

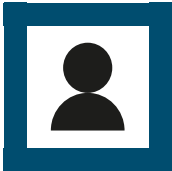
Railway Upgrade Plan

2017/18



Rail in Britain

Safe



2015-16 was the ninth year in a row with no passenger or workforce fatalities in train accidents¹



The UK has the best safety record of the ten largest European railways²

Reliable



In 2015-16, 89.1 % of train services arrived on time³



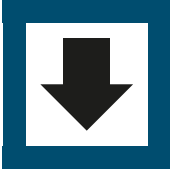
The number of delays fell by 40 % between 2006-07 and 2014-15⁴



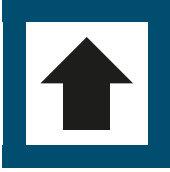
In a European comparison, Britain comes second in terms of passenger satisfaction⁵ (after Finland but ahead of France, Germany and other European countries)

¹Annual Safety Performance Report, RSSB (2016)
²Annual Safety Performance Report, RSSB (2016)
³Rail Statistics Compendium 2015-16 Annual, Office of Rail and Road (2016)
⁴Rail's transformation in numbers, Rail Delivery Group (2016)
⁵What makes Britain's railways great, Rail Delivery Group (2017)
⁶Rail's transformation in numbers, Rail Delivery Group (2016)

Affordable



Network Rail operating costs have fallen by 46 % since 2003-04⁶



£10.1bn added value rail contributes to UK economy every year⁷

Growing



Passenger numbers have doubled since 1997-98⁸, and they are expected to double again by 2040⁹



There were an average of 4.7m passenger journeys per day in 2015-16¹⁰



Over 3,800 extra trains per day ran in 2015-16, compared to 1997-98¹¹

⁷Our customers, our people, Rail Delivery Group (2016)
⁸ORR data portal
⁹Our customers, our people, Rail Delivery Group (2016)
¹⁰ORR data portal
¹¹Rail's transformation in numbers, Rail Delivery Group (2016)

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Our Railway Upgrade Plan at a glance

2014

- Reopening of the line at Dawlish, after the track was destroyed in winter storms.
- The rebuilt Reading station opened, including new platforms and new entrances, designed to improve experience for passengers and meet increasing demand.

2015

- Borders Railway opened. The new line between Tweedbank and Edinburgh brought train services to the Borders for the first time in nearly 50 years.
- Redeveloped Birmingham New Street opened, with improved layout and retail offer for passengers.

2016

- Oxford-Marylebone line opened – the first new rail link between a major British city and London in more than 100 years.

2017

- Cambridge North station to complete – a new station to support economic growth in the area and alleviate congestion in the city.
- Ordsall Chord completed (new stretch of track to connect Manchester stations for the first time, reducing congestion and creating new routes).
- Platform extensions from Waterloo to Reading, to allow longer trains.

2018

- First Elizabeth line (Crossrail) services run - a new railway for London and the South East, with improved journey times and better connections for passengers.
- Thameslink programme, including London Bridge station rebuild, completes. Transforming north-south travel through London with new, more frequent trains and better connections.

2019

- Elizabeth line fully open.
- Midland Mainline electrified to Kettering and Corby, enabling faster journey times and almost twice as many seats into London at peak times.
- Great Western (Cardiff-London) electrification complete – more trains with more seats and more space, faster journey times and greater reliability.

About us

Network Rail owns and maintains the majority of Britain's rail infrastructure – including:



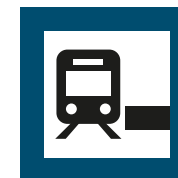
20,000 miles of track;



40,000 bridges and viaducts;



thousands of tunnels, signals and level crossings; and



2,500 stations – most of which are leased to train operators, although we manage 18 of the largest stations.

We are a public sector, arms-length body of the Department for Transport, regulated by the Office of Rail and Road. Our income comes largely from government and from the 'track access charges' we receive from train operators – so ultimately from tax payers and fare payers.

We divide the network into nine routes:

- Anglia;
- London North East and East Midlands;
- London North West;
- Scotland;
- South East;
- Wales;
- Wessex;
- Western; and
- Freight and National Passenger Operators (FNPO).

Each is run as a separate business, with its own managing director, responsible for the day-to-day running of the railway in their area and with targets and priorities agreed jointly with the train operators who use their route. FNPO works with freight operating companies and those passenger operators whose services extend across different geographical routes, to ensure their needs are addressed within our devolved structure.

As well as our maintenance work to keep the railway running safely and effectively day-to-day, we are in the middle of delivering the largest ever programme of enhancements to the railway. These are projects that make changes to the railway in order to improve performance and increase capacity – many of which you'll read about in this report.



We employ
C. 36,000 people



We're investing £100m
a week on improving
the railway

Message from our Chief Executive

Britain’s railways are a remarkable success story. We now have the safest major railway in Europe, and also the fastest growing – passenger numbers have doubled in the last 20 years.

With that success, however, comes challenges. We now also have one of the most heavily congested railways in Europe. Stations and platforms have to accommodate more passengers than they were ever designed for. Parts of the network have no room to run the extra trains that are needed to meet demand.

As this document shows, we will be completing some major projects in the year ahead that will start to address some of these challenges and allow for more trains, longer trains and faster journeys in different parts of Britain.

That’s good news for passengers but also good news for wider society. We are a major employer, and a significant purchaser of UK goods. Network Rail employs 36,000 people, and in 2015/16 spent £6.7bn with 3,392 suppliers – 98 per cent of whom are UK-based. Local economies will benefit this year as we continue to invest in their stations and make improvements that make travel to and from the area easier. Of course we, like any public company, have to live within our means. With the final two years of our five year funding period left, budgets are tight and we will need to drive rigorous efficiencies to balance the books and make ends meet. Spending will be prioritised based on what matters most to customers: safety, train performance and completing vital projects to expand and improve the railway.

The next twelve months will also see a further step change in Network Rail’s internal transformation. We are on a journey to becoming a public sector organisation that behaves like a private business – relentlessly customer focused, competitive and attractive to investors. Devolving power to route-level is central to this, and in the rest of this document you will hear from each of our route managing directors about what they are delivering in their area and their aspirations for the year ahead.

Working together with Government and train companies, we are in the middle of delivering the biggest programme of infrastructure projects in decades. Many of these will come to fruition in the next two years. Passengers are going to experience a better railway for a better Britain – and we are playing our part.



Mark Carne,
CEO of Network Rail



Network Rail is changing

In July 2016, Network Rail published ‘Delivering for our Customers’, the organisation’s transformation plan. It focuses on five key areas where we know we need to change, setting out how we will:

- Become relentlessly customer focused
- Ensure we are cost competitive and efficient
- Become more commercial, to attract third party investment
- Instil a culture that embraces diversity, continuous improvement, efficiency and safety.
- Find solutions to the biggest problem facing the railways – the lack of capacity to meet growing passenger demand.

We have already made significant progress. We now develop and agree performance targets at a route level with train operating companies, rather than having them set centrally by the ORR, to ensure we are focused on what our customers want. Financial authority levels have been changed to allow routes to take the vast majority of decisions, and their leadership teams have been strengthened with new chief operating officer roles.

We have established an independent review, chaired by Professor Peter Hansford, into how to remove the barriers that get in the way of others delivering projects. Competition will drive innovation and make it easier to raise third party funding.

There is more to come in the year ahead. Our plans include:

- Establishing ‘route supervisory boards’, bringing us together with train operators and passenger representatives, under an independent chair, to help us improve joint planning and further align targets. We are currently trialling this approach on our Western route.
- Appointing a new managing director to align with our pan-Northern stakeholders and oversee the planning, investment and delivery of Transport for the North funded projects.
- Completing strategic business cases for five areas where we could target the deployment of digital railway solutions to help address the lack of capacity on the rail network.

Guide to our customer focused targets

In each of the route sections which follow, you will find some of our targets for the year ahead. These are only a selection, and the full scorecard can be found on our website (www.networkrail.co.uk).

The targets have been drawn up in consultation with train and freight operating companies, to ensure we are focusing our attention on the issues most important to them, and so that together we can improve passenger experience. This also means that the targets vary from route to route, as different customers and different regions will have different needs and priorities.

Glossary

CaSL – Cancelled and Significantly Late. This measures how many trains are cancelled or are more than 29 minutes late at their terminating station.

Freight Delivery Metric – Measures the percentage of freight trains arriving at their destination within 15 minutes of schedule.

MAA – Moving Annual Average.

Passenger satisfaction measure – How this is measured is determined by route, but is normally from the National Rail Passenger Survey conducted by Transport Focus.

PPM – Public Performance Measure. This is the percentage of trains that arrive at their terminating station within five minutes (for commuter services) or ten minutes (for long distance services) of when they were due.

Reduction in railway work complaints measure – We believe that the number of complaints that we receive from the public about our work could be reduced if we improve how we inform people about work due to take place, and ensure all our staff behave considerably towards those living and working close to the railway. Each route is therefore aiming to reduce the number of complaints it receives in the coming year.

Right Time Arrival – This measures the percentage of trains arriving at their terminating station early or within 59 seconds of schedule.

Right Time Departures – This measures the percentage of trains departing their station of origin on time or early.

Our routes at a glance

1. Anglia (p10-15)

- c2c
- Greater Anglia
- London Underground/TfL Rail

2. London North Eastern and East Midlands (LNE&EM) (p16-21)

- DB Tyne & Wear
- East Midlands Trains
- First TransPennine
- Grand Central
- Hull Trains
- Northern
- Virgin Trains East Coast

3. London North Western (LNW) (p22-27)

- Chiltern
- London Midland
- Merseyrail
- Virgin West Coast

4. South East (p28-33)

- Eurostar
- Govia Thameslink Railway
- Southeastern
- Southern

5. Wales (p34-39)

- Arriva Trains Wales

6. Wessex (p40-45)

- South West Trains

7. Western (p46-51)

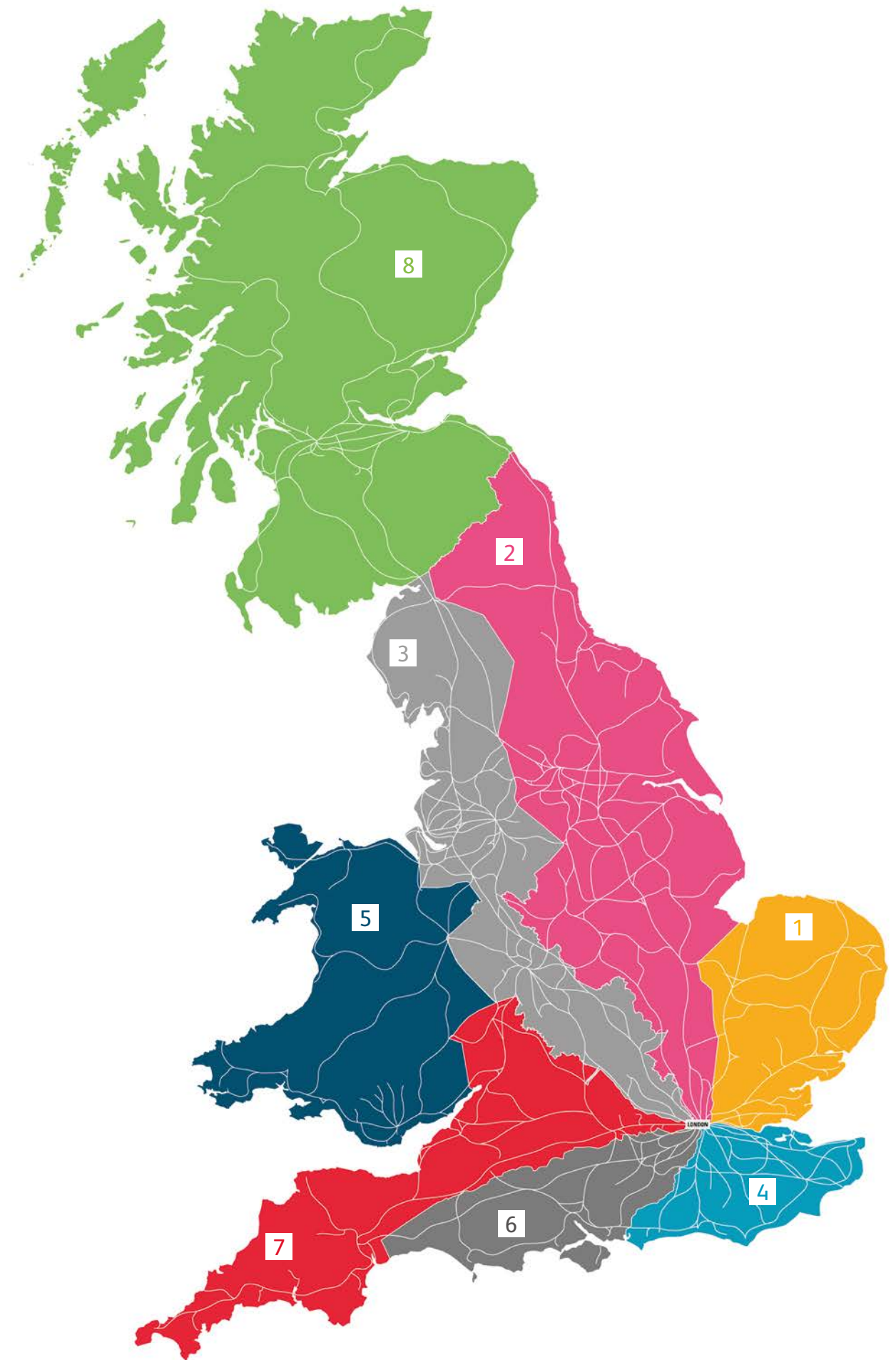
- Great Western Railway
- Heathrow Connect
- Heathrow Express

8. Scotland (p52-57)

- Abellio ScotRail

Freight and National Passenger Operators (p58-61)

- Caledonian Sleeper
- Colas Rail
- CrossCountry
- DB Cargo
- Direct Railway Services
- Freightliner
- GB Rail Freight



1 Anglia

Introduction from the route managing director – Richard Schofield

Anglia is an increasingly busy commuter route into London, as well as serving two airports in Stansted and Southend and being a key freight route for the ports of Felixstowe, Thameshaven and Tilbury. It also includes London Liverpool Street station, the capital’s third busiest station, which is owned and managed by Network Rail.

Performance remains challenging, with an ever increasing need for additional capacity as passenger volumes increase each year. All the main train operators on the route are now in long-term franchises/concessions, enabling us to build strong relationships and focus together on performance.

In the next year, passengers on the route will benefit from a major new station north of Cambridge and the introduction of new, more reliable electric trains for rail passengers as part of Crossrail. Four-car electric trains will double capacity on the Gospel Oak to Barking line in North London and, thanks to funding from the London Legacy Development Corporation, passengers, local residents and businesses will benefit from a completely transformed station with improved access and better local connections at Hackney Wick. The entire Greater Anglia train fleet will also be replaced by 2020. Significant investment in infrastructure is being made to cater for large housing developments, particularly on the West Anglia lines. Plans are also being developed for a potential third-party investment scheme to build a new station to serve Addenbrooke’s hospital and the expanding biomedical campus to the south of Cambridge.

My priority is to build ever-closer relationships and joint plans with our train and freight operating partners to enable us to improve both our day-to-day performance and our ability to quickly get services up and running again following disruptive incidents. We are building a joint team with Greater Anglia to help deliver their franchise commitment for better and more frequent services. We are also creating a new Director of London Rail, in conjunction with Arriva Rail London, to drive improved safety, performance and efficiency on the London Overground.

Our challenge will continue to be to offer a good and improving service to passengers while we carry out major upgrade work on our main routes through Essex and North London. Whilst potentially disruptive to passengers in the short term, projects such as Crossrail will deliver the transformative improvement we need to help address our capacity challenge.



Route at a glance

- £ CP5 (2014-2019) renewals and refurbishment spend – £915m
- 🚆 4,230 train services per day
- 🚦 849 level crossings
- 📡 4 integrated control centres, 2 power signal boxes, 43 signal boxes and 10 crossing boxes
- 🚉 235 stations
- 🛤️ 1,697 miles of track
- 👤 C. 2,400 employees

Our customer focused targets for the year ahead

[NB these are a selection of our targets, and remain subject to ORR and DfT approval. For further information about what these targets mean and how they are set, please see page 7]

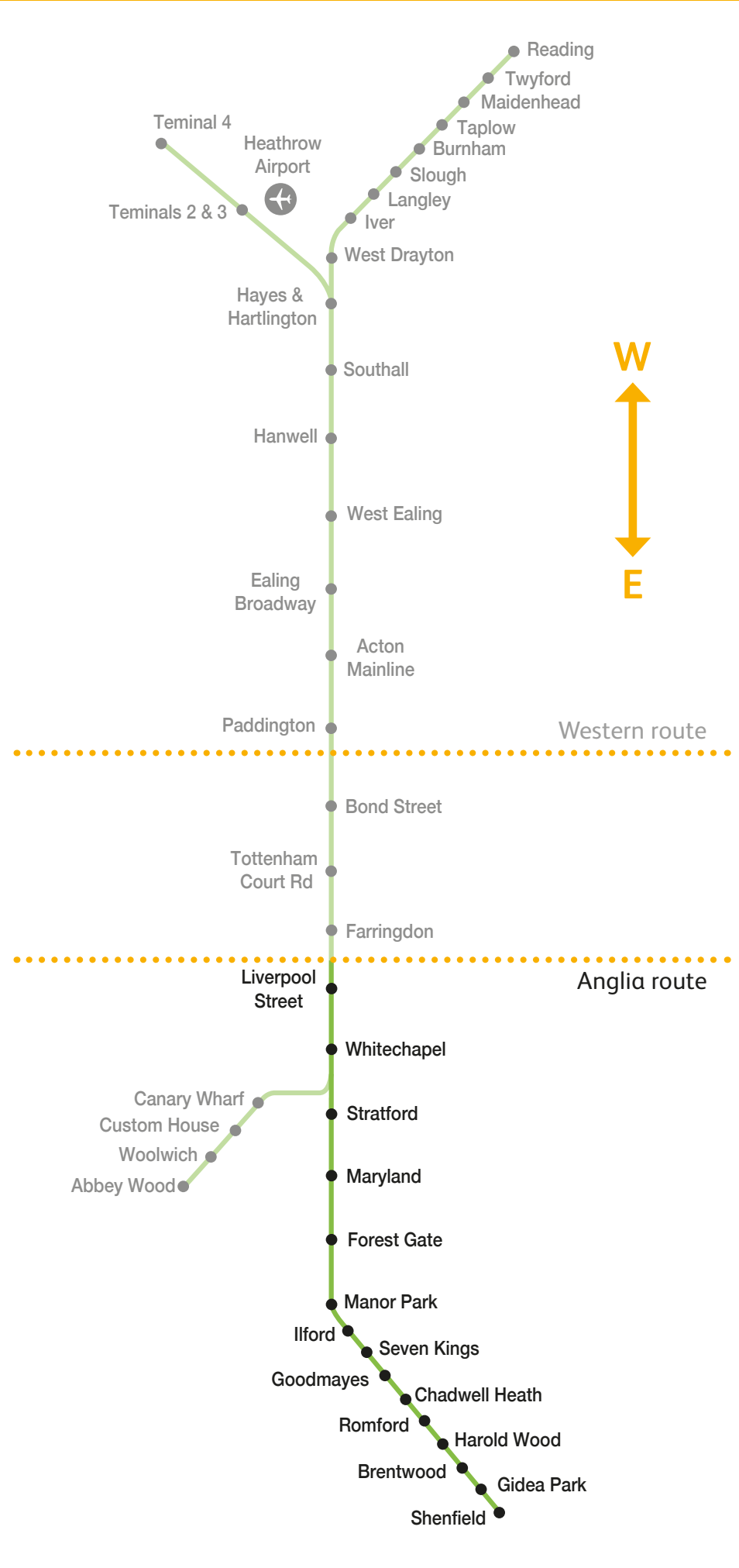
c2c
PPM – 96.1 %
CaSL – 1.3 %

Greater Anglia
PPM – 90.5 %
CaSL – 2.5 %

London Overground
PPM – 95.3 %
CaSL – 1.8 %

TfL Rail
PPM – 94.5 %
CaSL – 2.2 %

Route-wide
Passenger satisfaction – 85 %
Railway work complaints – 880



- The Elizabeth line
- West Anglia Main Line
- Overhead line renewals
- Gospel Oak to Barking
- 1 Cambridge North station
- 2 Hackney Wick station
- 3 Felixstowe doubling scheme

The Elizabeth line

The Elizabeth line (Crossrail) is a new railway that will link Reading and Heathrow in the west with Shenfield and Abbey Wood in the east, via 21km of new tunnels under central London. The tunnels are being delivered by Crossrail Ltd, but we are responsible for the parts of the Crossrail route that are on the existing network – upgrading track, redeveloping stations and installing overhead electrical equipment.

In the year ahead: Building a new platform at Shenfield station and improving the track layout there. Work to connect the main network to the new tunnels at Pudding Mill Lane.

By 2019: Elizabeth Line to fully open.

Passenger benefits: Passengers will benefit from quicker journeys - with 1.5m more people able to get to central London within 45 minutes – as well as new trains, improved stations, and reduced congestion at underground stations and on the rail network (reducing the risk of delays).

There are also wider economic benefits, with the project expected to add £42bn to the economy of the UK and support regeneration across the capital.

West Anglia Main Line

We are working with the UK Government, Mayor of London, Transport for London and local authorities to improve the West Anglia Main Line and accommodate proposed plans for Crossrail 2.

In the year ahead: We will begin upgrade work later this year.

By 2019: We will:

- Build a third track between Stratford and Angel Road.
- Build a new station south of the existing Angel Road station to serve the new Meridian Water development.



- Make improvements at Tottenham Hale station including new platforms, lifts and a new bridge linking the Hale Village estate.
- Improve Northumberland Park station, including building a new step-free access footbridge.

Passenger benefits: An extra two trains per hour between Stratford and Tottenham Hale stations, reducing crowding and increasing choice for passengers, as well as new and improved stations.

This work also supports regeneration in the Upper Lee Valley, with 10,000 new homes and 6,000 new jobs planned at Meridian Water and 3,500 new homes and 500 new jobs at Northumberland Park.

Overhead line renewals

We are replacing 320km of overhead wires between Chelmsford and London Liverpool Street.

In the year ahead: We will begin work to renew the overhead wires on the Southend Victoria branch.

By 2019: Work continues.

Passenger benefits: New wires will reduce the risk of faults and disruptive incidents, particularly in summer, resulting in fewer delays and cancellations for passengers.

Gospel Oak to Barking

On behalf of the Department for Transport and Transport for London, we are electrifying the line between Gospel Oak and Barking.

In the year ahead: Continue overhead wire installation.

Passenger benefits: From 2018, new four-carriage electric trains will allow twice as many people to travel on this route.



Cambridge North station

We are building a new station, in partnership with Cambridgeshire County Council and funded by the Department for Transport, to serve Cambridge Science Park and the suburb of Chesterton.

In the year ahead: The station will open in May 2017.

Passenger benefits: 3,000 passengers a day are expected to travel to or from the new station, which will alleviate the pressure on the existing Cambridge station, and provide improved access and journey times for passengers.

It is expected that the station will encourage new businesses to the area, as well as help existing businesses to grow, creating new employment opportunities.

Hackney Wick station

We are improving Hackney Wick station in east London.

In the year ahead: Due for completion January 2018.

Passenger benefits: Improved station environment, including a new underpass, lifts and stairs, and better access through the local area.

Felixstowe doubling scheme

To support growth at the Port of Felixstowe, we are planning to build an additional track and make changes to six level crossings in the Trimley area.

In the year ahead: We are awaiting a decision from the Secretary of State for Transport but anticipate construction beginning in early 2018.

Passenger benefits: The construction of the additional track will allow more freight trains to run, reducing the need for freight to be transported by road and so helping to reduce road traffic congestion and pollution.

Route wide initiatives

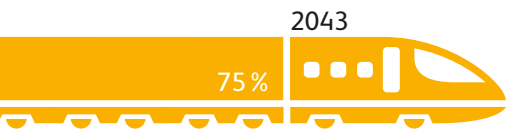
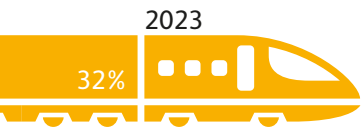
Level crossing risk reduction programme

We are proposing to close or alter over 100 level crossings across Cambridgeshire, Suffolk, Essex, Havering, Hertfordshire, Southend and Thurrock.

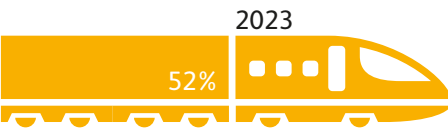
In the year ahead: We are awaiting a decision from the Secretary of State for Transport. If permission is granted, work will begin in 2018.

Passenger benefits: Closing the crossings would mean improved safety for crossing users and reduced risk of delays for rail users.

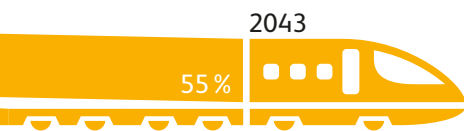
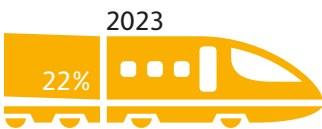
Forecast growth for journeys



GEML ‘outer’ services to Norwich



GEML ‘inner’ services (Crossrail)



North London Line

2 London North Eastern and East Midlands (LNE&EM)

Introduction from the route managing director – Rob McIntosh

On LNE&EM, our purpose can be summarised with a simple phrase – we care about our people, we are proud about our work and we are passionate about railways.

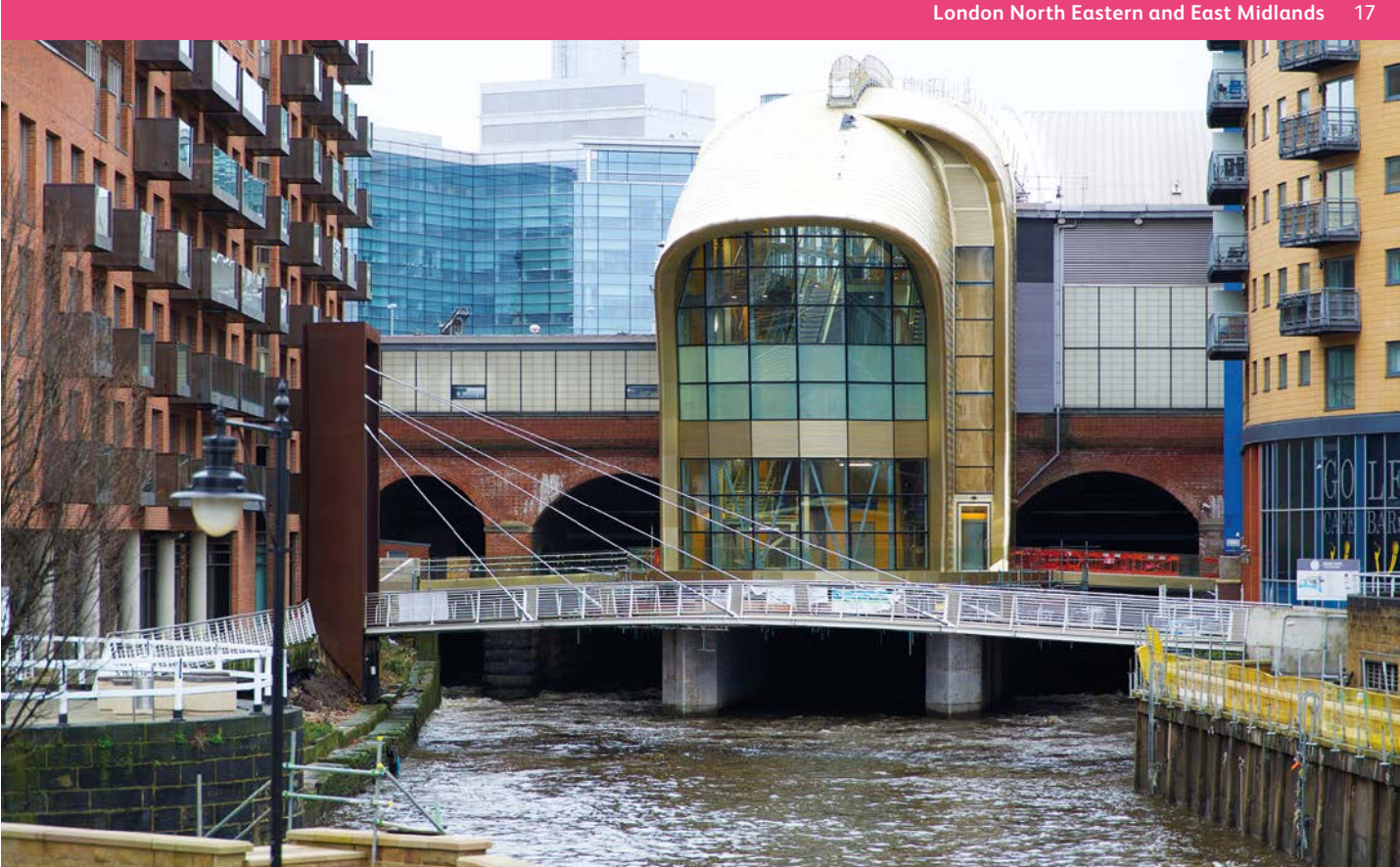
Each day, we serve around 20 per cent of the UK’s travelling public, with hundreds of commuter and leisure services connecting major cities and conurbations, supporting regional economies up and down the country.

This makes it critical that we can deliver on train performance, and we have had some recent successes. This January saw the best train performance on record for the Midland Main Line and also our best freight service performance. We have responded to major incidents on the East Coast Main Line in 2016 with improvement work to our overhead lines to sustain train performance in the short term, whilst developing a proposal to upgrade the wires as they approach the end of their design life over the next few years.

In early 2017, new stations at Ilkeston in the Midlands and at Low Moor in West Yorkshire opened as we continue to work with local authorities to help deliver their transport strategies. We will continue to electrify the railway from Kettering to Corby and to prepare for the upgrade of the Transpennine route, with track and platform work at key stations across Yorkshire. The East Coast Main Line continues to be prepared for the new Intercity Express trains in 2018, with power supply and station platform upgrades.

Our route team are focused on helping the communities we serve, listening to what they want and delivering a safe and reliable railway that meets their needs. Working with our train and freight operating customers through alliances and partnerships, we will focus on their passengers – who care simply about value for money, getting on the train when they want to and getting off where and when they want to – as well as business customers who need to receive their goods on time. Our job – collectively – is to provide that safe and reliable railway, improving long term performance whilst maintaining a safe place to work and travel.

To do this we are transforming our approach to managing the assets on the railway, looking longer term with a focus on safety and performance. We are focused on continually improving what we do and driving the efficiency of our business, giving future funders of railway investment confidence that we take our responsibilities seriously. Our biggest step forward is the devolution to a route based business and devolved regulation. Not only do we now involve our customers in the planning of key performance targets but our route targets are now also regulated, meaning that our route business is managed with rigour and accountability. Working in this way ensures our success is driven with our own customers in mind.



Route at a glance

- £ CP5 (2014-2019) renewals and refurbishment spend – £2.285 billion
- 2,600 train services per day
- 1,968 level crossings
- 414 stations
- 6,914 kilometres of track
- C. 5,500 employees

Our customer focused targets for the year ahead

[NB these are a selection of our targets, and remain subject to ORR and DfT approval. For further information about what these targets mean and how they are set, please see page 7]

East Midlands Trains

PPM MAA – 92.57 %

Grand Central

PPM MAA – 84.5 %

Hull Trains

CaSL MAA – 6.7 %

Northern (East)

PPM – 93.10 %

Virgin Trains East Coast

Right Time Arrival – 55 %

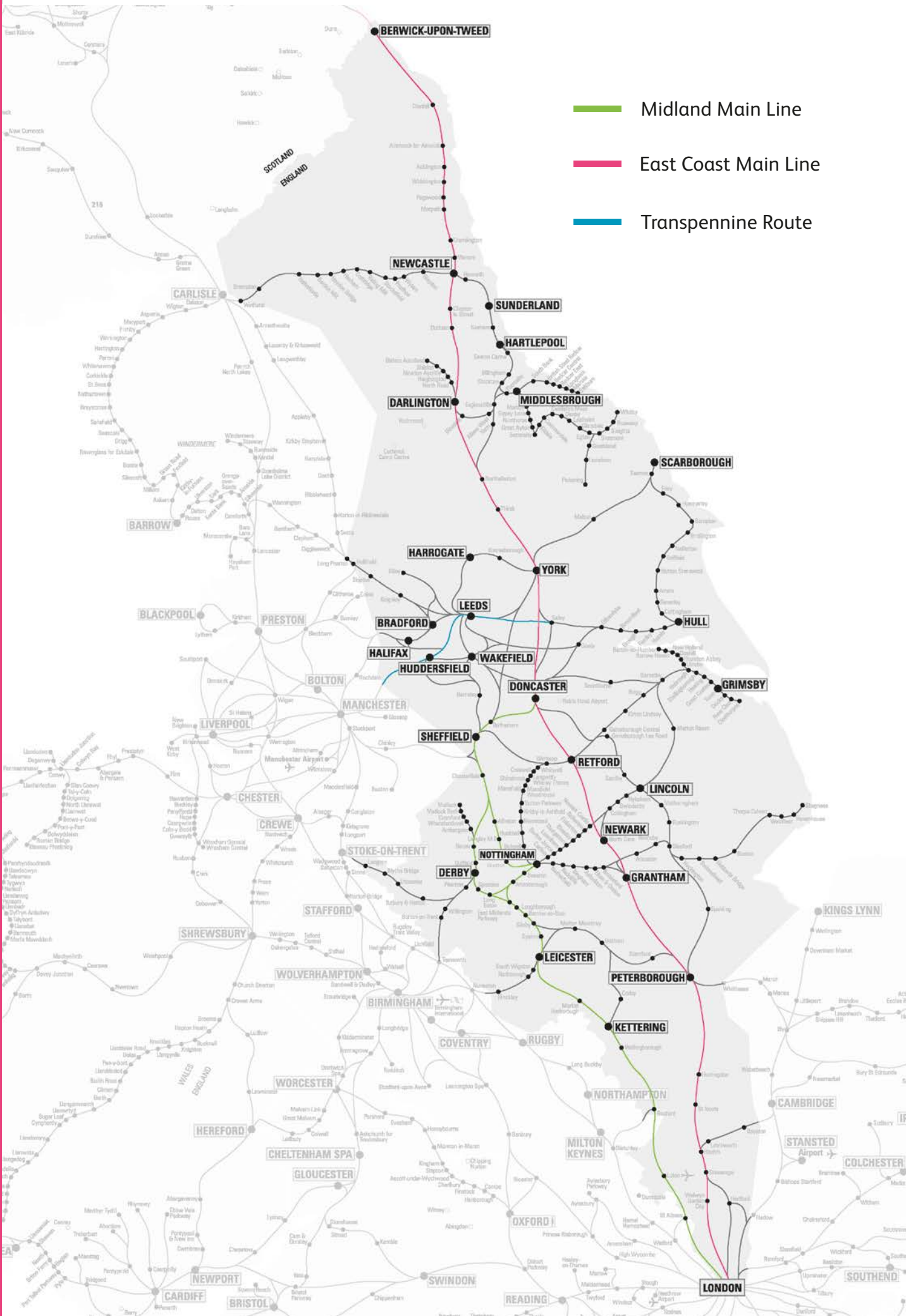
First TransPennine Express

PPM MAA – 90 %

CaSL – 4.3 %

Route-wide

Railway work complaints – 1,082



- Midland Main Line
- East Coast Main Line
- Transpennine Route



East Coast Main Line

We are making changes to our infrastructure so that new trains can run and we are also doing work to make the line more reliable.

In the year ahead: Extending the platforms at Durham station. Renewing infrastructure in the Thirsk area. Upgrading the power supply on the line.

Passenger benefits: More reliable journeys. The new Virgin ‘Azuma’ trains will provide an extra 12,200 seats, reducing crowding, and a reduction in journey times of up to 22 minutes.

Midland Main Line

We have begun a major programme to transform travel on the Midland Main Line.

In the year ahead: Work to change the track layout in the Derby area. Improvements at Market Harborough station will start this year. Work to get the Kettering-Corby line ready for the installation of the new electrical wires (altering bridges, removing trees, inserting the posts that will support the wires).

By 2019: Electrification of the line from London to Kettering/Corby.

Passenger benefits: Once the programme is complete, it will be possible to run faster trains, longer trains and more trains on the line. Passengers in the Ilkeston area will benefit this year from being able to catch a train from the town for the first time in 50 years.

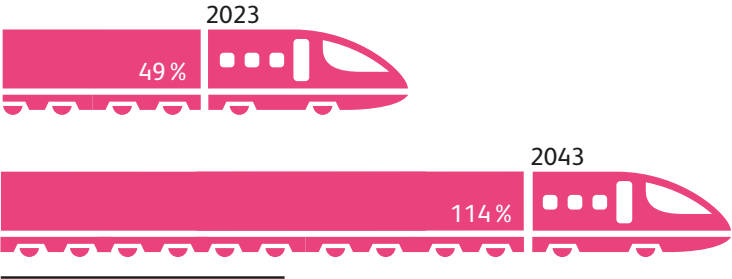
Transpennine Route

We have been asked by the Department for Transport to plan a programme of work to improve services and support economic growth in the north of England.

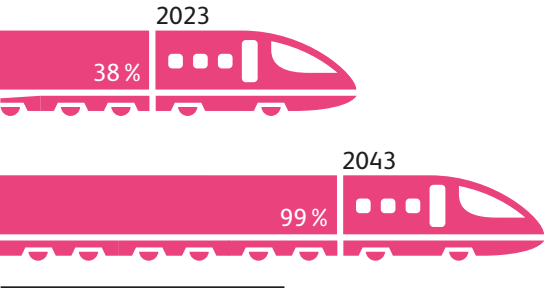
In the year ahead: We will finalise and present our proposal to DfT. We will make improvements to Hebden Bridge and Micklefield stations. We are also making improvements to the Calder Valley line and upgrading the signalling between Huddersfield and Bradford.

Passenger benefits: In the short term, passengers will benefit from the extra station at Low Moor and from step-free access to Hebden Bridge station. The Calder Valley line will be more reliable, reducing the risk of delays and cancellations. The long-term programme we are designing would allow more and faster trains to run across the route, including improvements in journey times of up to 15 minutes between Manchester Victoria and York, via Leeds.

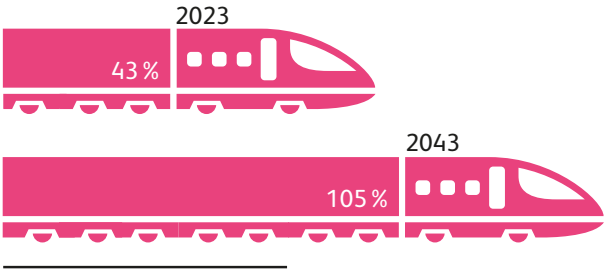
Forecast growth for journeys



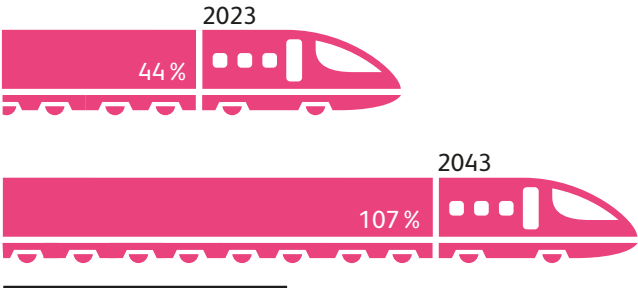
Leeds



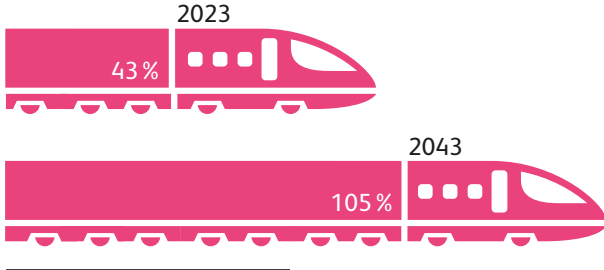
Newcastle



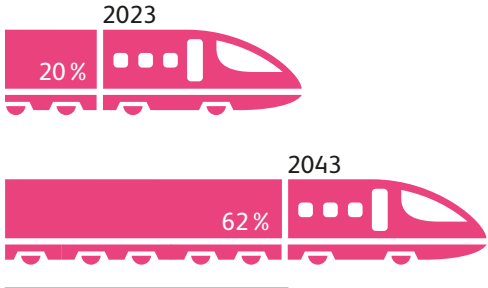
Sheffield



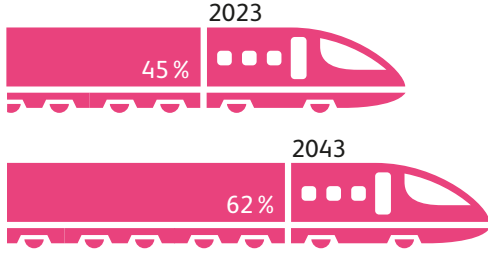
Leicester



Nottingham



London King's Cross



St Pancras



3 London North Western (LNW)

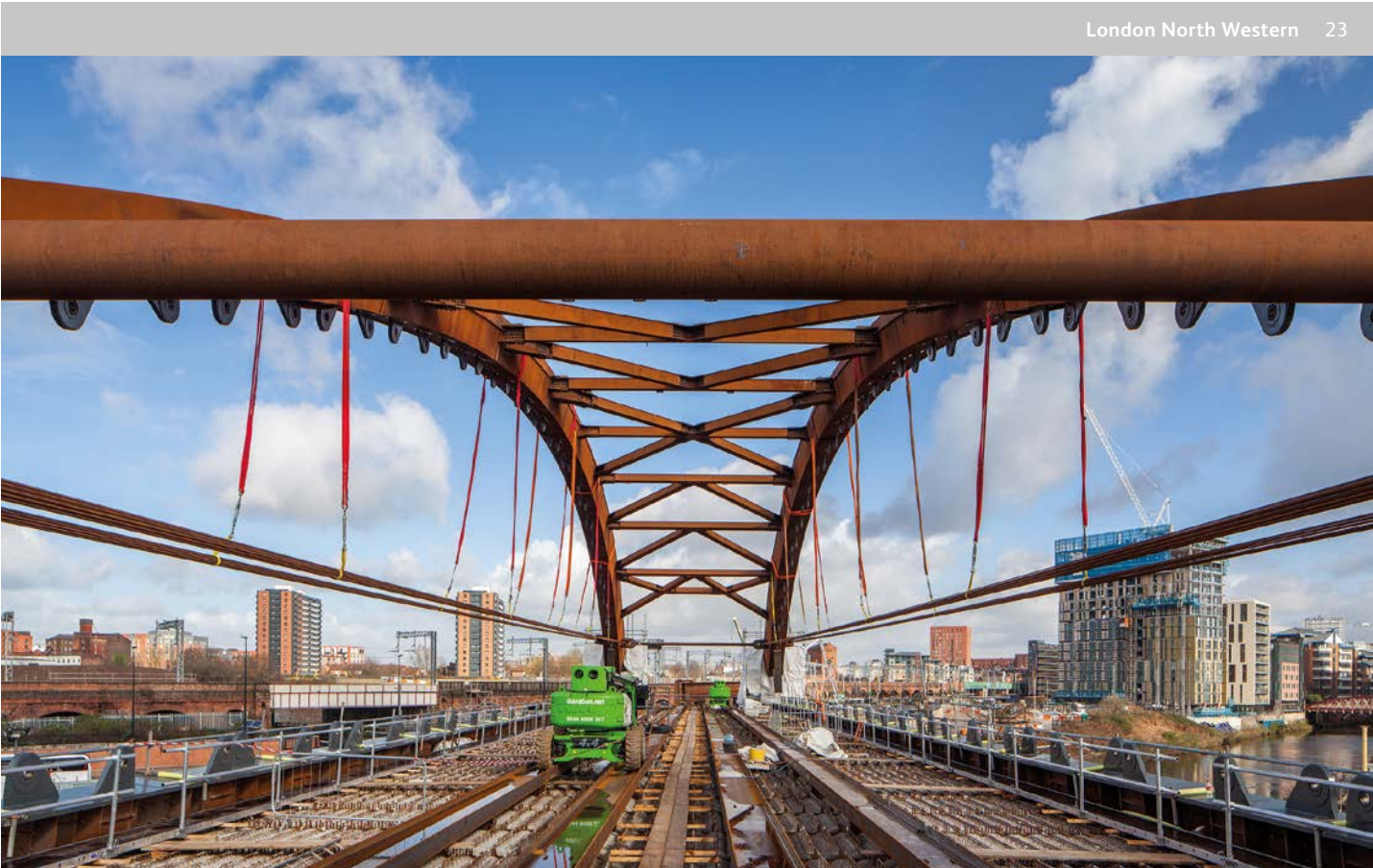
Introduction from the route managing director – Martin Frobisher

London North Western (LNW) is the largest of Network Rail’s route businesses, comprising 24 per cent of Britain’s railway. This includes the country’s economic spine: the West Coast Main Line, Europe’s busiest mixed-use railway, with seven freight operators and 14 passenger operators.

Getting from A to B on time is what train customers value above anything else. Over the last two years we have progressively improved punctuality on the West Coast Main Line from 84 % to 88 %. We aim to achieve 90 % within the next two years - all while continuing to upgrade the railway. These upgrades include the Great North Rail Project, which, by May 2018, will deliver customers more reliable, more spacious, more frequent, faster, greener, cleaner train services between cities like Liverpool, Manchester, Preston and Blackpool. After 2019 work will begin on upgrades to the Manchester-Leeds route.

We have a good track record on the route of attracting external investment to deliver rail improvements and meet customer needs. Examples from the last few years include the transformation of Birmingham New Street station (a £750m scheme, nearly half of which was funded by external parties) and the new Oxford-Marylebone line which was part funded by Chiltern Railways. We are developing exciting plans for future projects, including working closely with the NuGen nuclear project, and other partners, to deliver a £400m investment on the Cumbrian coast. We are also working with Midlands Connect and Transport for the North to develop the Midlands Rail Hub and Northern Powerhouse Rail schemes.

The main challenge we face on LNW is keeping customers on the move while the new HS2 railway is built between London and Birmingham. This is akin to building the railway equivalent of a new Wembley football stadium every month while continuing to host more and more matches. On LNW we have strong relationships with the freight and passenger operators. Great teamwork will ensure we continue to deliver for customers in 2017/18 and beyond.



Route at a glance

- £ CP5 (2014-2019) renewals and refurbishment spend – £2.385bn
- 6,009 train services per day
- 7,100 bridges, 728 level crossings, 159 signal boxes
- 571 stations
- 4,500 track miles and 325 route miles
- C. 6,700 employees
- 246.5m annual rail passenger journeys

Our customer focused targets for the year ahead

[NB these are a selection of our targets, and remain subject to ORR and DfT approval. For further information about what these targets mean and how they are set, please see page 7]

Chiltern

PPM – 94 %
CaSL – 1.4 %

London Midland

PPM – 89.5 %
CaSL – 2.5 %

Virgin Trains West Coast

PPM – 87.4 %
CaSL – 3.5 %

TransPennine Express

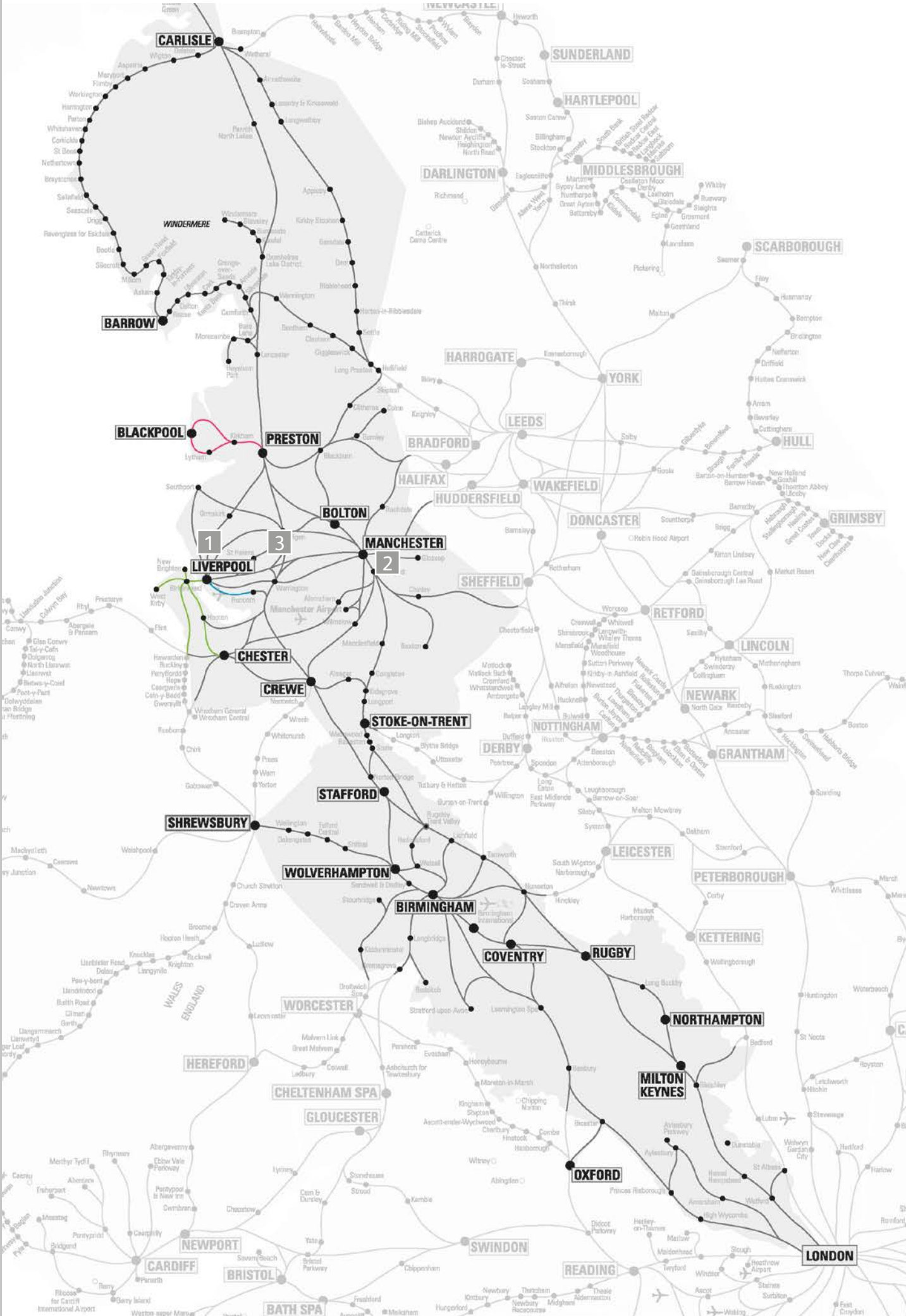
PPM – 90 %
CaSL – 4.3 %

Merseyrail

PPM – 95.9 %
CaSL – 1.9 %

Route-wide

Railway work complaints – 1,285



Wirral loop line track renewal

Blackpool to Preston line

Weaver to Wavertree

1 Liverpool Lime Street station

2 Ordsall Chord

3 Newton-le-Willows

Wirral loop line track renewal

We are replacing the track between Wirral and Liverpool.
In the year ahead: We'll have finished the work by June 2017.
Passenger benefits: Having new tracks mean they're less likely to develop problems, so there is a reduced risk of delays and cancellations.

Blackpool to Preston line

We are electrifying the route between Blackpool and Preston.
In the year ahead: We'll be finishing our work to electrify the route, as well as improving the track layout and modernising the signalling equipment.
Passenger benefits: New trains with more seats, and less crowding. Reduced risk of delays and cancellations.

Weaver to Wavertree

We are upgrading the signalling between Cheshire and Liverpool.
In the year ahead: We'll be completing the upgrade.
Passenger benefits: More trains and reduced risk of delays.

Liverpool Lime Street station

We are upgrading the station to accommodate the increasing demand for train services.
In the year ahead: Redesigning the platform layout – including two new platforms, with others lengthened and widened.
By 2019: The project will be complete, with track and signalling upgraded as well as the platform changes.
Passenger benefits: More trains, more space at the station.

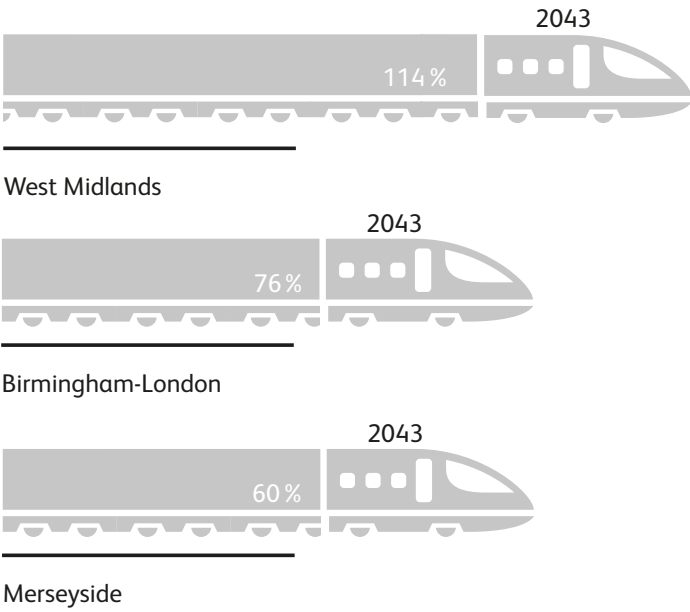
Ordsall Chord

We are building a new section of track to link Manchester's main stations together for the first time.
In the year ahead: The work will be completed this year.
Passenger benefits: New services (including direct links to Manchester Airport), more trains, reduced risk of delays.

Newton-le-Willows

We are building a brand new station, between Liverpool and Manchester.
In the year ahead: The station will be built.
Passenger benefits: Better transport links for local people.

Forecast growth for journey



4 South East

Introduction from the route managing director – John Halsall

The South East route is the busiest and most congested in the country, connecting the capital and its southern suburbs with Kent, Surrey, Sussex and Europe. More than 500 million passengers travel on our route every year – that’s almost 30 per cent of all passenger rail journeys in Britain.

Commuters make up the largest proportion of passengers, although leisure travellers to the south coast and people travelling to and from Gatwick – the UK’s second busiest airport – are also key passenger groups. Record passenger growth on a railway that is now completely full at the busiest times of day mean that train performance is not where we, the train operators or passengers want it to be – which is why we’re working hard to increase capacity and reliability across the route.

By the end of 2018, the completion of the Thameslink Programme will enable trains to run at tube-like frequency through the centre of London, offering more frequent and reliable journeys, a new fleet of 115 ultra-modern, spacious trains and better connections for passengers across London and the south east of England – as well as a completely rebuilt London Bridge station. Passengers will also benefit from a £300m programme to improve the resilience of the railway on the most critical parts of the route serving Southern and Thameslink by the end of 2018, replacing ageing track, points and signalling and bringing our infrastructure up to the very highest standards.

Elsewhere we’re continuing to lengthen platforms and upgrade power supplies so longer trains can run in future, renewing and upgrading signalling systems to make the railway more reliable, improving stations to make them better and more accessible and bringing in state-of-the-art digital technology to improve the capacity and performance of our network for the benefit of passengers and business.

The last twelve months have been extremely difficult for passengers, but I’m positive we have the right plans in place for the future. Our top priority for the year ahead is absolutely clear – a relentless focus on getting the basics right in order to improve train performance. Alongside this, we will continue to strengthen and deepen working relationships with our main operators Southeastern and GTR, including joint performance teams to deliver the best possible train service, and look for further opportunities to bring our teams closer together for the benefit of passengers.



Route at a glance

- £ CP5 (2014-2019) renewals and refurbishment spend – £1.465bn
- 5,100 train services per day
- 2,829 bridges, 571 level crossings, 36 signal boxes
- 361 stations
- 1,863 track miles
- C. 3,000 employees
- 510m annual rail passenger journeys

Our customer focused targets for the year ahead

[NB these are a selection of our targets, and remain subject to ORR and DfT approval. For further information about what these targets mean and how they are set, please see page 7]

Govia Thameslink Railway

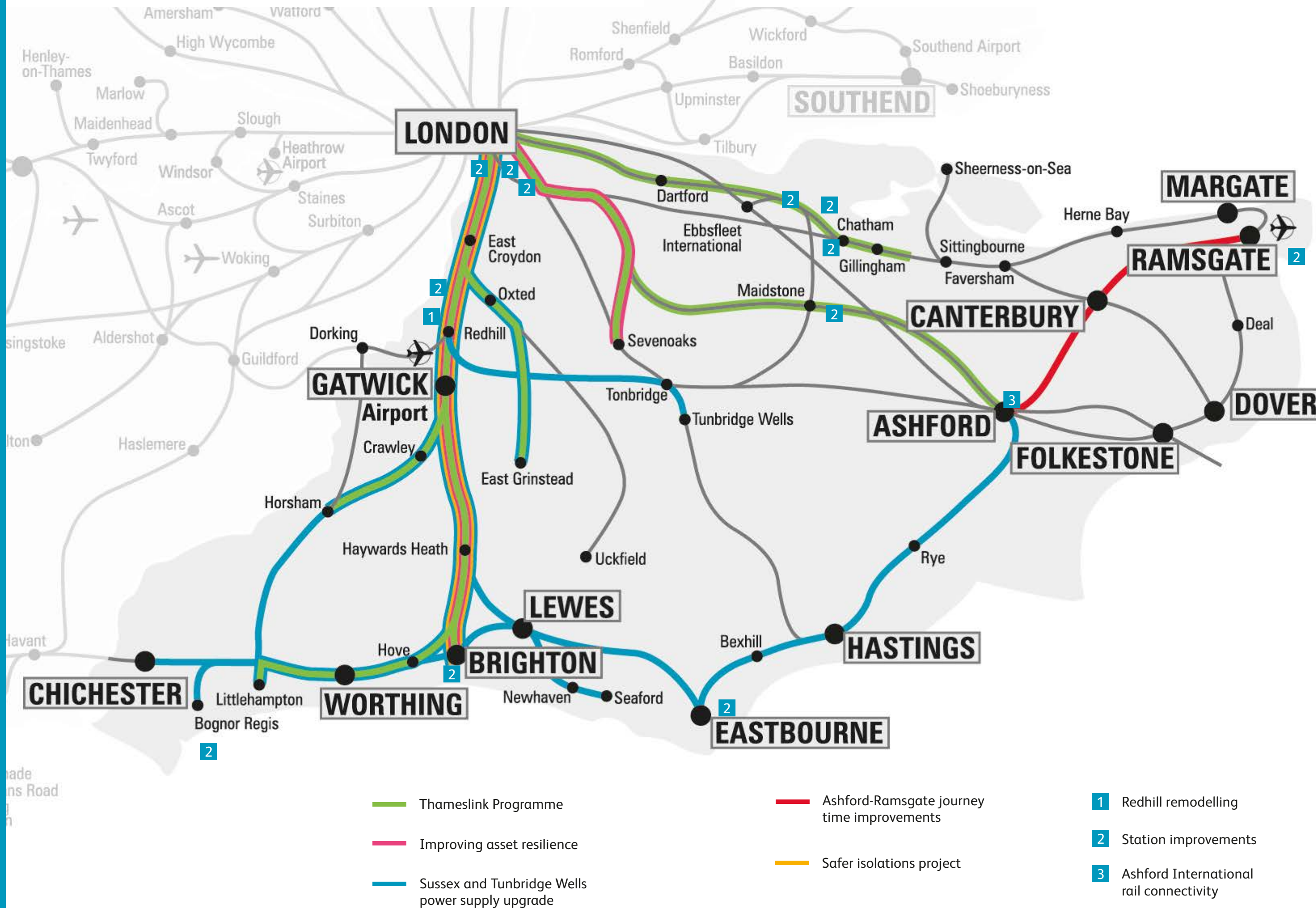
- Right Time Arrival – 54 %
- Passenger satisfaction – 78 %

Southeastern

- Right Time Arrival – 61 %
- Passenger satisfaction – 85 %

Route-wide

- Railway work complaints – 760



Thameslink Programme

We are improving stations, track and signalling (including undertaking the biggest ever station upgrade at London Bridge), as part of the £7bn government-sponsored programme to transform north-south travel through London.

In the year ahead: We'll finish the new concourse and new platforms at London Bridge station.

By 2019: We'll link the Thameslink and Great Northern routes. Digital signalling will allow up to 24 trains per hour through central London from December 2018.

Passenger benefits: More trains, new trains, longer trains, improved station environment, reduced risk of delays and cancellations.

Improving asset resilience

We are spending £300m to improve reliability for passengers on the Brighton Main Line, and associated routes critical to the expanded Thameslink network from December 2018, targeting known delay hotspots.

In the year ahead: We will replace signalling, renew track, rebuild old bridges, improved drainage, shore up cuttings and embankments and improve anti-trespass measures.

By 2019: The work will be completed by December 2018.

Passenger benefits: Fewer delays and cancellations.

Sussex and Tunbridge Wells power supply upgrade

We're improving the power supply in Sussex and at Tunbridge Wells.

In the year ahead: We'll be installing the new equipment and substations.

By 2019: The work will be completed by December 2018.

Passenger benefits: Will allow more and longer trains to run and reduce the risk of delays and cancellations. It will also be safer for our workforce when they need to access the equipment.

Ashford-Ramsgate journey time improvements

We're making a series of improvements between London and East Kent, funded jointly with Kent County Council.

By 2019: We will have completed the detailed design for the project, ready for work to begin in 2020.

Passenger benefits: Faster journeys.

Safer isolations project

We are installing new equipment on the Brighton Main Line that will make it safer for our staff when they need to do work on the line.

In the year ahead: We'll install the new equipment at the south end of the line.

By 2019: We will have completed installing the equipment on the whole line.

Passenger benefits: As well as being safer for our staff, the new equipment will enable staff to start working on the line more quickly when there is a fault, reducing delays and cancellations for passengers.

Redhill remodelling

We are remodelling the track layout and building a new platform at Redhill station, on the Brighton Main Line.

In the year ahead: Building the new platform.

By 2019: The improved station and additional platform is due to be open for passenger use in December 2018.

Passenger benefits: Enables more trains (an extra train per hour between Reading and Gatwick) and improved punctuality.

Station improvements

A number of stations on the route are being improved as part of the National Stations Improvement Programme.

In the year ahead: Leatherhead, Herne Hill, Strood and Ramsgate stations will all benefit.

By 2019: Tulse Hill, Bognor Regis, Eastbourne, Brighton, Denmark Hill, Gravesend, Maidstone East and Chatham stations will also be improved.

Passenger benefits: A better station environment, including new toilets, improved choice of shops, new waiting rooms and shelters, better ticket buying facilities, improved passenger walkways, better passenger information on platforms and improved onward transport links.

Ashford International rail connectivity

We're working with Kent County Council, Ashford Borough Council and Eurostar to upgrade the signalling system in the Ashford area.

In the year ahead: We will install a bespoke £10.5m signalling protection system that works with the new trains.

By 2019: The work will be complete by March 2018.

Passenger benefits: New, more reliable trains.

Route wide initiatives

Level crossing risk reduction programme

We're closing some level crossings on the route, and altering others.

In the year ahead: We'll be installing footbridges at three crossings, and then closing them.

By 2019: Three more crossings are planned for closure, with safety cameras installed at ten others.

Passenger benefits: Safer for level crossing users (the programme will reduce the safety risk on the route by 28 per cent); fewer delays for passengers.



The growth projections for next 10 years:



London Bridge –
(Southern and Thameslink)



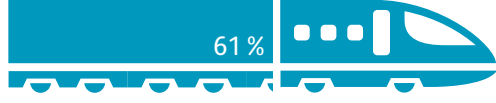
London Bridge –
for Charing Cross &
Cannon Street (Southeastern)



London Victoria –
(Southern and
Gatwick Express)



London Victoria
(Southeastern)



Kent high-speed services
(Southeastern)

5 Wales

Introduction from the route managing director – Andy Thomas

The railway is the economic and social lifeblood of Wales and the borders. It includes key commuter routes in and around Cardiff and the valleys as well as lines serving towns, cities, and rural and coastal communities in North Wales and in Mid and West Wales.

Working collaboratively with our lead operator, Arriva Trains Wales, and the other train and freight operators, my priority is to make sure we build a railway in Wales that delivers quality rail infrastructure to the people of Wales and the borders to support economic growth, job creation and sustainable communities.

As part of our Railway Upgrade Plan, ageing signalling is being replaced across the route with state-of-the-art equipment to build a more reliable and resilient railway, allowing more services to run in the future. This year, we will deliver the final stage of a major upgrade to the railway between North and South Wales and passengers will soon begin to benefit from the brand new fleet of twenty-first century trains that will connect South Wales and London.

We are working closely with Transport for Wales – the organisation formed by the Welsh Government to lead on the development of the new Metro transport system and the procurement of the new Wales and Borders franchise – to make sure the rail network can support their aspirations for the future.

Establishing the Wales route in 2011 was a major step forward, creating a single Welsh rail entity for the first time. The increased commitment to devolution within Network Rail will see more decisions being taken locally, increased accountability to our key stakeholders in Wales and the borders, including the Welsh Government, elected representatives, our lineside neighbours and the people and communities who rely on rail.



Route at a glance

- £ CP5 (2014-2019) renewals and refurbishment spend – £734m
- 🚆 1,340 train services per day
- 🏗️ 2,923 bridges, 1,150 level crossings, 55 signal boxes, 246 stations
- 🚉 1,487 track miles and 923 route miles
- 👤 C. 1,500 employees
- 👤 29.3m annual rail passenger journeys

Our customer focused targets for the year ahead

[NB these are a selection of our targets, and remain subject to ORR and DfT approval. For further information about what these targets mean and how they are set, please see page 7]

Arriva Trains Wales

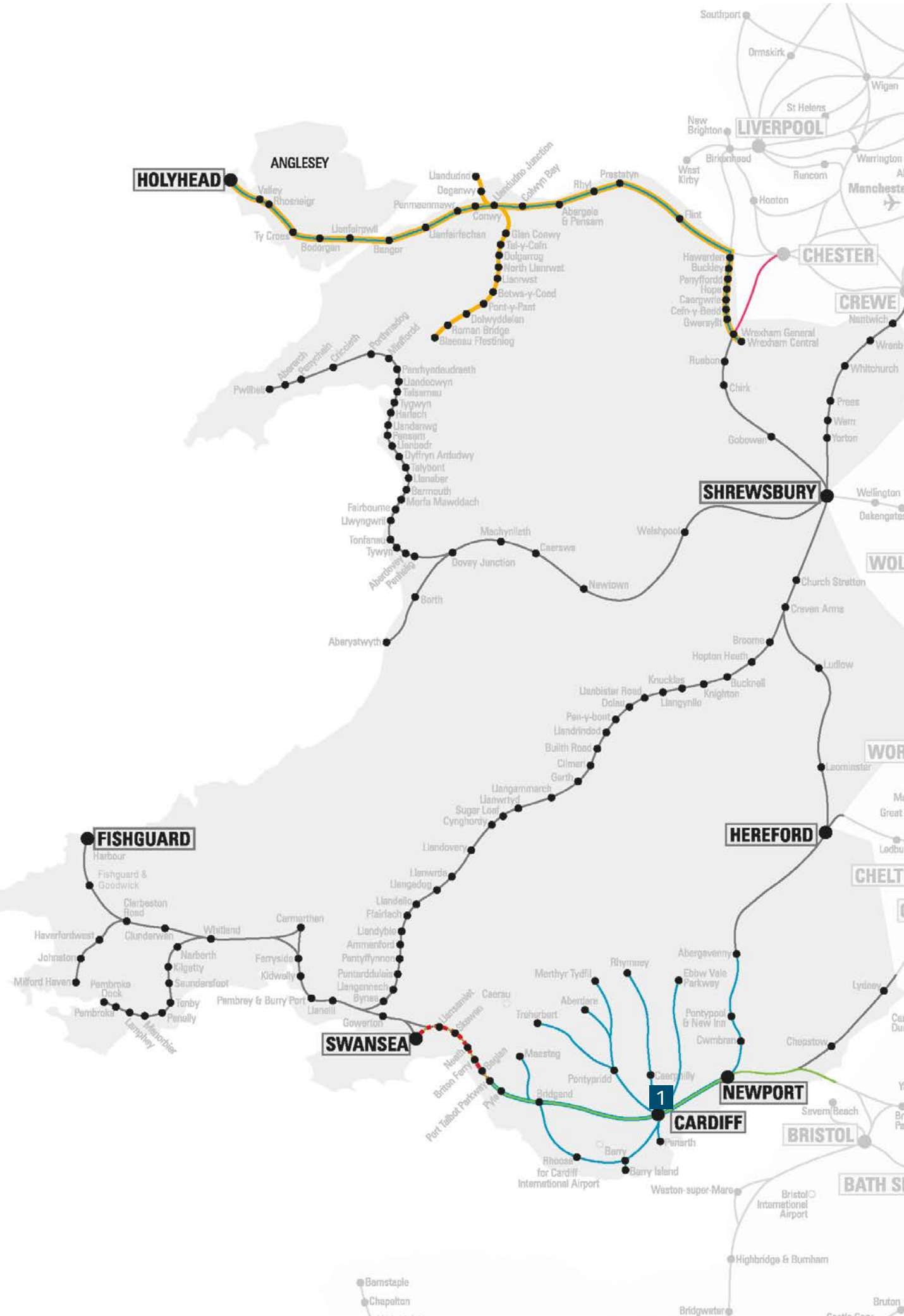
PPM – 93.5 %

CaSL – 2.34 %

Route-wide

Passenger satisfaction – 82 %

Railway work complaints – 429



- Great Western electrification project
- North/South Wales enhancement project
- South Wales Metro

- North Wales Railway Upgrade Project
- Port Talbot-Swansea signalling renewal scheme
- 1 Cardiff Area Signalling Renewal

Great Western electrification project

We are electrifying the South Wales mainline as part of the Great Western upgrade from London to South Wales. This represents the biggest single investment in the Great Western railway since Brunel and will benefit passengers and local economies.

In the year ahead: Installing overhead line equipment, and altering bridges, station platforms and canopies to accommodate the wires.

By 2019: Line fully electrified from London to Cardiff.

Passenger benefits: More trains; greener, faster, more reliable trains and a quieter railway for our lineside neighbours.

North/South Wales enhancement project

We are improving journeys between North and South Wales, including upgrading four level crossings.

In the year ahead: The project is due to be completed in March 2017.

Passenger benefits: Safer for level crossing users, reduced risk of delays to passengers, and the potential for more and faster services in the future.

South Wales Metro

The Welsh Government has established Transport for Wales as a wholly-owned, not-for-dividend company to procure the next Wales and Borders Rail Franchise and the Metro project – a new transport system that aims to offer faster, more frequent and joined-up train, bus and light rail services in the Cardiff region.

We are working with them to develop options for the project. These include alternative models for building and operating the railway. We are also supporting them to make sure all options are compatible with the existing rail network.

In the year ahead: Procurement process for franchise and Metro.

By 2019: The contract is due to be awarded in early 2018, with the franchise beginning in October 2018.

Passenger benefits: Will depend on the outcome of the procurement process, but Welsh Government’s intention is more and faster trains and fewer delays and cancellations.

North Wales Railway Upgrade Project

We are upgrading sections of the railway in North Wales.

In the year ahead: We will install a new signalling system between Shotton and Colwyn Bay, and improve the track layout at Abergele and Pensarn stations.

Passenger benefits: Reduced risk of delays and cancellations to passengers.

Port Talbot-Swansea signalling renewal scheme

We are upgrading signalling in the area, along with other improvements.

In the year ahead: We will upgrade the signalling between Cockett Tunnel and Baglan, and between Port Talbot and Swansea, as well as undertaking track improvements.

Passenger benefits: Reduced risk of delays and cancellations to passengers.

Cardiff Area Signalling Renewal

We are undertaking our most complex signalling project to-date, anywhere in Britain. We will be transferring control of all signalling in the area to the state-of-the art Wales Rail Operating Centre, based in Cardiff. The project has also included improvements to Cardiff Queen Street and Cardiff Central stations.

In the year ahead: The project is due to be completed by the end of 2017.

Passenger benefits: Reduced risk of delays and cancellations. Improved station facilities. The potential to run more trains in the future.

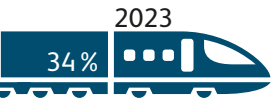
Route wide initiatives

Renewing and maintaining the network

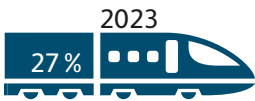
We are spending £55 million on maintenance in the year ahead, and a further £260 million in the next two years on renewing the Wales rail network.

Passenger benefits: By upgrading our infrastructure we are reducing the potential risk of delays for passengers across the network.

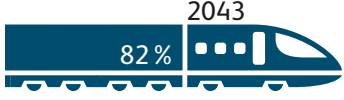
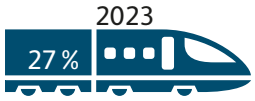
Forecast growth for journeys



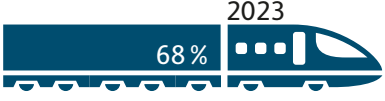
Cardiff and London



North Wales and London



Wrexham and Liverpool



Commuting into Cardiff City Region



6 Wessex

Introduction from the route managing director – Becky Lumlock

In the Wessex route, we operate some of the busiest and most congested rail lines in the country, transporting large numbers of commuters to London and other employment hubs in Surrey, Hampshire and Berkshire, as well as large numbers of leisure travellers to London and the south coast.

In 1996, the lines to and from London Waterloo provided 108 million journeys per year. Today this has more than doubled to 234 million and this passenger growth is expected to continue, with projections indicating a further 40 per cent increase on the route by 2043.

Over the last 12 months, performance on the Wessex route has been disappointing. We are working very closely with our train operators to bring performance levels back to where they should be. As well as tackling the causes of delays, we will continue investing in large schemes to enhance the railway for passengers. In the year ahead we are extending platforms to accommodate longer trains, providing step-free access at more stations, and continuing our huge investment at Waterloo to provide more platforms for more trains and improve reliability. In combination with the delivery of an additional 150 new train carriages, this work will result in a 30 per cent increase in capacity at Waterloo in the peak hours by December 2018.

My number one priority for the route is that we operate a safe railway. Safety and business performance go hand-in-hand, and I'll be continuing our relentless commitment to providing a safe environment for everyone who works on and uses the railway. We will also take over the management of two of the route's key stations in 2017, Clapham Junction and Guildford, as part of our strategy to develop and enhance station facilities across the network and improve passenger satisfaction.



Route at a glance

- £ CP5 (2014-2019) renewals and refurbishment spend – £1.270bn
- Over 2,000 passenger and freight services run per day
- 1,983 bridges
- 4394 signals
- 323 level crossings
- Around 1,300 miles of track
- C. 1,800 employees
- Over 200 stations
- 230m annual rail passenger journeys

Our customer focused targets for the year ahead

[NB these are a selection of our targets, and remain subject to ORR and DfT approval. For further information about what these targets mean and how they are set, please see page 7]

South West Trains

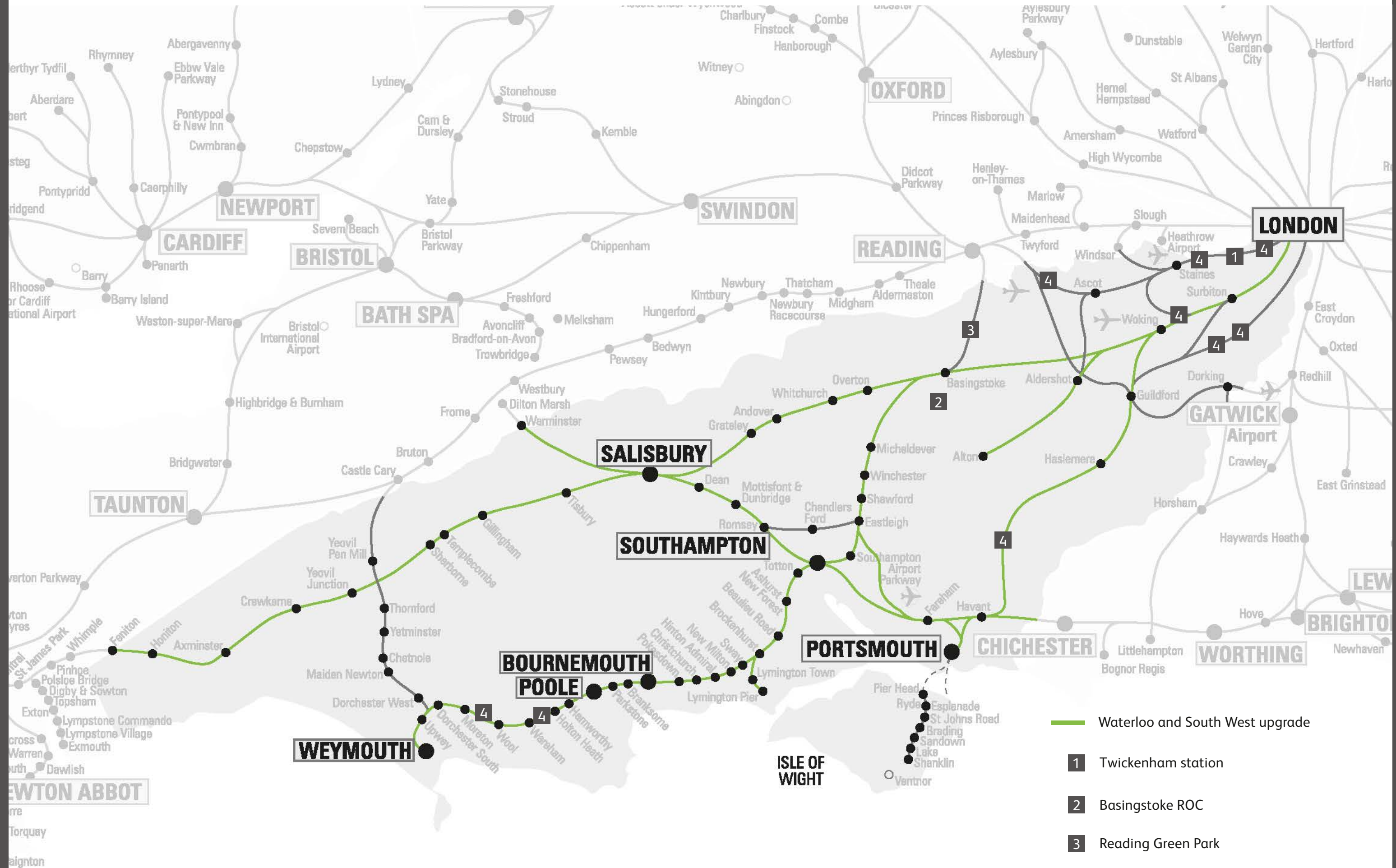
PPM – 89.3 %

CaSL – 3.5 %

Route-wide

Passenger satisfaction (Waterloo) – 86 %

Railway work complaints – 468



Waterloo and South West upgrade

1 Twickenham station

2 Basingstoke ROC

3 Reading Green Park

4 Level crossings

Waterloo and South West upgrade

We are delivering an £800m upgrade programme in the South West, including a major redevelopment of Waterloo station.

In the year ahead: We are extending platforms at Waterloo, and at stations between Waterloo and Reading.

By 2019: We will refurbish and re-open the former Waterloo International Terminal, creating five additional platforms at Waterloo.

Passenger benefits: New trains, longer, 10-car trains (more seats), reduced risk of delays and cancellations. Improved facilities and more space at Waterloo.

Twickenham station

As part of a joint venture with Kier Property, we are redeveloping Twickenham station.

In the year ahead: Work is scheduled to begin in April 2017.

By 2019: Continued work to develop the station.

Passenger benefits: Improved station facilities. Also supports the redevelopment of the area, with a new public plaza and 115 new homes.

Basingstoke ROC

We are co-locating with South West Trains into a new Rail Operating Centre.

In the year ahead: Teams will move to the ROC by April 2017.

Passenger benefits: Joint working, along with improved technology, will mean we can reduce delays to passengers when something goes wrong.

Reading Green Park

We are building a new station to provide dedicated access to Reading Green Park Business Park.

In the year ahead: Construction of the new station is expected to begin in December 2017.

Passenger benefits: New station, making it easier to travel to and from the local area (including the business park and the Madejski stadium).

Level crossings

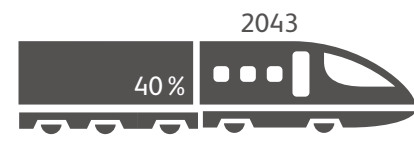
We are continuing our programme of closing level crossings, and making alterations at others.

In the year ahead: We will make improvements at Ashted level crossing and close Buriton level crossing.

By 2019: Additional crossings will be closed, including Wareham, Waterloo Road and Feltham West. We will also make safety improvements at White Hart Lane.

Passenger benefits: Improved safety for level crossing users.

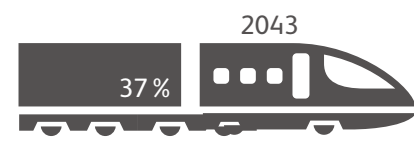
Forecast growth for journey by 2043



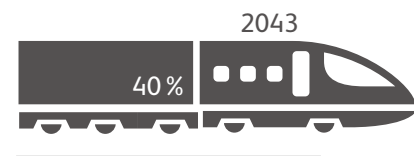
South West Main Line



Currently over 19,000 passengers using Main Line long distance services to central London during the high-peak hour, and expected to increase to over 26,000 by 2043



Windsor and Reading Line services



Suburban Line services



7 Western

Introduction from the route managing director – Mark Langman

The Western route stretches across the Thames Valley to Oxford, Worcestershire, the Cotswolds, South Wales, the West and South West. It encompasses some of Britain’s most important towns and cities, as well as one of Britain’s busiest rail routes, the Great Western Mainline. We own and manage over 900 miles of track; as well as London Paddington, Reading and Bristol Temple Meads stations.

The route is currently undergoing the largest period of investment and modernisation since it was built by Brunel over 175 years ago. In 2017, the Greater West Programme, delivered by Network Rail, Great Western Railway, the Department for Transport, Hitachi and Bombardier, will enable passengers to benefit from new electric services and upgraded trains across the route.

In January this year, passengers benefited from new ‘Electrostar’ trains running more frequently between London Paddington and Hayes & Harlington. By June 2017, these services will extend to Maidenhead, providing 6,550 extra seats per day in each direction.

In autumn 2017 the new, British-built, Intercity Express Trains (IET) will start running on our network. Each IET will offer up to 24 per cent more seats per service over the existing trains on long distance services. We are making all of this possible by raising bridges, lowering track, extending platforms and installing the hundreds of miles of overhead electric wires required to run electric trains.

We are putting passengers at the forefront of everything that we do. We have established an alliance with GWR to deliver more improvements to passenger services. This year we have established an independently chaired Route Supervisory Board comprising Network Rail, GWR, Heathrow Express and Transport Focus to help drive more improvements for passengers from our joint working. Improving capacity for passengers remains vital given that we expect journeys into Paddington to increase by 29 % by 2019, and by 99 % by 2043.



Route at a glance

- £ CP5 (2014-2019) renewals and refurbishment spend – £1.27bn
- 🚆 2,100 train services per day
- 🌉 7,058 bridges, 700 level crossings, 65 tunnels
- 🚉 198 stations
- 🛤️ 2,400 track miles and 933 route miles
- 👤 C. 2,500 employees
- 👤 50m annual rail passenger journeys

Our customer focused targets for the year ahead

[NB these are a selection of our targets, and remain subject to ORR and DFT approval. For further information about what these targets mean and how they are set, please see page 7]

Great Western Railway

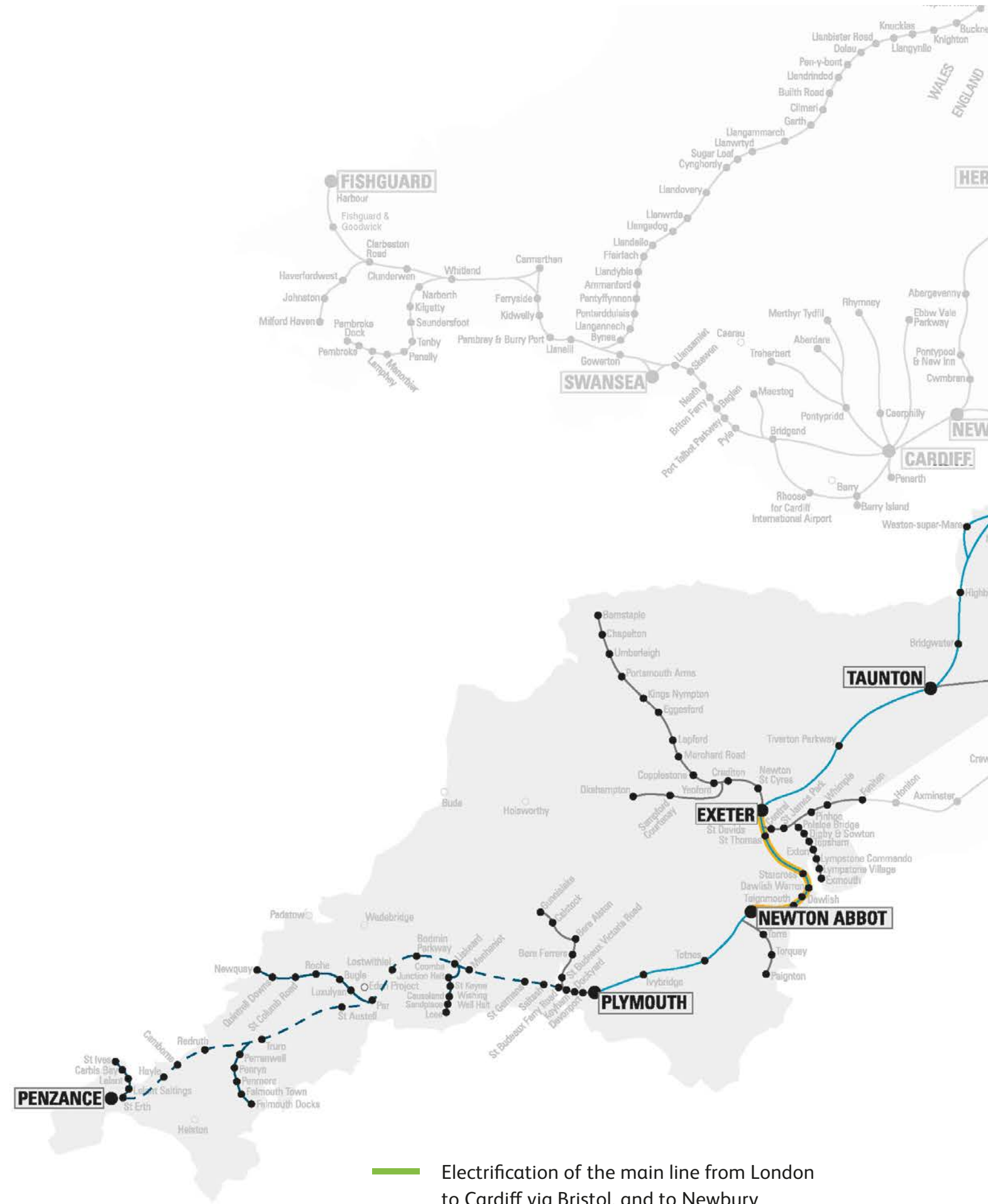
PPM – 90 %
CaSL – 2.8 %

Heathrow Express

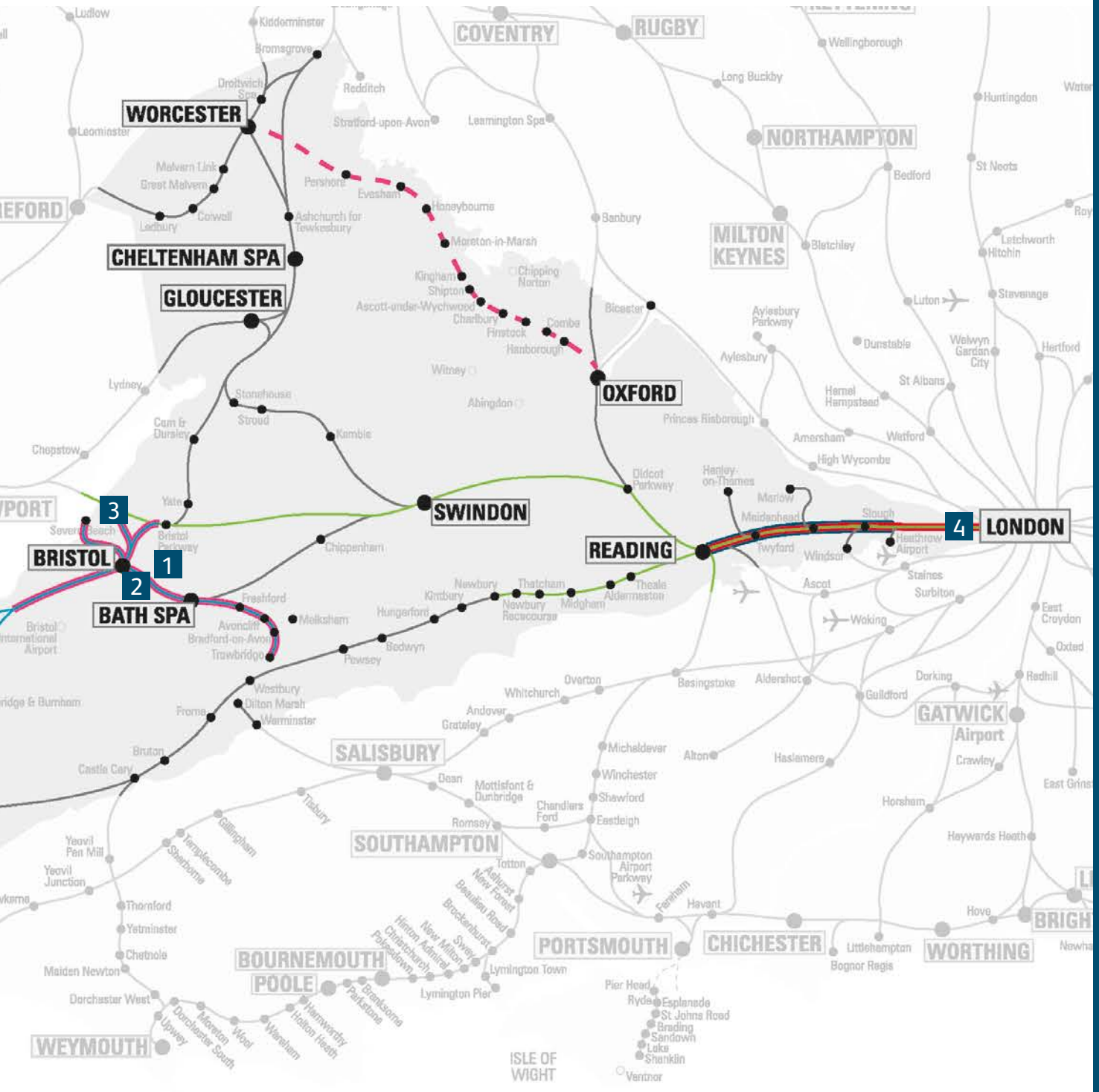
PPM – 90.1 %
Right Time Arrival – 70 %

Route-wide

Passenger satisfaction – 85 %
Railway work complaints – 1,285



- Electrification of the main line from London to Cardiff via Bristol, and to Newbury
- Bristol Area Signalling Remodelling



- West of England rail upgrade programme
- Elizabeth line (Crossrail)
- Environmental resilience improvements
- Cornwall resignalling
- Western Rail link to Heathrow
- Bristol Parkway capacity works
- North Cotswolds rail upgrade plan

- 1 Filton Bank additional tracks
- 2 Bristol Temple Meads
- 3 Bristol Parkway capacity works
- 4 Paddington station

Greater West Programme

A number of projects to improve the railway in the West, including:

Electrification of the main line from London to Cardiff via Bristol, and to Newbury

In the year ahead: By June we will have electrified the line between Paddington and Maidenhead and by the end of the year between Paddington and Didcot. New Intercity Express Trains (IETs) will start running between London Paddington and Bristol Temple Meads, and other destinations, in the autumn.

By 2019: We will complete electrification between Paddington, Bristol, Cardiff and Newbury.

Passenger benefits: New trains with more seats and improved passenger experience. Modernised infrastructure reduces risk of delays and cancellations.

Bristol Area Signalling Remodelling

In the year ahead: We will continue to install new state-of-the-art signals across the Bristol area, including beyond Bath Spa.

By 2019: The project will be completed by Easter 2018.

Passenger benefits: Improved infrastructure reduces the risk of delays and cancellations.

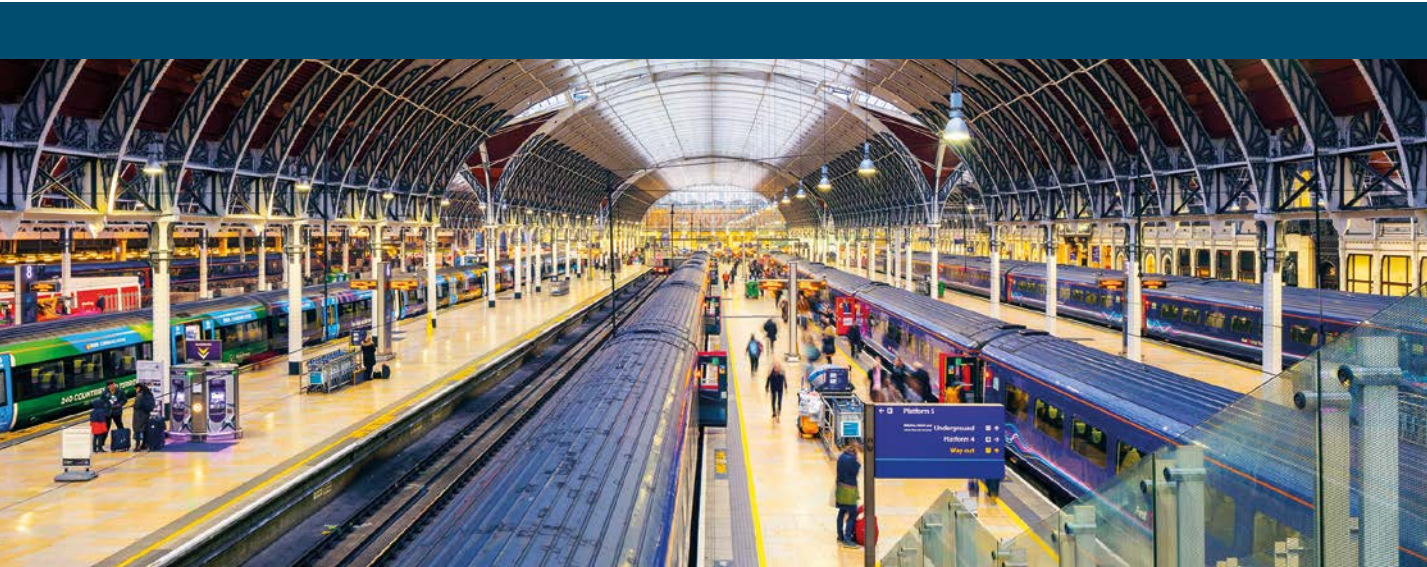
West of England rail upgrade programme

As the new ‘Electrostar’ trains are rolled out in the Thames Valley, the old diesel trains being used in the Bristol, Bath, Somerset and Wiltshire area can be replaced by the more modern ones currently used in the Thames Valley. We are upgrading the infrastructure to allow this to happen.

In the year ahead: Platform works to enable the new trains to begin operating.

By 2019: Work continues.

Passenger benefits: More modern trains, with more seats and an improved passenger experience.



Elizabeth line (Crossrail) *See map on page 13*

We are upgrading and electrifying the infrastructure to allow Elizabeth line services to run from Paddington to Heathrow and Reading.

In the year ahead: Electrification between Maidenhead and Heathrow airport.

By 2019: Services between Heathrow and Paddington will begin in May 2018 and the line will open in full by December 2019.

Passenger benefits: New, longer trains, new services and destinations, better stations, faster journeys, improved connections, reduced risk of delays and cancellations.

Environmental resilience improvements

We are doing work to reduce risks from flooding.

In the year ahead: Work at Exeter Cowley Bridge and Chipping Sodbury; and between Exeter and Newton Abbot.

Passenger benefits: Reduced risk of delays and cancellations.

Western Rail link to Heathrow

A new, five kilometre tunnel will link the Great Western Main Line directly to Heathrow Terminal 5.

In the year ahead: Consultation will go ahead on the detailed design.

By 2019: If planning consent is received we will be preparing for work on site.

Passenger benefits: Faster journeys, easier connections to Heathrow from the Midlands, West of England and Wales, reduced crowding at Paddington.

North Cotswolds rail upgrade plan

We are lengthening platforms at seven stations along the North Cotswolds line.

In the year ahead: Developing the project.

By 2019: Work will be completed.

Passenger benefits: Access to new, longer trains.

Cornwall resignalling

We are adding new signals in Cornwall, to allow more trains to run.

In the year ahead: We will complete our work.

Passenger benefits: An hourly train service can run throughout the day.

Filton Bank additional tracks

The number of tracks between Bristol Parkway and central Bristol will be doubled from two to four, along with station improvements along the line.

In the year ahead: Earthworks and station works continue, and new Intercity Express Trains will run along existing tracks.

By 2019: Four tracks in place and ready for use.

Passenger benefits: New trains with more seats and improved passenger experience. Improved stations. Modernised infrastructure which reduces risk of delays and cancellations.

Bristol Temple Meads

We are constructing new entrances to the station.

In the year ahead: Project development.

By 2019: New entrances.

Passenger benefits: Improved passenger experience and accessibility at the station.

Bristol Parkway capacity works

We are building a new platform, lengthening existing platforms and improving signalling to allow the new Intercity Express trains to use the station.

In the year ahead: Platform and signalling work undertaken.

By 2019: New platform into use.

Passenger benefits: New trains with more seats and improved passenger environment. Less crowding at the station.

Paddington station

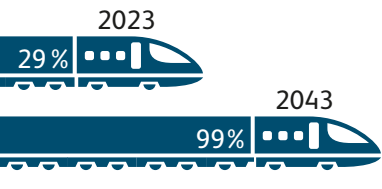
Improvements to the busiest station on the route.

The year ahead: Preparation for Crossrail, including access from the Bakerloo line. Platforms enabled for electrification.

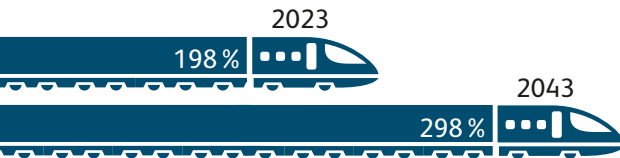
By 2019: Crossrail station will be open and operational; improved ticket gates.

Passenger benefits: More trains; faster, longer trains; improved retail experience; better connections.

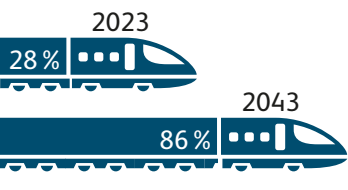
Forecast growth for journeys



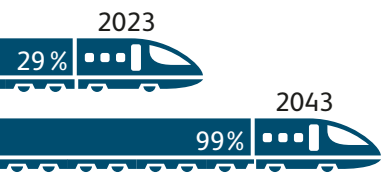
London Main Lines



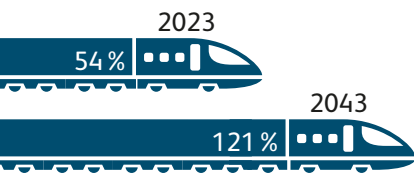
London Relief Lines



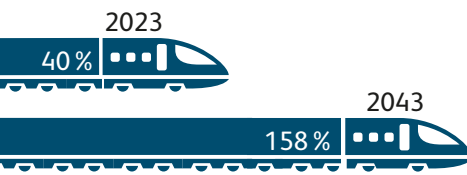
Into Reading



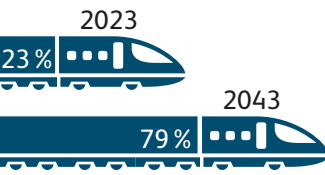
Thames Valley Branches into London



Greater Bristol Area



London to Cornwall



Between Cornwall and Exeter

8 Scotland

Introduction from the route infrastructure director – David Dickson







Scotland is one of the most geographically diverse routes in the British network. Domestic and cross border services fulfil a variety of travel needs, from leisure and short distance to daily commuter services.

Rail travel in Scotland is more popular than ever before, with more than 96 million journeys made last year. At the same time, Scotland’s railway is undergoing a period of enhancement and expansion unmatched since the Victorian era. Across the country huge investment is being made to deliver improved passenger facilities and introduce more new, faster, longer, and greener trains.

To be able to deliver this, and improve the railway for our customers, Network Rail has entered into an alliance with Abellio ScotRail, Scotland’s national train operator. While remaining separate companies, we are working together to achieve common aims and objectives led by a single managing director and senior management team. Within its first 18 months, the ScotRail Alliance has delivered a number of benefits. Establishing joint ‘control’ operations means quicker decisions are now being made to manage the network and resolve incidents effectively, reducing delays for passengers. A combined property and maintenance team has been able to manage contracts and tendering more efficiently, ensuring public money is well spent. An integrated communications team is also delivering joined-up communications to staff, external stakeholders and the travelling public.



Route at a glance

-  CP5 (2014-2019) renewals and refurbishment spend – £1.40bn
-  1,718 route miles and 2754 track miles
-  358 stations
-  591 level crossings
-  C. 2500 employees
-  96m annual rail passenger journeys

Our customer focused targets for the year ahead

[NB these are a selection of our targets, and remain subject to ORR and DfT approval. For further information about what these targets mean and how they are set, please see page 7]

Abellio ScotRail

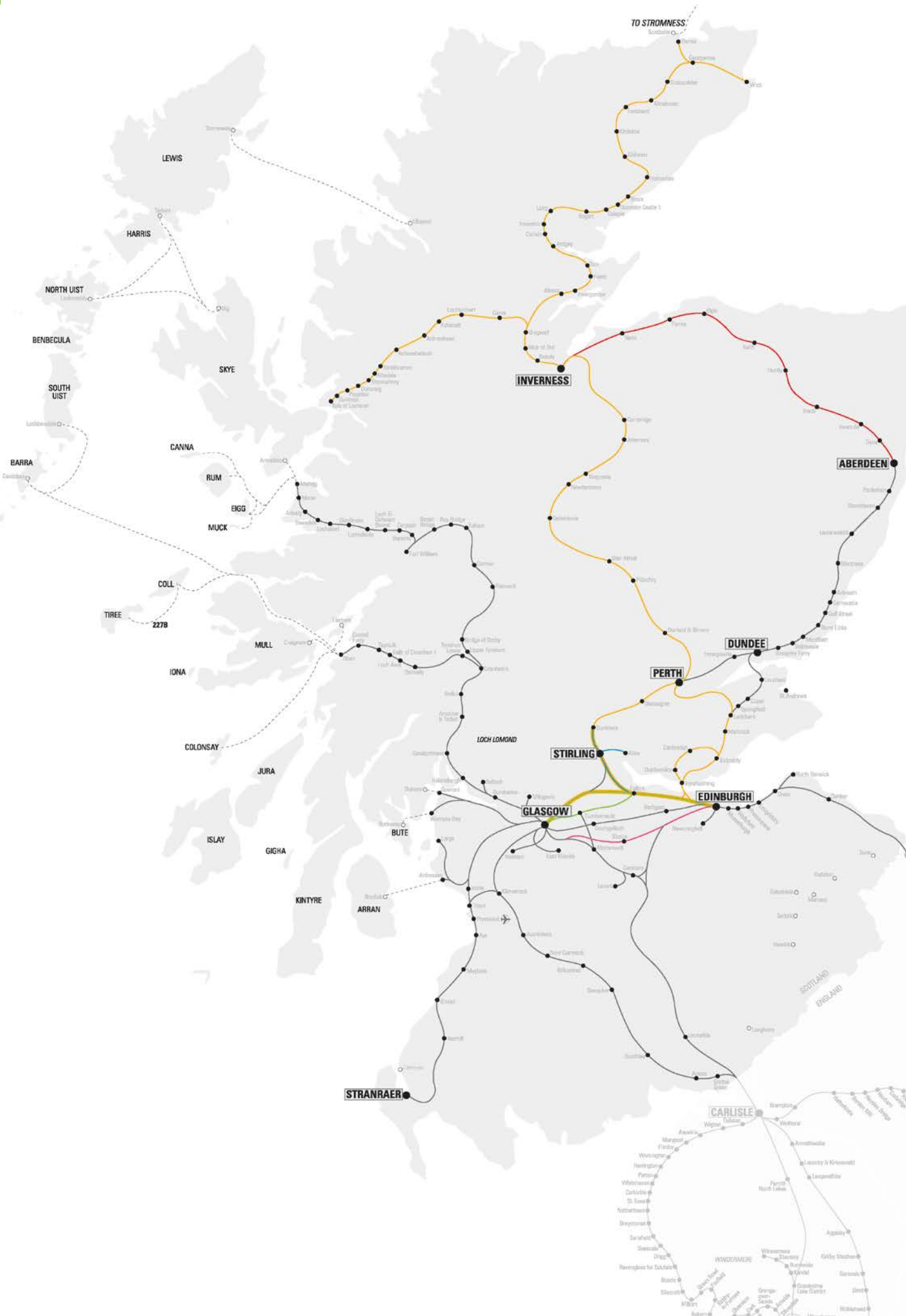
PPM – 91.7 %

Right Time Departures – 82.5 %

Route-wide

Passenger satisfaction – 84 %

Railway work complaints – 758



- The Edinburgh Glasgow Improvement Programme (EGIP)
- Shotts electrification
- Stirling, Dunblane and Alloa electrification

- Aberdeen to Inverness Improvement Project
- Highland Main Line

The Edinburgh Glasgow Improvement Programme (EGIP)

We are electrifying the main railway between Edinburgh and Glasgow. As part of the Scottish Government’s programme we have already delivered the electrification of the Cumbernauld line, the redevelopment of Edinburgh’s Haymarket station and the Edinburgh Gateway station and tram-train interchange.

In the year ahead: Work to walls and bridges, building a depot at Millerhill for new electric trains.

By 2019: Extending platform 12 at Edinburgh Waverley station and redeveloping Glasgow Queen Street station.

Passenger benefits: New trains; shorter journey times (20 per cent reduction in journey times between Glasgow and Edinburgh); ability to run more trains; improved station environments; easier journeys, with improved links with Edinburgh’s trams and the airport.

Shotts electrification

We are electrifying the line and improving station environments at some locations.

In the year ahead: Delivering platform alterations at Shotts, Carfin and West Calder and reconstructing Livingston South station. Step free access will also be provided at Livingston South and West Calder stations.

By 2019: The project will be complete in Spring 2019.

Passenger benefits: New trains, improved station environments.

Stirling, Dunblane and Alloa electrification

We are electrifying the line from Grangemouth Junction through Falkirk Grahamston and Stirling to Alloa and Dunblane.

In the year ahead: Preparing for electrification, including installing masts, removing vegetation and altering bridges.

By 2019: The project will be complete by March 2019.

Passenger benefits: Faster journeys and more trains.



Aberdeen to Inverness Improvement Project

We are improving the lines into Aberdeen and Inverness, as well as supporting the development of two new stations (Kintore and Dalcross).

In the year ahead: Platform extension and upgrading level crossing at Elgin, upgrading the signalling between Elgin and Nairn, relocating Forres station.

By 2019: Reinstating double track between Aberdeen and Inverurie, extending the platform at Insch station, work to enable new stations at Dalcross and Kintore (which are being promoted and funded by other parties).

Passenger benefits: More trains (including four per hour in peak times Aberdeen-Inverurie) and new stations.

Highland Main Line

We are improving connections between the north of Scotland and the Central Belt.

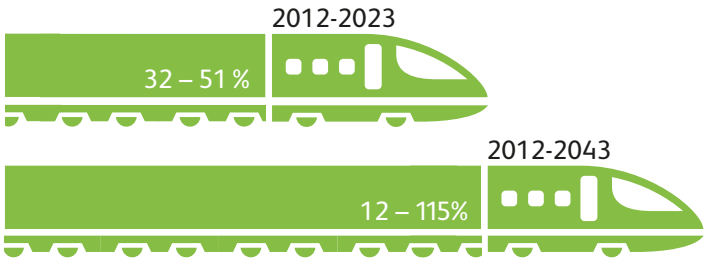
In the year ahead: Developing the project.

By 2019: Extending platforms, improving signalling and extending a 'loop' to allow trains to overtake each other.

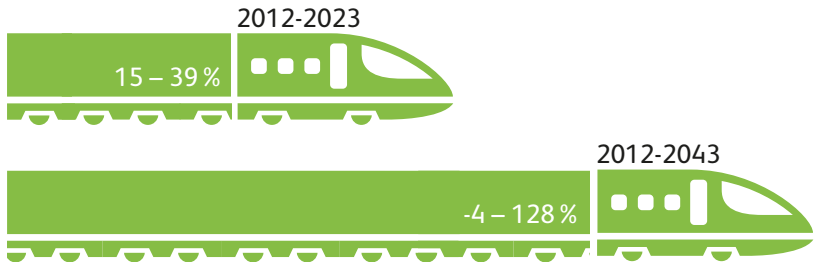
Passenger benefits: More trains (an hourly service Inverness-Perth) and faster journeys (the long-term goal is 2 hours 45 minutes between Inverness and the Central Belt). Also more efficient freight options on the route.



Forecast growth for journeys



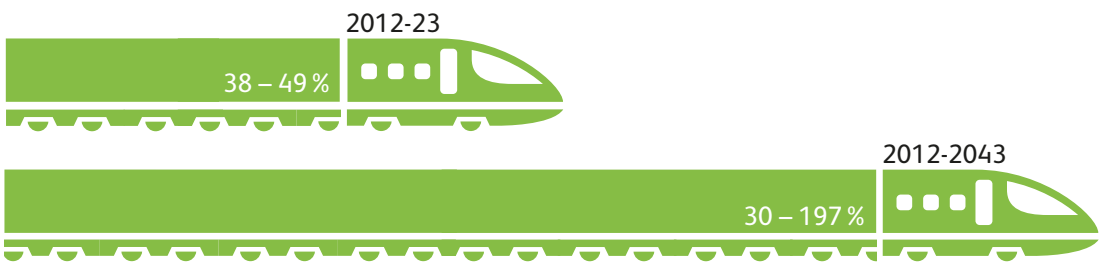
Edinburgh Morning Commuter



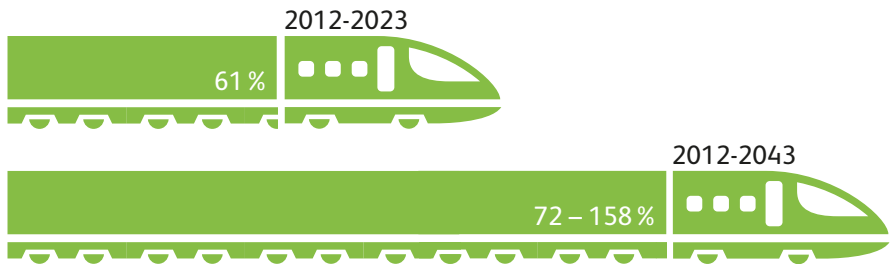
Glasgow Morning Commuter



Aberdeen Morning Commuter



Interurban



Rural

9 Freight and National Passenger Operators

Introduction from the route managing director – Paul McMahon

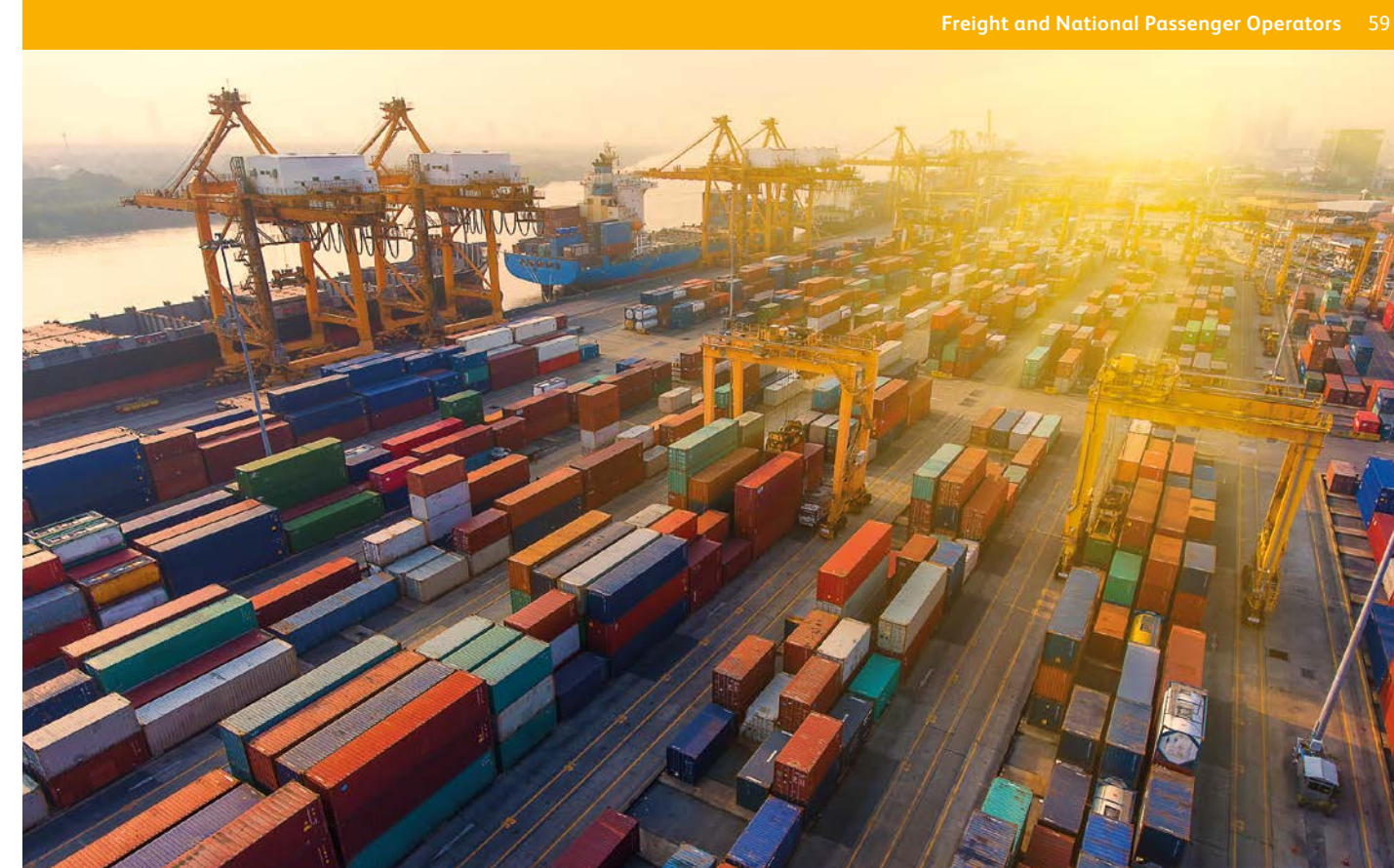
During 2016/17 Freight and National Passenger Operators (FNPO) was established as the company's ninth operational route, to look after nationally focused customers whose interests extend across our geographical routes.

As well as freight operating companies (FOCs), our customers include CrossCountry, Caledonian Sleeper, charter operators and aspirant open access passenger operators. The route also works closely with rail freight end users, including retailers, car manufacturers, quarries and power stations. Although we do not physically operate infrastructure like the other routes, we are accountable for the delivery of performance and other outputs for our customers and we provide them with a single point of contact. As with other routes, customer scorecards are at the heart of our relationships and our customer focused delivery.

We work closely with our geographical route colleagues on ensuring we are listening and responding to our customer's needs. Many of the benefits being delivered for these pan-route operators are detailed in the various route sections in this Business Plan. Freight operators do also have some very specific requirements and more details of these can be found in this section of our Business Plan.

The delivery of safe, reliable and efficient operational freight performance is at the heart of our plans. In 2017/18 we will work collaboratively with the sector, including the National Freight Safety Group, to improve freight safety – including aiming to reduce the risks of derailments and signals passed at danger.

The route has a strong focus on attracting private investment to increase freight traffic levels and grow income. New rail freight terminals are being developed on our vacant land, wholly funded by rail freight end users for loading and unloading their goods. Around a dozen schemes are underway nationally. These include a former Post Office terminal site in Chelmsford, which has been established as an aggregates distribution hub, and Bevois Park on the Wessex main line, which was unused for three decades but is now being used by a concrete manufacturer.



Route at a glance



Rail freight moves 12 per cent of the UK's inland surface freight



Rail freight carries goods each year worth £30 billion



Rail freight removes 7.6 million lorry journeys from the roads annually



More than a third of all deep sea containers that arrive or depart from major ports are transported by rail



Around 40 per cent of construction materials used in London arrive by rail



CrossCountry covers around 1,500 route miles and calls at over 100 stations



Caledonian Sleeper trains cover 3,500 miles every night between Scotland and London

Our customer focused targets for the year ahead

[NB these are a selection of our targets, and remain subject to ORR and DfT approval. For further information about what these targets mean and how they are set, please see page 7]

Freight Delivery Metric – 94 %

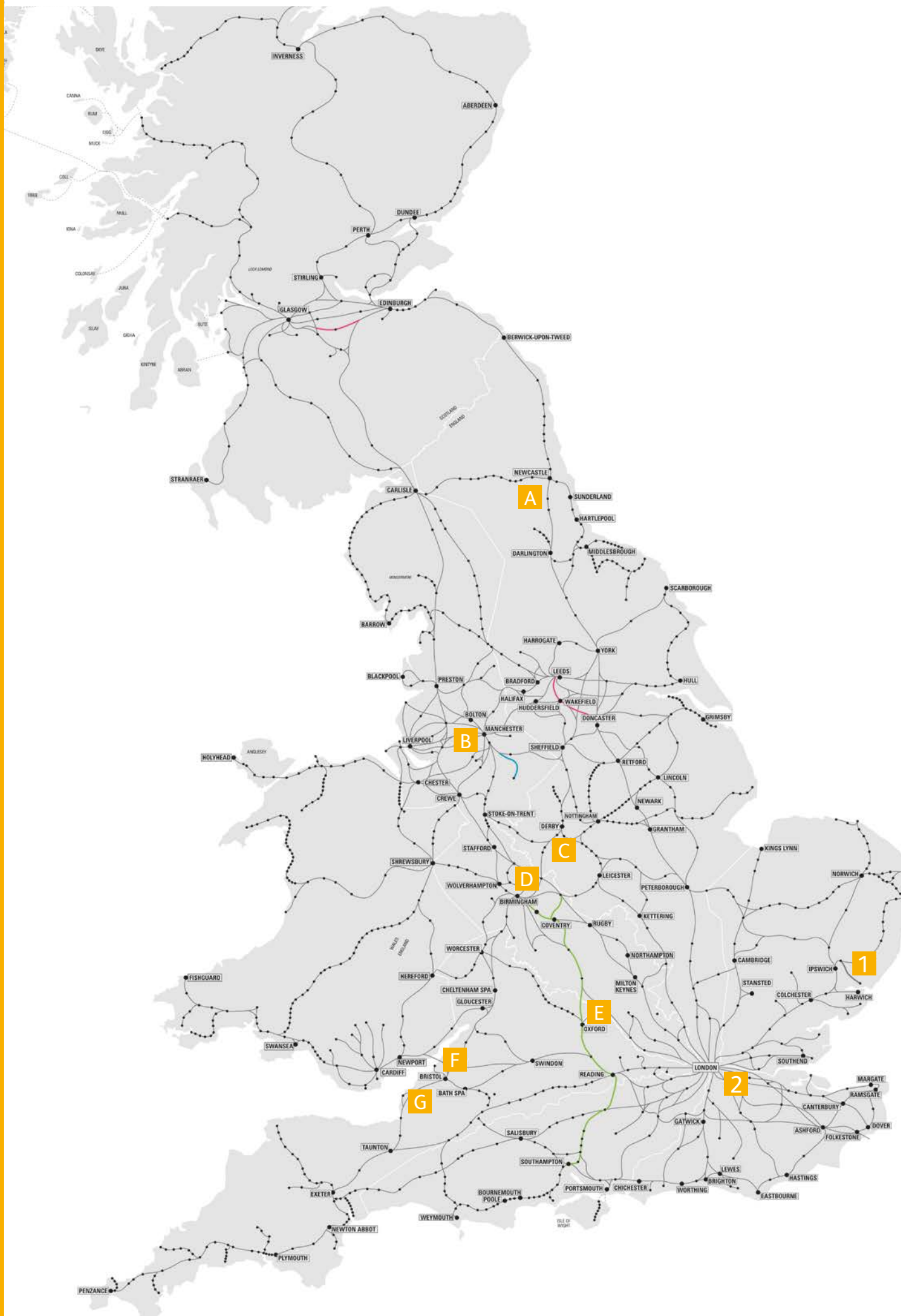
Freight Right Time Departures – 80 %

CrossCountry PPM – 90 %

CrossCountry CaSL – 3.95 %

Key initiatives to improve freight performance include:

- Continuing our focus on freight service recovery following delays and incidents on the network.
- Introducing additional route freight managers to provide greater focus on the root causes of performance and support freight operations.
- Working with both FOCs and port and terminal operators to build on recent successful collaborative initiatives, such as the 'control rooms' at the Port of Immingham, Drax power station and Port of Felixstowe, to improve right-time departures.



Southampton/West Midlands
freight train lengthening works

— Peak Forest to Buxton

- 1 Felixstowe branch line capacity works
- 2 Thameside Nodal Yard

We are reconfiguring the sidings at Ripple Lane West Yard, in collaboration with Transport for London.

Customer benefits: A wider range of containers, and longer trains, will be able to use the route. It also means more freight trains can run from HS1 and Essex Thameside.

We are building a longer 'loop' at Buxton to allow longer trains to reverse there.

Customer benefits: Supports additional construction traffic from Peak District quarries.

We are building a new 'loop' at Trimley to allow trains to pass each other, as well as improving signalling and closing level crossings.

Customer benefits: An extra ten freight trains per day will ultimately be able to run each way between Felixstowe and Ipswich.

We are improving connections to Southampton Maritime terminal, improving the Western Docks branchline, and improving 'loops' at Hatton, Fenny Compton and Dorridge in the Midlands to more effectively allow fast trains to pass slower ones.

Customer benefits: Longer freight trains will be able to run between Southampton Port and the West Midlands.

We are continuing work at the north and south ends of the East Coast Main Line to increase the 'gauge clearance' on the route.

Customer benefits: Allows a wider range of containers to be carried on the route.

Property

Network Rail Property is the land and property development division of Network Rail, tasked with raising income and capital to help fund the railway.

Our work also helps the safe and efficient maintenance, operation and expansion of the rail network as well as improving station environments, driving the regeneration of local communities and providing land for housing and commercial developments.

In April 2016, Network Rail established a stand-alone Property Board, which will approve and make recommendations about investments in, and disposals of, Network Rail’s estate and property assets.



Our targets for 2017/18

- In 2017/18 we will continue to focus on our strategic objectives:
- Using our knowledge and expertise to improve experiences for passengers, reduce costs for the sector and create great places for businesses and communities.
 - Growing our sustainable model by generating income to reinvest and create a better railway for a better Britain.
 - Helping fund Network Rail’s Railway Upgrade Plan by selling assets not core to Network Rail’s operations.
 - Releasing land for housing to achieve government targets.
 - Delighting our customers by putting them at the heart of everything we do.

Some specific targets that make up these objectives are outlined below.

Releasing land for much needed homes

Network Rail own significant amounts of land across Britain. Most of this is needed in order to fulfil our role in running the railway but, in support of the government’s goal of building one million homes by 2021, we are working to release land for around 12,000 new homes across almost 200 sites. In 2017/18, we expect to release land for up to 3,000 homes.

Raising capital to help fund the railway

As part of the Hendy review into the re-planning of Network Rail’s investment programme, Network Rail have committed to raising additional funds by March 2019 to enable us to deliver our programme of major projects to improve the railway. The majority of this money is expected to come from the sale of property assets, which could include:

- Railway arches.
- Parts of our freight estate.
- Non-station car parks.

At this point we are considering all options and no decisions have been made. We are absolutely committed, however, to ensuring that sales have no detrimental impact on our ability to run a safe and reliable railway.



A better management model for stations

We are looking at how we can improve our 18 managed stations, to deliver better experiences for the passengers and communities they serve. This includes considering plans which involve third party investment.

- Our objectives are to:
- Enable the safe and sustainable growth of stations to meet increased demand.
 - Improve the customer experience through a better managed station environment.
 - Drive socio-economic benefits for the wider community.
 - Maximise value for money and minimise the impact of future investment on the taxpayer.
- In 2017/18, we will put forward recommendations to government for the future model for our managed station portfolio.

Regional Maps

North of England
The Midlands
London
Our customers at a glance

North of England

- Wirral loop
- Blackpool-Preston line
- Calder Valley line

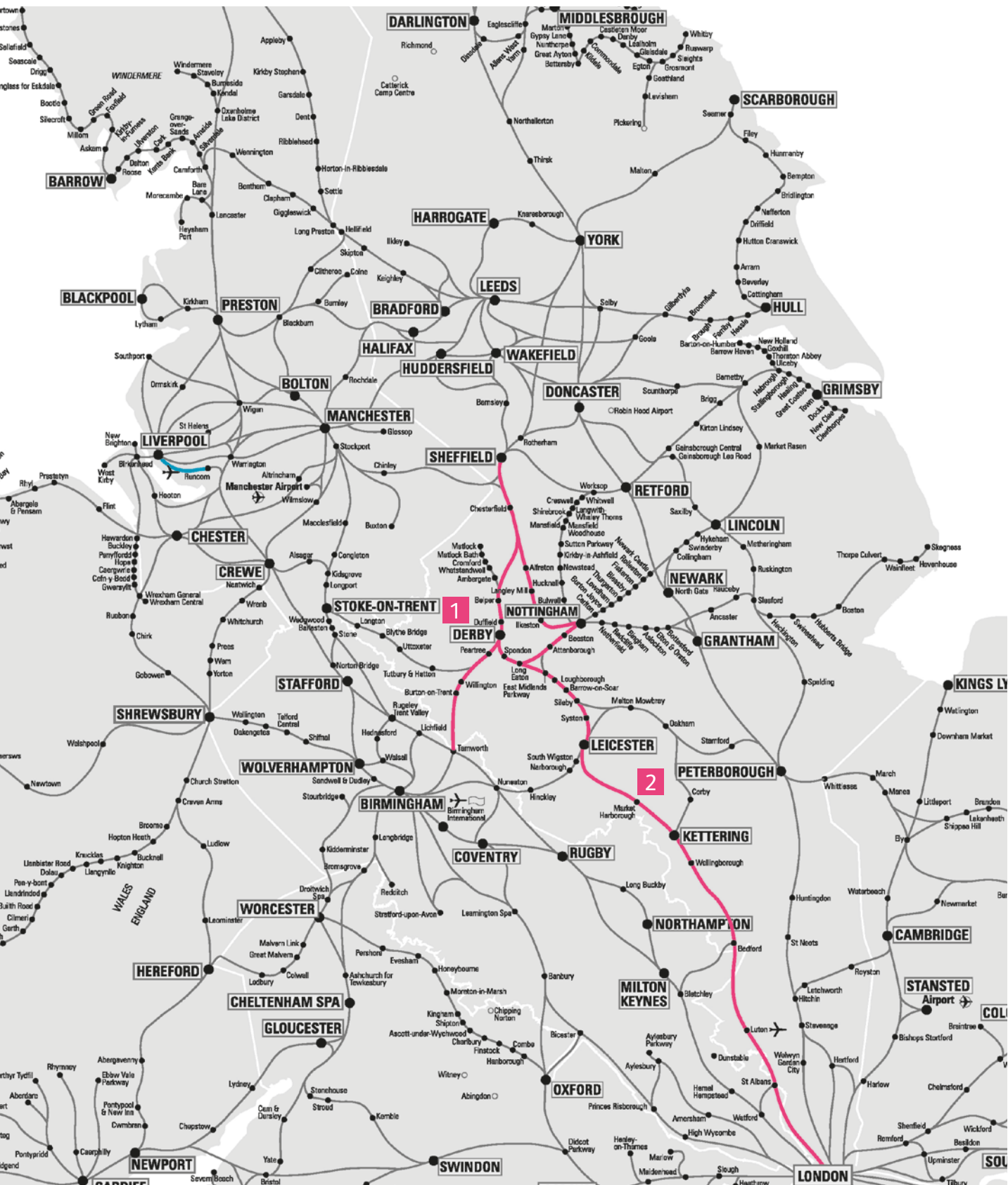
- 1 Durham station
- 2 Hebden Bridge
- 3 Newton le Willows
- 4 Ordsall Chord
- 5 Liverpool Lime Street



The Midlands

- Midland Mainline Programme
- Weaver-Wavertree

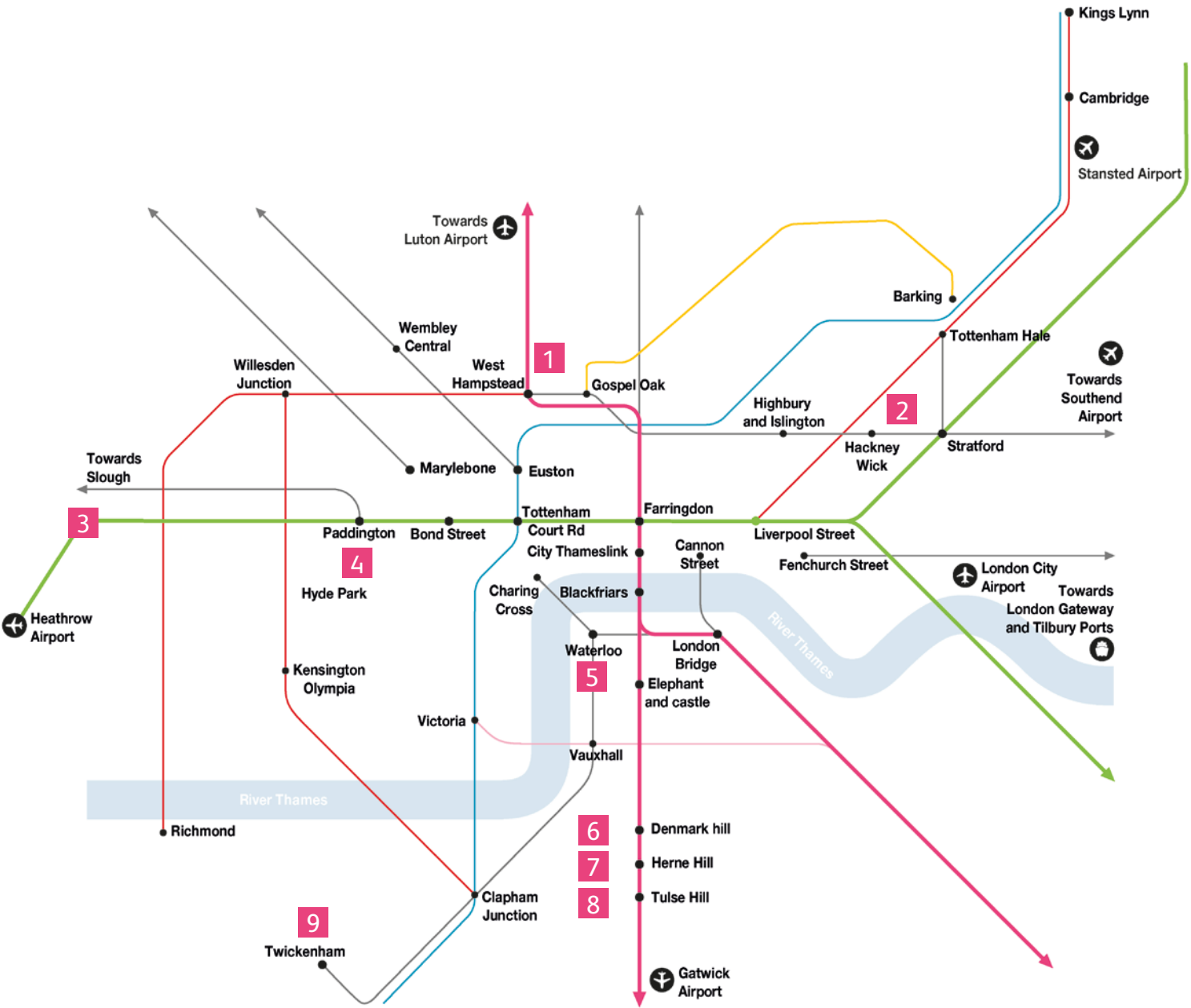
- 1 Derby
- 2 Market Harborough



London

- Elizabeth line (Crossrail 1)
- Thameslink Programme/ London Bridge
- Crossrail West
- West Anglia Main Line
- Gospel Oak to Barking

- 1 West Hampstead
- 2 Hackney Wick
- 3 Rail link to Heathrow
- 4 Paddington
- 5 Waterloo upgrade
- 6 Denmark Hill
- 7 Herne Hill
- 8 Tulse Hill
- 9 Twickenham



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