

# THE CHANGING FACE OF RAIL



**11-PAGE SPECIAL ON RAIL'S EMERGENCE FROM THE CORONAVIRUS PANDEMIC**



**38** Reimagining stations: NR/RIBA's global design competition

**44** Predicting demand: Scenario planning techniques from SYSTRA

**46** Rail recovery: RSSB's roadmap to winning back passengers

# REIMAGINING RAILWAY STATIONS



The Network Rail Modular Design copied the LMS 'Unit' design in its flexible approach, allowing a bespoke application of a planning grid and a choice of cladding materials. The standardised design was the work of architects Robert Thornton and John Fellows, and was published in 2006. Aimed at Category C-E stations, it allowed for photovoltaic cells to be incorporated in the roof. Corby station was an early example, built in 2007-08. LUKE O'DONOVAN/NETWORK RAIL.

**Network Rail and RIBA Competitions are hosting a design competition for small- to medium-sized stations. ANTHONY LAMBERT looks at the changing role of stations in the 21st century and what we can expect from the results**

## NR STATION CATEGORIES

A	National Hub	2 million+ trips	28
B	Regional Interchange	2 million+ trips	67
C	Important Feeder	0.5-2 million trips	248
D	Medium Staffed	0.25-0.5million trips	298
E	Small Staffed	0.25-0.5million trips	679
F	Small Unstaffed	Under 0.25 million trips	1,200

For well over a hundred years, the railway station served as a main focal point of towns and villages. At all but the smallest stations, solid buildings and some degree of shelter were provided in a wide range of materials and styles, creating a rich and distinctive legacy deserving of care.

During the 1960s and 1970s, when both the quality of architecture and the appreciation of historic buildings reached an all-time low, British Railways was notorious for replacing good station buildings and canopies with little more than bus shelters, usually in conjunction with de-staffing.

This often-scandalous indifference to the railway's architectural heritage was encapsulated by the destruction in 1962 of the Euston Arch.

This produced such a strong reaction that in 1968, BR dropped plans to demolish the former hotel/offices of St Pancras Chambers, although the concession did not mark a change of heart or policy.

In 1977, Save Britain's Heritage mounted an exhibition at the Royal Institute of British Architects (RIBA) entitled *Off the Rails*, whose purpose was "to make you angry", as Simon Jenkins put it. It questioned "the misleading

equation between corporate imagery and modernity" and called for a more responsible and creative approach to the adaptation of stations, either for railway or alternative use.

A turning point was the creation in 1985 of the Railway Heritage Trust (RHT), to provide advice and grants for the preservation and upkeep of buildings and structures on the national railway estate.

Since then, more than £60 million has been awarded through over 1,750 grants, most for operating parts of the railway. These have helped to develop a recognition in the industry that bland utilitarian stations do not

provide an attractive welcome to the railway, that passengers value stations of character as well as convenience, and that these qualities encourage greater use of trains.

Railway conservation work is celebrated each year by the National Railway Heritage Awards. Although the categories salute imaginative and high-quality work across the entire spectrum of railway buildings and structures, most entries are naturally stations.

Transformation of a different kind has come from passengers' changing expectations of a station. We have moved a long way from platforms with little more than a crude bus

shelter and a paper timetable on a board, or the days when BR saw vacant station space simply as a rental opportunity, without much thought of complementary activities.

As a minimum at staffed stations, passengers expect comfortable waiting space, clean lavatories, good lighting, train information screens, and secure parking for bikes and cars. Unstaffed Grade F stations lack some of these amenities.

At larger town stations, passengers look for an interchange with tram and bus services with appropriate information, a cafe and/or newsagent, WiFi, bike and car hire, car-club

facilities, local or tourist information, and a staff presence for information and help with accessibility.

Increasingly, passengers will expect electric bike- or car-charging facilities. Electric bike sales have increased significantly since the first lockdown, and a recent UBS report estimates that electric cars will cost the same as internal combustion-engined cars by 2024. If that transpires, sales of electric cars are likely to increase dramatically.

Rising expectations of stations have been accompanied by a growing sense of their 'ownership' by the community and local organisations. This is reflected in the sterling work of community rail, mobilising volunteers and stakeholders to revitalise underused station buildings and engage with their local community.

"Involving the wider community, creating familiarity with the railway and a sense of ownership towards rail among as broad a cohort of people as possible will be critical to the recovery of our railways", says Community Rail Network (CRN) Chief Executive Jools Townsend.

The potential of stations to play a greater role in community life is also reflected in a growing willingness of local stakeholders to share in the funding of improvements. The regeneration of Irlam station in Greater Manchester was funded by local and regional authorities and by the local Hamilton-Davies Trust, creating a railway-themed cafe, cycle hub, children's playground, heritage centre and meeting rooms.

"Stakeholders can see the benefits of different ways of formatting stations," says Tolu Osekita, Network Rail's lead on third-party funding.

"Although the difficult part is getting people to help pay for them, businesses and local communities recognise that stations can drive regeneration and economic growth, besides producing better and healthier communities.

"Discussions with beneficiaries about investing in stations is becoming easier - primarily because we are getting better at identifying benefits beyond transport and, as importantly, communicating those benefits."

Success in creating a community hub is exemplified by the Kilmarnock Railway Heritage Trust, which has used multiple funding sources to establish the Kilmarnock Station Community Village.

The gradual restoration of the station has created a cafe, bookshop, gift shop, a records office for the Glasgow & South Western Railway Association, office space, and meeting rooms which host everything from art →

→ exhibitions and creative classes to tai-chi, meditation, yoga and even charity comedy nights. The Active Travel Hub is supported by a cycle workshop and includes led rides using a fleet of electric bikes.

CRN publications and its website are full of such enterprising examples, and Townsend points to “an increasing focus on community gardening, growing food and biodiversity projects to provide a home for nature and connect people with the natural world.

This may seem fluffy to some, but it is

about building relationships, community and sustainability.”

Some countries have gone much further in designing stations as multi-function hubs of the community. Japan has made a policy of combining station redevelopment with the provision of such community facilities as dental practices, surgeries, nurseries and libraries, as well as the usual amenities. These provide a source of income as well as increasing the attractiveness of train travel.

In recent years, there has been a growing

focus on the need for stations to meet sustainability criteria in their construction and energy consumption.

### Previous visions

In 2015, the Rail Delivery Group published its *Vision for Stations*, articulating nine principles behind their role as potentially major contributors to local and national economies. The intention was to engrain these nine principles into the management of every station and in the long-term planning of the

**Electrification of the West Coast Main Line called for new stations to be built quickly, providing an opportunity to resume innovation in prefabricated buildings. The prototype for the Mod-X system was East Didsbury in 1959, and the station was delivered by rail as a kit of parts.** LUKE O'DONOVAN/NETWORK RAIL.

network by 2030:

- Customer-focused.
- Intelligent use of technology - ticketing and information.
- Seamless journey experience - integration and partnerships with other modes, as well as facilities that encourage active travel.
- Reflect local needs and opportunities - working with local businesses, organisations and CRPs to use spare station space for community services.
- Safe and secure environment.
- Entrepreneurial spirit - stations as catalysts for innovation.
- Flexible and long-term stewardship.
- Shared industry know-how - sharing best practice and developing good design guidelines.
- Optimised network - realising the full value of every station while minimising inefficiencies through investment and operation based on objective and informed decision-making.

Some of these are self-evident requirements for a station to be fit for purpose. NR's aspirations go well beyond that - its Delivery Plan for Control Period 6 (2019-24) talks of implementing “a master planning approach to station development, to improve stations for passengers and help stations better integrate into the wider community”, as well as creating “stations that surprise and delight”.

Quantitative evidence for the value of investing in stations was provided by Steer's August 2020 report *The Value of Station Investment*, for the RDG and NR.

It examined 180 examples to assess the value of investing in Britain's railway stations. Besides achieving the primary object of increasing passenger numbers, station



investment was found to generate “substantial increases in house prices, tertiary employment, enterprise units and new developments close to the station”.

It highlighted the importance of strong partnerships with third parties and advocated ways to minimise risks and maximise success when investing in new stations.

How were these broad objectives and societal changes to be translated into designs fit for the 21st century?

### The competition's purpose

Besides raising the quality of design, NR wants the competition entrants to reflect “the evolving civic role of [its] infrastructure ... looking to expand what a station could be”.

The competition will give architects, engineers and designers the chance to improve the travel experience for the millions of

passengers who use Britain's railway, and leave a lasting legacy on station design.

It asks designers to reimagine small- to medium-sized stations, which make up 80% (over 2,000) of all those on Britain's railway, so that they better serve the needs of both passengers and their local communities. The competition encourages entries which stimulate creativity and address the changing character of our society.

“In developing proposals, entrants are encouraged to consider how future stations can be sustainable and deliver outstanding value, while considering the impact on the environment to achieve net zero emissions to leave a positive legacy for future generations,” says NR.

To provide entrants with context and to inform a brief, the Design Council co-ordinated ideas from a range of



Birmingham's Cross-City route between Redditch/Bromsgrove and Lichfield opened in 1978. The public dislike of 1960s designs led to BR's John Broome adopting neo-vernacular brick to achieve a more traditional look for the new stations - as here at University. LUKE O'DONOVAN/NETWORK RAIL.

## THE GOOD: KENILWORTH...



FRASER PITHEE

## ...THE BAD: READING WEST...



NETWORK RAIL

## ... AND THE UGLY: KINTORE



NETWORK RAIL

It is fair to say that the quality of new station design has been highly variable in recent years.

A rare public consultation was carried out to determine which of three designs should be adopted for the new station at Kenilworth in Warwickshire. More than 70% preferred the traditional design, which echoes the previous 1884 Gothic-style building.

In contrast, the the design for the new station at Reading West has been compared to “leaving a shipping container on the pavement”. And the lift towers at Kintore (between Inverness and Aberdeen) have been criticised for their ugliness.

→ stakeholders, through workshops with 324 participants. Think Station sets out the findings.

Preferring the term ‘passenger hub’ rather than station, it summarises responses to the question ‘what would a future passenger hub be if it embodied each of NR’s Principles of Good Design?’ The exercise produced nine priorities for stations:

- Support existing and new communities in their local area, embedding stations within the community by providing facilities such as crèches and drop-in GP centres.
- Reflect and embody local character and heritage. Participants disliked “the idea of replicated designs and the complete absence of specificity, creating ‘anywhere’ places”.
- Provide consistent quality of space and service in terms of the station facilities and standards, reflecting the station’s size.
- Establish connections with and between the town centre and/or the High Street, through greater permeability and better links.
- Celebrate and improve the quality of green spaces and open spaces and/or provide access to them.

- Be welcoming and facilitate inclusive travel – a stage beyond accessibility.
- Support and better integrate cross-modal transport to provide seamless travel with shared data between modes.
- Help to address climate change through minimising the impacts of construction and operation.
- Ensure longevity by accommodating changes of use, capacity, trends and technology.

### The competition

Anthony Dewar, Head of Buildings and Architecture at Network Rail since 2017, thinks that small- to medium-sized stations in Category D–F have been neglected and understandably overshadowed by the magnificent developments of the largest Category A and B stations, such as St Pancras and King’s Cross. The competition is intended to redress the imbalance.

The outcome will be a catalogue of pre-approved new station designs recognising that no one size fits all and which are sufficiently malleable to be used in a wide

**Charlbury, between Oxford and Worcester, is one of the few surviving Italianate stations designed by Brunel. Built in 1853, it is characterised by the broad overhanging hipped roof, providing shelter at front and rear.** LUKE O’DONOVAN/NETWORK RAIL.



**The Southern Region intended a major programme of station replacement in the 1960s and adopted a system named CLASP (Consortium of Local Authorities Special Programme). It used concrete prefabricated panels for exterior walls and timber or glass panels for interior walls. In the event over 30 CLASP stations were built and other BR regions adopted the system; the SR’s scheme was cut back. This example is Aylesham in Kent.** LUKE O’DONOVAN/NETWORK RAIL.

variety of locations.

The idea of standard designs is as old as Brunel’s pattern-book series of Tudor and Italianate designs for the Great Western Railway in the 1840s. The LMS developed a Unit Station in the 1940s, and BR adopted Mob-X and CLASP designs in the 1960s, the D70 style in the 1970s, and VSB90 in the 1980s.

During his time as NR’s Chief Executive, Iain Coucher set a challenge in 2007 to build a station for under £1m, resulting in the Modular Station programme with Mitcham Eastfields as the first example.

NR’s competition was opened to international entries in June, and the first of three phases was concluded in November with the shortlisting of five winners chosen from over 200 entries from 34 countries (see panel, below). The first phase called for concept proposals, so no specific location was given to entrants.

For Phase 2, the winners will be given a more detailed, site-specific brief, although the designs must be capable of easy adaptation to the context, size and community at a particular site.

The winners will engage with NR representatives in design approach workshops

### THE FIVE WINNERS OF PHASE 1:

- Atkins with PRD (London)
- Miguel Angel Carrasco Arguitetura (Rio de Janeiro)
- Pascall + Watson (London)
- 7N Architects (Edinburgh)
- WORKSHOP Architecture (Toronto)

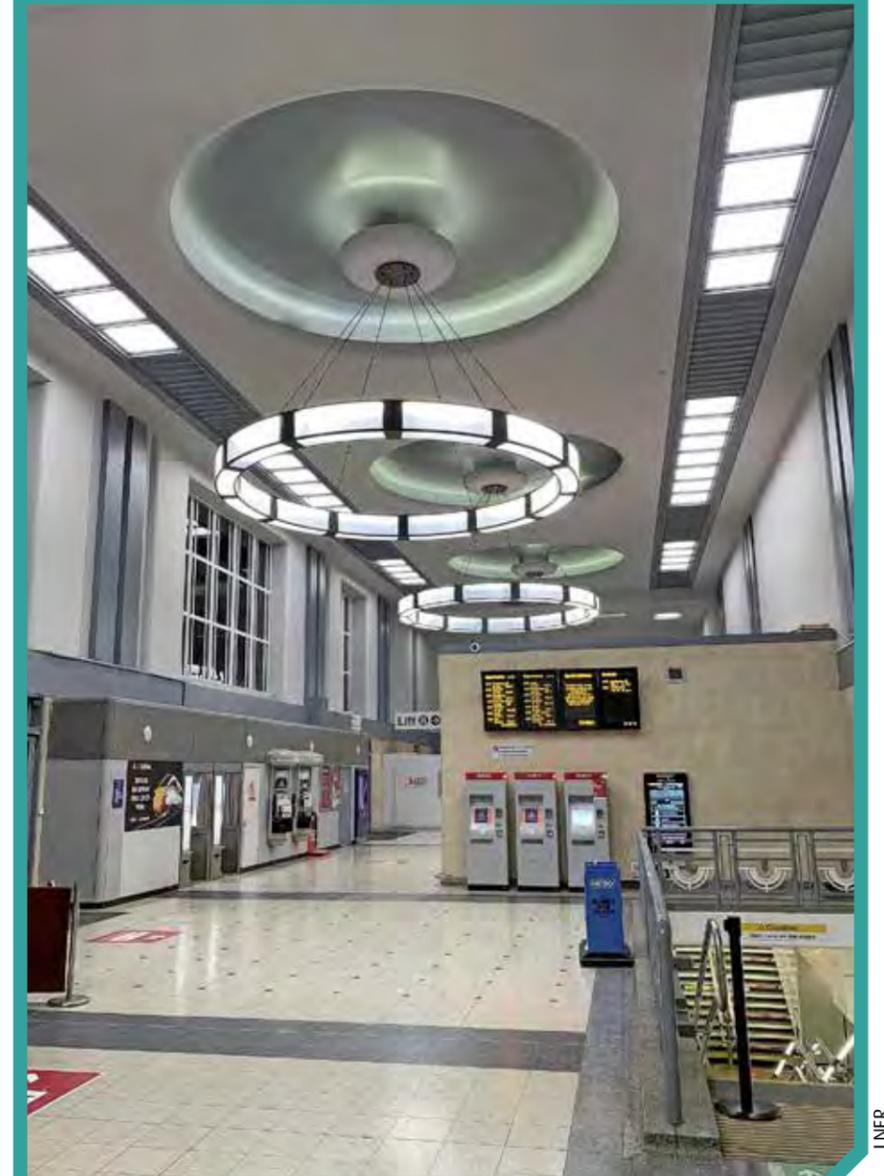
### ATTENTION TO DETAIL

The work of the Railway Heritage Trust has achieved much more than the distribution of grants.

Just as important is the way that it has encouraged a different way of looking at stations, a greater concern for the often small touches that make a huge difference to the ambience and feel of a station. One example is the enhancement and restoration of lighting in the Grade 2-listed art deco station at Doncaster.

LNER Customer Experience Director Claire Ansley says: “Our stations have played an important role in the great towns and cities of the LNER route, and we value their rich history.

“That is why we are extremely careful when it comes to planning any improvements, to ensure that any projects will both enhance the customer experience and be respectful of the building’s heritage and architectural qualities.”



to help them develop their final design submissions, which will be made public next February. The prize for the finalists will be an invitation to enter into a contract with NR for detailed design development work, and their work will feed into station design guidance which NR will publish in March.

It would not be uncharitable to pass a poor verdict on the majority of post-war small

station designs. With some exceptions, they have ignored their surroundings in terms of style and materials, and they have failed to provide the welcome and amenities that waiting passengers deserve.

This competition provides an opportunity to raise the quality and widen the scope of stations and restore their place in towns and villages as a source of civic pride. ■

# LEADING THE WAY IN GREENER TRANSPORT

In June 2019, the UK became the world's first major economy to pass a net zero emissions target into law.

By committing the UK to eliminating its contribution to global greenhouse gas emissions by 2050, the legislation represented a natural progression from a motion passed by MPs just weeks earlier that declared an environmental and climate 'emergency'.

Fast forward 18 months and we find ourselves in the grip of an additional emergency created by the Coronavirus public health crisis.

But far from threatening efforts to help the nation achieve its ambitious net zero target, our recovery from the pandemic instead provides an unexpected opportunity to decarbonise even more rapidly.

The Government's renewed commitment to reducing greenhouse gas emissions was summed up by Prime Minister Boris Johnson on October 6, when he said: "Now, as we build back better, we must build back greener."

As the highest carbon dioxide-emitting sector in the country, the transport industry is in pole position to help turn this ambition into reality. But a strong return of road traffic to near-normal levels since the start of the pandemic in March makes it more important than ever that rail rises to this challenge.

Not only does it need to become an even cleaner and greener mode of transport than

## SYSTRA Business Director CHRIS POWNALL explains how the company is advising clients on changes in travel patterns

it already is, it must also urgently attract passengers back to the network and away from more polluting modes of transport.

To help understand the implications of Coronavirus on public transport, and on the prevailing attitudes to work and travel, SYSTRA carried out two rounds of extensive research earlier this year.

The most recent survey conducted in June indicated that 39% of pre-pandemic public transport users will make fewer trips than before, once all COVID-19 restrictions are lifted.

This figure increases to 59% of those who regularly commute by rail or bus, and 62% of those surveyed in London.

Encouragingly, the survey also showed that 68% of respondents would feel safer using public transport through the use of safety measures such as the strict enforcement of social distancing and deep cleaning of stations and vehicles.

SYSTRA Business Director Chris Pownall explains: "In each survey we talked to about 1,500 people across different settings, roles, jobs and contexts around the country. The

second survey in June was particularly interesting, as we focused on the long-term impacts of the pandemic on how people work.

"One of the key things for the rail sector is the move we were already seeing towards people travelling to offices on fewer days of the week. 62% of office workers told us they usually commuted five days a week before the pandemic, but only 26% thought they were likely to go back to the same pattern once a vaccine is available.

"The survey was therefore important to not only understand the impact of Coronavirus on travel by public transport, but also around some of the actions that people would like to see in order to feel more reassured and to return to using rail, as a lot of us begin to work more flexibly."

To help train operating companies (TOCs) more effectively respond to the survey results and the changing demand for rail travel, SYSTRA has employed advanced Scenario Planning techniques to help its clients map out different potential versions of the future.

Scenario Planning creates a range of different potential versions of the future. SYSTRA can model what passenger demand and usage of the transport network will look like under these difference scenarios, enabling operators and policymakers to make intelligent planning decisions accordingly.

Pownall adds: "Clearly there is going to be a big change in the way people behave around public transport, and one of the big things we've been doing over the years is forecasting passenger demand. It's going to be difficult to predict for the next few years, but one of the approaches we are taking to reduce that uncertainty is to look at different scenarios that might result from the pandemic.

"With one TOC we've recently done a scenario planning exercise looking at four different versions of the future, where you have a weak or strong return to travel, and then what sort of strategies a TOC might need to optimise their business under those sorts of circumstances.

"In a high car-usage scenario, you might need to look at car parking and developing easier-to-access railheads, because thinking about how people get to the station might be key to keeping up rail's share of the market in

that situation."

To help support TOCs respond to changes in demand, SYSTRA has also been using its modelling skills to develop flexi-season ticket products that are attractive and cost-effective to passengers while also protecting product yield for operators.

A large number of TOCs have now developed and brought more flexible ticketing products to market, while the Government is expected to consider more wholesale reform to fares and ticketing in the near future.

SYSTRA has also worked with transport providers, including HS2 Ltd, to develop Station Travel Plans that look ahead to future demand and further enhance rail's standing as a sustainable mode of transport.

"If people are going to choose rail, then the way they get to the station needs to be greener. We therefore produce Station Travel Plans for TOCs that encourage walking and cycling, rather than the car," adds Pownall.

"It's about looking at facilities at stations and locking in good behaviours for getting to existing stations or ones that haven't been built yet, like we've done with HS2.

"For HS2, you're also thinking about stations as destinations. You look at retail, the station's purpose and sense of place, and making it somewhere that people want to be, and then how it links with local transport so that people use these stations in a green way. "King's Cross is very much marketed as a destination station, and it's about trying to capture that concept elsewhere on HS2."

As well as how we travel to and use stations, SYSTRA also recognises that the way we buy mobility services is changing.

The company is at the forefront of a number of trial schemes for the Mobility as a Service (MaaS) concept, whereby transport operators and mobility providers offer integrated packages of information and services.

As a result of its real-world experience, SYSTRA is currently advising a range of clients on the economic and practical issues of such arrangements.

Pownall explains: "We are helping clients to work out the feasibility of MaaS schemes and solve some of the practical problems around sharing information and payment means within a single platform on an internet-connected device.

"It goes beyond rail, as you want demand-responsive transport to get you to the station. And if you can get that all joined up, then you have a really attractive offer to deter people from driving the car." ■

SYSTRA advised on 1,300km of Danish electrification from 2013. ROBERT ATTERMANN/RED STAR.



## DECARBONISATION IS SPELT E-L-E-C-T-R-I-F-Y

In February 2018, the Government set out plans to eliminate diesel-only passenger trains from the network by 2040.

As the largest single source of emissions on the rail network, a Rail Industry Decarbonisation Taskforce was duly assembled to consider pathways to achieving this ambitious target.

In 2019, the Taskforce confirmed that it could be done through a "judicious and balanced" mix of cost-effective electrification alongside the targeted deployment of hydrogen and battery technology.

Supported by the Railway Industry Association's Electrification Cost Challenge, the Taskforce said that progressive electrification of the most intensively used lines was the lowest whole-life cost and whole-life carbon solution.

In September Network Rail's *Traction Decarbonisation Network Study (TDNS)* reinforced this message by recommending almost 12,000 standard track kilometres (stks) of electrification, battery operation over 400 stks, and hydrogen operation over 900 stks.

The Government will now consider this information before publishing its *Transport Decarbonisation* plan early next year.

RIA's *Electrification Cost Challenge* report provided lessons and insight from SYSTRA's involvement in a number of electrification schemes globally. This includes in Denmark, where rail network owner Banedanmark has been advised by SYSTRA on the electrification of more than 1,300km of line since 2013.

SYSTRA fully supports the output of the report which will improve the efficiency of delivery of electrification schemes going

forward.

Michael Toher, SYSTRA's Head of Business Development in Conventional Rail, says: "We've been involved in electrification for a number of years on schemes including the Great Western Electrification Programme (GWEP), so we've seen the challenges faced by wiring in the UK, but also the successes such as the Edinburgh-Glasgow Improvement Programme (EGIP).

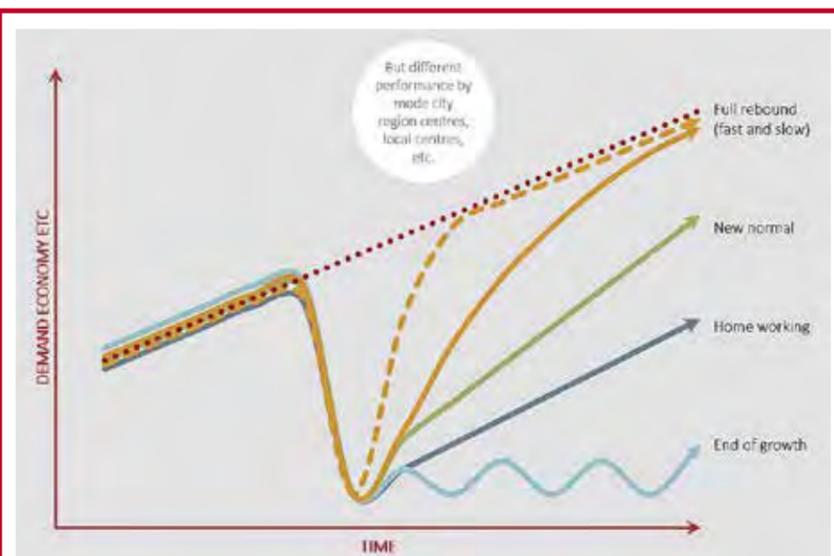
"We also work closely with industry groups including Northern Rail Industry Leaders (NRIL), where we offer our opinions and thoughts on electrification to Network Rail and Transport for the North, and will now respond to the TDNS both through the NRIL forum and as an individual company.

"Decarbonisation has been on the agenda for a while. But we are at a pivotal point because the benefits of electrification are not just about air quality and the environment, but also helping modal shift - because when you take diesel trains off the network you are offering a better transport solution.

"We share the view that decarbonisation is spelt E-L-E-C-T-R-I-F-Y, and we are keen to push the agenda and add our voice to the prioritisation of routes once we get a commitment from government around the spend profile for schemes."

He adds: "We believe that we have invested heavily in this country and abroad on electrification capability, and have a team that has been at the leading edge of this as a discipline.

"We can show from our portfolio of projects that we can meet RIA's Electrification Cost Challenge. What we need now is commitment from government for a rolling programme of electrification."



SYSTRA is helping train operators to prepare for changes in demand that are hard to predict, with a range of Scenario Planning tools. SYSTRA.

# REBUILDING RAIL IN THE 2020S

**R**SSB has been at the very heart of the rail sector for almost two decades. Established in 2003 in the aftermath of the fatal crash at Ladbroke Grove, it has been tasked with leading and facilitating industry-wide efforts to create a better-performing, safer railway ever since.

Formerly known as the Rail Safety and Standards Board, the not-for-profit organisation's remit includes managing and developing Railway Group Standards on behalf of the rail industry, leading the development of long-term safety strategy, and supporting cross-industry groups that address major areas of safety risk.

Since 2012, it has also facilitated the implementation of the Rail Technical Strategy, which calls on industry to find innovative technical solutions to the multiple challenges it collectively faces over the next 30 years.

RSSB provides technical support via its own research and development programme and employs more than 270 specialist staff covering a range of technical disciplines - including operations, engineering, information technology and risk assessment.

Leading RSSB's day-to-day activities is CEO Mark Phillips, who tells RAIL how his organisation's wealth of expertise has been deployed to support the industry's response to the outbreak of Coronavirus in late March.

"One of the first things we did was to discuss with our members - in particular Network Rail and the trade unions - the principles around which work on the network could continue safely. Alongside colleagues at the Rail Delivery Group and the Office of Rail and Road, we agreed those principles so that routine maintenance and renewals could go ahead to keep the railway running for key workers and vital freight.

"The next stage was to talk to train operators about how they needed to reflect changes in their safety management systems in order to keep the risk of transmission as low as possible for staff and passengers, as timetables were slowly brought back up to near pre-pandemic levels.

"During the summer, we then started to develop our own transmission models so that we could further help to build up confidence with passengers and operators around

## Chief Executive MARK PHILLIPS explains how RSSB is helping the industry to meet the challenges posed by COVID-19

travelling by train."

Published in early August, this analysis by RSSB calculated that the risk of contracting COVID-19 while travelling by train was approximately 1-in-11,000 journeys.

Furthermore, the risk was believed to more than halve if passengers wear face coverings (which have been mandatory on the network since June), with the overall safety risk for travelling by car deemed to be 25 times less safe than rail.

RSSB's findings successfully challenged the public perception that trains represented a hotspot of infection and that use of private road vehicles was a safer alternative.

Phillips adds: "Our transmission model was and is an opportunity for the public to see that travelling by train is safe, as we look to get back to doing the things that we used to do. We will continue to update and refresh the model to reflect changes to the wider risk of COVID-19 in the community, and are also looking to develop a tool so that operators can update it themselves for their particular circumstances.

"We've been quite busy, and it's been novel because we haven't had to address these types of concerns before. But I think it's enabled us to work with lots of organisations that we haven't done before, and to build a much closer relationship with our members.

"Typically, much of our previous work has been quite long-term, but we've had to come up with immediate solutions to meet the industry's needs now - not just in years to come."

Following reports in early November of an effective vaccine becoming available early next year, thoughts are beginning to turn toward the UK's emergence from the Coronavirus pandemic.

The full implications of the pandemic on future demand for rail travel are yet to be borne out, although there is broad consensus that a pre-existing shift towards greater home working and less peak-time travel has been accelerated.

Phillips explains: "I think the impact on rail is too early to tell. But the signs are that mass commuting is less likely and that people will still use the train, but for more specific purposes such as meetings and events.

"That means that flexible ticketing needs to be sorted out very quickly. People aren't going to want to buy annual season tickets and deposit £6,000-£10,000 with a railway company in advance of any travel."

Phillips argues that as well as posing a threat to the industry, the pandemic has also created an opportunity to remake the case for rail's continued role as an economic multiplier and one of the most sustainable means of travel.

He is therefore urging the industry to productively use the remaining duration of the pandemic to design its own destiny, so that it will be in a stronger position to respond to any future-demand scenario and be ready to kickstart the UK economy.

It must show government and the wider public that continuing to invest in rail travel is vital, and that it remains an attractive option that aids productivity, leisure and other connections between people, while also helping to curb climate change.

"It's almost as if you have brown paper up at the window and you're busy doing the internal refurbishment behind the scenes," says Phillips.

"We need to make good use of this time, so that when passengers do return, they are pleasantly surprised by what they find.

"I think that there comes a point where people begin to get bored within their own confines, so there is definitely an opportunity to encourage travel - even though it will be a different sort of arrangement than we've been used to in the past.

"Before Coronavirus, the network was almost at capacity. This might provide an opportunity to rebalance how the system works, so that it's more reliable and enjoyable for the end user and overall satisfaction becomes higher than it has been of late.

"Relatively speaking, we are a small industry, and we have to spend less time worrying about internal demarcations and who does what because our joint purpose is to win customers away from road and to build a better Britain."

He adds: "Rail has been phenomenally successful over the last 200 years in stimulating

Britain's economy, and I believe it continues to offer that opportunity. But we have to make sure that we don't lose that chance.

"We have to demonstrate fantastic performance, a reliable product and be better with passengers, because we know that customer service can be a bit patchy and that information can be sporadic and not as accurate as it should be. Perhaps COVID-19 will allow us to do some groundwork and get to that better place."

The industry charting its own route forward will also be important, given that government is currently providing an estimated £900 million per month in financial support to keep services running while demand remains low.

Although this financial backing is a sign that rail remains a key priority for government, it seems likely that pressure will grow from within the Treasury for cost optimisation if revenue remains low.

Phillips does not shy away from this challenge and agrees the industry will need to demonstrate value for money and that it can be more efficient.

He points to the RSSB model established in 2003 that was built on the premise that improvements in safety and standards can be made by adopting best practice collaboratively. He says that this reduces cost and the need for companies to invent or invest in their own solutions, as well as having the potential to further improve sustainability and performance as well as safety, health and wellbeing.

"We've been very fortunate for the last

20 years to have this five-year funding settlement and it would be a really retrograde step if we moved away from those longer-term arrangements. But clearly there is going to be a renewed focus on cost and efficiency.

"There are two things we can do. Firstly, as a membership body, we have to be as efficient as possible and organise and carry out our work, so it provides the best value for money.

"The work we do must also be of sufficient quality to enable the industry to reduce its costs. For example, if you take standards, we are working with government on its Restoring Beeching agenda, because it might not be that you want national rail standards to apply to all of those routes if it makes them too expensive to operate. Producing something that's lower cost so that those lines can reopen at an affordable amount of money is the sort of initiative we can help industry with.

"We also have our long-standing research and technology programme, which is important because the industry does need to look forward in terms of what we do differently in five to ten years' time.

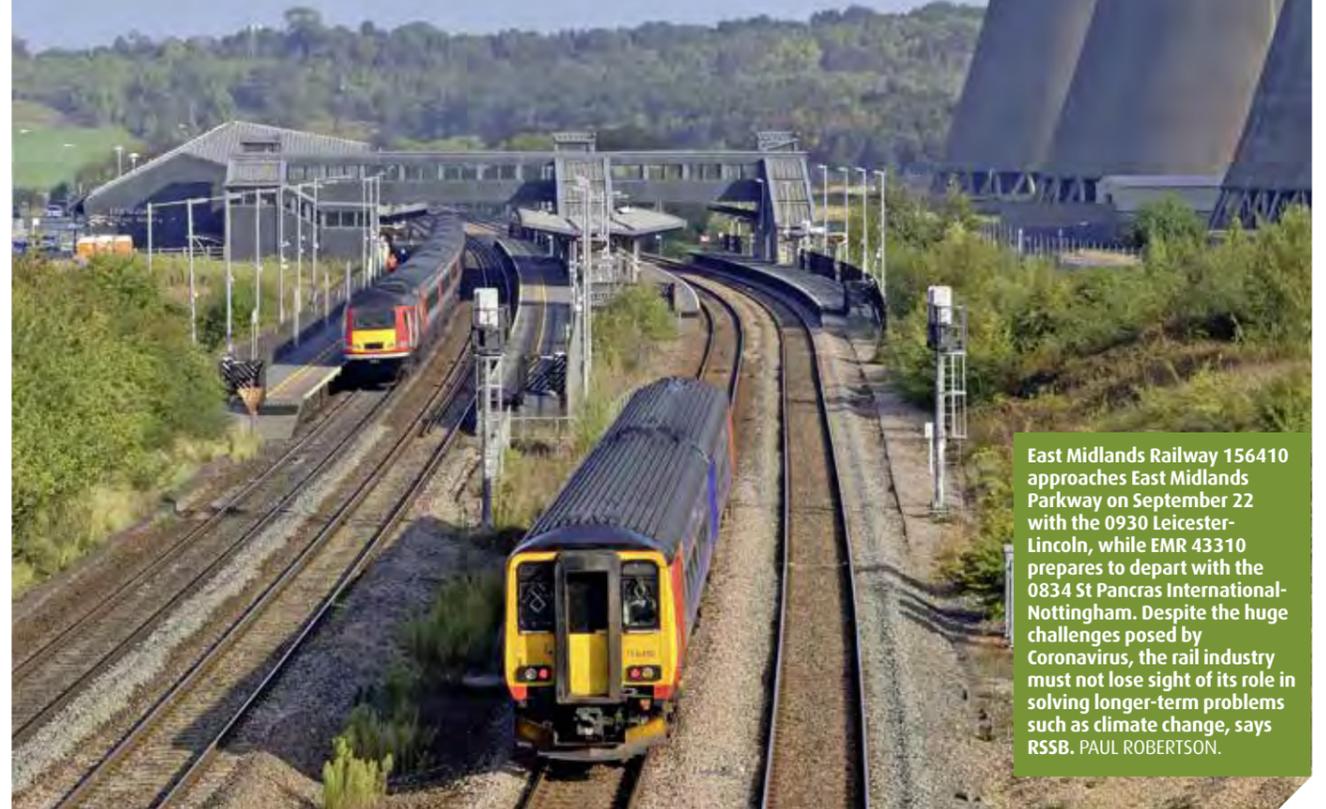
"We help to make sure research is joined up with other programmes [like Network Rail's], and we have been working with universities on a lot of research into how you do things better and cheaper - for instance, how you might reprofile rolling stock wheels more efficiently or how we can reduce the likelihood of pantographs damaging overhead lines."

While COVID-19 has provided a

short, sharp shock to the industry, the end hopefully appears to be in sight. Despite the immediate priorities and changes that may well now follow, nobody should doubt RSSB's determination to help position rail as a long-term solution.

Phillips concludes: "We should make no mistake that the pandemic has had a hugely damaging impact on the industry, and we are hugely grateful for the support the Government has given us.

"But we are where we are, and the opportunity is there for us to grasp what we have learned from this process and what we can embed into working differently in future." ■



East Midlands Railway 156410 approaches East Midlands Parkway on September 22 with the 0930 Leicester-Lincoln, while EMR 43310 prepares to depart with the 0834 St Pancras International-Nottingham. Despite the huge challenges posed by Coronavirus, the rail industry must not lose sight of its role in solving longer-term problems such as climate change, says RSSB. PAUL ROBERTSON.



**“We have to demonstrate fantastic performance, a reliable product and be better with passengers.”**

Mark Phillips, Chief Executive, RSSB