



# Travelwatch North West



## Investment in the existing rail network

13<sup>th</sup> June 2019

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# **TfN's Pan-Northern Transport Objectives**

1. Increase efficiency, reliability and resilience in the transport system
2. Transforming economic performance
3. Improve opportunities across the North
4. Promote and support the built and natural environment

# Long Term Rail Strategy (LTRS) Principles (12)

adopted at Rail North Board, June 2017

1. Create the conditions for transformative economic growth **across the whole of the North of England**, as part of rebalancing the national economy, in a socially inclusive way;
7. **Set a series of standards that should apply across the whole of the North of England**, taking regard of the different market sectors (freight, long distance, commuting, leisure) and the particular needs of all parts of the north of England, both urban and rural
9. Seek to do all the above in a cost effective manner, including **identifying ways of delivering these principles and the outcomes necessary to put them into effect in the cheapest possible way**

# LTRS key objectives

## **1. Connectivity**

A step-change in Frequency & Journey time for both passenger & freight

## **2. Capacity**

Longer and additional services to meet existing and future demand, and improvements to the infrastructure to accommodate that

## **3. Customer**

High standards of Accessibility; information; stations; integration; rolling stock etc

## **4. Communities**

Support the social fabric of the communities served

## **5. Cost-effectiveness**

Minimising the cost of operating the north's railway without compromising the quality of service ....enhance(s) the case for additional and faster services

# LTRS Desirable Minimum Standards

which **should form the starting points of interventions & initiatives aimed at delivering the conditional outputs.**

- 1. All passenger routes to be served by a minimum two trains per hour**
2. Long-distance services to ensure average journey speeds of at least 80 mph
- 3. Interurban services to achieve average journey speeds of at least 60 mph**
- 4. Local and suburban services to achieve average journey speeds of at least 40 mph**
5. The North's rail network to accommodate the evolving needs of the freight market - supporting longer and heavier trains, increased path availability and additional gauge clearance.
6. Direct connectivity between economic centres and Manchester airport
7. Rail to directly serve each of the North's airports, with direct services to economic centres within the airport's catchment
8. Direct connectivity between tourist destinations and economic centres in their catchments
9. Infrastructure to be available to enable a weekday interpeak level service on Sundays & public holidays
10. Capacity provision aligned to holiday patterns and events
11. The 5 major ports in the North (Hull, Immingham/Grimsby, Liverpool, Teesport, and Tyne) to be served by W12 loading gauge & Route Availability 10 without being subject to any 'RT3973' speed restrictions
- 12. Improve the average speed of freight services in the North by 50% over the next 10 years**

The standards will not be appropriate nor deliverable in all circumstances. TfN will work with its stakeholders to understand **local requirements** before developing interventions & **may see the standards applied in a different way, to meeting local needs.**

# Desirable Minimum Standards re Preston

60mph for interurban services

- Inc to Blackpool North, Leeds, Liverpool, Manchester etc

40 mph for local services

- Inc to Blackpool South; Ormskirk, Colne etc

**2 trains per hour to (& from)**

- Blackpool South
- Colne
- Leeds
- Ormskirk

# TfN's 'Statutory partner' duty

This is **set out in the TfN Partnership Agreement with DfT**

- **8.8 TfN will be formally consulted at each stage of the Secretary of State's decision making process for investments within the TfN area through the Rail North Partnership Board**, and the Secretary of State shall ensure that TfN's views shall be reported in any papers submitted to Department for Transport decision making boards and shall ensure that timely feedback from any such decision making board is provided to the Rail North Partnership Board

# HLOS advice to the Secretary of State

(issued through Rail North Partnership Board, 15<sup>th</sup> June 2017)

- adequate **capacity to cater for the growth** set out in the Northern and TPE franchise agreements (and other NoE operators) and its continuation into the subsequent franchises working through the NoE Route Study to identify where such additional capacity is required,
- adequate **capacity to allow for a service of 2 trains per hour on all lines** between the major towns and cities of the north of England, as per the LTRS
- **reduced journey times** for the major towns and cities of the north of England, as in the LTRS
- infrastructure capable of delivering the levels of **reliability specified in the HLOS across the whole of the north of England**, and as required under the Northern and TPE franchise agreements.
- **the Trans-Pennine Route Upgrade** scheme, to deliver the outcomes in full (in particular for greatly increased capacity/frequency, faster journey times, reliability and freight;
- **advanced works in preparation for HS2 and NPR** (e.g. the ECML upgrade, and emerging works on the WCML and to Hull), as identified jointly with TfN and HS2, and their interface with the existing network, including re classic compatible services and released capacity; and
- **adequate capacity to accommodate the rail freight** which Freight Operating Companies wish to carry, particularly across the Pennines, for both current flows with improved productivity particularly through faster journey times, and for the development of new flows

# CP5 schemes (2014 – 2019)

## Completed

- Liverpool – Manchester / Wigan electrification
- Ordsall Chord
- Blackpool – Preston
- Preston – Manchester (mostly complete)
- Lime St remodelling
- Manchester – Stalybridge - LineSpeed Increase (LSI)
- Calder Valley LSI
- Bradford Mill Lane

## Deferred to CP6 (or later/never ?)

- Huddersfield (under TRU)
- Manchester – Stalybridge electrification (under TRU)
- Wigan – Lostock electrification
- Oxford Rd & Piccadilly platforms 15 & 16
- Leeds capacity increase
- Garforth & Church Fenton JTI
- ECML (minor works only done in CP5, at Doncaster)

## Cancelled

- Windermere electrification
- MML electrification north of Kettering (but recently re-instated Kettering – Market Harborough)

# Other schemes since 2016

Scheme	Progress / current position
Cumbrian Coast	Cumbria CC/LEP promoted – TfN supporting. SOBC submitted July 2018. OBC funding approved by DfT April 19
Warrington West	Warrington Council promoting – TfN supporting. New Stations fund bid successful July 2017. Construction underway.
South Fylde line	Blackpool Council/Lancs CC promoting – TfN supporting.
Kirkstall Forge station	WYCA promoted. Opened June 2016. 150,208 passengers in 2017/8
Low Moor station	WYCA promoted. Opened April 2017 133,060 passengers in 2017/8
Ilkeston station	Derbyshire CC promoted. Opened April 2017. 252,772 passengers in 2017/8
Skelmersdale new line	Merseytravel/Lancs CC promoted. TfN supporting. In development.

# DfT CP6 enhancement funding

- Circa £9bn for 2019 – 2024
- DfT not making public the pipeline of schemes (nor telling TfN)
- DfT claims largely allocated for schemes carried over from CP5, inc
  - Hope Valley
  - Oxford Rd & Piccadilly
  - Wigan – Lostock electrification

## **NB all subject to final approvals**

- plus £2.9bn allocated for TRU,
- £3bn would = 32% of CP6 funds
- NoE has 29% of England & Wales population
- So TRU would stop NoE falling yet further behind, but not redress past underfunding of NoE
- And %ages ignore Crossrail 2 (£30bn) and East-West rail
- Also ignores London Tube, Trams (M'Cr & Sheffield), NECA Metro

# DfT funding for new NoE CP6 schemes over and above CP5 carryovers & TRU



# What prospects for Linespeed Increases (LSI)

3 recent LSI schemes

- Liverpool – Manchester: journey times faster than 1930s (at last)
- Preston – Manchester
- Calder Valley; minor reduction in SRTs

Prior to Northern Hub, last English LSI schemes were

- GWML (2019) – re-establishes BR's 1976 times !
- **Walsall – Rugeley (2018)**
- Shirebrook - Mansfield - Kirkby (2009)
- MML (2008)
- WCML (2000 - 2008)
- **BR's early 1990s Sprinter works**

But costs have soared. £4.5million bought/buys

- 1991: 14 miles along Hope Valley (£2.1m in 1991) - Implemented
- 2016: 30 seconds Bradford – Leeds (NWR study) – No chance !

# **Journey Time Improvement CP6 schemes in the rest of England**

- None that we are aware of
- Because they generally fail the standard business case test
- passenger benefits not
- Needs operating cost reduction too
- Combined OpEx saving & passenger benefits give far stronger business cases

# Journey time improvement schemes in Scotland

National Transport Strategy 'Key Strategic Outcomes' for all transport modes, including rail, are:

- **improved journey times** and connections
- reduced emissions
- Improved quality, accessibility and affordability

"In support of the Scottish Ministers' strategy to improve journey times and connections and the priority they accord to this matter, the **Scottish Ministers expect that the outputs of the network will maximise all appropriate opportunities to decrease average journey times (minutes per train mile) across all service groups**" (Scottish HLOS para 6.14)

e.g.

- Perth – Inverness - 20 minutes
- Aberdeen – Inverness - "up to 25 minute reduction"
- even Inverness – Wick/Thurso

# What prospects for TfN – 2tph

- All schemes with business case were included in current franchise
- Remaining schemes are the ‘worst value’ under business-as-usual  
e.g. Carlisle – Whitehaven

## Business-as-usual calculation

- Would require 3 additional diagrams (6 vehicles & 48 staff)
- Additional operating cost - £6million per annum
- Additional revenue - £200,000 per annum
- **Revenue would cover just 3% of additional cost**

Suspected that OPEX is more likely £3m per annum, but revenue would still only cover 7% of business-as-usual cost

# And things have got more difficult since April 2016

- VTEC franchise terminated – won't make payments to DfT
- Other franchises widely reported as being in financial trouble – e.g. SWT, Anglia
- And bidders withdrawing from process e.g. E Mids, Wales
- Or being disqualified – Stagecoach
- EMT franchise just let with negligible enhancements

What chance of DfT agreeing future extra NoE services with business cases so weak that they haven't ever been approved before now ?

# So do things cheaper !

- This all reinforces the need to find better, cheaper ways of doing things
- Fits with
  - LTRS 5<sup>th</sup> 'C'
  - DfT SoFA
  - DfT all other policies

**Difficult to envisage securing significant funds any other way**

**Journey times over the years**

**2016**



**e.g. Preston – Liverpool**

**1968**



It is 28 miles as the crow flies  
How long does it take by train ?

## Journey times over the years 2016



## e.g. Preston – Liverpool 1968



It is 28 miles as the crow flies  
Which in 2017 took 59 minutes = 28mph

# Journey times over the years

## 2016



# e.g. Preston – Liverpool

## 1968



It is 28 miles as the crow flies - which in 2016 took 59 minutes = 28mph

How long did the steam train take in 1968 ?

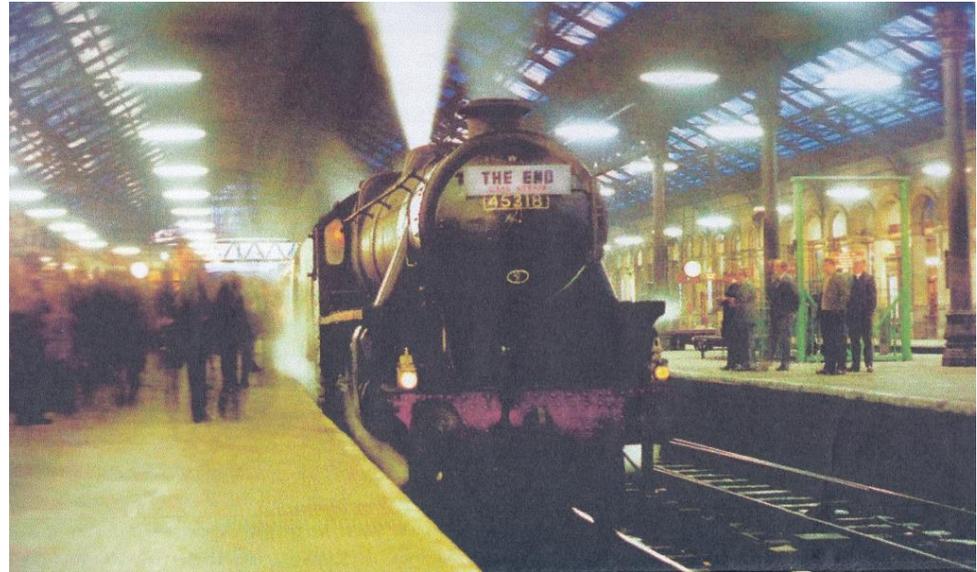
# Journey times over the years

2016



# e.g. Preston – Liverpool

1968



It is 27 miles as the crow flies - which in 2016 took 59 minutes = 28mph

In 1968 the steam train was scheduled to take 38 minutes = 44mph

But this steam train actually did it in 33 minutes = 51mph

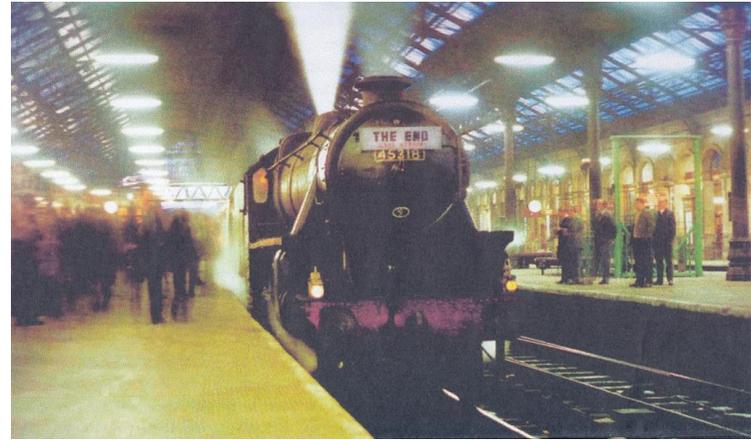
# Journey times over the years

e.g. Preston – Liverpool

## 2016



## 1968



It is 28 miles as the crow flies - which in 2016 took 59 minutes = 28mph

In 1968 the steam train schedule

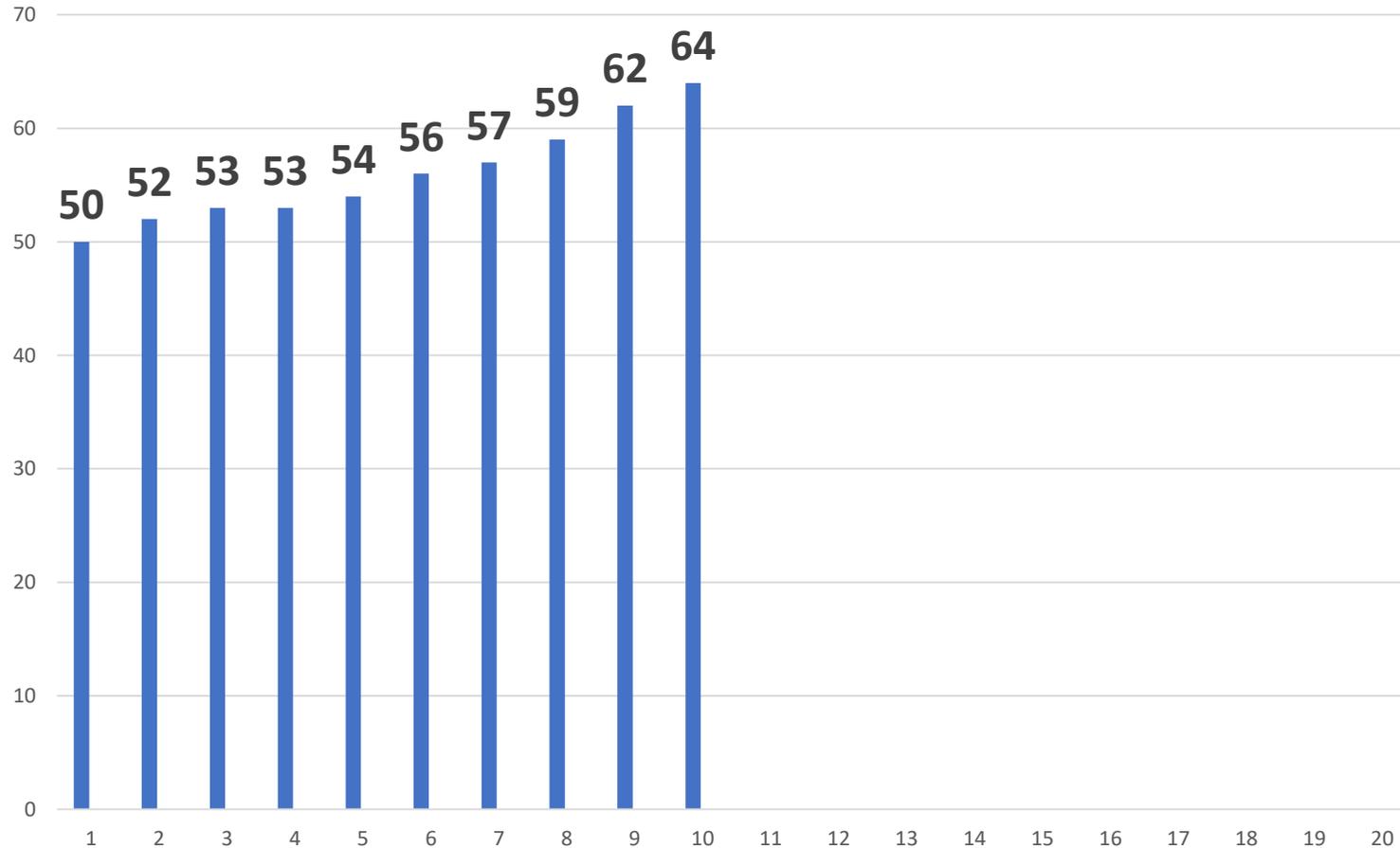
38 minutes = 44mph

Electric trains now take

50 minutes = 34mph

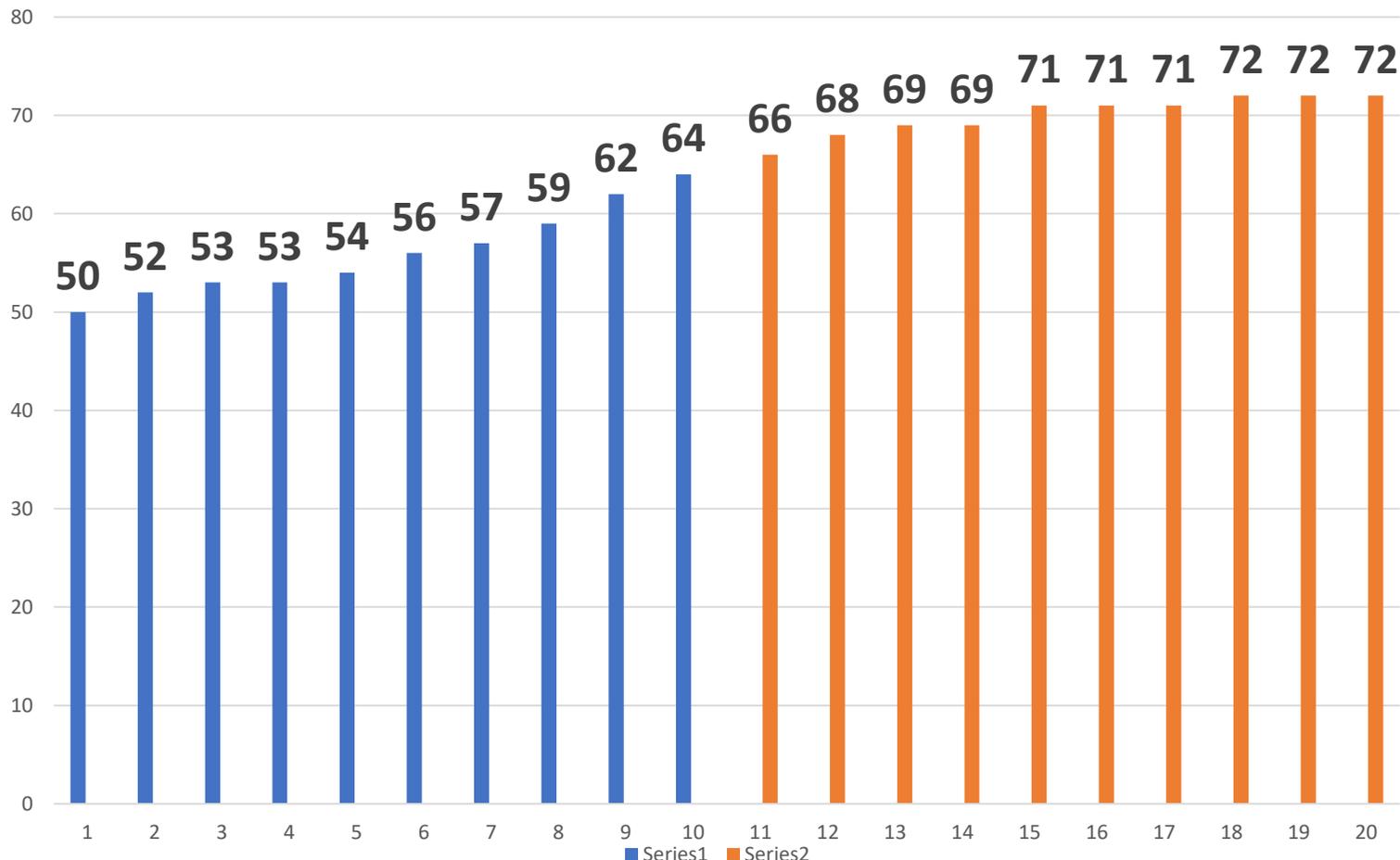
# Manchester – Southport

## 10 fastest journey times (minutes) - 1962



# Manchester – Southport

## 10 fastest journey times (minutes) 1962 vs 2018



# But what if we speed it all up ?

Current	1	2	3	4	1	2	3	4	
Newcastle	08.24	09.24	10.24	11.22	12.22	13.23	14.24	15.24	
Carlisle	09.57	10.46	11.57	12.47	13.54	14.48	15.57	16.50	
Carlisle	10.25	11.35	12.25	13.32	14.36	15.28	16.28	17.28	
Newcastle	11.57	12.59	14.00	15.03	15.58	16.48	17.59	19.07	
	1	2	3	1	2	3	1	2	
Newcastle	08.24	09.24	10.24	11.22	12.22	13.23	14.24	15.24	
Carlisle	09.37	10.26	11.37	12.27	13.34	14.28	15.37	16.30	
Carlisle	09.57	10.46	11.57	12.47	13.54	14.48	15.57	16.50	
Newcastle	11.00	11.58	13.01	13.58	14.56	16.00	16.59	18.02	

# Faster needs less rolling stock and train crews

- With the existing journey times it needs **4 units for an hourly service Newcastle - Carlisle**
- **But a faster service only needs 3 units**
- **Speeding it up would release a unit**
- **Which could be used to increase frequency Carlisle - Whitehaven**

# The way forward - LSIs

- New LSI process,
  - Speed-up sufficiently to operate set frequency with fewer trains
  - So cutting operating costs –
    - highly worthwhile in its own right  
and
    - will strengthen the business case
1. Establish the best possible unconstrained Journey Time – ‘max JTI’
  2. Establish what %age of Max JTI is needed to operate with less units – and calculate potential reduction in Operating cost
  3. Establish capital cost of enhancements

# The way forward - 2<sup>nd</sup> tph

- Do in association with LSIs
- Which will enable it to be done with fewer train sets & crews
- And so at much lower additional cost

e.g. Carlisle – Whitehaven

- **At higher speed 2tph would need only 1 additional train set compared to 3 under business-as-usual**
- So additional cost should be circa £1m per annum
- And extra revenue because faster –
- **Could cover circa 50% of cost (cf just 7% under business-as-usual)**



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