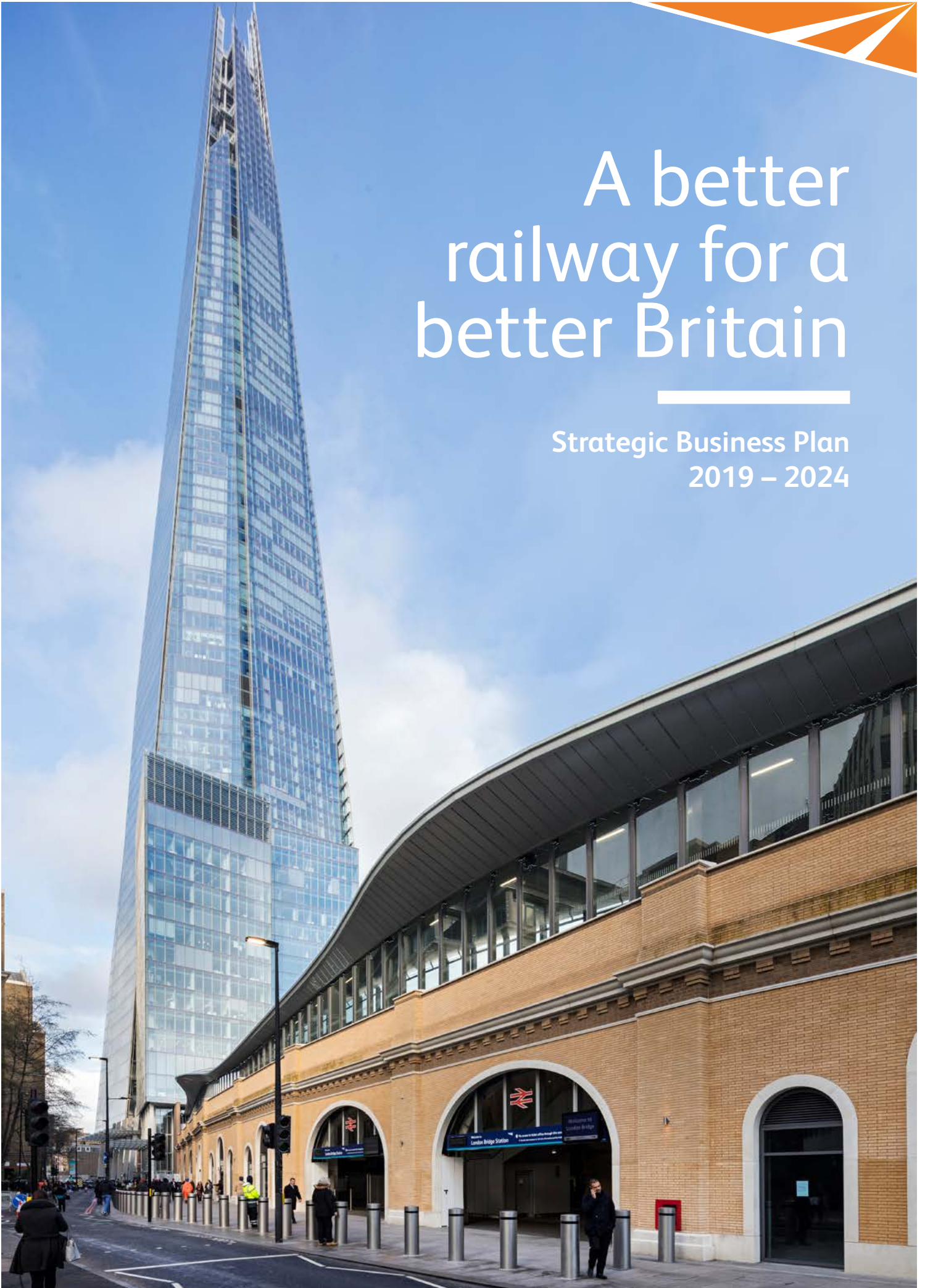


# A better railway for a better Britain

Strategic Business Plan  
2019 – 2024





# These are exciting times for Britain's railways

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The biggest period of investment into the railway since the Victorian era is coming to fruition. Right across Britain, passengers are seeing a transformation as new, more frequent and longer trains come into service as a result of our Railway Upgrade Plan.

This matters. Not only because there will be improvements for people travelling on our railway, but because the railway is crucial to Britain's economic success; helping to connect goods to market, and people to jobs, friends and family. It brings communities closer together, drives productivity and can help unlock the supply of new housing that is so desperately needed.

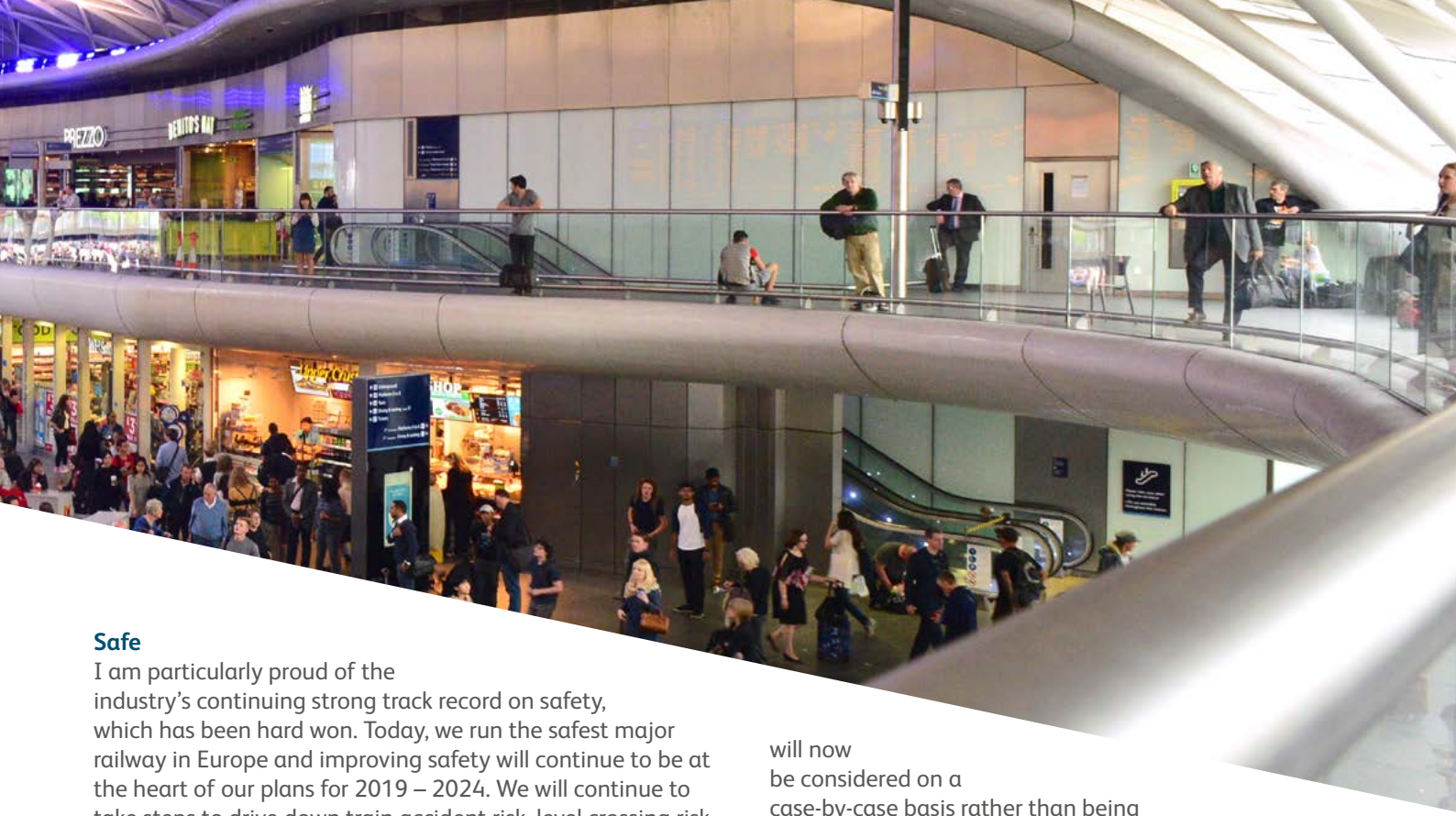
This document presents our plan for Britain's railways between 2019 and 2024. At the heart of the plan is greater alignment between track and train, with shared targets and priorities. The advantages of better collaborative working between track and train are self-evident.

Our new organisational set-up, with nine devolved businesses, is helping place accountability closer to customers and passengers, so that decisions can be more relevant to local needs and taken faster.

We now set targets and priorities that are agreed jointly with train and freight operators at route level. We have strengthened and deepened the relationship between Network Rail and train and freight operating companies through alliances and other partnership arrangements. And we are working with Government to reform the way franchises are planned, so that there is greater alignment between franchise requirements and the existing or planned capability of railway infrastructure.

To help hold the industry to account, we have introduced new Route Supervisory Boards, with independent chairs and representation from Transport Focus to make sure the voice of the passenger is heard.

These changes are bringing the railway industry together to better deliver for Britain. Working together, our plans for 2019 – 2024 are built around four key themes: safe, reliable, efficient and growing.



### Safe

I am particularly proud of the industry's continuing strong track record on safety, which has been hard won. Today, we run the safest major railway in Europe and improving safety will continue to be at the heart of our plans for 2019 – 2024. We will continue to take steps to drive down train accident risk, level crossing risk and protect our workforce from injury. We will also increase our focus on growing security threats including cyber security.

### Reliable

Passengers tell us that they want a more reliable railway, with trains that run on time and more frequent services. Working together, the rail industry is tackling the various factors that contribute to improved train performance, and we have set ourselves a target of a 15 % reduction in the number of trains that are delayed. We will also revolutionise the way we measure train punctuality, running trains to the minute, setting us apart as the most demanding and transparent train network in Europe.

### Efficient

The doubling in demand for Britain's railways over the last twenty years is a mark of the rail industry's success, but as the railway has grown bigger, so has the cost of running it. Network Rail needs to become the most efficient company we can be, and while we have driven down the cost of operating and running the railway by 40 % in the last ten years, we can and must do more. New technology and more efficient ways of working will be key to the railway becoming a lean, innovative industry in the years ahead.

### Growing

Rail passenger numbers are forecast to increase by around another 40 % by 2040. This is a mark of success for the railway industry, but it does present long-term capacity challenges. The 10 % increase in train services over the next two years will help, but we need to continue to invest in new capacity.

We have set up the System Operator to help ensure the railway is planned for, and operates, as a whole. We have radically changed the way that we plan and deliver railway enhancements: we will no longer commit to a project before it is fully scoped and costed; and major enhancement projects

will now be considered on a case-by-case basis rather than being planned for in one five-year budget.

2019 - 2024 will mark a turning point for Britain's railway with the end of major analogue re-signalling. We will be accelerating the transition to a digital railway, so we can unlock the benefits of digital signalling and help meet the capacity challenge of the future. Digital signalling is the future that this plan ushers in.

### Great people, great teams

The delivery of this reforming, ambitious plan will only be possible if we can attract, develop and retain the brightest and the best. The loyalty and commitment of people who are working on the railway cannot be faulted, and we aim to be one of Britain's best employers. We want to create an environment that will allow everybody to reach their full potential, and we are leading the way in moving the rail industry to become more diverse and inclusive. By the end of CP6 we aim to increase the number of women in our business by 50 %, and have gender balanced recruitment of apprentices and graduates. Diverse teams perform better.

Our plan for 2019 - 2024 is a radical plan, an ambitious plan. It is not without challenge and risk. But it is a realistic plan that has been planned from the ground up, by local engineers who understand the railway in their area. With great people, great teams, the right quality of leadership, the right incentives and the determination to see it through, this plan can deliver the better railway that a better Britain needs.

**Mark Carne**  
Chief Executive



# A better railway for a better Britain

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The railway in Britain is crucial to the prosperity of the country. It connects people with jobs, goods with markets and stimulates economic growth.

In recent years, Britain has had the fastest growing railway in Europe, with the number of rail journeys doubling in the last 20 years and passenger numbers expected to increase by around 40% by 2040. It is a growing industry, which offers not only prosperity and connectivity at home, but gives British businesses export opportunities overseas.

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## Improvements for passengers

We know that passengers want more frequent, reliable trains, with more seats and ticket prices that offer value for money.

Working in partnership, the railway industry is coming together to deliver improvements for passengers. By 2021, there will be 7,000 new carriages on the railway network. The new carriages will mean the retirement of some of the oldest trains on the network with rolling stock that has more seats, Wifi, power points, improved accessibility and air-conditioning. Pacer trains, dating back to the 1980s, which operate in the north of England will be replaced with 281 new electric and diesel carriages.

As well as a smoother, quieter ride, there will be technology on the new carriages that can detect potential faults on the railway, meaning we can fix problems before they cause disruption to passengers. Some carriages will also include digital screens to give passengers real-time information on connecting services and seat availability.

It's not just new carriages. By 2021, there will be 6,400 new train services a week running across the country, helping to connect communities and boost local economies. There will be a major increase in train services between 2019 – 2021, following the opening of the Elizabeth Line, the completion of the Thameslink and Great Western upgrade programmes, and the associated train cascade. More trains, more seats and more frequent services will mean that more people than ever can use the railway.

And our station improvements programme is also delivering benefits for passengers. We will have delivered improvement works to 178 stations across the country by 2019, driving regeneration and increasing customer satisfaction scores. We have listened to our passengers, and will be making the

use of toilet facilities free at all our Managed Stations, and we will also introduce water fountains to cut down on plastic. Improved accessibility is at the heart of our station re-designs.

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## Britain's railways are an economic powerhouse that is helping drive growth across the country.

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Gone are the days when our stations were only used for catching a train, they are now also destinations of choice for shopping, dining and socialising. Our investment in stations and our diverse, high-quality retail offer is directly linked to our retail performance and customer satisfaction, both of which are growing. All profits from Network Rail retail activities are reinvested back in to improving the railway.

We are working in partnership with train operating companies to keep improving customer satisfaction, with the aim of remaining the top-rated major railway in Europe for passenger satisfaction. We will continue to review in detail the results of the twice yearly passenger satisfaction survey carried out by Transport Focus and targets on customer satisfaction will be built into our annual performance measures.

## Jobs, housing and growth

*\*In Partnership for Britain's Prosperity, Rail Delivery Group, October 2017*

The combination of public and private investment that is going into the railway will boost the UK's economy by almost £85 billion\*. Improved journey times will drive up productivity, increase connectivity and create jobs. There are over 4,000 companies in the railway supply chain, and 240,000 people work in the rail sector in the UK.

Rail investment also drives regeneration and housing development. New links or stations can bring communities that have been traditionally cut off within easy reach of towns and cities. Working in partnership with developers, Network Rail has helped to deliver thousands of new homes all over the country, and we are releasing some of our own unused land by 2020, so that a further 12,000 new homes can be built.

## Supporting British technology and innovation

Many of the improvements that have been delivered on Britain's railway in the last decade came from new technologies, such as the 'predict and prevent' technology that is now carried on trains to pick up potential problems with the track.

Many of the technologies have been borne out from collaboration and innovation across the rail industry, initially

trials in UK universities and Rail Innovation Development Centres, before being adopted more widely.

The rail industry's research and development helps support British knowledge and innovation, creating export opportunities as we sell our technology and expertise overseas. We will be looking to strengthen our links with UK universities in the coming years.

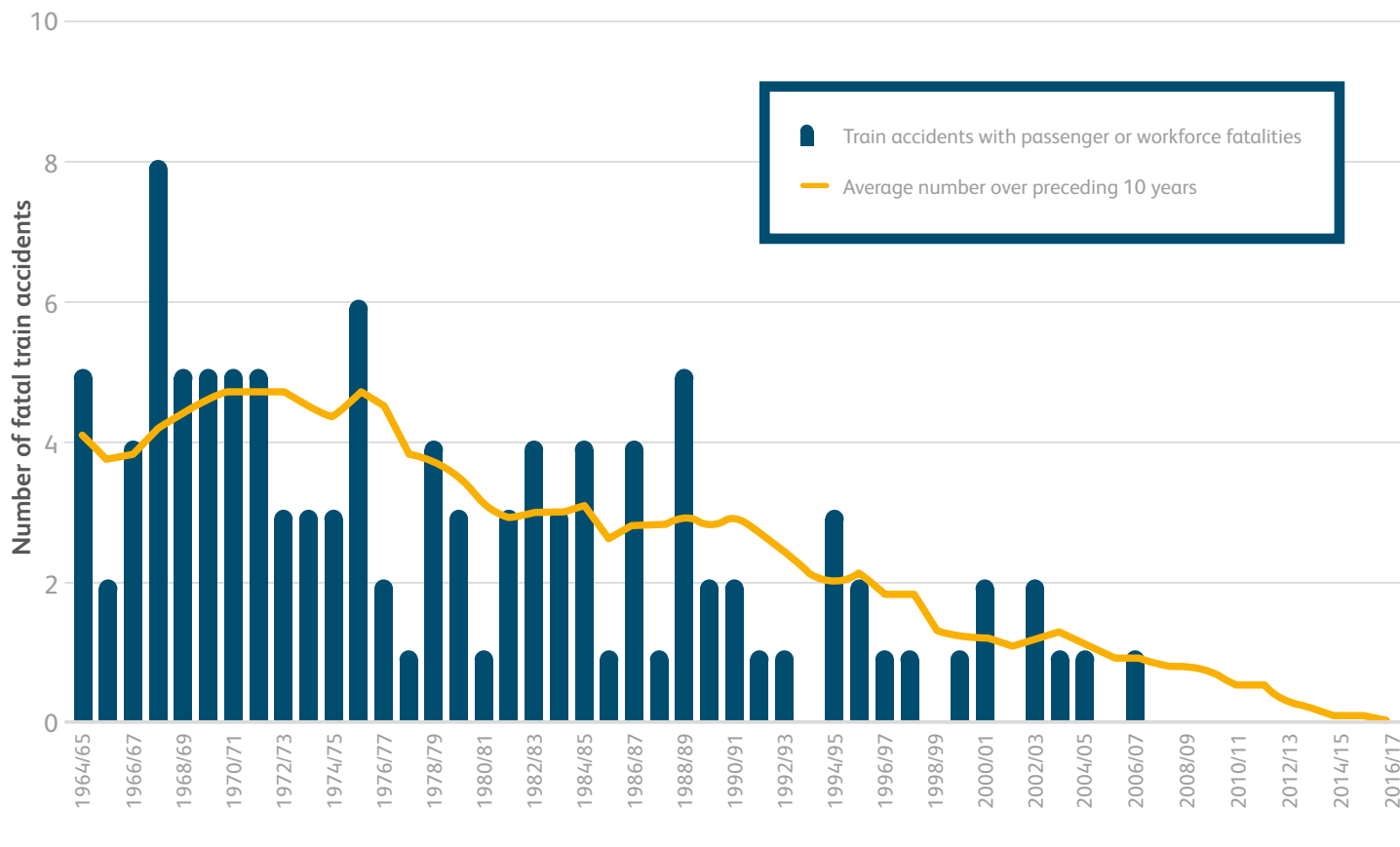


# Safe

Keeping people safe on the railway has to be at the heart of everything Network Rail does – we want everyone home safe, every day. As well as it being a moral responsibility, we believe that improved safety and improved business performance go hand in hand.

Our strong track record of improving safety has been hard won. While the railway today is very safe, we should not forget that in the relatively recent past our railways were plunged into complete turmoil following problems relating to cost cutting, poor maintenance and a series of dreadful accidents.

Britain now has Europe's safest major railway, which is a significant tribute to a decade of professional, innovative engineering from across the industry. But we cannot be complacent – safety requires constant vigilance and investment.



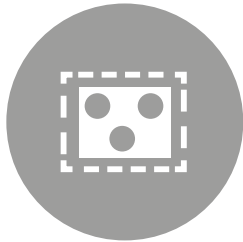


### Passenger Safety

Our plan for 2019 -2024 shows how we will reduce the risk of a train accident by a further 10 per cent, building on the 38 % reduction in risk during the last five years.

We will do this by using better techniques when inspecting the railway for potential problems, and also improving the way we maintain and manage the infrastructure of the railway. New digital technologies will also enhance safety through provision of automatic train protection (emergency brakes on trains) and better traffic management on selected routes. We will also increase our focus on growing security threats including cyber security.

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### Level Crossing Safety

We reduced the risk to the public at level crossings by 37 % between 2009 and 2018. In the five years of CP6, we will reduce the risk at level crossings by 13 %, using 'as low as reasonably practical' principles for the first time, helping us to target risk reduction in the most efficient way.

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### Public Safety

We will continue to develop our award winning programmes to reduce railway trespass and prevent suicides. We will seek to reduce trespass on the railways by targeting investment and public education campaigns at trespass hotspots, and continue our work on suicide prevention, building on the 14 % reduction in suicide on the railways in CP5.

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### Workforce Safety

We will continue our relentless pursuit towards an injury-free and healthy business, adopting world class innovations and targeting to further improve our Lost Time Injury Frequency Rate measure by 54 % between 2019 and 2024. We will also increase our work on mental health and resilience, with a target of a 30 % reduction in absence due to mental ill-health by 2024.

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### Safety and Sustainability

We are broadening our approach to safety by embracing environmental performance. Making sure the land around the railway, such as cuttings and banks, is stable is crucial to safety, and the stability of our earthworks is often reliant on the way we manage vegetation near the railway. We plan to increase biodiversity on and around the railway, and we will also reduce energy consumption in our operations by 18 % over the next five years. This is responsible leadership.

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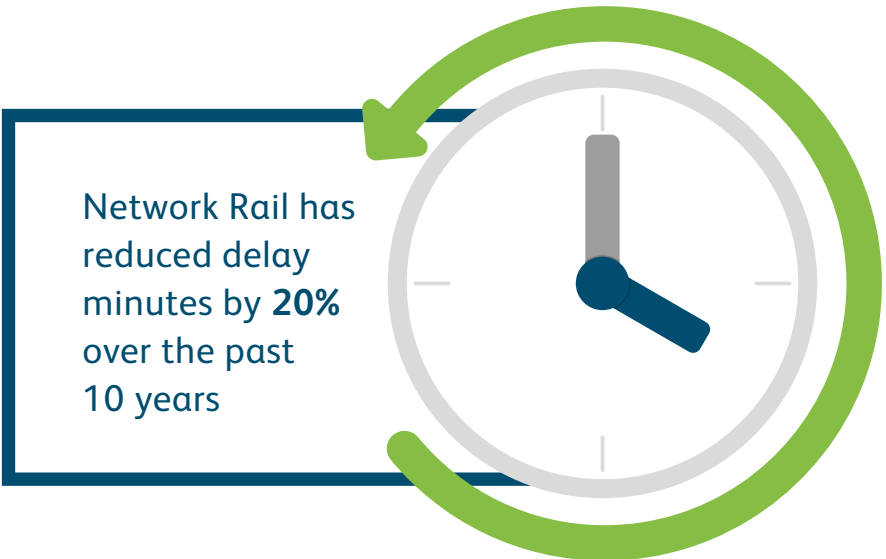


# Reliable

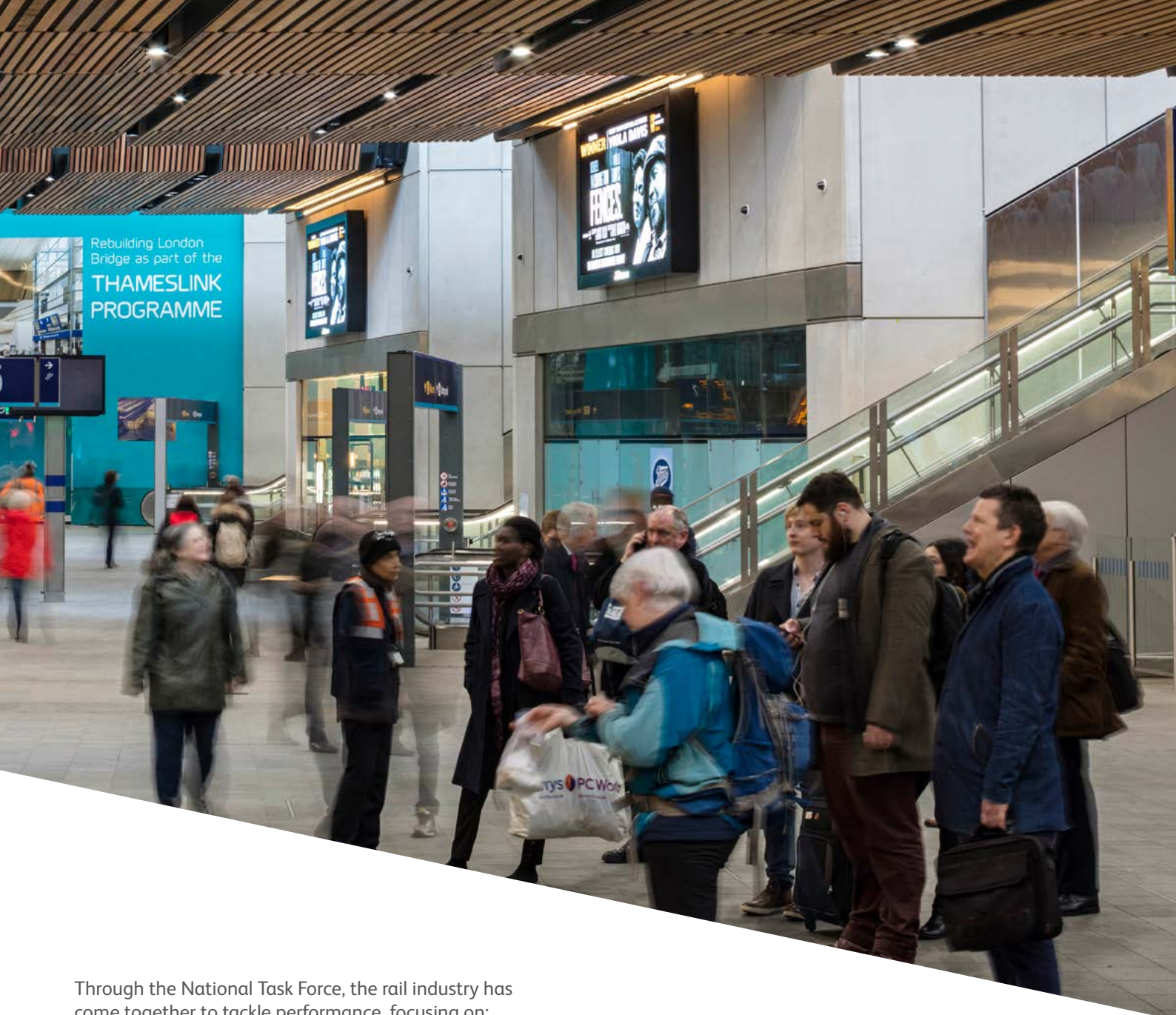
We know that what passengers want from the railways is a reliable service. At the moment, many rail lines are running at their maximum capacity, with no slack in the system for delays of any sort. A single problem at one place at rush hour can have a knock-on effect to services hundreds of miles away, many hours later. 70% of delays are now from knock-on effects rather than from a primary cause. Despite the steps we have taken to improve the reliability of the network, over the last six years, train performance has slowly declined.

Working together to improve performance is at the heart of the rail industry's plans for CP6. Over the last 12 months we have begun to reverse the previous six year trend of declining train punctuality but we are still not yet at a level that is acceptable. We have set ourselves a target to reduce the number of delayed trains by 15% between 2019 – 2024.

The causes of delay are complex, and more interconnected than ever before. There is no easy fix, and no one-size-fits-all solution to managing train performance; each route is working with their train operating company partners to develop joint plans to deliver the planned improvement.







Through the National Task Force, the rail industry has come together to tackle performance, focusing on:



### Better assets

improving the reliability of the railway's infrastructure to reduce incidents that cause disruption



### Better timetables

improving the accuracy of assumptions on which the timetable is based



### Better operations

improving operational processes so that service recovery from incidents is rapid



### Better information

improving the accuracy of train running data to help problem solve

We are also revolutionising the way we measure train punctuality, setting us apart as the most demanding and transparent rail network in Europe. From 2019, working with our train and freight operating partners, we will measure train performance to the minute, constantly striving to reach the optimal operational reliability. This new approach will help provide fresh insights into the various complex factors that cause delay, and may help guide potential reform to franchise and regulatory incentives.

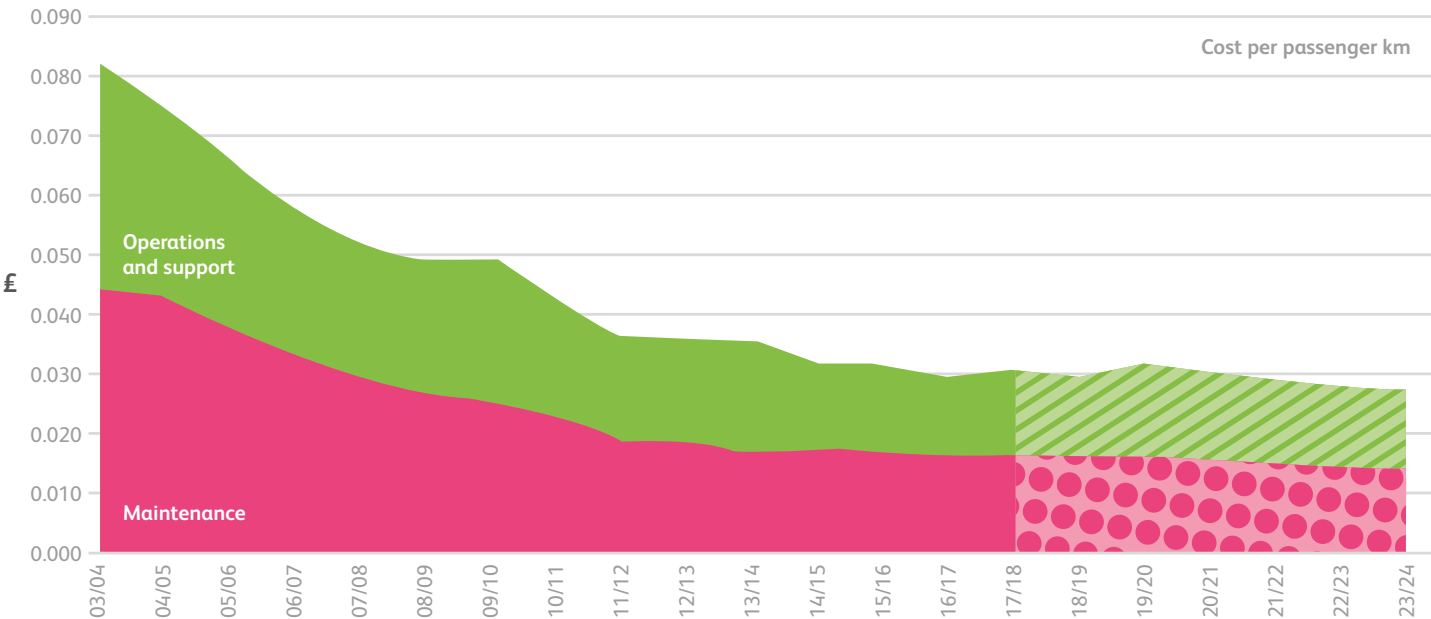


# Efficient

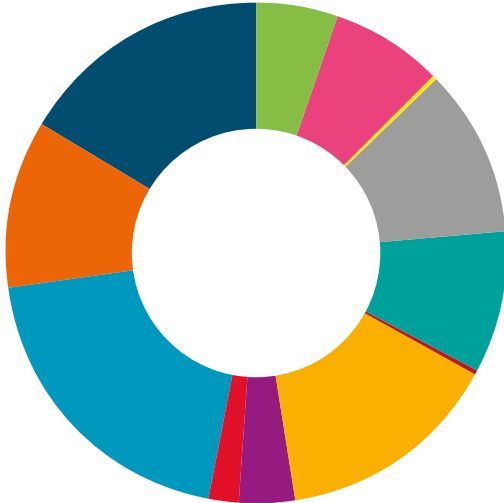
The doubling in demand for Britain’s railways over the last twenty years is a mark of the rail industry’s success, but as the railway has grown bigger, so has the cost of running it. We also know that in these challenging economic times, passengers are concerned about the level of fares, and want value for money on ticket prices.

Network Rail needs to become the most efficient company we can be, if we are to play our part in delivering an affordable railway for the future. Driving greater efficiency is a core part of our vision for CP6.

Our plan for 2019 – 2024 includes spending £47bn (in 2017/18 prices) to operate, maintain, renew and enhance the railway. Over the last 10 years we have reduced the operating and maintenance cost of passenger journeys by 40%. In CP6, we are forecasting that the cost per passenger km of running the railway will reduce by a further nine per cent in real terms.



## Summary of operating costs efficiency savings (%)



- Activity/Scope Efficiencies 0.3%
- Optimisation of access 0.4%
- NOS/ROC Migration/Other Operations 0.6%
- Organisation Restructure 0.5%
- Intelligent Infrastructure 0.8%
- Electrical Safety Delivery programme 0.2%
- Other innovation & technology benefits 0.1%
- Improved contracting strategies 1.1%
- Supply Chain Organisations initiatives 0.6%
- LEAN 0.9%

## Summary of renewals costs efficiency savings (%)



- Activity/Scope Efficiencies 1.8%
- Optimisation of access 1.0%
- Early contractor involvement, early scope definition 1.3%
- Stable workbank 1.0%
- LEAN 0.9%
- Other innovation & technology benefits 0.7%
- Improved contracting strategies/rates 2.2%
- Supply Chain initiatives 0.7%

Some of the ways that we will deliver a more efficient railway in the coming years include:



### Using intelligent infrastructure

New technology is allowing us to collect improved information about the state of railway infrastructure, allowing us to predict and prevent problems and better target our maintenance and renewals work.



### Stabilising our work plan

Making it easier for both us and our supply chain to plan and deliver work efficiently.



### LEAN

We are training people to use LEAN process analysis techniques to systematically identify opportunities to improve. Best practice and new ideas are shared across the company. This is already saving millions.



### Making the best use of access

The amount of time we have to access the railway to undertake work has reduced, so we are taking a number of steps to optimise the way we work when we do have access.



### Improved contracting strategies

Working with our supply chain to become an industry client of choice.



### Making our national functions more efficient

Delivering savings through IT transformation, increased commercialisation of Business Services and improved Supply Chain Operations.



# Growing

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The railway in Britain is a success story, a growth industry that is delivering jobs and growth across the country. But there is a long-term challenge, with passenger numbers set to increase again by around 40 % by 2040. With a million more train services every year running on our network than a few years ago, tackling congestion and crowding on our railway is a daily challenge.

Our Railway Upgrade Plan is delivering unprecedented levels of investment into the railway between 2014 – 2019, and passengers right across Britain are beginning to feel the benefit as new trains, improved services, and better stations come online.

CP6 will mark a turning point for Britain's railway, with the end of major analogue re-signalling. 63 % of all signals will need to be replaced in the next 15 years - digital signalling is the future that our plan ushers in. In the coming years, we will be accelerating the transition to digitally-run railways so we can unlock the benefits of digital signalling, allowing us to run more trains, safely and more reliably.

There are a number of schemes coming into service in 2018/19 that will use digital railway technology, including the

Elizabeth Line, and Thameslink, as well as Traffic Management schemes at Cardiff, Romford and Didcot. We will use these schemes to assess the benefits and learn lessons for future digital railway schemes. Our forecasts show that early adoption of collaborative working practices for a Digital Railway could deliver potential savings of 30 %.

Digital Railway is just one part of our Railway Upgrade Plan for CP6. There are a number of other schemes and projects being planned. But we have radically changed the way that we plan and deliver major projects in recent years, and we will no longer commit to a project before it is fully developed and costed. In CP6, enhancements will be considered on a case by case basis rather than in one five year budget.



The Department for Transport will regularly publish a ‘pipeline’ of railway enhancement projects, setting out where in the process each one is: commitment to develop; commitment to design; commitment to deliver. The Department’s recently published ‘Connecting People: A Strategic Vision for Rail’ sets out the Government’s plans for the next generation of rail schemes, which includes:

- **Transpennine Route Upgrade** – improved journey times between Manchester and Leeds
- **High Speed 2 (HS2)** – Phase 1 of the new high speed network will open in 2026, with new high-speed trains running from London to Birmingham
- **East West Rail Phase 2 (the western section)** – re-establishing the rail link between Cambridge and Oxford to improve connections between East Anglia and central, southern and western England

The Government is also working with Transport for the North on Northern Powerhouse Rail - a package of upgrades and network changes to improve frequencies and journey times between major cities in the North; and with Transport for

London on Crossrail 2, to deliver increased capacity and reduced rail journey times between south west and north east London.

We also want to make it easier for other people to fund, finance or deliver work on the railways. We are implementing a number of reforms that aim to cut red tape, so people can come forward with innovative solutions and new ways of working on the railway. In the years ahead, we will:

- Make it easier for third parties to compete for work
- Enable third parties to carry out work on the railway directly
- Make third party funding easier to achieve
- Attract and reward third party finance and delivery



# Great people, great teams

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Network Rail has been going through a huge period of change, and the delivery of our reforming, ambitious plans for 2019 - 2024 will only be possible if we can attract, develop, and retain the brightest and the best.

People working in the railway industry are some of the most committed and dedicated people in the country. We want Network Rail to be a great place to work, and help make people proud to work on Britain's railways.

We want to make sure our staff are looked after properly, whether office based or working trackside. It can be cold, wet and windy out on the railway, and our teams work through the night in the toughest of conditions. By the end of 2019, we have committed to providing adequate toilet and changing facilities for all genders at all sites throughout the country. No trains will discharge toilets onto the track by this time too, which will significantly improve the working environment for our staff and help us to provide a work place of dignity and respect.

To reach our potential we must call on the talents of everyone; diverse teams perform better. In recent years, we have started to make real progress in diversifying our workforce:

- we increased the number of women in the company by 32 per cent between 2014 - 2019
- we launched an award winning diversity and inclusion strategy
- we now have vibrant staff networks for gender equality, LBGT, cultural fusion and carers (leaders of some of these groups have been recognised in the Queen's honours list)

But we have much more to do and by 2024, we want to increase the number of women working at Network Rail by 50 per cent. We will also have gender balanced recruiting of apprentices and graduates, which is ambitious but we believe essential in driving cultural change and attracting the right talent to our business.

We were ranked 66th in the top 100 graduate employers this year, up ten places from the previous year and we aim to be in the top 25. We are proud to lead the industry in the development of apprenticeships across all levels in a range of technical and professional role, offering a wide range of interesting and rewarding career opportunities. In the last ten years, we have trained more than 2,000 apprentices, 75% of whom are still with the company. This is a record to be proud of, and we want to build on it in the years ahead.

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We will be known as a company where our people work in an environment that allows everyone a fair opportunity to reach their personal potential.

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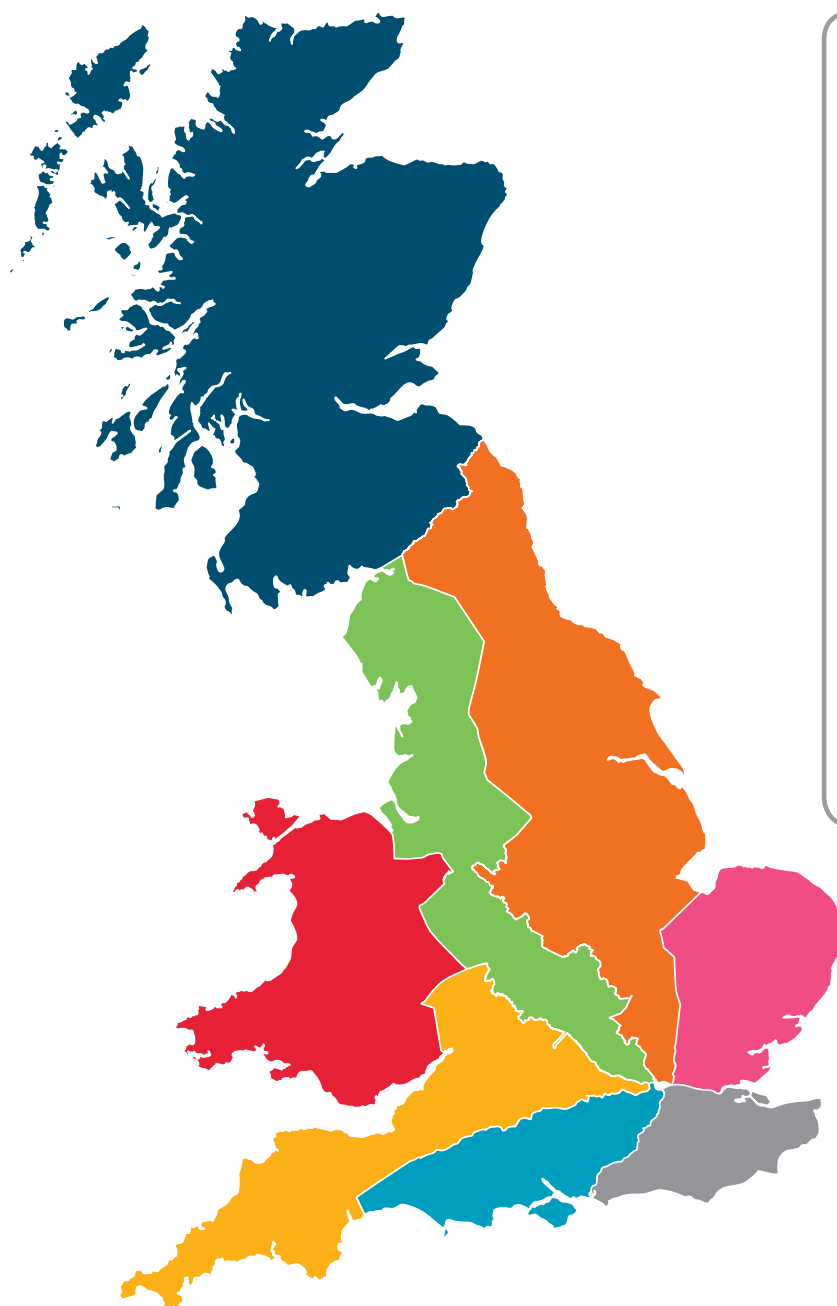
# Tell us what you think

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The publication of this plan is just the first step towards a better railway for 2019 – 2024. The regulator will be seeking views on what people think about our plans. You can also tell us what you think.

You can download the full Strategic Business Plan from our website [www.networkrail.co.uk/strategicbusinessplan](http://www.networkrail.co.uk/strategicbusinessplan), and you can find out more about what is happening on each route by clicking on the map below or by downloading route plans from our website.

If you want to tell us what you think, or if you would like any further information, please contact [publicaffairs@networkrail.co.uk](mailto:publicaffairs@networkrail.co.uk)



## Network Rail Routes

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- Anglia
- London North Eastern and East Midlands (LNE&EM)
- London North Western (LNW)
- Scotland
- South East
- Wales
- Wessex
- Western
- Freight and National Passenger Operators (FNPO)

**Network Rail Limited**

1 Eversholt Street  
London NW1 2DN

Tel **020 7557 8000**

**[networkrail.co.uk](http://networkrail.co.uk)**

Company number: 4402220  
Registered in England and Wales

For more information, please contact  
**[publicaffairs@networkrail.co.uk](mailto:publicaffairs@networkrail.co.uk)**

***Working for you***