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GREATER MANCHESTER INTEGRATED TRANSPORT AUTHORITY

REPORT FOR INFORMATION/RESOLUTION

COMMITTEE:	**Policy and Resources**
DATE:	**19th March 2010**
SUBJECT:	**High Speed Rail to Manchester – Strategic Study**
REPORT OF:	**Deputy Clerk to the Authority**

PURPOSE OF REPORT

To inform Members of the conclusions of a report commissioned by GMPTE and Manchester Airport into the implications of high speed rail to and beyond Greater Manchester.

RECOMMENDATIONS

Members are recommended to:

1) note the report and comment on the implications as appropriate; and

2) request additional work be carried out into the benefits of HSR serving Manchester and Manchester Airport

BACKGROUND DOCUMENTS

- *'Greengauge 21 – High Speed Rail Development Programme'* Report to Authority, 11th April 2008
- *'High Speed Rail'* Report to Policy Committee, 14th November 2008
- Publication Of '*Fast Forward: A High-Speed Rail Strategy For Rail',* Report to Policy and Resources Committee, 13th November 2009
- *'Meeting the Capacity Challenge – The Case for New Lines'* Network Rail, August 2009
- *'Fast Forward – A High Speed Rail Strategy for Britain'* Greengauge 21, September 2009
- *'High Speed Rail to Manchester – Strategic Study'*, AECOM/KPMG, December 2009

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1. Background

1.1. Over the past 12 months proposals to construct a high speed rail line have been adopted by all three main political parties. The Government has set up a company, HS2 to develop proposals for a line from London to the West Midlands, and outline proposals to take this line on to Greater Manchester, West Yorkshire, the North East and Scotland. This report was presented to the Secretary of State in December 2009 and is expected to be published, along with a Government response, imminently. The Conservative Party have established a policy which commits them to a line which services London, Birmingham, Manchester and Leeds.

1.2. In August 2009, Network Rail published its study into the need for new lines; *Meeting the Capacity Challenge*, which recommended a line up the west cost, based on the concept of a central line and a number of spurs serving Birmingham, Warrington and Liverpool, Manchester Airport and the city centre, Preston, Glasgow and Edinburgh.

1.3. In September 2009, Greengauge 21 published its report '*Fast Forward,* which was reported to this Committee in November, which recommended a comprehensive HSR network comprising two north-south lines (one on the east coast and one along the west coast, serving Manchester city centre), and two upgraded conventional lines, one linking Manchester and Leeds/Sheffield, and one serving London – Bristol – Cardiff.

1.4. In summer 2009 GMPTE and Manchester Airport commissioned AECOM (formerly Faber Maunsell) and KPMG to assess the case for Manchester to be a served by a high speed rail line, and the economic consequences of such a development. Whilst it is likely that Greater Manchester would be included in any high speed line proposals, the range and type of services, as well as the specific destinations served is open to discussion. Specifically the study was to look at the benefits a line could bring to the region, to advise on any benefits of a parkway station serving the Airport, and form a view on whether it would be beneficial for the line to continue beyond the Manchester area to Yorkshire and/or Scotland.

1.5. The study focused exclusively on the wider economic benefits of HSR – taking as its starting point work conducted by Network Rail, Greengauge 21 and HS2 which focused on the traditional appraisal of options. **The work is attached to this report.**

2. High Speed Rail to Manchester – Strategic Study

2.1. The AECOM/KPMG study examined the economic benefits of a number of different strategic options. These focused on whether central Manchester or Manchester Airport should be served, whether this should be on a direct line or a spur, and if Leeds, Sheffield or Scotland was the most appropriate onward destination.

3. Findings

Regional Benefits

3.1. The study found that HSR would bring significant economic benefits for the region. Significant economic benefits can accrue as a result of HSR; with almost 10 000 jobs generated in the Northern Way area, as well as influencing the redistribution of employment, particularly to Manchester and Preston. In combination with this employment growth, a boost to productivity could see the economic output of the Northern Way area growing by around £967million per year

3.2. It also concluded that finding a satisfactory conclusion to the Northern Hub (formerly the Manchester Hub) was key to the success of HSR; it is critical that once passengers arrive into Manchester they are able to disperse quickly and easily on to their ultimate destinations. This would require the additional capacity that the Hub proposals would bring about. This reinforces the Authority's view that addressing the capacity problems on the Northern Hub is a necessary precursor to HSR coming to Manchester.

3.3. The study found that journey times between Manchester and London could be reduced from 2 hours 20 minutes to 1 hour 6 minutes, to Birmingham from 1 hour 24 minutes to 44 minutes, and to Edinburgh from 3 hours 19 minutes to 1 hour 9 minutes. It also demonstrated a potential modal shift from car to HSR of around 130,000 between Manchester and London, and of 260,000 between Manchester and Birmingham.

Serving Manchester

3.4. The study demonstrated clear benefits for Manchester city centre to be served on a direct HSR line, and the benefits that would arise from this for the North West.

3.5. The report also examined various ways of including the airport on a high speed line to Greater Manchester. All of the options tested in this respect had positive business cases and economic benefits. Furthermore the report noted that the assessment of benefits of serving the Airport were probably understated as they did not reflect the singular importance of the Airport as a key regional asset and its particular role in supporting the Northern economy. Connecting the Airport to the HSR network would significantly increase its catchment area as well as reducing its reliance on the motorway network. However the evaluation of options of including the Airport is complex, and it is clear that additional work will be needed to better understand the impacts that an Airport station would have. It is clear that such a station must only be additional to, and not instead of, a central Manchester station.

3.6. The report also examined the benefits of onward high speed links to Leeds, Sheffield and Scotland. The greatest benefits are to be derived from a link between Manchester and Leeds. These two places are the largest concentrations of economic activity in region and their success is critical to the prosperity of the North of England. However, it was noteworthy that a significant proportion of those benefits could be achieved through an upgrade to the conventional line, reflecting the currently poor journey time between the two cities. Given the difficulty of constructing a high speed line over or through the Pennines an upgraded classic line may in fact be the more preferable option, and is the proposal favoured by Greengauge 21. The report also recognised the benefits to be found in serving Scotland and South Yorkshire, though these are not as great as those to be found from a Leeds link.

4. Conclusion

4.1. This report has underlined the potential economic benefit that high speed rail can bring about both for Greater Manchester and the Northern Way area. It has also highlighted the importance of a station located centrally in Manchester. The report underscores the need to link Manchester and Leeds by an improved rail connection, be it a high speed line or an upgraded conventional line. Whilst the report sets out the benefits to be found by serving Manchester Airport it is likely that it does not fully reflect the importance of the site to the economic growth and further work is needed to more clearly understand the implications of a second station at this location.

5. Recommendations

See front sheet of report for recommendations.

Stephen Clark
Deputy Clerk

Corporate Finance

Economic implications of HSR to the North of England

4 March 2010

ADVISORY

AUDIT ▪ TAX ▪ ADVISORY

Disclaimer

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Strategic economic arguments for HSR in the North of England

The national productivity divide

- The productivity gap between the economies of the Northern Way area and the south is £30bn per annum – almost £3,600 per employee
- This occurs for a wide variety of reasons which include lower relative economic densities than in the south as well as an industry mix skewed towards less productive business sectors

Strategic economic impacts of HSR

- HSR could make a significant difference to the functioning of the national and of regional UK economies, through supporting productivity growth and changes in locational factors that could significantly reshape the UK economy.
- In particular, it has been argued that HSR could connect the major economies of the North to the southern growth zone benefitting both

Why Manchester is the natural destination for HSR

- The largest agglomeration outside of London and natural complement to the southeastern economic powerhouse with critical assets of scale and connectivity
- The highest share of jobs in the key sectors that benefit most from agglomeration of any major Northern City
- Home to Manchester Airport and the largest higher education cluster outside London
- With Liverpool, home to the most productive businesses in the North of the country
- Capacity bottleneck at Manchester Hub that is intimately linked to HSR

"… probably the UK city outside London most likely to be able to increase its long term growth rate"
Manchester Independent Economic Review, 2009

Study objectives

AECOM, with support from KPMG, was commissioned by GMPTE to assess and quantify the wider economic impacts of delivering HS services in the Northern Way area (which comprises of the North West, Yorkshire and the Humber and the North East regions), with a focus on impacts for Greater Manchester.

The objectives of the study are:

- To establish the GVA benefits of serving Manchester and the wider northern economy with HSR
- To develop tools to capture and assess the strategic economic impacts of whether and how HSR could:
  - Support Northern and national productivity growth
  - Support structural economic change and further productivity benefits
  - Support growth in employment regionally and nationally
  - Support regional policy
- This means looking beyond DfT's WebTAG guidance, as it relies on fixed land use assumptions

> ***"… good transport links, both internationally and domestically, can be important in attracting, retaining and expanding such business activity in the UK.'"***
>
> Eddington Review

The economic implications of HSR in the North that have been investigated are:

- Direct benefits of time savings
- Agglomeration

Captured within WebTAG

- Structural economic change
- National and local distribution of economic activity (regional policy)
- Manchester Airport attracting regional investment

Not captured within WebTAG

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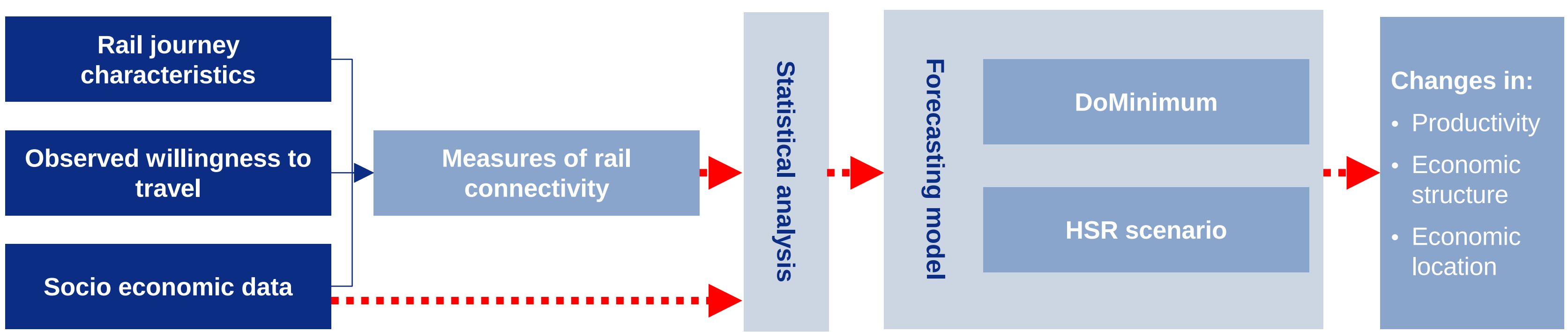
Overview of wider impacts methodology

The approach developed is based on:

- A statistical analysis of links between rail connectivity and:
  - Productivity within different business sectors
  - Location decisions of different business sectors
  - Productivity impacts of changing mix of business sectors sectors
- The development of a forecasting model to translate rail changes in economic outcomes taking into account economic redistribution and growth

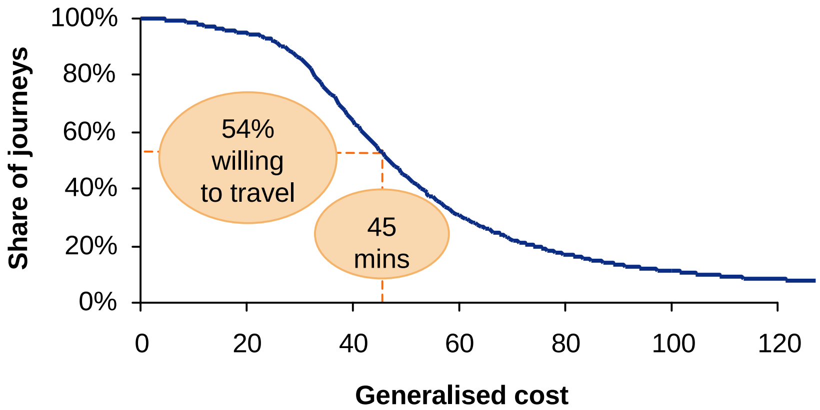
The approach assumes that transport can affect economic outcomes at the most profound levels including, not just how businesses use transport, but what they do and where they do it

Outline of land use transport interaction approach



Key aspects of methodology – measuring rail connectivity

Share of business trips over different generalised cost thresholds, 2006



Source: KPMG

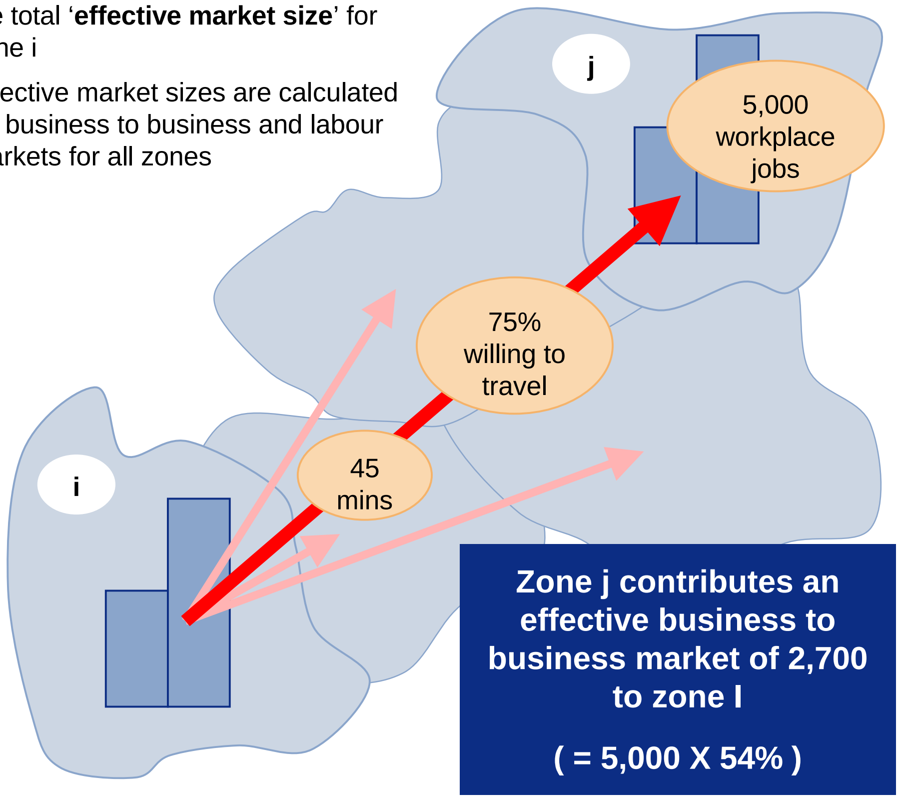
Based on demand data it is possible to determine how far (in terms of generalised cost) people are currently willing to travel for business trips

- Generalised cost includes elements for:
  - Access to the network (based on zone area)
  - In vehicle time
  - Frequency
  - Interchange
  - Fares

  Calculated from MOIRA rail network model (Frequency, Interchange, Fares)
- Not the same as the journey time used in agglomeration analysis as it is designed to capture travel behaviour and the journeys that matter
- Similar curve developed based on commuting behaviour and commuting values of time
- Decay curves used to simulate '**willingness to travel**'

Connectivity from I to j

- Depends on:
  - Socio-economic in zone j
  - Generalised journey time
  - Decay curve 'willingness to travel'
- Connectivity calculated for all destinations and summed to estimate the total '**effective market size**' for zone i
- Effective market sizes are calculated for business to business and labour markets for all zones



Zone j contributes an effective business to business market of 2,700 to zone I

(= 5,000 X 54%)

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Key aspects of methodology – understanding statistical relationships

Productivity

- The statistical analysis showed strong links between rail connectivity and productivity, with an elasticity of 0.11 across the UK meaning that areas with 10% higher rail connectivity are associated with 1.1% higher productivity
- This occurs because:
  - Each sector is more productive where rail connectivity is higher. This could occur from, for example, lower business transport costs or agglomeration benefits and are captured within a standard transport appraisal
  - Sectoral mix is skewed towards more productive sectors. This is not taken into account in appraisal which assumes fixed land use
- Supporting structural change in the economy is a key role of the transport system and could bring additional economic benefits

Business sectors affected

- The business sector most affected is business services and finance
- Manchester has the highest share of businesses in this sector than other key locations:
  - Manchester 46.3%
  - Leeds 36.0%
  - Liverpool 35.9%
  - Warrington 35.6%
  - Newcastle 32.1%
  - Preston 19.1%

Source: Experian Business Strategies analysis for Northern Way

Economic growth and redistribution

- The analysis is careful to distinguish between economic growth and redistribution effects:
  - Much change in the sectoral mix of areas benefitting from HSR will be from from relocation rather than a net change in sectoral mix within the study area or nationally
  - Similarly, we find that much of the change in employment in areas served by HSR is redistributed from within the study area or from the rest of the country

Three sources of net new employment

- **NEW** as international businesses and international migration is attracted to the study area
- **NEW** as commuting costs fall and attract people into the labour market
- **NEW** as change in labour productivity affects real wages and attracts people into work
- **REDISTRIBUTED** from other areas of the country

DfT analysis only considers the second of these

"To sustain future productivity, transport policy must reflect the economic and structural changes that are shaping the UK's transport needs.'"
Eddington Review

Scenarios

Service scenarios tested

- Option 0: Network Rail 1.4.1 London – Scotland incl Manchester Central
- Option 1: Option 0 plus Manchester Airport Stop
- Option 2: Manchester - London combined with Edinburgh – London (Manchester Airport Stop included)
- Option 2.1: Option 1 plus 2 trains per hour (tph) of the Manchester –London services continue on to Leeds on HSR
- Option 2.2.1: As 2.1 but the HSR train continues to Leeds via the Classic Rail Network
- Option 2.2.1: As 2.2.1 but the HSR train continues to Sheffield via the Classic Rail Network
- Option 3.0: London – Birmingham HSR only
- Option 4.0: Manchester Airport on the mainline, Manchester Central on a spur

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Scheme costs - Unit costs are derived from the published Network Rail strategic assessment and EU Benchmarks.

- The cost data generated suggests that the construction of an airport station in Manchester will be of the order of £400m. The total sum is estimated to be in the order of £800m when optimism bias and overheads are included. One of the key assumptions made here is that additional tunnelling will be required within the Manchester urban area as the option to decide the best approach to the city centre is compromised with an airport stop.

- Routing HS2 through Manchester is estimated to cost an additional £3Bn and this is reflected in the additional tunnelling required north and south of the city and the construction of a new central station facilitating access to existing transport systems. It is believed that some incremental savings will be made on the existing Network Rail proposal but these would be eliminated by increased construction costs. A junction in Manchester has been assumed to allow previously terminating High Speed services to continue through to Leeds Leeds or Sheffield.

- it is estimated that the additional cost of extending HS2 to Leeds or Sheffield (but not both) would be in the order of £8Bn over and above initial Network Rail Rail costs for option 1.4.1.

The methodology employed in this study has been to identify for each option:

- Changes in route distances as compared with NR 1.4.1 option
- Identification of sections in tunnels and plain line route
- Identified urban sections
- Identified plain line sections
- Changes in volume of junctions required
- Identification of additional stations required.
- Additional depot requirements

It has been assumed that any additional new build line would be of a standard identical to that proposed by Network Rail.

The BCRs for each option were estimated as:

	£m	£m	£m	
	PVB	**PVC**	**NPV**	**BCR**
NR 1.4.1	31,400	17,900	13,500	1.754
1	31,404	21,300	10,104	1.474
2	31,278	21,494	9,785	1.455
2.1	32,277	29,096	3,181	1.109
2.2.1	31,836	23,018	8,818	1.383
2.2.2	31,432	23,336	8,095	1.347
3	24,461	-7,767	32,228	-
4	31,023	18,991	12,032	1.634

Why HSR to Manchester would provide value for money

- The main growth area for HSR is around the 2-hour time band (250-550km); travellers can make a return day trip with time for activities (e.g. business meetings).
- When a major city is brought within one hour of the capital it allows for daily commuting (e.g. Paris to Le Mans, Tours, Lille)
- The HSR station needs to be the focus of major redevelopment geared to the service economy but there also has to be a gain for the whole conurbation and catchment region – effective transport to link this together is vital and HSR stations should be multi-modal interchanges.
- Metro, light rail, trams and guided buses are suggested as potential modes of access. The rapid reintroduction of tramways in France is closely related to TGV development
- The distribution of population in Britain along a long and narrow stretch would enable HSR to serve a relatively high proportion of the population, similar to Italy (Rome-Florence), Japan and France (Paris-Lyon).
- HSR, by virtue of its superior journey times, places a much larger range of journeys within scope for genuine competition with car than would currently be possible. Effectively HSR expands the catchment for rail journeys
- In the case of Manchester Airport, HS2 access may encourage more trips to Manchester Airport as the location becomes more accessible for those located in the northern regions and north of Birmingham.
- Rail is extremely effective in delivering commuters into congested city centres, and there are gains to be made for these services through HSR creating new capacity for longer distance routes and releasing existing capacity for shorter distance services.
- The component parts of high speed line benefits (journey time savings, crowding relief, highway decongestion benefits, carbon reduction, improved integration) will all be delivered by HSR.

Option 1 (Including MIA Stop)	2030 pa
Intercity Car Trips Removed	3m
Intercity Car km Removed	900m
Intercity Minutes Saved Existing Rail	1.2bn
Intercity Minutes Saved New Users	800m
PVB	£32bn
PVC	£21bn
NPV	£11bn
BCR	1.5

This analysis is consistent with the approach we believe that HS2 will take and is consistent with the methodology applied by NR in its New Lines Study. It does not assume benefits from Manchester Hub. A full WebTAG appraisal has not been undertaken in this high level assessment but is likely to identify additional benefits which would raise the BCR.

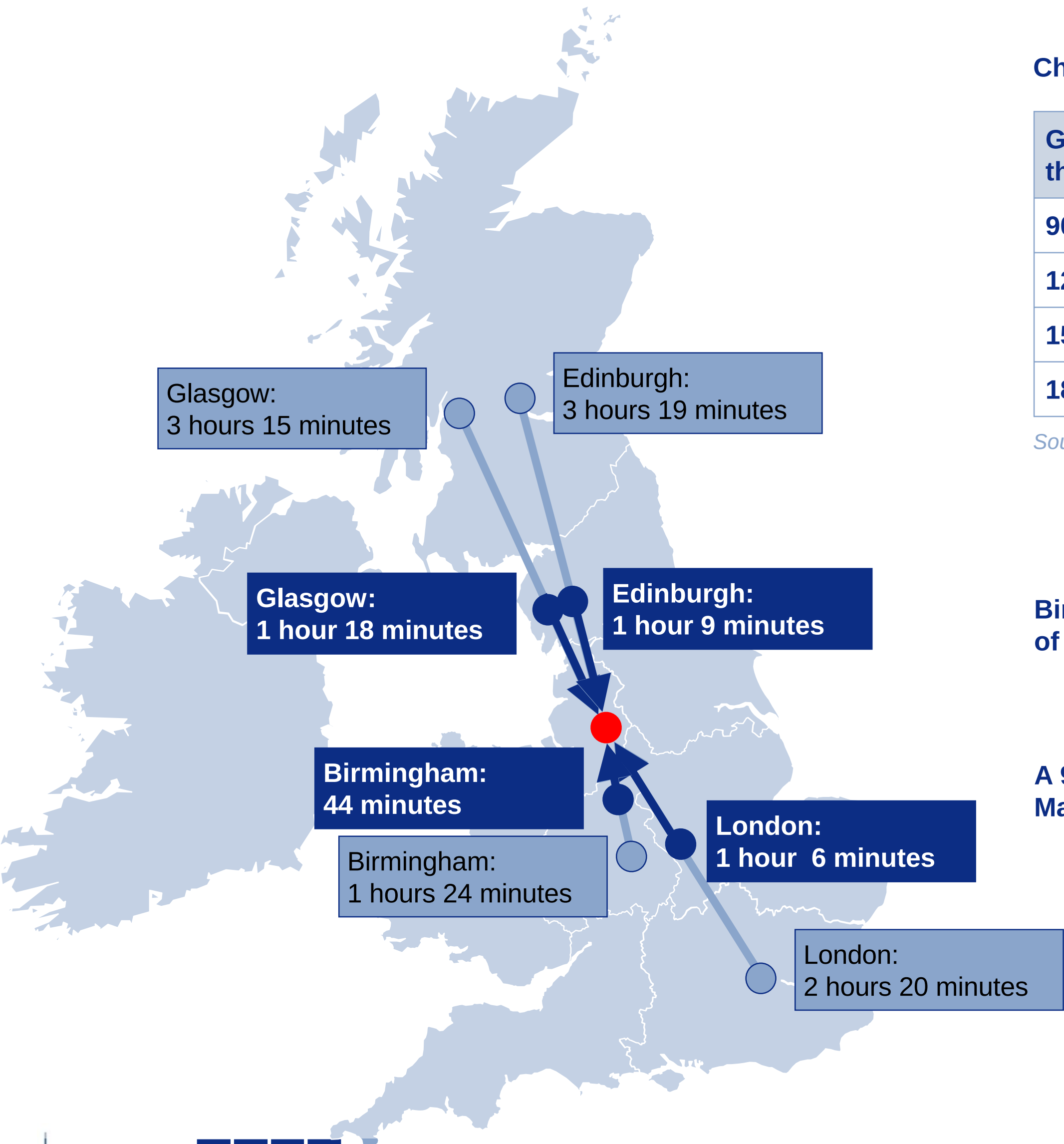
Key features of a successful HSR to Manchester

Improved mode share (from car and air)
Reduced journey times between important economic centres
Reduced road congestion
Additional rail capacity to provide secondary benefits to non-HSR rail markets
Improved rail accessibility to Manchester airport

Manchester Hub

A key benefit of interchange between HSR and Hub is dispersal. A combined investment approach that recognises the synergy benefits of Hub and HSR will minimise overall costs while maximising demand for rail services on the classic and HSR networks.

Radical changes in connectivity to the rest of the UK



Change in number of workplace jobs within journey time isochrones

Generalised journey time threshold	Do Minimum	Central scenario	Difference
90 minutes	2,870,000	5,440,000	2,570,000
120 minutes	4,710,000	8,450,000	3,730,000
150 minutes	8,920,000	10,240,000	1,320,000
180 minutes	11,770,000	13,370,000	1,600,000

Source: Network rail, MOIRA rail network model, Annual Business Inquiry

Birmingham becomes as 'close' as Leeds – and effectively joins the cluster of northern cities

A 90% increase in the number of workplace jobs accessible from Manchester within 90 minutes by rail

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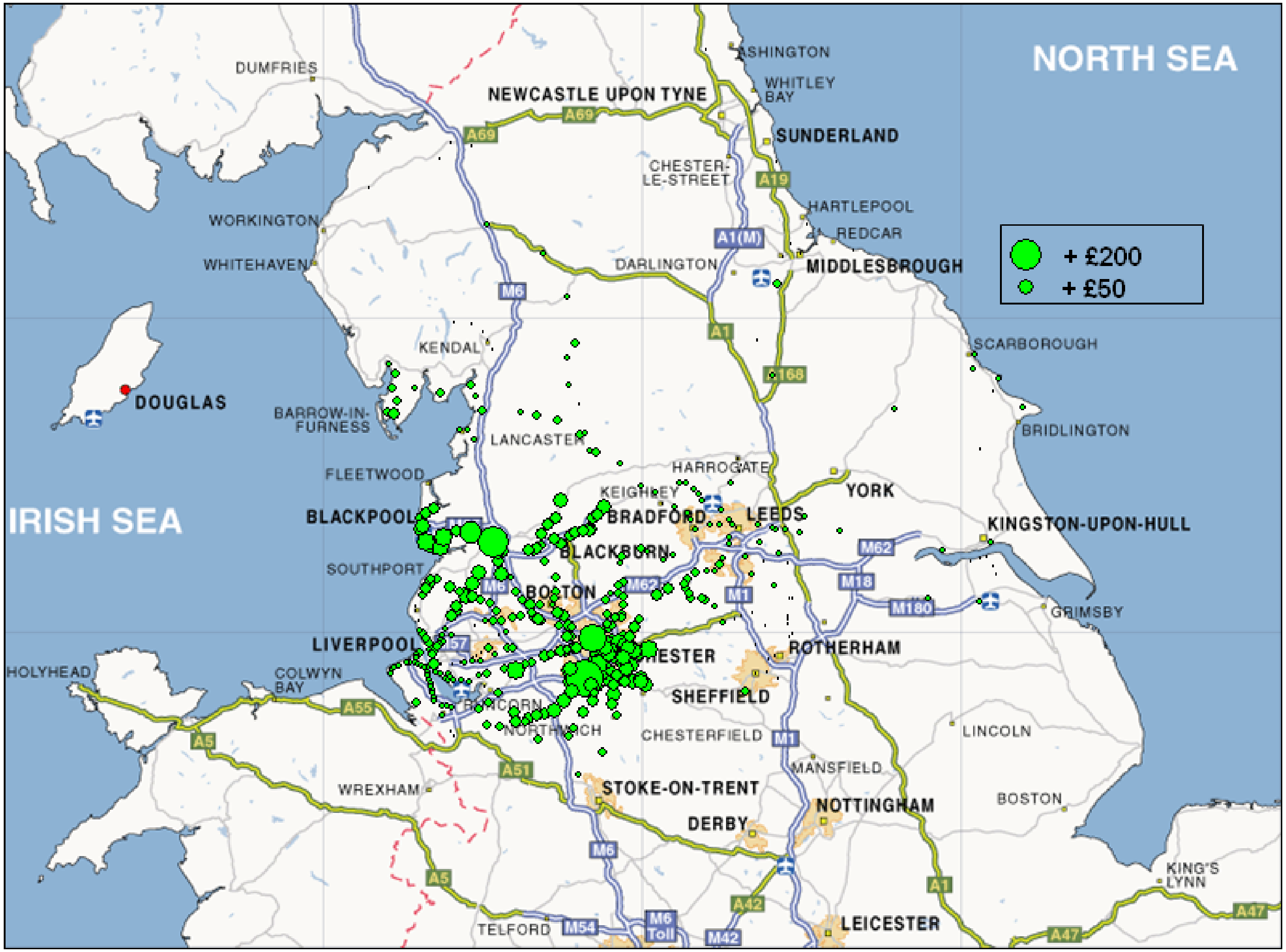
Productivity benefits within business sectors

Change in annual productivity per job within business sectors from central case HSR scenario, 2021



Productivity changes within business sectors

- Substantial impacts in rail connectivity in:
  - Preston
  - Manchester
  - Manchester airport
  - Other connecting areas
- Largest changes per job are seen in Manchester Airport and surrounding area where productivity per job is estimated to rise by £290 per job
- Next largest impact s in Preston where GVA per job jumps by £201 per job
- Widespread positive impacts across the North

All figures expressed for 2021 in 2021 values, 2007 prices

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Productivity benefits

Productivity benefits within sectors

GVA benefits rise as productivity within sectors increases because of:

- Lower business travel costs
- More businesses within reach (classic agglomeration)
- More competitive markets

Total GVA impact of increased productivity in the Northern Way = £176m per annum

Productivity benefits from changes in sectoral mix

GVA benefits rise as sectoral mix changes as:

- More productive sectors (such as business services and finance) move to areas that benefit most from HSR

Total GVA impact of increased productivity in the Northern Way = £234m per annum

Total GVA impact arising from changes in productivity in the Northern Way = £410m per annum

Policy implications

- Rail connectivity can support the structural change of the economy – helping productive sectors in productive places
- This could support the further growth of productive clusters in, for example, media, businesses services and IT in Manchester, boosting the Northern economy

Total impact including employment redistribution and growth

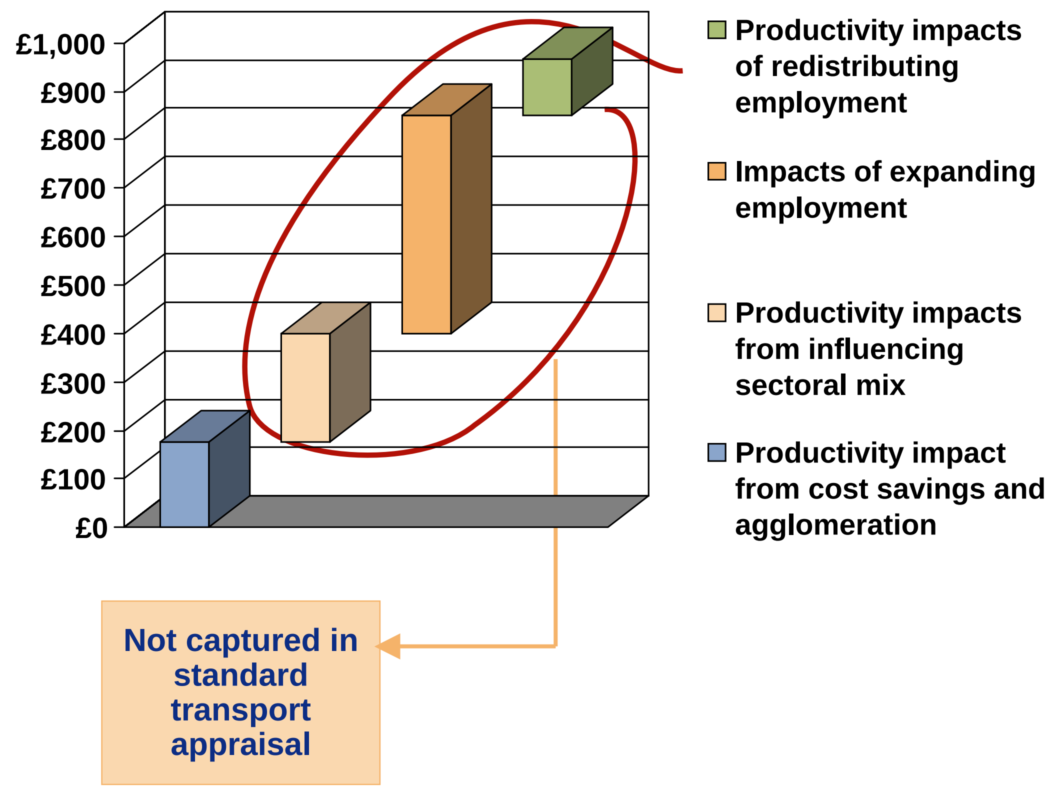
GVA benefits concentrated at HSR stops

- The map opposite shows the combined GVA impacts of:
  - Changes in productivity within business sectors
  - Changes in sectoral mix
  - Relocation of employment
  - Growth in employment in the study area (both from net national gains in employment and relocation to the study area)
- Growth impacts concentrated in:
  - Manchester
  - Manchester airport and Airport City
  - Preston
- The relocation serves to increase productivity as areas served by HSR become more competitive
- This helps to maximise competitive advantage both across the North and the country as a whole

Total GVA impact for the Northern Way rises to £967m per annum

- Impacts comes from:
  - Almost 10,000 net new jobs modelled in Northern Way area
  - Redistribution of jobs to more productive locations

Total GVA impact from central case HSR scenario, 2021



A unique opportunity for the Manchester Hub

Manchester Hub could have massive economic benefits for the North

- Manchester Hub is the north's most significant rail bottleneck
- Analysis for GMPTE suggests that solving capacity problems at Manchester Hub could support a wide variety of enhanced services across Manchester and and the wider North of the Country
- The economic **benefits of this could reach £7bn per annum** for the Northern Northern economy, although:
  - Achieving this timetable is as yet uncosted
  - Other constraints on the economy could then bite first. These have not assessed using this methodology which assumes that other constraints (such as land availability in city centres) get no worse than they are now
- The Hub timetable is about providing capacity, improving journey opportunities and improving journey times.
- The Hub and HSR have significant synergies
- Improved connectivity to Manchester and to the Airport are integral elements of of the Hub proposals
- Hub analysis undertaken to date identifies the London route and Transpennine links to Leeds, Sheffield and Liverpool as the most valuable flows, followed by Chester, Preston and Warrington.
- A key benefit of interchange between HSR and Hub is dispersal.

Network Rail's Hub Timetable

- NR's Hub analysis uses the anticipated 2016 Timetable as the base with the following assumed service levels from Manchester by key corridor:

– London	3tph
– Birmingham	2tph fast, 1tph slow
– Liverpool	4tph
– Leeds	4tph fast, 2tph semi-fast
– Sheffield	2tph fast, 2tph semi-fast

- Liverpool – Manchester Electrification, announced in August by Network Rail, is assumed to link Liverpool Lime Street to both Manchester Victoria and Piccadilly Stations

HSR could free up 12 trains paths into Manchester

- HSR allows paths to be released into Piccadilly
- Infrastructure options plus retimetabling and some rerouting of existing trains can take up to 12 conflicting moves out of the critical station throat and central platforms at Piccadilly

What if HSR made possible only 20% of the Hub benefits?

- Only 20% of the modelled Manchester hub benefits **could double the benefits of HSR alone to more than £2bn per year**
- This is around **7% of the Northern Way GVA gap**, although some of this is likely to come from redistributed business activity rather than net national productivity or employment gains

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The airport as a growth accelerator

- Manchester is the fourth largest Airport in the UK, and twice the size of other non-London airports.
- The strategic importance of providing HSR access to the airport also is linked to the wider development of the airport as a substantial transport hub in its own right.
- The provision of HSR allows a wider catchment to the airport itself, and alters the relative strengths of Manchester as a route destination for airline carriers.
- Increased economic activity in the North in turn drives Airport demand.
- HSR makes Manchester airport attractive to passengers in the Midlands and Scotland, enabling Manchester to realise its true potential as an International Gateway.
- HSR provides an opportunity to transfer some passengers making short air trips or interlining at Heathrow to use HSR. This in turn can free up paths at Manchester Airport for longer distance, higher value flights, providing a genuine alternative to Heathrow.
- HSR at the Airport interacts positively with growing demand for flights: greater flight opportunities require improved surface access and connectivity to broader markets
- The siting of stations at the periphery of cities, particularly close to extensive interurban motorway networks (M62, M60, M56) maximises the the opportunities to gain mode share
- The Airport is a substantial generator and attractor of trips, and providing high quality public transport connections can reduce the surface access burden of the airport on the regional highway network.

- *To calculate the impact that HSR might have on international passenger demand at MIA the change in Rail GJT between the present timetable and each of the options was used to generate a change in market shares, based on changes in Generalised Journey times. This potentially understates likely increase in demand as it does not take into account changes in the number and attractiveness of flights.*

	International Pax (000's)		
	Manchester	Difference from Base Manchester	Impact of Sub Options
Base	17950		
Option 0	18716	766	
Option 1	18870	920	154
Option 2	18932	982	217
Option 2.1	18938	988	222
Option 2.2.1	18947	997	231
Option 2.2.2	18917	967	201
Option 3	17923	-27	-793
Option 4	18936	986	220

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HSR needs Manchester, Manchester needs HSR

Why HSR needs Manchester

- A natural distance for HSR to be competitive over
- Supports the rebalancing of national economic growth
- Brings the economic mass of Birmingham effectively within range of the Northern economies – closer to Manchester than Leeds is
- Manchester provides the critical economic mass that makes it the best chance chance for accelerated economic growth outside London
- HSR expands Manchester rail catchments substantially more than it would Birmingham's
- The right mix of business activity
  - Manchester's has 46% of businesses in the business services and finance sector – more than any comparable northern city
  - This sector is set to gain the most from improvements in rail connectivity
  - Manchester along with and Liverpool) is the most productive city in the North and the natural northern growth pole
- Net national benefits from supporting growing highly productive and agglomerating sectors
- By linking to Manchester airport:
  - Reducing the need for internal flights and contributing to CO2 emissions
  - Expanding the airport's catchment and reducing the need for airport expansion in the south
  - Driving further growth across the North as the airport could support a more attractive route network
  - Supporting the emergence of northern world city
- Potentially multiplying HSR's benefits to the north by two through unlocking capacity at the Manchester Hub

Why Manchester needs HSR

- To grow the local economy and support its drive to increase productivity
- To encourage the land use change to support city centre growth and clustering clustering of key sectors and areas including:
  - Drive further growth in media and communications jobs
  - To support the dense business service sector in the city centre
  - To accelerate the development of 'Airport City'
  - To spread productivity gains across Greater Manchester, drive up wages and reduce deprivation
- To provide the high capacity, high quality links that will ease overcrowding on the regional network
- To provide a final phase of Manchester Hub capacity improvements unlocking the regional service improvements and further benefits for the city and the wider North
- To support Manchester as a world city

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SUMMARY OF BENEFITS

HSR will:

- Have a GVA impact for the Northern Way of £967m per annum
- Including a fraction of the Hub benefits, potentially result in benefits of £2bn per annum
- Result in a positive NPV of £11bn and a BCR of 1.5
- Remove 3m car trips from on the roads
- Save users 2bn intercity minutes