



Appendix P:Warrington Western Link

Land use and economic development report

October 2017

Mott MacDonald
9 Portland Street
Manchester M1 3BE
United Kingdom

T +44 (0)161 914 8880
mottmac.com

Warrington Borough Council
New Town House
Buttermarket Street
Warrington
WA1 2NH

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Executive summary

Introduction

Mott MacDonald was commissioned by Warrington Borough Council (WBC) to deliver an Outline Business Case (OBC) for the Western Link scheme in Warrington. This report forms an Appendix to the OBC and focuses on wider economic benefits captured through anticipated changes to land utilisation and the economic development benefits that are likely to arise as a result.

The Western Link

The Western Link scheme is a major highway scheme aimed at addressing a range of transport issues in Warrington, such as alleviating congestion around the centre of the town and providing enhanced north-south connectivity. The scheme aims to provide an additional crossing of the River Mersey west of Warrington town centre to relieve congestion, increase connectivity, reduce air pollution, and support wider economic benefits, including helping to bring forward development land within Warrington for employment and housing use in line with the Draft Local Plan.

Strategic economic context

Warrington is characterised by its strategic location between Liverpool and Manchester, at the core of the Atlantic Gateway and the Northern Powerhouse. Several key economic indicators put Warrington ahead of other areas in the North West, including the Liverpool City Region and Greater Manchester, in terms of job density and growth, gross weekly pay and the proportion of people who own their own home (either outright or with a mortgage). The proportion of people employed in business administration and science & technology roles in Warrington is higher than the North West and national levels.

Economic impact assessment

Warrington has a strong economy which could potentially be reinforced by the delivery of the Western Link scheme. This appendix assesses the Wider Economic Benefits (WEBs) of the scheme in terms of its potential impact on employment and housing sites identified in Warrington's Draft Local Plan.

This assessment considers those development sites in the Draft Local Plan which could be brought forward in response to the delivery of the scheme, particularly in relation to their proximity to the Western Link and the findings of consultation with key stakeholders. The sites on which this analysis is based includes five employment sites equalling almost 16ha of A and B use employment land and three housing sites identified to accommodate 863 new homes. The economic impact of the development of these is shown below.

Key findings

The employment sites that were included in the analysis could support:

- A total of **367 net additional jobs**.
- **£16.1m of net additional GVA** per annum

In addition to this, the construction of the 863 dwellings¹ could generate a temporary economic impact of:

- **105 temporary construction jobs**; and,
- Approximately **£4.4m of GVA per annum** during the construction period.

The tax impact of developing these sites to Warrington Borough Council is:

- An additional **£2m in business rates** per annum;
- Approximately **£1,000,000 in additional council tax** each year.

The total value of this intervention in GVA, modelled over 30 years in 2010 prices and discounted to 2010 is a **Net Present Value (NPV) of £137.63m**. This demonstrates that the Western Link scheme has the potential to generate significant economic benefits for Warrington and contribute to its growing economy and that of the North West.

¹ *863 dwellings represents the gross number of homes constructed. It should also be noted, sites such as K4 identified in the Warrington 2017 Draft Local plan have not been assessed. The site was deemed unlikely to come forward in the local plan period (despite being in the local plan). The K4 site may come forward over a longer time period.*

1 Introduction

1.1 Introduction

Mott MacDonald was commissioned by Warrington Borough Council (WBC) to deliver an Outline Business Case (OBC) for the Western Link scheme in Warrington. This report forms an Appendix to the OBC and focuses on wider economic benefits captured through anticipated changes to land utilisation and the economic development benefits that are likely to arise as a result.

The Western Link is a major highway scheme aimed at addressing a range of transport issues within Warrington, such as alleviating congestion around the centre of the town and providing enhanced north-south connectivity. This scheme is anticipated to support the development of a significant amount of land, identified for housing and employment use in WBC's new Local Plan, currently in draft form. This report examines the Wider Economic Benefits (WEBs) associated with the scheme in terms of jobs, Gross Value Added (GVA) and new housing related impacts, based on the assessment of the potential for the Western Link scheme to support the delivery of major housing and employment sites. This report sits alongside the OBC as a supplementary document.

This report follows on from the options sifting that reduced the long list of scheme options from over 80 down to six and ultimately to one, using Mott MacDonald's Investment Sifting and Evaluation Tool (INSET). INSET was used to compare each option based on their ability to deliver against the objectives of the scheme, of which supporting WEBs was one. The preferred option presents the strongest mix between potentially delivering significant WEBs and meeting the required transport, connectivity, environmental and deliverability criteria. The focus of the analysis contained within this report is the single preferred scheme option identified through the sifting process.

1.2 Warrington and the scheme

Warrington is a large town in northern Cheshire, strategically located between the Liverpool City Region to the west and Greater Manchester to the east. The town has several key development sites which accommodate large numbers of employees across a range of business sectors. Key among these are the Omega development, a storage and logistics base to the north west of the town, and various sites around Birchwood, home to a nationally-significant cluster of nuclear energy companies and major organisations such as the Department for Work and Pensions (DWP).

The objectives of the Western Link scheme are set out below.

Table 1: Western Link scheme objectives

<ul style="list-style-type: none">● Objective 1 Relieve congestion and improve air quality in Warrington town centre.<ul style="list-style-type: none">– Reduce volumes of through traffic passing through the town centre.– Free up town centre capacity for bus, public realm, and active travel improvements.– Relieve severe pinch points on the network, including Bridgefoot Gyratory and Brian Bevan Roundabout.– Contribute to improved air quality in the Warrington Town Centre Air Quality Management Area (AQMA).● Objective 2 Improve connectivity between North and South Warrington<ul style="list-style-type: none">– Improve local connectivity, by delivering additional route choice and reducing the 'barrier effect' caused by the River Mersey, Manchester Ship Canal and railway lines.
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-
- Improve strategic connectivity, by making Warrington more resilient in case of incidents in the 'Motorway Box' (M62/M6/M56)

- **Objective 3** Unlock key development land to support the growth aspirations of 'Warrington Means Business' and the Warrington Local Plan.

- Deliver access to the next phase of the Warrington Waterfront Masterplan.
- Deliver improved access to the Port of Warrington.
- Deliver access and capacity to support new housing developments.
- Deliver access and capacity to support the development of employment land.

- **Objective 4** Support the continued growth of Warrington's economy within the Northern Powerhouse.

- Deliver journey time savings for commuters travelling into, out of and within Warrington.
- Provide access to growing employment sites across Warrington, including Omega, Lingley Mere, Sci-Tech Daresbury, Warrington town centre and Birchwood.

- **Objective 5** Make Warrington a better place to live

- Provide access to new green and recreational space between the River Mersey and the Manchester Ship Canal.
- Support the implementation of new public transport and active travel routes associated with the Warrington Waterfront development.
- Support Warrington Health and Wellbeing Strategy's vision to work together for stronger neighbourhoods, healthier people, a vibrant and resilient economy and greater equality across all communities.

Source: Mott MacDonald, Warrington Western Link Options Appraisal Report, 2017

1.3 Methodology

The WEBs of this scheme have been assessed (at the WBC level) by reviewing potential changes in land use as a result of the Western Link scheme enabling development. We have calculated the associated economic impacts (jobs, GVA and housing related impacts) using Mott MacDonald's Transparent Economic Assessment Model (TEAM).

More specifically the method has entailed:

- The review of the strategic economic context in Warrington, in terms of economic and housing policy and how development will help deliver the growth planned.
- A review of the proposed development potential of the area anticipated to be supported by the Western Link scheme, as set out in the Draft Local Plan.
- Consultation with representatives of WBC on the proposals for the sites in the area around the Western Link scheme and on broader economic issues that could impact the assumptions made as part of this WEB assessment.
- Quantitative assessment of the gross and net economic benefits (focusing on jobs and GVA) associated with the Western Link scheme using TEAM.
- These GVA benefits are then shown over a 30-year time horizon (at NPV) from the beginning of the anticipated construction period of the modelled employment sites.

1.4 Report structure

This report is structured as follows:

- **Section 2: Strategic economic context** – summary of how the scheme supports the Northern Powerhouse, Atlantic Gateway and key local economic and housing policy and strategy and wider growth ambitions for Warrington.
- **Section 3: The Western Link scheme** – sets out the rationale for identifying employment and housing sites that could potentially be unlocked by the Western Link scheme in the context of the Draft Local Plan.
- **Section 4: Economic impact assessment** – provides the assessment of the WEBs associated with the Western Link scheme.

- **Section 5: Summary** – presents the key findings of the WEBs assessment.

2 Strategic economic context

2.1 Introduction

This section provides an overview of the strategic economic context and the socio-economic characteristics of the local economy to understand how this scheme could contribute to local growth objectives.

2.2 Economic and housing policy

2.2.1 Northern Powerhouse

In recent years, there has been strong Government emphasis on the need to rebalance the national economy and close the productivity gap between the north and the south. The Northern Powerhouse encapsulates this vision by encouraging growth in the North through building on the existing strengths of the region alongside fostering new opportunities for economic expansion². As part of the portfolio of projects and strategies supporting this ambition, there are plans to stimulate all forms of transport including road, rail, and aviation, as well as expanding the freight and logistics sectors.

Transforming the North into a global centre of economic success will rely on the major urban centres achieving their maximum economic potential³. These strategically important urban centres include Liverpool and Manchester, both of which are within commutable distance from Warrington. The strong alignment between the Warrington Western Link scheme and this wider strategic agenda is demonstrated by the decision of the Government in 2016 to award funding from the Northern Powerhouse project to produce the business case this appendix supports⁴.

2.2.2 The Atlantic Gateway

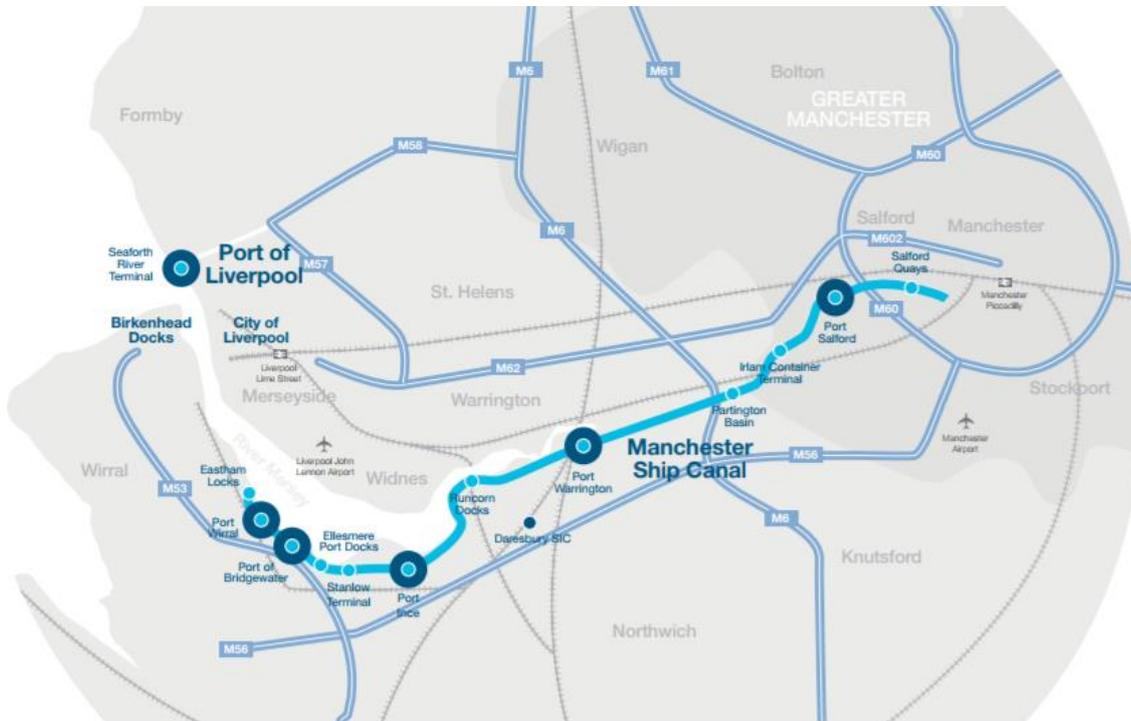
The Atlantic Gateway is a spatial corridor focused on international trade, logistics, business and innovation stretching from Deeside and Merseyside through Cheshire and Warrington to Manchester. Warrington sits at the centre of this corridor and is located on the Manchester Ship Canal which connects Liverpool and the Irish Sea with Manchester. A map of the Atlantic Gateway corridor is shown in Figure 1.

² The Northern Powerhouse: One Agenda, One Economy, One North, 2015, page 2.

³ Ibid., page 10.

⁴ HM Government (2016): 'Northern Powerhouse Strategy'

Figure 1: The Atlantic Gateway corridor



Source: Atlantic Gateway Business Plan (2012)

The Atlantic Gateway initiative presents a significant investment and growth opportunity in the UK, with the Gateway region currently generating £17bn of GVA per annum. Its aim is to create a critical mass such that a new level of growth is achieved that previously has not been seen in the UK outside of London, and by 2030 there is the potential for approximately 250,000 new jobs to be created in the Atlantic Gateway area⁵. OMEGA North in Warrington is a key project identified as part of the Atlantic Gateway which has delivered 100,000m² of new logistics and distribution space and created over 1,400 new jobs.⁶

Box 1: Mersey Gateway

The Mersey Gateway is a major project to deliver a new crossing of the River Mersey between Runcorn and Widnes, aimed at reducing journey times and creating an efficient and reliable strategic link between the Liverpool City Region and the rest of the country. This is anticipated to support the growth of the Liverpool SuperPort development as well as the growth of industrial, manufacturing and logistics businesses across the Liverpool City Region and beyond. It is anticipated that the Mersey Gateway scheme could support as many as 4,640 net additional jobs generating £61.9m of net additional GVA by 2030. The Mersey Gateway crossing opened to traffic in October 2017.

Source: The Mersey Gateway (2017): 'The Mersey Gateway Project'

The Mersey Gateway is among several major projects that are directly aimed at delivering the objectives of both the Atlantic Gateway and Northern Powerhouse initiatives. Both of these initiatives are focussed on providing more efficient transport connectivity between key cities and areas of the North of England, in order to support wide-ranging economic growth. The Western

⁵ Atlantic Gateway (2012): 'Business Plan'

⁶ Cheshire and Warrington Enterprise Partnership (2014): 'Cheshire and Warrington Matters'

Link scheme actively supports this objective by aiming to create additional capacity on Warrington’s road network while supporting through traffic travelling around the region.

2.2.3 Cheshire and Warrington LEP

The Cheshire and Warrington Local Enterprise Partnership (LEP) area has a strong economy that regularly ranks within the top LEPs in the country. It is polycentric with several key spatial areas including the Cheshire Science Corridor and the Omega development site. The LEP area is noted for its pockets of severe congestion which the LEP identifies as being a key threat to its growth objectives going forward⁷. In response to these opportunities and challenges, Cheshire and Warrington LEP has developed a Vision and Strategic Framework⁸. The framework formalises the primary goal of the LEP, which focuses on reversing the decline in GVA per head the area has been experiencing over the past decade and a half. It also establishes the following specific growth targets which are expected to be achieved through accelerated growth of existing businesses and new start-ups:

- By 2021, Cheshire and Warrington LEP intends to grow its economy to a total value of £26.6bn (an increase of a third from its 2014 position of approximately £20bn⁹) with GVA per head at 110% of the UK average.
- By 2030, the target for the total value of the economy rises to £35bn with GVA per head at 115% of the UK average. The LEP also expects the area to house an additional 100,000 residents, create 75,000 new jobs and construct 70,000 new homes.

The Western Link scheme directly supports the delivery of these objectives by enabling greater transport connectivity through Warrington and between the LEP area and key markets such as Manchester and Liverpool. It will also help to unlock land for employment and housing growth, enabling both a growth in jobs and GVA for the region.

2.2.4 Warrington Borough Council

In July 2017, WBC released its Draft Local Plan, which sets out its objectives for economic growth and housing policy over the period to 2037. The specific objectives set out in the Draft Local Plan are outlined in Table 2 below.

The Draft Local Plan sets out the medium to long-term strategy for the town, focussing on supporting the continued future growth of the town’s economy by delivering strategic infrastructure. The proposed Western Link scheme is widely referenced as significant infrastructure necessary to facilitate this growth and is seen as a crucial scheme to enable the Draft Local Plan to achieve its overall targets of 22,260 new homes and 381 hectares of employment land¹⁰.

The Draft Local Plan key diagram in Figure 2 shows the distribution of the key employment (dark blue) and housing (yellow) land designated in the Draft Local Plan around the Arpley Meadows area of Warrington, which are expected to be impacted by the Western Link scheme.

Table 2: Strategic objectives from Warrington’s Draft Local Plan, 2017

W1	Enable the transition of Warrington from a ‘new town’ to a ‘new city’ through: The ongoing regeneration of Inner Warrington,
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⁷ Cheshire and Warrington Enterprise Partnership (2014): ‘Cheshire and Warrington Matters’

⁸ Cheshire and Warrington Enterprise Partnership (2014): ‘Cheshire and Warrington Matters’

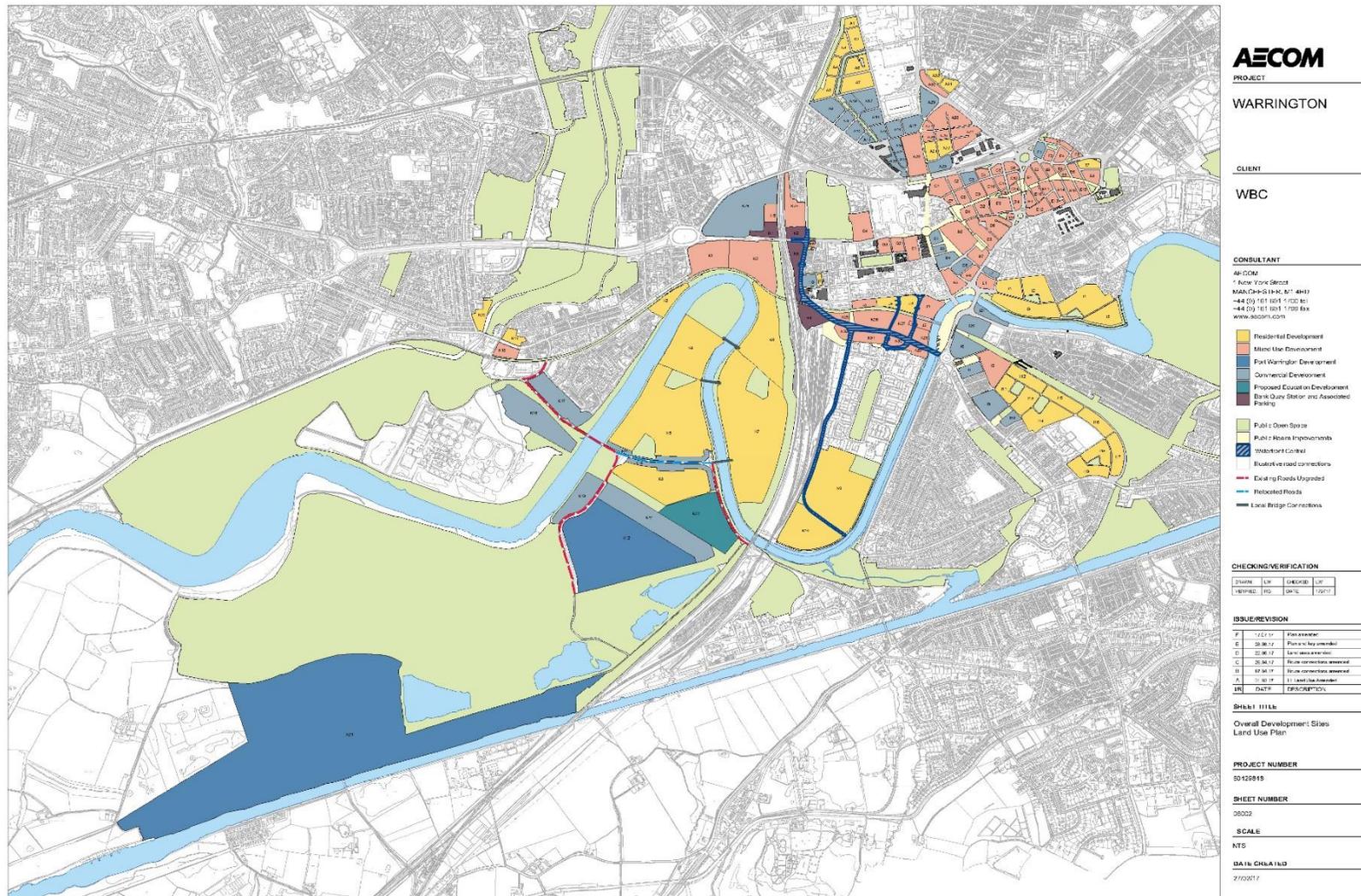
⁹ Cheshire and Warrington Enterprise Partnership (2014): ‘Cheshire and Warrington Matters’

¹⁰ WBC, Draft Local Plan, 2017

	<p>The delivery of strategic and local infrastructure, The strengthening of existing neighbourhoods, and The creation of new sustainable neighbourhoods. This must be achieved whilst delivering a minimum of 22,260 new homes and supporting Warrington's ongoing economic success by providing 381 Hectares of employment land between 2017-2037.</p>
W2	<p>Facilitate the sensitive release of Green Belt land to meet Warrington's long-term housing and employment needs, whilst ensuring the revised Green Belt boundaries maintain the permanence of Warrington's Green Belt in the long-term.</p>
W3	<p>Strengthen and expand the role of Warrington's town centre as a regional employment, retail, leisure, cultural and transport hub, whilst transforming the quality of the public realm and making the town centre a place where people want to live.</p>
W4	<p>Provide new infrastructure to support Warrington's growth, reduce congestion and promote sustainable transport options, whilst reducing the need to travel and encouraging active lifestyles.</p>
W5	<p>Secure high-quality design which reinforces the character and local distinctiveness of Warrington's urban area, its countryside, its unique pattern of green spaces and its constituent settlements whilst protecting, enhancing and embracing the borough's built and natural assets.</p>
W6	<p>Minimise the impact of development on the environment through the prudent use of resources and ensuring development is energy efficient, safe and resilient to climate change and makes a positive contribution to improving Warrington's air quality.</p>

Source: WBC, Local Plan Preferred Development Option, 2017 (emphasis added by Mott MacDonald)

Figure 2: Draft Local Plan key diagram



Source: WBC, 2017

2.3 Socio-economic characteristics

This section provides a brief overview of the key socio-economic characteristics of Warrington and the wider Cheshire and Warrington LEP area to further understand how the Western Link scheme could support key employment sectors, population growth and the development of the local and regional housing offer.

2.3.1 Travel to work

According to the 2011 Census, 50.6% of Warrington residents live and work in the Borough, meaning that approximately half of the jobs in Warrington are filled by people from outside of Warrington. Table 3 below shows a much stronger labour market connection with Greater Manchester and the Liverpool City Region than with the two neighbouring Cheshire authorities. This suggests that Warrington is much more closely connected in employment terms with the two major city regions it borders than to the other areas that make up the rest of Cheshire and Warrington LEP; this is not surprising given that people are more likely to commute to places with the greatest concentration of employment opportunities. Simultaneously, Warrington serves as an employment destination for its neighbouring areas.

Table 3: Travel to work - summary

		Warrington
Total journeys to work to Warrington		99,646
Total journeys to work from Warrington		85,159
Net commuting		14,487
<hr/>		
Journeys as %:	Inbound	Outbound
Cheshire East	4.2%	5.8%
Cheshire West and Chester	7.9%	7.1%
Wigan	13.3%	5.8%
Greater Manchester	32.7%	39.7%
Liverpool City Region	39.8%	33.8%
Other	2.0%	7.9%
Total	100.0%	100.0%

Source: Census, ONS, 2011

2.3.2 Employment

At a workplace level, approximately 122,000 employees work in Warrington, representing 25.8% of total employment in the Cheshire and Warrington LEP area. The key employment sectors for the borough are business administration and support services (15%), health (13%), professional, scientific and technical (11%) and retail (8%)¹¹. Table 4 shows the comparison with other locations including Cheshire and Warrington LEP and the regional and national averages. This shows that Warrington has a greater proportion of residents employed in business administration & support services and professional, scientific & technical jobs than all the comparator areas, including against the regional and national level. This suggests that these sectors are among Warrington's key economic strengths, in addition to its strategic location at the centre of the Atlantic Gateway, between Liverpool and Manchester.

¹¹ BRES, ONS, 2017

Table 4: Employment by broad industrial group (%)

Broad industrial group	Warrington	Cheshire and Warrington LEP	Liverpool City Region	Greater Manchester	North West	Great Britain
Agriculture, forestry & fishing	0	0	0	0	0	1
Mining, quarrying & utilities	2	1	1	1	1	1
Manufacturing	6	9	8	8	10	8
Construction	5	4	4	4	4	5
Motor trades	2	2	1	1	1	2
Wholesale	5	3	3	4	3	4
Retail	8	10	10	10	10	9
Transport & storage (incl postal)	7	6	7	6	5	5
Accommodation & food services	7	8	8	7	8	7
Information & communication	3	3	2	3	3	4
Financial & insurance	2	4	3	4	3	4
Property	1	1	1	2	2	2
Professional, scientific & technical	11	11	7	10	8	9
Business administration & support services	15	10	8	10	8	9
Public administration & defence	4	3	6	4	4	4
Education	5	7	10	9	9	9
Health	13	12	18	13	14	13
Arts, entertainment, recreation & other services	3	4	4	4	4	5

Source: ONS, 2016

Warrington is also a growing economy with an increasing proportion of residents employed in managerial and professional services. Warrington also has a relatively high job density of 1.03, meaning that there is slightly more than one job for every person of working age in the borough, the comparison with neighbouring local authorities shows Warrington has a considerably higher job density than its neighbours.

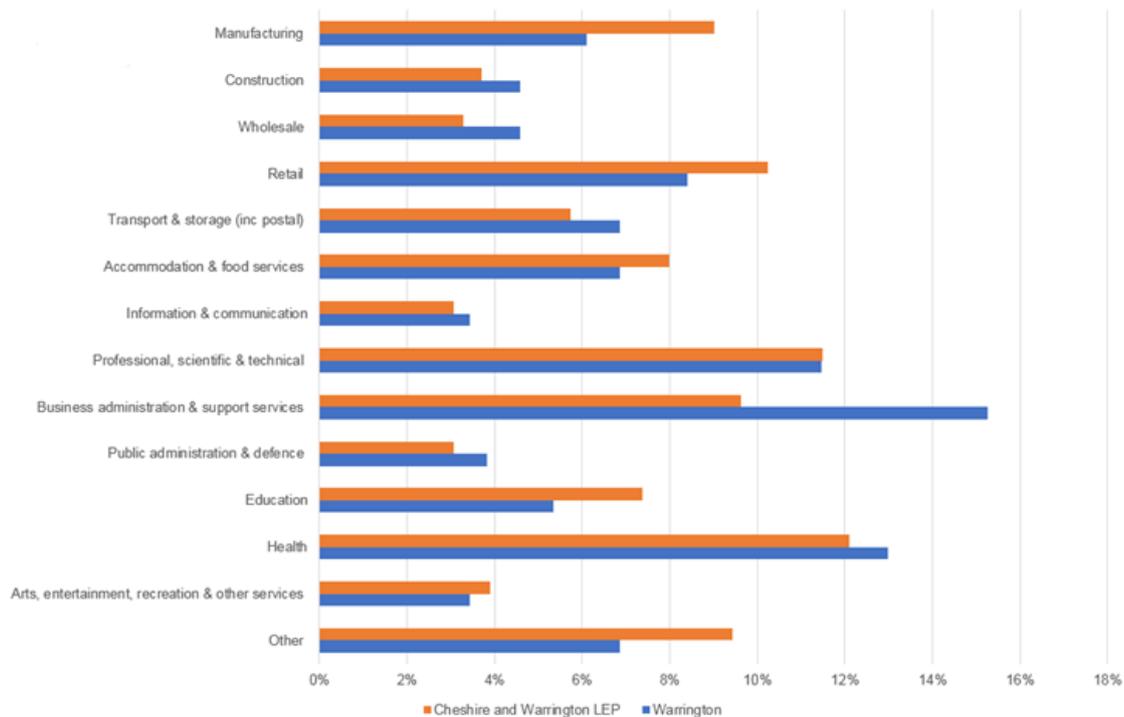
Table 5: Job densities

Area	Job density
Warrington	1.03
Halton	0.77
Liverpool City Region	0.70
Greater Manchester	0.78
Cheshire and Warrington LEP	0.95
North West	0.79
Great Britain	0.83

Source: ONS, 2015

In addition to having a higher job density than Halton, the Liverpool City Region and Greater Manchester, Warrington also has a greater job density than the regional and national average. This shows that Warrington has a strong supply of jobs and currently has the equivalent of a surplus of jobs relative to the population of the town which partly explains the high levels of in-commuting to work.

Figure 3: Employment by sector, as % of total, 2016



Source: BRES, ONS, 2016

2.4 Gross weekly pay

Gross weekly pay, as a measure of the average wages paid to workers in Warrington, show a similarly positive view of Warrington’s economy relative to the regional and national levels. Data on average gross weekly pay from 2015 shows:

- Gross weekly pay in Warrington was £549.90.
- This was significantly higher than across the North West (£485.30).
- Gross weekly pay in Warrington was also higher than the average across Great Britain (£527.20).
- Warrington also had significantly higher levels of gross weekly pay than across Greater Manchester (£479.00) and the Liverpool City Region (£476.60)¹².

This data indicates a higher proportion of higher paid and likely high value employees within the town, relative to the comparator areas. This is also an explanation for the high level of in-commuting for work in Warrington.

2.4.1 Deprivation

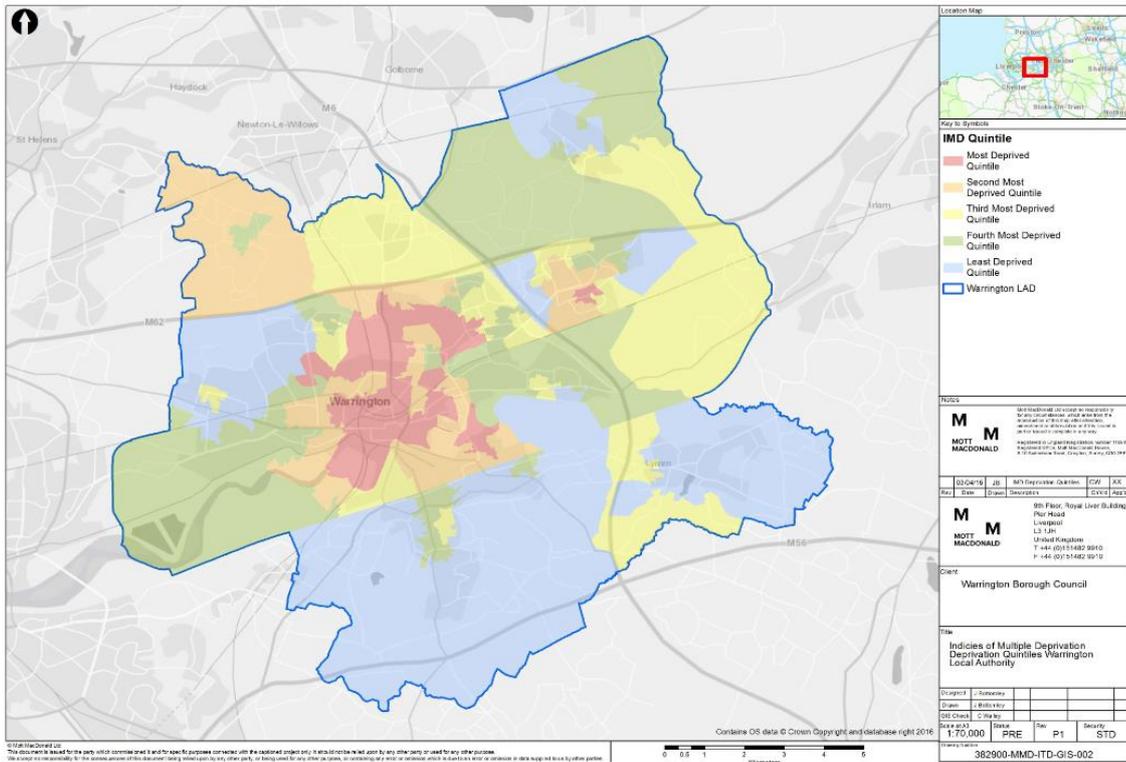
When considering deprivation levels, Cheshire and Warrington is an area of stark contrasts with wealthy hotspots in rural hinterlands and pockets of severe deprivation in inner urban areas. There are 9 areas in Cheshire West and Chester within the 10% most deprived in England and 16 areas across Cheshire East within the top 20% of the most deprived areas in England¹³.

¹² ONS, Annual survey of hours and earnings, April 2017

¹³ Needs Analysis for Cheshire and Warrington, Cheshire Community Foundation, 2016

In Warrington, there are 12 areas within the 10% most deprived and 12 further areas within the 20% most deprived areas in England. Deprivation is clustered in and around Warrington town centre. Many of the least deprived areas are in South Warrington in the more rural areas of the borough. Warrington is amongst the 40% least deprived areas in the country¹⁴.

Figure 4: Index of Multiple Deprivation, Warrington, 2015



Source: Index of Multiple Deprivation, DCLG, 2015

2.5 Housing

The 2011 Census highlights that there are currently 85,140 dwellings in Warrington with an overall household size of 2.3. There is a much higher level of ownership (including both outright and mortgaged) in Warrington at 72.3% compared to 64.3% nationally.

Table 6: Housing stock by tenure, 2011

	Owned		Rented		Total
	Owned Outright	Owned with a mortgage or loan or shared ownership	Social rented	Private rented or living rent free	
Warrington	32.0%	40.3%	15.6%	12.0%	100.0%
North West	31.0%	34.0%	18.3%	16.7%	100.0%
England and Wales	30.8%	33.5%	17.6%	18.1%	100.0%

Source: Census, 2011

¹⁴ The English Indices of Deprivation, DCGL, ONS, 2015

The most common type of housing in Warrington, as in the North West and Cheshire and Warrington LEP, are semi-detached houses accounting for 41.3% of all household spaces. As in the LEP area, there is a low proportion (10.8%) of flats or apartments compared to 20.7% nationally.

Table 7: Housing stock by type

	Warrington	Cheshire and Warrington	North West	England and Wales
Detached house or bungalow	24.0%	31.0%	18.0%	22.7%
Semi-detached house or bungalow	41.3%	35.9%	36.3%	31.3%
Terraced house or bungalow (including end-terrace)	23.9%	21.9%	29.8%	24.6%
Flat, maisonette or apartment	10.8%	10.7%	15.4%	20.7%
Caravan or other mobile or temporary structure	0.1%	0.4%	0.4%	0.2%
TOTAL	100.0%	100.0%	100.0%	100.0%

Source: Census, 2011

The housing market in Warrington (as it is nationally) is dominated by households with three bedrooms, accounting for 46.9% of all households. As highlighted in the Warrington Core Strategy¹⁵, there is a shortage of affordable homes within the borough, with average house prices being five times that of household incomes.

Average house prices in Warrington, at approximately £171,800 in 2016 (see Table 8), are around 15% higher than the regional average and 9% lower than the national average. As such, housing affordability is an issue.

When broken down by house type, data shows that Warrington has higher house prices than neighbouring local authorities. House prices in the eastern and southern parts of Warrington tend to be the highest which also reflects the spatial patterns of relative deprivation and affluence shown earlier.

Table 8: Average house prices 2010-2016 (£)

	2010	2011	2012	2013	2014	2015	2016
Warrington	147,000	147,100	147,500	149,000	157,900	163,000	171,800
North West	133,200	129,200	128,300	128,900	134,900	139,900	146,800
England and Wales	170,400	167,900	168,600	172,900	186,800	197,900	211,900

Source: Average house prices by local authority, region and nation, ONS, 2017

Average gross migration flows show that Warrington has a close migrator relationship with Halton and St. Helens, but a relatively weak relationship with Liverpool and Knowsley.

¹⁵ WBC, Local Plan: Core Strategy, 2014.

Warrington is also noted to have links with the Greater Manchester authorities and with Cheshire West and Chester¹⁶.

In summary, the housing market in Warrington is characterised by higher value detached housing with many residents owning their properties. Given that a considerable proportion of people who work in Warrington do not live there, coupled with the high job density, this suggests there is a shortage of housing to meet Warrington's overall requirements. The strategic need to provide affordable housing and a wider range of homes to attract a mixed demographic to the area is a key focus for the borough and is listed as a priority in the Warrington Core Strategy. Providing housing to accommodate an increased supply of labour is important for continued economic growth and development in the borough.

2.6 Summary

Key Points:

- There is an established need to upgrade the existing housing offer to provide an appropriate mix of housing to attract workers and support a skilled labour market.
- In Warrington, a high proportion of residents commute out of the borough particularly to the Liverpool City Region. There is also a high proportion of inbound commuters which highlights the potential benefits that the Western Link scheme could provide.
- Average house prices are relatively high in Warrington, which supports the finding that there is a high proportion of residents in managerial positions in this area. The Western Link scheme will potentially provide access to housing sites for more affordable housing developments.
- The Western Link could enable Warrington to build on its strong strategic location by unlocking new employment and housing sites to attract new businesses and skilled employment to the area.
- The Western Link could also help alleviate pockets of deprivation within central Warrington by delivering new employment opportunities to the town as well as by providing a range of housing types, including affordable homes.
- A key impact of the Western Link scheme is likely to be its effect on local employment land. By connecting the sites in Arpley Meadows that are currently largely inaccessible, the scheme unlocks these sites for development. These sites will offer strong connectivity with the wider North West region and in particular cities such as Manchester and Liverpool. This is likely to be key in attracting major businesses and skilled workers to the area.

¹⁶ Mid Mersey Strategic Housing Market Assessment, January 2016

3 The Western Link and Warrington's Draft Local Plan

3.1 Introduction

This section looks at the employment and housing sites selected for inclusion in the analysis of WEBs of the Western Link scheme. This section reviews the preferred option and the objectives of the scheme and compares the preferred option to the employment and housing sites identified in the Draft Local Plan, identifying sites selected for inclusion in this analysis.

3.2 The decision to use the Draft Local Plan

The Draft Local Plan identifies employment and housing sites across Warrington for development in the period to 2037. It is our understanding from consultation with WBC and other stakeholders that the sites identified in the draft plan adjacent to the Western Link scheme are likely to be brought forward into the adopted plan. The analysis of WEBs for this scheme focusses on the future potential of land unlocked or brought forward for delivery by the scheme in terms of supporting employment and housing. One of the objectives for the Western Link scheme is to "Unlock key development land to support the growth aspirations of 'Warrington Means Business' and the Warrington Local Plan"¹⁷. This means that the most appropriate way to measure the WEBs impact of this scheme is against its ability to support the delivery of sites set out in the Draft Local Plan.

The current Strategic Housing Land Availability Assessment (SHLAA) and Employment Land Review (ELR) for Warrington assess recent progress against existing targets for housing and employment land respectively and assesses future delivery trajectory. The Draft Local Plan looks at future requirements for such development and in this instance, draws clear linkages between several identified sites and the Western Link scheme. The SHLAA and ELR have been used as a basis to model the likely future traffic flows around the area of the scheme based on the anticipated future demand from current homes and businesses, as well as future developments considered likely to be delivered in the SHLAA and ELR

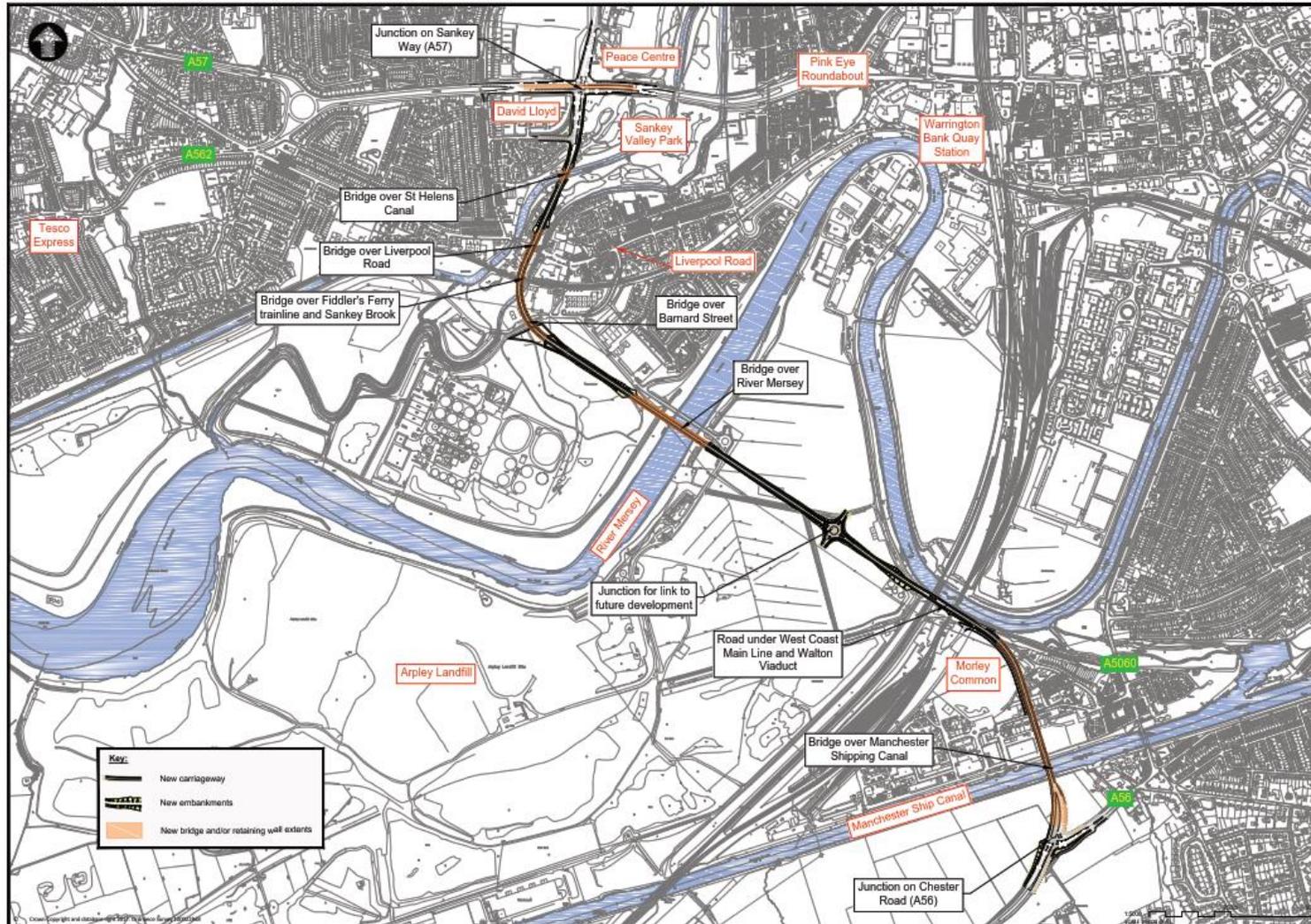
The assessment of potential WEBs uses the Draft Local Plan to assess the impact of the Western Link scheme in supporting development and delivering net additional economic growth within Warrington that potentially would not have occurred without scheme. Consultation with WBC supports the assumption that the Western Link would facilitate the delivery of the sites identified in the Draft Local Plan.

3.3 The Western Link preferred option

The preferred route option for the Western Link scheme was identified in August 2017 after extensive multi-criteria analysis that sifted the more than 80 initial options down to the single option that provided the greatest range of potential benefits when compared against the scheme's overall strategic objectives. The preferred option for the Western Link scheme is shown in Figure 6. It is this option that is the focus of the WEBs assessment.

¹⁷ Mott MacDonald, Western Link Options Appraisal Report, 2017.

Figure 5: Western Link preferred scheme route



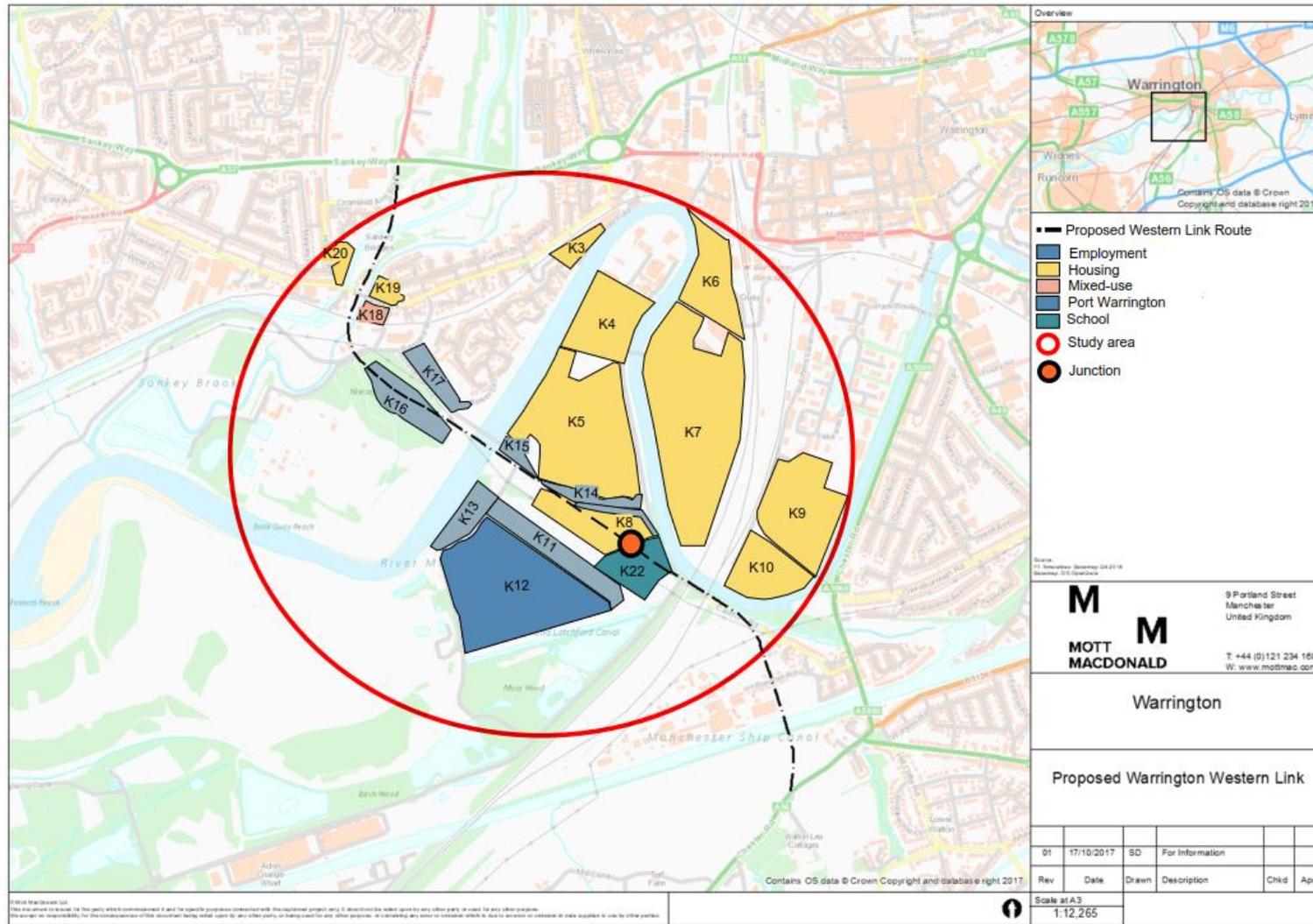
Source: Mott MacDonald

3.4 Selection of sites for inclusion in analysis

The Draft Local Plan sets out a series of employment and housing sites across Warrington. Consultation with WBC and Warrington & Co. highlighted a series of sites that were deemed relevant to the Western Link scheme, these sites were primarily located at and around Arpley Meadows, and are sites that currently are largely inaccessible or, as we have been informed through our consultations, considered unviable to developers without this scheme. As part of the previous stage of options sifting, the maps of each scheme option were compared to the map from the Draft Local Plan showing the land allocations. Each route option was assumed to impact a site if it could reasonably be assumed to help provide access to it. From this, the final sift of six options down to the preferred option was carried out, with the selection of the preferred option being, in part, determined by the option that had the potential to unlock the most employment and housing land.

From the full list of employment and housing sites across Warrington assembled in the Draft Local Plan, sites were selected based on their proximity and relevance to the Western Link scheme. Sites were discounted if they had no clear connection to the scheme in that they are considered too far from the scheme to be clearly and directly impacted by it. Sites in Warrington town centre were discounted because the River Mersey prevents easy access to the area, primarily around Arpley Meadows, that the Western Link is anticipated to unlock for development. While it is possible that the reduced congestion and increased highway capacity resulting from the Western Link scheme could lead to the development of sites in Warrington town centre or elsewhere, the focus of this assessment is on the land considered likely to be directly unlocked by the scheme. Figure 7 below shows the area around the Western Link from which sites were selected.

Figure 6: Draft Local Plan development sites



Source: Mott MacDonald

The removal of the sites not in the area shown within the red circle in Figure 6 left the following sites for inclusion in our analysis.

Table 9: Total development sites in the Western Link area.

Sites		
Employment sites		
Site	Size (ha)	
K11	6.01	
K12	17.09	
K13	2.37	
K14	1.44	
K15	1.10	
K16	2.98	
K17	4.88	
K22	6.03	
Housing sites		Total units
K3	1.14	144
K4	5.60	214
K5	13.75	526
K6	6.23	247
K7	17.29	1011
K8	6.12	275
K9	9.13	349
K10	4.38	162
K19	0.59	27
K20	0.78	35
Mixed use sites		
K18	0.70	30

Source: WBC, Draft Local Plan, 2017

Each of these sites were further assessed based on their relevance to the Western Link scheme and the perceived likelihood of their being developed as a result of the scheme being delivered. Based on this criterion, the following employment and housing sites were selected for inclusion in this analysis of WEBs.

Table 10: Employment sites

Site reference	Site size (ha)	Proposed land use
K11	6.01	B1/B2/B8
K13	2.37	B1/B2/B8
K14	1.44	Retail
K15	1.10	Retail
K17	4.88	B1/B2/B8

Source: WBC, Draft Local Plan, 2017

Table 11: Housing sites

Site name/reference	Site size (ha)	Number of homes
K5	13.75	526
K8	6.12	275
K19	0.59	27

Site name/reference	Site size (ha)	Number of homes
K20	0.78	35
Total	20.46	863

Source: WBC, Draft Local Plan, 2017

The justification for the inclusion or rejection of each site is provided below.

Table 12: Site identification

Type of site	Site Reference	Included in analysis of WEBS	Reason for not including in analysis	
Employment sites	K11	✓		
	K12	✗	Intended to be part of Port Warrington this has been excluded from analysis as it cannot be accurately modelled at this stage. Ports vary so widely that they cannot be accurately modelled in line with HM Green Book and HCA Additionality Guide principles. While it is likely that the Western Link will support the development of Port Warrington going forward, it is not possible to include it in this analysis at this stage as insufficient information is available to address the issues stated above.	
	K13	✓		
	K14	✓		
	K15	✓		
	K16	✗	Current owners of this site have indicated that they do not intend to either allow it to be redeveloped or to develop the site themselves. While it is possible that this site may come forward for development following the delivery of the Western Link, at this stage it is considered unlikely to come forward for development.	
	K17	✓		
	K22	✗	Intended for use as a school, this is unlikely to be dependent on the road and does not deliver B-use jobs	
	Housing sites	K3	✗	Not unlocked by this scheme – no access is provided to this site by the preferred route of the Western Link scheme
		K4	✗	Not anticipated to come forward at this time due to land ownership issues.
K5		✓		
K6		✗	Not unlocked by this scheme – no access is provided to this site by the preferred route of the Western Link scheme	
K7		✗	Not unlocked by this scheme – no access is provided to this site by the preferred route of the Western Link scheme	
K8		✓		
K9		✗	Site anticipated to be brought forward by Centre Park Link scheme, not by the Western Link scheme	
K10		✗	Site anticipated to be brought forward by Centre Park Link scheme, not by the Western Link scheme	
K19		✓		

Type of site	Site Reference	Included in analysis of WEBS	Reason for not including in analysis
	K20	✓	These sites are included as the enhanced transport connectivity provided by the Western Link scheme has the potential to lead to these sites coming forward ahead of schedule. The enhanced connectivity to these sites are likely to increase developer interest and result in both sites K19 and K20 being developed earlier than they would without this scheme.
Mixed use sites	K18	✗	Insufficient information is available on this site for inclusion in this analysis. It is also unclear if the Western Link scheme would directly support its delivery.

Source: Mott MacDonald

3.5 Summary

Following our assessment of which sites would be influenced by the scheme and after consultations with WBC and Warrington & Co we were able to validate the sites to be included in our analysis which are listed below.

Table 13: Employment sites

Site reference	Site size (ha)	Proposed land use
K11	6.01	B1/B2/B8
K13	2.37	B1/B2/B8
K14	1.44	Retail
K15	1.10	Retail
K17	4.88	B1/B2/B8

Source: WBC

Table 14: Housing sites

Site name/reference	Site size (ha)	Number of homes
K5	13.75	526
K8	6.12	275
K19	0.59	27
K20	0.78	35
Total	20.46	863

Source: WBC

The above employment sites will be entered into Mott MacDonald's proprietary Transparent Economic Assessment Model (TEAM) while the temporary economic impact of the construction of the housing sites will also be assessed in order to determine the potential benefits. This is fully explained in the following section.

4 Economic impact assessment

4.1 Introduction

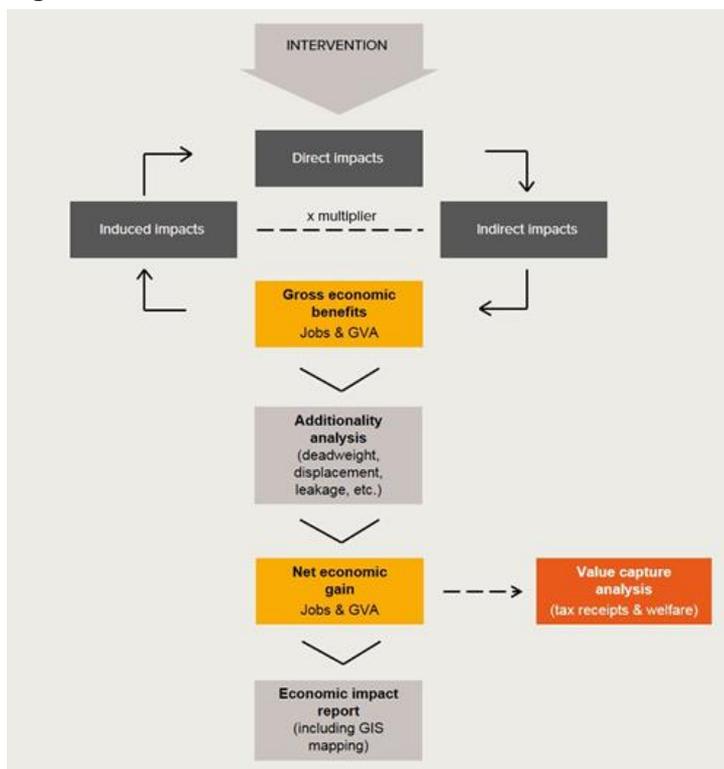
This section provides the assessment of the WEBs of the Western Link scheme in terms of its impact on supporting the development of sites set out in the Draft Local Plan. This assessment considers the potential impact of unlocking both employment and housing land, enabling the creation of jobs and contributing towards a GVA uplift. This section sets out the methodology by which this is assessed and the land-use and additionality assumptions used in the analysis.

4.2 Methodology

4.2.1 TEAM methodology

The WEBs have been calculated using Mott MacDonald's TEAM, which assesses the economic benefits arising from land-use change calculated in-line with HM Treasury Green Book principles of additionality. It is also aligned to draft WebTAG guidance on supplementary economic modelling (TAG Unit M5.3) where it reflects the 'Additionality Modelling' approach. TEAM uses Office of National Statistics (ONS) datasets alongside bespoke local area analysis, in this case for the North West and Warrington borough, to inform specific assumptions. TEAM operates as follows, where the intervention is the scheme:

Figure 7: TEAM model



Source: Mott MacDonald

The net economic gain to Warrington as a result of land use changes from the sites potentially unlocked by the Western Link scheme is captured by adjusting the gross impacts for

additionality, that is “the net, rather than the gross impact of an intervention after making allowances for what would have happened in the absence of the intervention”¹⁸. The assessment therefore adjusts the gross impacts by considering the following additionality assumptions:

- **Deadweight:** the level of economic activity that would have occurred without the intervention.
- **Leakage:** the level of benefits (i.e. jobs on these sites) that are likely to go to residents outside of Warrington who in-commute.
- **Displacement:** the proportion of economic benefits that are displaced from elsewhere in the borough (e.g. through relocation of business activities to sites potentially unlocked by the Western Link scheme).
- **Multiplier impacts:** additional impacts within the economy from supply linkages due to purchases made as a result of the intervention and further purchases with linked firms along the supply chain (indirect effects) and income effects associated with local expenditure as a result of those who derive incomes from the direct and supply linkage impacts (induced effects).

The assumptions relating to additionality are fully referenced below.

4.2.2 List of sites included in analysis

Consultations with WBC and Warrington & Co. found that the Draft Local Plan sites should be used for analysis of the wider economic benefits of this scheme and helped to narrow down the number of relevant sites to be included in the analysis. This process resulted in the following sites that were taken forward for analysis, using the size provided in the Draft Local Plan and the proposed land use provided by the consultees.

Table 15: Employment sites used in analysis.

Site reference	Area (ha)	Assumed land use class - based on consultation
K11	6.01	B1/B2/B8
K13	2.37	B1/B2/B8
K14	1.44	A1
K15	1.1	A1
K17	4.88	B1/B2/B8

Source: WBC, Draft Local Plan, 2017

4.2.3 Assumptions used

Calculated impacts are adjusted for additionality. TEAM provides estimates of the potential net additional impact which these developments can bring to Warrington (the target area). The level of additionality for the sites has been adjusted using the following assumptions to determine the net additional impacts:

Table 16: Assumptions used

Assumption	Justification
Displacement – 50%	An assumption of 50% for displacement was selected in line with the HCA Additionality Guide 2014 ¹⁹ which advises 50% as a ‘medium’ level of displacement. This level of displacement has been selected to reflect the potential for businesses in Warrington to relocate to sites brought forward by the Western Link scheme. Consultation with WBC and Warrington & Co highlighted an intention to use some of these sites to enable current Warrington businesses to

¹⁸ The Green Book, HM Treasury, p.52

¹⁹ HCA, Additionality Guide, 2014

Assumption	Justification
	<p>relocate from elsewhere in the town and free up sites in the town centre to attract new businesses that require town centre locations that are not currently available.</p> <p>Whilst some businesses will be relocated to these sites from elsewhere in Warrington, many will be new to the town and many of the businesses that relocate to these sites will be enabled to expand their workforce because of their relocation to a site with available expansion land and strong transport links. To reflect the higher level of displacement caused by the anticipated relocation of businesses to these sites, displacement has been set at 50% of the gross jobs created on these sites.</p>
Leakage – 49%	<p>This figure of 49% leakage is based on travel-to-work data from the 2011 UK Census, which shows that 49% of the jobs in Warrington are held by people who live outside of the town.</p>
Deadweight – 35%	<p>Deadweight provides an estimate of the proportion of benefits likely to occur without a given intervention being made. It is not possible to accurately state what proportion of benefits are likely to occur without an intervention as there are many factors that can influence development and the future demand for employment sites. To factor in deadweight, as a substitute for a counter-factual 'do-minimum' scenario, a judgement must be made as to what development is likely to occur without this scheme based on the logic chain through which the benefits are anticipated to derive.</p> <p>The benefits of this scheme are anticipated to derive from it enabling the development of multiple housing and employment sites in the Arpley Meadows area of Warrington. The Western Link scheme, in providing transport access to this area of land, actively enables the sites identified in the Draft Local Plan to be developed. Without this intervention, therefore, it is likely that few sites in this area could be developed as the only access point would be the current bridge over Sankey Brook on Forrest Way, which, according to consultation, could only provide sufficient transport capacity to support between 100 and 200 new homes.</p> <p>This assessment measures the likely wider economic impacts to Warrington borough, rather than simply the area in which the scheme will be constructed. This means that while there is a very low chance of the sites identified in this area in the Draft Local Plan of delivering these jobs without this scheme, there remains a significant chance that these jobs could be created elsewhere in Warrington over this study period, without the scheme being delivered.</p> <p>Consultation highlighted that the congestion in and around central and southern Warrington, focussed on the Bridge Foot and Brian Bevan roundabouts, deters new businesses from locating to sites in this area as the congestion interrupts their supply and distribution operations and adds time and financial costs. This scheme is therefore likely to have a significant impact in attracting businesses to these sites and to others in the area, due to the anticipated reduction in journey times and congestion that have been confirmed by transport modelled carried out on this scheme.</p> <p>On this basis, deadweight could be expected to be relatively low as the Western Link scheme is arguably a pre-requisite for significant levels of employment growth to be delivered to Warrington over the coming years. However, as the study area applied here is Warrington as a whole, viable sites across the borough must be considered as it is possible that businesses that would otherwise have relocated to sites enabled by the Western Link scheme could chose instead to locate at other sites across Warrington, if the scheme were not built.</p> <p>These alternative sites include the Omega development site to the north west of Warrington, which has strong links to the M62 and M6 and currently hosts businesses such as Hermes and an ASDA distribution centre. The probability of the further expansion of the Omega site and similar developments in Birchwood in eastern Warrington means that were the Western Link scheme not delivered, businesses looking for sites suitable for hosting B1/B2/B8 land-uses with strong transport links have several other options within Warrington.</p> <p>Based on the need to balance the factors that reduce the likelihood of these jobs being delivered in Warrington over the same period without the Western Link scheme and those that increase it, a medium figure of deadweight must be applied to account for both. Accordingly, a medium level of deadweight has been selected as 35%, meaning that slightly over one-third of the jobs enabled to be created by the Western Link scheme could be delivered without the scheme, somewhere in Warrington.</p> <p>This 35% figure is based on guidance on estimating deadweight provided by Scottish Enterprise's guide on additionality and economic impact assessment which advises 50% as a medium degree of deadweight and 25% as low as 20%. To reflect the view explained above, where factors that suggest a higher level of deadweight should be balanced against reasons to believe the deadweight should be low, a mid-point of 35% has been selected, between the low figure (25%) and the medium (50%) suggested by the Scottish Enterprise guide.</p>

²⁰ Scottish Enterprise, *Additionality & Economic Impact Assessment Guidance Note*, 2008.

Assumption	Justification
Composite multiplier – 1.29	<p>A composite multiplier of 1.29 has been applied, in accordance with HCA's Additionality Guide 2014. This incorporates the likely multiplier effects within the economy from:</p> <ul style="list-style-type: none"> Supply linkages due to purchases made because of the intervention and further purchases associated with linked firms along the supply chain (indirect effects). and, Income or induced effects associated with local expenditure because of those who derive incomes from the direct and supply linkage impacts of the intervention. The multiplier models the indirect and induced economic impacts. This composite multiplier includes a supply linkage multiplier relating to purchases made because of the intervention and a consumption multiplier based on the expenditure of those whose incomes derive from the direct and supply linkage impacts of the intervention.
GVA per worker (2014 prices) - £43,957	GVA figures have been calculated based on applying GVA per worker data across the whole economy at a North West England regional level. This is the basis for an estimate of potential gross GVA impacts.
Occupancy rate – 80%	An occupancy rate of 80% accounts for the possibility that the sites developed because of the Western Link scheme will not be occupied to full capacity. This provides a conservative estimate of the likely WEBs of the scheme as the actual sites could be occupied more than 80% if the scheme is well received by investors, developers and potential occupiers.
Employment density - various	<ul style="list-style-type: none"> B1c (Light industrial): 47m² of Net Internal Area (NIA)/Full Time Equivalent (FTE) - This is the assumption that one full-time equivalent (FTE) job is generated for every 47m² of B1c employment space, in NIA. B2 (Industrial and manufacturing): 36m² of NIA/FTE - This is the assumption that one FTE job is generated for every 36m² of B8 employment space, in Gross Internal Area (GIA). B8 (Regional distribution centre): 77m² of Gross External Area (GEA)/FTE - This is the assumption that one FTE job is generated for every 77m² of B8 employment space, in GEA A1 (High street): 18 m² of NIA/FTE - This is the assumption that one FTE job is generated for every 47m² of B1c employment space, in NIA. <p>These assumptions are based on the HCA Employment Density Guide 2015.</p>

Source: Mott MacDonald

4.3 Results

The outputs of the TEAM model are shown in employment and GVA impacts, each are set out below reflecting the position once sites are developed and premises occupied.

Table 17: Employment impacts

Employment	K11	K13	K14	K15	K17	Total
Gross direct jobs	460	173	280	214	356	1,483
Less deadweight, leakage, displacement and substitution	385	144	211	161	297	1,198
Net direct jobs	76	28	69	53	59	284
Multiplier jobs	22	8	20	15	17	82
Total net jobs	98	37	89	68	75	367

Source: Mott MacDonald

Table 18: GVA impacts (£m)

GVA (£m)	K11	K13	K14	K15	K17	Total
Gross direct GVA	20.2	7.6	12.3	9.4	15.6	65.2
Less deadweight, leakage, displacement and substitution	16.9	6.3	9.3	7.1	13.1	52.7
Net direct impacts	3.3	1.2	3.0	2.3	2.6	12.5
Multiplier impacts	1.0	0.4	0.9	0.7	0.7	3.6

GVA (£m)	K11	K13	K14	K15	K17	Total
Total net direct, indirect and induced GVA	4.3	1.6	3.9	3.0	3.3	16.1

Source: Mott MacDonald

On the basis of this analysis the employment sites potentially brought forward by the Western Link scheme could support:

- A total of **367 net additional jobs**.
- **£16.1m of net additional GVA per annum**.

4.4 Housing

In addition to the above impacts, the construction of the more than 800 new homes on sites potentially brought forward by this scheme could deliver a sizeable but temporary economic impact. These impacts are shown below.

Table 19: Temporary construction impacts of housing

	Value	Description
Number of homes	863	Project specific information
CAPEX per home	£100,000	Based on consultations with major UK house builder
CAPEX	£86,300,000	Assumption
% of capex spent on salaries in the North West	30.20%	Annual Business Survey, ONS, 2014
Salary expenditure	£26,062,600	Calculation
Average mean salary in construction sector (full time workers)	£32,089	Annual Survey of Hours and Earnings, ONS, 2015.
Direct job years supported	812.20	Calculation
1FTE= 10 employment years	10	HM Treasury Guidance
Direct jobs supported	81	Calculation
Multiplier	1.29	HCA Additionality Guide 2014
Direct, Indirect & induced jobs	105	Calculation
Total GVA	£4,383,200	Calculation (based on regional GVA per worker in north west of £41,835)

Source: Mott MacDonald

Therefore, the total number of jobs supported during the housing construction phase is 105, with an uplift in GVA of approximately £4.4m. However, this will only last for the duration of the construction period and should be viewed as a one-off benefit.

4.4.1 Property and land use related taxes

The development will contribute towards other taxes generated from the land use changes including council tax from the housing development and business rates from the commercial development.

4.4.1.1 Council tax revenue

The housing development resulting from the development of sites brought forward by the Western Link scheme is estimated to provide in the range of **£1,000,000 per annum of housing-related council tax revenue** based on the following assumptions:

- Average house price of £163,000 using the latest average house price for Warrington (ONS).
- Council tax bands by house value and band rates for Warrington.

4.4.1.2 Business rates

The business activity generated from the development and occupation of sites brought forward by the Western Link scheme is estimated to generate in the region of **£4m per annum of business rates**. This is the gross figure, based on the total sizes of employment sites. As 50% of these businesses are assumed to be displaced from elsewhere in Warrington, only half of this business rates income is additional to WBC as a direct result of the Western Link scheme. Therefore, the **net additional business rates income is therefore worth approximately £2m per annum**.

This is based on the following:

- Applying the rateable value per m² for various land uses for Warrington to the total floorspace using data from the Valuation Office, (ONS, 2016). These rateable values by land use are:
 - office - £106/m²
 - industrial - £42/m²
 - retail - £140/m²
- Applying the Department for Communities and Local Government (DCLG)²¹ multiplier of 0.497, which is the business rate (in £s) per pound of rateable value (set for England).

It should be noted that business rates for each individual business are subject to reviews, appeals and refinements following detailed appraisals by DCLG officials. These figures provide an indication of the approximate values business rates, although actual figures may vary.

4.4.1.3 Net housing figures

The Western Link scheme is anticipated to require the demolition of a number of homes to make way for the construction of the scheme. The dwellings that would require demolition are six sets of two semi-detached homes on Baronet Road and a single home on Chester Road. While this scheme will essentially involve the demolition of thirteen homes, only three of these are currently occupied. Consultation with WBC indicated that the remaining ten homes will not be let or sold to new tenants as they have been put forward for demolition, once the three remaining occupants leave. This means that only three occupied homes are actually being lost to Warrington as a direct result of this scheme, the remaining homes that are impacted are not available for occupation. Of these three occupied homes, it is our understanding that one is privately owned with a provisional deal for WBC to purchase it as part of a Compulsory Purchase Order. The other two occupied homes are understood to be owned by one of the chemical companies operating close to Arpley Meadows.

Accordingly, subtracting the three viable homes lost to Warrington from the total of 863 new homes constructed, leaves a total number of net homes resulting from this scheme of 860. The construction impacts are calculated based on the gross 863 homes as this is the number constructed as a result of this scheme.

4.5 Trajectory and Net Present Value (NPV) analysis

The Draft Local Plan does not provide an anticipated delivery trajectory of the employment sites included in this analysis. In order to model how these sites may be built out over the years following the completion of the Western Link, several assumptions have been made. It has been assumed that development of these employment sites would not commence until the year after the Western Link scheme had been delivered, which replicates the profile of development seen on other, similar schemes in recent years. Each site has been assumed to be developed at a

²¹ Business Rates Information Letter, DCLG, February 2016

rate of 20% per annum for five years, with the level of jobs and GVA at each site following this trajectory. Each site is assumed to develop separately, with development commencing a year apart, beginning with those sites closest to the Western Link scheme.

The GVA benefits of the employment sites are then forecast over a 30-year appraisal period. This 30-year period has been applied in similar studies and has been accepted for the appraisal of the WEBs associated with major transport schemes in two separate public inquiries involving Mott MacDonald: the Norwich Northern Distributor Road; and, the Postwick Hub scheme, both of which successfully applied a 30-year appraisal period. The 30-year appraisal period is shorter than standard WebTAG 60-year appraisal periods but is thought to better reflect the physical lifespan of modern employment space and the business owners occupying them.

In line with guidance from TAG Unit A1.1, an annual discount rate of 3.5% has been applied to generate the NPV of the GVA benefits anticipated to be generated by this scheme. In addition, this NPV has been calculated in 2010 prices, also in accordance with TAG Unit A1.1. Over a 30-year appraisal period, with the first jobs on these sites being delivered in 2024/25 (following completion of the Western Link scheme in 2023/24) and all modelled permanent jobs (not including temporary construction jobs) delivered by 2032/33, the NPV (in 2010 prices, discounted to 2010) totals £137.63m.

4.6 Comparative route tests

As part of the comprehensive assessment of the Western Link scheme, two comparative route options were created to assess the impact of key changes to the preferred option on the various assessment metrics. These options were:

- Only delivering half the length of the Western Link scheme, retaining the existing Forrest Way Bridge as part of the route; and,
- Delivering the entire scheme as a dual-carriageway, rather than the single carriageway proposed.

As both of these comparative routes appear to potentially unlock the same amount of development land as the preferred option, no quantifiable comparison can be drawn between them. It is possible that the use of the existing Forrest Way bridge may lead to increased congestion that may deter some businesses from these sites. Similarly, the additional highway capacity provided by the dual-carriageway scenario may lead to a faster build-out rate of the employment sites in this area as these sites are made more arguably more attractive to businesses that require a large number of vehicles accessing the site on a regular basis. These are however, unsupported by evidence at this stage and cannot be categorically stated or empirically shown.

4.7 Summary

The employment sites likely to be supported by the Western Link scheme can support:

- A total of **367 net additional jobs**.
- **£16.1m of net additional GVA per annum**

In addition to this, the construction of the 863 homes could generate a temporary economic impact of:

- 105 temporary construction jobs; and,
- Approximately £4.4m of GVA per annum during the construction period.

The tax impact of developing these sites to WBC is:

- An additional £2m in business rates per annum;

- Approximately £1,000,000 in additional council tax each year.

The total value of this intervention in GVA, modelled over 30 years, in 2010 prices, discounted to 2010 is an NPV of £137.63m.

5 Conclusions

5.1 Appointment and the scheme

Mott MacDonald was appointed by WBC to deliver a business case for the Western Link scheme. The scheme is a major highways project to deliver an additional crossing over the River Mersey with the capability to both deliver transport benefits and unlock additional employment and housing land for development. This appendix has assessed the WEBS of this scheme likely to derive from the development of this employment and housing land. Following a programme of options sifting, a final preferred option was selected by WBC.

This option was assessed against its ability to meet objectives for economic development and supporting the delivery of employment and housing sites set out in Warrington's Draft Local Plan. This assessment has looked at Warrington's current economic profile, the anticipated impact of the scheme and produced an economic impact assessment using Mott MacDonald's proprietary Transparent Economic Assessment Model.

5.2 Warrington's economic strengths

The economic profile of Warrington shows several key strengths, key among these is its strategic location, between Liverpool and Manchester, in the centre of the Atlantic Gateway. Warrington's economy is characterised by a higher jobs density than neighbouring areas, higher gross weekly pay than local, regional and national comparators and higher levels of home ownership than across the North West and England and Wales. Warrington's economy is strong and has a high proportion of employment within higher skilled sectors such as business administration and science and technology than these various comparator areas. WBC and the Cheshire and Warrington LEP is therefore targeting interventions aimed at continuing this economic growth and supporting Warrington's strategic role within the Northern Powerhouse scheme and at the heart of the Atlantic Gateway.

5.3 The Western Link scheme

The Western Link is a major road scheme aimed at relieving congestion, increasing connectivity and unlocking additional employment and housing land in Warrington. Among the schemes key objectives is the aim to "Unlock key development land to support the growth aspirations of 'Warrington Means Business' and the Warrington Local Plan". This appendix assesses the wider economic impact of the Western Link scheme against its ability to unlock development land identified in Warrington's Draft Local Plan.

5.4 Key findings

This analysis assessed the development sites identified in Warrington's Draft Local Plan and selected the sites most anticipated to be impacted by the Western Link scheme. The process by which sites were selected was focussed on their proximity to the Western Link and the findings of consultation with WBC and key stakeholders to assess the viability of each site. The employment sites that were included in the analysis were found to be capable of supporting:

- A total of **367 net additional jobs**.
- **£16.1m of net additional GVA per annum**

In addition to this, the construction of the 863 homes could generate a temporary economic impact of:

- 105 temporary construction jobs; and,

- Approximately £4.4m of GVA per annum during the construction period.

The tax impact of developing these sites to Warrington Brough Council is:

- An additional £2m in business rates per annum;
- Approximately £1,000,000 in additional council tax each year.

The total value of this intervention in GVA, modelled over 30 years, in 2010 prices, discounted to 2010 is an NPV of £137.63m.

This shows that the Western Link scheme would meet its objective to support the delivery of employment and housing sites set out in Warrington's Draft Local Plan. This scheme can build upon Warrington's current strong economic performance and provide 863 additional homes to support the future expansion of the town. Additional developments such as Port Warrington may also be supported by the Western Link but with the limited information that is currently available and the issues surrounding accurately modelling ports, it is not possible to include this site in this analysis at this time.

