HSUK NORTH-WEST RAIL STRATEGY

For many years, a high speed railway linking London, Heathrow, Birmingham and Manchester has been seen by planners as the core element of a UK high speed rail network. There has also been general acceptance that such a 'North-West Corridor' route will ultimately continue along the axis of the present West Coast Main Line to Edinburgh and Glasgow, and there seems an unarguable logic in a new direct route linking the UK's capital and primary aviation hub with its second and third most populous cities, and ultimately extending to Scotland.

However, this clearly desirable concept is fatally flawed by a) the impracticality of establishing high speed routes through the centres of Heathrow, Birmingham and Manchester (as well as the huge engineering difficulties of the onward route to Scotland) and b) its failure to recognise the wider requirement for high speed rail to comprise a genuine network, capable of linking all of the UK's major centres. Against this latter requirement, a high speed route aligned primarily with the West Coast Main Line, and lacking any transpennine dimension, clearly fails to measure up. To gain maximum connectivity benefits for the North-West from the UK high speed rail initiative, and to avoid the clear dangers of increasing regional economic disparities through increased focus upon London, a trans-Pennine high speed route must be integral to any proposal put forward by the Government. This has been belatedly recognised in the 2014 launch of the Government's 'HS3' initiative.

The following diagrams chart the development of the North-West's rail network, and illustrate the likely impacts of both HS2 and High Speed UK. For precise details of the core High Speed UK proposals (as included in the cost estimates) see the HSUK Regional Maps on www.highspeeduk.co.uk.

NWN1 : NORTH-WEST REGIONAL NETWORK – PRE-1923 GROUPING

The North-West rail network was dominated by 3 major companies, the London North-Western (LNW), the Lancashire & Yorkshire (L&Y) and the Cheshire Lines Committee (CLC) (the latter a local amalgamation of Great Northern, Great Central and Midland railways). Each company (LNW, L&Y and CLC) had separate stations in both primary cities of the region ie Manchester and Liverpool (and with the Great Western's Woodside terminal across the water in Birkenhead, Liverpool effectively had 4 termini). Of these stations, all comprised termini, with the only exceptions being Manchester Exchange/Victoria and Manchester Piccadilly (with 2 through and 12 terminating platforms). Although both Great Central and Midland railways offered intercity services to London via trans-Pennine alignments, the LNW route via Crewe always comprised the primary route, now aligning with the present-day West Coast Main Line. The LNW also operated the other 'West Coast' routes to Liverpool, and via Shap and Beattock to Scotland. The 4 main transpennine routes were operated by separate companies, respectively Hope Valley (Midland), Woodhead (Great Central), Diggle (London North-Western) and Calder Valley (Lancashire & Yorkshire).

NWN2 : WOODHEAD NORTH-WEST REGIONAL NETWORK - CONTEMPORARY

This diagram illustrates the concentration of intercity connectivity at the primary hubs of Manchester and Liverpool. In contrast with the multiplicity of rail terminals which once served these 2 cities, the 1960's and 1970s saw major rationalisation. With the construction of the Merseyrail loop and the Northern line, all local and intercity rail services in Liverpool focussed upon Lime Street Station; whilst in Manchester, construction of the Windsor Link to the west of the city allowed all intercity and most regional services to be integrated upon Manchester Piccadilly; and with the establishment of the Metrolink tram system, good connections now exist to Manchester Victoria on the north side of the city. Further integration has now come about with the Northern Hub scheme, in which the new Ordsall Chord allows trains from Yorkshre on transpennine routes to continue from Victoria to Piccadilly, and onwards to Manchester Airport; but a major drawback is that the entire local system remains reliant on the congested 2-track route between Deansgate and Piccadilly (P/F 13 & 14).

It must be stressed that although the interventions delivered under the Northern Hub scheme bring welcome capacity relief in the Manchester area, they will not deliver the step change benefits of a new railway such as HS2. It will also not deliver significant new freight capacity. It should be noted that with the closure of all cross-Manchester freight routes (ie Tiviotdale via Stockport, the Fallowfield loop in south Manchester and the Rochdale-Bury-Bolton line), all east-west railfreight must pass through either Piccadilly or Victoria stations. The greatest pressure is currently experienced at Manchester Piccadilly, where all trains to the Trafford Park container terminal must pass through the congested through platforms (P/F 13 & 14).

Other centres across the region, such as Chester, Bolton, Wigan and Stockport have seen significant rationalisation, with some services lost but all remaining services operating from a single integrated hub. Stockport, the primary centre to the south of the Greater Manchester conurbation, enjoys a level of intercity connectivity almost equivalent to Manchester Piccadilly, with 3 trains per hour to London, and also Crosscountry and (since the opening of the Hazel Grove chord in 1986) TransPennine services also. Possibly the greatest connectivity deficiency exists at Warrington. Here, east-west trans-Pennine services cross over north-south West Coast services, with no interchange between Central and Bank Quay stations.

NWN3 : CONNECTIVITY OF LOCAL & INTERCITY RAIL NETWORK TO HS2

The HS2 trunk route is projected to follow the axis of the West Coast Main Line, passing under Crewe in tunnel, continuing north between the urban masses of Warrington and Greater Manchester, before connecting to the existing route south of Wigan. Extension along the WCML corridor towards Scotland is projected, but no route has yet been defined. Manchester will be served by a dedicated spur, approaching the city from the south-west. The spur will serve a Manchester Airport station, remote from both airport terminals and existing transport interchange. The spur will then continue in a 12km long tunnel to a central Manchester terminus located adjacent to the existing Piccadilly station. This spur is also planned to form the HS3 route from Manchester to Liverpool. It has yet been explained how HS2's Manchester terminus will have the capacity to accommodate the planned frequency of HS3 services, or enable onward HS3 services to Leeds, which will operate from Manchester Victoria.

HS2 services will only serve 7 stations in the North-West region (as illustrated on the diagrams). Other centres such as Stockport and Chester, currently integral to the intercity network, will be bypassed by HS2, and will be left greatly disadvantaged. To illustrate the quality of the connectivity achieved by HS2, a green/amber/red 'traffic light' system indicates stations within 20/40/60 minutes' direct journey from the nearest station at which high speed services to London are planned.

NWN4 : ALTERNATIVE HIGH SPEED UK AND OTHER DEVELOPMENTS TO LOCAL RAIL SYSTEM

High Speed UK will serve the North-West by means of a transpennine spur, routed via the restored Woodhead corridor. A transpennine high speed rail connection is crucial to creating a symmetric and comprehensive national network of high speed lines. It is the key differentiating element in the High Speed UK proposals, permitting multi-billion savings and radically improved rail connectivity compared with the alternative HS2 proposals. The route will approach central Manchester along existing rail corridors, generally upgraded to 4 tracks along redundant trackbeds to permit local and intercity services to be segregated for optimum capacity. Some expansion of the existing Piccadilly terminus is planned, but most services will need to cross Manchester en route to Liverpool and other destinations further west. A tunnelled route is planned between Ardwick in the west, and Eccles in the west; this will be aligned via Piccadilly Station, with underground platforms below Fairfield Street ie located between the terminating trainshed platforms to the north, and the through Platforms 13 & 14 to the south.

HSUK will then continue towards Liverpool, first running parallel to the existing Liverpool & Manchester 'Chat Moss' Line. HSUK will pass north of Warrington, where a triangle junction will connect to the WCML (effectively analogous to the Grand Junction meeting the Liverpool & Manchester at Earlestown), and continue to Liverpool, parallel to the M62. At Liverpool Lime Street, extra capacity for terminating HSUK services will be created by diverting existing local services onto the Merseyrail system and onwards to the Wirral. This will be achieved by restoring the Waterloo tunnel from Edge Hill, and connecting to the Merseyrail Loop.

NWN5 : CONNECTIVITY OF LOCAL & INTERCITY RAIL NETWORK TO HIGH SPEED UK

HSUK high speed services will directly access 13 regional centres, with services to a far more diverse range of destinations than HS2 can offer. These destinations will include Preston and Blackpool, Chester and Manchester Airport. Connectivity along existing West Coast Main Line routes, both via Stoke to Manchester, and via Stoke and Crewe to North Wales, Liverpool and Scotland will also be maintained. As with HS2, a green/amber/red 'traffic light' system indicates stations within 20/40/60 minutes' direct journey of the nearest station hub. This clearly demonstrates High Speed UK's much greater connectivity which – with shared use of the new underground platforms at Manchester Piccadilly – will also bring major benefits to the regional rail system, allowing more through routeing.

NWN6 : HIGH SPEED UK AND ASSOCIATED FREIGHT DEVELOPMENTS

The HSUK transpennine routeing is part of a wider strategy to increase rail capacity between the North-West and the east-sided conurbations of the East Midlands, South and West Yorkshire and the (English) North-East. The restoration of the Woodhead corridor presents a unique opportunity to achieve a step-change increase in capacity for trans-Pennine railfreight, in terms of both the number of trains operated and also an increase in wagon size to 'Continental Gauge'. But with all transpennine rail routes focussed upon central Manchester ie passing through either Piccadilly or Victoria, and with all diversionary routes having been abandoned during the Beeching era, it is necessary also to scheme a cross-Manchester freight route, linking to an onward route to Liverpool.

This will involve:

- restoration of the abandoned ‘Tiviotdale’ Mersey Valley route via Stockport that was followed by the former Woodhead coal traffic;
- upgrade/restoration of former CLC routes as far as Glazebrook and onwards to join the WCML near Wigan;
- 8km of new railway following the Manchester Ship Canal from Partington to Warrington;
- upgrade of the existing Timperley-Garston route via Fiddlers Ferry;
- upgrade of existing routes to the Liverpool ‘Superport’ at Seaforth, and also Garston Docks.

This will create a largely dedicated freight route able to handle the high volume of trains necessary to ferry containers unloaded at Liverpool from the port to their final destinations – of which perhaps 50% will be on the far side of the Pennines.

Connection of the cross-Manchester freight route to the CLC main line at Glazebrook establishes an alternative rail access to the Trafford Park container terminal. This would avoid the congestion in the Manchester Piccadilly area that currently limits freight flows, and it would also permit Eurogauge operation.

NWN7 : ENHANCED RAIL CONNECTIVITY TO MANCHESTER AIRPORT (AND STOCKPORT)

To improve rail access to Manchester Airport, a new link is proposed from the Stockport-Crewe line. This will extend to the west, and return via Altrincham and Glazebrook to the HSUK main route to Liverpool. This allow direct services to Manchester Airport from all primary cities of the North (ie Liverpool, Manchester, Sheffield, Leeds and Newcastle, as per the One North initiative) and also a large range of more local connections, with most second-tier cities also directly connected. These greatly increased train movements through Manchester Airport are possible with through rather than terminating operation, as presently applies.

The proposed development of transpennine routes to Manchester Airport will also have the effect of greatly enhancing hub function at Stockport, allowing direct high speed services to most UK primary cities. This will also allow viable reopening of the (virtually) closed stations at Denton and Reddish South.

NORTH-WEST REGIONAL NETWORK – PRE-1923 GROUPING

NORTH-WEST RAIL NETWORK : 1

TRANSPENNINE ROUTES

CALDER VALLEY	LANCASHIRE & YORKSHIRE
DIGGLE	LONDON NORTH WESTERN
WOODHEAD	GREAT CENTRAL
HOPE VALLEY	MIDLAND

SOUTHPORT
CHORLEY
BACUP
RAWTENSTALL
HORWICH
ROCHDALE
ORMSKIRK
BOLTON
BURY
HEYWOOD
ROYTON
WIGAN
KIRKBY
MIDDLETON
OLDHAM
MANCHESTER
St HELENS
LEIGH
LIVERPOOL
BIRKENHEAD
SALFORD
VICTORIA/ EXCHANGE
STALYBRIDGE
CENTRAL
PICCADILLY
WEST KIRBY
WIDNES
WARRINGTON
HYDE
GLOSSOP
BIRKENHEAD WOODSIDE
RUNCORN
MARPLE
ELLESMERE PORT
HELSBY
ALTRINCHAM
STOCKPORT
FLINT
NORTHWICH
KNUTSFORD
SHOTTON
CHESTER
BUXTON
MOLD
WILMSLOW
MIDDLEWICH
MACCLESFIELD
CONGLETON
WREXHAM
KIDSGROVE
ALSAGER
CREWE

EXCHANGE
LIME ST
CENTRAL
JAMES ST

KEY

- LONDON NORTH-WESTERN
- LANCASHIRE & YORKSHIRE
- CHESHIRE LINES COMMITTEE
- MIDLAND
- GREAT CENTRAL
- NORTH STAFFORDSHIRE
- GREAT WESTERN
- CAMBRIAN
- WIRRAL RAILWAY
- PRINCIPAL/SECONDARY
- TERTIARY/ LOCAL STATION

DIAGRAM NWN 1

SOUTHPORT
PRESTON & SCOTLAND
CHORLEY
BACUP
BRADFORD
EAST LANCS RAILWAY (restored)
ORDSALL CHORD CONSTRUCTED UNDER NORTHERN HUB SCHEME
MOOR-FIELDS
JAMES ST
LIME ST
CENTRAL
ORMSKIRK
WIGAN
BOLTON
BURY
ROCHDALE
LEEDS
KIRKBY
OLDHAM
MANCHESTER
LIVERPOOL
St HELENS
LEIGH
SALFORD
VICTORIA
STALYBRIDGE
BIRKENHEAD
PICCADILLY
WEST KIRBY
WIDNES
WARRINGTON
HYDE
GLOSSOP
RUNCORN
MARPLE
SHEFFIELD
ELLESMERE PORT
HELSBY
ALTRINCHAM
MANCHESTER AIRPORT
STOCKPORT
FLINT
SHOTTON
NORTHWICH
KNUTSFORD
CHESTER
BUXTON
MOLD
WILMSLOW
MIDDLEWICH
MACCLESFIELD
CONGLETON
WREXHAM
CREWE
LONDON & B'HAM

KEY
- WEST COAST
- TRANSPENNINE
- MERSEYRAIL ELECTRICS
- MANCHESTER METROLINK
- ABANDONED ROUTE
- PRINCIPAL/SECONDARY
- TERTIARY/LOCAL STATION

DIAGRAM NWN 2

NORTH-WEST RAIL NETWORK : 2
NORTH-WEST REGIONAL NETWORK - CONTEMPORARY

SOUTHPORT
SHORT WALKING CONNECTION BETWEEN WIGAN WALLGATE & NORTH-WESTERN STATIONS ASSUMED (5 MINS)
PRESTON & SCOTLAND
CHORLEY
ASSUMED ONWARD HS2 ROUTE TOWARDS SCOTLAND
NPR LEEDS-MANCHESTER ROUTE ORIENTED VIA BRADFORD, WITH CIRCA 33km LONG TUNNEL & 4-TRACKING OF ROCHDALE LINE NECESSARY FOR 30 MINUTE LEEDS-MANCHESTER JOURNEY TIME
ROCHDALE
ORMSKIRK
BOLTON
BURY
EXTRA 10 MINUTES ADDED FOR CHANGE AT MOORFIELDS TO LIME STREET
4% 2
WIGAN
HS2 APPROACHES MANCHESTER PICCADILLY VIA 12km LONG TUNNEL UNDER SOUTHERN SUBURBS
LEEDS
KIRKBY
#
OLDHAM
MANCHESTER
HS2 SECOND PHASE LINKS TO WCML SOUTH OF WIGAN #
LIVERPOOL
St HELENS
SALFORD
VICTORIA
STALYBRIDGE
BIRKENHEAD
POTENTIAL NPR THROUGH ROUTE VIA CROSS-MANCHESTER TUNNEL NO LONGER PREFERRED
HS3 LIVERPOOL-MANCHESTER ROUTE VIA AIRPORT
PICCADILLY
WEST KIRBY
WIDNES
13% 4
HYDE
GLOSSOP
WARRINGTON
4% 3
MARPLE
SHEFFIELD
RUNCORN
ELLESMERE PORT
ALTRINCHAM
18% 4
STOCKPORT
2% 0
HELSBY
HS2 SERVICES ALONG EXISTING WCML TO LIVERPOOL & WARRINGTON
FLINT
SHOTTON
HS2 MANCHESTER AIRPORT STATION LOCATED REMOTE FROM EXISTING AIRPORT TERMINALS & PUBLIC TRANS-PORT LINKS. SHUTTLE CONNECTION ASSUMED
BUXTON
CHESTER
2% 0
CONNECTIVITY DATA BASED UPON HSUK ASSESSMENT OF HS2 SCHEME, ADDRESSING 31 KEY HUBS OF UK RAIL NETWORK
WILMSLOW
MACCLESFIELD
AVE. JOURNEY TIME REDUCTION
No OF CITIES DIRECTLY LINKED
CONGLETON
HS2 LINKS TO WCML SOUTH OF CREWE #
WREXHAM
6% 4
CREWE
LONDON

KEY
- HIGH SPEED NETWORK & HUBS WITH HS LINKS TO LONDON
- STATIONS AT 20/40/60 MINUTES FROM HS HUB
- STATION AT >60 MINUTES OR REQ^{G} FURTHER CHANGE
- MERSEYRAIL ELECTRIC NETWORK

DIAGRAM NWN 3

NORTH-WEST RAIL NETWORK : 3
CONNECTIVITY OF LOCAL & INTERCITY RAIL NETWORK TO HS2 (DEVELOPED AS 'Y')

NORTH-WEST RAIL NETWORK : 4

HIGH SPEED UK AND OTHER DEVELOPMENTS TO LOCAL RAIL SYSTEM

MERSEYRAIL LOOP TRANSFORMED INTO 'FIGURE OF 8', PARTLY UTILISING EXISTING WATERLOO TUNNELS, AND LINKING TO EXISTING NETWORK AT EDGE HILL

SOUTHPORT

MOOR-FIELDS

JAMES ST

LIME ST

CENTRAL

BIRKENHEAD

ORMSKIRK

PRESTON & SCOTLAND

CHORLEY

NEW NORTH TO SOUTH FREIGHT LINK AT EDGE HILL

WIGAN

KIRKBY

HSUK ALIGNED PARALLEL TO M62

St HELENS

LIVERPOOL

WEST- & EAST-FACING LINKS TO HSUK FROM WCML NORTH OF WARRINGTON

LOWTON

#68

#72

#71

#70

#69

WIDNES

GLAZEBROOK

WEST KIRKBY

#72

HSUK CONNECTS TO LIVERPOOL & MANCHESTER AT WAVERTREE ON APPROACHES TO LIME STREET STN.

HSUK ALIGNED PARALLEL TO M62

WARRINGTON

RUNCORN

HELSBY

TIMPERLEY-GARSTON LINE UPGRADED FOR GAUGE-ENHANCED FREIGHT ROUTE TO LIVERPOOL

NEW LINE FOLLOWING MANCHESTER SHIP CANAL

SOUTH MANCHESTER FREIGHT BYPASS VIA GLAZEBROOK & CULCHETH BRANCH

FLINT

ELLESMERE PORT

SHOTTON

CHESTER

NORTHWICH

ONWARD LINK FROM MANCHESTER AIRPORT TO ALTRINCHAM AND TO HIGH SPEED UK

WREXHAM

NEW STATIONS AT # NEWTON HEATH, CLAYTON BRIDGE, LITTLEMOSS & ASHTON WEST

BOLTON

BURY

SECOND HSUK TRANS-PENNINE ROUTE LINKING MANCHESTER & BRADFORD. 14km NEW TUNNEL & 4-TRACKING OF ROCHDALE LINE

ROCHDALE

HIGH SPEED UK APPROACHES MANCHESTER PICCADILLY ALONG UPGRADED EXISTING RAIL ROUTES WITH ONWARD ROUTE TO LIVERPOOL VIA TUNNELLED PLATFORMS AT PICCADILLY & CROSS-MANCHESTER TUNNEL (ALSO USED BY LOCAL SERVICES ON BOLTON-STOCKPORT AXIS) TO ACCESS LIVERPOOL & MANCHESTER

ROUTE VIA ASHTON MOSS NORTH JN UPGRADED FOR NEW STOCKPORT-VICTORIA LOCAL SERVICE

LEEDS

MANCHESTER

OLDHAM

SALFORD

VICTORIA

STALYBRIDGE

LONDON S.YORKS W.YORKS NORTH-EAST SCOTLAND

NEW TUNNELS BYPASSING BROADBOTTOM & HADFIELD

#67

#65

#66

PICCADILLY

#64

#63

HYDE

GLOSSOP

NEW LINK TO STYAL LOOP TO CREATE AIRPORT LOOP

MARPLE

NEW STOCKPORT-MARPLE LINK VIA HIGH LANE

CHAPEL en le FRITH

ALTRINCHAM

MANCHESTER AIRPORT

STOCKPORT

SOUTH MANCHESTER FREIGHT BYPASS VIA TIVIOTDALE

NEW PASSENGER SERVICES TO CHAPEL-EN-LE-FRITH ALONG EXISTING FREIGHT LINES

BUXTON

KNUTSFORD

DIRECT LINK FROM STOCKPORT-CREWE LINE TO MANCHESTER AIRPORT

WILMSLOW

MACCLESFIELD

STOCKPORT-STOKE ROUTE UPGRADED WITH EXTENSIVE 4-TRACKING AS PRIMARY MANCHESTER-BIRMINGHAM ROUTE

CONGLETON

NEW LONGPORT-CREWE LINK FOR REORIENTED WCML VIA STOKE

CREWE

STOKE

UPGRADES/NEW ROUTES MARKED # TO BE CONSTRUCTED TO ACCOMMODATE CONTINENTAL-SIZED 'EUROGAUGE' ROLLING STOCK

KEY

- DEDICATED HIGH SPEED LINE
- UPGRADED EXISTING ROUTE
- NEW ROUTE & NEW STATION
- RESTORED ROUTE
- #24 LINK TO EXISTING NETWORK

DIAGRAM NWN 4

MERSEYRAIL LOOP TRANSFORMED INTO 'FIGURE OF 8', LINKING TO EXISTING NETWORK AT EDGE HILL & CONTINUING TO WIGAN & WARRINGTON & NEWTON-L-W

MOOR-FIELDS
JAMES ST
LIME ST
CENTRAL

EXTRA 10 MINUTES ADDED FOR CHANGE AT MOORFIELDS TO LIME STREET

43% 27

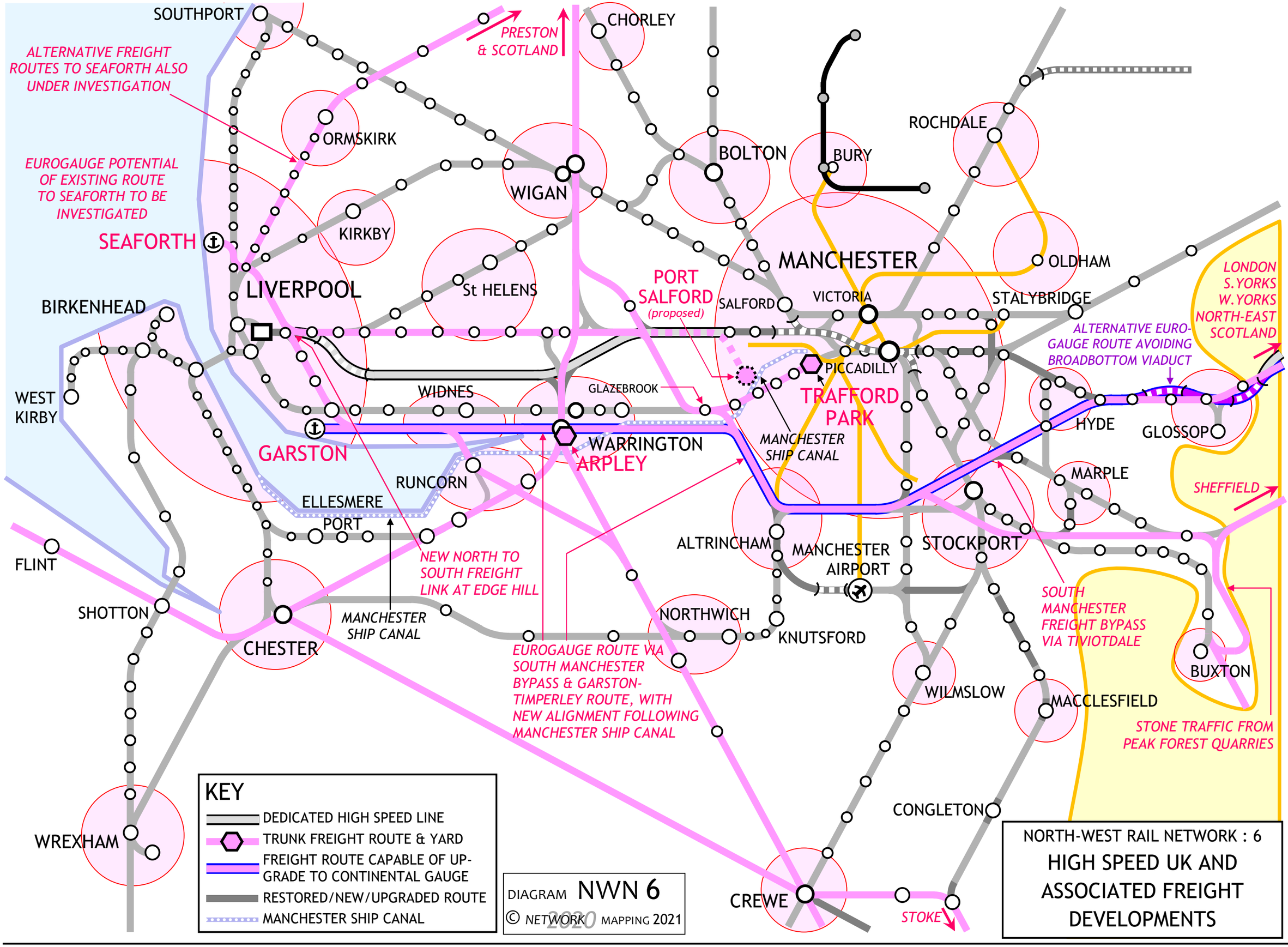
SOUTHPORT
ORMSKIRK
PRESTON & SCOTLAND
SHORT WALKING CONNECTION BETWEEN WALLGATE & NORTH-WESTERN STATIONS ASSUMED (5 MINS)
CHORLEY
WIGAN
KIRKBY
St HELENS
NEWTON le WILLOWS
LOWTON
BOLTON
BURY
ROCHDALE
NEW STATIONS AT NEWTON HEATH, CLAYTON BRIDGE, LITTLEMOSS & ASHTON WEST
HIGH SPEED UK APPROACHES MANCHESTER PICCADILLY ALONG UPGRADED EXISTING RAIL ROUTES WITH ONWARD ROUTE TO LIVERPOOL VIA TUNNELLED PLATFORMS AT PICCADILLY & CROSS-MANCHESTER TUNNEL (ALSO USED BY LOCAL SERVICES) TO ACCESS CHAT MOSS LINE
ROUTE VIA ASHTON
* MOSS NORTH JN UPGRADED FOR NEW STOCKPORT-VICTORIA LOCAL SERVICE
LEEDS
LIVERPOOL
BIRKENHEAD
MANCHESTER
OLDHAM
VICTORIA
SALFORD
STALYBRIDGE
LONDON
S.YORKS
W.YORKS
NORTH-EAST
SCOTLAND
NEW TUNNELS BYPASSING BROADBOTTOM & HADFIELD
PICCADILLY
42% 29
WEST KIRBY
WIDNES
WARRINGTON
RUNCORN
MERSEYRAIL ELECTRIC SERVICE EXTENDED (DUAL VOLTAGE) TO WARRINGTON, NEWTON-L-W & WIGAN
43% 23
STOCKPORT
HYDE
GLOSSOP
MARPLE
CHAPEL en le FRITH
ELLESMERE PORT
HELSBY
AVE. % JOURNEY TIME REDUCTION
No OF CITIES DIRECTLY LINKED
ALTRINCHAM
MANCHESTER AIRPORT
45% 28
FLINT
SHOTTON
KNUTSFORD
NORTHWICH
43% 13
DENTON & REDDISH SOUTH STATIONS SERVED BY FREQUENT TRAINS TO STOCKPORT, MANCHESTER AIRPORT, MANCHESTER VICTORIA & GUIDE BRIDGE
BUXTON
CHESTER
42% 12
CONNECTIVITY DATA BASED UPON HSUK TIMETABLE COVERING 32 KEY HUBS OF UK RAIL NETWORK
TRANSPENNINE HIGH SPEED SERVICES VIA NEW MANCHESTER AIRPORT LOOP
WILMSLOW
MACCLESFIELD
PRIMARY MANCHESTER-BIRMINGHAM LINK VIA CONGLETON
NEW PASSENGER SERVICES TO CHAPEL-EN-LE-FRITH FROM HOPE VALLEY ROUTE ALONG EXISTING FREIGHT LINES
DIVERSION OF LOCAL SERVICES TO MERSEYRAIL ALLOWS LIME STREET STATION TO BE DEDICATED TO TERMINATING INTERCITY TRAFFIC
POSSIBLE SPLITTING POINT FOR 400m LONG HIGH SPEED SERVICES AT CREWE
CONGLETON
WREXHAM
CREWE
32% 20
STOKE

KEY
- HIGH SPEED NETWORK & HUBS WITH HS LINKS TO LONDON
- STATIONS AT 20/40/60 MINUTES FROM HS HUB
- STATION AT >60 MINUTES OR REQ[G] FURTHER CHANGE
- MERSEYRAIL ELECTRIC NETWORK

DIAGRAM NWN 5
© NETWORK MAPPING 2021

NORTH-WEST RAIL NETWORK : 5

CONNECTIVITY OF LOCAL & INTERCITY RAIL NETWORK TO HIGH SPEED UK


SOUTHPORT
ALTERNATIVE FREIGHT ROUTES TO SEAFORTH ALSO UNDER INVESTIGATION
EUROGAUGE POTENTIAL OF EXISTING ROUTE TO SEAFORTH TO BE INVESTIGATED
SEAFORTH
ORMSKIRK
KIRKBY
PRESTON & SCOTLAND
CHORLEY
WIGAN
BOLTON
BURY
ROCHDALE
OLDHAM
MANCHESTER
LIVERPOOL
St HELENS
PORT SALFORD (proposed)
SALFORD
VICTORIA
STALYBRIDGE
BIRKENHEAD
WEST KIRBY
WIDNES
GLAZEBROOK
PICCADILLY
TRAFFORD PARK
ALTERNATIVE EURO-GAUGE ROUTE AVOIDING BROADBOTTOM VIADUCT
LONDON
S.YORKS
W.YORKS
NORTH-EAST
SCOTLAND
HYDE
GLOSSOP
GARSTON
WARRINGTON
ARPLEY
MANCHESTER SHIP CANAL
RUNCORN
MARPLE
SHEFFIELD
ELLESMERE PORT
FLINT
NEW NORTH TO SOUTH FREIGHT LINK AT EDGE HILL
ALTRINCHAM
MANCHESTER AIRPORT
STOCKPORT
SHOTTON
CHESTER
MANCHESTER SHIP CANAL
NORTHWICH
KNUTSFORD
EUROGAUGE ROUTE VIA SOUTH MANCHESTER BYPASS & GARSTON-TIMPERLEY ROUTE, WITH NEW ALIGNMENT FOLLOWING MANCHESTER SHIP CANAL
SOUTH MANCHESTER FREIGHT BYPASS VIA TIVIOTDALE
BUXTON
WILMSLOW
MACCLESFIELD
STONE TRAFFIC FROM PEAK FOREST QUARRIES
CONGLETON
WREXHAM
CREWE
STOKE
KEY
DEDICATED HIGH SPEED LINE
TRUNK FREIGHT ROUTE & YARD
FREIGHT ROUTE CAPABLE OF UP-GRADE TO CONTINENTAL GAUGE
RESTORED/NEW/UPGRADED ROUTE
MANCHESTER SHIP CANAL
DIAGRAM NWN 6
© NETWORK 2020 MAPPING 2021
NORTH-WEST RAIL NETWORK : 6
HIGH SPEED UK AND ASSOCIATED FREIGHT DEVELOPMENTS

SOUTHPORT
CHORLEY
PRESTON & BLACKPOOL
BLACKBURN & BURNLEY
BRADFORD & BURNLEY
ORMSKIRK
WIGAN
BOLTON
BURY
ROCHDALE
SERVICES TO MANCHESTER AIRPORT VIA NEW TUNNELLED CROSS-CITY ROUTE AND ALSO VIA NEW ORDSALL CHORD
LEEDS
KIRKBY
LIVERPOOL
St HELENS
MANCHESTER
OLDHAM
BIRKENHEAD
LOWTON
SALFORD
VICTORIA
STALYBRIDGE
S.YORKS
W.YORKS
NORTH-EAST
NOTTINGHAM
PICCADILLY
WEST KIRBY
WIDNES
NEW LINK TO STYAL LOOP TO CREATE AIRPORT LOOP
HYDE
GLOSSOP
WARRINGTON
MARPLE
CHAPEL en le FRITH
RUNCORN
ELLESMERE PORT
ALTRINCHAM
STOCKPORT
HELSBY
FLINT
KNUTSFORD
DENTON & REDDISH SOUTH STATIONS SERVED BY FREQUENT TRAINS TO STOCKPORT, MANCHESTER AIRPORT, MANCHESTER VICTORIA & GUIDE BRIDGE
SHOTTON
NORTHWICH
BUXTON
CHESTER
TRANSPENNINE HIGH SPEED SERVICES VIA NEW MANCHESTER AIRPORT LOOP
WILMSLOW
MACCLESFIELD
CONGLETON
WREXHAM
CREWE
STOKE

KEY

DIRECT SERVICE TO MANCHESTER AIRPORT ON HIGH SPEED LINE/ OTHER ROUTE

STATION DIRECTLY LINKED TO MANCHESTER AIRPORT

DIAGRAM NWN 7

NORTH-WEST RAIL NETWORK : 7

ENHANCED RAIL CONNECTIVITY TO MANCHESTER AIRPORT