NORTHERN

Welcome



Go do your thing

Agenda

1. **Introduction**
2. **Our transformational strategies:**
   - Station as a Place – *Mark Powles*
   - Our vision for rolling stock – *Rob Warnes*
   - The future of operations – *Tricia Williams*
3. **Regional update** – *Kerry Peters, Tony Baxter*
4. **The Strategic Planning Team** – *Joe McTigue*



Introduction

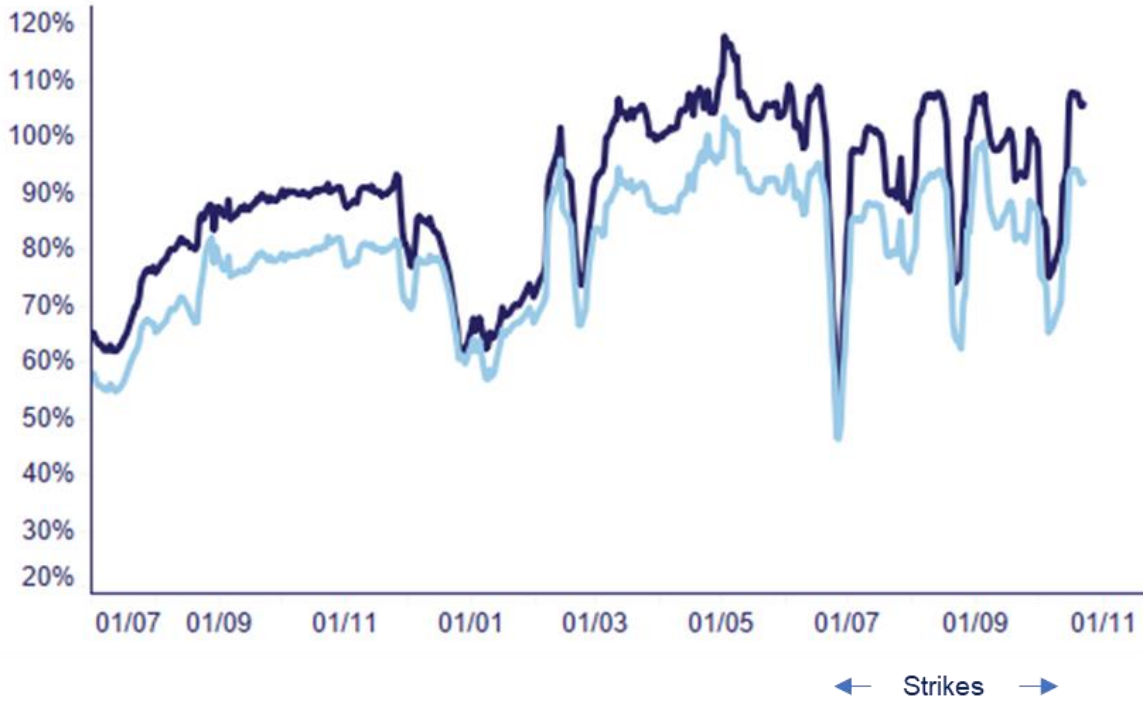
Nick Donovan, Managing Director



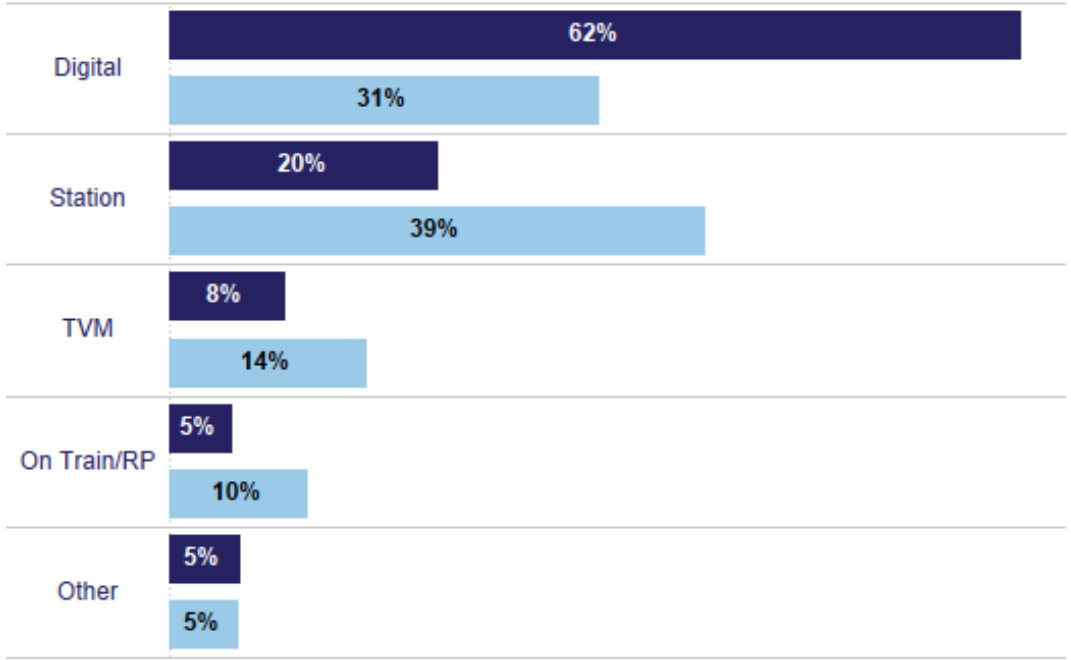


Growth

Revenue and **journeys** 7 day moving average

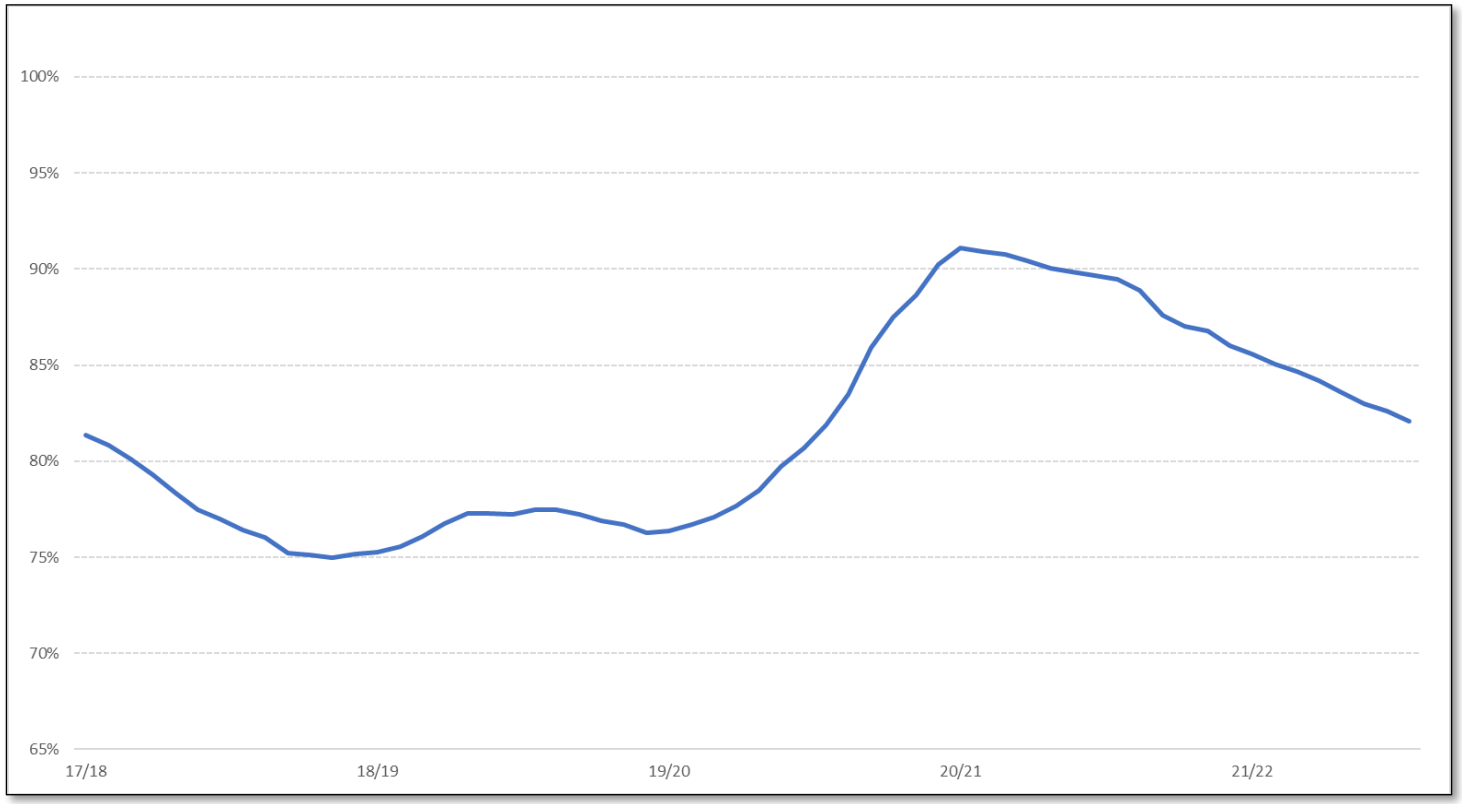


Retail Channel Share *Period 7 (Sept 22)*



Performance

T-3 March 2018 to date



Our vision



Transformational programmes

Stations as a Place	Accessibility and inclusivity	Rolling Stock Strategy
Transpennine Route Programme	Engineering transformation	Operating model

Questions



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Station as a Place

OUR VISION FOR THE FUTURE STATION



The Need for Change

- Changing customer needs
- Digital / self-service adoption
- Value in place / community
- Historic lack of estate investment
- Better accessibility & inclusivity
- Maximise efficiency / value



Station As A Place



Retail Transformation



Destination Station

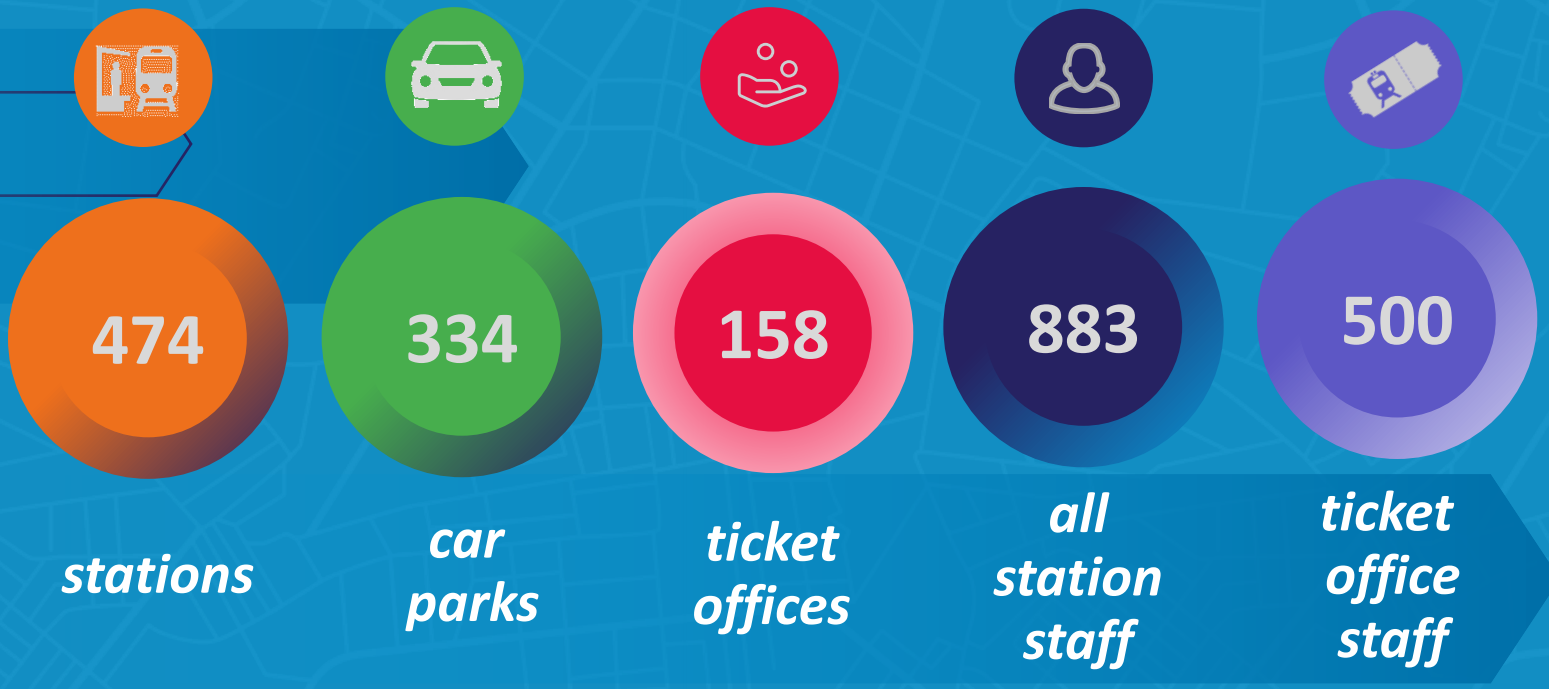


Supporting Our Communities



Transformed Operating Model

The Context:
Northern's Estate



Station type		Example stations
National hub	3	Liverpool Lime St
Regional interchange	1	Manchester Victoria
Important feeder	16	Barnsley
Medium staffed	24	Bridlington
Small staffed	114	Garswood
Small unstaffed	316	Cramlington

Customer-focused



Digital Dom

Who: Savvy Young Professional
Age: 23 | **Salary:** 22k
Kids: None

Appreciates how easy it is to claim a refund

5% of customer database

My life is pretty fast-paced – so I expect my train to keep up.



Student Steph

Who: Money-Conscious Student
Age: 18 | **Salary:** P/T min. wage
Kids: None

Appreciates good value for money

9% of customer database

Every penny counts as I look to make my way in the world.



Lively Lisha

Who: Punctual Go-Getter
Age: 31 | **Salary:** 32k
Kids: None

Values punctuality and reliability

19% of customer database

I like to stick to my routine – so it's a pain when things don't go to plan.



Family Man Frank

Who: Hard-Working Family Man
Age: 37 | **Salary:** 40k
Kids: Yes

Values punctuality and reliability

13% of customer database

Being timely for work is important, but family time is everything.



Go Getter Graham

Who: High-Earning Achiever
Age: 44 | **Salary:** 45k
Kids: None

Appreciates how easy it is to claim a refund

15% of customer database

I'm driven to succeed – always up for challenges and off on adventures.



Organised Orla

Who: Organised Senior Exec
Age: 50 | **Salary:** 90k
Kids: Yes

Values personal security on board

17% of customer database

I'm known for making plans and managing people – at work and at home.



Day Trip Diane

Who: Recently Retired Explorer
Age: 66 | **Salary:** Pension
Kids: Yes + grandkids

Likes to know the length of any delays

8% of customer database

It's a thrill to visit all these places I've always wanted to see.



Laid Back Larry

Who: Easy-Going Grandfather
Age: 62 | **Salary:** 26k
Kids: None

Likes to know the length of any delays

5% of customer database

Happily still working but winding down towards an easy life.

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Retail Transformation



Our retailing landscape

Changing customer behaviour and expectations



	2018		2022	*Change*
Digital journeys	16%	↑	63%	*+47%*
Magnetic stripe sales	82%	↓	29%	*-53%*
Ticket office sales	48%	↓	19%	*-29%*
On train sales	20%	↓	4%	*-16%*
Cash sales	18%	↓	10%	*-8%*

Future Retailing Model

Easier to use Ticket Machines





Remotely Supported Self Service

Stronger Digital Channel Retailing





New Digital Products

Pay As You Go





Off-station Retailing

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Destination Station



The Station: Value As A Place

Hybrid solutions
(a blended approach)

- Cycle Hubs
- Coffee Shop
- Co-Working Space
- Day Nursery
- Artisan production with shop
- Community skills workshops

Estate Developments
(maximising the value)

- EV charging hubs
- Drive through coffee/fast food
- Convenience stores
- Car services (tyres, MOT, wash)
- Standalone work/meeting space hubs

New Partnerships
(delivering new services)

- Win a kiosk or unit for a year for free
- Building relationships to create social support spaces
- Station activities in return for rent discount
- Clear path to long-term relationship

Transforming the station fabric

- *Customer Information Systems*
- *CCTV & Security Systems*
- *Station Presentation*
- *Accessibility and inclusion*
- *Service Quality Regime*



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Supporting Our Communities



The Living Station

Sustainable Community Partnerships

- Stations as Community Hubs
- Tourist Information
- Local knowledge and partnerships
- New community & 3rd Sector Partners
- Meeting Spaces for All
- Stimulating Social Enterprise



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Transformed Operating Model



Operating Model Solutions

Customer focus

- Role change
- Improved Visibility
- Great people, great training

Efficiency

- Broader roles
- Ownership of the Living station
- Third party presence

Technology

- Digitally-Equipped and informed front line
- Consistent service information
- Supported self-service

Change to drive better value for customers, communities and taxpayers

1. Helping customers to plan a trip
2. Supporting customers to purchase tickets
3. Helping customers locate their lost property
4. Helping when things go wrong
5. The face of Northern
6. Helping customers to continue their journey (with local knowledge)

Presence where and when it's needed

Better, more efficient customer support



Station as a Place

Many projects
A single vision

- Stations as a destination
- Accessible & inclusivity for all
- Transformed ticket Retailing
- Community services
- Delivered through partnership
- Efficient & customer focused
- Services for the local area
- Improving personal safety



Our vision for rolling stock

Rob Warnes, Strategic Development Director



Decarbonisation

Through Modernisation of Rolling Stock

Complex

11 Different Fleet Types (unit classes)
16 Different Fleet Configurations

Age

2/3 of the fleet is more than 30 years old
Some of the fleet were built in 1984

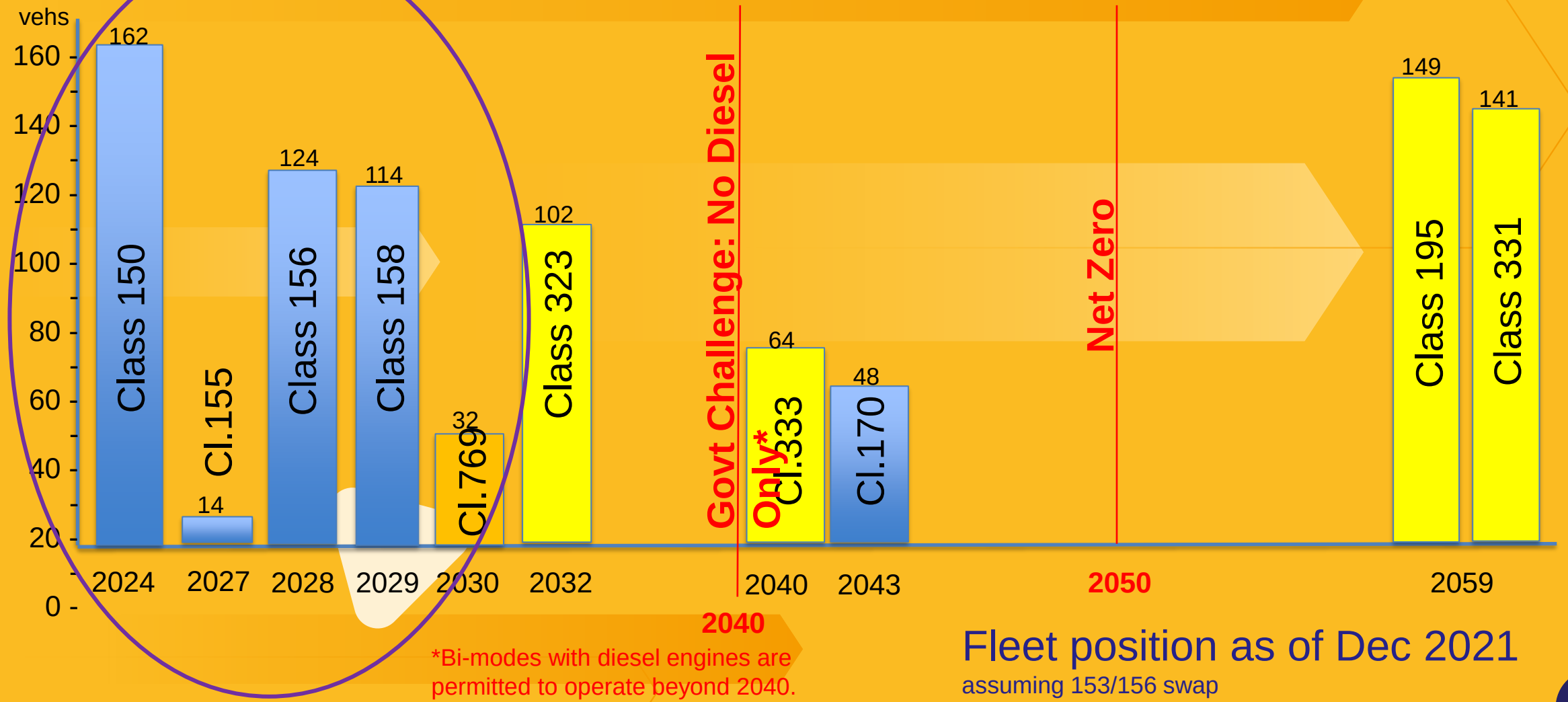
Net Zero

Only 36% of the fleet is electric
But only c25% of our network is electrified
Only 15% of fleet could remain in traffic beyond 2040
Largest number of diesel miles of the Regional Operator
(2nd Nationally behind XC)





Fleet Replacement Programme (assuming 40 year life)



*Bi-modes with diesel engines are permitted to operate beyond 2040.

Fleet position as of Dec 2021

assuming 153/156 swap

Northern Rolling Stock Strategy



Emerging thinking

- Phased approach to class 15x replacement between 2026 – 29
- Replacement of around 60-70% of fleet before 2030
- Diesel will continue to play a role for beyond 2040
- Northern's electrification priorities
- Simplification through reduction in fleet types



Opportunities - Electrification

Immediate Priority Schemes

- Liverpool – Manchester via Warrington
- Wigan – Salford (Atherton Lane)
- Morpeth sidings

Depots & Stabling

- Supported by investment in modern depots and enhanced stabling facilities





Early CP7 Schemes (2030 – 2035)

- Calder Valley (Leeds – Bradford – Victoria)
- Chester – Warrington
- Bolton – Blackburn
- Preston – Hebden Bridge
- Leeds – Harrogate - York

Opportunities -

From Battery Trains





Hydrogen

Hydrogen could be the solution to routes where batteries can not achieve the range and full electrification is many years away

Worked extensively with Tees Valley CA to develop a hydrogen economy on Teesside

Exploring options with DfT for continued development of Hydrogen for rail in the UK, but funding remains a challenge.





Modernisation of signalling (ETCS) = Rolling Stock Change







Diesel & Other Fuels

Diesel is likely to play a significant part across the North for many years to come.





Decarbonisation through modal shift

Grow patronage through more trains and longer trains and better customer service





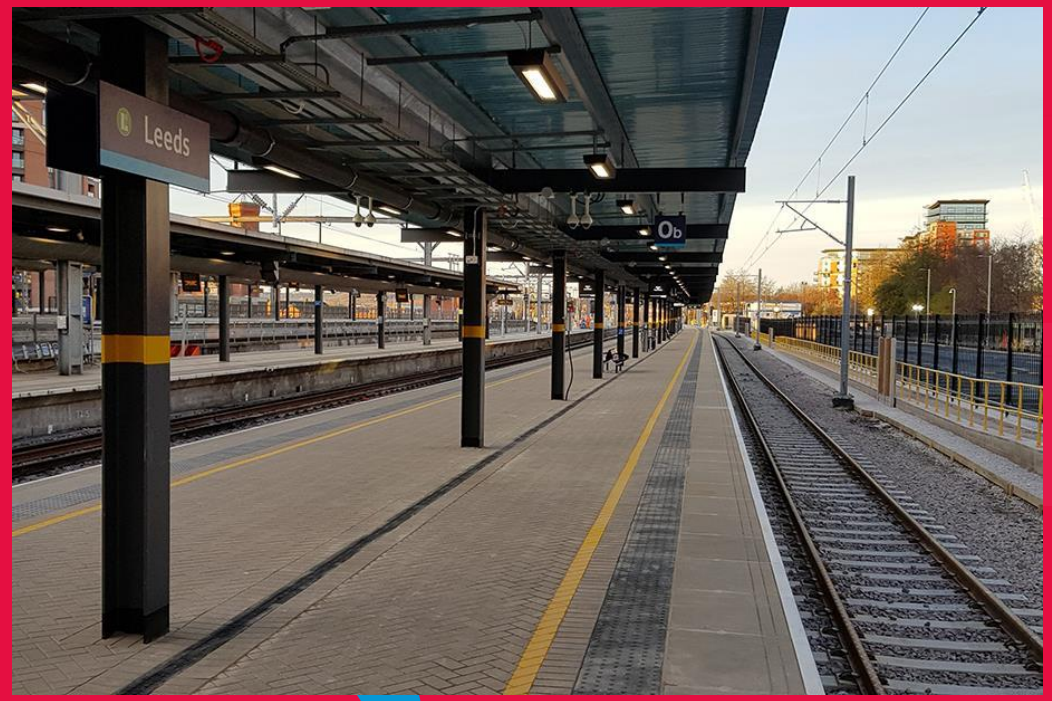
Need to resolve Manchester Bottleneck through Manchester Taskforce





Decarbonisation through modal shift

Leeds Station Capacity



Transpennine Route Upgrade



Decarbonisation through modal shift

Journey Time Improvements

- Working with TfN on 20 priority schemes

Restoring Your Railway

- Northumberland Line
- Fleetwood
- Chesterfield – Sheffield





Decarbonisation can only be achieved through a mix of infrastructure, trains and services – whole system approach



Visit our market stalls today

Transpennine Route Upgrade



Matt Harrison
Communications Manager

Reducing crime and keeping customers safe



David Wilkinson
Community Safety Manager

Protecting our revenue



Garry Spicer and the
Revenue Protection Team

Digital trains



Marc Silverwood
On Trains System Manager
With James Brown from Belvoir rail

Accessibility



Maxine Myers
Accessibility Improvement Manager
In partnership with Chrome Angel, Angel Trains, Community Rail Lancashire and Totem Learning

Centre of Excellence



Joe McTigue
Senior Economist

Northumberland Line



Paul Henry
Asset Manager North East

Welcome back



The future of our operations

Tricia Williams, Chief Operating Officer



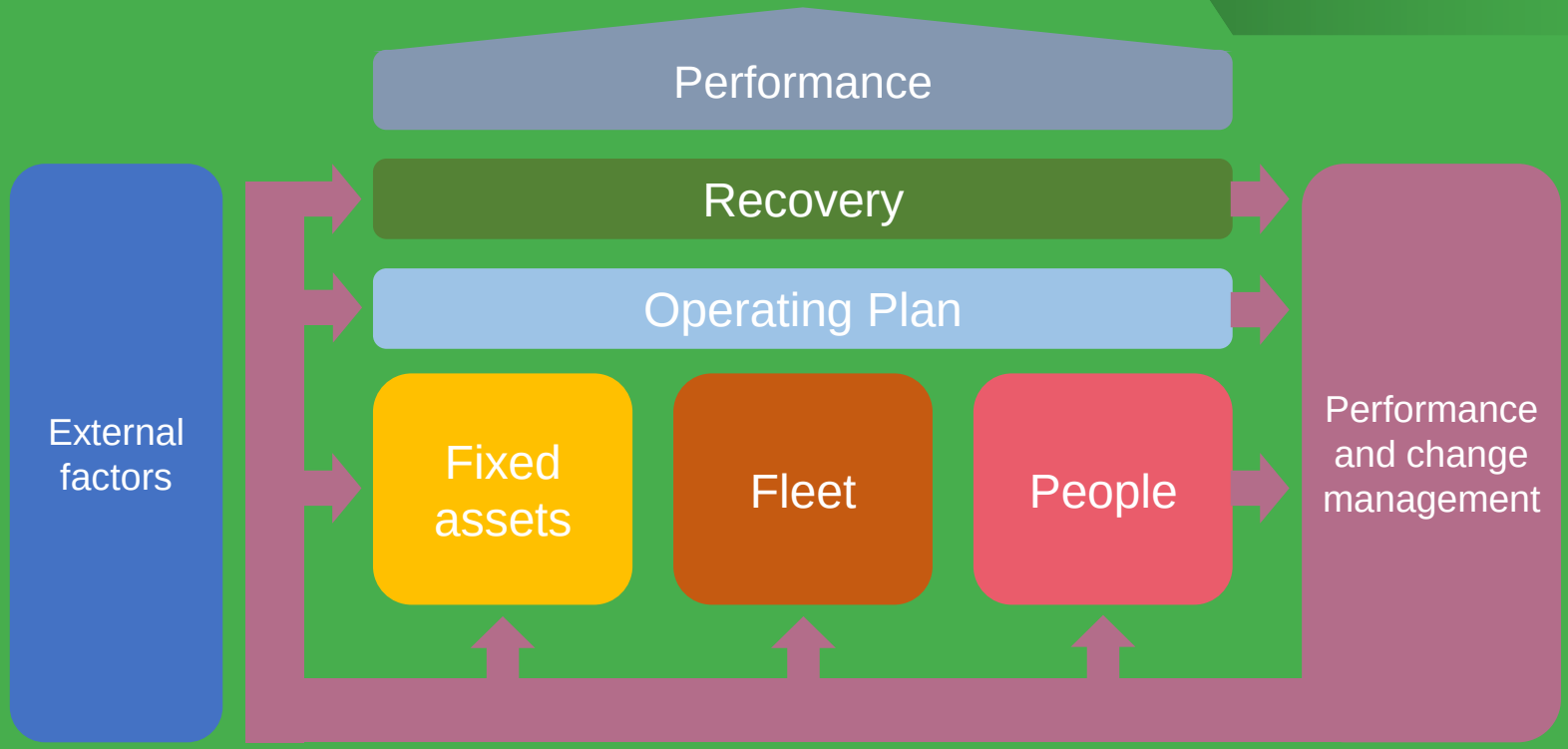
Operational excellence

People/process/system change to deliver value for our customers



Clarity of operating model

- No heroics/meaningful change.
- Whole system model/control the controllables.
- Internal capability supported with external excellence.
- Strong partnerships



Engineering

A plan-led approach

- Right place, right time, right tooling and parts.
- Introducing engineering fleet planners.
- Alignment of trains with materials, people and facilities.
- Integrated engineering systems

= improved reliability and better customer experience



Investing in facilities



Neville Hill TrainCare Centre



Hull depot

Innovation

Improving adhesion



Watertrak

Virtual reality simulation



Valuing our people

Skills, capabilities and culture

- Apprenticeships.
- Kick-start programme.
- Leadership track.
- Customer service.

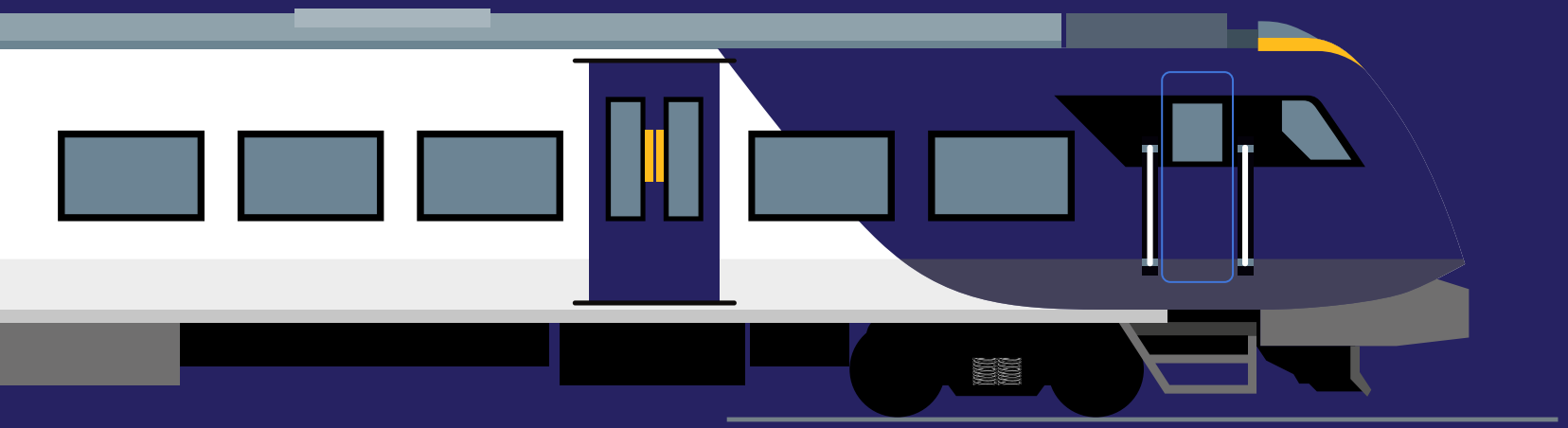


Panel Q&A

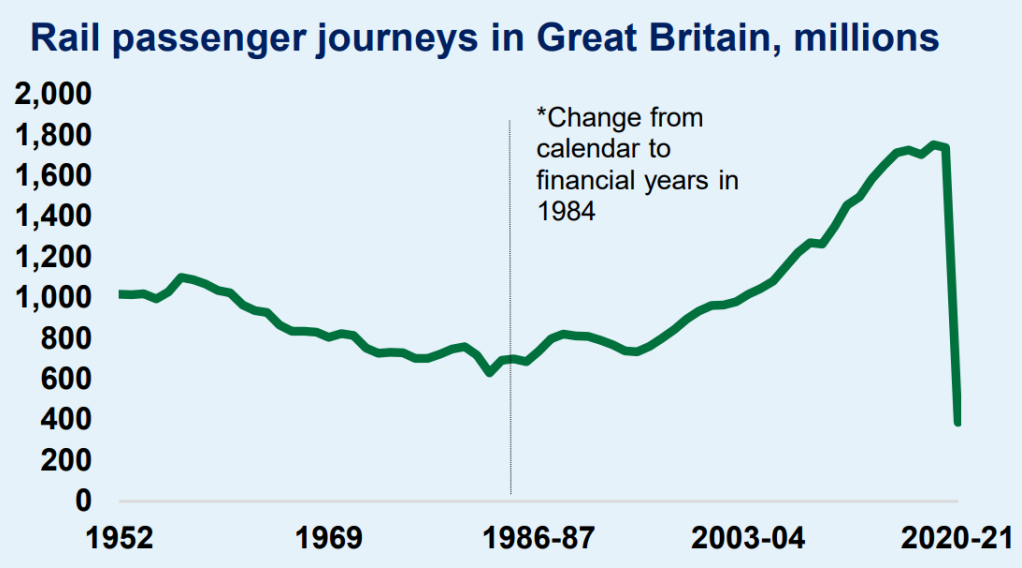


Regional update: East and North East

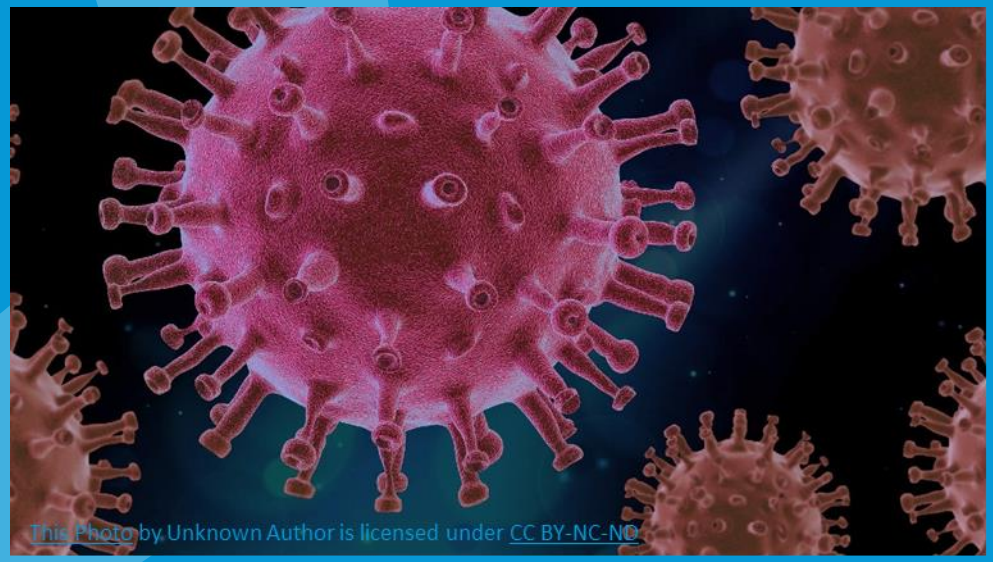
Kerry Peters, North East Regional Director
Tony Baxter, East Regional Director



Context


Rail passenger journeys in Great Britain, millions
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
*Change from calendar to financial years in 1984
1952
1969
1986-87
2003-04
2020-21

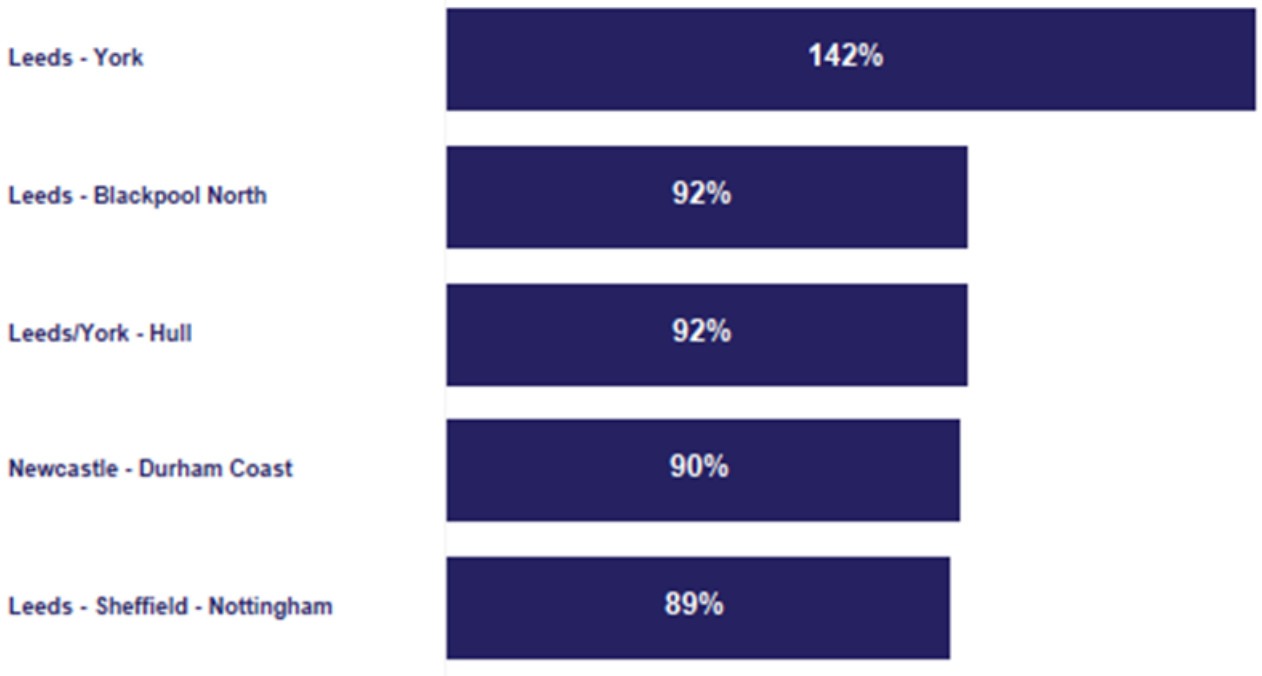



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Demand

East and North East

Top 5 line of routes by journeys *(Period 7/Sept 22)*





Passenger count sensors on CAF train

Train service changes 2020 to 2022

Timetable Changes		
	‘Normal’	Currently
2020	2	7
2021	2	6
2022	2	3

Since July, 5 x Emergency Strike Timetables have also been required

Timetable Development → Resource plan development → Timetable readiness → Timetable implementation

Timetables: December 2022

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northernrailway.co.uk/december22

North East	• **Newcastle – Carlisle** resumes 2tph • **Newcastle – Morpeth** resumes 1tph • **Esk Valley** resumes 6tpd
East	• **Leeds – Sheffield via Dearne** resumes 1tph • **Hull – Halifax** resumes 1tph • **Hull – Bridlington** maintains 1tph • Last two return trips **Nottingham – Sheffield** reinstated • **Doncaster – Scunthorpe** resumes 2 hourly • **Sheffield – Doncaster/Adwick** resumes 1tph • **Sheffield – York** resumes 3tpd • **Leeds – Knottingley** resumes 1tph on each route • **Leeds – Airedale/Wharfdale** service resumes 2tph • **York- Harrogate - Leeds** resumes 2tph with some peak extras • **Bradford – Huddersfield** resumes 1tph • **Huddersfield – Castleford** resumes peak only

Performance



Performance: driving improvements East Region

Key workstreams

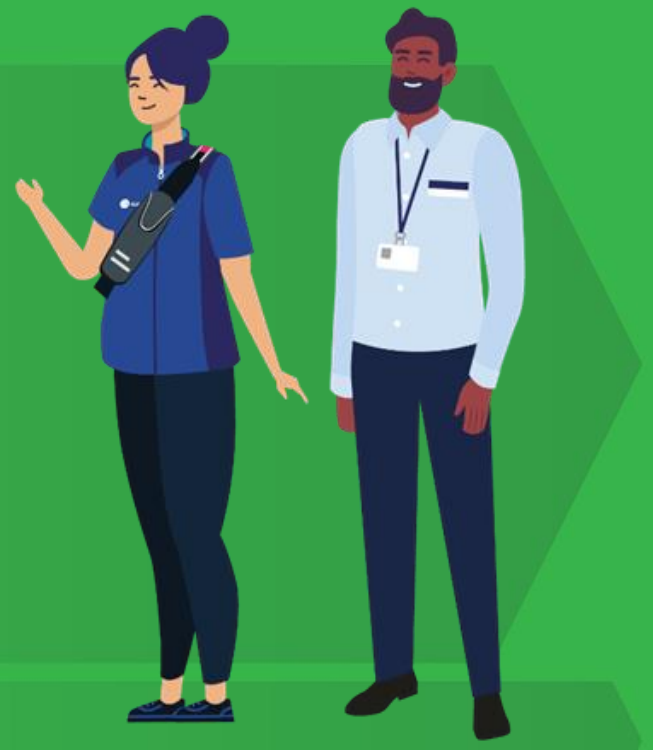
- Address route learning backlog
- Autumn planning with Network Rail and Water-Trak
- Neville Hill Start of day / Quartz
- 5 Focus Trains
- Meadowhall delay trial
- Hull improvement plan
- Blockades and Special Events/Transpennine Route Upgrade



Performance: driving improvements North East Region

Key Workstreams

- Driver ring-fenced route learning plan
- Traincrew sickness improvement plan
- Whitby Route Safety Speeds – Annual Review Mitigation
- Worst performing trains deep dive
- Unexplained delay reduction focus
- Autumn Delay /RHTT Focus
- Harlepool platform upgrades
- Newcastle Link Efficiencies December timetable



Understanding our customers: monitoring performance

Sources of insight:

- Post travel surveys
- Customer panel
- New touchpoints

Supporting our colleagues

- Salesforce
- Customer service training

Key themes:

- Crowding
- Security
- Cleanliness
- Information during disruption



Station improvements and our property programme

Region: North East and East

Station Presentation
Station painting (platform edge white-lining) and heavy cleaning.

CIS replacement
Enhancements to Customer Information Systems (CIS) and Long line public address.

Network Rail maintenance
Waiting area refurbishment, surface repairs, reinstatement of CIS displays and additional seating

Defibrillators
A programme of work installing defibrillators, tagged and registered by the NHS Ambulance Service

CCTV replacements
Upgrades to and installationn of new CCTV cameras.











Region: North East and East

Waiting rooms
A programme of work to renovate the waiting rooms and ticket office at Haltwhistle

Commercial investments
Refurbishment of the café (including windows) at Chester-le-Street

Station redevelopment
The complete redevelopment of Sunderland station.

Station improvement fund
Replacing and refurbishing several waiting shelters.

Traincrew accommodation
Upgrades to traincrew accommodation at Middlesborough.

Access improvements
Re-lining the existing car parking bays at Bardon Mill.







East: Community Rail highlights



Mirfield in Bloom National Award winners



BCFC – 435 young volunteers delivering £246,000 of social value to their community



Tigers – 380 volunteers delivering 13,680 volunteer hours



Targeted engagement to raise awareness of rail safety



Yorkshire County Cricket Foundation supporting Airedale Hospital



Working with communities to make our station reflect the communities we serve



Primary Engineers, inspiring the next generation of rail engineers



Age no barrier to travel with Northern, isolation to inclusion



Raising awareness of the need to report unwanted sexual behaviour on the network





Growing partnership with YABA







Building confidence and supporting families

North East: Community Rail highlights





Building confidence in vulnerable or isolated groups

Community engagement days to enhance stations









Increasing biodiversity at stations





Engaging with local schools to raise awareness of rail safety



Bringing disused buildings back into use

















Community workshops to create station artwork



Friends of Alnmouth national in bloom award



Inspiring the next generation of rail engineers

The role of the Strategic Planning Team

Joe McTigue, Senior Economist



Priorities for the coming year

Continuous development

Centre of Excellence and Partner of Choice

1. **Business Plan**
   Continuous work on progressing the current business plan and preparing for the next
2. **Rolling Stock Strategy**
   Strategic advice and programme business case support including business cases for 195(H), EMU, BEMU, Hydrogen, diesel replacement
3. **Input into Large Industry Business Cases (e.g. TRU, MRTF, RyR)**
4. **External Pipeline**
   Maintaining horizon scan and support of external cases
5. **Analysis & Economics**
   Provision of ongoing high-quality evidence to inform business decisions

Northern's offer to the region

A multi-faceted function, designed to meet all needs of the business and sector

Cost analysis

- Benchmarking and review of assumptions
- Provision of robust data and inputs
- Creation of bespoke analysis and assessments
- Cost information from existing operations

Appraisal

- Overall guidance, processes and review
- Demand forecasting
- Robust and creative economic cases
- Compelling strategic cases
- Rationale for investment and developing options
- Monitoring and evaluation

Location based analysis

- Regional and local economies
- Labour markets and demographics
- Policy drivers and funding sources
- Econometric forecasting and modelling
- GIS
- Catchment areas

Research and evaluation

- Ongoing monitoring and evaluation
- Assessment of past interventions
- KPIs/success measures
- Research into "what works"
- Research and modelling of WEIs

Operational and service planning

- Robust service planning outputs
- Performance modelling
- Sectional Running Time modelling
- Feasibility assessments
- Awareness of operational opportunities

what works centre for local economic growth

Department for Transport

TRANSPORT FOR THE NORTH

UNIVERSITY OF LEEDS Institute for Transport Studies (ITS)

NetworkRail

LNER LONDON NORTH EASTERN RAILWAY

Strategic Planning – our Centre of Excellence

How we work with partners across the North

❖We will always provide help and advice for any partners who need it to support the sector and the region.

Areas we can provide support:

- Strategic advice
- Knowledge of funding options
- Sense checking assumptions
- Provision of applicable data



- Business case development
- Research and evaluation projects
- Surveys
- Timetable planning
- Costs and financial analysis

Q&A



Go do your thing…
Together

