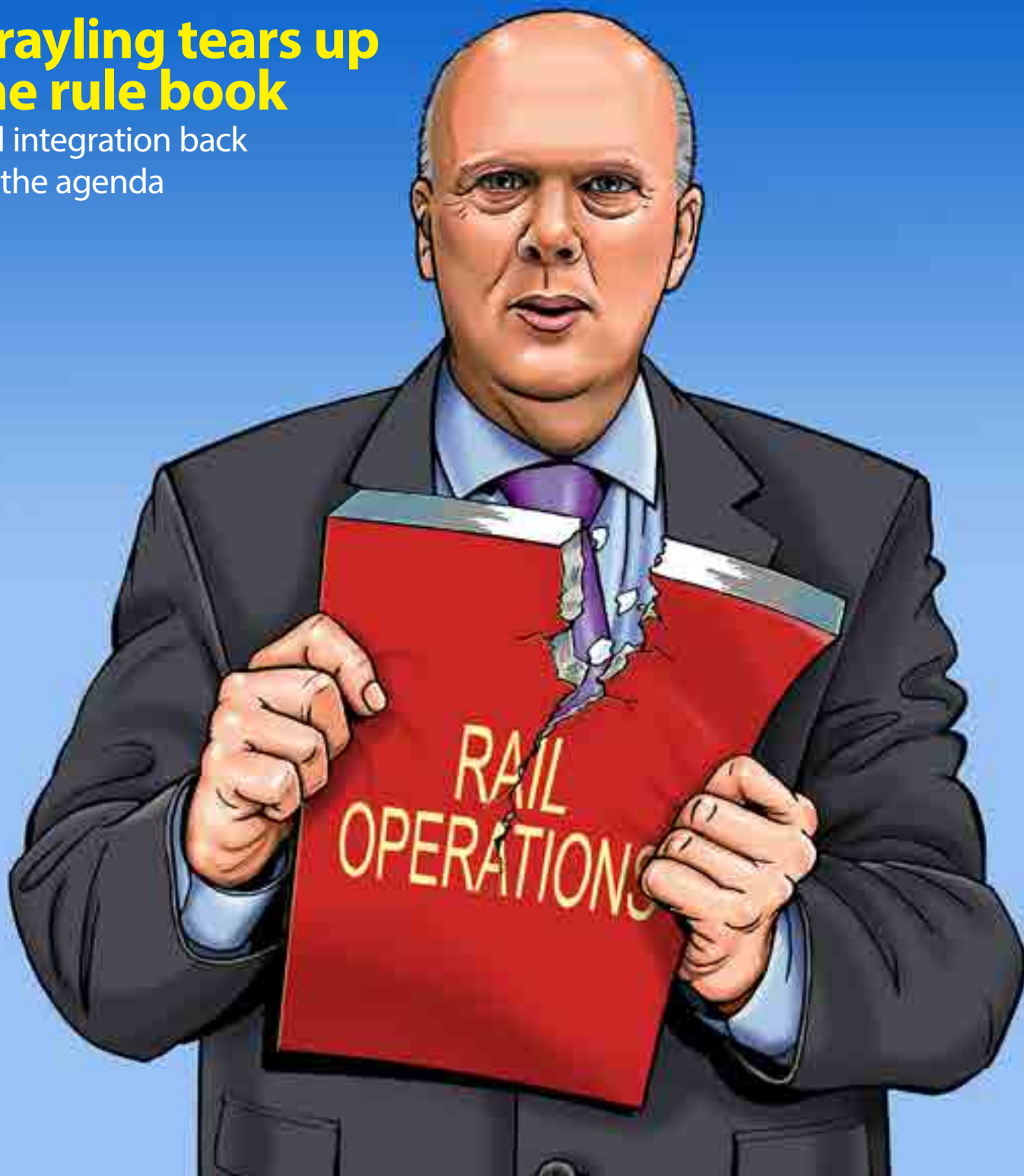


Grayling tears up the rule book

Rail integration back on the agenda



Powerhouse priorities

Infrastructure could bridge the North-South divide
p21



Northern winners power through

The North of England Transport Awards captured a new mood
p26



Plan for change with smart data

Integrated approach could transform operations and retail
p32

roadworks.org

The leading communications hub for live and planned road and traffic information

Diversion route planning
changed forever...

www.elgin.org.uk/traffic-management



The future of roadworks
communication...

www.elgin.org.uk/communications-management



Save time with simple
signage plans...

www.elgin.org.uk/traffic-management



elgin 
roadworks.org

For further information, please contact us on 020 7127 6955, info@elgin.org.uk or visit www.elgin.org.uk

HIGHWAYS MAGAZINE

EXCELLENCE

AWARDS 2015

WINNER



Cover illustration:
Dave Eastbury

Portrait photography:
Simon Battensby

Transport Times is published monthly and provides news, information, analysis and comment on surface transport.

Publisher David Begg
Email david.begg@transporttimes.co.uk

Editorial

Transport Times welcomes editorial contributions – news, features and opinions – which should be emailed to the address below. The editor reserves the right to edit all contributions for reasons of length and style.

Unit 27, Beaufort Court,
Admirals Way,
London,
E14 9XL

Tel 020 7828 3804
Fax 020 7828 3803
Email editorial@transporttimes.co.uk

Editor David Fowler
Email david.fowler@transporttimes.co.uk

Associate Editor Adam Raphael
Email adam.raaphael@transporttimes.co.uk

Production Editor Rob Buckley
Email rob@robbuckley.co.uk

Advertising

Sales Director Isabel Poulton
Email isabel.poulton@transporttimes.co.uk

Tel 01236 739577

Sales Executive Ciara Corcoran
Email ciara.corcoran@transporttimes.co.uk

Tel 020 7036 8572

Printer

Buxton Press Ltd
Palace Road
Buxton
Derbyshire SK17 6AE

ISSN 1759-1015

© All rights reserved. No part of this publication may be reproduced in any form without the prior written permission of the publisher.

How to get YOUR copy of **transporttimes**

Transport Times is designed to help keep transport professionals and those who work with them up to date with the latest developments in the field.

It is read by the people who make the important decisions on transport infrastructure and service provision at national, regional and local level.

Lots of people have asked for their own personal copy rather than having to wait for the office copy to hit their desk. They want to take advantage of our unrivalled feature, opinion and news coverage that helps keep them in the know and ahead of the game.

The annual subscription charge is £95 + £4 VAT (print and online), £60 + £12 VAT (online only). For a subscription form, just email transporttimes@tjcuk.co.uk, call 01424 757610, or write to:

Transport Times Subscriptions
PO Box 304
Hastings
TN34 9EJ

transporttimes

issue no: 138 December 2016

Grayling seeks to make his mark

Transport secretaries fall into a range of categories. There are the quietly competent – such as Sir Patrick McLoughlin, Philip Hammond, Alistair Darling. There are the fleeting ones who come and go without leaving much trace, like Justine Greening. There are those who, whether or not through their own fault, always seem mired in controversy, such as Stephen Byers.

And there are the ones who have a bold vision and pursue it, such as Andrew Adonis or John Prescott.

Chris Grayling is clearly seeking to join this last group, with a succession of recent announcements which show his intention to make a difference.

The first is his proposal to mandate joint train operation and infrastructure management teams in future franchises, starting with South Eastern and East Midlands. The desirability of so-called vertical integration of track and train has been debated ever since privatisation. Merseytravel and Merseyrail sought to adopt it a decade ago, but were blocked. It was, as Mr Grayling pointed out, recommended by the McNulty rail value for money review five years ago.

On the surface, integration of track and train appears entirely logical or common sense. And yet the UK railway's record as the safest in Europe in recent years has been achieved under separate train and track operations. Integration is not a panacea: after McNulty the one-team alliance approach was adopted on the South West route, then abandoned last year. ScotRail, whose performance is currently a matter of controversy in Scotland, is another example of a "deep alliance".

It is not entirely clear that closer track and train working is the solution to an urgent problem, which partly explains renewed accusations from critics that this is a precursor to the break-up and privatisation of Network Rail.



A succession of recent announcements show his intention to make a difference

The second initiative concerned East West Rail. The economic importance of the Oxford-Milton Keynes-Cambridge-East Anglia corridor is increasingly recognised. The National Infrastructure Commission described it as having the potential to be the UK's Silicon Valley. But the NIC endorsed the arguments put forward by the England's Economic Heartland alliance in calling urgently for improved east-west links across the region to underpin its continuing economic success.

Mr Grayling is right to point out that the East West project seems "stuck in a long pipeline of Network Rail projects that are funded for some time in the next decade", so his initiative to speed things up is welcome.

But is inviting the private sector to design, build, operate and invest in the route the right way to do it? Cllr Kevin Price, Cambridge City Council's deputy leader, pointed out that there is no evidence that the private sector is keen to fund the line. And the proposal sounds remarkably like the design-build-finance and operate model that reduced the progress of tram schemes to a snail's pace in the 1990s and 2000s.

Finally, Mr Grayling has ripped up the agreement between his predecessor Sir Patrick McLoughlin and then London mayor Boris Johnson for TfL to take over the operation of suburban London rail services as franchises fall due for renewal. The first of these, Southeastern, will now be a test-bed for the new integrated approach, with TfL merely having a representative seconded to the franchise specification team.

This will put the operation of that franchise under intense scrutiny, and has already drawn criticism from fellow Conservative MP Bob Neill.

Meanwhile, unless continuing talks at Acas lead to a breakthrough, another controversy drags on: the industrial dispute between Southern and the RMT and now ASLEF unions. The secretary of state has appeared to take a hands-off approach to the dispute, blaming union intransigence.

But experience in Scotland shows that in such cases blame has a habit of attaching itself to ministers.

Southern passengers have been enduring a substandard service since well before the dispute began in April, because of disruption arising from the rebuilding of London Bridge station and driver shortages. They are justified in asking why Mr Grayling has not taken decisive action.

Mr Grayling is aspiring to make a mark as a bold and visionary Transport Secretary. But he could find himself in the category marked "mired in controversy".

David Fowler, editor
Transport Times

A Merry Christmas to all our readers! The *Transport Times* team would like to wish all our readers the greetings of the season and a happy and prosperous 2017. The next issue of TT will be published on 27 January.



ANALYSIS

6 RAIL INTEGRATION

Chris Grayling tears up the rule book

7 AUTUMN STATMENT

Chancellor prioritises infrastructure investment

8 HS2 PHASE TWO

Government reveals preferred route

9 ELGIN AND TOMTOM

Team-up will help with real-time roadwork responses

10 HITACHI TRAIN

First UK-built Intercity Express unveiled

OPINION

11 MINISTERIAL BRIEFING

Devolution must work for the travelling public

12 JIM STEER

Lessons from Great Western electrification

13 LOUISE ELLMAN

Commons must iron out flaws in the Buses bill

14 CLAIRE HAIGH

Buses: playing a vital role in reducing emissions

15 SIR PETER HENDY

For Network Rail, it will be an orange Christmas

16 JIM O'SULLIVAN

Smart motorways are keeping people moving

17 ANDREW MCNAUGHTON

Focus on infrastructure is growing around the world

20 DEREK HOLDEN

Better links are needed between networks

34 DEHAVILLAND

A fluid and testing new year is in prospect

FEATURES

21 POWERHOUSE PRIORITIES

Last week's North of England Transport Summit took an in-depth look at priorities for infrastructure investment and its role in bridging the productivity gap between the north and south of England. David Fowler reports

26 NORTHERN WINNERS POWER THROUGH

The inaugural North of England Transport Awards last week captured a new mood of optimism and put the people who will shape the Northern Powerhouse centre stage

32 PLAN FOR CHANGE

An integrated approach based on smart and mobile technologies and effective use of data has the potential to transform rail operations and retailing, says John Bain

9TH FEBRUARY 2017

QEII CENTRE, BROAD SANCTUARY,
WESTMINSTER, LONDON SW1P 3EE

Media partners

transport times

PASSENGER
TRANSPORT

Bus & Coach
Super



Keynote Speaker:

Andrew Jones MP
Transport Minister

Confirmed Speakers



Humza Yousaf MSP,
Scottish Transport Minister



Valerie Shawcross CBE,
Deputy Mayor of London
for Transport



Martin Griffiths,
Chief Executive,
Stagecoach



David Brown,
Chief Executive,
Go-Ahead



Laura Shoaf,
Managing Director,
Transport for West Midlands



Leon Daniels,
Managing Director Surface
Transport, Transport for London

The third annual UK Bus Summit will be held in London at the QEII Conference Centre, Westminster on 9th February 2017 and once again is supported by the Department for Transport.

Following its resounding success in 2015 and 2016, the UK Bus Summit has become the central platform for a national policy discussion on issues facing the bus sector. Discussion will focus on the crucial role that buses play in supporting society and stimulating the economy; the range of successful technologies available for tackling pollution; and, the scope for improved ticketing and information to enhance the passenger experience. The event will also provide a forum to analyse and debate the strengths and weaknesses of the contrasting delivery models.

The Summit is a must-attend event for anyone who wants to be up to speed with all the latest developments in the bus industry.

Additional confirmed speakers include:

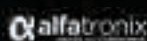
- Dr. Manfred Rudhart, Chief Executive, Arriva
- Giles Fearnley, Managing Director - UK Bus, FirstGroup Plc
- Prof David Begg, Chief Executive, Transport Times
- Anthony Smith, Chief Executive, Transport Focus
- Claire Haigh, Chief Executive, Greener Journeys
- Andy Eastlake, Managing Director, Low CVP
- John Henkel, Executive Sponsor - Integrated and Smart Travel, Transport for the North
- Neill Birch, Director - Public Transport Operations, Systra

For more information please visit

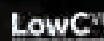
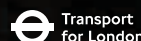
www.transporttimes.co.uk

or call 0207 828 3804

Sponsored by



Supported by



UK
BUS
SUMMIT

Grayling rewrites the rules on rail

Transport Secretary Chris Grayling signalled his intention to tear up the rule book on rail operations, with a pledge to reintegrate train and track.

A requirement for a single team covering rail operations and track maintenance will be built into the next franchise specifications to be issued.

Mr Grayling also announced the establishment of a new private company to speed up development and then operate the East-West Rail project.

The proposal for re-integrating track and train operations revives a recommendation by the report on rail value for money by Sir Roy McNulty to then Transport Secretary Philip Hammond in 2011 (*TT* 78 and 82). This was followed up by a pilot of alliance working on the South West franchise in 2012, which was abandoned last year.

Mr Grayling said in a speech that the industry needed to change the way it worked to cope with increasing demand, recover better from disruption and address declining performance.

He endorsed the route devolution approach recommended in the Shaw report earlier this year but added: "I understand why the railways were privatised in the way they were, with the two parts of the network split into separate companies. But what worked on a declining post-nationalised industry is not necessarily right for now."

"Delivering improvements on a working railway is a tough task at

Chris Grayling: "The railway is much better run by one team of people working together"



the best of times. Doing so across different teams with complicated contracting arrangements is even tougher. And when things go wrong, a lack of a joined-up approach can make things much worse for the passenger. Report after report commissioned by the department has pointed in the direction of a simpler railway, with less contracting complexity, and more localised decision-making.

"Our railway is much better run by one team of people working together. They don't have to work for the same company. They do have to work in the same team."

The next two franchises to be let, South Eastern and East

Midlands, will be expected to have integrated operating teams between train services and infrastructure. The model would continue to be developed as franchises were re-let, with joint ventures, proposed by the McNulty report, a possible option.

Mr Grayling described East West Rail as one of the most strategically important rail projects, with potential to unlock housing and development. The Oxford-Cambridge line closed in the 1960s; as well as linking the two university towns its route runs through growth areas around Milton Keynes and Bedford, home to

high-tech industries including much Formula One racing.

The National Infrastructure Commission last month also identified its importance.

"Most of the old route remains, partially derelict, in use in places, and the link is eminently reopenable," Mr Grayling said. But "despite millions of pounds of pre-funding, it is stuck in a long pipeline of Network Rail projects that are funded for some time in the next decade."

A new organisation, East West Rail, will be set up to speed up development.

Initially it will accelerate gaining powers needed to reopen the route. Its main task will be to secure private sector involvement to design, build and operate the route. "It will lead to the creation of Britain's first new integrated railway for decades," he said, providing a commuter route for the corridor as well as a spine for housing and business development. £110m was provided in the autumn statement for initial work including enabling works where it will cross the route of HS2. Former Chiltern Rail chief executive Rob Brighthouse will chair the new organisation.

The proposal was welcomed by Network Rail chair Sir Peter Hendy, speaking at the *TT* North of England Transport Summit last week. Critics including RMT general secretary Mick Cash and Cambridge City Council deputy leader Kevin Price voiced concerns about "creeping privatisation" and "further fragmentation".

The initial section of the route, from Oxford to Bicester, became fully open this week following the opening of the Oxford-Oxford Parkway section, as part of a Chiltern Railways project.

Mr Grayling made a U-turn by rejecting London mayor Sadiq Khan's bid to take over Southeastern, saying TfL had not made a convincing enough business case. This reversed an agreement between his predecessor Patrick McLoughlin and then London mayor Boris Johnson earlier this year.

Conservative MP for Bromley and Chislehurst Bob Neill called for Mr Grayling's resignation over a leaked letter in which Mr Grayling said he wanted to keep suburban rail "out of the clutches" of a Labour mayor.

NIC backs east-west links

The National Infrastructure Commission's interim report on the Oxford-Milton

Keynes-Cambridge corridor recommended that:

The Government should go ahead with East West Rail's initial phase, a new link from Oxford to Bedford and Milton Keynes, which should be completed by the end of the next five-year funding period in 2024.

It should invest in developing as soon as possible detailed plans both for the next phase, to complete the link to Cambridge, and for a new Oxford-Cambridge Expressway.



Sir John Armitt: "A potential UK Silicon Valley"

The plans should be drawn up with the specific intention of securing the tens of thousands of new homes the area needs.

Local authorities, Local Enterprise Partnerships, government departments and national delivery agencies should work together to develop a strategic vision for housing, jobs and infrastructure across the corridor, as well as proposals for joint governance arrangements.

NIC deputy chair Sir John Armitt said: "The corridor connecting Cambridge, Milton Keynes and Oxford could be Britain's Silicon Valley – a globally recognised centre for science, technology and innovation." But without improved transport links, "its future success is not guaranteed".

Chancellor prioritises infrastructure investment

Chancellor Philip Hammond said he faced in his autumn statement the challenge of resolving how to protect the recovery and build on the economy's strengths, while at the same time responding to warnings of a difficult period ahead due to the vote for Brexit.

The latest forecast from the Office of Budget Responsibility predicted growth over the next five years to be "2.4 percentage points lower" than would otherwise have been the case.

He introduced a new target to return the public finances to balance "as early as possible in the next Parliament". But there was a need to address the weakness of UK productivity, and "grow the potential of the economy and protect the tax base".

"So we choose in this autumn statement to prioritise additional high-value investment, specifically in infrastructure and innovation, that will directly contribute to raising Britain's productivity," Mr Hammond said. And this commitment could be funded in the short term from additional borrowing.

He announced a new £23bn National Productivity Invest-

ment fund, to be spent on innovation and infrastructure over the next five years.

For transport this would mean an additional £1.1bn for English local transport networks, "where small investments can offer big wins", focused on relieving congestion and installing important upgrades; £220m to address traffic pinch points on strategic roads; and £390m "to build on our competitive advantage in low-emission vehicles and the development of connected autonomous vehicles", plus 100% first year capital allowances for the installation of electric vehicle charging infrastructure.

In an unexpected move Mr Hammond unveiled £450m for a trial of digital signalling on railways.

The DfT would continue to work with Transport for the North to develop detailed options for Northern Powerhouse Rail. There was a commitment to continued higher infrastructure investment. Mr Hammond said: "We must sustain this effort over the long term if we are to make a lasting difference to the UK's productivity performance." He had written to the National Infrastructure Commission to

ask it to base its recommendations on the future infrastructure needs of the country on the assumption that the Government would invest between 1% and 1.2% of GDP every year from 2020 in economic infrastructure – compared with 0.8% this year.

The chancellor also backed the NIC's interim recommendations on the Oxford-Cambridge corridor, published last month, with £110m of funding for East West Rail and a commitment to build the Oxford-Cambridge expressway, with an immediate £27m of development funding. This could become "a transformational technology corridor, drawing on the world-class research strengths of our two best-known universities", he told MPs. The expressway will be included in the second Road Investment Strategy, alongside dualling of the A66, and improvements to the M60 North West quadrant.

It was also necessary "to drive up performance of our regional cities," he said. A strategy for addressing productivity barriers in the Northern Powerhouse was published alongside the statement, with the go-ahead for a programme of major road schemes in the north of England.

A Midlands Engine strategy would follow shortly, but immediate funding of £5m for an evaluation study for the Midlands Rail Hub, a programme of interventions in and around Birmingham that could allow up to 10 additional trains hourly, was also announced.

Mr Hammond announced £1.8bn from the local growth fund to LEPs around England, £80m to accelerate the introduction of smart ticketing and £150m to improve transport flood resilience.

Overall, the infrastructure measures were welcomed by the industry but were criticised by shadow chancellor John McDonnell as too little. Andy Burnham MP, Labour candidate for mayor of Greater Manchester, said plans for the North should have been bolder: "The North is crying out for a clear plan for transport – our motorways are full. The region is also crying out for a skills plan after the referendum. Today was a chance to meet both with a bold plan for east-west rail investment and a clear timetable for it. The Northern Powerhouse Investment Fund is welcome but we needed more than the dribble of low-key announcements we got."

National Express adopts stop/start technology

National Express West Midlands has successfully tested the world's first diesel buses with stop/start technology. Over the last year two single-deck ADL Enviro 200 buses with Voith Turbo gearboxes have clocked up over 80,000 miles on the 71 and 72 routes between Solihull and Birmingham. As a result the company is fitting the technology to all the new buses it orders.

Stop/start, whereby the engine is cut while the vehicle is stationary and restarts when the driver presses the accelerator, is a common feature on cars but is new to non-hybrid buses.

National Express head of engineering Colin Saward said that on buses in the past, because of the inertia of the gearbox, start-up and shut-down had been too slow, taking several seconds. Stop/start has been made possible by adopting the new gearbox type. Mr Saward said: "The Voith Turbo gearbox disengages at



the input shaft, so the drag on the engine is reduced when you restart. The technology cuts fuel consumption by 10%, therefore also cutting harmful emissions."

He continued: "The stop-start gearbox trial was ex-

tremely successful, so every one of the 96 double-deckers we bought this year comes with the stop-start gearbox."

Steve Hayes, network development and delivery manager for Transport for West Mid-

lands, said: "This is testament to the work of our Bus Alliance, for which tackling air quality is a key objective."

• **Greener buses make inroads on emissions – page 9**

Government reveals preferred route for HS2 phase two

The Government has announced its preferred route for phase 2b of High Speed 2, the Y-network from Crewe to Manchester and Leeds. The announcement covers most of the route but there will be a further period of consultation over seven route refinements.

Enabling works contracts worth £900m to allow main construction to go ahead in 2018 have also been awarded.

The phase 2b route continues from the Birmingham-Crewe section, phase 2a, which was accelerated on the basis of proposals by HS2 chair Sir David Higgins.

On the western leg, the route continues north from Crewe to

Manchester Airport and on to Manchester city centre, where a new HS2 station will be built next to Manchester Piccadilly.

There will be a connection to Liverpool and to the existing West Coast main line, allowing HS2 services to continue north, serving stations to Glasgow and Edinburgh.

On the eastern leg, HS2 will continue from the West Midlands to Toton in the East Midlands, where a new HS2 station will be built to serve Nottingham, Derby and the wider region. It will continue north to South Yorkshire.

Following the recommendation of Sir David Higgins in July, it is proposed that HS2 should serve Sheffield city centre with a connection to the

existing station, with the main route being moved further east. From South Yorkshire, the route continues to Leeds, where a new HS2 station will be built in the city centre, adjacent to the existing station. There will be a connection to the East Coast main line, allowing HS2 to serve York, Newcastle and other places in north-east England.

There will be further consultation on the new Sheffield proposals and six other refinements. On the western leg it is planned to move the rolling stock depot from Golborne to a site north of Crewe; to move the approach to Manchester Piccadilly eastwards with a tunnel portal in Ardwick, to avoid residential properties and a school; and to

move the route in the Middlewich-Northwich area to the west.

On the eastern leg it is proposed to move the route to the east of Measham in Leicestershire, to reduce impact on manufacturing and development sites; to go around East Midlands Airport rather than tunnelling under it; and to amend the route through Long Eaton to reduce severance and the impact on existing roads and rail lines.

Following consultation the Transport Secretary will make a decision on these changes next year, with the aim of bringing forward a hybrid bill to Parliament in 2019.

Enabling works have been let in three packages. They are: Area South – Costain/Skanska Construction UK joint venture; Area Central – Fusion joint venture comprising Morgan Sindall, BAM Nuttall and Ferrovia Agroman (UK); Area North – Laing O'Rourke and J Murphy & Sons joint venture.

These contracts include archaeological investigations, site clearance, establishing site compounds and a range of other activities including utility diversions, ecology surveys, demolition, ground remediation, watercourse activities, highway realignments, monitoring and instrumentation, structural reinforcement and drainage. Work is due to begin in the spring, roughly a year before main construction works, following expected Royal Assent for the phase one bill early next year.

A new Leeds HS2 terminus would be built adjacent to the existing station



Euston Express submits new proposals

The team behind Euston Express, an alternative proposal for redeveloping Euston to accommodate HS2 services (TT last month), has produced modified proposals.

Its latest scheme, "Euston Amalgam", follows new discussions with Network Rail, HS2 and the DfT and seeks to capture the best of the Euston Express and HS2 proposals.

The new scheme retains the plan to fit a total of 23 platforms, for HS2, the West Coast main

line, and local suburban services to Watford, within the existing station footprint. However it adopts HS2's proposal for long tunnels from Old Oak Common. The original Euston Express plan envisaged much shorter tunnels ending at Queen's Park, where HS2 trains would take over two WCML tracks.

The new plans still eliminate the complex grade-separated station throat proposed by HS2 on a section of the track in Camden Town, in favour of a flat throat.

Network Rail had expressed concern about disruption to West Coast main line services both from constructing the grade-separated throat and from Euston Express works around Queens Park.

The Euston Express team, represented by Rail Freight Group chairman Lord Tony Berkeley and petitioner Sam Price, say the new scheme provides a space-efficient set of HS2 approaches without the large-scale construction and local environmental damage foreseen in the official

scheme; avoids major disruption to West Coast main line traffic; proposes improvements to the WCML terminus approaches to give the classic railway greater capacity and flexibility; would shorten construction; and allows for the whole of Euston to be redeveloped on its existing site.

It claims savings would be between £2bn and £4bn compared with the official scheme.

The revised project has been sent to the House of Lords HS2 Bill Select Committee.

Elgin and TomTom team up

TomTom, which manufactures navigation devices, and roadworks.org creator Elgin have announced a collaboration they claim has the potential to revolutionise traffic management in the UK, by enabling traffic managers and works promoters to monitor and respond to the impact of roadworks on traffic in real time, and to plan both roadworks and traffic management interventions more effectively.

TomTom Traffic in the UK now includes roadworks and traffic management information from Elgin, and the collaboration aims to provide more accurate and validated real-time traffic information to drivers, fleet managers and traffic management professionals.

Elgin's roadworks.org provides a comprehensive roadworks and traffic management communications hub, and also serves as the national roadworks database for England and Wales. The roadworks.org map is embedded within hundreds of local and national authority websites and the underlying data is widely disseminated through a variety of services.

TomTom receives a detailed picture of current vehicle speeds and locations reported by TomTom navigation systems and mobile applications. Under the new collaboration this data is anonymised and fused with roadworks data from Elgin.

"By harnessing machine learning to improve the data's quality, TomTom's traffic fusion engine creates a positive feedback loop and can discern whether, for example, scheduled roadworks reported to Elgin are causing traffic disruption and whether these are occurring where they were expected to," said Anders Truelsen, managing director of TomTom's licensing business unit.

"We're extremely enthusiastic about the ways that TomTom and Elgin's combined real-time data feeds can be harnessed by transport authorities and contractors alike to actively monitor and minimise traffic disruptions resulting from planned roadworks," said Elgin managing director James Harris. "We have worked closely with TomTom to ensure that this valuable data is made accessible through our



The collaboration fuses traffic speed and location information from TomTom with roadworks data from Elgin

respective data services."

The combined TomTom/Elgin data, including the real-time impact of roadworks and traffic management measures, can be accessed by authorised users within Elgin's roadworks.org Pro operational environment, or licensed as a raw data feed through TomTom or Elgin for

integration within traffic control centres, urban traffic management and control systems and intelligent transport systems.

Private road users using TomTom's live traffic information in the UK, for example through a connected navigation system or mobile application, will benefit directly from the collaboration.

Greener buses make inroads on emissions

A new generation of clean buses is reducing greenhouse gas emissions by 55,000 tonnes annually and providing £8m in health and environmental benefits, according to a new report by the Low Carbon Vehicle Partnership for Greener Journeys.

There are 3,760 certified low carbon emission buses currently operating in towns and cities in England, Scotland and Wales, including 40% of new buses sold last year.

If this proportion were to reach 100% of all new buses by 2020, the annual savings could increase to 432,000 tonnes of methane, carbon dioxide and nitrous oxide emissions – the equivalent of taking 92,000 cars off the road – and £248.5m in wider social benefits.

The figures are published in *A Green Bus for Every Journey*, a new report by the LowCVP, commissioned by Greener Journeys, the sustainable travel group. The report reveals how the latest

buses are using a wide range of technologies to help reduce emissions and air pollution.

There has also been a dramatic improvement in conventional diesel engines, with the latest Euro VI types – including over half of all new models bought in 2015 – reducing emissions of nitrogen oxides by 95% compared with the previous Euro V models.

Greener transport is seen as key to helping towns and cities meet European clean air targets, which are currently being breached in 38 out of 43 UK zones.

The report highlights how the wide variety of green buses available, including hybrid, plug-in hybrid, electric, electrified ancillary, hydrogen fuel cell and biomethane models, is allowing operators around the country to find the option most suited to their operations.

Examples include a total of 175 electric buses around the country, including the first wirelessly charged types operated

by Arriva in Milton Keynes, and 10 hydrogen fuel cell buses operated by First Group and Stagecoach in Aberdeen – the largest such fleet in Europe.

Go-Ahead's 600 hybrid buses in London have helped lower emissions by 16%, with a further 10% improvement possible by 2018. Lothian Buses has saved £1.4m in fuel costs since 2011 thanks to its fleet of 85 hybrid buses.

Reading Buses has operated 34 biomethane buses since 2013, achieving 30% savings in fuel costs. Stagecoach, which operates 4,581 biodiesel buses, says the technology has cut the carbon dioxide emissions of its overall fleet by a quarter. National Express's fleet of 18 hybrid buses in Birmingham is so popular that passengers sometimes complain when conventional models arrive at their stop. The drivers of First-Group's 12 electric buses in York say passengers prefer them because they offer a smoother ride and are quieter than diesel buses.

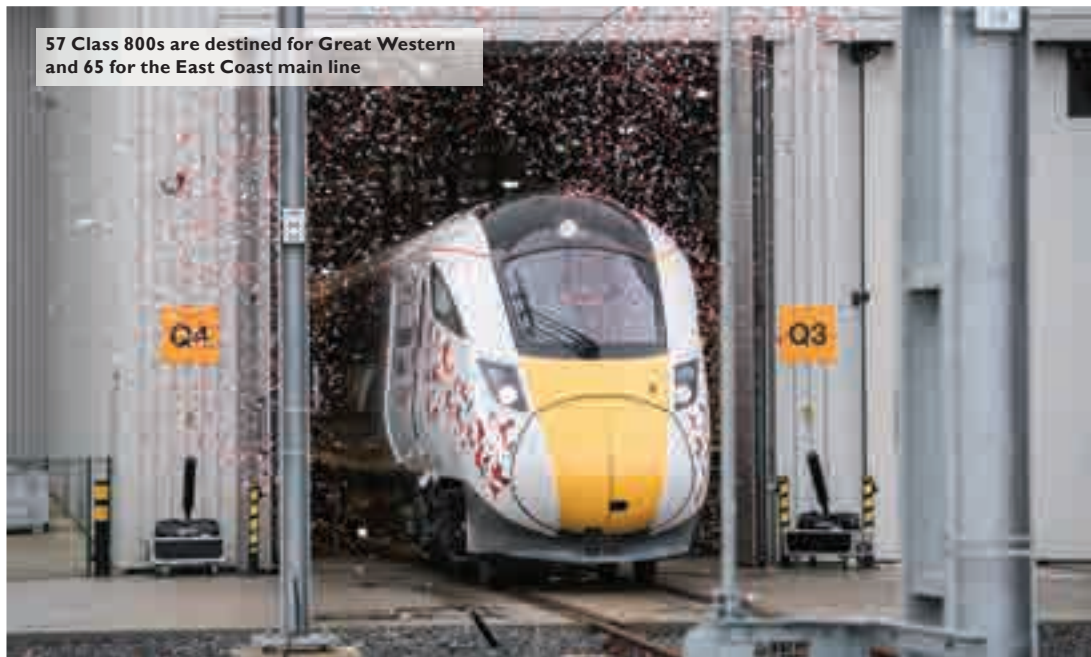
Greener Journeys chief executive Claire Haigh said: "Tackling transport emissions is one of the most pressing issues facing councils and operators today, and this report clearly shows that investing in clean buses is an integral part of the solution."

LowCVP managing director Andy Eastlake said: "The UK's bus sector has made great progress in introducing low-emission, efficient technologies over the last decade. This has been in large part due to the support of the Government, and the commitment of industry and other stakeholders to work together and drive change. This support and commitment needs to continue if the sector is to make a necessary contribution to cutting CO₂ emissions, as well as to the increasingly urgent task of reducing pollution in towns and cities."

For print subscribers, a copy of *A Green Bus for Every Journey* is enclosed with this issue of *Transport Times*

Hitachi unveils first UK-built Intercity Express

57 Class 800s are destined for Great Western and 65 for the East Coast main line



Hitachi unveiled the first Class 800 Intercity Express train built in the UK at its Newton Aycliffe plant last week.

Guests included Transport Secretary Chris Grayling, minister for the Northern Powerhouse Andrew Percy and the ambassador of Japan in the UK, Koji Tsuruoka. The event marked an important milestone in the £5.7bn Intercity Express programme under which 122 new Hitachi-built trains will be introduced on Great Western routes and the East Coast main line. Two types

of train are being manufactured, an electric multiple unit, and a bi-mode version with under-floor diesel engines, which can operate on non-electrified routes.

With the first 12 pre-series trains having been produced in Japan, units are already undergoing testing and are scheduled to enter timetabled service on Great Western routes in autumn next year, and on the East Coast in 2018.

Hitachi's £82m train manufacturing site was opened in September last year following the company's success in securing

the IEP rolling stock contract in 2012. Subsequently, Hitachi has received contracts to manufacture 36 additional AT300 intercity trains for Great Western's Devon and Cornwall routes – to be built at Hitachi Rail's Pistoia plant – as well as orders for 19 units for Transpennine Express and five for Hull trains. A contract for 70 commuter trains for ScotRail means that the company has a strong order book into the next decade.

The County Durham plant, which Hitachi describes as its primary European facility for train manufacturing, currently

employs 700 people – set to increase to 900 by spring – including 50 apprentices. In addition, maintenance facilities are being created in Doncaster, Bristol and Swansea as well as London, with the company committed to employing 2,000 people across 14 UK sites by 2019.

Hitachi Rail Europe managing director Karen Boswell said: "Today is a celebration of the return of train manufacturing to the North East, supporting thousands of jobs and developing a strong engineering skills base in the region. Trains running across the country's rail network will be built by a proud workforce harnessing the best of Hitachi's long-standing rail expertise. The company that built the world famous bullet trains is now building the next generation of UK trains, which will deliver a step change in intercity travel, offering more capacity, greater comfort and a lower carbon footprint."

The event signalled a boost for manufacturing in the region and the Northern Powerhouse. Transport Secretary Chris Grayling said: "The first train to roll out of Hitachi's new factory in Newton Aycliffe shows we are open for business and will provide a real economic boost to the North East, not only by providing jobs, but also by investing in the skills needed to provide the transport network our country needs for the future."

New award pays tribute to TfL's Stuart Ross

Transport Times launches a new category at the 2017 London Transport Awards in association with Transport for London. The Stuart Ross Young Transport Communications Professional of the Year award will be open to young communications professionals involved in the transport industry.

The award commemorates the life and achievements of Stuart, Transport for London's director of news, who died this year. Those who knew him will be aware of the work he did in giving others a start in life through an internship programme he started for young communications

professionals. He was a master communicator himself and an award dedicated to Stuart's legacy seems a fitting tribute.

The award is open to young communications professionals aged 30 or under on 1 Jan 2017. Nominated candidates should be able to demonstrate an outstanding contribution to improving transport in London.

Citations will be accepted up until 31 January 2017; entries should be sent directly to grant.poulton@transporttimes, or for more information contact 0207 828 3804. The shortlist will be revealed in early February and winners will be announced at the London Transport Awards ceremony on 2 March 2017.



Devolution must work for the travelling public

Decentralisation allows local knowledge to be applied to transport decisions. But what works in cities may not be the best solution elsewhere, says **Chris Grayling**

Transport can never be divorced from the people and places it serves. Effective transport is rooted in the market, and responds to the needs of passengers and road users who provide the demand.

Such a statement might seem manifestly obvious to the readers of *Transport Times*. But it's not something transport planners have always practised in this country. In fact only in recent years has Whitehall relaxed its grip on local transport, and finally given councils the responsibility and autonomy they need to manage their own services. In doing so, devolution has moved decision-making much closer to the people who are ultimately affected. The vast majority of journeys in this country are local in nature, so it makes sense for them to be planned locally too.

But for me, devolution is not a matter of political principle. It's a matter of pragmatism. Rather than decentralising every aspect of government, I want structures of power and accountability that *work*. And I don't mean that work for the Department for Transport, for parliament, or even local authorities. I mean structures that work for transport users.

I have a straightforward test for any transport network. Does it enable people to get where they need to go, safely, quickly, cleanly and affordably? If so, it is working. But if journeys are beset by congestion, delays, overcrowding, needless cost, or preventable pollution, then we are not succeeding and need to take action.

Devolution will often be part of the solution. It takes local knowledge to understand transport problems, and therefore local authorities and transport providers are best positioned to fix them.

Perhaps that's most relevant in our major cities and economic centres. In Greater Manchester, for example, the mayor will

have extensive powers to shape transport across the region. The West Midlands has also agreed a major devolution deal with an elected mayor. And on Merseyside, locally run rail services are working well for passengers.

But the devolution we are seeing in some of our cities is not the right choice everywhere. Counties have different requirements and challenges, such as maintaining extensive local road networks and providing rural bus services for widely-dispersed communities. By comparison with Manchester and London, authorities in north-east England have not been able to agree on a suitable structure, and what improvements should be undertaken by whom.

If journeys are beset by congestion, delays, overcrowding, or preventable pollution, we are not succeeding

So we shouldn't blindly support devolution for devolution's sake. Policymakers should be wary of changes that might look attractive from an administrative perspective, but that to the rest of the population look like the endless rearrangement of deckchairs.

We need very good reasons to set up new, publicly-funded sub-national bodies. Transport for the North and Midlands Connect are doing good work, gaining the benefits that can come from local decision-making. But devolution on this scale is not the answer for every part of the country.

Sometimes, the best way to get things done is just for the Government to stomp up the cash. That's exactly what we are doing in many areas.

The Bay Gateway Road in Lancashire, for example, was

first proposed in 1948. Lancashire County Council made the case and in 2013 we backed it with over £100m of funding. The road opened to traffic just a few months ago. It's the biggest new road to open in the county for decades.

In Cornwall we're funding improvements to the A30, meaning that by next spring it will be possible to drive from London to Cambourne on dual-carriageway roads for the first time.

Then there's the new Bedale bypass in North Yorkshire, which opened this summer following £30m of government investment. It has reduced congestion in the town centre, improved journey times into the Yorkshire Dales, and provided better access to local businesses. All over the country, direct government investments are making a difference.

But I've also been impressed by the achievements of Local Enterprise Partnerships. They've done a great job, putting transport at the heart of local housing, retail and business developments, and as a result, over 500 schemes are in planning or construction for completion this parliament.

Thankfully the days of Whitehall micromanagement are behind us. Instead there's a huge amount of work going on at local authority level to make everyday transport connections better. But although devolution may be working for millions of transport users today, I am also conscious that every region of the country is unique, with different transport needs.

That is why the decisions I take as Transport Secretary will be influenced not by strict adherence to a single model of delivery, but whether they offer the best and most affordable results for the travelling public.

Chris Grayling is Secretary of State for Transport and MP for Epsom and Ewell



Lessons from Great Western electrification

The National Audit Office report raises questions about value for money and strategic oversight of major route upgrades, as well as whether the business case remains valid



It is a sorry tale. Just electrifying Mr Brunel's railway from London to Bristol, and onwards to South Wales, seemed a reasonable goal back in 2009. But the infrastructure part of the Great Western Route Modernisation has escalated in price rapidly to £5.58bn, according to the National Audit Office, reporting last month. To which you could add in the Great Western part of Crossrail, from Paddington to Maidenhead coming in at £1.4bn. So say £7bn for the lot (excluding new trains). Three of these and you could have HS2 phase one.

Actually the estimated core electrification cost (£2.8bn) has not increased since it emerged from Sir Peter Hendy's review in 2015. The NAO sheds light on the challenge of route modernisation rather than providing new numbers.

We know from the West Coast experience that major route renewals/upgrades are expensive. At least in this case the delays per train have been kept down to an average of 5-6 minutes while the works have progressed, including such major schemes as the Reading rebuild. But completion is not likely until 2024, 13 years after work started.

The current Chancellor of the Exchequer was Secretary of State for Transport when, after a period of suspense and review from the incoming coalition government, he approved electrification from London to Didcot and Oxford (November 2010) and then, with confidence apparently growing (in March 2011), onwards to Bristol and Cardiff. This was in the pre-nationalised era of Network Rail, when its credit card was ever-available (or so it seemed). Now all the costs fall to the chancellor's account, and project cost inflation hurts.

Like many major rail schemes the Great Western modernisation has project interfaces in abundance (with HS2 and Crossrail; with Heathrow's western rail access; with the potential rebuild

of Oxford station; with electrification of the Welsh Valley line; with fleet re-deployments...). The contemporary answer is to introduce portfolio boards to keep an eye on boundary effects and cross-project infections. Better still if some strategic thinking were applied at the outset before ministers signed off specific projects, and if strategic oversight were provided throughout.

The NAO report concerns itself with management processes – and in fairness, finds much of what was going awry now being put right. It doesn't get into questions like whether, under such a protracted implementation timeframe, changes to technical standards or to meet DDA requirements have created

As the route heads west, intensity of use diminishes, and with it, the investment case

the need for more engineering. Route modernisation leaves little as it was, and eschews like-for-like replacement. The question of value for money needs to be asked at this more detailed level too, and it appears that the regulator is no longer fulfilling this function.

In the face of Great Western route modernisation's apparently declining business case, the NAO is understandably calling on DfT to reconsider whether the full scheme is still worthwhile. And in this instance, if not others, the answer should be clear.

The basic economics of electrification centre on an efficiency gain: electric trains have lower energy costs and lower maintenance costs. The more trains, the better the investment case. The GWR, as it sets off from Paddington, has plenty of trains, and so a good core business case. But by the time it has reached Didcot, 53 miles out, it has split

into four separate routes; the dissipation continues as the route goes further west. Intensity of use diminishes, and with it, the investment case weakens.

Other gains come from better environmental outcomes (less noise, improved air quality, reduced carbon emissions), and from the scope to introduce better timetables, since electric trains generally have better acceleration rates, and can climb gradients more readily. Again, the greater the service intensity, the better the case.

Meanwhile, with slow progress on electrification, the new Great Western train fleet has been re-specified. It will now be entirely bi-modal, able to operate under the wires electrically powered, and diesel powered on unelectrified routes.

With a bi-modal train fleet, it is very likely the optimum will be what Phillip Hammond approved back in 2010, with electrification limited – at least for a time – to the most intensively used parts of the route, where capacity relief is most needed. In effect this looks like happening on the Midland main line too, with the wires extended just to Kettering/Corby.

A period of bi-mode operation with a much enhanced Great Western service could save capital spending at a time when other projects on the national rail network have higher priority. More capacity and better connectivity are the economic priorities. Projects such as Manchester/Bradford-Leeds-York achieve these benefits and have the wider virtue of filling a gap between routes already electrified, so that places such as Newcastle and Liverpool gain as well.

Meanwhile, the rail industry has to find a way to specify and carry out route upgrades and electrification more cost-effectively.

Jim Steer is director and founder of Steer Davies Gleave.

Commons must iron out flaws in the Buses bill

The Government's move to legislate is welcome, but the Transport Committee finds that despite amendments in the Lords, there are still improvements that need to be made

Bus services have rarely received the attention they deserve, so I was very keen that the Transport Committee should scrutinise the Bus Services Bill. Seen by many as less glamorous than other modes or ambitious infrastructure projects, buses have been in decline in much of England for decades. And yet the bus remains by far the most popular mode of public transport, making up 60% of passenger journeys.

Bus services are vital for a vast number of people, connecting them with education, jobs, their local communities and with wider society. Where they are well planned, designed and operated for the benefit of the people who use them, with strong local accountability, such as in London, the popularity of buses can soar.

But it's clear that broadly, outside London, deregulation of bus services has not worked well for many passengers and communities. With a handful of notable exceptions, the current system is characterised by high fares; very poor passenger information; a lack of integration between services in neighbouring areas; outdated and unintegrated ticketing arrangements; and a lack of accessibility, particularly for people with mobility issues and disabilities. In many places there are no bus services and people have been left isolated.

The Government was right to bring forward legislation to give local transport authorities greater control over how bus services are planned, designed and run for the benefit of passengers and their communities. The Bus Services Bill legislates for two new structures of closer working between local transport authorities and bus service providers – known as Advanced Quality Partnerships and Enhanced Partnership Schemes – and, crucially, allows for

franchising, which has worked well in London, to be adopted more widely across England.

In its recently published report, the Transport Committee welcomed much of the bill. The new arrangements have the potential to address some of the key failings of deregulation – by allowing local transport authorities to work with providers to design and specify services that better meet the needs of the local community. The new framework should facilitate better integration of networks and ticketing, and, through open data, has the potential to greatly improve the provision of information for bus passengers, which has been woefully lacking in many areas of the country.

Some of the processes in the new system remain too cumbersome

The Government's commitment to bring forward regulations under the bill to require audio-visual equipment on buses, for the benefit of passengers with disabilities, is also very welcome. Audio-visual equipment on buses as standard is long overdue, so we will closely monitor progress on this commitment.

My committee's report was intended to inform scrutiny of the bill in the House of Commons. The Lords have addressed some initial flaws in the legislation; we hope our recommendations can help the Commons iron out a few more.

It is not yet clear enough how franchising will work in practice, and we've called for the Government to publish more information and draft regulations.

Some of the processes in the new system remain too cumbersome; as they stand they might

prevent authorities, other than combined authorities with an elected mayor, from achieving the arrangements they seek. Local transport authorities should have clearer powers to choose.

The bill prohibits any new municipal bus operators in the new system; we think this is disproportionate.

By the time it receives Royal Assent, we hope that the bill will more fully empower local transport authorities to make the right choices for their communities and provide a much needed boost to local bus services.

But there are some important problems for the bus sector which this bill does not address. More is needed to support bus services in isolated communities and where services are not commercially viable. It is not realistic to expect the voluntary sector to plug all the holes in service provision.

And, equally important, urban areas need advice and support to make the right choices to ease traffic congestion. As Prof David Begg's recent report for *Greener Journeys* so clearly demonstrated, it's crucial that we find ways of breaking the vicious circle of worsening congestion, leading to slower bus journeys, leading people to switch to the car, leading to worsening congestion.

The Transport Committee will be looking at the problem of urban congestion, and considering the best strategies for managing competing demands for limited road space in towns and cities, in our inquiry in the new year. We hope to find recommendations that will further benefit our vital bus services.



Louise Ellman MP is chair of the House of Commons Transport Select Committee and Labour MP for Liverpool Riverside.

Buses: playing a vital role in reducing emissions

A quiet revolution has been under way in bus technology, helping to address the twin challenges of reducing greenhouse gas emissions and improving air quality



Greener Journeys was formed in the aftermath of the 2008 Climate Change Act, against a backdrop of a heightened focus on the carbon reduction agenda and at a time when buses were regarded as part of the problem, not part of the solution.

The perception at the time was that while cars were getting cleaner and greener, buses were polluting and burning more fuel. The fact that increased fuel consumption was the direct result of buses becoming heavier to provide customer enhancements and meet accessibility requirements mandated by legislation did little to shift the poor image of the bus. And there was very little focus on the potential carbon reduction benefits of modal switch.

It has been to address this last point that much of Greener Journeys' work has been targeted. We have chiefly focused on the importance of demand-side measures as a way to reduce carbon emissions. The best used bus services in urban areas are reducing carbon emissions by up to 75% through modal switch.

This year, however, we have looked in depth for the first time at the buses themselves. It has come as something of a revelation to realise the full extent to which a quiet revolution in bus technology has been under way. As the latest report for Greener Journeys by the Low Carbon Vehicle Partnership (Low CVP) demonstrates, huge technological progress has been made in reducing vehicle emissions.

Several rounds of the Green Bus Fund and considerable private sector investment has meant that there are now 3,760 officially-defined Low Carbon Emission Buses (LCEBs) operating in England, Scotland and Wales, accounting for 40% of all new buses bought last year. They demonstrate a diverse and innovative range of fuels and technologies suited to different operational

needs – ranging from electric to hybrid, and biodiesel to biomethane through to hydrogen fuel cell.

LCEBs are not only saving 55,000 tonnes of greenhouse gas emissions annually, but in 2016 saved an estimated £8m in so-called "air quality damage costs" – a government measure which calculates the cost of pollution to society, for example through harm to human health and the environment.

The focus today is no longer just on the urgent need to reduce greenhouse gas emissions. Air quality has really shot up the agenda. And with official limits on oxides of nitrogen being breached in 38 out of 43 zones in the UK, a comprehensive strategy for tackling air quality has never been more urgent.

Real-world testing of the latest Euro VI diesel engines demonstrates a 95% reduction in emissions of nitrogen oxides

The issue of air quality has serious and far-reaching implications for all parts of the transport network. For its part, the bus sector is under pressure to tackle harmful emissions arising from older diesel buses. It is fair to say, though, that attention given to these older buses by the media can sometimes obscure the fact that the latest Euro VI engines are a huge success story. Moreover, the rigorous testing regime for buses means that an equivalent of the Volkswagen emissions testing scandal would be inconceivable in the bus sector.

As Low CVP highlighted in its previous report for Greener Journeys, real-world testing of the latest Euro VI diesel engines demonstrates a 95% reduction in NOx emissions compared with their older Euro V counterparts.

And SMMT figures reveal that three times as many Euro VI buses were sold last year as in 2014.

There is an urgent need both to reduce greenhouse gas emissions and to improve air quality. The Government's recent ratification of the Paris Agreement demonstrates the UK's continued commitment to tackling climate change, even if 2008 was the highwater mark for UK international leadership. Meanwhile, the recent High Court ruling that government plans to tackle air quality are inadequate will rightly focus minds and intensify pressure on this issue.

The bus has a key role to play in addressing both challenges. As the latest Low CVP report demonstrates, enormous progress has been made in developing bus technologies to reduce emissions. There is still a way to go and, as the report makes clear, continued government support will be essential if progress in the introduction of low emission technology is to be maintained. In the meantime, the immediate opportunity is to capitalise on the technological advances made by encouraging modal switch. Not only will this reduce emissions, but it will also mitigate the inexorable rise of congestion on our roads.

The biggest challenge is to reduce car use. The decision in the autumn statement to cancel (once again) a planned fuel duty increase will only make that harder to achieve. The cheap costs of motoring are drawing people away from public transport.

If the UK is to make any real headway in tackling both the carbon and air quality challenges, the Government is going to have to make it less convenient and more expensive for people to drive.

Claire Haigh is chief executive of Greener Journeys, a campaign dedicated to encouraging people to make more sustainable travel choices www.greenerjourneys.com

For Network Rail, it will be an orange Christmas

Engineering work over the holidays is vital to accomplish over £100m of improvements under the Railway Upgrade Plan, addressing capacity issues and supporting economic growth

For most people, Christmas is a time to be spent with family and friends; a welcome end-of-year break from the routine of the day job and a chance to relax, eat, drink and be merry. Businesses are shut and people can spend their well-earned days off with their loved ones, catching up and having a good time.

But as we all know, that's not the case for frontline staff in the rail industry, including many of Network Rail's "orange army".

For us, Christmas is when we go into overdrive.

On Christmas Eve, as the last trains of the day depart their stations carrying passengers home to their families, some sections of the railway network will close. Approximately 24,000 engineers will pick up their tools to start work on over 200 key projects all across the country and help deliver over £103m worth of upgrades and improvements as part of our Railway Upgrade Plan for 2016.

In fact, this year the volume of work is so great, work will begin earlier on some projects and will affect travel during the day on Christmas Eve. This essential programme of investment will provide more frequent, faster services to help relieve overcrowding and respond to the tremendous growth we've seen on Britain's railways over the past 20 years.

This process happens every single night of the year, but over Christmas some sections of the railway are closed for several days in a row. This extended period of closure gives us a unique opportunity to carry out some significant, one-time-only upgrades with much greater efficiency, compared with our "business as usual" maintenance slots which are often just three or four hours per night; and it allows us to get the work done faster, with less consequent future disruption.

Behind the scenes, these set-pieces will have been years in the planning: wholesale demolitions of deteriorating structures, huge swathes of track replacements, complex signal renewals, large-scale switch and crossing replacements, difficult electrification preparations, lifting entire road-over-rail bridges into place – massive jobs that require a longer time to complete and can only be accomplished when those sections of the railway are closed. These could never be achieved during the tiny windows of opportunity we get on a regular night.

I firmly believe that improving Britain's railway is vital for economic growth, jobs, and housing. The railway has been growing by 3-4% for 20 years, representing

Passengers are advised to plan their journeys as early as possible

the fastest level of growth since the Victorian era – and passenger numbers are expected to double over the next 25 years, which is all quite fantastic. But with rising passenger numbers comes rising congestion. Though our infrastructure is the most reliable it has ever been, each incident on the railway now has a bigger impact and causes more knock-on delays than it did in the past. Addressing this capacity issue is a top priority for us, which is why these upgrades are so important.

The Government is investing more in the railway than anybody has ever invested, and this Christmas our orange army will spend a combined 600,000 hours working to complete our Christmas upgrade work.

I am often asked: "Why now? Why do engineering over Christmas when everyone's trying to get home to see family and friends?"

I understand their frustration. And I understand that it

can seem very busy during this time. But it's actually one of the quietest times on the railway. Every day, 4.5 million people use the railway. But over the Christmas holidays, passenger numbers drop by up to 50%. So this is the best time because it's when our work has the least impact on passengers overall.

Of course, there's never truly a good time to close parts of the railway and carry out engineering work. Passengers are our top priority so we plan these projects meticulously, jointly with the train operating companies, to make sure they are completed as quickly and efficiently as possible, keeping disruption to a minimum. In fact, despite our essential upgrades the vast majority of the rail network, more than 90%, remains unaffected and will be open for business as usual.

Nevertheless, in the build-up we work as hard as we can with our TOC partners to make sure passengers are aware of what's going on: posters, flyers, hoardings, social media, radio ads and newspaper ads have all been pumping out messages advising passengers to plan their journeys as early as possible in the run-up to Christmas. And, as I said, unlike previous years, work on a few major projects will begin in the early hours on Christmas Eve. This will mean significant changes to train services out of London Paddington and London Liverpool Street in particular – so we're advising passengers travelling from these stations to travel before Christmas Eve where possible.

This Christmas represents a key part of our Railway Upgrade Plan – it is vital investment that will prompt economic growth, jobs, and housing, and will make the railway more reliable for years to come, while improving journeys for thousands of passengers.



Sir Peter Hendy CBE is chair of Network Rail

Smart motorways are keeping people moving

The introduction of smart motorways is the biggest upgrade to capacity in a generation. Highways England is working to improve drivers' knowledge and awareness of them, says **Jim O'Sullivan**



Jim O'Sullivan: "Harnessing advances in technology"

When the first motorway opened almost 60 years ago near Preston, on what is now known as the M6, most people saw the future of travel in a world like *The Jetsons*, where the sky would host the daily commute.

Fast forward to today and though we may not have our own flying pods, motorways connect our cities, towns and ports and keep more than 4 million people, as well as millions of tonnes of freight, safely moving on a daily basis.

The evolution of our motorways over the last decade or so has focused on harnessing advances in technology to increase capacity by using the hard shoulder for live traffic,

and to keep traffic moving by dynamically opening and closing lanes to manage incidents. These upgraded roads are known as smart motorways, and drivers across the country have safely been using some versions of these for years.

On the latest version of smart motorways, all-lane running, Highways England has permanently converted the hard shoulder for traffic use.

The initial results from all-lane running are good. At locations where we have introduced it on the M25, evidence from the first 12 months shows that the busiest journey times have been almost halved and collision and casualty rates cut by around 20%.

Evolution of our motorways over the last decade or so has focused on harnessing advances in technology to increase capacity

These improvements are needed as soon as possible to support a growing economy and for future road users: traffic is forecast to increase on the strategic road network by between 27% and 57% by 2040, according to the Road Investment Strategy.

We know that transport is more than just the movement of people and goods; it provides the vital links which create jobs and the opportunity for new homes to be built and which allow businesses to grow to meet new demand.

It's not just engineering or physical improvements that are needed; for Highways England it's about how our customers experience the road and about the vehicles that they use. For smart motorways, we need to account for what people think and feel as they travel in an upgraded environment.

Take for example the hard shoulder. There is the perception that the hard shoulder is a safe place because it is where people go to in an emergency. We are reminding drivers to stop on the hard shoulder only in an emergency. For all-lane running, where emergency refuge areas at intervals replace the hard shoulder, we also looking at the size and signing of these areas, to improve awareness of the places to stop in an emergency when drivers are unable to leave the motorway safely.

Electronic signs on smart motorways allow us to dynamically alter the information we provide to drivers, and enable us to close lanes and reduce speeds to manage traffic safely, tackle stop-start flows and improve journeys.

We are doing more to communicate the importance of the closed "red X" lanes which protect road users and road workers in a breakdown or other emergency. This formed a key part of the company's summer journey planning campaign, targeting those who use unfamiliar routes as part of their summer getaway.

Last month, we hosted BBC's *The One Show* at our Wakefield regional control centre and took them out with traffic officers on the M1 and M62 smart motorways. The show, reaching 3-4 million viewers, led to an increase in visits to our smart motorway webpages. I expect that similar engagement with the media will, over time, help to change the way drivers understand our roads.

This is an example of how, as a company, Highways England is continually striving to improve as we evolve our motorways, which provide some of the safest journeys on our roads and help keep people and businesses moving.

Jim O'Sullivan is chief executive of Highways England



Driving on a smart motorway

- Follow the signs and signals: they are there to keep you moving safely. Do not drive under a red X
- A solid white line indicates a hard shoulder: don't drive on it unless directed to do so. On all-lane running smart motorways, there is no solid white line.
- If you encounter any problems with your vehicle, leave the motorway if possible or make your way to the nearest emergency refuge area, typically every 75 seconds at 60mph.

For more information: www.gov.uk/highways/smartmotorways

Focus on infrastructure is growing around the world

Donald Trump has said he will spend \$1tr to update the US's crumbling infrastructure. This reflects a growing worldwide trend, says **Andrew McNaughton**

By any definition, 2016 has been quite a year. Who could have imagined, 12 months ago, a world in which Donald Trump is president-elect of the United States, the UK is busy making plans to leave the European Union and Vladimir Putin has taken his navy through the English Channel on the way to Syria?

Everywhere we look there seems to be confusion, and it is a fact that business hates uncertainty. It sometimes feels as if each week brings something new to remind us of the old saying: we live in interesting times.

Yet the panic in the markets predicted by many pundits has not materialised. Quite the opposite, in fact. It was striking that despite the many, let's say, unconventional comments made during his presidential campaign, almost the first statement from Donald Trump once the election results were announced was about infrastructure. In his acceptance speech he said: "We are going to fix our inner cities and rebuild our highways, bridges, tunnels, airports, schools, hospitals." Perhaps there is a clue in that as to why the business world has taken less fright than the commentariat expected.

Where US infrastructure is concerned, there is no argument but that there is plenty that needs to be done. Roads, rail and almost everything, with the possible exception of air travel, are in a deplorable state in much of the US.

During his campaign Trump spoke of spending £1tr on infrastructure over 10 years, and the prospect of such an enormous programme promises many business opportunities and a welcome fillip to the US's economic recovery. It won't be easy to pull off, but while Trump's lack of political experience has not escaped anyone's notice, one thing he does know something about is making the deals that can get big projects built.

The pledge to take on the gigantic challenge of dragging the degraded infrastructure of the United States into the 21st century speaks directly to the president-elect's voter base because it means investment in secure skilled and unskilled jobs for some time to come. But it should matter to the rest of us too.

Whether he can break through the cultural resistance to private investment in public projects that often holds back investment in US infrastructure remains to be seen. But the fact that Mr Trump is staking so much on a massive infrastructure upgrade and that this issue has grown to such prominence on the political scene is, in itself, of huge significance to

The movement of populations from country to city is too well-established to change soon

those in the business of planning, designing, building and managing transport systems.

That's because it reflects a growing cultural change that I have noticed around the world in recent years. Where once the word infrastructure belonged to specialists – engineers, planners, architects – it is suddenly everywhere in common use. Citizens are becoming more and more aware of how much the quality of local infrastructure affects the quality of their lives, and policymakers are beginning to understand that their towns and cities are not self-contained but must compete globally if they are to grow and thrive.

Where this is felt most forcefully by most people is in the quality of their transport infrastructure. Almost nothing else has so direct an impact on the quality of people's lives. See how

long you can talk to a Londoner before the conversation turns to the Tube, or a Los Angeleno before they complain about the traffic.

So naturally, the citizens and managers of our global cities are demanding better transport infrastructure. Meanwhile, the nature of what "better" means keeps changing. Cycling, which barely impinged on our attention ten years ago, is a central concern of transport planners and engineers almost everywhere today, and the opportunities offered by big data, digital connectivity and autonomous vehicles – to say nothing of completely new technologies such as Elon Musk's Hyperloop One – will make even greater demands on the planners of the future.

It is up to transport professionals to anticipate and meet those demands. What it all adds up to is a huge, perhaps unprecedented, opportunity for the transport sector. That is one reason why my company, Systra, plans to maintain the strong international growth trajectory successfully followed over the last five years.

Attempting to predict the future can make a fool of anyone, but one thing that is certain is that cities are going to continue to grow. The movement of populations across the world from the country to the city is too pronounced and well-established to change any time soon – and those new citizens are going to need transport. The pressure from the ground is growing and, perhaps, president-elect Trump is proof that the political class is listening. In my role as a UK business ambassador I have travelled the world to talk about investment opportunities and I know that the money is out there, plenty of it, looking for a home.

So, yes – we live in interesting times.

Andrew McNaughton is Systra chief operating officer and is a UK business ambassador for the British Government.



Andrew McNaughton:
"Plenty that needs to be done"



TRANSPORT TIMES WOULD LIKE TO

THANK
EVERYONE

WHO ADVERTISED DURING 2016



ABELLIO ★

ABERDEEN CITY COUNCIL ★

ALSTOM ★ ABERDEENSHIRE COUNCIL

★ AMEY ★ ALEXANDER DENNIS ★ ARRIVA ★

ATG ★ ATKINS ★ BAM NUTTALL ★ BUS EXPO ★

CALMAC ★ BOMBARDIER ★ BRIGHTON & HOVE CITY

COUNCIL ★ BARCLAYS ★ CLEAR CHANNEL ★ CUBIC ★

EAST DUNBARTONSHIRE COUNCIL ★ ELGIN ★ FIFE COUNCIL

★ EDINBURGH AIRPORT ★ EIC CONFERENCE ★ FIRST GROUP

★ KEOLIS ★ GLASGOW AIRPORT ★ GO AHEAD ★ HITACHI ★

HACKNEY HEALTH & COMMUNITY SERVICES ★ HEATHROW

AIRPORT ★ FORS ★ HIGHLANDS AND ISLANDS AIRPORT ★

LOTHIAN BUSES ★ MTR CROSSRAIL ★ NATIONAL EXPRESS

★ OMBUDSMAN ★ OPTARE ★ PRENTICE COACHES ★ VIX ★

SIEMENS ★ PROACTIVE ★ PROJECT CENTRE ★ RAIL

DELIVERY GROUP ★ RATP DEV ★ SESTRANS ★

STAGECOACH ★ STAGECOACH NORTH SCOTLAND

★ STANSTED AIRPORT ★ SYSTRA ★ THALES ★

TIMESPACE TECHNOLOGY ★ TRUEFORM

★ FERROVIAL ★ WORLDLINE ★

★ MORGAN SINDALL ★

★ FUSION ★

**WE LOOK FORWARD TO A
CONTINUING ASSOCIATION IN 2017**

Better links are needed between networks

Planning for the UK's long-term growth and prosperity will need an integrated approach to infrastructure, connecting railways with roads, ports, airports and freight depots, argues **Derek Holden**



Derek Holden: "Important role for the National Infrastructure Commission"

By setting out its preferred route for the second phase of HS2 earlier this month, the Government has reaffirmed its commitment to building much-needed capacity and connectivity on the UK's rail network.

Throughout history, infrastructure connectivity has promoted economic activity, demonstrated by the rise of different transport modes, from the canals and ports that fuelled the industrial revolution to rail, roads and aviation. But given the present-day challenges facing the country, including population growth and climate change, improving connectivity *between* transport modes will be key to maintaining economic prosperity. Modernisation of the UK's transport networks must focus on both building capacity and improving connectivity between modes.

The UK's rail and road networks suffer from severe overcrowding and heavy congestion, yet there is still little connectivity or coordination between the two. To achieve an integrated transport network, different transport modes must not compete or be planned in isolation. A vision of an integrated transport network connects railways with roads, ports, airports and strategic freight depots. Joined-up thinking and an integrated approach to infrastructure planning would improve both city and rural life and pave the way for more sustainable transport solutions such as electric and driverless cars. In towns and cities traffic congestion would ease, and more integration between buses and rail routes would bring coordinated timetables to rural areas.

Greater integration of UK transport is a theme that has consistently come through among respondents to this year's CBI/AECOM Infrastructure

Survey, which was published in November. Three-quarters of respondents to the survey viewed greater integration between roads and alternative modes of transport as a critical or important outcome in road infrastructure that needed to be secured in the long term. With many European countries more advanced at connecting rail infrastructure with other transport modes by integrating freight hubs along key routes, the UK must take similar steps if it is to compete more effectively on the global stage and improve productivity.

Under an integrated transport vision, the case for HS2 is clear. As the first new major railway north of London for over 100 years, the north/south

Different transport modes must not compete or be planned in isolation

route will create much-needed capacity and release space on existing lines, helping to take freight off the roads and on to rail. Economic growth spurred by initiatives like the Northern Powerhouse and the Midlands Engine for Growth will require better connectivity and HS2 is an important step towards creating better links between cities, ports and airports.

The National Infrastructure Commission will play an important role in defining the vision for an integrated transport network. In the autumn statement the chancellor, Philip Hammond, announced he has asked the NIC to make recommendations on the UK's future infrastructure needs using a fiscal remit of between 1% and 1.2% of the UK's GDP each year from 2020 to 2050. The group is expected to publish a report in 2018 setting out a vision

for UK infrastructure up to 2050, and this will be updated once during each parliament. The NIC has recently issued a request for evidence enabling all interested parties to contribute to this process.

This is an opportunity for industry to ensure the UK transport network is truly connected. A long-term plan that recommends how national infrastructure should be prioritised and implemented by successive governments will bring clear direction for the next 30-plus years. Post-Brexit, the need for this long-term strategic approach to infrastructure will be even greater if the country is to remain competitive.

One of the most exciting – yet challenging – aspects of future transport is the impact of new technologies. In addition to the development of new sustainable transport modes themselves, innovative technologies have the potential to improve capacity and operation, aid more efficient maintenance and change the way we all work with one another. This underlines the importance of the continually updated 30-year infrastructure vision.

Planning for the UK's long-term growth and prosperity will clearly need a broad, integrated approach to infrastructure. The link between transport and long-term plans for other vital infrastructure such as energy, water, waste and housing must also be considered. A clear vision for integration will be essential to accommodate the UK's projected population growth and maintain economic prosperity.

High-profile projects like HS2 that provide a step change in capacity and connectivity are important first steps towards an integrated infrastructure network. Momentum must be maintained.

Derek Holden is AECOM Business Development Director for Transportation, Europe



Powerhouse priorities

Last week's North of England Transport Summit took an in-depth look at priorities for infrastructure investment and its role in bridging the productivity gap between the north and south of England. **David Fowler** reports

Transport Secretary Chris Grayling moved smart ticketing up his list of priorities at last week's North of England Transport Summit. All the UK's major cities should have smart pay as you go ticketing within the next two years, he said.

"There is no reason why only London should have smart ticketing." But, he stipulated, "I want the systems to talk to each other." Passengers should not have to carry a Manchester card, a Leeds card, a different one for each city.

For longer journeys, bar codes on mobile phones should be available. The whole transport sector should move very rapidly towards this, he said.

Over 160 delegates attended the Manchester conference to hear a range of speakers discuss priorities for investment in the north of England, transport's role in boosting the economy, and how subnational and devolved bodies were changing the landscape for planning and constructing transport infrastructure.

The north of England had a huge legacy of transport infrastructure, Mr

Grayling continued, but due to a long history of under-investment it often seemed more suited to the 19th than the 21st century. As a result trains were crowded and roads clogged, and this was holding back the economy.

The Government was investing £13bn in the North in this parliament and there had been more commitments in the autumn statement. "But it is not just about money," he said. There needed to be better decision-making, a focus on better outcomes for passengers, and there should be input from people on the ground locally.

He was grateful for the work of Transport for the North and would be "working with them to see how we can strengthen their role".

"There is a genuine commitment from the Government to the North of this country to make sure we deliver real economic growth. Let us all make sure that transport in the North delivers what we all know needs to happen," he said.

Transport for the North chief executive David Brown said in a keynote address that the organisation had brought together 11 local

enterprise partnerships, 19 local government partners and four development partners including Network Rail and Highways England.

Its role was to help address the productivity gap between the north and south of England and to support growth in jobs, as part of the Northern Powerhouse economic strategy.

In the short term TfN sought to make sure improvements already in Network Rail's and Highways England's investment plans were carried through. In the medium term it would influence, making sure the aspirations of the North were incorporated in the next round of five-year strategies. In the long term it would set out a vision for transport in the North.

The first draft of its strategic transport plan would be published in the spring. "We will prioritise schemes that will deliver economic growth," he said.

Infrastructure investment priorities

Speaking in the first session, on investment priorities, Network Rail chair Sir Peter Hendy said that the three key purposes of rail investment

Manchester Piccadilly will be a transport hub

turn to page 22



from page 21

were to support economic growth, job creation and housebuilding.

Citing Crossrail as an example, he said that in his experience projects were successful if there was a clear idea of what was wanted and how much it would cost, and if changes in scope were avoided. In the case of Network Rail's investment programme for Control Period 5 (2014-19), much of it had been rooted in the days when Network Rail was a quasi-independent private company but with apparently unlimited access to government-guaranteed borrowing. As a result "much of CP5 wasn't at that stage of maturity". It was currently successfully being "retrofitted" to achieve this, he said.

He advised TfN to seek "early deliverables" to establish its credibility. "The thing that would make a huge difference and is the bedrock of the public transport progress in London is integrated ticketing and information. Deliver that as soon as you can."

Network Rail had carried out "a detailed study of what's needed to make the Northern Powerhouse a reality" which would feed into TfN's strategic transport plan. A crucial decision would be what should be prioritised. "The right way is to start with projects that create the most economic growth, jobs and housing," he said.

Highways England chairman Colin Matthews said the UK's roads were "significantly safer" than they were ten years ago, and safer than in almost every other country, but casualties were still "intolerably high". Highways England had its own plans, but "to make a really significant impact we will need the collaboration of dozens of other organisations," he said, including training organisations, manufacturers and others. Secondly, he said, "We need better customer service". This was difficult when "we're putting in more investment than for a generation", but he added "I think we can square that circle through giving people better information", both advance and in real time.

Eighteen months into the first Road Investment Strategy, it had survived several budgets and a change of administration without being tinkered with, and progress was on track. By the end of the five-year programme the annual rate of investment would have increased by a factor of three from an initial £1.3bn, requiring a massive upskilling. "That's one of our biggest challenges."

Highways England was working on the second five-year plan, but also on a long-term "Vision 2050" looking at traffic flows, trends in technology and so on, "and in that way we'll be more confident that individual five-year plans are headed in the right direction."

The long-term plan also needed to be multi-modal, both for the North and nationally. It could come either

from the National Infrastructure Commission or from the Highways Agency, Network Rail and others working together directly.

Prof Tony Travers, director of LSE London at the London School of Economics, said the North of England paid £120-130bn annually in tax, and "every penny of it is allocated by national government". England had the most centralised economy of the western democracies, which apart from making planning investment difficult for the regions, "also leads to endless reorganisations" of institutions like local authorities, railways and so on. "Tinkering by the Government is profoundly disruptive," he said. "My big plea is that the devolved institutions of the North should have more control of their own resources – I think they'd use them better."

He added that there was "a lot of investment out there looking for something to invest in" and the centralised arrangements had underperformed in attracting it. "How can we come up with a mechanism that makes it easier for private investment to come into infrastructure projects?" he asked.

High Speed 2 Ltd phase two development director Paul Griffiths said that Royal Assent for the phase one bill was expected early in the New Year. "As soon as that happens, we've got our early works contracts awarded and we can get on the ground almost immediately." The recent government announcement on phase 2b, the remainder of the Y-network, "was hugely important" and "fixed most of our route".

The network would halve many journey times in the Midlands and the North and provide "a huge injection of capacity". HS2 was working in partnership with Transport for the North to maximise its benefits for Northern Powerhouse Rail.



Above: Chris Grayling
Right: Alstom's Widnes training centre



RATP Dev chief executive Tim Jackson said “for my company, local control of local transport is near the top of the list of powers we’d like to see devolved.” The autumn statement had signalled a change of approach to transport investment.

Metrolink, operated by RATP Dev, was not just a successful transport system “but a symbol of economic resurgence in Manchester”.

He made the point that relatively modest investments such as trams or BRT systems could produce large economic value added compared with the outlay. Examples were the procurement of new rolling stock for the Tyne & Wear Metro, or East West Rail. In Paris an underground electric bus garage had been funded by the development of new offices above it. New bus stops in Paris and Manchester had been funded by advertising, and had showed how something utilitarian could take on a role of attracting passengers.

Mace director of the North Steve Gillingham welcomed the announcement in the autumn statement of £1.3bn for transport: “We believe it can have a really big impact on economic growth.” He added: “We would like to see the recommendations of the National Infrastructure Commission implemented. We’re not too concerned about waiting to clarify the Government’s industrial

strategy. We want to get on with it.” He continued: “We need to make sure the Northern Powerhouse is seen as being open to inward investment.”

But, he said, “Skills are a real issue.” There had been “a lack of investment in skills over a long period”, confirmed by the results of the PISA statistics last week. These showed the UK “way behind in science, reading and maths” and Singapore near the top.

Singapore had reached this point, from being an almost illiterate nation, through a relentless government focus. “Singapore recruits all its teachers from the top 5% of graduates in the country, he said. “We need to think about that.”

Boosting the economy

The second session focused on the role of transport in boosting the economy of the North. Arriva Rail North managing director Alex Hynes outlined the improvements and £1bn investment programme that had been under way since the new Northern franchise began in April.

“We’re on a mission to make the north of England a better place to live and work,” he said. “Not just the big cities but the other great towns and cities such as Nottingham, Doncaster, York, Warrington, Darlington, the Tyne Valley... We are going to transform the quality and capacity of our railway.”

He had left the region in 1995 and up to his return in 2015 not much had changed on the railway, he said. Under the new franchise, “in 36 months every train will be new or refurbished”, he said. They would not be “cheap and cheerful”, but would have free Wi-Fi and power sockets, 100mph capability, air-conditioning, tables and “all mod cons”.

The 100mph capability would be used to create “a network within a network”, exploiting the Ordsall chord to offer faster services.

“In London, Crossrail will add 10% to capacity,” he added. “We’re adding 37% in the next three years. Everyone will get a seat.” There would be 2,000 extra services, running earlier and later, and 400 extra on Sunday.

“At the heart of the plan is a focus on face-to-face customer service,” he said. The company would create more frontline jobs, secure, well-paid and highly trained. “At the end you’ll have a railway you can look at and say ‘we are proud to be Northern’.”

Transport for the North integrated and smart travel interim programme director Alison Pilling said that transport could boost economic growth in three ways: through increased capacity, increased frequency, and improved usability. Obtaining a ticket for travel caused passengers a lot of wasted time and stress, she said. Smart North would be a new ticketing and jour-

Scotland’s Queensferry crossing is due to open next year (picture courtesy of Transport Scotland)

turn to page 24

ney planning system which would allow passengers to travel seamlessly around the North using contactless payment. Its vision was to create a system which made it easier to work out the best journey and travel options; made the pricing simple to understand; and made it easier to pay.

Contactless cards and smartphones would provide instant access to bus, train, tram, and metro. Live journey planning and updates for travel across the North would be available. Passengers would be able to buy advance or season tickets and use them through their card. Pay on the day fares would be accompanied by a promise that total spending would not exceed the cheapest on-the-day fares for the journeys made.

The programme would have three phases. Phase one was "quick wins". In phase two, pay as you go would be introduced under a system that "all operators across the board can buy into". The third phase would be advance purchase with a fair price promise which would allow customers to trust in consistently getting a fair price.

A business case has just been submitted to the DfT for the first phase.

Alstom UK and Ireland connected communities and devolved regions director Susan Evans said congestion would cost the UK's conurbations £225bn by 2025. She made the case for the benefits of trams for regeneration as well as cutting congestion. She added that tram and light rail systems can generate lasting local business growth and jobs, because they encourage companies to site their offices nearby, in the knowledge that they will be able to attract good staff easily, and that the tram will be there for the long-term.

She described Alstom's new 450,000 sq ft site under construction in Widnes. This will employ 600 people, initially repainting Pendolinos for the West Coast main line, then undertaking modernisation and maintenance of existing rolling stock, and ultimately building new trains under any new orders won from clients such as HS2 and London Underground. It will support 2,000 new jobs in the supply chain as well as providing training and support to suppliers.

Cubic Transportation Systems business development director John Pickworth addressed global developments in smart travel. "Smart travel is boosting mobility and transforming movement in cities around the world," he said. "It is attracting more customers and reducing congestion, and bringing about modal shift from cars to public transport."

In any system, passengers have to be confident they will be charged the right fare. Experience in London and elsewhere showed that "one

from page 23

of the biggest hurdles is getting people to trust the system, to bring the public on board," he said.

He added: "There is nothing stopping us doing the same thing in the North as in London." Amazon's move into groceries showed the pace at which retailing is developing. Cubic's One account would "bring everything together in a multi-modal single account," he said. For TfN this could mean simplified journeys, reliable connections, real-time multimodal information and trusted and accurate payment.

First Bus managing director Giles Fearnley said: "Real-time information, ticketing and integration of modes are all coming together." Mobile tickets were available on all First bus journeys and contactless was coming, he said. Research among people boarding buses in Bristol showed that 75% were using mobile or smart tickets. "On a bus with 50 passengers that's eight minutes saved," he said. "Through this we can change the perception of the bus."

He gave examples of successes around the north of England. In South Yorkshire, the partnership of operators, the city council and the PTE had transformed services, increased patronage and changed perceptions. The same was happening in Rotherham.

In Manchester, Vantage services incorporating the Leigh guided busway had saved 20-25 minutes on an average journey. Passenger numbers were running at 50,000 a week and rising.

York City Council was reporting 11% growth in passenger volume in the last three years. A focus on marketing to young people through fares and technology had "really worked".

Looking ahead, Mr Fearnley said, Leeds was aiming to double passenger numbers within ten years, "predominantly through focusing on highway investment to improve journey time". He said: "Leeds has a very ambitious vision for the city and I'm convinced buses will deliver."

Arup director Dave Newton said transport networks in the North were currently overcrowded and the region's economy was underperforming, with a "brain drain" of graduates moving south. "It's not all about transport," he said. "It's about us all raising our expectations."

Transport investment was needed not just for its own sake but because of its role in placemaking, as demonstrated by projects such as the redevelopment of London King's Cross, for example.

Arup was working with York on a masterplan to unlock new homes, and



Smart travel is boosting mobility in cities around the world

— John Pickworth

in Manchester on plans to transform Piccadilly station into a conventional rail, high speed rail and light rail hub.

There was a need for a different approach to funding transport infrastructure, recognising how the benefits were distributed to landowners and developers, users and society as a whole. The 2.5km Northern Line extension to Battersea was a good example, where an enterprise zone was created around it and the capital cost attracted from the private sector, allowing a large brownfield area to be redeveloped. The project is expected to create 16,000 homes and 24,000 jobs.

The changing landscape

The final session considered how devolution and the creation of new "sub-national bodies" such as TfN are changing the transport landscape.

Transport Scotland chief executive Roy Brannen told the conference that his organisation and TfN had signed a memorandum of understanding to work together on cross-border issues.

Transport Scotland was about to embark on a new cycle to produce a transport strategy for the next 20 years. It would be "geared towards growth sectors": food, renewables, life sciences and tourism. Transport Scotland had invested £15bn since 2007.

The 30-mile Borders railway had been built, and was surpassing passenger forecasts. On roads, the Queensferry crossing was under budget and on track to open in May, ahead of schedule. The 52km Aberdeen western peripheral "will transform the north-east", he said, taking traffic from Aberdeen and making the journey to Inverness easier. £100m was being spent on new ferries and on aircraft for public service contracts to the islands.

Overall he said "if we get it right we'll attract inward investment and boost exports," as well as attracting international events such as UEFA Euro 2020, for which Glasgow will be a host.

He concluded: "We've learned a lot in 10 years. Transport for the North is on the same kind of journey." It was doing "all the right things" and Transport Scotland offered its support.

Midlands Connect brings together 28 local authorities, 10 local enterprise partnerships and 27 universities. It covers the east and west Midlands, responsible for 17% of UK exports and home to employers including Alstom, Bombardier, JCB, PepsiCo, Rolls-Royce, Toyota and Jaguar Land Rover.

Its aim, said Midlands Connect programme director Maria Machancoses, was to provide one voice for the region, develop an

Transport for the North is doing all the right things

– Roy Brannen

evidence-based rationale for transport investment, and make sure the Midlands is ready for HS2.

Its strategy would be based on growth-led capacity – creating headroom for growth on its most crowded networks; clear patterns of clustering, with differing roles for road and rail networks; six intensive growth corridors; four primary economic hubs; and preparation for HS2 by providing wider connectivity to HS2 stations serving the Midlands, and maximising benefits to the wider network.

A key project, the Midlands Rail Hub, was backed by £5m of development funding in the Government's autumn statement. It involves improvements at five locations to allow an extra 10 trains hourly, more freight trains, and better connections between the east and west Midlands. Eight workstreams were gathering evidence towards its final transport strategy, to be published next March.

England's Economic Heartland is centred on Oxfordshire, Buckinghamshire, Northamptonshire, Bedfordshire and Cambridgeshire, and brings together nine local transport authorities and three local enterprise partnerships, with delivery partners Skanska, Ringway Jacobs and Kier/WSP. Programme director Martin Tugwell said the partnership had arisen from the bottom up, when three county leaders began discussions about working together on common issues.

The region contributes a net £92.5bn to the exchequer but, said Mr Tugwell, "if you don't continue to invest you go backwards".

The National Infrastructure Commission's report last month on east-west connectivity said: "The corridor connecting Cambridge, Milton Keynes and Oxford could be the UK's Silicon Valley". But it added "its future success is not guaranteed".

In Planning for Growth, published in October, EEH identified a number of projects needed immediately, including East-West Rail, an expressway-standard road between Oxford and Cambridge, and the adoption of a major road network as proposed by the recent Rees Jeffreys Road Fund report.

In the last few weeks there had been "real, tangible steps" with the Government endorsing the NIC report and providing £100m for the western section of East-West Rail in the autumn statement, and, the previous day, announcing plans to create a dedicated company to move East-West Rail forward.

Referring to figures from the NIC report Mr Tugwell said: "If we get this right we can get close to £163bn for the economy in the next five years."



Clockwise from top: Steve Gillingham; Susan Evans; Roy Brannen; Tim Jackson; Martin Tugwell; Tony Travers; and Dave Newton

Northern winners power t



The inaugural North of England Transport Awards last week captured a new mood of optimism and put the people who will shape the Northern Powerhouse centre stage

“The productivity gap can be eradicated by building on the North’s strengths”

Devolution is about to become a reality, the election of the first “metro-mayors” is only months away and anticipation is running high. The inaugural North of England Transport Awards, hosted by BBC business journalist Steph McGovern, were ideally placed to capitalise on a new mood of optimism, and they did not disappoint.

Transport will be crucial to the success of the Northern Powerhouse, and the awards put the people who will help to shape it centre stage.

The mood was summed up by Transport for the North chair John Cridland, who said: “These are exciting times for transport in the North. The Northern Powerhouse Independent Economic Review showed that transforming the North’s transport system will be vital to transforming the North’s economy.

In the year since I became chair of Transport for the North, I have been struck by how much agreement there is about the importance of transport infrastructure in closing the economic gap between the North and the rest of England. There is nothing inevitable about the productivity gap. It can be eradicated – by building on the North’s strengths. Our plans are ambitious, and we can’t realise them without the dedication, enthusiasm and commitment of the people we are celebrating here tonight. I congratulate all of you.”

Combined Authority of the Year

Transport for Greater Manchester took the most prestigious prize of Combined Authority of the Year, sponsored by Clear Channel. TfGM has introduced one of the largest

smart ticket schemes outside London, working with more than 30 bus operators. Passengers can buy a range of multi-operator tickets on smartcard that can be used on buses throughout Greater Manchester. Fares are 10% lower than paper equivalents. More than 22,000 Get Me There travelcards have been issued since November.

A Metrolink mobile flash pass ticket app lets passengers pay for travelcards on their phone, removing the need to queue at a machine. Around 7,000 app tickets are being sold each week.

Metrolink continues to expand, with the second city crossing due to open early next year. A £122m cross-city bus priority programme is under way, including the North West’s first guided busway, which opened in April and was an award winner in its own right. £42m is being invest-

through



ed in new cycling infrastructure.

New interchanges have been opened at Wythenshawe and Radcliffe. The early bird Metrolink service on the Airport line, catering for 4am shift workers, carried a thousand passengers in its first month. Through its role in Rail North, TfGM has secured transformational franchises for Northern and TransPennine Express rail services.

Liverpool City Region combined authority was commended in this category.

Public Transport Operator of the Year

The award for Public Transport Operator of the Year also went to Manchester, in the form of **Metrolink RATP Dev**, operator of the city's tram network. In the past five years the Metrolink network has trebled in size,

and transports 90,000 passengers each day. In the last year tram availability hit a target of 99.99%, at the same time as allocation rose from 78 trams per day to 92. Reliability has increased to an average mean distance between service failures of over 29,000km.

Metrolink RATP Dev achieved average operated mileage of 99.62%, despite the construction project to create the second city crossing, which included an eight-week blockade at city centre stop St Peter's Square.

Customer ambassadors and customer network managers have been introduced to help limit the impact of any disruption. The operator carried record numbers of passengers, as well as increasing satisfaction to 89% in the Transport Focus light rail survey.

Stagecoach Manchester was commended by the judges.

Transport Supplier of the Year

Amey was named Transport Supplier of the Year, sponsored by FirstGroup. It provides asset management, engineering and operational solutions at many UK airports and on roads, cycleways and rail networks. Amey provides highway services, street lighting and winter services to the West Yorkshire borough of Calderdale. In Liverpool, in a £3.5m transport scheme in 2015, Amey removed pinch points at junctions, increased capacity, provided new road surfacing and installed LED street lighting. The company operates the Streets Ahead highway maintenance and management service in Sheffield and maintains over 725,000 street lights in cities such as Manchester, Liverpool and Wakefield.

Amey is Network Rail's fourth largest supplier, turning over £240m

Clockwise from left: Port of Liverpool; Metrolink RATP Dev; the Nexus TV ad campaign for Tyne and Wear Metro

turn to page 28



annually. In 2014, it was re-appointed as Network Rail's sole supplier for civil examinations. It inspects around 100,000 rail structures in the UK.

Airport of the Year

Liverpool John Lennon Airport took the honours in the Airport of the Year category. 2015 was its busiest year since 2012, with over 4.3 million passengers passing through. The number of airlines operating from the airport more than doubled to nine and 15 new routes were announced, 13 to new destinations.

Around £2.5m has been invested in improving the terminals, with improvements to the layout of the departure lounge, opening up views across the airfield, replacement of old carpeted areas with new flooring, additional seating, improved flight information screens, and the addition of new retail units.

Last year the airport began participating in the Airport Service Quality survey. Customer feedback showed it was among the best for speed of security screening, baggage delivery times, reduced queue times and ease of access. A VIP customer board was established to address areas which feedback suggested still needed improving; the £2.5m investment programme was a direct response.

Seaport of the Year

Merseyside also came out on top in the Seaport of the Year category, which was won by **Peel Ports Group** for the Port of Liverpool.

Over the last year, the group has invested £750m to improve its container, warehousing and biomass facilities. The most significant investment is the construction of a new £400m deep

from page 27

water container terminal, Liverpool2, which will more than double container capacity at the port. The terminal will remove the current lock-gate restrictions and allow Liverpool to accommodate 95% of the world's container vessels. The development aims to reaffirm Liverpool as the UK's leading transatlantic port, and make possible direct market connections with south and central America, India, the Far East, the Mediterranean and the Baltics.

The group has invested £100m in a biomass terminal that allows bulk products to be transported via rail directly to Drax power station, which has converted three of its six burners to generate electricity from biomass rather than coal.



Clockwise from top: host **Steph McGovern**; a **Vantage bus** on the **Leigh-Elfenbrook** guided busway; **Doncaster's Great Yorkshire Way**; **first Hull Trains**; **Liverpool John Lennon Airport**

Transport Project of the Year

First Manchester, TfGM and Wigan, Salford and Manchester City Councils were the winners in this category, with the project that launched Vantage bus services and the Leigh-Salford-Manchester bus rapid transit scheme and guided busway. The project forms a key part of Manchester's £122m bus priority programme.

Leigh lacks a rail connection, so an innovative scheme was needed to tackle congestion on radial roads and improve public transport reliability. The project has created a frequent and reliable link, reducing the journey time from Leigh and Atherton to Manchester by 20 minutes to under an hour.

The guided busway runs for 4.5 miles along a former railway line between Leigh and Ellenbrook. It connects to a further nine miles of new on-highway bus lanes on the East Lancs Road and through Salford. There are three park and ride sites with a total of over 400 spaces along the route.

Vantage services start as early as 4am and run beyond midnight, with up to eight buses an hour during the day. During the first week, over 28,000 passengers used the service, and the 150,000th passenger was carried by the fifth week.

Leeds Station southern entrance was commended in this category.



Construction and Engineering Project of the Year

The Leigh-Elfenbrook guided busway was a winner in its own right for **TfGM** and **Balfour Beatty** in the Construction and Engineering Project category. An innovative technique was developed to construct the concrete busway, using in-situ slipforming instead of precasting. The guideway upstands were formed continuously with the running surface. Diamond-tip grinding followed the slipforming to provide the required tolerances. The continuously reinforced concrete pavement design and a seamless construction technique meant minimal joints and improved ride quality.

Diamond grinding requires high volumes of pressured water. The residue of water and concrete dust was passed through three filtration tanks which separated the concrete fines, allowing the water to be re-used.

A multi-user path runs alongside the busway for 6.5km, providing an area for pedestrians, cyclists and horse riders.

Economic Productivity Project of the Year

Doncaster Metropolitan Borough Council and Mott MacDonald were named winners in the Economic Productivity Project of the Year category for the Great Yorkshire Way, a new 5.5km link road between the M18 motorway and the A638. The project addresses longstanding problems on one of Doncaster's main routes, cutting journey times by up to 20 minutes, and reducing flows along a previously heavily congested corridor by 20%. Private sector firms contributed £34m to the £56m cost and £18m of regional grant funding was secured, with the council providing the rest.

The road is set to bring in £1.7bn of private sector investment, equating



to the creation of 24,000 new jobs in the region. It has had an immediate impact at Doncaster Sheffield Airport, increasing the 30-minute drive catchment from 0.6 million to 1.1 million people. This has triggered the addition of 500,000 new airline seats, putting the airport in the top three fastest-growing in the UK. It has also provided access to the iPort, a new 6 million sq ft rail-connected warehousing facility, and allowed the regeneration of almost 80ha of a derelict colliery site for 1,200 new homes.

Peel Ports Group's North West Investment Programme was highly commended.

Contribution to Sustainable Transport

First York was winner of the Contribution for Sustainable Transport award for its use of electric buses on York park & ride services. First York formed a partnership with City of York Council and local bus manufac-

turer Optare to introduce the first two park and ride sites in the UK operating with fully electric fleets of buses, at Poppleton Bar and Monks Cross. An initial six buses were launched on the Poppleton Bar route and were so successful that an additional six were introduced on the Monks Cross route.

Rapid chargers at Poppleton Bar and Monks Cross keep the bus batteries



topped up throughout the day, but 65% of charging takes place overnight when grid carbon intensity is lower.

Operational results from the Optare Versa electric buses show a 62% reduction in carbon dioxide emissions and a well to wheel carbon figure of 409g/km, compared with a standard diesel park & ride bus at 1078g/km.

TfGM's Clean Air for Schools programme was commended.

Excellence in Technology

The Excellence in Technology award went to the **Parking and Traffic Regulations Outside London Joint Committee** (Patrol) for the Traffic Penalty Tribunal's Fast Online Appeal Management (FOAM) system.

turn to page 30

The tribunal adjudicates in appeals against traffic penalties issued by local authorities. It commissioned the online system to allow motorists and local authorities to interact with the tribunal electronically in appeals.

Appeals are submitted online with instant notification to the authority; evidence, including photos and video files, is also submitted online by both parties. Authorities may decide not to contest the appeal, and the appellant can decide to withdraw at any point. The appellant only requests a hearing when all parties have reviewed the evidence. A web link is available for direct payment where an appellant loses a case.

Prior to the introduction of the online system, only 10% of appeals were submitted electronically. Now the figure is over 90%. Over 60% of cases are closed within three weeks.

There were two commendations in this category: **North Yorkshire County Council** and **Elgin** for their project to transform traffic management and roadworks communication in North Yorkshire, and **Alstom's TrainScanner**.

Transport Team/ Partnership of the Year

Arriva North East and the Tees Valley Bus Network Improvements Scheme won the award for Transport Team/Partnership of the Year. The scheme covers routes in Darlington, Hartlepool, Middlesbrough, Redcar & Cleveland and Stockton-on-Tees. A holistic approach was taken, with improvements to buses, stops and information provision. Arriva invested in new and refurbished buses and a comprehensive marketing strategy.

All major bus operators joined forces with the Tees Valley coun-



High achievers

An award for Lifetime Contribution to Transport in Northern England went to **Sir Howard Bernstein**, who is standing down from the role of chief executive of Manchester City Council. He joined the council as a junior clerk in 1971 and became chief executive in 1998.

TfN chief executive David Brown said: "Sir Howard has led the successful regeneration of Manchester since then, and he played a pivotal role in raising billions of pounds of investment, as well as leading the charge for devolved powers over planning, housing and transport. He was involved in the establishment of Manchester Airport as a plc in the mid-1980s and has continued to lead the development of the airport group. He has been a very vocal supporter of the Northern Powerhouse and championed the role of transport as a key part of it. He has been an exemplary leader and advocate for Rail North and Transport for the North in its formative years."

Frontline Employee of the Year

Two winners were jointly named Frontline Employee of the Year. **Tina Roberts** is the driver of Pocklington Medibus, a council minibus service that carries East Riding residents from their homes to local hospitals, doctors' surgeries, clinics and dentists. Most people travelling on the Medibus are elderly, vulnerable or have medical needs. Tina has gone beyond the call of duty on more than one occasion. In March

Sir Howard Bernstein has led the regeneration of Manchester since 1998

Frontline Employees of the Year Tina Roberts and Mike Phillips



at York Hospital, a woman had gone to A&E with a suspected angina attack. After a four-hour wait, she became very concerned about her dog and decided she wanted to go home. The A&E staff told her that she must seek medical advice from her doctor when she got home.

Tina was at the hospital picking up Medibus passengers, and a member of hospital staff asked if she could take the woman. Tina took her home, and made sure the patient spoke to her doctor while she let the dog into the garden for a run.

Mike Phillips is an inspector for Merseytravel, monitoring train and station presentation for the Merseyrail concession. Mike's duties include inspecting the interior and exterior condition of trains, ticket

offices and shelters, and monitoring station cleanliness. He goes beyond his remit by alerting station staff to anything he has seen that would not be scored, but needs attention.

Mike's experience proves invaluable in training and supporting colleagues new to the team, helping them to gain confidence. He has developed a series of presentations outlining the principles of the inspection regime for Merseyrail staff.

In July this year, Mike was commended by Merseytravel, Merseyrail, and the Samaritans for his life-saving actions during an incident at a railway station in May, when he came to the aid of an injured customer. Mike was praised and thanked for his professionalism, empathy and courage.

from page 29

cils to create the partnership. The main aim was to support local council bids for central government funding; Arriva adopted a policy of match-funding local authority investment in the bus network.

Arriva now operates a fleet of 14 gas buses in Darlington. The new buses have better facilities for disabled passengers. Other improvements include raised kerbs at bus stops; a new information format at bus stops to help the visually impaired; on-board audio announcements and wi-fi on a large percentage of the North East fleet.

Nexus was commended for the success of its maintenance teams in keeping the Tyne & Wear Metro on the move through winter.

Transport Information and Marketing

Nexus was the winner in the Transport Information and Marketing category, sponsored by Arriva, for its campaign to drive passenger

growth on the Tyne and Wear Metro. Thanks to excellent campaigns, and a key decision to go into TV advertising for the first time in more than a decade, patronage growth of 6.3% to April 2015 was followed by a further 5.4% to April 2016. This took passenger numbers above 40 million.

In summer last year Nexus had taken decision to personify the Metro brand, creating a lively character based on its 'M' logo. The character market-tested so well that Nexus reconsidered its media strategy, and chose to lead with TV advertising. The new character appeared in two TV commercials designed to remind a target audience that for a day with the kids, or a night with friends, Metro is the perfect choice.

The result was a summer leisure campaign achieving an impressive 300% return on investment, generating 1.4 million extra journeys and a 4.4% revenue increase, and the fastest increase in like-for-like passenger numbers in Metro's 36-year history.

First UK Bus was commended for its Red Arrow Service in Halifax.

Major bus operators and the Tees Valley councils joined forces to improve services

Customer Service Team of the Year

First Hull Trains was the winner in the Customer Service Team category. The operator has invested in training in customer service for every employee. It has received the highest score for passenger satisfaction for three consecutive years in the National Rail Passenger Survey.

In January it achieved a record-breaking satisfaction rate of 97% – the highest score ever by a long-distance train operator – and 100% satisfaction on weekend services. It is one of the most reliable long distance train operating companies, with an industry-leading miles per technical incident figure of 18,516 (moving annual average). It has introduced on-board information screens, 4G wi-fi and USB chargers, as well as mobile and print-at-home tickets. The number of people travelling with First Hull Trains increased year-on-year by 21% to October 2015.

Merseyrail's Aintree Grand National Event Team was commended in this section.

transporttimes

Informed analysis Incisive comment Unrivalled insight

Keep up to date with the latest developments by reading *Transport Times* every month.

Our team of writers and columnists bring you in-depth analysis and critical comment on the transport issues of the day.

Our insight into the politics of transport from local government to Whitehall is unmatched – which is why we're read by the key decision-makers themselves.

From public transport to walking, cycling and road-user charging, *Transport Times* gives you the integrated view.



Contact us on 01424 757610, transporttimes@tjcuk.co.uk or use the form below

Subscribe to Transport Times

Stay abreast of all the developments in transport across the UK! Why not take out a year's subscription for only £95 + £4 VAT (magazine and online) or £60 + £12 VAT (online only)? Just fill in the form and return it to the address below

Order number (if applicable)
Title
Name
Job title
Department
Company/organisation
Address 1
Address 2
City
Postcode
Telephone number
Email
Where did you hear about *Transport Times*?
.....
.....

Please choose from the following methods of payment:

- ☐ I enclose a cheque for £95.00 + £4 VAT (print and online) made payable to *Transport Times*
- ☐ I enclose a cheque for £60.00 + £12 VAT (online only) made payable to *Transport Times*
- ☐ I authorise you to debit my Mastercard/VISA/Eurocard/Delta/Switch/Maestro for £95.00 + £4 VAT (print and online)
- ☐ I authorise you to debit my Mastercard/VISA/Eurocard/Delta/Switch/Maestro for £60.00 + £12 VAT (online only)

Card number:

Last three digits on back of card:

Expiry date:

Issue No (Switch/Maestro only):

Name on card:

Address (if different from opposite):

.....

.....

- ☐ Please send me an invoice

Please return your completed form to Transport Times Subscriptions, PO Box 304, Hastings, TN34 9EJ or call 01424 757610

Data Protection Notice

The personal information you have provided by completing this form, and any other information provided in connection with this form will be used and controlled by the Transport Times Ltd, to process your details and for any future marketing. We will keep the information you have supplied confidential and will not disclose it to any third parties unless we are required to do so by law or you have given your consent. You can update your personal information by calling the *Transport Times* office on 020 7828 3804.

At Virgin Trains we love the use of new technology when it is of benefit to both our colleagues and our customers. Using Worldline's modern tablet solution will improve the flow from the station to the train. Another example of modern technology providing greater 'change and convenience' to our customers and our colleagues

— John Sullivan
CIO, at Virgin
Trains



Plan for change ...and transform rail retailing and operations

by James Bain

Change is everywhere, challenging the ways we live and work, disrupting systems and processes, and making our lives easier.

More people want to travel by train, further and more often, with easier and faster ways to pay for journeys and to access real-time detailed information – whenever they need them, wherever they are. Today's consumers expect rail services to run on time, more of the time. They know that disruptions happen, but they want the impact on their lives to be mitigated by operational excellence.

Worldline believes that the rail industry must embrace change in order to deliver the scale and quality of service that passengers now demand. It must provide information and sell tickets and other retail opportunities at customers' convenience. It must achieve high efficiency, speed up decision-making, reduce delays, and unlock capacity.

We can deliver quality experience for the rail customer, in both retail services and in operational performance, but only if all of us

in the industry embrace a number of critical change principles.

Our retail vision

Worldline's holistic approach to retail for rail customers recognises three principles for change:

1. Smart integration

Throughout the history of the rail industry, most solutions have been developed to fit individual processes. The time has come to create an integrated approach to the industry's requirements, made possible by today's smart mobile technologies.

The more suppliers integrate services using the cheaper mass market technologies, the simpler it will be for rail staff to serve the customer, and for customers to access ticket and travel information at their own convenience.

A single technology backbone can support the customer experience across all touch points, providing a seamless approach. Integration can also incorporate open connectivity to back end retail systems, streamlining of physical retail solutions, and development of proof of concepts for future retail and fulfilment options.

2. Pick and mix flexibility

Train operators must demand from suppliers the flexibility they need for their distinctive systems environments. Fully managed service options do not reflect today's trend towards self-service retail for consumers. Operators want to be agile, and in direct control of their crucial interface with customers.

Another key to retail flexibility is the need for reassurance that future investment is protected. Suppliers must make sure that their applications evolve as technology changes, so operators can deliver consistently high quality customer service and avoid costly investment in new hardware and software. This principle underpins operators' freedom in technology selection, and offers real choices about how services are deployed over time.

3. Insights through data

Data is at the core of efficient and effective retail solutions, and provides the engine for great customer experience. Operators these days can use structured and unstructured data from all consumer interactions, including mobile devices, to find out what their customers want and need.

James Bain
is Director
Mobility and
eTransactional
Services UK&I,
Worldline

'Any time, any place': walking the retail talk

Worldline is living its retail vision for change through a brand new Worldline Mobile Ticketing Service developed for Android smart phones. Our retail solution provides operating companies with all the 'any time, any place' flexibility of mobile technology, delivers service disruption updates, and presents fares to passengers for purchase online or offline.

The next phase will be to expand functionality for the new service, so station-based rail staff can add more sources of information from third parties. Already designed to accept online and contactless payments, the service will be developed to accommodate smart ticketing and eventually perhaps virtual tickets stored in the cloud.

Our quest for an integrated family of products extends to peripherals. We are building and planning a set of devices to print physical tickets, scan barcodes, and validate smart tickets – all consistent with an Android application.

Looking further forward, the product family will support the rail industry when it is ready to remove the physical ticket. It will also provide for wider payment methodologies such as Android Pay and Apple Pay, and contactless bank cards and Bitcoins – which some of our terminals already support.

The major recent change in data is the ability to integrate and analyse unstructured online data such as website navigation, customer reviews, social media posts, and even videos.

These data points can be mixed with transactional data from on-line and in-station purchases, and even third party transactions, for more precise analyses and detailed understanding of customer desires. Customers can then get more relevant personalised offers and content faster and more contextually, in time for travel and other purchase decisions.

Our vision for operations

Worldline's plans for achieving operational transformation recognise the importance of three other change principles:

1. An integrated single source of truth

Integrating operational information to create a single source of truth is a critical success factor in tomorrow's operations environment. 'One version of the truth' enhances the quality and speed of decision-making, and enables timetables and staffing schedules to be updated urgently with accurate data by control room staff, following any service disruption.

2. Digitised automation, and communication

Real-time data is becoming an increasingly important requirement in rail operations. By bringing real-time data closer to the train operator, quicker decision making, reduced delays and unlocked capacity are all enabled, and new levels of customer service can be achieved.

3. Mobile technology gets information where it is most needed

Information at hand is paramount in effective rail operations, particularly at a time when growth in passengers and services requires fast responses to changed circumstances. Mobile technology provides staff with flexibility and improves resource management. Using mass market mobile technology avoids costly investment in bespoke options, and helps staff to learn to use devices and applications with all the instinctive ease with which they use mobile technology in other aspects of their lives.

Warnings before problems happen: the ultimate control room dream

Worldline lives our own principles for success in operational transformation. We have vast experience in the integration of business technologies and managing of data to ensure one source of information. We have developed automated solutions for the rail industry for decades. And mobile solutions are central to our current and future development plans.

Worldline delivers operational transformation through the Integrale system, our unique automated decision support system. Unmatched in the integrated functionality it provides, Integrale warns control rooms about

service problems before they happen, provides solutions, and reworks operational plans to deliver those solutions. It uses real-time information to speed up decision-making, reduce delays, unlock capacity, and achieve new levels of customer service.

Integrale has been a major success story, helping Worldline's clients accelerate performance and take faster, more effective and proactive decisions. Increasingly it is recognised as the hub for a process of operational transformation that is vital to the industry's future success.

Operational transformation is no longer a pipe dream. We aim to be at the forefront in helping our clients make it a reality.

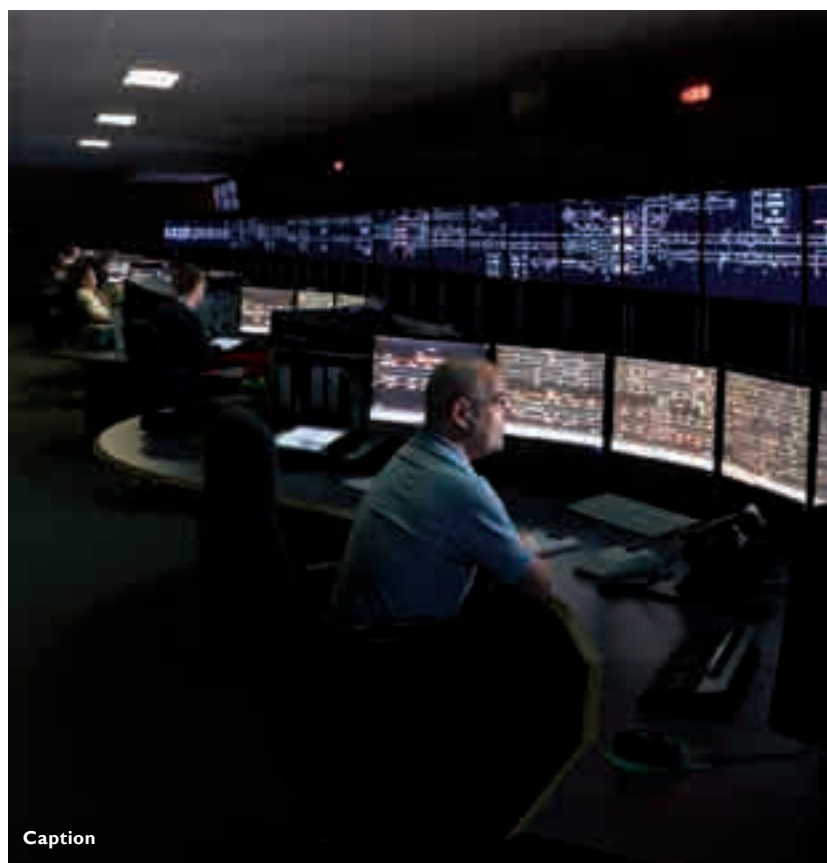
Planning for change...together

Worldline believes that sharing our future product plans will help train operators to better plan their own future. We work closely with the industry because only the industry knows the real issues and opportunities presented by change.

We continue to develop our operational products, and update older platforms. True operational transformation will only be achieved by integrating TOC operations with Network Rail operations, we believe. We are involved now with Network Rail to provide integration in implementing 3rd Party traffic management tools – a major step towards delivering that operational holy grail for control rooms.

Integrale is a powerful tool for our controllers. It sends alerts in real-time about service problems before they happen. So resources can be planned more effectively, and we can keep people moving across the Great Western network

– David Slater,
Railway
Operations
Control Centre
Manager,
GWR



Caption

Old year bows out, with testing times to come

After a year in which the established order was rocked to its foundations, in the coming 12 months the consequences will be played out. **Mike Indian** looks ahead to 2017



Mike Indian: "Elected mayors will shape regions' transport strategies"

2016 has been a year in which big decisions were made. 2017 will be the year the impact of those decisions will be felt.

Prime Minister Theresa May and her team begin the year having set out how investment in economic infrastructure is at the heart of their plans for the coming years in the autumn statement last month. Spades are due to go into the ground for phase one of HS2 as the hybrid Bill completes a long parliamentary journey.

With all eyes on the parliamentary vote on Heathrow expansion next December, the Government is due to publish the National Policy Statement and supporting documents for consultation in the new year. Transport Secretary Chris Grayling assured the Environmental Audit Committee on 30 November that this would include an appraisal of the all-important question of air quality. The lengthy process will be the first test of the commitments ministers will hold Heathrow to.

However, airport expansion was the issue that helped to provoke a series of events that underlined the political precariousness of Theresa May's government as 2016 drew to a close. Defeat in the Richmond Park by-election underlined how a failure to carry a dissatisfied backbencher on a key, controversial issue – when combined with the mercurial issue of Brexit – could serve to whittle down a slim parliamentary majority.

Even before 2017 has begun, the Government faces battles over what it has decided not to do. The announcement by Mr Grayling that he will not allow rail devolution to go ahead in London, and the infamous leaked letter to then London mayor Boris Johnson from 2013, have already earned him enemies inside City Hall – and within his own party, in the

form of Bromley and Chislehurst MP Bob Neill. Having ended the year by outlining his plans for an overhaul of the nation's railways, this key May ally risks political discontent sapping his authority from both in front and behind.

Away from Westminster, the election of mayors in Cambridgeshire and Peterborough, Greater Manchester, Liverpool City Region, Sheffield City Region, Tees Valley, the West of England and the West Midlands provides an opportunity for alternative power bases and policies to develop. The attraction of senior MPs like Andy Burnham or Steve Rotherham, as well as rising stars like Conservative MP Heidi Allen, underlines the influence these positions can potentially exert.

Brexit will influence the framing of almost all major debates, testing party discipline

The holders of these offices will shape their regions' transport strategies, but success in each race will also be used as a barometer of health for the two biggest parties. Jeremy Corbyn's Labour undoubtedly expects to be the main beneficiary, picking up most of the roles, but there could still be opportunities for his critics to pick faults. Failure to win in the important West Midlands region, where the Tories are fielding former John Lewis chief executive Andy Street, would be a blow to the party at a time when its electoral performance is being called into question by opponents.

2017 will be the year that Brexit gets under way, and thus we have to consider its impact on the landscape of transport policy. This most divisive of topics crosses conventional lines

of loyalty and will influence the framing of almost all major debates, testing the party discipline on which the Westminster political system is based.

The common factor and threat to the authority of Theresa May and Jeremy Corbyn is that a parliamentarian's position on Brexit has emerged as a more compelling tag of identity than which side of the House of Commons they sit on. Ahead of the Supreme Court verdict in January, cross-party activity led by Labour's shadow Brexit Secretary Sir Keir Starmer has already secured incremental but key concessions from ministers on the role of parliament in the Brexit process.

These include the fact that the Commons will debate Article 50 before it is moved, and the prime minister's commitment to publish a statement setting out her Government's position and negotiating objectives.

In the last few months, Downing Street has moved from "no running commentary" towards a more transparent and open process. In 2017, more of the mechanics of leaving the European Union will be played out in the chambers and committee corridors of the Palace of Westminster, with the drama far from confined behind closed doors in Whitehall or Brussels.

Politics has never been more fluid or exciting as it is right now. The new year brings the start of a new journey towards a post-Brexit reality, and the transport sector will want to be sure it helps to guide the hands on the wheel.

Mike Indian is a senior political analyst at DeHavilland

DeHavilland
Definitive political intelligence

DeHavilland provides in-depth political information to public affairs and policy professionals. Its analysts gather political news from Westminster and the European Parliament to bring its customers live coverage tailored to their information needs. To find out more about DeHavilland's political monitoring and to request a free trial, contact: www1.dehavilland.co.uk/contact-us or call +44 (0) 203 033 3870.

Connecting the **NORTH**



North of England Transport Awards

Transport Project of the Year – **Winner:** First Manchester with TIGM & Wigan, Salford and Manchester City Councils – Launch of Vantage

Contribution to Sustainable Transport – **Winner:** First York – Electric Vehicles and York's Park & Ride

Customer Service Team of the Year – **Winner:** Hull Trains

Frontline Employee of the Year – **Commended:** Chris Pickard, TransPennine Express

Excellence in Travel Information and Marketing – **Commended:** First Halifax Red Arrow Service

Our vision is
to provide solutions for an increasingly congested world...
keeping people moving and communities prospering across the North
firstgroupplc.com



Find out more at www.systra.co.uk

From
1 January
2017 JMP and
SIAS will be
integrated with
SYSTRA

JMP

SYSTRA

SiAS
transport planners

MOVING FORWARD TOGETHER