

Stakeholder Perspectives: the West Coast Partnership

a report by

Greengauge 21 for West Coast Rail 250

October 2017



Contents

1.	Introduction	2
2.	Economic plans and ambitions	4
3.	Overview of wider rail network developments	10
4.	Released Capacity & HS2 Service Specification	19
5.	Conclusions on the West Coast Partnership	33
Ann	ex A: Strategic Economic Plans	39
,		00

1. Introduction

This report represents the findings of research collaboration between Greengauge 21 and stakeholder group West Coast Rail 250 (WCR250). We have examined the development potential for the West Coast corridor, identifying stakeholder needs and the opportunities that HS2 will bring from 2026/7 onwards.

The aim is to provide WCR250 with the evidence needed to inform its stance on the upcoming West Coast Partnership (the combined intercity and HS2 franchise to be let by DfT, based on the prospectus issued by DfT in January 2017). In particular, the report aims to inform Ministerial and DfT decision making and serve as an input for WCR250 to use in discussion with those intending to bid for the West Coast Partnership (three bidders have been short-listed).

The work is also intended to help shape WCR250's approach to (as yet) un-finalised aspects of HS2 such as the hub station at Crewe. Greengauge21 will also use the output from this work to help inform its planned update of the original national high-speed rail strategy document (*Fast Forward*).

Our work comprised five elements:

- A review of LEP/stakeholder economic plans and ambitions (carried out by WCR250). This identifies where rail is critical to sustaining economic activity, or where connectivity acts as a constraint to growth or productivity gains
- A strategic-level assessment of relevant (rail) developments. Greengauge 21 met informally with TfN and with Transport Scotland to understand their aspirations for the west coast rail corridor, its development with HS2 and the relationship with Northern Powerhouse Rail
- An examination of the question of released capacity, including a review of existing work (including by Greengauge 21 for HS2 Phase1) and, more recently by DfT (July 2017). This includes consideration of the impacts of Phase 2A and informs a proposed set of principles that could guide service development (including implications for HS2 services)
- An integrating strategic level assessment that focuses on key parts of the corridor (including the devolved nations and major English regions/sub-regions) and pulls together the implications for rail in the West Coast corridor. It covers key output requirements such as the accommodation of railfreight; achieving progress towards the 3-hour target for London – Glasgow/Edinburgh; the importance of connectivity between intermediate locations on the WCML; and the question of providing connections between HS2 Phase1/2A/2B and the existing network
- A proposition for WCR250 to use in relation to the development of the West Coast Partnership (franchise) and a narrative that shows how the preferred pattern of investment and service development will help deliver against stakeholder economic and social ambitions.

The report is structured as follows:

- A consideration of the economic plans along the line is contained in Chapter 2 (with a summary of relevant LEP plans at Annex A), together with an exposition of the mechanisms by which enhanced rail connectivity can help realise economic ambitions
- An assessment of development plans and options to connect and interface with the HS2 route is set out in Chapter 3
- Chapter 4 contains a summary of the opportunities for the use of released capacity following HS2
- Key findings and conclusions are drawn together in Chapter 5.

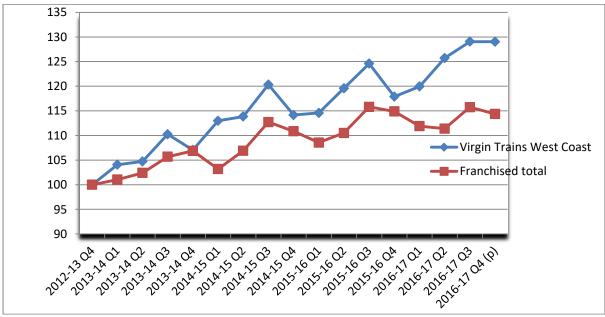
2. Economic plans and ambitions

The starting point for understanding the key outcomes of investment in the West Coast Main Line (WCML) is a consideration of the economic plans along the route and the role rail connectivity can play in helping to deliver them. This section therefore considers:

- i. The background evidence on growth of travel on the route.
- ii. The mechanisms by which rail connectivity improvements can lead to economic benefits.
- iii. The Strategic Economic Plans (SEPs) prepared by Local Economic Partnerships (LEPs), together with relevant sub-regional economic plans in Wales and Scotland; and the key common themes emerging from these plans in relation to rail connectivity, illustrated by example case studies.

Growth of travel on the WCML Franchise

Passenger journeys across the franchised network have grown by around 14% across the four-year period from the start of 2013. In this same period, passenger growth on Virgin Trains West Coast (VTWC) has been at *more than double* this rate: 29%. These growth rates have diverged more sharply in recent years (see below).



Source: ORR: Normalised data: Q4 2012-13 = 100.

The seasonal variation by quarter is also noteworthy: seasonality appears greater on the West Coast, particularly in relation to lower demand in the first 3 months of each calendar year (Q4FY data). This reflects lesser reliance on year-round commuter travel compared with the network as a whole and the *relatively greater importance of tourism traffic*.

Relationship between rail connectivity and economic benefits

The conventional approach to measuring connectivity benefits to the economy is through user benefits, driven by time savings for those who are already travelling or who are induced to travel by rail by the improvements introduced. However, in seeking to understand how this proxy quantification converts into real economy effects, there are several key mechanisms by which these benefits are transmitted to consider.

The first and most important of these is the stimulation of improved economic output through better business to business connectivity. As the cost of travel and travel time between locations reduces, businesses are more likely to engage with each other. This increases business opportunities between urban areas and regions and leads to increased economic activity. Econometric analysis undertaken by Network Rail has shown that there is a statistically significant positive link between effective density (a proxy for business to business connectivity) and economic outputs, which is measurable in Gross Domestic Product (GDP) per worker.

The second area is the labour market benefit of improving rail connectivity. As the perceived cost of travel between population areas and urban centres reduces, people are more likely to commute to a job that better matches their skills; this allows employers to choose from a deeper pool of prospective employees and better match those employees to the activities at which they will be most productive, increasing the productivity of the business and increasing overall economic output.

As with the London labour market, better connectivity in the regions also enables individuals (and their partners) to develop their careers across more than one economic sub-region without moving family homes.

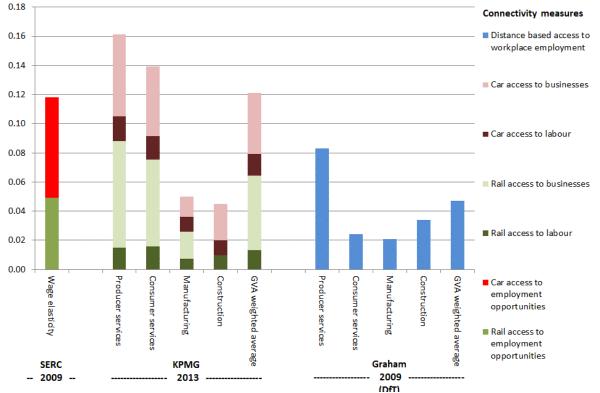
The third area of particular importance to the WCML is the encouragement of tourismrelated activity. Key factors here are:

- Direct service opportunities, to encourage discretionary travel;
- Links to/from airports: there is evidence that direct services from airports will stimulate significant additional trips;
- Customer experience, which in turn depends on factors such as rolling stock quality.

Complementary to leisure tourism is conference travel, an important subset of business travel. There are several WCML city economies for which conferences are an important source of income – and rail travel is a vital part of their competitive offer.

The relationship between connectivity improvements and economic benefits is illustrated in the graph below (on page 6), reproduced (with permission) from desk research undertaken by AECOM on behalf of Transport Scotland. It compares elasticity research findings –the responsiveness of economic benefits (measured on the vertical axis) to potential changes in connectivity by different transport modes and for different economic impacts (shown in the colour key). The units on the vertical axis are the proportionate change in economic benefits for a unit change in connectivity; for example, the KPMG research found that a 100%

improvement in rail connectivity to businesses would lead to around a 7% improvement in economic productivity.



Connectivity elasticities – a research summary

Caution should be used in interpreting the results of this *meta* analysis, since methodologies may vary. Nevertheless, the analysis suggests that:

- rail connectivity is a stronger driver of economic benefits than its mode share alone would suggest;
- rail access to businesses has the strongest proportionate response;
- it is producer services professional and other business services that benefit most from connectivity improvements (and in these employment sectors, the KPMG work confirms that rail connectivity has a bigger proportionate effect than road connectivity).

Strategic Economic Plans

We examined the economic plans of authorities in the West Coast Corridor with these broad conclusions on the linkage between economic activity and rail connectivity in mind.

We found coherent argument as to the linkages between the economic aspirations of a given area, and the role transport and rail can play to unlock this – as summarised below

Source: Aecom for Transport Scotland

and in Annex A, where we provide a comprehensive summary of the connectivity and broader economic plans for the English LEP areas in the West Coast Corridor.

A good example of a Strategic Economic Plan which identifies a programme of measures to stimulate a regional economy and supporting transport interventions is provided by Lancashire's Strategic Economic Plan (see panel below). The plan provides examples of the close fit between Lancashire's economic aspirations and the roles that enhanced rail connectivity can play in realising them, including:

- The focus on Preston as a regional growth hub for inward investment boosted by both its role as a station on the HS2 service network and the opportunity to unlock direct and more frequent connections to other (non-HS2) WCML destinations such as Milton Keynes. The LEP estimate that there would be a lifetime economic benefit of £150m.
- Intervention priorities for Blackpool and its tourist market where the release of rail capacity could allow improved rail services.
- Labour market skills interventions (especially for young people) complementary release of capacity for enhanced local rail services to widen realistic job and training search opportunities.

Lancashire Strategic Economic Plan (2014)

Key Plan Element 1 sector development programme to improve the capability and capacity of Lancashire's competitive strengths in advanced manufacturing - especially in aerospace, automotive and energy.

Key Plan Element 2 major research and innovation programme to enable Lancaster University and the University of Central Lancashire (UCLan) to expand and develop national centres of excellence linked to the delivery of local economic priorities.

Key Plan Element 3 a skills for growth programme , underpinned by a capital investment strategy consistent with agreed economic priorities, including a new Apprenticeship Hub to drive-up SME engagement and the local take-up of apprenticeships as career pathways.

Key Plan Element 4 an enhanced business growth hub to strengthen the support given to high growth SMEs.

Key Plan Element 5 an enhanced strategic marketing and investor development function to transform Lancashire's inward investment performance.

Key Plan Element 6 the development of a renewal strategy for Blackpool to sustain the growth of the visitor economy and address severe local housing market challenges.

Transport Intervention 1 a strategic transport programme to release the economic and housing growth potential of Preston, East Lancashire, Lancaster, and Skelmersdale in West Lancashire, strengthen cross-boundary connectivity with neighbouring city regions, and maximise the local advantage of national infrastructure initiatives such as HS2.

Transport Intervention 2 request for Lancashire's full 10-year funding allocation to be made available through the competitive elements of the Local Growth Fund over the 3-year period 2017/18 to 2019/20.

Transport Intervention 3 establish a HS2 Growth Hub at Preston station to strengthen the recommendations of the HS2 Growth Taskforce.

We also found examples of more localised specific regeneration opportunities and the role a railway station with improved services can play in helping realise it in Coventry and Warwickshire's SEP (see panel following).

Coventry and Warwickshire Strategic Economic Plan (2014)

Economic Opportunity – Friargate Employment Site

A very major mixed use development project adjacent to Coventry station. The first phase is close to completion. In total, the masterplan sets out:

- Up to 2,350,000 sq ft of Grade A office space across 14 buildings
- Up to 215,000 sq ft of shops, restaurants and bars
- Up to 450,000 sq ft of hotel space across two buildings
- Up to 400 new homes
- Up to 110,000 sq ft of leisure use
- Vastly improved public space
- 15,000 new jobs once complete

Connectivity Opportunity – Coventry Station

Friargate is expected to contribute to growth in rail patronage at Coventry station of 2m trips per annum by 2023. This would mean a stronger role for Coventry as a commuter destination station, with implications for service aspirations and possibly for the station car park, given that part of its current rail-heading role may well switch to Birmingham Interchange post-HS2, with pressure on seat capacity at Coventry reduced accordingly. The case for local service enhancement is improved, for example by securing an increase in train service frequency between Coventry-Bedworth-Nuneaton.

Coventry is a location where, with HS2 in place, intercity services on the WCML can be restructured and along with them, new and better opportunities for rail connections can be provided. The 20-minute interval Birmingham – London Euston service currently provided by VTWC leaves limited seats for those joining train in peak periods at key intermediate stations such as Coventry – and also has the effect of limiting other local and regional services (which operate on a 30/15-minute headway pattern) because of the impact on available line capacity. Re-structuring the fast Coventry – London service to a 30-minute interval (once HS2 is in place with Birmingham – London passengers transferred to HS2) would likely mean *more* intercity seats available from Coventry to London, not fewer. With this change, from 2026, it also ought to be possible to add a second hourly cross country service through Coventry, providing the city with a direct link to the East Midlands and Yorkshire that it currently lacks as well as potential direct links with Walsall and the Black Country, *and* accommodate a though service from Kenilworth to Birmingham.

Rail Connectivity and North Wales

The North Wales Economic Ambition Board prepared a Vision Statement in July 2016 that summarises the economic priorities for the region and the investment priorities needed to achieve it. Improving infrastructure across the region is one of three priorities within the Vision, alongside supporting business growth/innovation and investing in skills to foster jobs growth. Transport and digital are identified as critical, and on rail investment the vision is:

"Investment also needs to take place in the North Wales railway network – the electrification of the railway line is a priority as well as improving the frequency, speed and the quality of rail services and the rolling stock"¹

The need to integrate rail services between the WCML and North Wales is critical to securing economic growth. Work undertaken by Greengauge 21 in 2015/6 investigated a number of rail investment scenarios. The most comprehensive upgrade of services including electrification of the North Wales line, 6 trains per hour and a direct connection on to HS2 was projected to grow rail demand within North Wales/Chester by 42% and lead to economic benefits of between £3.1bn and £4.5bn across the full life of the project.

This would be a step change in economic performance. The forecast growth rate for the regional economy – based on current trends – is 1.9% between 2016-2035. However, delivery of the Growth Vision and Strategy could increase the value of the North Wales economy from £12.8 billon to £20 billion by 2035 – representing a growth rate of 2.8%. Further evidence in relation to the economic impacts of rail investment in North Wales is in preparation, under the auspices of the cross-border rail taskforce of Growthtrack 360.

Whilst it is not possible to extrapolate precisely from these North Wales analyses, the analysis gives a clear indication of the economic value of connecting more peripheral areas into the High Speed Rail network. An analogous location in England in the West Coast corridor would be Cumbria, which has economic parallels through sectors such as tourism and nuclear.

¹ <u>http://wcnwchamber.org.uk/wp-content/uploads/2016-08-Vision-for-North-Wales-Economy-FINAL-VERSION.pdf</u>

3. Overview of wider rail network developments

The first phase of HS2 now has Royal Assent, and is on track for opening in 2026.

In this section, we look beyond HS2 Phase 1 and cover:

- i. Progress on Anglo-Scottish studies and the northern part of the WCML
- ii. The choices at Crewe when Phase 2a is built
- iii. The interface between HS2 and the plans and aspirations of Transport for the North and Midlands Connect
- iv. Connections with HS1
- v. Digital Railway programme.

Anglo-Scottish studies and the northern part of the WCML

Development of ways to progress towards a 3-hour London-Glasgow/Edinburgh journey time has been the subject of work chaired by DfT in a four-way grouping of Transport Scotland/DfT/HS2 Ltd/Network Rail since Westminster and Holyrood Ministers signed an agreement to work together on that basis in Spring 2015. As of September 2017, there has been no published report of further progress.

A large part of the West Coast Route Modernisation programme (1998-2008) was in practice concentrated on renewals rather than upgrades. It was needed to make good a long period of deferred expenditure and it was very substantially focussed on the section of the route south of Crewe, with only minimal work carried out north of Crewe. This suggests strongly that investments on the Crewe – Glasgow section of the WCML should be given priority in the next Control Period (CP6) covering 2019-2024.

Earlier work on options of route upgrade and new sections of high-speed line were carried out by HS2 Ltd. A Greengauge 21 review of the <u>HS2 Ltd study</u> exposed limitations of this work, particularly when it came to assessments of Network Rail infrastructure upgrade options.

Under the ongoing 4-way study management, Network Rail has reviewed investment options, and these include, for example, bypasses for Shap and Beattock, along with local schemes at places such as Carlisle and the idea of allowing higher cant deficiency on existing curves.

The ambition to connect Scotland with London using high-speed rail is long-standing and supports wider policy objectives in the energy, environmental and tourism sectors, and the WCML is critical to achieving this aim. For example, as long ago as 2009, the Transport, Infrastructure and Climate Change Committee of the Scottish Parliament concluded:

"Whilst the Committee would not wish to prescribe in this report a specific route for a new high-speed line, it is essential that any new line serves both Edinburgh and Glasgow in order to maximise the benefits for Scotland" "The Committee notes that the Minister seems to agree that the three-hour journey time is of significance, and recommends that any new high-speed rail line is developed with the aim of permitting this journey time between Scotland and London."²

Within Scotland, a new HSR line between Carstairs and Rutherglen could save 15 minutes on Glasgow journey times, bypass a number of flat junctions and free capacity for regional and local services in the Greater Glasgow area. Between Rutherglen and Glasgow Central, the slow lines could be enhanced and in effect taken over by high-speed services: they are effectively unused at present. A 400m platform could be added at Glasgow Central.

Combining upgrade and bypass measures north of Crewe with the planned HS2 infrastructure could achieve journey times London-Glasgow/Edinburgh of 3h15. HS2 Phase 2b (due in 2033) reduces journey times by 4-5 minutes from the base times offered by Phase1/2a in 2027.

As earlier research into the views of <u>northern stakeholders</u> by Greengauge 21 showed, developing plans for the northern segment of the WCML needs to take into account the rich variety of passenger services that operate over the route, many of which serve the key intermediate stations in Lancashire, Cumbria and South West Scotland (and of freight). Published HS2 service plans remove existing direct London trains from these stations unnecessarily.

The scale of plausible future increased service levels was outlined by Greengauge 21 and published at a conference held in Scotland in August 2015. This envisaged an increase in service levels by 2030, with more than a doubling of services foreseeable. Since this table (see below) revealed at that conference was published, some of the new services have been announced (for example, the Liverpool-Scotland service committed in the new TransPennine Express (TPE) franchise).

² (§71 and §78 respectively, AP219, Climate Change Committee, 2009)

http://www.scottish.parliament.uk/S3_TransportInfrastructureandClimateChangeCommittee/Reports/Report_on_the_po_tential_benefits_of_high-speed_rail_services.pdf

Route	2015	2030
Glasgow - Euston	1	1-2
Edinburgh - Euston	-	1
Carlisle - Euston	peak only	1
Glasgow - Birmingham	0.5	1
Edinburgh – Birmingham	0.5	1
Glasgow - Manchester	0.5	1
Edinburgh - Manchester	0.5	1
Glasgow/Edinburgh –Liverpool	-	1
Glasgow – Carlisle - Leeds	-	0.5
Aberdeen – Manchester/Birmingham	-	0.5
Total	3+	8.5

Source: Greengauge 21, September 2015

The implication is that consideration of this part of the national rail network needs to consider capacity as much as speed – and this conclusion is reinforced by consideration of Anglo-Scottish railfreight which is experiencing steady rates of annual growth.



Cross-border railfreight; WCML and M6 motorway in the Lune Gorge. Photo: Greengauge 21

This is an area of benefit that is often underplayed by conventional DfT-compliant appraisals, which take as input assumptions current and only fully committed (and funded) train services with prospective freight traffic increases treated with great caution, despite their very substantial wider economic benefits.

The evidence from earlier studies by Network Rail and Greengauge 21 are positive on the case for investment in this northern WCML corridor. The Network Rail study 'New Lines' reported in 2009, before HS2 Ltd started work, and envisaged a high-speed line as shown below.



Source: Network Rail

The Network Rail report concluded:

"By continuing the high-speed line... to Glasgow (2hrs 16mins) and Edinburgh (2hrs 9mins), a much bigger market could be tapped and a significant modal shift from air to rail realised....This transformed the business case generating revenue and benefits worth almost £55bn....The line, over the course of 60years, paid for itself 1.8 times over....A new high-speed line to Scotland more than pays for itself"³

The Greengauge 21 work was reported in the Fast Forward report also published in 2009 which provided the following breakdown of corridor cost benefit appraisals, which showed a very good return on investment over the northern segment of the WCML:

Corridor	High Speed North West		High Speed North	High Speed North East	
New HSR infrastructure	London – Birmingham	Manchester –	London – Leeds /	Newcastle –	
	/ Manchester	Glasgow /	Newcastle	Edinburgh	
		Edinburgh			
Benefit:cost ratio	2.9:1	7.6:1	2.0:1	1:1	
Net Present Value (£ bn,	24	23	15	0	
2002 prices)					

In contrast to this earlier evidence, recent DfT appraisals, for various reasons including their inability to attribute value to capacity benefits from the type of investments on offer, we understand are showing much lower levels of economic return. It could also be that the commercial returns to Government from expanded franchise services are not being fully

³ https://www.networkrail.co.uk/newlinesprogramme/

reflected. It is notable that the longer distance services in the northern WCML corridor are in effect operating at a surplus; the evidence for this is that the cross-border TPE service expansions form part of a franchise bid's additional benefit, not a response to a DfTspecified service obligation. The implication is such services are commercially viable (otherwise franchise bidders wouldn't offer them) and capable of adding to the premiums paid by passenger franchise holders.

In a recent examination of the rail market between London and Edinburgh/Glasgow, environmental campaign group *Transform Scotland* noted that rail market share grew from 20% to 33% over the period from 2005 to 2015, bringing significant environmental benefits.⁴ The Glasgow-London rail market – which benefitted from the west coast upgrade and Virgin Trains' 'VHF' timetable increased its market share from 15% to 32% over the same period.

Progress on the Anglo-Scottish rail market has been considerable – a real success story – and the West Coast Partnership is an opportunity to build on this further in the period to 2027.

The choices at Crewe when Phase 2a is built

In *High Speed Two: From Crewe to Manchester & the West Midlands to Leeds and beyond* (November 2016), the Government supported an earlier conclusion of work undertaken by Network Rail that, if the Crewe Hub scheme is to be taken forward, it should be located at the site of the existing station.

According to DfT⁵, Network Rail and HS2 Ltd have been "assessing a range of options for Crewe that could:

- Facilitate local services;
- Allow more HS2 stops;
- Accommodate splitting and joining of 400m HS2 and this means in turn that other destinations such as Stoke-on-Trent could be served by a high-speed (HS2) service;
- Give a connection back onto the Phase 2b HS2 network north of Crewe, so that more HS2 trains can stop at Crewe."

These options were set out in the Crewe Hub consultation launched in July 2017. It is essential that there are connections to HS2 both south and north of the station, to allow services in both directions to leave HS2, call at Crewe Hub, attach and detach portions, and re-join HS2 beyond the station.

⁴ See A Greener Journey to Growth <u>http://transformscotland.org.uk/wp/wp-content/uploads/2017/08/A-Green-Journey-to-Growth-Transform-Scotland-report.pdf</u>

⁵ See <u>https://www.gov.uk/government/publications/hs2-phase-two-strategic-case</u> published July 2017 paragraphs 3.35 *et seq*

The interface between HS2 and Transport for the North (TfN) and Midlands Connect (MC) plans and aspirations

The emergence of sub-national transport bodies is a development that should foster a closer alignment between rail developments and the wider social and economic aims of the English regions.

It remains likely that, with continuing Government support, TfN could achieve statutory status before the end of 2017. It will then have a formal locus in relation to the WCP. While this will not be at a level matching its substantial role through Rail North in the tendering (although no longer oversight of) the Northern and TPE franchises, it will be a suitable route through which ambitions for the North, including aims related to better city – city rail connectivity within the North, could be expressed.

The TfN overall strategy will not be known until later in 2017. Currently, work is focused on so-called 'touch-points' between HS2 Phase 2b plans and east west connectivity aims. TfN's objectives for Northern Powerhouse Rail released in September 2017 have seven deliverables, the first of which would see a new line between Liverpool and the HS2 Manchester Spur *via* Warrington. It would require a serious acceleration and prioritisation for this scheme to be achieved by 2033: it most likely lies significantly beyond the period of WCP operation. Lower cost alternatives could see an upgrade of existing route(s) between Liverpool and Manchester in the meantime. The case for a new line relies on the diversion of Liverpool–London services from the West Coast onto HS2, with new connections required to provide a suitable fast route for HS2 services into Liverpool.

Another key 'touch-point' is Manchester Piccadilly where the potential for creating a lower level or same-level set of platforms for future service expansion is being considered.

The National Infrastructure Commission recently called upon Ministers to "introduce the hybrid Bill for Phase 2a (Birmingham to Crewe) of High Speed 2 and publish the finalised route for Phase 2b (Crewe to Manchester and Birmingham to Leeds), including connections with High Speed 3...by the end of July 2017". These timescale ambitions were met, although the question of connections with 'HS3' was addressed a little later, by the Chancellor of Exchequer, on October 2nd, with an announcement of £300m investment in Northern Powerhouse rail projects 'to link HS2 with faster services between Liverpool, Manchester, Sheffield, Leeds and York'.

The initial *One North* strategy of 2014 set out the basis of what became Northern Powerhouse Rail and can perhaps be criticised for focusing on connectivity between the six largest cities/city regions (and Manchester Airport). The WCML provides a way to address the accessibility needs of some of the wider set of places in the North of England that have economic significance and rail connectivity needs, including: Carlisle, Whitehaven/Workington, Barrow-in Furness; the Lake District stations; Lancaster, Blackpool, Preston and Blackburn & East Lancashire; Wigan and Warrington. These connectivity ambitions may well find expression in TfN documents in due course. Midlands Connect's ambitions were published in a strategy document of March 2017. It identified six *Intensive Growth Corridors* of which the first two are addressed by the WCML:
1. Birmingham – Coventry/Leicester – Northamptonshire – Milton Keynes and the South, and includes connections to Kettering, Corby and the East of England;
2. Birmingham – Black Country – Staffordshire and the North, and includes connections to Telford, Shrewsbury and North Wales.

The first of these can be addressed by a suitably defined service level for fast limited stop services on the WCML once Phase 1 of HS2 is open in 2026. The reference to Kettering/Corby and the East of England can be addressed by services operated through Leicester from the West Midlands or by interchange at Milton Keynes into the East West Rail (EWR) once it is developed. The potential significance of Milton Keynes acting as a rail hub station to meeting these aspirations is worth noting.

The second ambition is likely to be largely fulfilled by franchised services other than those of the WCP, but connectivity around Crewe Hub as well as at Stafford could be instrumental in helping create a usefully joined-up network of services. More generally, Midlands Connect wants to see greater certainty around the creation of a set of services to use the capacity released on the WCML by HS2.

And in Birmingham, there remains the question of station connectivity: how Curzon Street is to be properly connected with the existing network of national and regional rail services at New Street.

Connections with HS1

The planned connection with HS1 was dropped from the Phase 1 Parliamentary Bill in summer 2015. There is no clarity on how travellers between the two high-speed lines (Euston–St Pancras) – are expected to make the necessary transfer.

While Greengauge 21 (and others) have continued to press for a suitable solution, it is not clear that anything beyond a better signed walking route is intended. Provision of a transit link is clearly beyond the remit of the WCP and yet the franchise would be a key beneficiary should such a connection be introduced. A through rail link to HS1 from Old Oak Common remains the best option.

Digital Railway programme

Network Rail is developing outline business cases for several potential applications of digital railway technology. The Transport Secretary announced in September that funding had been allocated to Network Rail to work up a business case for the application of digital technology on the trans Pennine route. The WCML does not feature in the initial set of candidate schemes for which a specific fund of £450m has been set aside for digital railway technology development and application.

But there are, along the WCML, areas where digital train control system applications could bring significant benefits – and in some cases – at lower costs than traditional railway infrastructure schemes would require. A specific example would be in the Crewe area.

The work on Crewe Hub is likely to require modernisation and a rationalisation of the out of date track layout. Re-signalling could take place in CP6. If this is combined with digital railway technology, the capacity constraints on the routes north of Crewe which, following Phase 2a will experience additional demand in terms of train paths, might be relieved.

Digital train control systems could also assist with the operation of the mix of train speeds over the WCML more widely, between Crewe and Glasgow.

Chapter 3 Conclusions: Implications for the West Coast Partnership (WCP) specification

The WCP should replace the published HS2 service plan for north of Preston services (which has trains stopping only at Carstairs, where a divide and join operation is proposed) with a plan for cross-border HS2 trains usually calling at Carlisle and Preston. Planned Euston – Preston HS2 trains should be extended to serve Lancaster, Oxenholme, Penrith and Carlisle.

The WCP should be obligated to support – and as necessary lead – the development of infrastructure improvements to support a progressive speed-up and expansion of services north of Preston, working in partnership with Network Rail and – in the likely absence of Government funding – providing the finance and funds to progress investment needed to secure benefits for passengers. This could include digital railway applications if these are not selected for funding by Government.

Bidders should be encouraged to expand their service offers above those specified in tender documents (if these envisage minimal or no increase in service levels over today's levels).

The WCP service plan should provide for the complementary wider connectivity aims of the emerging TfN and MC strategies as well as emerging plans from relevant local authorities, noting the important role of hub stations and the implications this might have for investment and for timetabling philosophy.

Decision-making on Crewe (hub) station may be taken during the WCP procurement period. WCR250 should support a major upgrade with a fully integrated station design that facilitates easy interchange with and between 'classic' line services; provides for dividing and joining 400m trains; provides for a northside connection for HS2 trains to serve Crewe hub and regain the Phase 2b infrastructure when it is built; provides for an expansion of classic line services at Crewe; provides for exemplary passenger interchange facilities; allows for increased freight capacity; and allows for a very significant easing of the current speed restriction for all non-stopping trains during the currency of the Phase 2a operating period.

The WCP should engage with others to put in place a suitable arrangement for passengers travelling on HS1 and HS2 services and needing to transfer between them.

4. Released Capacity & HS2 Service Specification

A key benefit of HS2 – the release of capacity on the WCML – was the subject of an <u>earlier</u> <u>study by Greengauge 21</u> that focused on the effects of <u>Phase 1</u>. Work on producing a Swissstyle interval timetable resulted in much improved connectivity with a timetable as shown below.

West Coast Main Line: summary of potential service improvements following HS2 Phase 1

Lichfield Trent Valley, Tamworth and Nuneaton Twice hourly fast services (London and Manchester/Chester) Today: fast services in peak period only Wolverhampton Twice hourly London service (one via Walsall) Today: hourly service **Birmingham New Street** Twice hourly fast service to Milton Keynes, Watford Junction and London Today: three/hour London, hourly to Milton Keynes and Watford Junction **Coventry Corridor** Four local services/hour as needed for local stations Today: twice hourly Two Cross Country services hourly Today: hourly **Coventry & Birmingham International** Fast London trains on a 30 minute interval Today: 20 minute interval Direct connections hourly to Derby, Sheffield, York and Newcastle Today: no direct services Rugby 30 minute interval fast service to London and the North West Today: hourly London service, no regular fast service to North West Northampton London service five trains/hour, one non-stop (46 minutes) Today: three/hour, fastest 59 minutes **Milton Keynes**

Nine fast London trains each hour *Today: 3/hour* Direct hourly service to Scotland and Liverpool *Today: Scotland 1 per day, Liverpool 2 per day* Twice hourly direct services to Manchester *Today: 1/hour* Twice hourly fast West Midlands services *Today: hourly and none in commuter peaks* Twice hourly service to Clapham Junction *Today: one/hour*

Bletchley and Leighton Buzzard

Twice hourly service to Clapham Junction Today: one/hour

Cheddington

Twice hourly service Today: hourly

Tring

Six trains/hour Today: four/hour

Hemel Hempstead

Six trains/hour Today: five/hour

Watford Junction

Seven non-stop London Euston trains/hour *Today: three/hour* Hourly interval service to each of Liverpool, Manchester and Preston *Today: one service/day (each)* 30 minute interval Clapham Junction service *Today: hourly* Harrow & Wealdstone 30 minute interval service to Clapham Junction *Today: hourly* Wembley Central Twice hourly non-stop service to London Euston *Today: no fast service* 30 minute interval Clapham Junction service *Today: hourly*

Source: Greengauge 21, February 2011

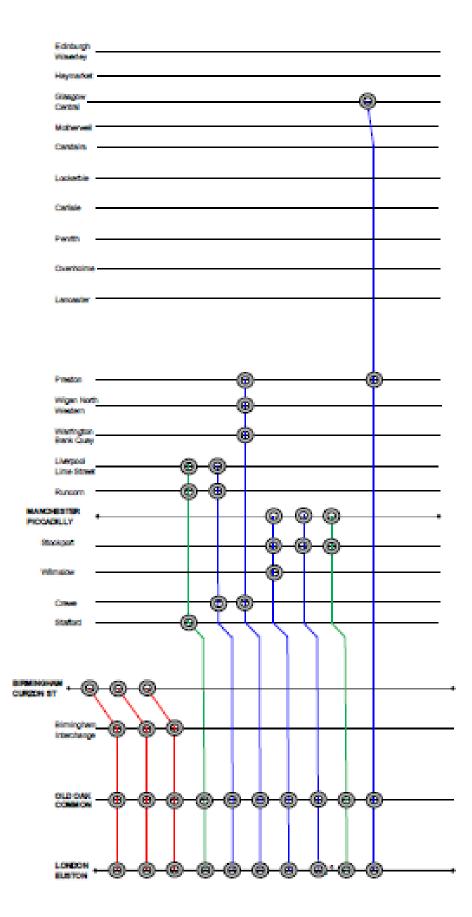
Work by *Centro/TfWM* looked at better use of the Rugby – Birmingham line; and more recently, work for DfT released as part of the strategic case update of July 2017 concentrated on Phase 2b, but also highlighted the effects of Phase 2a.

Of greatest interest are studies related to Phase 1/2a since these directly affect the West Coast Partnership (WCP). To date, no commitments of any sort have been made to the levels of intercity services (ICWC) that would operate on the WCML once HS2 is in operation. Neither, in fact, is there any commitment to the level and pattern of service that will be operated on HS2 itself. The widely-assumed service pattern on HS2 is that used in business case appraisals, but this takes no account of the possibility of adaptation or, for example, a 'soft launch' of an initial service.

Nevertheless, "the 'initial model specification' for the high-speed services as developed by HS2 Ltd to assist scheme design" is seen as a starting point for the Partnership to "develop and adapt this early model to provide the best service possible for passengers on both HS2 and the reconfigured ICWC services."⁶

The assumed service pattern of the Euston HS2 trains per hour following Phase 2a (2027) is shown below. Since the publication of this diagram in January 2016 that distinguishes operation by presumed train type, the decision has been taken that the Phase 1/2a HS2 rolling stock fleet will not be split into two train types ('classic compatible' and European gauge). Instead, the HS2 fleet is expected to be of a uniform design. This increases hugely the scope for WCP bidders to develop variants to the HS2 service plan, since all HS2 trainsets could (in theory) operate anywhere on electrified networks.

⁶ The West Coast Partnership; The Route to High Speed Rail, Department for Transport, January 2017, p22



Note: HS2 services coded green use Handsacre Junction; Blue Crewe; red London-Curzon St Source: HS2 Phase 2 West Midlands to Crewe: Economic Case, DfT January 2016

It will also be noted that HS2 London services have no planned station calls between Preston and Glasgow – a geographic blind-spot that also seems to have infected the authors of the WCP consultation document: while most key stations are shown in the diagrams in the document, stations between Preston and Glasgow are absent (except for an 'HS2' service from Glasgow to Birmingham Curzon street in place of the existing ICWC Glasgow Birmingham New Street service).

The West Coast Partnership Opportunity

As the DfT's West Coast Partnership document of January 2017 makes clear, the WCP is invited to shape future HS2 and ICWC services. "This is a new approach which goes beyond the well-established model of rail franchising...It offers a unique chance to redesign and develop the already successful ICWC services as well as designing and implementing the transformation of rail along the West Coast corridor of the high-speed service."

The WCP will be responsible for services on the West Coast Main Line from April 2019 and will design and run the initial HS2 high speed services between London and Birmingham from 2026.

The shortlist for the WCP announced by DfT on 22nd June 2017 comprises:

- First Trenitalia West Coast Ltd, a joint venture between First Rail Holdings Ltd and Trenitalia SpA;
- MTR West Coast Partnership Ltd, a joint venture between MTR Corporation (UK) Ltd and Guangshen Railway Company, with the following key sub-contractors:
 - Deloitte MCS Ltd
 - Panasonic Systems Europe
 - Snowfall AB
 - Trainline.com Ltd
 - WSP Parsons Brinkerhoff
- West Coast Partnership Ltd a joint venture between Stagecoach Group plc, Virgin Holdings Ltd and SNCF C3.

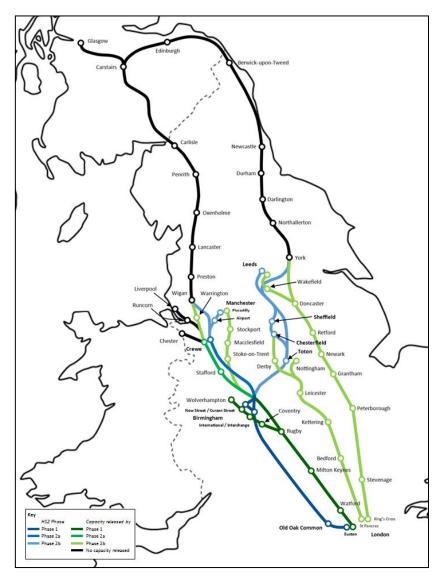
According to DfT's update of the Strategic Case for HS2, released in July 2017:

"HS2 will deliver a step change in capacity on the UK's long distance rail network. By providing direct intercity services on dedicated high speed lines, HS2 will free up train paths and platforms on the heavily congested WCML and ECML. This presents a once in a generation opportunity to improve services on these corridors, including passenger services to locations not directly served by HS2, and freight services. This will not only improve passenger experience by reducing overcrowding on peak time trains but will also allow train operators to run more varied and frequent services."⁷

⁷ Op cit DfT Strategic Case July 2017 paragraphs 3.38 et seq

"No decisions on the use of this released capacity have yet been taken. As the scheme develops we will consider options for inclusion in the final HS2 timetable.... For Phase One and Phase 2a, the West Coast Partnership will work to maximise the benefits of both HS2 and WCML services, including to places not directly served by HS2. This work will include consultation with passengers, communities and freight operators in order to finalise options."

The updated Strategic Case provides Government's current view on released capacity from HS2 Phases1, 2a and 2b. The HS2 phases are illustrated in the diagram below, and DfT's conclusions on released capacity – in summary – follow.



Source: DfT July 2017

Phase 1 [2026]

"HS2 Phase One could increase the combined capacity for fast trains on HS2 and the West Coast Fast Lines to/from London Euston from 15tph to 23tph. In turn, increasing the number of outer suburban commuter trains on the fast lines would allow a more even stopping pattern on the WCML slow lines. This could allow an increase from 8tph to 10tph on the Slow Lines."

"Introducing extra train services to Milton Keynes when HS2 is built would decrease crowding on services to Milton Keynes that depart London Euston between 5pm and 6pm [on which] load factors....were 115 per cent in 2015. The transfer of long distance passengers to HS2 services in 2026 and the introduction of additional services on the existing network could mean a fall in the load factor to 81 per cent for Milton Keynes passengers.... Together, the increase in frequency of services and the lengthening of trains could result in a 76 per cent increase in total seats on commuter services from London Euston to key commuter destinations in the evening peak."

Phase 2a [2027]

"As well as faster journeys, Phase 2a will also release capacity on the conventional rail network. Phase 2a extends the HS2 route from north of Birmingham to a junction with existing lines just to the south of Crewe station. This means that six trains per hour can be transferred onto Phase 2a lines, freeing up capacity on the WCML from Lichfield to Crewe. Subject to future decisions about the railway, Phase 2a could free up capacity in the following areas:

- Increasing the frequency of services to Nuneaton, Tamworth, Lichfield and Rugeley from hourly to half-hourly or better, subject to capacity at Crewe or Stoke-on-Trent. In order to provide wider connectivity, these services could be combined with Manchester and Liverpool commuter services to the north and with services from London to Northampton to the south
- Increasing the frequency of services from London to Chester, from one to two trains per hour. These services could be extended to destinations in North Wales
- Capacity released by Phase 2a could instead be used for freight services as far as Crewe. Additional freight services from the London area, Southampton and Felixstowe beyond Crewe would be subject to constraints elsewhere on the network. For example, freight services beyond Crewe towards Liverpool would be possible if capacity improvements could be delivered between Crewe and Weaver Junction."

Phase 2b

"Phase 2b will complete the Y-shaped HS2 network. In the west, Phase 2b allows HS2 services to Manchester to run entirely on dedicated high speed lines and services to Preston and Scotland to bypass the WCML around Crewe and Warrington."

In practice, for WCP bidders, there are three interacting service levels to be considered, the first two of which are under the control (or at least influence) of the planned Partnership:

- HS2 services
- Inter City West Coast services
- Other franchised and open access services operating in the west coast corridor.

HS2 services

The assumed services for Phase 2a (as shown above) comprise services between London and Birmingham Curzon Street (3 trains/hour), Manchester Piccadilly (3tph), Liverpool (2tph), Preston (1tph) and Glasgow (1tph). There are also services that will use HS2 northwards from Birmingham to Manchester (2tph) and Glasgow/Edinburgh (1tph).

There is scope to add Stoke-on-Trent to the high-speed network; a Euston-Stafford-Stoke-Macclesfield service has been suggested that would use the Phase 1 HS2 infrastructure. This in turn allows the second Liverpool train to be speeded up by using the HS2 Phase 2a route to Crewe (rather than the WCML with an intermediate station call at Stafford). As noted earlier, such an option is dependent on the feasibility of dividing/joining 200m+200m train sets at a rebuilt Crewe station. This would allow the Stoke-on-Trent service to be added without diminishing Liverpool and Preston HS2 service frequencies, and Preston trains could be extended further north (subject to capacity constraints) to Lancaster or, perhaps, Carlisle.

On current plans, however, all HS2 services will be operated in Phase 1 and 2a by 200m long train-sets (except those between London and Birmingham which will have the option of 2X200m configuration), there being no plans to provide 400m platforming at key stations such as Manchester Piccadilly (before Phase 2b in 2033) or Preston and Glasgow. Bearing in mind that the existing Pendolino fleet is mainly configured as 253m sets, there are some important seat capacity questions that WCP bidders will want to consider.

West Coast Partnership bidders will probably seek to:

- Maximise overall commercial value between the HS2 and ICWC services;
- Refine the standard hourly HS2 service pattern accordingly;
- Distinguish a peak service specification from the standard hourly pattern;
- Look carefully at ways to optimise fleet and crew rosters;
- Consider the merits of a soft launch with flexibility in the build-up of services.

A number of opportunities will also present themselves, including the scope to provide fast London-Edinburgh services competing with whatever is on offer via the ECML – a service feature perhaps surprisingly missing from current Phase 1/2a service assumptions. The scope to introduce services that operate from the north (say from Carlisle) to Birmingham Curzon Street (reverse) and then onwards to London is another. On current plans, WCML stations in Cumbria are served only by an hourly HS2 service between Scotland and Birmingham Curzon Street (along with trains to Manchester – and in due course Liverpool, operated by Trans Pennine Express).

There is also the question of the spare capacity available on HS2 itself when it is complete. There could be potentially 2 train paths/hour available on the western leg of HS2 north of Birmingham. This could be used, for example, to introduce a Liverpool – Birmingham HS2 service, speeding up the journey time between these two cities significantly. Depending in the detail of arrangements at the planned Crewe Hub station, it would also be possible to add further services onto the Phase 2b leg between Crewe and Manchester (Piccadilly). Where these additional services use relatively short sections of HS2 (as in that case), use of 230km/h 'Javelin-style' rolling stock would be acceptable since there would be little impact on overall route capacity.

Intercity West Coast services

To illustrate how released capacity on existing lines could be utilised post Phase 2b, the Department for Transport commissioned Steer Davies Gleave⁸, who developed and made a preliminary assessment of six scenarios, each with different primary objectives:

1 **Regular Interval Connections**: Enhancing London services for the principal intermediate stations providing a higher frequency service between these stations and much improved cross-network connectivity

2 **New Destinations**: Introducing new London intercity services and/or improving services to stations that currently receive fewer than 4 return services a day

3 **Cross-country**: Enhancing non-London city to city existing services and extending services to new markets

(4 covers the ECML only)

5 **Regional Transport Aspirations**: Building on initiatives put forward by regional bodies to enhance local and commuter services into Manchester...

6 **Freight**: Using released freight paths to enhance long-distance freight services that use the WCML.

There are critical interactions with the third category of services on the WCML – that is, services not provided by the WCP (see below) – to be considered, and of course with those operated on HS2. The report also noted that:

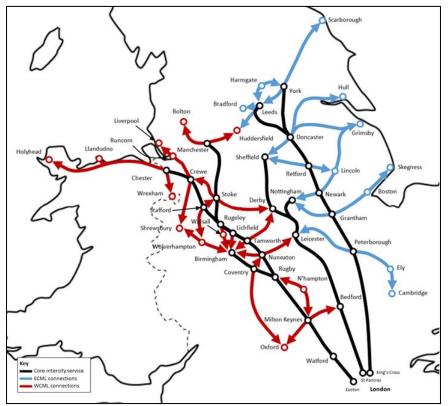
"There are also other potentially valuable options identified that become possible with some adaptations either to the HS2 service concepts or if additional connectivity to the existing network is provided."

The adoption of regular interval timetables on the WCML (Scenario 1) improves connectivity at intermediate stations along these routes – and these can become local/regional hub

⁸ <u>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/629168/high-speed-two-phase-two-strategic-case-appendix-hs2-released-capacity-study-summary-report.pdf</u>

stations with good connections. Improving service frequency for immediate stations on the WCML could also dramatically improve interchange opportunities into connecting east-west services (see diagram below):

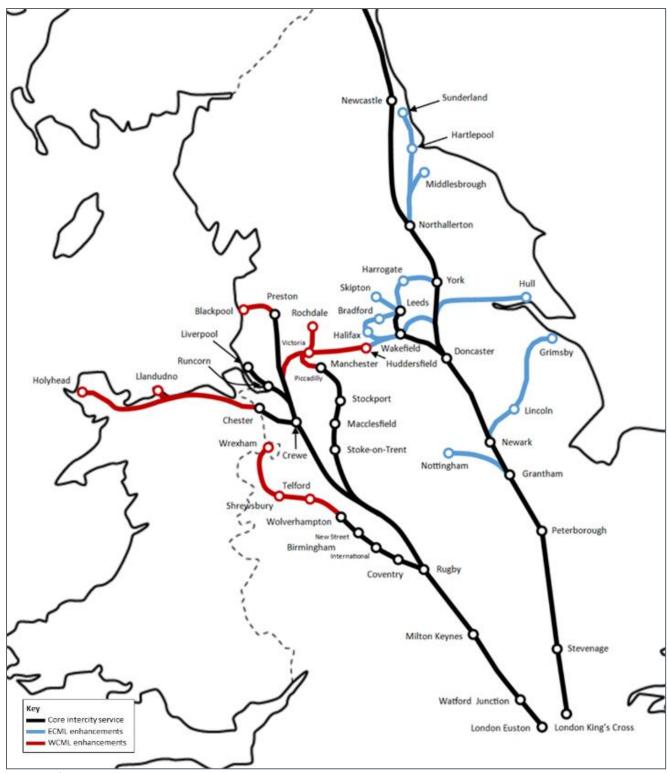
- Tamworth services to Burton upon Trent, Derby, Nottingham, (and further afield: Yorkshire, NE and SW England and South Wales);
- Lichfield services to Sutton Coldfield and Redditch;
- Rugeley services to Walsall and Hednesford.



Source: DfT July 2017

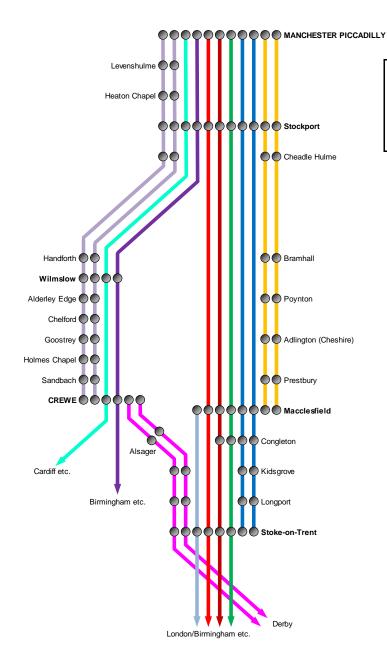
It is also possible to provide direct services from Rugby/Nuneaton/Tamworth/Lichfield to Manchester that cannot be operated today, shortening journey times by around 30 minutes. There could also be direct services between Northampton and NW England, which are absent currently.

The chart below illustrates *new destinations* (scenario 2) on the WCML corridor that could be served making use of some of the released capacity. Of course, it would be possible to combine these two scenarios, with new off-route destinations served by a limited stop service providing valuable service enhancement to existing intermediate WCML stations.



Source: DfT July 2017

In Scenario 5, with extra seats and services into Manchester (through Cheadle Hulme, from the south) an uplift in capacity of around 165% in the morning peak, 220% in the evening peak and 330% in the off peak (compared with 2016 seating provision) would be feasible – see indicative service diagram below.



Scenario 5 Enhanced Regional Transport Manchester Standard Hour

Source: DfT, July 2017

Other train service providers

There are several other franchises operating services over the WCML, including Scotrail, Trans Pennine Express, Northern, London Midland and Cross Country – and others⁹. In addition, there are now rights for Alliance to provide a new open access service between Blackpool and London. These operators have access rights and (Alliance aside) franchise service commitments that do not form part of the WCP. Train service provision is both a matter of competition as well as forming part of a national connected network. It is a complex picture.

⁹ Other operators serve key WCML stations or have limited numbers of services on the WCML including Scotrail Sleepers, Arriva Trains Wales, East Midlands Trains, TSGN and London Overground

It is to these other franchised operators that WCR250 should look for additional commuting capacity, and also for any wider cross country service developments. It is unlikely that DfT would welcome the WCP seeking to extend its operation into the 'territory' of other franchise operators in providing cross country or shorter distance commuter services.

A question that arises in relation to the WCP is whether there are areas of overlap (and therefore choice) between ICWC/WCP and other franchises in the provision of specific services. In one area in particular there is a clear overlap and that is between ICWC and London Midland/West Midlands Rail in relation to providing fast London services from the main Trent Valley stations. The ICWC service from Lichfield and Tamworth – London (one peak hour service daily) is 22 minutes faster than the regular (hourly through the day) London Midland service (even though this now takes the direct route between Rugby and Milton Keynes). The difference is attributable to stopping pattern and to rolling stock type (ICWC is 125 mile/h with tilt; the LM rolling stock is 110 mile/h, without).

Key Policy Choice Areas

There are key choices for the WCP – and for WCR250 in its representations to those bidding for the right to operate WCP services – in relation to service levels and timetable plans as outlined above. These in turn are inter-related with choices on:

- rolling stock fleet, including the question of retaining tilt train operation on the WCML;
- any specific infrastructure investments that WCR250 would wish to see implemented above and beyond what might be planned for CP6 and 7;
- timetable structure, whether the notion of key hub stations is to be progressed, and if so, as which locations;
- off-route destinations.

Taking these in turn: first on *rolling stock fleet*, while the WCP prospectus identified the existing ICWC class 221 (twenty 5-car trains) and 390 fleets (fifty-six 11-car and 9-car sets) as being in current use, the experience with recent franchise replacements shows that the incoming franchisee might choose to replace trains, even in their entirety. If these trains were to be replaced – or if their tilt capability were to be de-activated (this has happened with the cross-country sister fleet of Class 221 units), journey times would be extended. While this, it could be argued, matters less in relation to any major city end-to-end journeys that might be made on the WCML once HS2 is open (because of the existence of a faster alternative route), it would be an unwanted impact for key intermediate locations and those destinations that will continue to rely on WCML services. On the other hand, a new fleet could be provided with some advantageous features such as wider and better doors – more suitable for rapid boarding on services which stop more frequently. The 390/221 fleets will have seen around 23 years' service in 2027.

On *infrastructure investments,* there are many options that can be identified, and it would be difficult at this stage for WCR250 to take a view on their respective merits at a project level. But a broad outline of priorities could be helpful, for instance distinguishing between:

• further route electrification;

- platform lengthening to permit 400m HS2 train operation;
- measures designed primarily to enhance network reliability and resilience;
- major renewal of 'tired' assets to enhance capacity, journey times and passenger convenience (e.g. the renewal or rebuild of key stations such as Crewe, Preston and Carlisle);
- line-speed improvements (most relevant north of Crewe);
- measures that would specifically help support the operation of 'pulse hub' timetables and the convenience of transferring passengers;
- measures that would allow for more railfreight.

On the question of *timetable structure,* it should be recognised that today's railway is not designed for Swiss- or Dutch-style timetabling, with repeat pattern conveniently-timed connecting journeys, and that the cost of changing the infrastructure to achieve this could be considerable. In the WCML corridor – outside the major conurbations, journeys are relatively lengthy and yet frequencies are not generally (with a few exceptions) less than hourly. If key connecting services could be made half-hourly, it may be possible to provide a much more valuable *network* of rail services in the WCML corridor without the expense of providing European-style grade separation of junctions and multiple through platforms.

Each of the stations served by ICWC on the WCML trunk is already a hub/interchange station of sorts. The apparent exceptions are those few places where there are no rail branches served. These are only Penrith (where bus connections to Keswick and the Lake District are important) and Milton Keynes (where there is an important passenger transfer between ICWC and regional/local services provided by both London Midland and TSGN franchises).

This relates to the question of *off-route key destinations*. By the mid-2020s, two new opportunities could arise on the southern segment of the WCML. These are:

- connections (from Milton Keynes and/or Bletchley) to/from Bicester, Oxford and Aylesbury;
- connections via the Metropolitan Line Extension (Croxley Link) at Watford Junction.

This analysis suggests that WCR250 should advocate the following:

- 1. Places with a regular ICWC London service today should keep them with undiminished service standards (to be provided either via HS2 or WCML)
- 2. Adding an Edinburgh Euston service *via* HS2 should be encouraged once Phase 2a is complete in 2027 (it will help the investment case along the northern section of the WCML)
- An hourly Carlisle Euston service via HS2 should be added into the service specification (provided either by an additional service dividing and joining at Crewe, or by extending the planned Scotland – Birmingham Curzon Street service to Euston)
- An hourly service from Euston via HS2 to Stafford, Stoke-on-Trent and Macclesfield should be added in 2027 – and extended to serve Stockport and Manchester
- 5. A regular interval service over the southern segment of the WCML should be provided by ICWC to all stations with any ICWC service currently, with an encouragement to move towards a 30-minute interval service interval
- 6. The tilting train capability of the class 390 and 221 fleet should be retained and deployed on the WCML
- 7. Destinations off the trunk route should be provided with new/improved direct services designed to enhance economic performance and re-balancing of the wider national economy
- 8. The creation of a fully redeveloped station at Crewe (Hub) funded by a combination of DfT, Network Rail and Local Authority/LEP funds should be fully supported

5. Conclusions on the West Coast Partnership

The Department for Transport faced interesting choices in deciding how the West Coast franchise should be progressed through a time when HS2 (Phases 1 and 2a) would be completed.

It had to decide who should take responsibility for transition arrangements in 2026/7; how to handle the question of competition and complementarity between intercity train services using the West Coast Main Line and the new high-speed line; how best to manage the HS2 service start up and trialling of the new trains and equipment; and how much of a role it should give to the franchisee ('partner') in specifying the HS2 trains and the service plans for using both the existing and new main lines.

While the Department will no doubt retain oversight throughout, it has set out in the West Coast Partnership prospectus of January 2017, an approach to these questions which clearly envisages a major role for the successful WCP bidder. It creates the opportunity for the new West Coast Partner company (the franchisee) to bring to HS2 the commercial and operational know-how that will be needed to make the fullest success and best use of the HS2 infrastructure investment.

As with all rail franchises, the successful WCP company will, no doubt, wish to take into account stakeholder views and work in partnership – not just with DfT, HS2 Ltd and Network Rail, but also with local and regional authorities and businesses in the west coast corridor. Some of these will be local authority-specific matters – and these are not covered in this report which instead provides a wider perspective on behalf of WCR250 on how the WCP company can best help meet the overall needs and aspirations of stakeholders in the West Coast corridor.

Stakeholders have priorities set through Strategic Economic Plans and other policies set by the Local Enterprise Partnerships (LEPs) and local authorities. The intercity services in the West Coast Corridor play an especially important role for regional, city and local economies by:

- Connecting West Coast activity centres both with each other and with London of great importance for business travel but also for the cultural and social life of this significant part of the nation;
- Connecting West Coast activity centres with Heathrow Airport¹⁰ a task that HS2 is better placed to fulfil than the existing West Coast Main Line – again of great importance to businesses, especially those engaged in international trade;
- Providing the critical national connections between London/the South East and the West Midlands, North and Mid Wales, North West England, South West Scotland and the central belt of Scotland: faster, safer and more reliably than road-based connectivity; more sustainably than by air services (where they exist);

¹⁰ On this subject, the Coventry and Warwickshire LEP also propose direct Heathrow access via Oxford, Reading and the planned new western rail access to the airport.

- Offering opportunity with greater choice for accessing jobs and higher education, and improving productivity though broadening and overlapping of labour markets;
- Providing rail access to tourism and conference centres, and these include the major National Parks of North Wales (Snowdonia) and North West England (the recently designated World Heritage Lake District); traditional holiday resort locations such as Blackpool, Southport and Llandudno, each of which have active programmes to transition from summer week/fortnight family destinations to short breaks; major one-off attractions such as the Warner Brothers Harry Potter Experience at Leavesden (access *via* Watford Junction) or cities that have become major leisure destinations (such as Liverpool, also World Heritage); and, important conference destinations including Blackpool, Liverpool, Manchester, Glasgow and Birmingham. The importance of the tourism sector/visitor economy is substantial, and good intercity rail connectivity also helps ensure that tourism is sustainable, and not frustrated by road traffic congestion;
- Providing national transport access to remoter communities in places such as Dumfries and Galloway, West Cumbria, and the North Wales hinterland. The West Coast Corridor and its intercity rail connections are just as important to these areas as they are for the major cities.

The quality of rail services provided through the WCP will have a significant and lasting impact on the social and economic well-being of the west coast corridor: from the central belt of Scotland across the Border Country to Cumbria; Lancashire and Cheshire; the major cities of the North West; North and Mid Wales; the North and West Midlands the English Heartlands, London and the South East.

We have identified ten key policy decision areas where the choices and actions of DfT and the West Coast Partnership will be most crucial to providing the quality of service that stakeholders seek at this exciting – and challenging – time in the evolution of West Coast rail services. These are discussed in turn.

Ten key policy areas crucial to service quality

- 1. Balance between HS2 and WCML services.
- 2. Service competition & choice for rail passengers.
- 3. Utilisation of released capacity on the WCML.
- 4. Developing post-2027 plans.
- 5. Markets, travel classes and reservations policy.
- 6. Approach to stakeholder collaboration.
- 7. Specific service challenges and opportunities.
- 8. Third party investment funding.
- 9. Advance planning of timetable changes.
- 10. Managing major service changes.

1. Balance between HS2 and WCML services

Through the WCP, choices will have to be made on whether intercity services should run on HS2 or the existing main line. In some cases, it is expected that there will be services (from 2026) on both lines (for example, between London and Birmingham). It is unclear how prescriptive DfT intends to be on this matter. It would certainly be desirable to see what WCP bidders propose, after taking into account both costs and revenues. In general, providing passengers with a choice of services with differing characteristics is considered to be valuable.

DfT specifications of risk transfer could have unintended consequences in this area. Since WCP bidders in 2017/8 will face considerable uncertainty when assessing HS2 service costs and likely revenues, DfT would probably need to take more (or even all) revenue risk once the new HS2 services are introduced (2026-7). But for the remainder of services in the franchise/partnership, more conventional risk allocation arrangements will apply, which will help retain the incentive to grow the rail market ahead of HS2 over the years through to 2025. While there are several ways in which the detailed treatment of revenue risk – applicable to one part of the WCP franchise, but not to another – could be structured, for west coast stakeholders, the risk is that both DfT and the WCP could favour an overly cautious approach to HS2 service start-up.

This implies a need for WCR250 to be clear about the outcomes sought from HS2 service start-up. In practice, off-setting a tendency towards caution, DfT is likely to want to see a proven set of commercial and operational evidence on which to base the franchise offer from 2027 onwards. But this aim could (arguably) be satisfied with a start-up first/second year HS2 service restricted to specific routes. From WCR250's perspective, this would be undesirable. The choice has been made to use a single fleet for the first phase of HS2, a fleet capable of operation over the existing network as well as over HS2, and **it is essential that the full set of Phase 1 destinations (Glasgow, Liverpool, Manchester and Birmingham) are provided with London HS2 services in this start-up period**.

2. Service competition & choice for rail passengers

On some parts of the West Coast Corridor, there is significant competition between rail service providers and this is likely to continue. Examples include London – Birmingham and Preston – Glasgow (and some but not all intermediate stations). There are two new areas of competition of note that are likely to arise.

The first is within the WCP operation, where services are likely to be provided both over existing WCML and new HS2 infrastructure from many stations – especially to London. This can be advantageous if there is a complementary choice of fares to go with what will typically be a choice between a fast and a super-fast journey. The advent of HS2, with the additional seating capacity it brings (in aggregate) to the intercity market, should be used to

ensure that there is a low cost option available for intercity travel in the West Coast Corridor.

3. Utilisation of released capacity on the WCML

The released line capacity from HS2 is a key benefit that, while the subject of recent DfT work, remains unspecified. WCR250 needs to be clear what stakeholders are seeking. In summary we suggest that desirable *outcomes* are that:

- No West Coast station loses direct London rail connectivity
- Intercity services on the WCML should be both extended where practicable and operated on a limited stop basis to provide key interchange stations on the WCML with a regular interval service
- Sufficient 'clean' path capacity is provided for fast intermodal freight traffic, allowing for expected growth
- Additional capacity is provided for commuter services on shared routes into the major cities.

4. Developing post-2027 plans

High-speed rail ambitions do not come to an end in 2027. **The WCP should work proactively with HS2 Ltd and DfT to help implement extension of high-speed infrastructure** into Manchester city centre; support an examination of options that support better HS2 service access to Warrington and Liverpool; support the development of plans to reduce London – Glasgow/Edinburgh jourmey times towards a goal of 3 hours; and support exminations of ways to improve through runnning connections to/from HS2, including with HS1.

5. Markets, travel classes, reservations

Reflecting the analysis of the wider benefits in the West Coast corridor that stakeholders are keen to stimulate, the WCP should be **encouraged to explore options for market segments other than the ex-BR standard/first class split.** These might be based more closely on different travel markets – business, tourist, families, premium, economy etc.

There is an inter-related set of policy questions for HS2 services on seat reservation, seat allocation and standing. HS2 trains are being specified to accommodate a crush load with standing passengers, but there is good reason to explore what arrangements are needed to ensure that every passenger gets a seat. An **approach that should be examined for HS2 services is a last-minute seat allocation system** (just as was employed on TGV from its initiation, 35 years ago). This would have to avoid problems apparent with the current Cross Country franchise, but it could have the effect of retaining the appeal of 'turn up and go' without creating the risk of any more than incidental standing – and this can be avoided by the provision of a limited number of flip-down seats. A compulsory seat reservation system is used on high speed trains in France, Spain and Italy, but not Germany.

6. Approach to stakeholder collaboration

West Coast Rail 250 would welcome proposals for **continuing stakeholder engagement.** DfT has called for a partnership, and has created an opportunity to step back from the detailed specification of train service provider activity. West Coast Rail 250, for its part, should offer a continuing support role, using the all-Party Parliamentary Committee and other avenues to provide DfT and the Partnership with Stakeholder feed-back.

7. Specific service challenges and opportunities

Individual local authorities and LEPs will wish to engage with the WCP to explore areas of particular interest to their constituencies. But some specific regional issues have very wide-ranging implications for the corridor and its rail services as a whole. These are:

- (i) London Scotland. HS2 provides the basis for a major reduction in London Glasgow and Edinburgh journey times. The WCP needs to take a leadership role in driving west coast journey times down towards the 3-hour target. It should work closely with Network Rail and Transport Scotland and DfT towards this aim. It should also consider the merits of a London Edinburgh service from 2026 and examine the case of cross-border Aberdeen and Inverness services;
- (ii) *Cumbria.* Carlisle, Penrith and Oxenholme should **retain regular fast direct services** to Euston;
- (iii) Chester and North Wales. The existing direct hourly London-Chester/6 times daily North Wales should be matched post-HS2 and connecting to the Crewe Hub should be improved;
- (iv) Crewe Hub. The full specification of Crewe Hub station (now a subject of consultation) should be adopted and provide for continuity of use with high HS2 service frequencies and with the capability to divide/join trains from Phase 2a onwards; it should provide a state-of-the-art gateway from HS2 to Cheshire, the North Midlands and North Wales;
- Stoke-on-Trent. An hourly service should be provided on HS2 routed via Stafford, Stoke-on-Trent, Macclesfield and Stockport linking Manchester and London;
- (vi) Trent Valley stations. The key Trent Valley line stations (Lichfield, Tamworth and Nuneaton) should be provided with an hourly fast (125 mile/h) intercity service to London under the WCP;
- (vii) East West Rail and Metropolitan Line Extension. To get best value out of these two new connections to the West Coast Main Line that will significantly broaden its value and appeal to car users, fast WCML intercity services should be provided routinely with station stops at Milton Keynes and with at least twice hourly station calls at Watford Junction from 2026;
- (viii) Old Oak Common. WCP should examine the use of this station through the day and establish the case for whether all HS2 trains should stop; it should support options that would increase its value (such as providing for Chiltern line connections and a re-instated connection to HS1).

8. Third party investment funding

Given the very tight constraints that it seems likely Government will impose on capital investment in the railway during the currency of the West Coast Partnership, **the WCP should be encouraged to develop third party funding approaches for infrastructure schemes, in line with the Hansford review,** as well as for the usual applications of franchisee investment. Care will need to be taken to ensure these meet HM Treasury requirements that avoid classification as public account expenditures.

9. Advance planning of timetable changes

The WCP prospectus requires that the WCP will work with DfT and HS2 Ltd from 2019 on service specification. The **WCP should inject some urgency into this task**, and set out its own timescale and programme for advanced timetable planning. In practical terms this is likely to mean establishing an empowered task force that leads with the specification of intercity and long distance freight services on the WCML. It should be noted that this will be an innovation in standard rail planning processes. Preliminary outcomes of this work are needed by 2020.

10. Managing major service changes

Besides managing the transition at the start-up of HS2, when a major timetable re-cast for the whole of the WCML is likely, the WCP will need to manage services through the period of disruption during works at Euston station. WCR250 would like to see **an exemplary approach taken to communications with customers and stakeholders** throughout the period of the Partnership.

ANNEX A: Strategic Economic Plans

The following are headline extracts from the Strategic Economic Plans (SEPs) of the relevant Local Enterprise Partnerships (LEPs) along the route of the West Coast Main Line.

A1 Hertfordshire SEP (March 2014)

Increasing importance of WCML rail corridor and major redevelopment opportunities on brownfield land to east of Watford Junction. Network Rail Capacity Study for Watford Junction will inform future plans based on 'massively improved interchange facilities at the station'. The new Croxley Rail Link will add to development opportunities west of Watford.

A2 South East Midlands SEP (2015-2020)

Recognition of good connections on WCML to Milton Keynes. Importance of ensuring good passenger and freight connections at MK to the East West Rail project once completed. This route is part of the electric spine [note: since abandoned] that will carry freight traffic from Southampton to Sheffield without the need to use London. The SEP reminds us that 'the Daventry International Rail Freight Terminal is located at the centre of the UK's distribution and manufacturing heartland'. (2.4.5, p18)

With HS2 planned it will be necessary to ensure that any additional capacity released on the WCML is 'used to enhance journey times to MK and Northampton'. (2.2.26, p15)

With regard to the section of HS2 north of Birmingham to Leeds, it will be important to ensure that 'the planned electrification of Midland Mainline proceeds north of Bedford and that Kettering benefits from an enhanced service both south to London and north to Derby and Sheffield [note: no longer programmed]'. (2.2.27, p15)

A3 Coventry and Warwickshire SEP (March 2014)

The SEP identifies the following priority investments:

- To ensure transport connectivity and employment opportunities to support population growth and demographic change and linkage to the residents of 76,000 new homes
- Improving connectivity along the north/south urban spine to increase effective density and improve benefits from agglomeration
- Investments in the NUCKLES rail line between Nuneaton and Learnington Spa and consideration of future extensions to Stratford-upon-Avon, the East Midlands and the Thames Valley
- Enhancing our connectivity locally to UK Central, HS2, Birmingham Airport and Birmingham City Centre and our national connectivity through the road and rail network, including
- Investment in Coventry Station to address future growth in passenger numbers

North – south rail and Coventry station

The LEP area benefits from good rail connectivity on the Chiltern, Cross Country and West Coast Main (WCML) lines, but has weak services which require strengthening on the North-South corridor connecting its main travel to work pattern area with neighbouring growth points in Leicester & Leicestershire. It is hoped that addressing these deficiencies will off-set some of the anticipated impacts of WCML timetable changes post HS2. Critically strengthening the North-South rail corridor, as well as having merit in its own right, also provides a means to connect by rail to HS2 both directly and via Coventry Station as an interchange.

Significant committed investment in developing the North-South rail corridor is already secured for NUCKLE 1 (new stations at Bermuda and Ricoh Arena in Coventry, with platform extensions at Bedworth) and for Kenilworth Station (with associated new train service from Leamington-Coventry-Birmingham International-Birmingham) as part of NUCKLE 2. These existing commitments are supported through priorities and allocations already made under the devolved local major scheme funding, which is to be incorporated in the SLGF.

However, further enhancement to the corridor is essential in order to build on the improvements which will be delivered through these initial phases. The SEP proposes to extend the investment already secured for Coventry Station in order to deliver an ambitious masterplan which provides critical passenger capacity to accommodate a major employment development (Friargate) and on-going rail growth which is projected to add a further 2m passengers per annum demand to the station by 2023. It also seeks to cover the additional funding required to enable the completion of NUCKLE 1 by securing an increase in train service frequency between Coventry-Bedworth-Nuneaton and a bay platform at Coventry Station.

The LEP will continue to work with Network Rail and partners to seek continued enhancement to the corridor, ultimately to enable connectivity to the East Midlands (Leicester) and Thames Valley (Oxford and Reading and thereby to Heathrow). It is recognised that there are many factors and issues that need to be taken into account to enable this, but that this is a significant opportunity that can add value to nationally lead initiatives such as the 'electric spine' and national rail freight strategy.

CWLEP will work to deliver local access and capacity schemes, whilst fully supporting the Long Term Planning Process and engaging more widely with neighbouring LEPs to develop the strategic business case. Preliminary discussions with Leicester and Leicestershire Enterprise Partnership have confirmed in principle support and interest in the strategic corridor and further discussion will be sought with them and LEPs to the south. (p42)

HS2 & Rail connectivity: Enabling access to growth, retaining excellent direct rail services and maximising the benefits of investment

The majority of the Coventry and Warwickshire growth sites are within an 8-10 mile radius of HS2 Interchange and many rely on connectivity to Coventry Station to provide access to the national rail network.

Direct access to HS2 will also be critical and without high quality public transport access the default mode of access for business use is likely to be a car. Without direct connectivity to HS2 and without a strong strategy of investment in the capability of the passenger rail network to serve targeted investment sites then negative economic displacement impacts are likely.

Any change proposed for a reduction of the current 3 fast services per hour from Coventry to Euston to 2 per hour would result in a loss of jobs and £182m in GVA over 30 years from the local economy. This excludes potentially far more significant displacement impacts.

In order to release maximum benefit from current scheme commitments, further investment is required to create an effective gateway to the rail network and in the provision of rail services and targeted infrastructure enhancements to make best use of the rail network. (p40)

A4 Greater Birmingham and Solihull SEP (2016-2030)

We have led the way in establishing the Midlands HS2 Growth Strategy, the first of its kind in the country, setting out how we will maximise the benefits of high speed rail for our businesses, our people and our places – which was instrumental in the WMCA's first devolution agreement.

As set out in the Midlands HS2 Growth Strategy, HS2 presents a once-in-a-generation opportunity to drive productivity, economic growth and prosperity across the Midlands.

The two HS2 stations will drive new areas for regeneration, housing and business growth. The Birmingham Curzon Investment Plan and growth plans for UK Central in Solihull have set out the opportunity to create more than 52,000 jobs and £1.25 billion in GVA per annum. With an associated package of local transport investments, HS2 provides the opportunity to dramatically transform East Birmingham and North Solihull, two areas of long-standing deprivation.

In order to create world-class places, both Birmingham Curzon and the UK Central Hub require huge investment in infrastructure to enable growth to come forward. Furthermore, significant connectivity enhancements are required to ensure that people and businesses can access the station sites and associated development zones and fully participate in the economic opportunities created.

Our approach, as set out in the 'Midlands HS2 Growth Strategy', uses HS2 to build an economic, social and environmental legacy for the Midlands.

The development zones surrounding the stations will complement the overall strength of the Midlands as the place to visit, live and do business.

The delivery of the Birmingham Curzon Masterplan to maximise the regeneration potential of HS2 through a £724m programme of activity that will integrate the new rail terminus into the heart of the city centre.
Capitalising on the UK Central Hub, one of the strongest economic bases in the UK today, with potential to generate major growth and make a significant contribution to the UK economy
The delivery of the HS2 Connectivity Programme, supporting our broader vision to harness the unrivalled connectivity and investment opportunities by effectively connecting the HS2 stations and their associated development zones to other transport hubs, local communities and the wider region. (p 38-39)

A5 Black Country SEP (March 2014)

We will implement a programme of interventions to significantly improve the Black Country's connectivity, support the provision and improvement of employment sites, support the growth of our centres and contribute to our longer term connectivity vision, including Hs2. The effectiveness of the local transport infrastructure is an important element in maintaining international competitiveness in our growth sectors. (p28)

We are also aiming to become the **UK Centre of Excellence for Light Rail Innovation**. Developed with partners such as the Warwick Manufacturing Group, Centro, UKTram, and the Department for Transport, the centre will showcase emerging innovation utilising opportunities for a demonstrator track, will create opportunities for skills and employment, and develop the capacity in the UK to build rather than import light rail vehicles. (p8)

Wolverhampton Interchange: The project will provide a fully integrated multi-modal transport hub, deliver new commercial floor space for 278 high value jobs and improve the strategic gateway to Wolverhampton, the wider Black Country, Birmingham and HS2. A new rail station building will be constructed & the multi-storey car park refurbished & extended. This scheme builds on the £22 million already invested in Interchange 1, leverages in over £70 million of private sector investment and aligns an additional £40 million of public sector investment. The scheme delivers 74,000 sq ft of office/retail/leisure floorspace. This scheme is being delivered in partnership with Centro, Neptune, Virgin Trains, Network Rail and the Canals and River Trust.

Maximising the Benefits of HS2 – investment in key rail projects will allow the Black Country to see the benefits of 3,300 new jobs created and £180m a year boost to the economy, released capacity on the West Coast Main Line, improvements to freight services and direct connectivity to the HS2 stations predominantly through Wolverhampton Interchange and the Snow Hill Line. (p28)

Snow Hill Lines - This is a cross LEP supported scheme, which features in the HS2 connectivity package for the West Midlands. It includes the reinstatement of Platform 4 at Snow Hill Station (vacated by Birmingham City Centre Midland Metro extension) and a new

turn back facility at Rowley Regis and is critical in ensuring the Black Country maximises the impact of HS2 investment. (2017-2019) (p62)

A6 Black Country SEP (draft, March 2017)

The challenges the WMCA SEP seeks to address, mirror those faced at a Black Country level. The WMCA SEP includes the following priority actions:

- New Manufacturing Economy: harnessing the biggest concentrations of high value manufacturing businesses in Europe and their supply chains;
- Environmental Technologies : securing transformational environmental improvements;
- HS2 growth: maximising the benefits of the largest infrastructure project in Europe;
- Skills for Growth and Employment for All: ensuring the skills needs of businesses are met and everybody can benefit from economic growth;
- **Exploiting the economic geography:** making the most of the scale and diversity of the West Midlands' geography to enable economic growth and community wellbeing throughout the urban core and rural areas.

We are pursuing a £29.2m project to develop an Innovation Centre and Test Track in Dudley. This will support the development of the very light rail sector meeting the needs of domestic and international rail schemes. (p20)

A7 Stoke-on-Trent and Staffordshire SEP (March 2014)

Stoke-on-Trent and Staffordshire is well connected to the national and international road and rail network which enables easy access to large economic centres. This has contributed to many inward investment success over recent years such as a cluster of prestigious high value medical technologies and research industries centred on Keele University and Science Park and investment by Jaguar LandRover.

- The West Coast Mainline runs north-south, providing frequent connections to London, Birmingham, Manchester and Liverpool.
- The M6 Motorway runs through the area and is one of the major arterial roads running along the backbone of the UK.
- Four international airports are within a 1-hour road journey.
- Many of the country's major sea ports are within a 4-hour road journey and are increasingly becoming more connected by the rail network. (p11)

Two of the area's main rail stations (Stoke-on-Trent and Stafford) are chiefly served by the West Coast Mainline. This line runs north-south with frequent and fast services to London Euston, Liverpool Lime Street and Manchester Piccadilly. Other main rail stations within the Stoke-on-Trent and Staffordshire area include Tamworth and Burton upon Trent which lie on the Cross Country Route between Birmingham and Derby, providing services every half an hour. It is important to note that Tamworth also lies on the West Coast Mainline.

There are 23 local rail stations in the area that offer reasonably good connectivity to both local destinations and those further afield. In 2012/13 over 9.5m rail passengers used our stations and since 2006/07 our rail patronage has increased by more than 62%.

Our regional airports (such as Manchester Airport, Liverpool John Lennon, East Midlands Airport and Birmingham Airport) play an essential role in providing national and international transport links from and to the area. (p12)

Fast, reliable, frequent and connected transport networks are fundamentally important to the economic growth and competitiveness of the Stoke & Staffordshire LEP. Strategic linkages shape the economic opportunities facing our business and local linkages influence labour, residential and leisure flows particularly in our urban areas.

Our central location nationally and external rail, road and aviation connections are among our area's key strengths. We are located close to Manchester, Birmingham and Derby, and three of the UK's major airports. A triangle of corridors provide the connectivity spine between our urban centres and employment sites, and underpin our economic ties to the markets beyond our borders. The Connectivity Triangle of the M6/WCML Spine, the A5/M6 Toll Enterprise Belt and A38/A50 Eastern Links connection already play a vital role and have the potential to match the M4 as a nationally significant corridor of prosperity connecting the South East and North West regions. The LEP will also need to maximise the opportunities presented by strategic infrastructure investments, including High Speed 2 phase 2. (p21)

Our Priorities & Action Areas for Competitive Connectivity

Strategic Connections – Develop our strategic rail, road and air transport connectivity to ensure that our area remains at the heart of a connected economy External Connectivity – Maximise the opportunities presented by strategic infrastructure investments, including High Speed 2 phase 2 Rail Industry's Long Term Planning process Rail links to Manchester Airport, and connections to Birmingham Airport, and East Midlands Airport Maximising the benefits Chase Line Electrification by supporting higher speeds and other associated improvements City Centre access from strategic transport routes (p25)

A8 Cheshire and Warrington SEP (April 2014)

The sub-region is well placed in terms of the strategic rail network. Crewe and the two main Warrington stations (Bank Quay and Central) provide access to rail services on the West Coast Main Line (London-Scotland) and Trans-Pennine services (Liverpool-Manchester-Leeds-East England). However, much of the rail network is in need of modernisation, currently subject to slow journey times and a poor service pattern, coupled with poor quality rolling stock. The West Coast Main Line (WCML) is an important freight route, but the M6 carriers ten times the tonnage of the WCML emphasising the importance of this motorway to the sub-regional economy.

Despite the apparently good motorway connections, significant peak period congestion is a regular occurrence. Evidence from the DfT shows that some sections of roads within the sub-region are amongst the top 20 most congested routes in the country. The Highways Agency predicts certain routes, particularly the M6, M53 and the M56, will become significantly more congested with the anticipated growth in traffic. A consequence of these motorways operating at or close to capacity is that even a minor incident during the peak periods can lead to major disruption for long periods on the wider road network, with a consequent impact on business productivity. A particularly substantial impact is felt in Warrington town centre or on the A34 Corridor through Congleton when there is an incident on the M6 as they both serve as key diversion routes.

The West Coast Main Line running through C&W provides the principal rail link southwards from the North West to the Midlands, London and the South East and the Channel crossings. It is Europe's busiest mixed-traffic rail corridor and Network Rail's 2011 WCML Route Utilisation Strategy (RUS) identified that the line is operating close to its capacity. While HS2 will release capacity at the southern end of the WCML, Phase 1 of HS2 will place further pressure on the region's rail network as proposed high-speed services extend onto the classic network north of Lichfield.

Cheshire & Warrington's key location on the 'West Coast Spine' has resulted in the development of a number of regional or national freight distribution facilities, particularly at Crewe, Middlewich, Northwich and Arpley (Warrington). Thus, in addition to the line being a key long-distance passenger route, it is an essential freight corridor, daily carrying over 30,000 tonnes of freight south of Crewe. Freight demand is forecast to grow on the route which is driven by expansion of the container market, particularly from the expanded Port of Liverpool.

Despite the recent extensive WCML upgrade there remain a number of capacity constraints on the WCML through the Cheshire and Warrington area; for example, the layout of Crewe station and the large number of conflicting movements to the north and south of the station which limit line capacity and increase journey times. Further north, the predominantly twotrack railway between Winsford and Runcorn/Warrington limits the capacity on the section of the WCML that provides access to the Port of Liverpool and other important strategic freight facilities at Ditton, Halewood and Garston. The electrified route between Crewe and Stoke has a short single line section which limits capacity, while other lines that feed into the WCML are not electrified, limiting the ability to maximise network utilisation.

Further South, line capacity on the WCML is also limited. In the past 15 years, the number of trains using the West Coast Main Line has doubled and spare capacity is now at a premium, with a variety of competing demands as passenger and freight traffic is forecast to continue to grow in the future. These capacity constraints limit the scope for expansion of both local and long distance rail services from our sub-region as well as limiting the opportunity to transfer more freight from road to rail given the expected growth in freight from the increased economic activity.

In addition to the WCML, the sub-region has a number of other rail corridors and together, these networks cater for eight Train Operating Companies providing services in these franchises. This demonstrates and reinforces the huge national importance of the sub-region's rail network.

The importance of Crewe to the national rail network has been recognised and emphasised in the recent HS2 report by Sir David Higgins. Sir David proposes that the Government should accelerate Phase Two as soon as possible to take the line 43 miles further north than planned in Phase One, to a **new transport hub at Crewe** which could be completed by 2027, six years earlier than planned. This means that other necessary transport infrastructure to enable the new hub station has to be prioritised and developed to ensure it is in place in time for the arrival of HS2 and would support the delivery of a vast connectivity boost and resultant economic growth opportunity in this sub region.

Based on the spatial objectives of the SEP to deliver growth, the current transport network of the area, and the need to address its inherent weaknesses, the rationales for investment in transport infrastructure are:

- To improve connections to neighbouring sub-regions, and in particular international gateways to ensure business has connectivity to global markets and to facilitate the economic benefits of both out and in commuting that takes place on a daily basis;
- Pinch points and congestion in the transport network, both road and rail, act as barriers to growth if left unaddressed. Delays and unpredictable journey times affect business activity directly and indirectly, and influences commuting flows;
- Network resilience needs to be addressed to deliver predictable and efficient journey times to support business productivity;
- Make best use of the existing road (e.g. smart motorways) and rail network (e.g. electrification), to capitalise on existing infrastructure, offers efficient mechanisms for improvement, and will help deliver best value for money from investment;
- Capacity constraints on the West Coast Mainline are restricting the enhancement of improved rail connectivity in the sub-region.

The objectives of the transport priority are to:

- Transform connectivity across, and to and from, the Atlantic Gateway World Trade Corridor;
- Unlock the opportunity that is High Growth City focused on Crewe and connected Mid-Cheshire towns and facilitate delivery of the HS2 Crew Hub Station;
- Improve access to unlock priority employment and housing sites across the LEP area including the Science Corridor (p44).

Strategic Conversation with Government 2 – Preparing for HS2

High Growth City is ideally placed to ensure the benefits of HS2 are maximised, as identified by HS2 Growth Taskforce led by Lord Deighton.

Phase 1 – 2015-18 – A package of investments have been identified to provide infrastructure and develop employment sites.

Phase 2 – (2018-21) Crewe Station relocation – Package of infrastructure measures, including procurement and development of sites, delivering 370 dwellings and 96,850 sqm

of employment space. Longer term relocation of Crewe Station will relieve network capacity constraints.

Phase 3 - (2021-2033) Crewe Superhub Station. The potential is that the SuperHub station would enable some 63,000 jobs and 27,500 new homes - generating a GVA of £3.5 billion.

Surface access to regional airports (Liverpool and Manchester, and also Birmingham International) from the LEP area is poor, due to a combination of congested motorways and lack of direct train services. For example, road access to Manchester Airport from C&W is constrained by the congested M56 and A556. There are poor indirect rail services from the key population centres of Chester, Crewe, Ellesmere Port and Warrington to Manchester airport, often requiring a change of train in Manchester. (p84)

A9 Liverpool City Region Growth Strategy (Apr 2016)

Need for improved road and rail infrastructure, connectivity and capacity to key assets including port, airport and multimodal sites to enable their growth.

Delivery of all capacity and capability improvements underdevelopment including HS2, Northern Powerhouse Rail, transpennine electrification and Road Investment Strategy schemes, and implementation of the TfN and LCR Freight Study recommendations to provide capacity on the regional transport network to support expansion of the freight and logistics sector.

For the full economic potential of Superport to be unlocked, we need to improve connectivity to the Liverpool2 terminal. Currently, road access is insufficient to carry expected capacity, and key road infrastructure improvements are required. To help alleviate road congestion, we need to move more freight onto rail.

Linking Liverpool to existing plans for HS2 at the Golborne Link will simultaneously free up existing lines for rail freight from Liverpool2, decongest local roads, greatly reduce journey times to London and Manchester, and act as the symbolic beginning of east-west Northern Powerhouse Rail, creating the transport infrastructure for the realisation of an integrated northern economy.

Alongside Liverpool2 and Northern Powerhouse Rail is the Mersey Gateway Bridge project, providing a new six-lane toll crossing between Widnes and Runcorn, on track to open in Autumn 2017. This Strategy aims to exploit the potential of these new infrastructure investments across the City Region – by linking them into wider economic development visions for the Atlantic Gateway and the Northern Powerhouse. This means streamlining transport investment to work in sync with Transport for the North's plans for integrated multi-modal transport and smart ticketing across all northern city-region systems.

Transport supports economic growth in many different ways – connectivity for investment and business needs, but also access to work, education and training for people employed by those businesses. Accessible and affordable transport is good for social inclusion, health and wellbeing – all of which support sustainable economic growth, by improving the 'competitive context' of doing business.

Capitalising on the National Investment in High Speed 2 Rail Infrastructure

Our aim is: "Capitalise on Government investment in High Speed 2 as an engine for growth and renewal in the City Region; improving our business and tourism connectivity, allowing for an increase in freight capacity, and supporting a renewal and economic expansion of Liverpool City Centre."

We wish to see High Speed 2 add value to our economy by being complementary to our Growth Plan aims particularly in the areas of:

- Increasing freight capacity nationally to support our SuperPORT projects and Freight and Logistics Hub proposals;
- Increasing Liverpool's connectivity to attract both increased business and visitor economy visitors;
- To support the regeneration and renewal of Liverpool City Centre.

A10 Greater Manchester Transport Strategy 2040 (Feb 2017)

This document has been produced jointly by the new Greater Manchester Combined Authority and the GM LEP.

Delivering Better City-to-City Links

The Greater Manchester City Region lies at the heart of the North, with the large conurbations of Liverpool, Leeds and Sheffield all within 45 miles of our Regional Centre. Our connections to major city regions across the North, and to other major cities, such as Birmingham, London, Glasgow and Edinburgh are also crucial to our long-term success, supporting the critical flow of goods, skills and information that will enable the UK to boost its long-term productivity. The constrained capacity, speed and reliability of our existing city-to-city road and rail connections prevent Greater Manchester fulfilling its long-term potential. We will continue to work closely with partners over the coming years to deliver the transformational improvements to our city-to-city links we need to achieve our 2040 Transport Vision and to play a key role in delivering a Northern Powerhouse economy. However for the benefits of these improvements to be felt across Greater Manchester, we will also need to improve connections across the city region to enable people to access motorways and National Hub interchanges.

Improving North-South Connectivity High Speed 2

The West Coast Main Line (WCML) linking London to the northwest and onwards to Scotland is the busiest mixed use 125 mph railway in Europe. The line is already under considerable stress because there is more demand for train services than there are train paths available. This limits overall capacity and means there are trade-offs about deciding which services can run. We expect demand for rail travel to continue to grow over the coming years (both for freight and passengers) and the need for new rail infrastructure will become ever more pressing as we move towards 2040.

Detailed plans for the Phase 2 route were released by HS2 Ltd in November 2016, and GMCA look forward to continuing to work with HS2 Ltd to effect any further refinements where necessary, in order to minimise the impact on local communities, the environment and heritage assets. The November 2016 plans no longer provide for a west to east link in the north west which would have allowed for trains between Manchester and Wigan and onwards to Scotland to run much faster via the HS2 route, and therefore will no longer offer the opportunity to relieve capacity on the congested Manchester Wigan/Bolton/Preston lines, which will instead need to be addressed by other means.

The opportunities for sustained growth offered by HS2 cannot be delivered by any other alternative. However, the case for HS2 extends well beyond simple transport economics. HS2 is a strategic economic game-changer that will uplift productivity through enhanced labour market and business-to-business connectivity; increased network capacity; and improved international connections through the HS2 station at Manchester Airport.

We will push for the delivery of the full HS2 'Y' network as soon as possible to ensure that the people and businesses of Greater Manchester and the wider North have rapid access to the rest of the UK economy, including London, the Midlands, and Scotland. From Manchester, journey times to London are anticipated to be as low as 68 minutes, with 3 trains per hour to London and 2 trains per hour to Birmingham. Journey times to Wigan would also be reduced, by almost a half. We wish to see the benefits of HS2 realised as soon as possible, starting with extension of the line to Crewe by 2026. In the intervening years, however, we will continue to work hard to deliver improved north-south rail connectivity in and out of Greater Manchester, including identifying potential improvements to services on the existing WCML through future franchise specifications; and ensuring that Greater Manchester's key stations are served by HS2 classic compatible services that can run on both HS2 lines and the WCML following delivery of Phase 1 of HS2 from London to Crewe. We will also present growth strategies to government to demonstrate how we will maximise the benefits of both HS2 and NPR investment at Piccadilly and the Airport.

Travel across the city region

The range of work and business opportunities in Greater Manchester means that there are significant further flows to and from neighbouring areas to the south, west and north in particular; flows into the east are more limited, with the Pennines reducing connectivity. Increasingly, business and commuter travel patterns will also be influenced by strategic developments: the growth potential of the Atlantic Gateway in the west; the growth of Manchester Airport and the arrival of HS2 in the south; the potential of the West Coast Main Line to boost the economy of the north west, via its link to HS2; and the potential for the east to develop additional roles in relation to Leeds and Sheffield as a result of 'Northern Powerhouse' connectivity. Improving travel across the city region is therefore an integral part of improving city-to-city links and links to global gateways. (p89).

A11 Lancashire SEP (March 2014)

Lancashire lies within the UK's main north-south transport corridor that links Scotland to London and the South of England, and on to Europe via the Channel Tunnel and ports in the South East. This corridor includes the M6 and the electrified West Coast Main Line. Eastwest connectivity across Lancashire focuses on the M55 and M65 motorways and parallel railway lines that link Blackpool and Preston with Blackburn and Burnley. Road and rail links eastward into the Leeds city region are largely ineffective and are of much lower quality than links further south between Liverpool, Manchester and Leeds, Sheffield and the Humber ports.

The M6 is part of the Trans-European Road Network, and reflecting its strategic national/international functions, carries a high proportion of long distance traffic, to and from, as well as through, Lancashire. This route is under considerable stress, particularly between Preston and Birmingham, with the deterioration in operational effectiveness resulting in increased journey times and a worsening of journey time reliability. Given the importance of the route to Lancashire for the movement of freight, this is of particular concern as many freight operations now function on the basis of 'Just in Time' delivery.

Following completion of the West Coast Route Modernisation programme in December 2008 and the fleet replacement progressed by Trans-Pennine Express, parts of Lancashire now benefit from significantly improved rail services to London, Manchester, Manchester Airport, Birmingham and Scotland in particular. However, the West Coast Main Line is experiencing significant growth in passenger numbers, a trend which is expected to continue over the next 25 years.28 Network Rail also anticipates rail freight to grow strongly over the next 10 years and by as much as 140% over the next 30 years. Around half of all UK rail freight makes use of the West Coast Main Line at some stage in its journey, including much of the UK's international and domestic inter-model rail freight traffic. The West Coast Main Line is also currently the only north-south route that can handle the latest generation of inter-modal containers on standard wagons.

The scope to meet rising demand by running additional services and longer trains is becoming increasingly limited, particularly on the southern section of the route between Rugby and London. This is despite the increase in capacity provided by the West Coast Route Modernisation Programme. Any significant increase in the capacity of the existing route will be expensive to deliver and hugely disruptive to existing users, hence the urgent need to deliver an alternative solution such as HS2.

Completion of HS2 to the North West and the transfer of longer distance trains onto it will release a significant amount of capacity on the existing West Coast Main Line, particularly south of Crewe. This will be a key benefit of HS2 and it is essential Government develops a wider strategy for utilising this capacity, including consideration of new or enhanced local, regional and longer distance semi-fast services linking Lancashire directly with destinations such as Milton Keynes, and providing new opportunities for the rail freight industry.

Preston railway station is by far Lancashire's most used railway station with almost 4.5m passengers using the station in 2012/13, and with over 1.25m interchanges, is also the busiest in the North West outside of Manchester Piccadilly.30 Given Preston is the mid-

point between existing Glasgow and London services, and acts as rail hub for local centres including Blackpool, Blackburn and East Lancashire, Lancaster and the Lake District, Lancashire is excited by the opportunities of developing with Government a HS2 Growth Strategy for Preston station.

Elsewhere, the quality of many local rail services and infrastructure leaves much to be desired, and although some improvements are currently underway, for example, electrification of the lines linking Blackpool and Preston with Manchester and Liverpool, East Lancashire in particular faces many more years with rail connectivity limited by speed, frequency and poor rolling stock quality. This risks significantly undermining the economic productivity and competitiveness of Lancashire as a whole. (p17-18)

Lancaster

Lancaster benefits from its historic strategic position, which is critical to the city's current economic growth.

Lancaster is directly adjacent to the M6, with two junctions providing access to The city's railway station on the West Coast Main Line provides first class access to national, regional and local centres with frequent direct services to London, Birmingham, Glasgow, Edinburgh, Manchester and Manchester Airport, as well as to more local centres including Preston, Windermere for the Lake District, and Barrow-in-Furness via the Cumbrian Coast. Electrification of the line between Preston and Liverpool brings the possibility of direct services to Liverpool should through services between Liverpool and Scotland be reintroduced. (p51)

Preston

Preston's Railway Station is critical to the city and acts as a gateway to the county and for communities further north for local, regional, national and international connectivity. Today, Preston Station serves nearly 4.5m passenger users annually; with over 1.25-million interchanges each year it is the region's second busiest rail station after Manchester Piccadilly.

However, whilst passenger demand on long-distance services demonstrates the importance of Preston Station to the broader Lancashire economy, the station's relationship with the city centre is more demure:

The station building lacks presence, being at the western boundary and below the natural eye-line of the city centre; and Preston's business base is predominantly local with relatively few regional and national service sector companies. (Despite journey times to London of just over 2-hrs, Preston has one of the lowest proportions of London headquartered businesses of all UK cities)

The station fabric itself has seen limited investment in decades, which, in turn, has created a poor customer experience and prevented the station from becoming a key driver of the City Centre's wider commercial development strategy. In the short-term, electrified services between Preston, Manchester and Liverpool, including to and from Blackpool, will begin

from 2016, providing improved journey times and capacity, reinforcing the role of Preston as an interchange.

Network Rail has indicated to Lancashire County Council its intention to undertake a major renewal (with costs likely to be in excess of £20m) of the railway lines in and around Preston Station during the period 2017-2019. We understand that this will include technical and engineering consideration for Preston so that it is capable of fulfilling its identified role on the High Speed Rail network, as well as potentially increasing the number of platforms from 6 to 9.

Lancashire is committed to supporting High Speed. As an economic centre in its own right, and identified by Government as being such, it is crucial that Preston has direct and frequent access to HS2 in fit for purpose surroundings.

Preston City Council is partner within the URBACT II European programme exploring the territorial effects of railway hubs and their urban benefits. Partners from across Europe, including cities on High Speed lines, form part of this programme. This is providing invaluable intelligence from similar cities from their experiences of High Speed rail, including an understanding as to how Preston and Lancashire can fully exploit a High Speed stop. It is critical that the station's environment and passenger experience is transformed from its current Victorian condition to a modern 21st Century facility from which, to which and through which passengers would pass in comfortable surroundings that encourage even greater rail use and fully maximise the inherent advantages on the rail network that Preston benefits from. This would match standards of similar stations to Preston, such as Manchester Victoria. Should this be done, it is estimated that there would be a lifetime economic benefit of £150m. The significance of Preston Station as a driver of economic growth is recognised by stakeholders within and outside the county. As such the station's development is of fundamental importance to the economic growth aspirations of the county. In so doing, and with HS2 functionality, Preston's role as the North West's major rail hub north of Manchester will be reinforced. Establishing a HS2 Growth Strategy for Preston will be an important element to achieving this. (p59-60).

Blackpool

Blackpool is a distinctive local economy with a visitor economy unlike no other in the country in terms of its size, scale and mass-market appeal. It is the UK's largest seaside resort with nationally recognised attractions of Blackpool Tower, the Winter Gardens and the Pleasure Beach, and attracts over 17 million visitors per year.

Blackpool is the centre of the Fylde Coast economy which is also heavily tourism based with seaside towns including Fleetwood, Cleveleys, St Annes and Lytham, which regularly plays host to the prestigious Open Golf Championship.

However Blackpool has faced three decades of economic challenge. As the visitor economy changed from the 1980s Blackpool suffered disproportionately on account of its size and scale, combined with decreasing visitor spend. Investment stalled, jobs were lost and residents faced limited employment prospects with low, often part-time, wages. The

composition of the population has changed with social problems becoming increasingly deeply entrenched in many parts of the town; Blackpool is now the 6th most deprived authority in England.

Whilst Blackpool remains a popular destination for day visits, the numbers of people choosing to stay longer has remained low since the 1980s. This reduction in the length of visit has resulted in an over-supply of holiday accommodation. The LEP recognises the importance of Blackpool and the role it can again play as a quality visitor destination of choice. Therefore Blackpool's renewal is dependent upon successfully growing a year round visitor economy place and product that can compete in an increasingly sophisticated market place.

Blackpool is well served by road and rail networks and is therefore capable of connecting into other economic opportunities within Lancashire and beyond. These include local opportunities for manufacturing and commercial developments on the wider Fylde Coast, including areas such as Hillhouse Industrial area in Thornton (with its cluster of advanced chemicals and materials businesses) and Warton's EZ; electrification of the main railway line, in addition to the M55, means that Blackpool is also well placed to capitalise on the significant infrastructure improvements and employment opportunities created through the City Deal.

Strategic Blackpool Town Centre transport interventions:

- Blackpool Promenade & Town Centre Integrated Traffic Management;
- Blackpool Tramway Extension
- North Station / Talbot Gateway Transport Interchange
- Blackpool Bridges
- Green Infrastructure routes to prosperity (p76)

A12 Cumbria SEP (March 2014)

Providing the gateway into Cumbria, the M6 corridor and West Coast mainline provides East Cumbria with excellent inter-regional links. This connectivity makes the key settlements of Carlisle, Penrith and Kendal easily accessible and attractive locations for investment, while supporting and servicing the wider rural county.

Discussions are underway to explore opportunities for cross-border collaboration with Scotland, building upon the economic inter-connectivity between north Cumbria and south west Scotland. The potential extension of HS2 to Scotland has potential benefits for both Cumbria and Scotland alike. (p18) We are committed to continued partnership working with national highway and rail organisations to ensure:

the future franchise specifications, infrastructure investment plans and decentralisation proposals reflect the vision for the Cumbrian rail network.

the Train Operating Companies improve the quality and standard of rolling stock and station facilities.

improvements to the speed and reliability of the Furness Line between Barrow and Lancaster and assist in the development of the business case for investment.

a detailed business case is prepared for improvements to the Cumbrian Coastal Line in order to secure the services required to service the Energy Coast.

High Speed Rail proposals bring real benefits to Cumbria.

the Highways Agency route based strategies establish a co-ordinated approach to delivery of infrastructure improvements to the trunk road network in Cumbria, particularly on the A590, A595, A66 and A69. To support transport infrastructure, we ask that: the Highways Agency formally consults, with

the Cumbria Local Transport Body on future investment plans and route based strategies in Cumbria.

Train Operating Companies are obliged to consult with the Local Transport Body on their franchise proposals.

The West Coast Mainline Coastal Line and Furness Line services are improved to service the Energy Coast and Furness area, including maintaining the through service from Barrow to Manchester Airport.

The strategic investment priorities currently identified in the SEP are supported —the A590 at Ulverston, the A595 / A66 in West Cumbria and J40 and J44 on M6, as critical underpinnings to this SEP. (p26)

Policy Linkages: National/Local

The Cumbria SEP identifies infrastructure projects focussed on unlocking and maximising the growth opportunities in the Cumbrian economy across the four SEP priorities.

We will:

• Actively work with DfT, Network Rail, Rail north and NEBU to ensure the future franchise specifications, infrastructure investment plans and decentralisation proposals reflect the vision for the Cumbrian rail network;

• Work with Train Operating Companies to improve the quality and standard of rolling stock and station facilities;

• Promote improvements to the Furness Line between Barrow and Lancaster and support the business case development;

• Work in partnership with Network Rail and TOCs in developing a detailed business case for improvements to the Cumbrian Coast Line in order to secure the services required to service the Energy Coast;

• Work with DfT and HS2 Ltd to ensure High Speed Rail proposals bring real benefits to Cumbria;

• Work closely with the Highways Agency to establish a co-ordinated approach to delivery of infrastructure improvements to the trunk road network in Cumbria, particularly on the A590, A595, A66 and A69. (Technical Annexes p 31)

Infrastructure, Connectivity and Employment Sites

Nevertheless, West Cumbria has all the right building blocks to provide excellent and sustainable transport connectivity by rail, road, and sea. The Cumbrian Coast Railway Line links Carlisle to Barrow via the Cumbrian coast passing along its route through all the main West Cumbrian towns, major nuclear employment sites and outstanding coastal landscape. The line has significant untapped potential to carry a greater number of passengers, but is presently restricted by poor station infrastructure and accessibility, poor timetabling and an absence of a comprehensive weekend schedule. Improvements to this are absolutely vital to sustainable transport and economic growth in Cumbria. The potential of the line to provide an excellent commuter service between key employment sites and leisure and tourism services in an area with an outstanding landscape is clear. The line's lack of Sunday services constrains weekend tourist activity along the Cumbrian coast.

The line also carries significant volumes of rail freight, including the transportation of nuclear materials to Sellafield and the Low Level Waste Repository at Drigg. Connections to the West Coast Main Line and other parts of the national rail network at Carlisle and Lancaster enable freight to be transported to and from West Cumbria from all regions. The line could do much more – it is vital to meeting the freight demands of forthcoming construction projects at Moorside (Nuclear New Build), Drigg (Low Level Waste Repository) and Sellafield (Hazard Reduction Programme).

Signalling, speed restrictions and a number of single track sections presently limit the capacity of the Cumbrian Coast Line to carry significantly more passengers and freight. However, scaleable infrastructure enhancements would be of huge benefit for rail capacity. The ultimate aim is for full resignalling of the line along with infrastructure enhancements and doubling of track throughout. Improving street-side access to the railway for travel-to-work, education and leisure is also vital through better pedestrian and cycle links and adequate off-street car parking.

Short Term Projects - West Cumbria Rail Station Hubs

The initial focus is the programme of Rail Station Hub IMPROVEMENTS at Maryport, Workington and Whitehaven (Corkickle and Bransty) which will help unlock development of key town centre employment sites to meet the anticipated demand for office and other employment floorspace for the nuclear sector.

Access to the Cumbrian Coast Line will be improved at these stations through the provision of off-street car parking, pick up and drop off facilities for cars and taxis and improved pedestrian and cycle links to surrounding residential and employment areas. (T A p41)

Carlisle Station Hub

Located on the West Coast Mainline and with development growth in Carlisle City Centre, Carlisle Station is a key gateway to the City for tourists and business users. Improvements to Carlisle Station are required to respond to forecast growth in rail use and to improve the visitor experience, through enhanced facilities and excellent links to public transport and car parking. The scheme was identified as a potential scheme for devolved major transport scheme funding. Further work is ongoing to develop the detail of the scheme with a view to delivering the scheme in future years.

High Speed 2

The M6 Corridor is a rail as well as a road corridor, both the West Coast Mainline (WCML) and the M6 taking advantage of the Kent and Eden Valleys to traverse the high ground of Cumbria. Research by the County Council has indicated the advantages the HS2 will bring to the county, especially if improvements are made to the conventional system in the county, including re-signalling, station improvements, electrification of certain lines, and track dualling or the provision of passing loops, and if a 'Carlisle terminator' service from London is included within HS2 plans obviating the need to change to/from HS2 at Birmingham.

The benefits are associated primarily with increased capacity on the WCML and include securing the future of the Lakes and Furness lines that are vital to South Cumbria (they are under threat without greater capacity), raising the frequency of train stops on the WCML, and permitting greater use of rail freight of numerous kinds but including nationally essential arrangements for nuclear freight. It is thus the case that HS2 will under-pin the continuing growth of Cumbria's economy beyond the Plan period. (T A p56)





October 2017