

Lord Houchen,  
Tees Valley Mayor

Dear Mayor Houchen,

We wrote on 20/05/24 to alert you (and other northern Mayors) to critical failings in Transport for the North's 2024 Strategic Transport Plan (STP). These failings will effectively sabotage any prospect of the STP delivering the transformation in railway network connectivity and capacity, necessary to bring about Levelling-up and Net Zero in the Northern Powerhouse. In terms of lost economic growth, they will cost the Northern economy £100 billion per annum, over £6,000 per citizen every year.

At Network North, we are in a unique position to level this criticism against Transport for the North, the official body charged with developing the region's railway network. Network North (NN) comprises a detailed suite of railway engineering interventions extending across the Northern Powerhouse. Its routes have been designed to a scale of 1:10,000, bespoke station solutions have been developed in all major cities, and a 'demonstrator timetable' is now in place to illustrate both the journey time savings that Network North can achieve, and its overall performance as a transformed railway network for the North.

All this demonstrates how Network North will vastly outperform the official Northern Powerhouse Rail (NPR) proposals, on any conceivable metric – either connectivity, capacity, integration with local networks, or adherence to TfN's own journey time targets.

We would like to take this opportunity to explain the key features of Network North, and the particular advantages that it will bring for the Tees Valley region that you represent.

## **Network North – A Fully Integrated Network for Passengers and Freight**

Network North is the Northern element of the High Speed UK concept for an alternative Integrated Rail Plan covering all of Great Britain, completely independent of HS2, Northern Powerhouse Rail and all other official schemes. Network North comprises an integrated blend of new construction, upgrading of existing lines and restoration of abandoned lines, holistically designed as a network to achieve the following:

### **Comprehensive Direct Links between all Principal Cities (see Figures A01 & A02)**

Network North will provide high-quality and frequent services comprehensively interlinking the 7 principal cities of the Northern Powerhouse – Liverpool, Manchester, Sheffield, Bradford, Leeds, Hull and Newcastle, plus Manchester Airport – and extending to all most communities, large and small. *By contrast, NPR will fail to deliver comprehensive services, not only for major cities such as Sheffield and Bradford, but also most of the region's smaller communities.*

### **Transpennine Capacity Transformed (see Figure A03)**

Network North will provide 4 new tracks for Transpennine passenger services, and 2 new tracks for freight. Only with an intervention of such scale can sufficient extra capacity be provided to support Levelling-up and Net Zero in the Northern Powerhouse. *By contrast, NPR will provide only 2 new Transpennine tracks.*

### **Achievement of TfN Journey Time Specification (see Figure A04)**

Network North will meet or beat all of TfN's targets for intercity journey times, and overall it will achieve 9 out of 11 specified timings. *By contrast, NPR will achieve only 1 out of 11.*

### **Full Integration with Existing Network (see Figure A05)**

Network North will be fully integrated with the North's existing rail network. Its services will access all stations served by the present intercity network, and bespoke solutions have been developed in all principal cities (and at Manchester Airport) to deliver a step-change increase in capacity – necessary both for planned Network North intercity services and for local services which will be approximately doubled in

frequency. *By contrast, the Strategic Transport Plan is devoid of any substantive proposals for an integrated and higher capacity transport system.*

### **Establishment of a Coast-to-Coast Transpennine Freight Railway (see Figure A06)**

Network North’s plans include the establishment of a dedicated route from Liverpool to Immingham on which railfreight will be ‘prime user’. This will realise TfN’s own vision for a ‘Freight Superhighway connecting Liverpool and the Humber’ as set out in the 2018 Strategic Transport Plan – *now regrettably deleted from all subsequent iterations of Transport for the North’s Strategic Transport Plan.*

### **Network North in the Tees Valley (see Figures A07TV & A08TV)**

The Network North scheme in the Tees Valley and the wider North-East is based on 3 radical interventions:

- A new Anglo-Scottish high speed line, following the corridor of the A1(M)/East Coast Main Line, and passing through the heart of both Darlington and Newcastle;
- The Durham Coast line hugely upgraded for through intercity services from London, and from Liverpool/Manchester/Leeds. This will incorporate a new crossing of the River Tees, to place Middlesbrough, Hartlepool and Sunderland on an efficient single line of route with no need for reversal;
- The Leamside Line restored for Anglo-Scottish trunk freight traffic.

These interventions will enable huge enhancement of local passenger services in the Tees Valley, extending northwards to former mining communities in central County Durham and to Wearside and Tyneside.

Network North’s performance for the Tees Valley, far exceeding that of Northern Powerhouse Rail, is summarised below:

Northern Powerhouse Community / Station	Refer Figure	Average journey time reduction (percentage)		Direct links** within Northern Powerhouse (o/o 17)		Direct links** outside Northern Powerhouse (o/o 37)	
		NPR	NN	NPR	NN	NPR	NN
** including existing links		NPR	NN	NPR	NN	NPR	NN
Darlington	A09	13%	40%	10	17	10	30
Middlesbrough	A10	tba%	tba%	7	9	0	2

Northern Powerhouse Rail’s demonstrably huge performance deficit renders it utterly unfit for purpose as a regional railway network, and – in its failure to deliver on either economic or environmental priorities – directly contrary to the public interest. Our massively superior Network North scheme shows a clear way forward for a higher-capacity, better-connected and fully integrated public transport system in the Northern Powerhouse, and we wish to engage with all Northern Mayors as a matter of urgency. We are of course keen to ensure that our proposals best meet the needs of the people you represent; but most importantly, we would respectfully request your cooperation to ensure that clear railway corridors through cities are preserved, and safeguarded from urban development, and that – where tunnelling is required – pile-free corridors are also maintained.

We will contact you shortly with a view to arranging a meeting.

Yours sincerely,

**Colin Elliff** BSc CEng MICE  
Civil Engineering Principal, HSUK

PS Further information regarding HSUK and Network North can be found on [www.highspeeduk.co.uk](http://www.highspeeduk.co.uk).

# **APPENDIX A**

## **Diagrams showing HSUK/Network North proposals for development of railway network in the Tees Valley**

- A01 HSUK/Network North ‘Tube Map’**
- A02 HSUK/Network North Intercity Services**
- A03 HSUK/NN Proposed Passenger Works**
- A04 HSUK/NN Intercity & Local Network**
- A05 Compliance with TfN Journey Time Spec**
- A06 HSUK/NN Proposed Freight Works**
- A07TV HSUK/NN proposed New Works & Upgrades in the Tees Valley & North-East England**
- A08TV Indicative HSUK/NN Tees Valley & North-East England suburban services**
- A09DL Direct intercity/local links from Darlington**
- A10MB Direct intercity/local links from Middlesbrough**

# HSUK PRIMARY LINKS IN NORTHERN POWERHOUSE REGION ALL PRINCIPAL CITIES FULLY INTERLINKED

To calculate journey times on longer routes (e.g. Newcastle-Leeds) add 2 minutes 'dwell time' at intermediate stations

Newcastle-Leeds JT = 15+2+26+2+15 = 60

Journey times & routes interlinking major Northern Powerhouse cities based on detailed HSUK 'Demonstrator Timetable'

HSUK Northern Powerhouse services continue to Edinburgh & Glasgow via new cross-Border high speed line

Newcastle - Edinburgh: 37 minutes

Edinburgh - Glasgow: 20 minutes

**Network North** working with...  
High Speed UK

**A01**

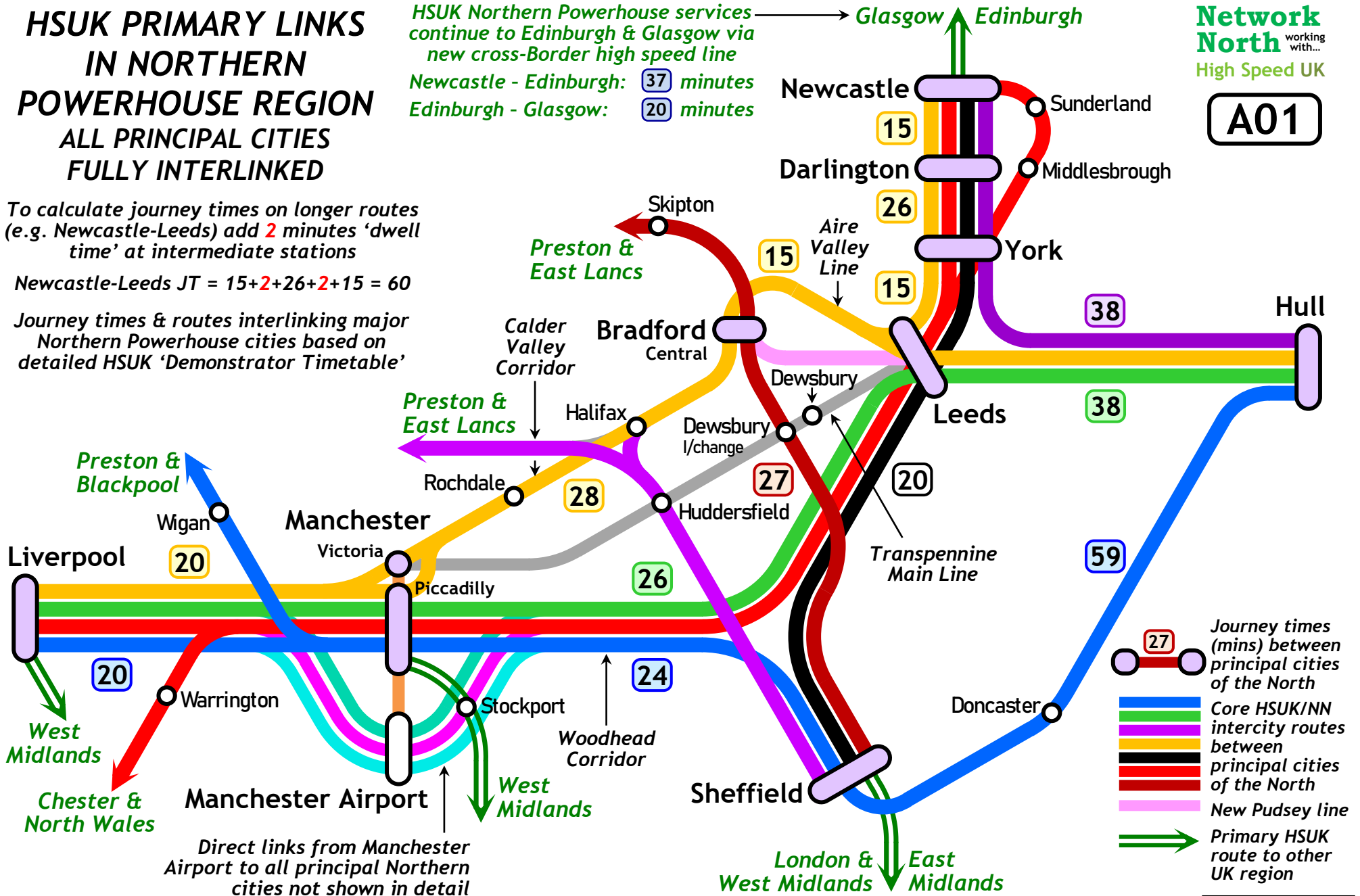
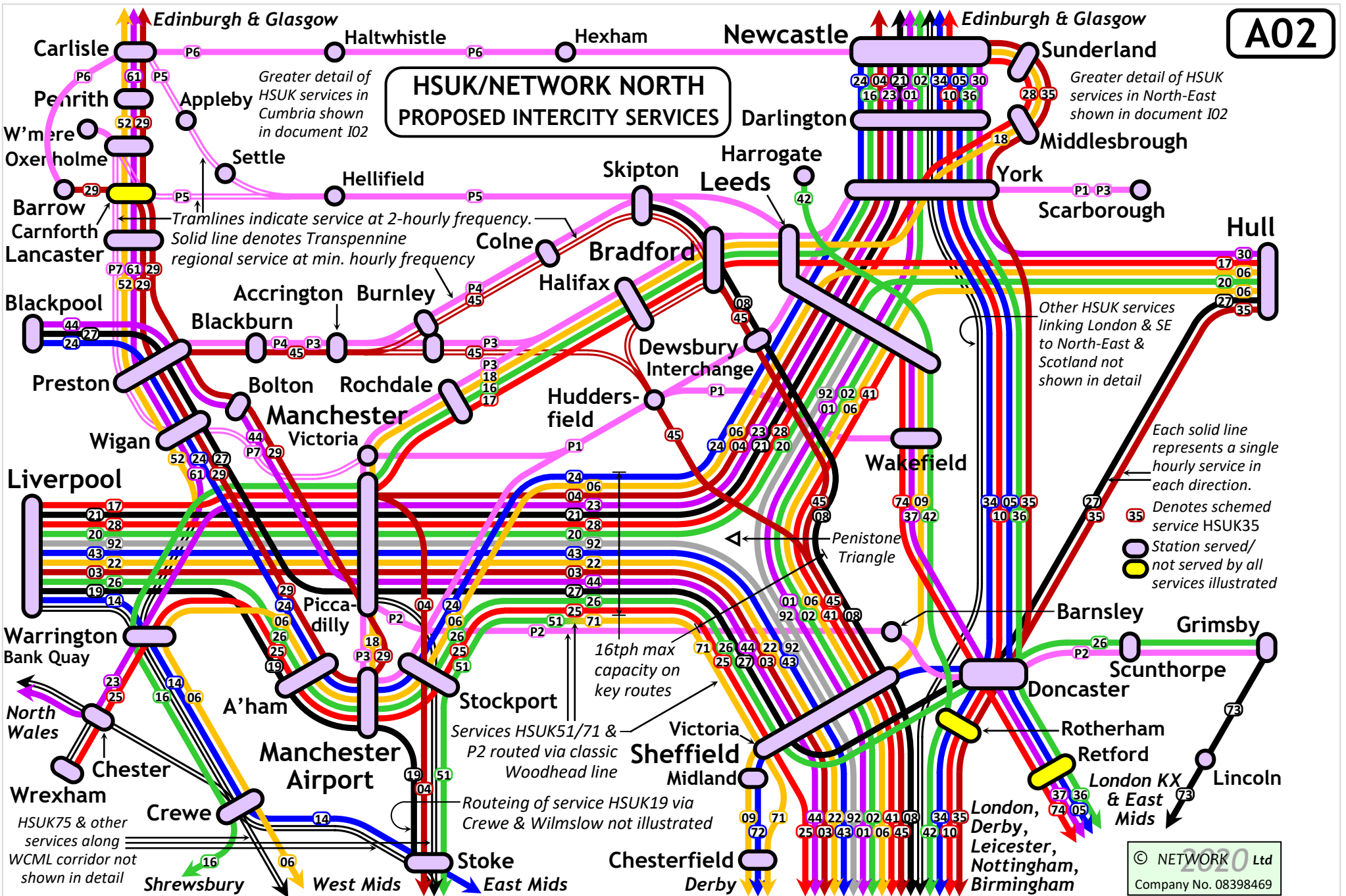


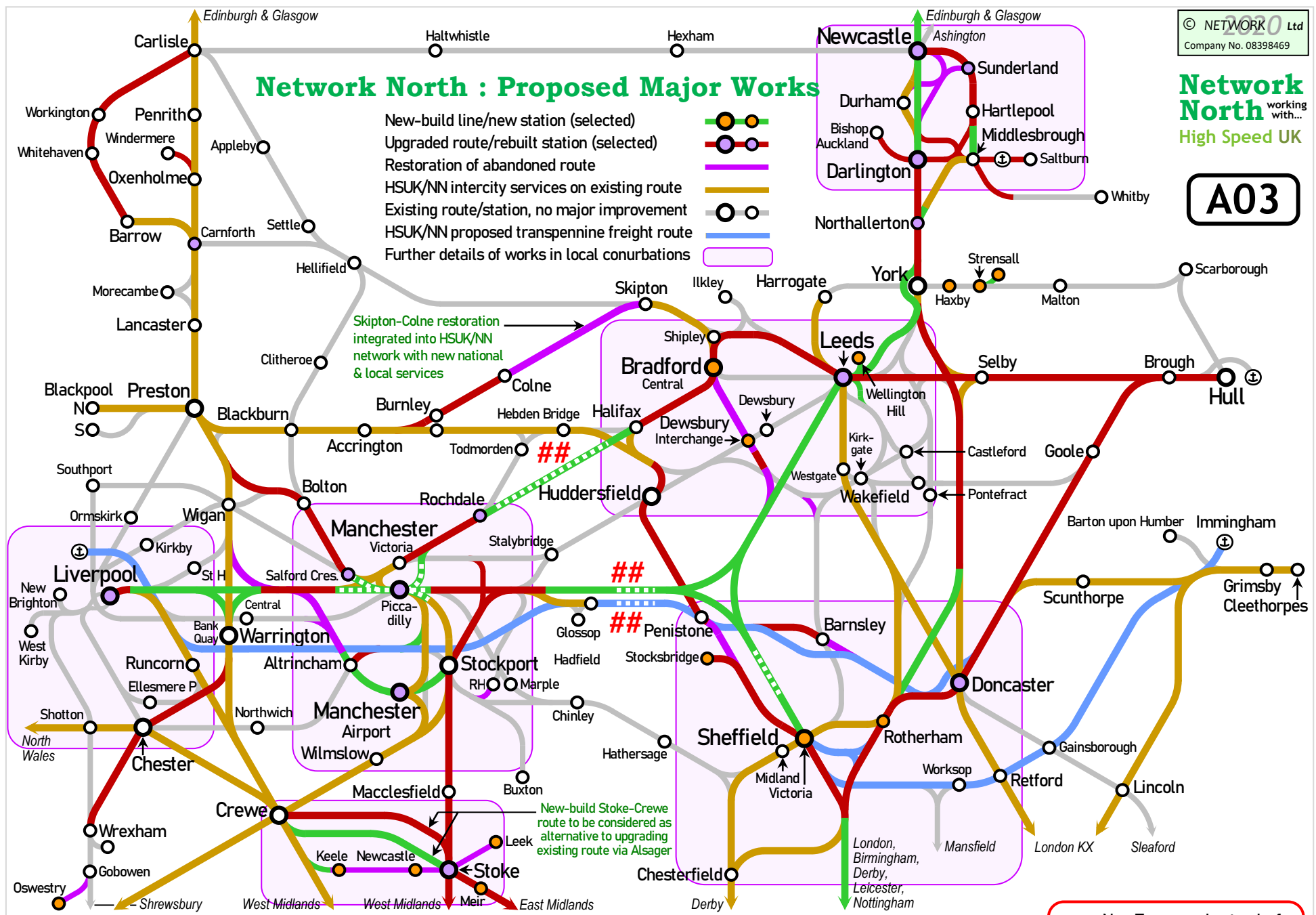
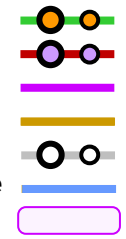
Figure I03J : HSUK / Network North 'Tube Map' showing primary intercity links & key journey times



**Figure I03I : HSUK / Network North 'Toothpaste Diagram' showing proposed intercity services across Northern Powerhouse**

## Network North : Proposed Major Works

- New-build line/new station (selected)
- Upgraded route/rebuilt station (selected)
- Restoration of abandoned route
- HSUK/NN intercity services on existing route
- Existing route/station, no major improvement
- HSUK/NN proposed transpennine freight route
- Further details of works in local conurbations



Skipton-Colne restoration integrated into HSUK/NN network with new national & local services

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New-build Stoke-Crewe route to be considered as alternative to upgrading existing route via Alsager

London, Birmingham, Derby, Leicester, Nottingham

Mansfield

London KX

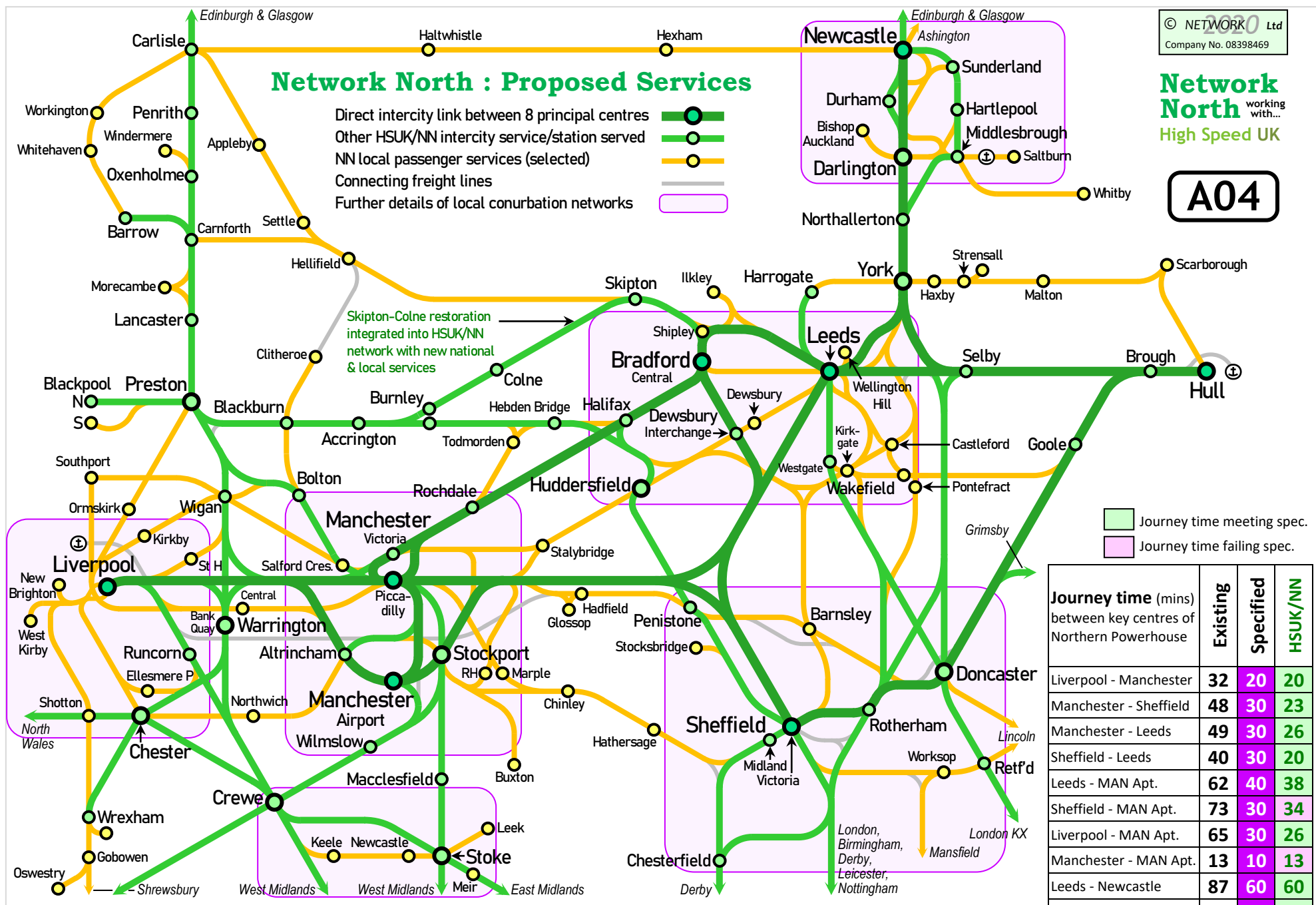
Sleaford

**Figure I03B : Proposed HSUK / Network North Major Works for Passenger Services**

**##** New Transpennine tracks for passenger or freight traffic

**Network North : Proposed Services**

- Direct intercity link between 8 principal centres
- Other HSUK/NN intercity service/station served
- NN local passenger services (selected)
- Connecting freight lines
- Further details of local conurbation networks



Journey time meeting spec.  
 Journey time failing spec.

Journey time (mins) between key centres of Northern Powerhouse	Existing	Specified	HSUK/NN
Liverpool - Manchester	32	20	20
Manchester - Sheffield	48	30	23
Manchester - Leeds	49	30	26
Sheffield - Leeds	40	30	20
Leeds - MAN Apt.	62	40	38
Sheffield - MAN Apt.	73	30	34
Liverpool - MAN Apt.	65	30	26
Manchester - MAN Apt.	13	10	13
Leeds - Newcastle	87	60	60
Leeds - Hull	55	45	38
Sheffield - Hull	86	60	59

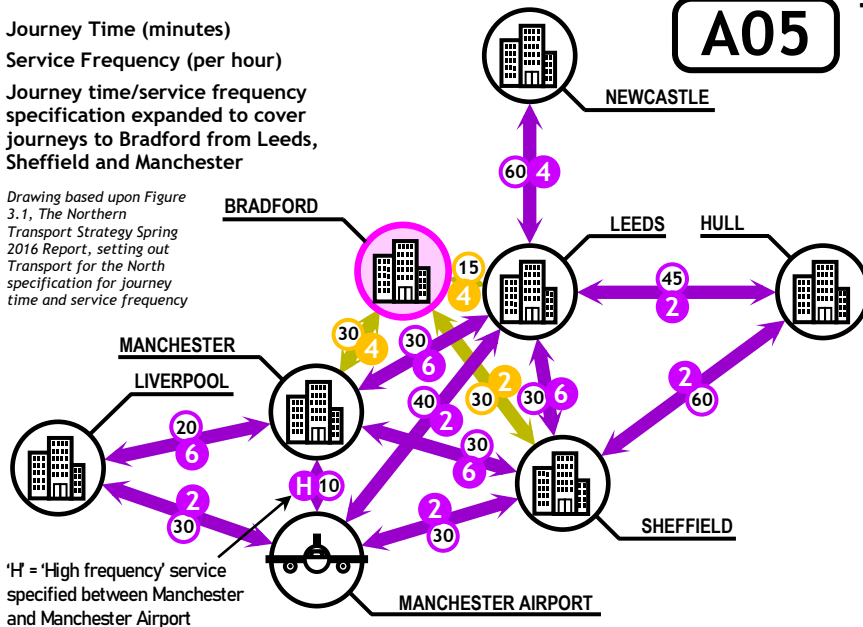
**Figure I03H : HSUK / Network North overall network coverage in Northern Powerhouse**

# A05

## Transport for the North Specification for Intercity Journey Time & Service Frequency (March 2016)

- 60 Journey Time (minutes)
- 4 Service Frequency (per hour)
- 30 Journey time/service frequency specification expanded to cover journeys to Bradford from Leeds, Sheffield and Manchester
- 4

Drawing based upon Figure 3.1, The Northern Transport Strategy Spring 2016 Report, setting out Transport for the North specification for Journey time and service frequency

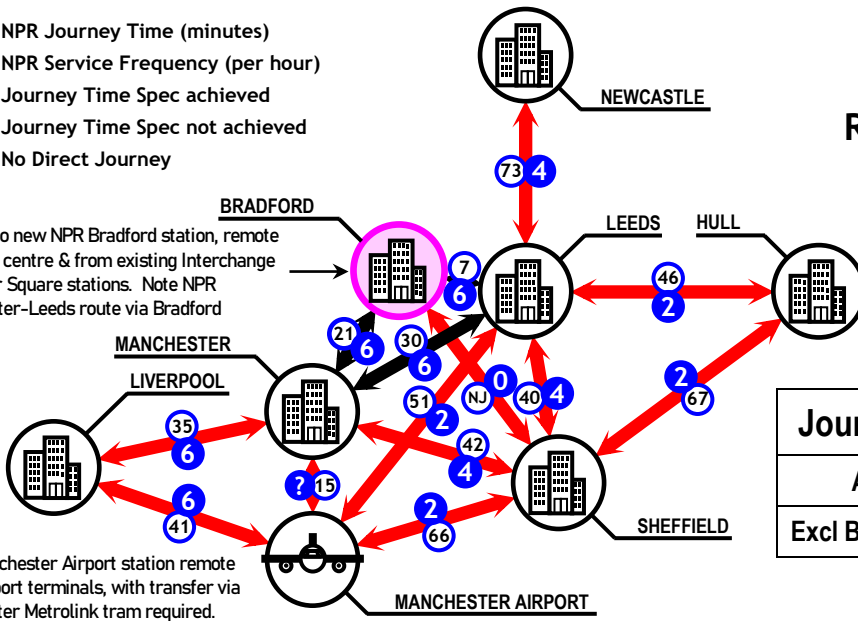


Specified Journey Time (mins)		
Existing Journey Time (mins)		
Liverpool - Manchester	32	20
Manchester - Sheffield	48	30
Manchester - Leeds	49	30
Sheffield - Leeds	40	30
Leeds - MAN Airport	62	40
Sheffield - MAN Airport	73	30
Liverpool - MAN Airport	65	30
Manchester - MAN Apt.	13	10
Leeds - Newcastle	87	60
Leeds - Hull	55	45
Sheffield - Hull	86	60

## Northern Powerhouse Rail Performance against TfN Journey Time / Service Specification (April 2024)

- 60 NPR Journey Time (minutes)
- 4 NPR Service Frequency (per hour)
- ↔ Journey Time Spec achieved
- ↔ Journey Time Spec not achieved
- NJ No Direct Journey

Timings to new NPR Bradford station, remote from city centre & from existing Interchange & Forster Square stations. Note NPR Manchester-Leeds route via Bradford



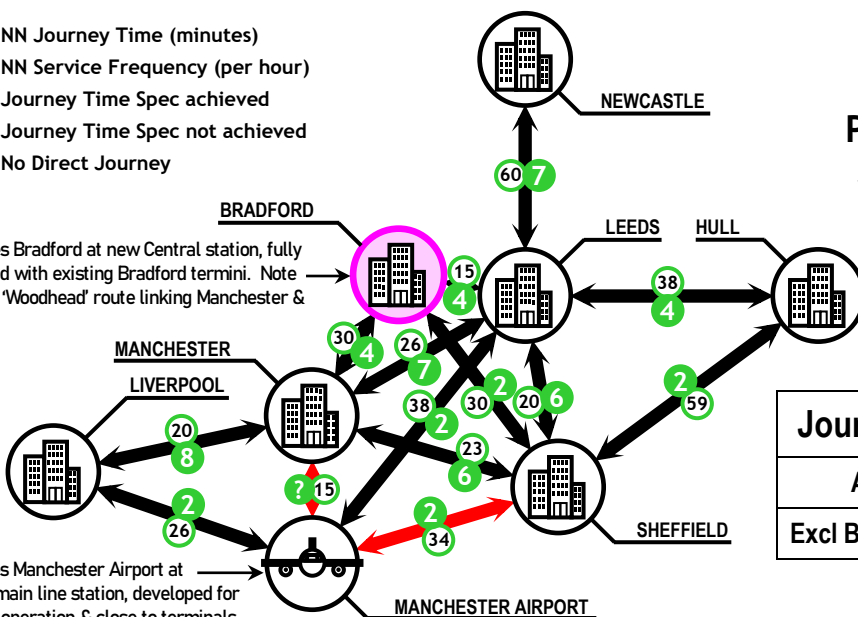
NPR Manchester Airport station remote from airport terminals, with transfer via Manchester Metrolink tram required. Appropriate allowance made in timing calcs.

Journeys	Meeting JT spec	Failing JT spec	Total
All	3	11	14
Excl Bradford	1	10	11

## Network North (NN) Performance against TfN Journey Time / Service Specification (April 2024)

- 60 NN Journey Time (minutes)
- 4 NN Service Frequency (per hour)
- ↔ Journey Time Spec achieved
- ↔ Journey Time Spec not achieved
- NJ No Direct Journey

NN serves Bradford at new Central station, fully integrated with existing Bradford termini. Note separate 'Woodhead' route linking Manchester & Leeds

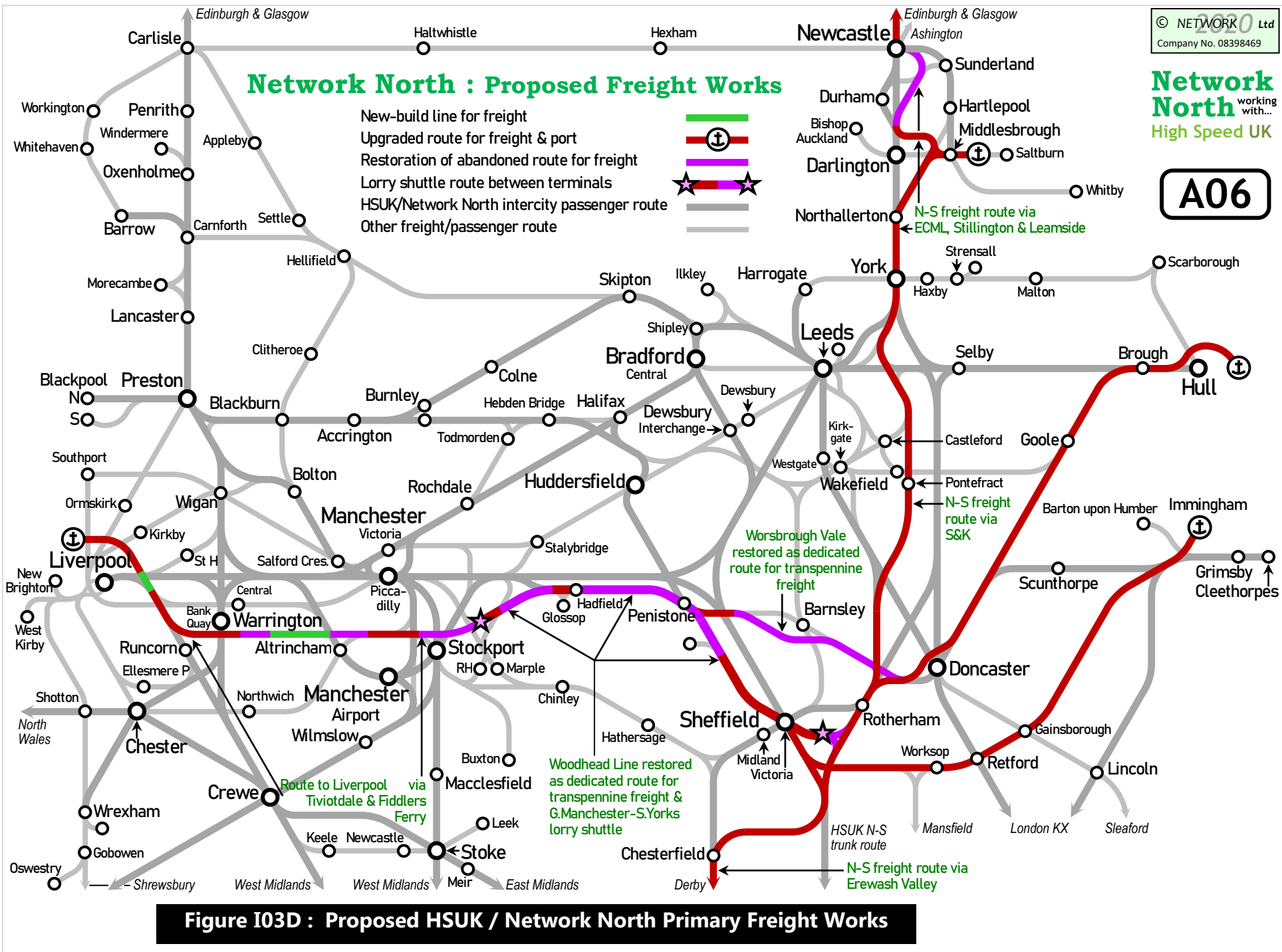


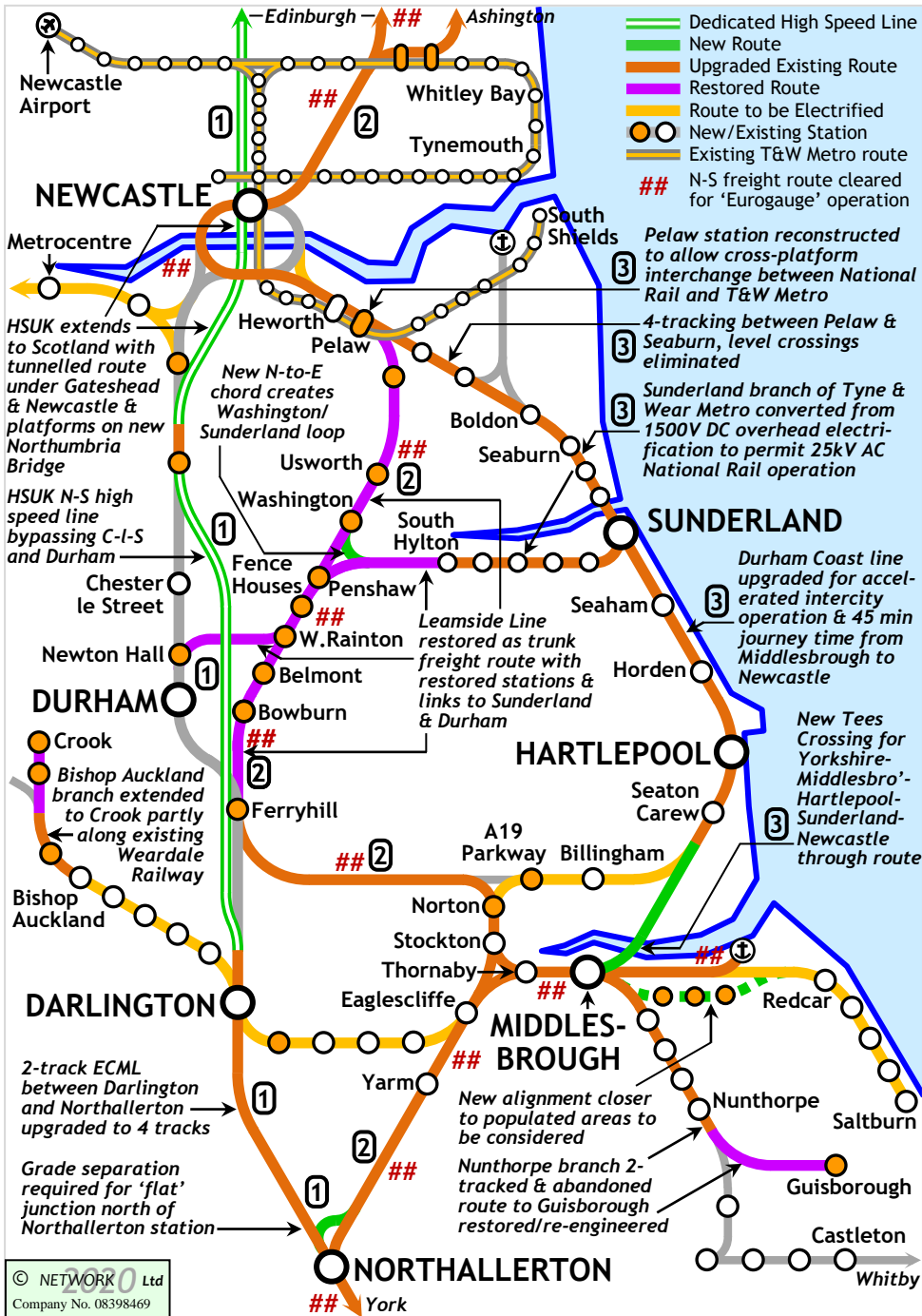
NN serves Manchester Airport at existing main line station, developed for 'through' operation & close to terminals.

Journeys	Meeting JT spec	Failing JT spec	Total
All	12	2	14
Excl Bradford	9	2	11

Figure J03D2 : Performance of Network North and NPR against TfN Specification



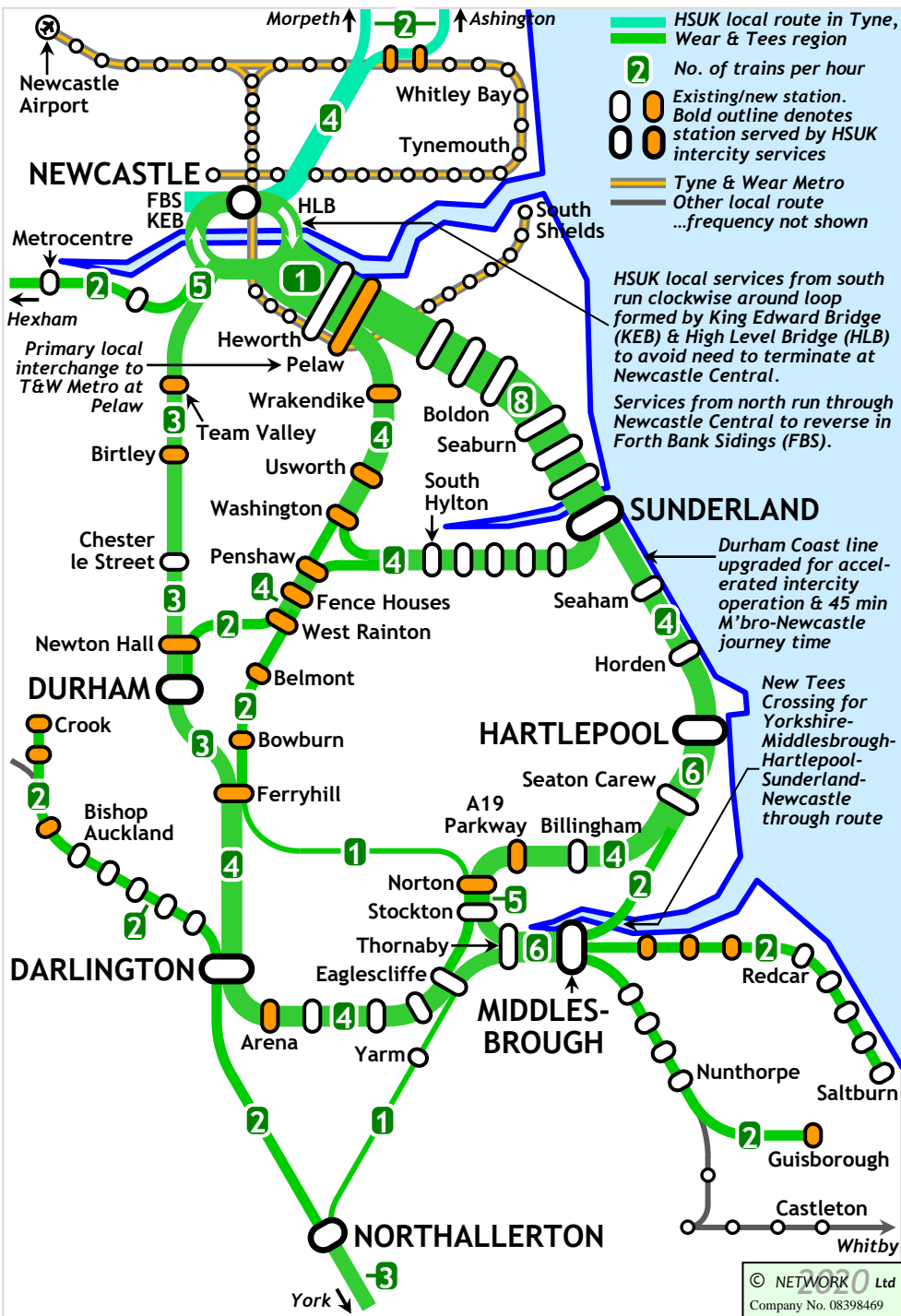




**Figure I12I :**  
**HSUK/NN proposed new works & upgrades in the Tees Valley and North-East England**

**A07TV**

- Primary Interventions proposed by HSUK**
- 1** New Anglo-Scottish high speed line
  - 2** North-South freight spine route including Leamside restoration
  - 3** Development of Durham Coast route as through intercity corridor linking Yorkshire/Middlesbrough/Hartlepool/Sunderland/Newcastle



**Figure I12J :**  
**Indicative HSUK/NN**  
**Tees Valley & North-East**  
**England suburban services**

**A08TV**

Darlington	DL		15	Direct link		
Middlesbrough		MB		No link		
Hartlepool			HP	Total <b>15</b>		
Sunderland				SR		
Newcastle				NE		
Durham				DH		
	DL	MB	HP	SR	NE	DH
No of Direct Links	5	5	5	5	5	5

