

# **Hereford Relief Road - Economic and Business Impacts**

A Final Report to Herefordshire Council

3 December 2011

**SQW**

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<b>Approved by:</b>	Steve Lucas Director	Date: 3 December 2011
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# 1: Introduction

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## Context

- 1.1 There have been longstanding proposals to provide Hereford with a relief road that would take long-distance traffic out of the city centre and thereby reduce congestion. Apart from the social and environmental consequences of any decision as to whether Hereford is to have a relief road, the decision can also be expected to have an influence on the future economic performance of the city.
- 1.2 In recent times, Hereford has been the main focus of development and growth in Herefordshire, and the weight of current policy is that this should continue to be the case. This growth is likely to focus on the recently approved Enterprise Zone on the Rotherwas site, the new livestock market in north west of Hereford, redevelopments around Edgar Street in the city centre, and additional employment/housing growth at Three Elms (in the north west), Holmer West (in the north), and Lower Bullingham area (to the south east).
- 1.3 However, much of this growth is dependent upon the provision of a Hereford Relief Road – first suggested 20 years ago - with an additional package of sustainable transport measures. To date, the Council has conducted extensive investigations into the choice of route, which will run to either the west or east of the City. Eastern options have been discounted by Herefordshire Council because of their likely effects on nature conservation sites. Environmental analysis has confirmed that the Special Area of Conservation, River Lugg/Meadows SSSI, Special Wildlife Site and Local Nature Reserves to the north east of Hereford should be regarded as serious constraints and that an eastern route was “very likely to be challenged by statutory and non-statutory environmental bodies”<sup>1</sup>. Consultation on a western route was held in Autumn 2010 and this is to be the subject of further consultation this autumn/winter as part of revised proposals within the Local Development Framework.
- 1.4 This study on the economic and business impacts of a relief road has been commissioned to ensure that the final decision is able to be based on a full assessment of relevant considerations – economic as well as environmental – and other implications for the longer-term economic performance of Hereford as a place to live, work and invest.

## Study aims and approach

- 1.5 The key aim of the study is to identify significant effects (both positive and negative) in terms of employment and economic output that would potentially derive from the Relief Road, and the extent to which impacts differ if a western or eastern route is implemented. This includes an assessment of:

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<sup>1</sup> Amey (September 2010) Hereford Relief Road – Study of Options

- the potential for additional jobs, additional business investment, improved productivity, improved functioning of the Hereford and Herefordshire labour market and, ultimately, economic output (in terms of Gross Value Added<sup>2</sup>).
- the impacts both in terms of the City (Hereford) and the wider area of Herefordshire.
- those economic sectors – such as manufacturing and distribution – that are most likely to be affected by the improved connectivity and transport efficiency that the proposed Relief Road is expected to deliver.
- the distributional impacts, in particular, impacts on Hereford’s more deprived neighbourhoods.

1.6 The research has involved a desk-based review of documentation on the proposed scheme and strategic context, analysis of relevant socio-economic data and economic modelling. We have also undertaken consultations with representatives at Herefordshire Council (including transport, planning, inward investment and worklessness) and Hereford Futures, a small number of local landowners, developers and commercial agents working in the area, and 12 large businesses based in and around the City.

## Structure of the report

1.7 This report is structured as follows:

- Section 2 provides an overview of the proposed relief road scheme, and the strategic and socio-economic contexts in which the scheme sits.
- Section 3 presents our analysis of economic impacts of the scheme, including employment and GVA impacts (gross and net) and wider distributional impacts.
- Section 4 provides a summary of the study findings and conclusions.

1.8 The report is supported by six annexes:

- Annex A presents the Bibliography
- Annex B presents detailed analysis of the socio-economic context
- Annex C provides a definition of Lower Level Super Output Area (LSOA) and Wards that form the Hereford City Locality
- Annex D lists those consulted as part of the research
- Annex E summarises the key messages from a series of consultations with local landowners, developers/commercial agents and businesses
- Annex F presents detailed modelling of employment impacts.

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<sup>2</sup> Gross Value Added (GVA) is a measure of economic output, based on compensation to employees (i.e. earnings) and profits.

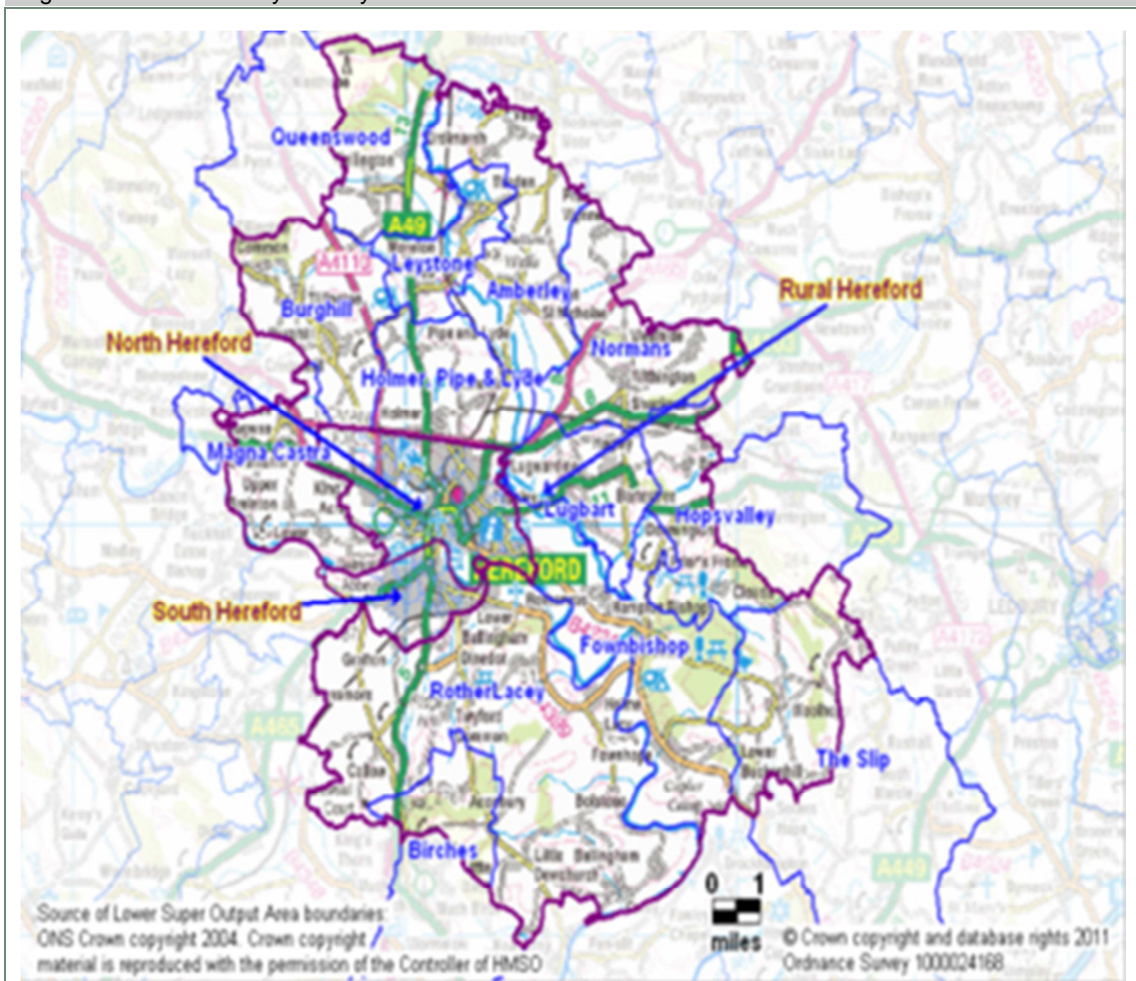
## 2: Socio-economic context for the proposed Relief Road

- 2.1 In this Section we provide an overview of the socio-economic context for the proposed relief road and outline the strategic growth ambitions for Herefordshire. We then introduce the proposed relief road scheme, including the rationale for the scheme, how proposals have evolved over time and the current preferred option.

### Socio-economic context for the proposed relief road

- 2.2 This section presents an overview of the economic and social profile of the Hereford City Locality in accordance with Herefordshire County Council's definition built up from parishes (which contains the sub-localities of North Hereford, South Hereford and Rural Hereford to distinguish between built-up and more rural parts of the area likely to have different characteristics). The Locality contains the city of Hereford, the county's primary administrative, employment and retail centre and is surrounded by the large villages of Lugwardine, Burghill, Withington, Marden, Wellington, Fownhope and Moreton-on-Lugg,

Figure 2-1: Hereford City Locality



Source: Herefordshire Council

## Socio economic profile

- 2.3 The profile is presented in the form of a SWOT analysis of the area based in the 2010 Local Economic Assessment of Herefordshire and SQW analysis of secondary data sources. Where possible data has been aggregated using Lower Super Output Area's (LSOAs) to form an accurate picture of activity in the study area (Hereford City Locality), however, for many data sets this is not possible as data is unavailable at this low spatial scale.

Table 2-1: SWOT	
<b>STRENGTHS</b>	
<ul style="list-style-type: none"> <li>Herefordshire has <b>high qualification rates</b> compared with other local authorities in the West Midlands and broadly follows the UK average in terms of the proportion of its working age population in possession of different qualification levels. However the county does have a lower proportion of people that have little or no skills and a lower proportion of its population in possession of NVQ level 4 and above.</li> <li>The area also boasts a <b>high survival rate for business start-ups</b>, at the five year rate 53.5% of business survive compared with 46.8% nationally.</li> <li>Herefordshire benefits from a <b>relatively low unemployment rate</b> at 5.3% compared with 7.7%, although it has risen in recent years owing to the recession resulting in a slight rise in the proportion of the working age population claiming Job Seekers Allowance to 3%, marginally lower than the national average of 4%.</li> <li>Similarly, the area also benefits from a <b>high rate of employment</b>, three quarters of the area's working age population are in employment compared with 70.3% nationally. The county also has a significantly larger proportion of its economically active population in <b>self-employment</b> (14.5%) compared with a national average of 9.1%.</li> <li>The area has a <b>strong track record for diversification</b> of its important sectors to maximise growth in other sectors e.g. the diversification of agriculture to tourism in order to maximise its <b>high quality natural environment</b>, and manufacturing into defence, food and drink and the creative industries.</li> </ul>	
<b>WEAKNESSES</b>	
<ul style="list-style-type: none"> <li>The area suffers from a dominance of <b>low value added sectors</b> resulting in low economic output, contributing only 13% (2.84bn) of the regions GVA in 2008 despite a 59% increase over the last ten years. Substantial gaps exist regarding GVA per head and GVA per employee with the national average at £15,857 compared with £21,103 and £35,500 and £45,400 respectively.</li> <li>The area has <b>low wage levels</b> with work based earnings standing at £19,763 compared with a national average of £25,879. Residence based wages in the county are higher (£20,678) suggesting, higher skilled workers may commute out for better paid more skilled work outside of the County.</li> <li><b>Residents with high skills levels commuting to work outside of county</b> to neighbouring authorities of Worcester, Malvern Hills, Forest of Dean, South Shropshire, Powys and Monmouthshire, some travel further afield, to Dudley and Peterborough.</li> <li>The area suffers from a <b>lack of affordable housing</b> evidenced by a housing affordability ratio of 8.5 (earnings to lower quartile house prices 2009).</li> <li><b>Road congestion</b> in more urban areas poses a significant problem for the area exacerbated by high car ownership in the area, 37% of households have two cars or more.</li> <li>Five of the Hereford City Locality LSOAs, are in the top 20% most deprived in the country, all of these are located in the south. There are also some <b>hidden pockets of deprivation</b> outside the city in Rural Herefordshire, in Leominster.</li> </ul>	
<b>OPPORTUNITIES</b>	
<ul style="list-style-type: none"> <li><b>Businesses 'cautiously confident'</b> with regard to growth in turnover over the next 12 months.</li> <li><b>High quality environment for businesses.</b></li> <li>The area has relatively <b>low rateable values</b> for its commercial property which should draw existing and start-up companies in the current financial climate.</li> <li><b>Managing congestion levels</b> by improving access to integrated public and community transport, and encouraging alternatives to car use.</li> <li>There is an opportunity to <b>maximise technologies</b> by increasing the proportion of employees in Knowledge Intensive Industries which currently stands at 34% below the national average of 48%.</li> <li>There are <b>opportunities for higher education</b> within the county with the introduction of the planned Higher</li> </ul>	

Education Centre as part of the Hereford Futures Programme.

- **Potential growth in the economy** following future economic recovery, especially through the city centre expansion scheme and Livestock Market developments.
- **Improvement plans for infrastructure** such as the impending relief road and accompanying sustainable transport measures.

## THREATS

- **Some young people are poorly prepared for work** - For 17 and 18 year olds attitudes or lack of motivation was reported most frequently by employers. For people recruited straight from higher education there are issues around a lack of required skills or competencies<sup>3</sup>.
- **Poor/non-existent broadband access in some areas**, only 57% of Herefordshire's postcode areas have the potential to reach broadband up to 2 Mbps<sup>4</sup>. However, 100% coverage of Next Generation Broadband is planned for the area by 2019<sup>5</sup> and there are also Enterprise Zone incentives to encourage accelerated broadband take up.
- An **increased number of long term JSA claimants** as a result of the recession however, the proportion of claimants remains below the national average at all age levels suggesting that people are able to find employment opportunities. At the small spatial scale, there are some unemployment hot spots in the county, Belmont and St Martins and Hinton Wards in the South of the city, where up to 8% of the working age population are claiming Job Seekers Allowance. Three Elms Ward in the North of the City also has high level of claimants.
- **Skills to match future business requirements** - A fifth of companies reported the existence of skills gaps in the National Employers Skills Survey 2009. Overall the skills that are most needed improving were technical, practical or job-specific skills (74%), problem solving skills (45%), customer handling skills (41%) and team working skills (40%).
- **Fewer people of working age by 2026** due to the retirement of post war baby boomers and the out migration of young people, coupled with a projected **decrease in employment**.
- **Under employment** - the proportion of people working in high end occupations in Herefordshire is slightly below the national average at 37.7% compared with 44.2%. However, projections suggest that by 2026, the proportion of employees (residence based) that are managers and senior officials will increase by 19% whilst those in skilled trades will reduce by 24%. At the other end of the spectrum elementary and administrative and clerical staff are projected to decrease by 27% and 18% respectively.
- An expected **decline in jobs in key sectors** such as agriculture (-59%) and manufacturing (-21%) by 2026. However, this is likely to be offset by a small increase in other sectors such as financial and business services (+19) and construction (+33%).
- **High CO2 emissions from electricity usage & transport**<sup>6</sup>.

Source: SQW data analysis and Herefordshire LEA

## Strategic objectives for development in Herefordshire

### Strategic objectives

2.4 In light of the challenges and opportunities identified above, the Economic Development Strategy for Herefordshire 2011-2026<sup>7</sup> has the vision 'to increase the economic wealth of the county through the growth of business' through the following aims:

- sustained business survival and growth
- increased number and range of jobs
- increased skilled population to meet the work needs
- enhanced infrastructure for enterprise to flourish.

<sup>3</sup> National Employers Skills Survey 2009

<sup>4</sup> BT's online ADSL checker and [www.samknows.com/broadband](http://www.samknows.com/broadband)

<sup>5</sup> Draft Economic Development Strategy 2011-2026

<sup>6</sup> Department of Energy and Climate Change 2008

<sup>7</sup> Approved by Cabinet in July 2011

- 2.5 Sustained business survival and growth is key to creating a strong economy, wealth and employment opportunities. The Economic Development Strategy seeks to attract business to the county and inward investment particularly; from the defence, security, technology and knowledge base sectors, and ultimately achieve GVA levels that match the regional average by 2020.
- 2.6 Despite the county's high employment rate, wage levels are relatively low. Therefore the Strategy aims to encourage people to stay and work, progress their careers and create high skill level jobs commanding higher salaries within the county. Not only does this require sustainable business survival/growth and inward investment, but also raising the awareness of the types of opportunities available within the county. The need to travel outside of the county to access higher education creates a net outward migration of the young people who move for higher education and do not return. To reverse this trend, the Strategy suggests that there needs to be greater connectivity between the business and educational sector to offer alternative options higher education.
- 2.7 In addition, Herefordshire is also part of the Marches Local Enterprise Partnership which also aims to remove barriers associated with business growth and has the following three key priorities:
- Gain access to finance for business start-up, growth and diversification
  - Achieve superfast broadband coverage across the area
  - Establish an Enterprise Zone where strategic growth is essential.
- 2.8 The third priority has now been achieved with the recent granting of Enterprise Zone (EZ) status for the Rotherwas site in Hereford, which will focus on growing the following sectors: Tourism & Leisure; Advanced Manufacturing; Defence; Social Enterprises; Food and Drink production & processing; Agriculture & Land-Based Industries; Environmental Technologies & Services. The EZ covers 61.5 ha of brown field land, 54.2 ha of which is developable, and aims to accelerate the creation of 1,800 gross FTE jobs by 2015 (1,620 net) rising to 6,500 private sector jobs (275 businesses) by 2020 if full<sup>8</sup>.

### ***Employment land and other developments in and around Hereford***

- 2.9 The forecasted total employment land requirements for Herefordshire amount to a minimum of 49.4 Hectares (ha) to 2026 (allowing for churn)<sup>9</sup>. Despite some local perceptions, the area has a good quantity of quality employment land available<sup>10</sup>, amounting to 110.8 ha (approximately 20 ha of land suitable for offices, 62 ha suitable for manufacturing and 28 ha for warehousing).
- 2.10 A site breakdown for employment land identified in the current Employment Land Review for Hereford City and its immediate hinterland is provided in Table 2-2. As noted above, the **key strategic sites for employment land in Hereford are currently the Rotherwas**

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<sup>8</sup> Marches Enterprise Zone Application Form 2011

<sup>9</sup> This can be broken down into 18.5 ha of office (B1) space, 12.8 ha of manufacturing (B2) space and 18.1 ha of warehousing (B8) space.

<sup>10</sup> Core Strategy – Draft Revised Preferred Option Background paper, July 2011



**Industrial Estate (the Enterprise Zone site) and Three Elms site.** In addition to the sites below, a further 40 ha are available on the east of the county which includes the towns of Bromyard, Ledbury and Ross on Wye, and 34 ha in the Rural Heartland which includes the rural north west and south such as Kington and Leominster, the majority of which is immediately available.

Table 2-2: Employment land available in Hereford City and its immediate hinterland

Site	Total area available for development (Ha)	Possible use	Classification	Status	Availability
Rotherwas Industrial Estate <sup>11</sup>	54.23	B1, B2, B8	Best (10.35 ha) Good (5.68 ha) Moderate (19.92 ha)	Allocated employment land in UDP - with planning permission	Immediate/short (16.03 ha) Medium (19.92 Ha)
Three Elms trading Estate	0.70	B1, B2	Good	Allocated employment land in UDP - with planning permission	Medium
Three Elms Strategic site	10	B1a/B1c/B2	Best	Allocated under the urban extension scheme	Medium
Holmer Trading Estate	1.82	B1/B2/B8	Good	Allocated employment land in UDP - with planning permission	Medium
Holmer Road, Hereford	0.81	B1, B2, B8	Moderate	Allocated employment land in UDP - with planning permission	Immediate/Short
Westfields Trading Estate	1.74	B1 Ind / B2, B8	Good	UDP employment allocations without planning permission	Immediate/Short
Commitments outside ELR survey sites (including 19 small sites)	3.2	Various	Various	Various	Various

Source: Adapted from the Herefordshire Employment Land Study Update September 2010

- 2.11 The Employment Land Study concludes that, although the quantity of employment land available in the county is good, it is skewed towards manufacturing/industrial uses - this sector is predicted to decline in the amount of land it requires over the study period. More

<sup>11</sup> All Rotherwas sites have been included in this row

limited opportunities appear to exist for office uses. Also, in the absence of suitable road networks (despite the improved Rotherwas Access Road reducing journey time to the M50 motorway) there will not be the demand to fill this space.

2.12 In addition to the employment land above, the ESG area is a planned expansion of Hereford City Centre, which includes the redevelopment of 100 acres of central Hereford over the next 15 to 20 years<sup>12</sup>. The project is to involve the creation of three separate but interlinked zones including:

- a Retail/Leisure scheme on the old livestock market site spanning 12.5 acres (29,000 sq m in total), with Phase 1 expected to be completed in 2013 at a cost of £80m which will include a department store, a six screen digital ODEON cinema, a Waitrose food store and a variety of shops and restaurants<sup>13</sup>
- the Catherine street area, containing a mix of public buildings, private offices, shops, restaurants and small scale residential
- a new Urban Village containing up to 800 new homes, 65% are to be for the open market and 35% affordable. A master plan for the urban village is currently being developed and the application for planning permission is expected to be submitted during 2012. A link road to the urban village from the A49 was granted planning permission in 2010 and is to be constructed alongside the early phases of the urban village. The Council is currently exploring options for the funding and delivery of this road.

### **Housing growth**

2.13 The 2009 draft Regional Strategy proposed a total of 18,000 houses for the county between 2006 and 2026, 8,000 of which was allocated to the City of Hereford. However, due to a reduction in house building activity during the recession, structural changes in population/households and other housing market drivers, this target is no longer considered to be achievable. As a result, the Draft Revised Preferred Option Paper (July 2011) sets out new proposals for a total of 16,500 houses for the county by 2031 (this equates to a total of 825 dwellings per annum), with 6,500 planned for Hereford. This reflects in particular the cancellation of Whitecross as an urban expansion area and reducing the Holmer West urban expansion area by half.<sup>14</sup>

2.14 The location of new homes around Hereford centre will focus on the following urban extension sites (plus the urban village expansion in the city centre):

- Lower Bullingham (1,000 to 2031, at a rate of 50 homes pa)
- Three Elms<sup>15</sup> (1,000 to 2031, at a rate of 50 homes pa)
- Holmer west (500 to 2031)

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<sup>12</sup> Herefordshire Council [http://www.herefordshire.gov.uk/business/economic\\_development/1267.asp](http://www.herefordshire.gov.uk/business/economic_development/1267.asp)

<sup>13</sup> Hereford Futures <http://www.herefordfutures.co.uk/>

<sup>14</sup> Core Strategy – Draft Revised Preferred Option Background paper, July 2011

<sup>15</sup> Also known as Kings Acre

- 2.15 Smaller sites amounting to around 2,100 dwellings will make up the remainder of housing growth in Hereford. Elsewhere in Herefordshire, housing allocations focus on Leominster (2,300), Ross-on-Wye (900), Ledbury (800), Bromyard (500) and Kington (200), as well as 5,300 distributed across more rural areas.
- 2.16 Although there has been investment in affordable housing in the county, affordability remains an issue. There needs to be a continued emphasis on affordable housing and the encouragement of developers and social landlords to invest in the area along with improvements in the availability and mix of housing and also for mixed live work developments to be part of the housing offer.<sup>16</sup>

## An overview of the proposed Relief Road Scheme

- 2.17 As part of the vision set out in the *Draft Preferred Option for the Herefordshire Local Development Framework 2011*, the congestion in Hereford will be managed. The proposed relief road is key to this, providing additional highway capacity to implement sustainable transport measures and reducing the level of through traffic in the city centre. As noted in our introduction, the growth identified above is dependent upon the provision of a Hereford Relief Road with the additional package of sustainable transport measures.

### ***The rationale for intervention***

- 2.18 The transport network in Hereford currently suffers from congestion, a problem that is predicted to worsen with the future growth planned for the city. The Local Transport Plan 2 states that the City's transport network is severely constrained by its historic street pattern and densely developed residential areas immediately adjacent to the central area. Congestion occurs particularly on the radial routes that converge on the central area and the inner ring road. With only one main road through the centre of the city (A49) from north to South crossing the river, congestion has been an issue for the city for decades.
- 2.19 Many businesses in and around Hereford have reported difficulties in being able to ship and receive goods due to congestion, particularly those in the manufacturing sector that have to compete with other companies based elsewhere that can transport products more quickly and cheaply because of their proximity to faster road and rail links<sup>17</sup>.
- 2.20 More specifically, the latest *Herefordshire Employers Survey 2010*, reported that 72% of organisations in the area consider an effective transport system to be important to their business, with 30% of those losing man hours due to the poor transport system. In addition, a quarter believe that the poor transport system has increased their operating costs, 21% say that they have lost businesses because of it, 17% report that it causes a lack of inward investment and 10% believe that it has made recruiting difficult. Businesses also reported a net loss of trade and income due to poor roads and infrastructure and manufacturing companies felt that this limited the extent of the market they are able to reach<sup>18</sup>. Poor access to the motorway poses a significant barrier for those companies located in the north and west of the county.

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<sup>16</sup> Draft Economic Development Strategy for Herefordshire 2011-2026

<sup>17</sup> Hereford outer relief road business case, 2001

<sup>18</sup> Impact Consultancy, 2011, *Your Business...Your Future; The Business Perspective of the Herefordshire Economy*

With a fifth of businesses surveyed anticipating growth in their workforce and over 40% anticipating growth in turnover over the next twelve months, these issues are likely to be exacerbated - especially as almost half have the majority of their customer based locally within Herefordshire.

### **The scheme's evolution**

2.21 A relief road around the city was first considered in 1987, a brief history of how these plans have unfolded since then are presented in Table 2-3 below.

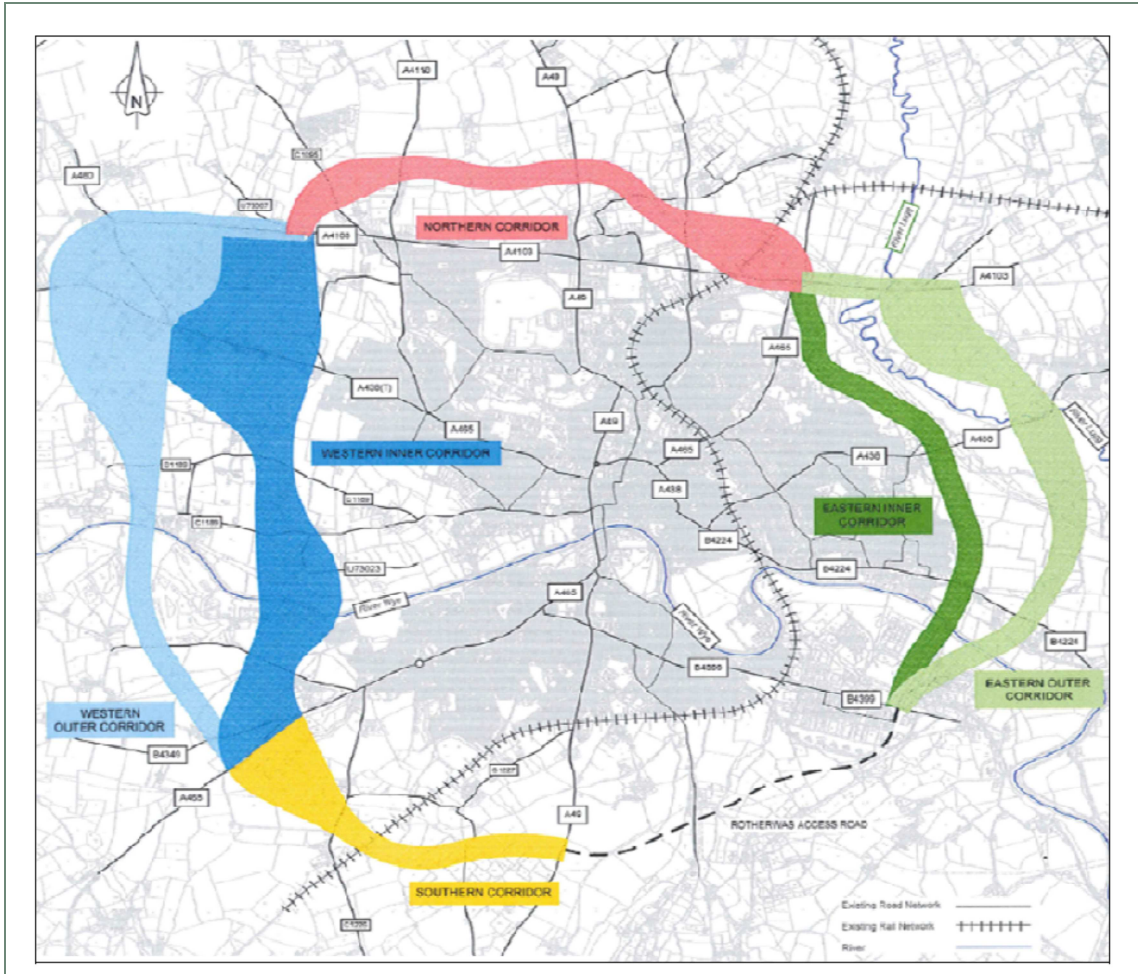
Year	Study	Summary of Outcomes
1987	DfT Route Selection Public Consultation	Two routes considered (one east and one west), Eastern route selected by DfT
1990	Funding	Financing options considered
1991	Public inquiry	Eastern Relief Road is rejected and alternative Western Route preferred.
1993	Public Consultation	Route options re-considered and Hereford's transport problems investigated
1993	Hereford Traffic Conference	Traffic problems investigated and no-road and road options considered including options for Inner Relief Roads. Inner Relief Roads opposed due to impact on population.
1996	Entry to Trunk Roads Programme	A revised Eastern Relief Road was included in the Highways Agency Trunk Road Programme. However, works stopped on the eastern route in 1997.
2001	Hereford Outer relief Road Business Case	Consultation with 52 businesses indicated that traffic congestion in Hereford was a problem for them, impacting on the reliability of transport and the ability to attract staff. There were also examples of where firms had not been able to expand or had moved away because of it and loss of contracts. The study concluded that a Relief Road would reduce transport costs for firms based in Hereford and potentially prevent important manufacturing firms from leaving.
2001	Regional Planning Guidance and transport Strategy	Report to Regional transport Group
2001	Local Transport Plan (LTP1)	Plan covered 2001/2 to 2005/6, recognised transport provision in Hereford was needed to support growth and identifies an Integrated Transport Strategy focusing on an integrated sustainable transport system
2003	Hereford Transport Review	A review of the LTP Strategy through a Local Multi Modal Study including considerations for growth.
2005	Highways Agency Consultation on A49 Edgar Street	Consideration given to HGV restriction with additional bus and cycle provision on a lane on Edgar Street. Scheme abandoned due to low level public support.
2006	Local Transport Plan (LTP2)	Identified need for Herefordshire to work closer with the Highways Agency to make best use of the A49 and identifies Hereford as an Air Quality Management Area
2009	Hereford Multi Modal Study	Commissioned jointly by Herefordshire Council and the Highways Agency and identified a Relief Road as an effective measure for accommodating growth.
2009	Delivering a Sustainable Transport System (DaSTS)	Government agreed approach to identify transport needs from 2014 onwards. DaSTS set out coordinated national approach to providing sustainable solutions to identified transport issues in the West Midlands, focusing on Hereford, Shrewsbury and Telford. It highlighted the limited capacity of the city's highway network which is heavily constrained by the convergence of radial routes on the inner ring road and the presence of only one suitable river crossing connecting the north and the south of the city and serving longer distance movements.

Source: Amey Study (modified by SQW)

### **Developing the preferred option**

- 2.22 The most recent study undertaken by Amey UK Plc in 2010, *Hereford Relief Road: Study of Options*, to inform the forthcoming Local Development Framework, looked at inner and outer relief road route options on both the east and the west of the city. The study concluded that the eastern corridors, although having greater time saving qualities due to most of the over capacity junctions being located on the east, present a high risk in terms of delivery due to environmental constraints especially the Lugg Meadows Special Area of Conservation site. This would make it likely that any plans would be successfully opposed by Natural England under the Countryside and Rights of Way Act 2000. Therefore the report suggests that this route should not be pursued any further. The study also highlighted that a corridor too far outside the city (i.e. an outer route) would not provide a short enough route to attract through-traffic or local trips. An inner western route was considered to be the preferred option as it would have a reduced impact on the Special Area of Conservation sites. An inner western route would also have a shorter crossing over the River Wye minimising environmental impact and construction costs.
- 2.23 According to the Amey study, the estimated cost for a dual carriageway along this preferred route was approximately £109m (due to the requirement for substantial earth works activity as it has a varied topography), reducing to £82m if only a single carriageway were to be implemented which was considered sufficient. A map showing the alternative routes is presented in Figure 2-2. This compared to £103.4m for a dual carriageway inner eastern route and 76m for a single carriageway.

Figure 2-2: Relief Road route options



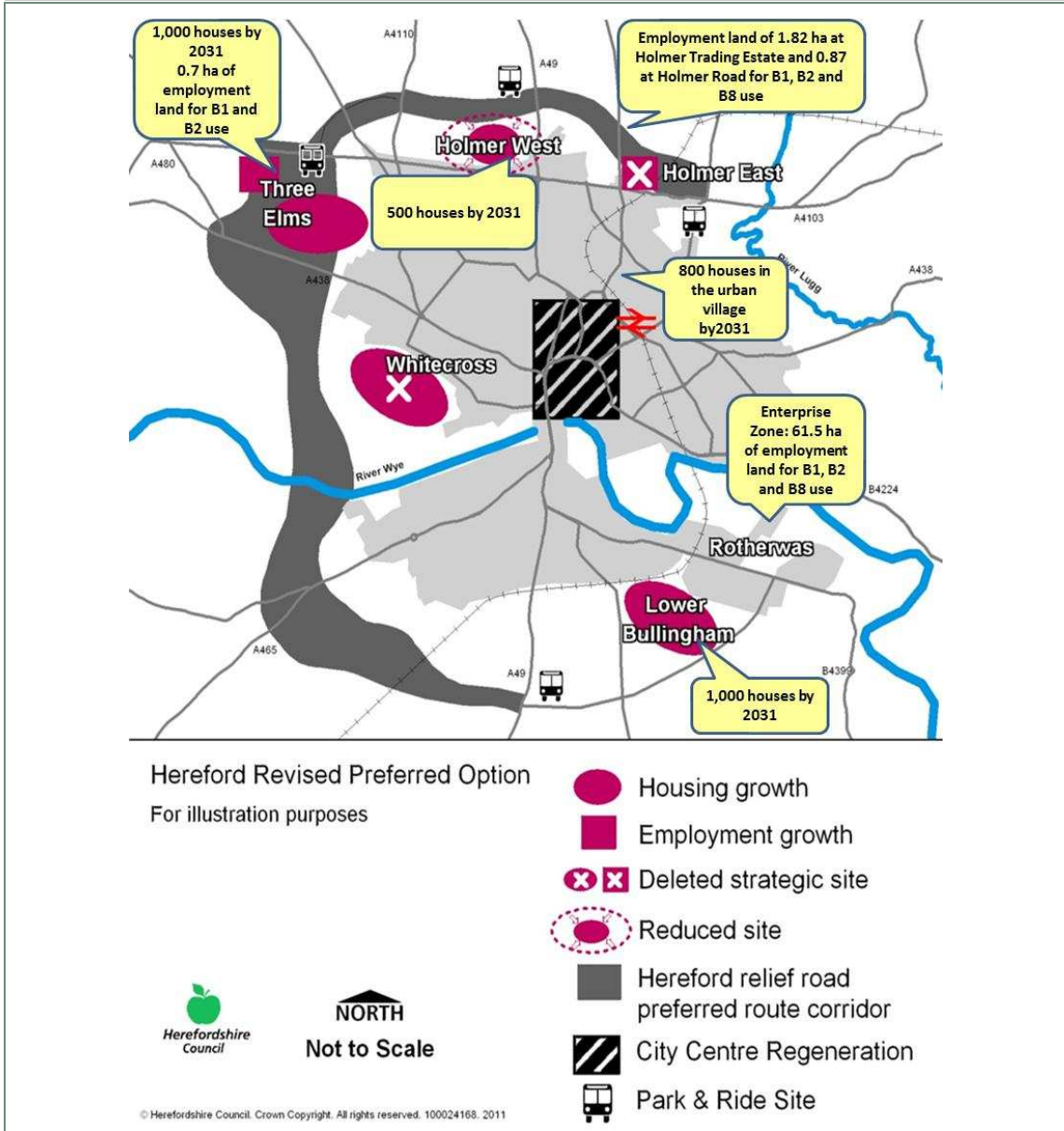
Source: Amey, 2010, *Hereford Relief Road Study Options*

- 2.24 In July this year an independent *review of Hereford Relief Road Technical Studies* was carried out by Parsons Brinkerhoff Ltd which reinforced the conclusion reached in the Amey report, that the inner western route was the most suitable given the high risk and delivery complications associated with an eastern relief road. As such, the western inner corridor continues to feature in the *Core Strategy Preferred Option* published in July 2011. This is illustrated in Figure 2-3.
- 2.25 The Hereford Relief Road also forms a key element of the Hereford Transport Strategy (part of the Local Transport Plan 3 currently under development). It is proposed that the relief road will be constructed in three stages to align with Hereford's indicative plans for urban extensions:
- the first southern section would be delivered with the southern urban extension at Lower Bullingham (2016-2020)
  - the second section will be dependent on funding along with the western urban expansion proposals (2020-2026)

- and the final northern section would be part funded by the northern urban expansion proposals for future housing post 2026<sup>19</sup> (2026-2030).

2.26 It is important to note that the findings of this report are based on the phasing above.

Figure 2-3: Core strategy preferred option employment and housing sites



Source: Herefordshire Council (2011) – annotated by SQW

<sup>19</sup> Source of information on the timescales for expansions: Hereford Council, 2010, Shaping Our Place 2026 Local Development Framework Preferred Option: Hereford

## Key messages

- Herefordshire has high employment rates, but issues around low wage levels and under-employment. The county performs well in terms of skills, but it appears that many of the highly skilled residents commute out of the county for work. Business survival rates are strong, but firms tend to operate in lower value added sectors.
- City's transport network is severely constrained by its historic street pattern and densely developed residential areas immediately adjacent to the central area. With only one main road through the centre of the city (A49) from north to South crossing the river, congestion has been an issue for the city for decades.
- Business survey evidence shows that Hereford's poor transport system has impacted upon operating costs, securing business/trade, attracting inward investment and recruitment.
- The main economic ambition for Herefordshire is *'to increase the economic wealth of the county through the growth of business'*. Increasing business survival, growth and inward investment is a priority in order to increase the number of (better paid) jobs in Herefordshire.
- Key strategic sites for employment land in Hereford are currently the Rotherwas Industrial Estate (the Enterprise Zone site in the south east) and Three Elms site (in the west).
- The location of new homes in Hereford centre will focus on the following urban extension sites: Lower Bullingham (in the south), Three Elms (in the west), and Holmer west (in the north), plus the urban village extension in the centre.
- The current preferred option for the relief road is the western inner route, which has been selected to align with the location of urban expansion plans and due to significant environmental constraints on the eastern side of Hereford.



## 3: Economic impacts of the proposed scheme

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- 3.1 In this Section, we present our analysis of the potential impacts of the relief road on business performance, job creation, inward investment and wider economic performance (in gross and net terms). This analysis is informed by a series of consultations with local landowners, developers/commercial agents and businesses undertaken for this study (please turn to Annex D for detailed feedback from consultees) and a detailed modelling exercise. We also assess the likely skills needs associated with employment growth that might be generated by the relief road, and possible distributional impacts.

### Gross impacts of the proposed scheme

- 3.2 The relief road has the potential to deliver a variety of impacts, including business growth prospects, improving the productivity of existing jobs, encouraging inward investment and accelerating the development of employment land and creating jobs.
- 3.3 Below, we assess the potential impacts of a relief road in general (and differential impacts of the western and eastern routes where these appear), and compare these against potential impacts of not implementing the relief road (i.e. the counterfactual or ‘do minimum’ position).
- 3.4 It is important to note that, whilst the majority of consultees were in favour of a relief road, many found it very difficult to quantify the potential impacts on their business. Therefore the analysis of consultation evidence below is largely qualitative, with anecdotal examples of potential impacts where available from consultees<sup>20</sup>. The main area where we have been able to quantify impacts has been in terms of the scale and speed of employment land development.
- 3.5 The counterfactual position or ‘do minimum’ has been developed following consultation with transport planners at Herefordshire Council. Under this scenario, transport improvements would be implemented under the Local Transport Plan (LTP) with a modest funding programme. These would predominantly be soft transport measures to encourage sustainable transport use (such as the £2m revenue fund allocated to improve local sustainable transport over the next three years) rather than large-scale capital investments in the transport infrastructure. The main capital investment which is likely to go ahead (and has secured funding) is the Rotherwas cycle route (£3m)<sup>21</sup>.

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<sup>20</sup> Given the limited evidence on these impacts, it is not possible to scale up/model some of the impacts for businesses in Herefordshire as a whole

<sup>21</sup> The link road associated with the ESG retail scheme has been excluded from our analysis because it is likely to be completed before the relief road implementation commences. The flood alleviation works at the Rotherwas site have also been considered but excluded as they are likely to be completed prior to the start of the relief road. The will also be a £300k capital investment for the Rotherwas flood attenuation works; however, because this is not transport related investment we have not included it in our analysis.

### **Accelerating business growth prospects**

3.6 Without a relief road, individuals consulted as part of this study argued that businesses would continue as they are, but would struggle to expand and grow. Feedback from landowners, commercial agents and businesses suggests that a relief road does have the potential to accelerate business growth prospects. Specifically, businesses argued that a relief road would have a positive impact on:

- **improving access to existing and new markets** – and these impacts do not differ significantly if the road is located on the east or west. For example, a western route is more likely to open up opportunities in Wales and the north west, but one business on the east anticipated that an eastern road will generate an additional £2,000 in turnover per month as a result of better access to new customers.
- **improving access to suppliers, expanding production, and taking on more staff** – businesses believed the impacts would be slightly greater if the road was constructed on the east of Hereford, but the does not appear to be a significant difference in impacts compared to a western route. Only one consultee could quantify the benefits here – a likely increase of 50 staff over ten years due to an eastern relief road.

3.7 More widely, a landowner consultee believed that the economic performance and growth of Herefordshire would thrive, as would overall confidence in the town. Also, consultees argued that a relief road would bring about benefits for the tourism sector by encouraging people to visit the county (consultees were aware that people were sometimes reluctant to visit and shop in Hereford because of congestion issues), which would have knock-on implications for businesses and job creation.

### **Improvements to efficiency of local labour markets and access to high quality labour**

3.8 At present, the single river crossing in the centre of Hereford is a pinch point for congestion, and means that Hereford's labour market does not operate efficiently across the whole area. A commercial agent consultee noted that firms are reluctant to locate in the south of Hereford (south of the river) because of congestion crossing the river at peak times, and the difficulties that this creates in terms of access to the city centre and a large proportion of Hereford's workforce. Another consultee was also concerned about difficulties in linking residents/workers in the new housing developments in the north west of the city (such as at Three Elms) to job opportunities in the south east at the Rotherwas Enterprise Zone because of the congestion faced in the centre of Hereford.

3.9 We would expect to see a relief road resulting in a more efficient labour market by reducing travel times (as illustrated in Table 3-1 below). This would effectively increase the labour pool available to businesses in Hereford, and provide residents with greater opportunities for work. Businesses consulted believed that an eastern route was more likely to have a greater impact on access to labour, enabling residents to avoid commuting through the city centre to access employment opportunities on the east. This aligns with the data below, which indicates that an eastern relief road would have a slightly greater reduction in journey times.

However, a western route would also improve travel times, especially as more sustainable transport options are introduced.

Table 3-1: Journey time (min:sec) and network trips (000s) – impact of a relief road					
	2008 Base	No Sustainable Measures	Sustainable Option 1	Sustainable Option 2	Sustainable Option 3
<b>AM Peak</b>					
	<b>143:03</b>	<b>194:59</b>	<b>174:18</b>	<b>181:54</b>	<b>182:59</b>
No Relief Road	Car 19.9		Car 24.2	Car 23.0	Car 21.8
	Total 29.8		Total 37.9	Total 38.1	Total 38.2
Western Relief Road		<b>170:58</b>	<b>158:21</b>	<b>168:18</b>	<b>161:40</b>
			Car 24.3	Car 23.3	Car 22.1
			Total 38.2	Total 38.4	Total 38.5
Eastern Relief Road		<b>162:08</b>	<b>152:58</b>	<b>167:42</b>	<b>156:12</b>
			Car 24.2	Car 23.0	Car 21.8
			Total 37.9	Total 38.1	Total 38.2
<b>PM Peak</b>					
	<b>156:54</b>	<b>217:40</b>	<b>195:56</b>	<b>201:34</b>	<b>195:44</b>
No Relief Road	Car 21.1		Car 25.3	Car 24.0	Car 22.8
	Total 32.3		Total 40.7	Total 40.9	Total 41.0
Western Relief Road		<b>187:36</b>	<b>171:33</b>	<b>185:49</b>	<b>183:18</b>
			Car 25.6	Car 24.3	Car 23.1
			Total 41.0	Total 41.1	Total 41.2
Eastern Relief Road		<b>177:55</b>	<b>164:27</b>	<b>167:59</b>	<b>161:53</b>
			Car 25.3	Car 24.0	Car 22.8
			Total 40.7	Total 40.9	Total 41.0

Source: Amey (2010) Study of options. Notes: the figures are based on an assessment of journey times on eight key routes through the City. Sustainable Option 1 assumes a continuation of existing levels of investment, with a 10% modal shift from car to sustainable modes; Sustainable Option 2 assumes that there is an increase in the existing level of investment in the sustainable transport network combined with an increase in demand management measures, and a 15% modal shift; and Sustainable Option 3 assumes that there is an increase in the existing level of investment in the sustainable transport network combined with a substantial increase in demand management measures, and a 20% modal shift from cars to sustainable modes of transport.

- 3.10 Attracting highly skilled people, and retaining skilled young adults, are also challenges in Herefordshire – through our analysis of documentation and consultations with local stakeholders, this is largely attributed to the lack of suitable job opportunities in the area – and business consulted for this study identified difficulties in sourcing high quality staff as a key barrier to growth. However, consultees also suggested that congestion issues influence people’s choices on where to live, and there is a concern that Hereford’s congestion deters some (especially higher skilled that may commute further – and are more likely to work in higher productivity jobs) from locating in the area. Consultees believed that a relief road, which would reduce congestion in the centre, would make Hereford a more attractive place to live and thereby encourage more people to move to the area in the longer term. Also, by attracting inward investment and business growth, the relief road could help to stem the net-outmigration of 18-40 year olds from the local area.

**Improvements to the efficiency of business operations and the productivity of existing jobs – with implications for business turnover and profitability**

- 3.11 The movement of goods and business travel were considered important by all of the businesses consulted<sup>22</sup>, with multiple movements of goods to and from businesses on a daily basis, which involves a constant flow of HGVs across the city. The majority of staff employed by the businesses consulted live locally within Herefordshire, and most drive (although cycling/walking to work is also relatively common), and it would appear that congestion has less impact on travel to work times (compared to the movement of goods and business travel).
- 3.12 At present, a number of landowner and business consultees are experiencing issues as a result of congestion in Hereford, including:
- delays, which increases the amount of diesel required (and therefore the cost of production) and reduces businesses' competitive advantage (as it is necessary to leave more time for deliveries)
  - pressure on lead-in times to/from the site for businesses located there
  - staffing implications due to long delays and being stuck in congestion
  - additional cost of overtime as a result of traffic congestion (especially in the delivery of goods)
  - additional costs of logistics between sites based in Hereford
  - additional costs to the businesses as they are unable to fulfil contracted timescale agreements
  - having to undertake business travel at antisocial hours to avoid traffic
  - delays in staff getting to work, with one business experiencing up to 60% of staff being 30-45 minutes late on a regular basis: this results in lengthy queues for customers on the phone, late deliveries and ultimately a loss of business
- 3.13 Many businesses have taken steps to avoid periods of heavy congestion by introducing different shift patterns. However, the majority of business consultees believed that a relief road would have an impact on business efficiency, and therefore turnover and profitability – and both a western and eastern relief road would have positive benefits in this respect. For example, they believed that a relief road would:
- reduce transport costs
  - free-up staff time
  - allowing more customers to be visited in a day
  - reduce staff costs (one business believed that a relief road would lead to a 30% reduction in staff costs due to a reduced need to pay overtime)

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<sup>22</sup> For example, the average cost of moving goods being between 3% and 15% of their annual turnover

- improved access to suppliers and therefore reduce delivery costs (one business anticipated a reduction in costs of £17k per month)
- increased turnover and/or profitability (one businesses was able to quantify the extent of this impact as 2.5% increase in both turnover and profitability)
- prevent job losses due to increased productivity.

### ***Encouraging inward investment potential***

- 3.14 A number of consultees argued that a relief road would have a positive impact on attracting inward investment. For example, one commercial agent argued that a relief road would “enhance greatly” the chances of inward investment decisions being made in favour of Hereford (particularly for businesses where locational decisions are dependent upon transport/access). To date, access has been poor and commercial agents have found it difficult to convince firms to invest. The ability to offer an integrated, uncongested transport structure would make the business case for investing in Hereford much stronger. It would also help to improve the image and environment of Hereford, and thereby help to encourage the decision-makers of major businesses to want to locate/live in the area. However, it is very difficult to quantify the potential scale of impacts on inward investment.
- 3.15 Furthermore, through consultation with the Inward Investment Team at Herefordshire County, it appears that access is a key criteria (on par with price) for the majority of businesses that enquire about inward investment opportunities in Hereford. Over the last year, evidence on inward investment enquiries suggests that many of the enquiries are for business activities that are in sectors that are most likely to be affected by the improved connectivity and transport efficiency (such as manufacturing, logistics/warehousing, haulage), and those would benefit from easier access to customers (such as retail and services) and labour markets (including industrial and office uses).

### ***Accelerating employment land development***

- 3.16 The key area where it is possible to quantify the impact of a relief road is in terms of employment land development.

#### *Views from consultees*

- 3.17 According to landowners and commercial agents consulted as part of this study, a relief road is likely to increase the speed of development of key employment sites, and increase the scale of development in some places (for example, a landowner in the north of Hereford felt that their site would be able to attract larger occupiers who require good road access if a western relief road was built). Consultees argued that the development of B2 and B8 land uses, such as manufacturing, food and drink and distribution sectors, were most likely to be accelerated.
- 3.18 Landowners expected that the impacts of a western and eastern relief road would differ to some extent, largely reflecting whether sites were located on the west or east:

- A **western relief road**: some argue that a western road would accelerate future developments and increase the demand for labour in the area (a landowner in the north), and accelerate the take up of employment land
- An **eastern relief road**: consultees argued that the demand for land would increase (by up to 50% according to some) if the relief road is implemented on the east and demand would be created to enable expansion plans to be accelerated (landowners in the south). Also, it is argued that the eastern route is complementary to the Enterprise Zone scheme, and would help the Enterprise Zone achieve its objectives (one consultee argued that the Enterprise Zone would be completely full within 10 years if an eastern route is adopted, but in its absence the site would only be a third full). However, another consultee expressed concern that a relief road on the east would encourage further displacement to the south east of Hereford (towards the Enterprise Zone) and result in a fall in demand elsewhere in the city: arguably, this would create unbalanced growth.

3.19 Most commercial agents consulted did not have a real preference as to whether the road took the western or eastern route, and did not believe that the impact of a relief road on commercial development on employment land would differ significantly if it went west or east. The priority for these consultees was to ‘implement a relief road, no matter which route it takes’.

3.20 Without a relief road, landowners and commercial agents consulted were concerned that:

- the scale of potential gains from the Enterprise Zone status may be reduced, as this would reduce the attractiveness of Hereford compared to other locations with similar incentives
- it would be more difficult to develop Hereford’s office market and “make it difficult for Hereford to achieve its aspirations” in this respect
- the proposed ESG retail development at the old cattle market in the centre of Hereford would be seriously constrained if the congestion issue was not addressed.

#### *Analysis of impacts on employment land*

3.21 In this sub-section, we assess the potential impacts of a relief road on the scale and speed of development on existing allocated land (in the UDP) and bringing other land to the market (for example, as part of the urban extension) through to 2031<sup>23</sup>. A more detailed analysis of impacts over time is set out in Annex E.

3.22 There are presently two major schemes in and around Hereford, which will be influenced by the proposed relief road scheme:

- the Enterprise Zone at Rotherwas (with incentives focused from 2012 for five years)
- the western urban expansion proposals at Three Elms (2020-2026).

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<sup>23</sup> 2031 has been identified as the time horizon for this study, as it aligns with the time period for the Plan (the Core Strategy) as set out in the Draft Revised Preferred Option Background Paper (July 2011).

- 3.23 In addition to these, the current Employment Land Review identifies other sites in and around Hereford. These are listed in the table below, along with an assessment of the potential impact of a relief road (based on consultation feedback and SQW's economic modelling).
- 3.24 Whilst the ESG retail development in the city centre is also a major scheme for Hereford, it will be completed by December 2013 (before the first phase of the relief road begins) and therefore a relief road is not likely to have an impact on the implementation of this scheme. We have therefore excluded this development scheme from our analysis of impacts below.

Table 3-2: Potential impacts of proposed scheme on development of employment land and other sites

Site	Develop-able Floorspace (Sqm)	Status	Western Route	Eastern route
Rotherwas Enterprise Zone	167,919	UDP employment allocation with planning permission	<b>Small positive:</b> Following the decline of EZ incentives after five years, take-up of land will decline but be maintained at a higher level than past trends/'do minimum'. Relief road will provide more attractive/competitive location for businesses and enable better access to jobs at Rotherwas (especially from urban extension areas)	<b>Positive:</b> Slightly higher positive impact than the western route, once the eastern route is implemented, given that road would be on the same side of Hereford as the EZ site – eastern relief road is likely to have a greater impact on realising the EZ's objectives
Three Elms Trading Estate	2,800	UDP employment allocation with planning permission	<b>Large positive:</b> western relief road would enable the development of this site to full capacity	<b>No impact (compared to 'do minimum' scenario),</b> in which it is assumed that the site would develop more slowly and to a lower scale).
Holmer Trading Estate (x 2 sites)	7,709	UDP employment allocation with planning permission	<b>Small positive:</b> the relief road would not reach this area until latter stages of development, so a slight uplift on the scale of development has been assumed towards the end of the assessment period.	<b>Small positive:</b> the relief road would not reach this area until latter stages of development, so a slight uplift on the scale of development has been assumed towards the end of the assessment period.
Holmer Road, Hereford	240	UDP employment allocation with planning permission	<b>No impact (compared to 'do minimum' scenario):</b> likely that the road would be developed after site take-up	<b>No impact (compared to 'do minimum' scenario):</b> likely that the road would be developed after site take-up
Westfields trading estate	6,960	UDP employment allocation without planning permission	<b>Positive:</b> site is located on the north west of the city, so impact of relief road likely to come towards the end of its development (i.e. phase 2 of road). Therefore an increased uptake has been assumed towards end of the assessment period.	<b>Smaller positive:</b> benefits only likely to arise towards the latter stages of the relief road development, so an increased uptake has been assumed towards end of the assessment period (but at a lower level than the western route, given the location of the site).
Vacant plot Holmer Road	1,080	UDP employment allocations without planning permission	<b>No impact (compared to 'do minimum' scenario):</b> moderate quality site, and likely that the road would be developed after site take-up	<b>No impact (compared to 'do minimum' scenario):</b> moderate quality site, and likely that the road would be developed after site take-up
Commitment s outside of ELR (19 small sites)	12,968	Allocated employment land outside of UDP - with planning permission	<b>Positive:</b> A relief road is likely to increase scale/speed of development after phase 2 of road is completed, as congestion in the city centre will be maintained (and so firms will be more likely to expand production/turnover, and the city will be a more attractive location for inward investment).	<b>Positive:</b> same as western route
Three elms urban extension	18,150	Employment land associated with urban extension	<b>Large positive:</b> site development largely dependent upon implementation of phase 2 of relief road (only a small proportion would be developed without a road). Given location on the west, impacts are likely to be much greater from a western relief road. It is assumed that relief road allows all of site to be taken-up.	<b>Small positive:</b> Site is located on west of Hereford – therefore impacts of eastern route limited. It is assumed that part of the development would be enabled as city centre congestion is managed by an eastern relief road, with an increase towards 2026 as the final phase of an eastern relief road is completed.

Source: SQW analysis of employment land data and consultation feedback



3.25 In order to assess the potential job creation at the sites listed above, it is necessary to assess the type of use proposed for each site, and convert this into jobs using standard employment densities. The types of uses planned for each employment site are set out in the Employment Land Review and the Enterprise Zone bid. These are presented in the table below.

Table 3-3: Employment land development – types of usage

	Develop- able Floorspace (Sqm)	B1 Office	B1 Light Industrial	B2	B8
Rotherwas Enterprise Zone	167,919	19%	38%	34%	8%
Three Elms Trading Estate	2,800	14%	29%	14%	43%
Holmer Trading Estate (x 2 sites)	7,709	29%	0%	38%	33%
Holmer Road, Hereford	240	0%	0%	0%	100%
Westfields trading estate	6,960	0%	50%	0%	50%
Vacant plot Holmer Road	1,080	0%	100%	100%	300%
Commitments outside of ELR (19 small sites)	12,968	21%	39%	20%	20%
Three elms urban extension <sup>24</sup>	18,150	35%	45%	20%	0%

Source: Employment Land Review 2010 and EZ bid. The categories above are taken from the Town and County Planning (uses classes) order 1987. B1 refers to business use (offices or light industry), B2 refers to general industrial uses (e.g. manufacturing) and B8 refers to storage, wholesale and distribution uses.  
<http://www.communities.gov.uk/documents/planningandbuilding/pdf/144275.pdf>

3.26 We now calculate the jobs capacity of the floorspace above using employment densities set out in the Offpat (2010) *Employment Densities Guide*<sup>25</sup>. Based on these assumptions, **these sites have the capacity to generate around 8,357 jobs**, of which:

- 41% would be in B1 Office functions
- 21% would be in B1 Light Industrial uses
- 22% would be B2
- 4% would be B8
- 11% would be in services associated with the urban extension housing developments.

3.27 **Under the ‘do minimum’ scenario, it is estimated that around 4,806 jobs will be created by 2031.** This estimate is based on the assumptions that after the EZ incentives come to an end, the take-up of employment land will decline to just above pre-EZ employment land take-up rates.

<sup>24</sup> Please note, types of usage for this site are an assumption, based on usage elsewhere.

<sup>25</sup> These employment densities are as follows: 1 job per 12 sqm of B1 office floorspace; 1 job per 47 sqm of B1 light industry floorspace; 1 job per 36 sqm of B2 general floorspace; and 1 job per 70 sqm of B8 general floorspace; Employment densities have been applied to net or gross internal areas for each use, as recommended in the 2010 guidance.

- 3.28 If we apply the assumptions above on the impact of a relief road on the scale and speed at which sites are developed, we estimate that **a western relief road could create an estimated 6,761 gross jobs by 2031, compared to 6,126 gross jobs over the same time period if the road took an eastern route.** This is because a western route would have greater impact on releasing many of the larger strategic sites on the western side of Hereford, especially the Three Elms site as part of the urban extension scheme.

Table 3-4: Job creation

	Total Jobs Capacity (gross)	Impact of a relief road on jobs delivered by 2031		
		Do nothing	Western relief road	Eastern relief road
Rotherwas Enterprise Zone	5,719	3,872	4,225	4,457
Three Elms Trading Estate	73	15	73 -	15
Holmer Trading Estate (x 2 sites)	276	55	174 -	174
Holmer Road, Hereford	3	3	3 -	3
Westfields trading estate	120	36	120 -	90
Vacant plot Holmer Road	98	98	98 -	98
Commitments outside of ELR (19 small sites)	402	402	402 -	402
Three elms urban extension (associated with employment land)	716	39-	716 -	421
Urban extensions (x3): Service jobs associated with housing growth	950	285	950 -	646
<b>TOTAL</b>	<b>8,357</b>	<b>4,806</b>	<b>6,761</b>	<b>6,126</b>

Source: SQW analysis

### Temporary construction jobs impacts

- 3.29 The construction of the road will also create temporary employment opportunities in the construction sector. Based on coefficients for jobs created through spend on infrastructure capital developments, **the number of construction jobs directly created by implementing the western relief road (at 863 person years of construction employment) is slightly higher than the eastern route (815).** This is because the level of investment required to construct a relief road on the west is higher, and therefore the number of jobs created (which is proportionate to the scale of investment) is higher. Due to very limited capital investment under the ‘do minimum’ option, the number of construction jobs created through infrastructure spend would be around 23 person years of construction employment.

Table 3-5: Capital expenditure on transport infrastructure, and associated jobs

	Scenario 1: Do minimum	Scenario 2: Western Relief Road	Scenario 3: Eastern Relief Road
Transport capital expenditure – on the relief road	NA	£109m	£103m

	Scenario 1: Do minimum	Scenario 2: Western Relief Road	Scenario 3: Eastern Relief Road
Transport capital expenditure – other transport infrastructure <sup>26</sup>	£3m	£3m	£3m
<b>Total construction expenditure</b>	<b>£3m</b>	<b>£112m</b>	<b>£106m</b>
<b>Total person years of construction employment</b>	<b>23</b>	<b>863</b>	<b>815</b>

Source: SQW analysis, based on construction expenditure data sourced from Herefordshire Council and Amey UK Plc (2010) Hereford Relief Road: Study of Options. Employment co-efficients sourced from the Construction Skills Network.

3.30 Construction jobs will also be created indirectly through the building of employment sites. Again, because the western route is likely to bring forward more employment land, it is also likely to generate slightly more indirect person years of construction employment (1,371) than the eastern route (1,307).

Table 3-6: Indirect construction jobs

	Unit build cost (£)	Do minimum		Western route		Eastern route	
		Total cost of developing floorspace to 2031 (£m)	person year of construction employment supported	Total cost of developing floorspace to 2031 (£m)	person year of construction employment supported	Total cost of developing floorspace to 2031 (£m)	person year of construction employment supported
B1 Office	1,291	84	643	101	780	99	762
B1 Light Industrial	861	26	201	38	289	33	253
B2	861	28	216	34	265	34	259
B8	538	3	23	5	36.74	4	32
<b>Total</b>		<b>141</b>	<b>1,082</b>	<b>178</b>	<b>1,371</b>	<b>170</b>	<b>1,307</b>

Source: SQW analysis. Unit cost build are based on 2008 prices. Conversion to person years of construction employment is based on Census of Production and Annual Business Inquiry data. SQW's usual approach is to assume that one person year of construction employment will be supported for every £130,000 worth of expenditure on the construction of commercial premises.

## Net employment impacts

3.31 The employment impacts above are 'gross' impacts, no matter where they are felt. It is also important to understand the 'net' impacts upon the Hereford and Herefordshire areas specifically, and compare the impact of the relief road against what would happen anyway (i.e. the counterfactual). In doing this, we seek to understand the *net attributable jobs* associated with the relief road in both Hereford and the wider Herefordshire areas.

<sup>26</sup> This relates to the £3m allocated to the Rotherwas cycle route

### Additionality assumptions

3.32 In order to move from gross to net impacts, we have applied a series of assumptions for additionality. These are based on guidance from the Homes and Communities Agency and English Partnerships (2008)<sup>27</sup>, which have been adjusted where appropriate to reflect evidence collated for this study. These are as follows:

- **Deadweight:** i.e. the proportion of outcomes that would have occurred in any event without the relief road going ahead. This is assessed by taking into account the reference case scenario – in this case, we have assumed that employment land take-up in Hereford will resume to around 3,400 after the benefits of the EZ have washed through<sup>28</sup>.
- **Leakage:** leakage is the proportion of jobs that benefit residents that live outside of Hereford/Herefordshire. Commuting data shows that 90% of jobs in Herefordshire are taken by residents in the County, and 78% of jobs in Hereford are taken by residents of the City. This suggests that leakage is likely to be 10% at the County level and 22% at the Hereford level.
- **Displacement:** this refers to economic activity based on sites which are released by the relief road that is diverted from other businesses in the area. The level of displacement varies by sector, and depending on the spatial scale in question. According to EP guidance, displacement can range from 25% to 75%.
- **Multipliers:** this measures the economic benefits resulting from indirect effects (i.e. supply chain) and induced effects (i.e. employee spend in the economy) of the intervention. Again, multipliers vary by sector and geography, ranging from 1.05 to 1.7<sup>29</sup>.

Table 3-7: Additionality assumptions

Additionality assumptions	Hereford city	Herefordshire County
Deadweight	Reference case (do minimum)	Reference case (do minimum)
Leakage	22%	10%
Displacement		
	B1 Office 12%	22%
	B1 Light Industry 17%	25%
	B2 17%	25%
	B8 17%	25%
Other (e.g. services in new housing devts)	12%	22%
Multiplier effects		

<sup>27</sup> HCA and English Partnerships (2008) Additionality Guide: Third Edition

<sup>28</sup> Data from Herefordshire Council shows that between 2000/01 and 2010/11, employment land take-up rates have averaged 3,415 (if we exclude an anomaly in 2006/07 and assume that the development density is around 27%, based on the Rotherwas site)

<sup>29</sup> HCA and English Partnerships (2008) Additionality Guide: Third Edition

Additionality assumptions	Hereford city	Herefordshire County
B1 Office	1.29	1.44
B1 Light Industry	1.29	1.44
B2	1.29	1.44
B8	1.29	1.44
Other (e.g. services in new housing devts)	1.29	1.44

*Source: SQW analysis*

3.33 Temporary construction jobs are not typically included in an assessment of net impacts. However, it is worth noting that a large proportion of the construction jobs created are likely to be additional (i.e. would not have occurred anyway) given the impact of the recession on the construction sector, and the substantial capacity that now exists in this sector. Furthermore, construction activities have the potential to create jobs for unemployed residents in Herefordshire, resulting in savings to the Exchequer as these individuals come off benefits.

### ***Net employment impacts on Hereford city and Herefordshire County***

3.34 On the basis of the additionality assumptions above, the estimated gross and net permanent jobs created by a western and eastern relief road are set out in the table below. This shows that:

- a western relief road is likely to create an additional 2,865 jobs for residents of *Hereford City* by 2031, compared to 1,934 if the road was constructed on the east of the city.
- a western relief road could create an additional 3,187 jobs for residents of *Herefordshire County* by 2031, compared to 2,151 if the road was constructed on the east of the city.

3.35 The main reason that the western route is likely to create more jobs than the eastern route is because a relief road on the west will have a greater impact on bringing forward some of the key employment sites around Hereford – most notably the Three Elms urban extension, but also sites on the Westfields trading estate. The number of jobs created in Herefordshire County is greater than for Hereford City (a tighter geography) predominantly because leakage effects at the level of the County are much smaller and the potential for multiplier benefits is higher (as shown in Table 3-7).

3.36 The type of jobs created by the western and eastern routes varies slightly according to allocation of floorspace usage on different sites brought forward in different parts of the city – but on the whole the analysis suggests that similar types of jobs would be created if the road was implemented on the west or the east.<sup>30</sup>

<sup>30</sup> The types of jobs created by a western relief road are as follows: 36% in B1 office uses; 20% in B1 light industry uses; 22% in B2 uses; 8% in B8 uses; and 14% in other service functions. Equivalent figures for an eastern relief road are: 39% for B1 office; 20% for B1 light industry; 23% for B2; 6% for B8; and 12% for other service functions.

Table 3-8: Net impacts on Hereford City and Herefordshire County

	Net impacts on Hereford City		Net impacts on Herefordshire County	
	Western relief road	Eastern relief road	Western relief road	Eastern relief road
Gross permanent direct jobs created if the relief road is implemented	6,761	6,121	6,761	6,126
<i>Estimated leakage</i>	1,487	1,348	676	613
<i>Estimated job displacement</i>	968	879	1,581	1,434
Net jobs before multipliers	4,306	3,899	4,504	4,079
Multiplier impacts	5,554	5,030	6,485	5,874
<b>Total net attributable jobs</b>	<b>9,860</b>	<b>8,927</b>	<b>10,989</b>	<b>9,953</b>
<i>Gross permanent jobs (reference case), minus ...</i>	<i>4,806</i>	<i>4,806</i>	<i>4,806</i>	<i>4,806</i>
<i>Estimated reference case leakage</i>	<i>1,057</i>	<i>1,057</i>	<i>481</i>	<i>481</i>
<i>Estimated reference case job displacement</i>	<i>694</i>	<i>694</i>	<i>1,127</i>	<i>1,127</i>
<i>Net reference case jobs before multipliers</i>	<i>3,015</i>	<i>3,015</i>	<i>3,198</i>	<i>3,198</i>
<i>Multiplier impacts of reference case</i>	<i>3,941</i>	<i>3,941</i>	<i>4,605</i>	<i>4,605</i>
<i>Total net attributable jobs under reference case</i>	<i>6,995</i>	<i>6,995</i>	<i>7,802</i>	<i>7,802</i>
<b>Overall net attributable jobs associated with the relief road</b>	<b>2,865</b>	<b>1,934</b>	<b>3,187</b>	<b>2,151</b>

Source: SQW analysis

## Sharing the Benefits – Matching Job Opportunities with People

3.37 Having discussed the gross and net employment generation potential of the two alternative options for the Relief Road, the next issues to consider are (1) the potential quality of those jobs and (2) the potential accessibility of those jobs for local people, especially for the currently unemployed and economically inactive.

3.38 In earlier Sections a number of key features of the Hereford labour market were described. The salient aspects are as follows:

- 47% of Hereford's resident working age population possess NV3 Level 3 qualifications or higher, compared to 45% for the West Midlands and 51% for England
- 14% of Hereford residents possess no qualifications, compared to 15% for the West Midlands and 11% for England

- Of the jobs located in Hereford, about 90% are filled by local residents
  - Unemployment and economic inactivity are significant issues for the Hereford economy. The unemployment rate is around 6%, while the economic inactivity rate is around 20%.
- 3.39 In order to estimate the potential for the Relief Road options to provide economic opportunity for Hereford’s existing and future residents, it is necessary to estimate the potential breakdown – by required skill level – of the jobs likely to be generated by on the currently available and future development land that will be opened up by the Relief Road.
- 3.40 Ideally the distribution of job opportunities should be broadly in line with the skill profile of the resident population, so that the relevance of the job opportunities to the population are maximised.
- 3.41 Estimation of the average skill requirement of the business sectors that are relevant to the Relief Road options (such as manufacturing, transport, distribution, professional and business services, etc.) can be made by interrogation of datasets available from the Office of National Statistics together with the various relevant sector skills councils (such as SEMTA).
- 3.42 Use of this method suggests that the typical profile of qualification requirements for each of the development type analysed in this report are as follows.

Table 3-10: Qualifications among existing businesses (UK data)

Development Type	NVQ Level 4+	NVQ Level 3	NVQ Level 2	NVQ Level 1	Other qualifications	No qualifications
B1 Industrial	23%	32%	22%	11%	9%	3%
B2	12%	14%	20%	19%	19%	16%
B8	12%	14%	20%	19%	19%	16%
B1 Offices	25%	34%	19%	10%	9%	3%
Other	18%	24%	20%	15%	14%	10%

Source: SQW

- 3.43 The next step is to convert the assumptions for the average skill profile by broad sector into specific estimates for the gross jobs – net of the Reference Case – that are expected to be created by the two alternative route options for the Relief Road. The results are presented for each Route Option in turn below, starting with the western route.

Table 3-11: Skills/ Qualification Breakdown of Expected Gross Jobs net of Reference Case (FTEs): Western Route

Development Type	NVQ Level 4+	NVQ Level 3	NVQ Level 2	NVQ Level 1	Other qualifications	No qualifications
B1 Industrial	102	142	98	49	40	13
B2	33	38	54	52	52	43
B8	9	11	15	14	14	12
B1 Offices	125	170	95	50	45	15
Other	120	156	135	98	93	63

Development Type	NVQ Level 4+	NVQ Level 3	NVQ Level 2	NVQ Level 1	Other qualifications	No qualifications
<b>Total</b>	388	517	397	263	244	147
<b>% of Overall Total</b>	19.9%	26.4%	20.3%	13.4%	12.5%	7.5%

Source: SQW

3.44 That is, for the Western Route, of the 1,955 additional gross jobs (net of the Reference Case) expected to be created:

- 388 (19.9%) are expected to require NVQ level 4 or higher
- 517 (26.4%) are expected to require NVQ level 3
- 397 (20.3%) are expected to require NVQ level 2
- 263 (13.4%) are expected to require NVQ level 1
- 244 (12.5%) are expected to require other qualifications
- 147 (7.5%) are expected to require no qualifications

3.45 For the Eastern Route option, the results are provided in the table below.

Table 3-12: Skills/ Qualification Breakdown of Expected Gross Jobs net of Reference Case (FTEs): Eastern Route

Development Type	NVQ Level 4+	NVQ Level 3	NVQ Level 2	NVQ Level 1	Other qualifications	No qualifications
B1 Industrial	58	81	55	28	23	8
B2	27	32	46	43	43	36
B8	7	8	11	11	11	9
B1 Offices	106	144	80	42	38	13
Other	65	85	73	53	51	34
<b>Total</b>	263	349	266	177	165	100
<b>% of Overall Total</b>	19.9%	26.4%	20.1%	13.4%	12.5%	7.6%

Source: SQW

3.46 That is, for the Eastern Route, of the 1,320 gross jobs (net of the Reference Case) expected to be created:

- 263 (19.9%) are expected to require NVQ level 4 or higher
- 349 (26.4%) are expected to require NVQ level 3
- 266 (20.1%) are expected to require NVQ level 2
- 177 (13.4%) are expected to require NVQ level 1



- 165 (12.5%) are expected to require other qualifications
- 100 (7.6%) are expected to require no qualifications

3.47 Comparing the two options side-by-side, the key points are as follows:

- The Western Route generates significantly greater numbers of gross jobs (net of the Reference Case) compared to the Eastern Route
- Both options generate a very similar skills profile for jobs. The Western Route generates a slightly higher proportion of NVQ2 jobs and slightly fewer jobs with no qualifications, but these proportionate differences are very slight.

3.48 However, the Western Route generates demand for significantly greater numbers of higher skilled jobs: for example, under the Western Route, 388 additional jobs requiring degree level qualifications are expected to be needed, compared to 263 under the Eastern Route option.

3.49 The existing skill profile of the Herefordshire labour market was described in an earlier Chapter. The relevant data is summarised for convenience in the table below.

Table 3-13: Skills/Qualification Breakdown of Herefordshire's Resident Working Age Population, 2010

NVQ Level 4+	NVQ Level 3	NVQ Level 2	NVQ Level 1	Other qualifications	No qualifications
27.5	14.9	16.1	14.3	13.5	13.6

Source: ONS Annual Population Survey

3.50 As can be seen by comparison of the data in the tables above, the anticipated supply of new job opportunities that is expected to follow following the construction of the Relief Road is reasonably well matched against the current availability of skills among the resident working age population of Herefordshire. The main issue is that there is a potential risk of an insufficient supply of mid-level skills to fill the job vacancies that are expected to appear, but this risk could be averted through appropriately targeted training and skills development programmes targeting both new entrants to the workforce (e.g. school-leavers) and existing members of the workforce.

3.51 There are also opportunities to augment Herefordshire's skills base through the expansion of the locally resident workforce through the expansion of housing, particularly that associated with the urban extensions enabled under the Western Route option.

## Links to Regeneration Objectives

3.52 Another aspect to consider is the spatial location of future employment opportunities compared to the spatial location of above average rates of deprivation in Hereford. In particular, with the spatial location of economic inactivity and economic disadvantage.

3.53 The maps overleaf indicate the areas in and around Hereford that have significantly above average rates of deprivation, in comparison with England averages. Specifically, the maps show:

- The parts of Hereford that are included within the most 20% deprived areas in England
- The parts of Hereford that experience the highest rates of employment deprivation (compared to other parts of England).

3.54 The maps also show in schematic terms the two Relief Road route options.

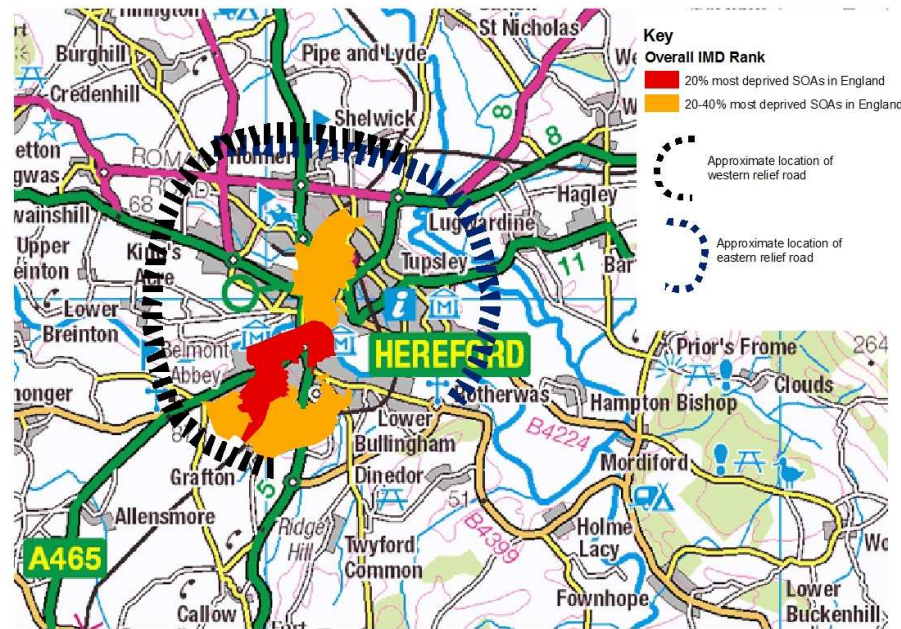
3.55 Neither route would penetrate the most deprived areas of Hereford, although it could be argued that the western route does come closer to the south-western concentration of deprivation which is evident from the mapping.

3.56 However, the largest impact on mobility is likely to be in terms of addressing congestion in the city centre, an aspect that is largely neutral with respect to a choice of western vs. eastern route options.

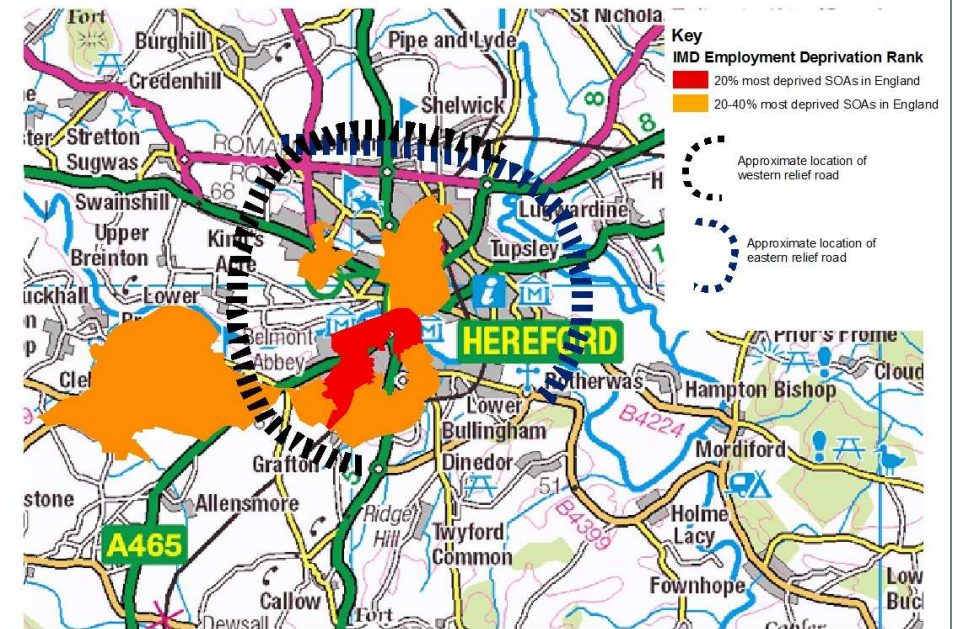
3.57 On that basis, we conclude that the choice of relief road route is largely neutral with respect to the spatial orientation of deprivation and economic disadvantage in Hereford.

Figure 3-1: IMD 2010 – overall rank and employment deprivation rank

Overall IMD rank (of all SOAs in England)



IMD employment deprivation<sup>31</sup> rank (of all SOAs in England)



Source: SQW analysis and mapping of data from ONS. Contains Ordnance Survey data © Crown copyright and database right 2011

<sup>31</sup> This domain measures employment deprivation conceptualised as involuntary exclusion of the working age population from the world of work. The employment deprived are defined as those who would like to work but are unable to do so through unemployment, sickness or disability. Individuals experiencing employment deprivation are detached from the labour market.

## Economic output impacts

- 3.58 Using the data above, it is possible to assess economic output (measured by Gross Value Added) associated with the net employment created by the relief road. The Gross Value Added (GVA) estimates are based on GVA per employee figures for the relevant sectors in Herefordshire sourced from ONS and BRES<sup>32</sup>. The results are presented in Table 3-9 below. **Overall, the net additional GVA impact of a western route is expected to be higher than an eastern route by 2031, both for Hereford (at £117.6) and the wider County (at £130.3).**

Table 3-9: Estimated net additional GVA generated by a western and eastern route by 2031 (£m)

Development type	Hereford		Herefordshire	
	Western route	Eastern route	Western route	Eastern route
B1 Office	40.5	34.3	44.4	37.6
B1 Light Industry	26.3	14.9	29.9	16.9
B2	16.0	13.5	18.2	15.3
B8	3.1	2.4	3.6	2.7
Other	31.6	17.2	34.7	18.8
<b>Total</b>	<b>117.6</b>	<b>82.2</b>	<b>130.8</b>	<b>91.4</b>

Source: SQW analysis, informed by ONS and BRES data to estimate GVA per person in employment by sector.

### Key messages

- The evidence suggests that a relief road would bring about the following benefits for Hereford and the wider County:
  - business growth prospects
  - improving access to existing and new markets
  - improving access to suppliers, expanding production, and taking on more staff
  - enable improvements to efficiency of local labour markets
  - improve access to high quality labour – by creating jobs and attracting inward investment, which attracts higher skilled workers; by making Hereford a more attractive place to live and reducing commuting times; by stemming out-migration of young adults
  - efficiency of business operations, costs and the productivity of existing jobs – with implications for business turnover and profitability

<sup>32</sup> GVA per employee figures are as follows: £42,325 in manufacturing/production; £29,930 for distribution, transport, communications, wholesale and storage; £53,693 in business services and finance; and £31,466 in public administration, education, health and other services. These sectors have been used as proxies for the land uses above.

- encouraging inward investment
- the scale and speed of development on existing allocated land (in the UDP) and bringing other land to the market (for example, as part of the urban extension), which will lead to job creation.
- In addition, the construction of the relief road is likely to directly create a number of temporary construction sector jobs (863 person years of construction employment on the western route and 815 on the eastern route), plus a number of indirect construction jobs as sites are developed.
- Consultees views on the impact of a western or eastern route did not differ significantly – the overall message is that there is a strong need for a relief road (due to the impacts congestion is having on current business performance) and having a relief road (which ever route it take) is considerably better than the 'do minimum' option.
- In terms of the quantifiable impacts:
  - a western relief road is likely to create an additional 2,865 jobs for residents of *Hereford City* by 2031, compared to 1,934 if the road was constructed on the east of the city.
  - a western relief road could create an additional 3,187 jobs for residents of *Herefordshire County* by 2031, compared to 2,151 if the road was constructed on the east of the city.
- Skills matching – Both route options are reasonable well-matched against Hereford's current endowment of skills and qualifications. The Western Route generates significantly greater numbers of gross jobs (net of the Reference Case) and more higher level jobs compared to the Eastern Route.
- Distributional impacts – We consider that the choice of Relief Road route is neutral with respect to the potential impact on the spatial location of deprivation and economic disadvantage in Hereford.
- The net additional GVA impact of a western route is expected to be higher than an eastern route by 2031, both for Hereford and the wider County

## 4: Summary and conclusions

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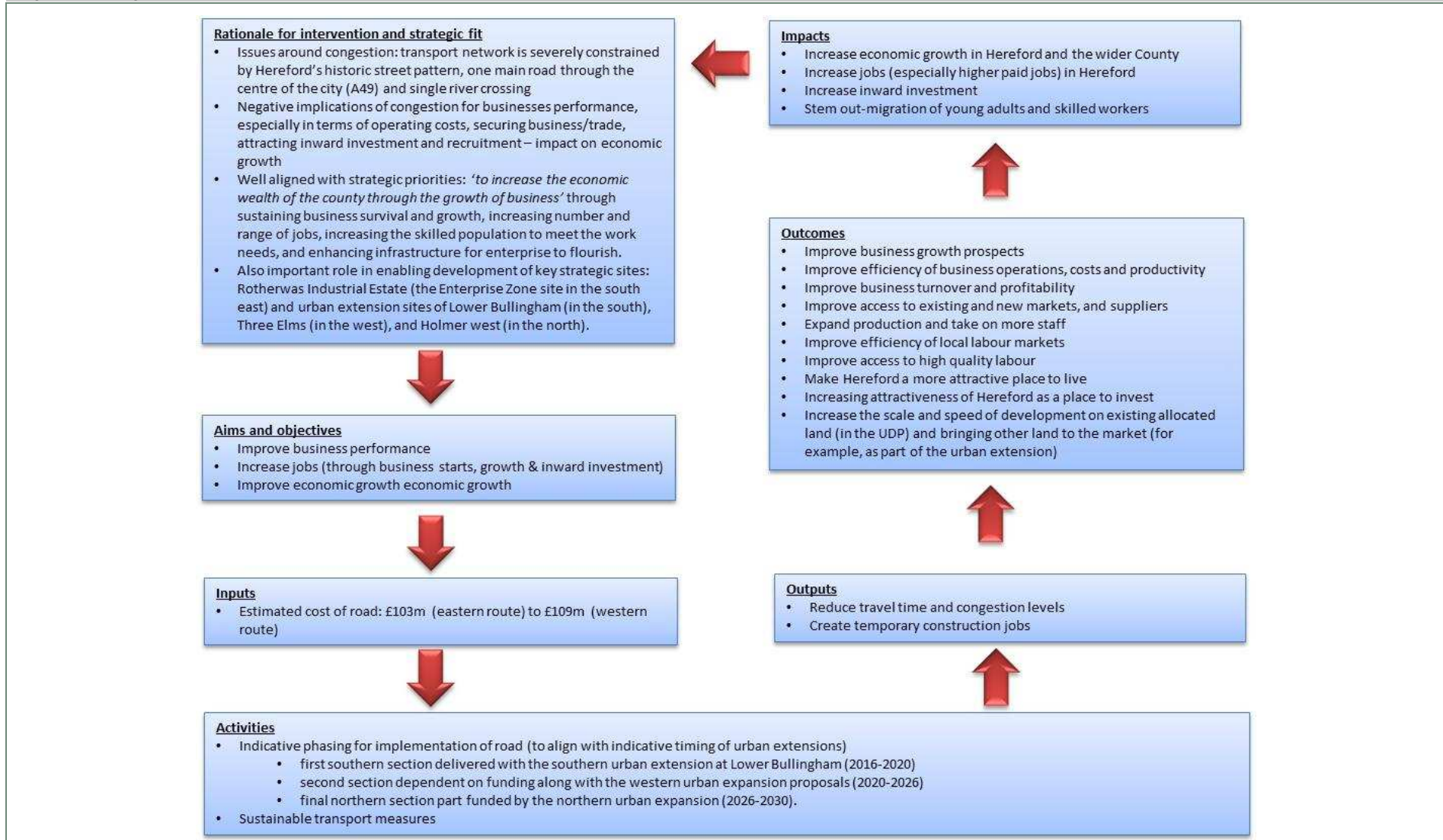
### Summary and conclusions

- 4.1 In this Section, we provide an overview the proposed relief road scheme, outlining the rationale for the intervention, what it hopes to achieve, and potential outcomes and impacts. These are summarised in Figure 4-1.

#### ***Rationale and strategic fit***

- 4.2 A relief road has been proposed for Hereford for many years: the City's transport network is severely constrained by its historic street pattern, with only one main road through the centre of the city (A49) from north to South crossing the river. There is evidence to show that congestion is still an issue, and resulting in negative implications for businesses performance (especially in terms of operating costs, securing business/trade, attracting inward investment and recruitment) and Herefordshire's economic growth.
- 4.3 The proposed scheme is well aligned with strategic objectives, and will play a key role in enabling Herefordshire ambitions to '*to increase the economic wealth of the county through the growth of business*', which prioritises business survival, growth and inward investment in order to increase the number of (better paid) jobs in Herefordshire. Under current plans for growth, the key strategic sites for employment land in Hereford are the Rotherwas Industrial Estate (the Enterprise Zone site in the south east) and Three Elms site (in the west), and the location of new homes in Hereford centre will focus on the following urban extension sites: Lower Bullingham (in the south), Three Elms (in the west), and Holmer west (in the north).
- 4.4 However, much of this growth is dependent upon the provision of a Hereford Relief Road with an additional package of sustainable transport measures. Following detailed investigation of potential routes, the current preferred option for the relief road is the western inner route. This has been selected to align with the location of urban expansion plans and because of significant environmental constraints which limit development on the eastern side of Hereford.

Figure 4-1: Logic chain



Source: SQW

## Potential impacts

- 4.5 The evidence suggests that a relief road would bring about a wide range of benefits for Hereford and the wider County, which will help to deliver against the strategic objectives discussed above, including:
- improving business growth prospects
  - improving access to existing and new markets
  - improving access to suppliers, expanding production, and taking on more staff
  - enable improvements to efficiency of local labour markets
  - improve access to high quality labour – by creating jobs and attracting inward investment, which attracts higher skilled workers; by making Hereford a more attractive place to live and reducing commuting times; by stemming out-migration of young adults
  - efficiency of business operations, costs and the productivity of existing jobs – with implications for business turnover and profitability
  - encouraging inward investment
  - the scale and speed of development on existing allocated land (in the UDP) and bringing other land to the market (for example, as part of the urban extension), which will lead to job creation
  - creating temporary construction jobs.
- 4.6 The key message from consultations with landowners, developers and commercial agents, and local businesses is that having a having a relief road - which ever route it takes - is considerably better than the ‘do minimum’ option. Consultees saw merits in both a western and eastern route: views on potential impacts upon access to existing/new markets, business efficiency, the productivity of existing jobs, profitability and attracting inward investment were fairly balanced, but slightly more consultees thought that an eastern relief road would have greater impacts in terms of access to suppliers, expanding production, and taking on more staff. However, the evidence does not point towards a significant difference in impacts.
- 4.7 The key area where the route choice is likely to have a greater, quantifiable impact is in the scale and speed at which employment land is developed (depending on its location) and bringing new land to the market. Modelling analysis undertaken for this study estimates that a western route would have a greater impact in this respect:
- a western relief road is likely to create an additional 2,865 jobs for residents of *Hereford City* by 2031, compared to 1,934 if the road was constructed on the east of the city.



- a western relief road could create an additional 3,187 jobs for residents of *Herefordshire County* by 2031, compared to 2,151 if the road was constructed on the east of the city.
- 4.8 The main reason that the western route is likely to create more jobs than the eastern route is because a relief road on the west will have a greater impact on bringing forward some of the key employment sites around Hereford – most notably the Three Elms urban extension and Westfields trading estate. The number of jobs created in Herefordshire County is greater than for Hereford City (a tighter geography) predominantly because leakage effects at the level of the County are much smaller and the potential for multiplier benefits is higher.
- 4.9 These employment impacts have the potential to generate between £82.2m (for an eastern route) and £117.8m (for a western route) in net additional GVA by 2031 for Hereford city (i.e. GVA above and beyond what might happen anyway). At the county level, a relief road could generate between £91.4m (for an eastern route) and £130.8m (for a western route) by 2031.
- 4.10 With respect to the impact of route choice on labour market performance and skills requirements, it is notable that the Western Route generates significantly greater numbers of gross jobs (net of the Reference Case) compared to the Eastern Route. For example, under the Western Route 388 additional jobs requiring degree level qualifications are expected to be needed, compared to around 263 under the Eastern Route option.
- 4.11 With respect to distributional impacts, we have assessed both routes in terms of the potential influence of spatial location of deprivation and economic disadvantage. Neither route choice directly accesses the most deprived areas of Hereford. On balance, we consider that route choice is neutral with respect to deprivation: the largest impact would be in terms of addressing congestion with respect to accessing the city centre, and it is considered that both route choices would be broadly similar in their ability to achieve this.

## Annex A: Bibliography

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### Figure A-1 : Section 2 - Bibliography

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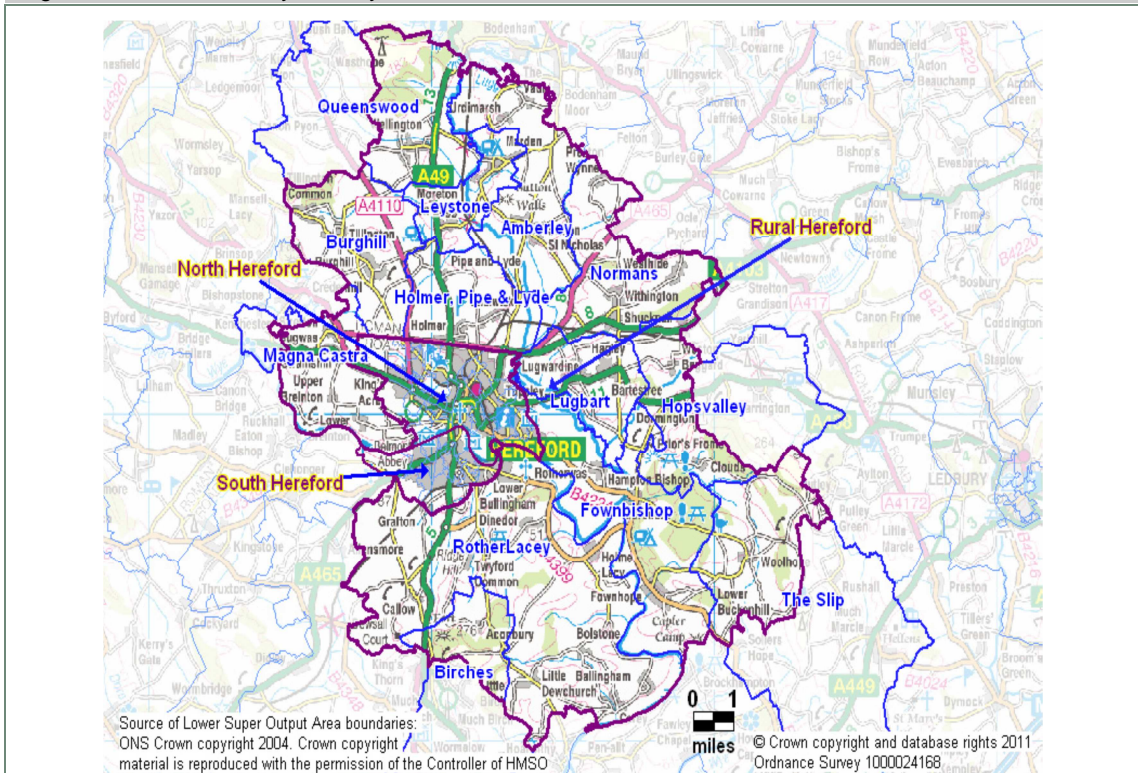
Source: SQW

## Annex B: Socio-economic context

### Data analysis

- B.1 This annex presents a detailed analysis of the economic and social profile of the Study area, which is defined as the Hereford City Locality in accordance with Herefordshire County Council's definition (North Hereford, South Hereford and Hereford rural). It contains the city of Hereford, the county's primary administrative, employment and retail centre and is surrounded by the large villages of Lugwardine, Burghill, Withington, Marden, Welington, Fownhope and Moreton-on-Lugg.
- B.2 The total area spans 244km<sup>2</sup>, 22km<sup>2</sup> of which consists of the city itself. The Hereford City Locality is made up of the following wards and LSOs. A full list of the Wards and LSOA's that comprise the Hereford Locality is provided in Annex C.

Figure B-1 : Hereford City Locality



Source: Hereford Council

- B.3 The key economic indicators that are relevant to the proposals for Relief Road are considered in turn. These include: economic output (Gross Value Added), population trends, the change in the sectoral composition of the workforce, the elements associated with labour supply, enterprise levels and the degree of deprivation in the immediate area as well as commuting patterns of the local workforce. Where possible comparisons have been made between the study area (Hereford City Locality), Herefordshire county and the UK average. Where possible data has been aggregated using LSOA's to form an accurate picture of activity in the Hereford City Locality, however, for many data sets this is not possible as the lowest spatial scale available is district level which for this study is at the county level of Herefordshire.

## Economic Output (Gross Value Added)

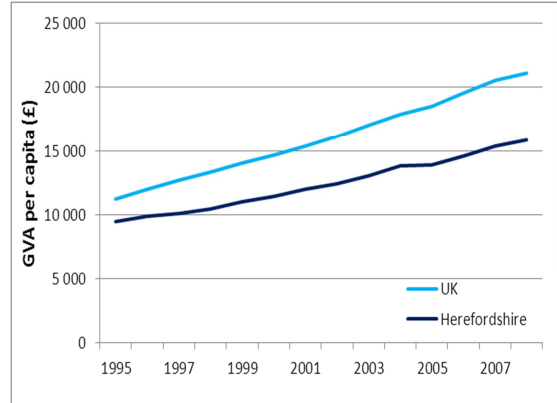
Table B-1 : Economic Output indicators

**Gross Value Added (GVA)** measures the total value of all economic activity in an economy. The latest data from the Office of National Statistics (ONS) states that in 2008, the total GVA produced in Herefordshire was £2.84 billion accounting for 13% of GVA in the West Midlands. Total GVA in the county has increased by 59% over the last ten years, below the national average of 66%.

Almost a quarter of the county's GVA come from Distribution, Transport and Communication, the same proportion as Public administration, education and health (24%). Business services and finance contributes 18%, with a further 17% from production (this contribution was at 28% in 1998). The remaining 17% comes from Agriculture and Construction.

**GVA per head** was £15,857 in 2008 compared with the national average of £21,103.

**GVA per employee** is a measure of labour productivity, which allows comparisons to be made between industries and geographic areas. In 2007, GVA per employee in Herefordshire was £35,500, compared with the national average of £45,400; this mirrors the low wages in the county.



**Source: ONS Regional Accounts 2010 Demographics**

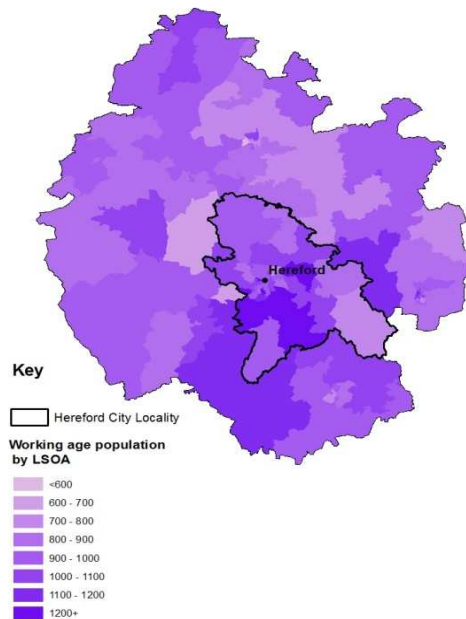
Table B-2 : Demographic indicators

The Hereford City Locality has a population of 73,100<sup>33</sup>, 41% of the county's total population of 179,300.

The working age population living in the Hereford City Locality stands at 46,100 accounting for 63% of the total population. This compares with an average of 61% in Herefordshire and 65% nationally. The adjacent map shows the distribution of the working age population across the county, from which it appears the south has the highest concentration of people living there.

According to Sub National Population Projections, the working age population of Herefordshire is predicted to fall after 2012 to 16,900 by 2024 where it is thought to remain until 2033, due to the retirement of the post war baby boomers and the out migration of young people. Although it must be noted that the area has a high proportion of 65-74 year olds still active in the labour market relating to high rates of self-employment (20% versus 13%) and employment in the agricultural sector where people tend to work to an older age.

The aging population will have implications for future labour supply and ultimately the productivity potential of the economy).



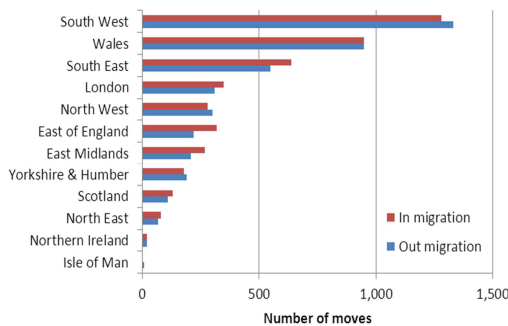
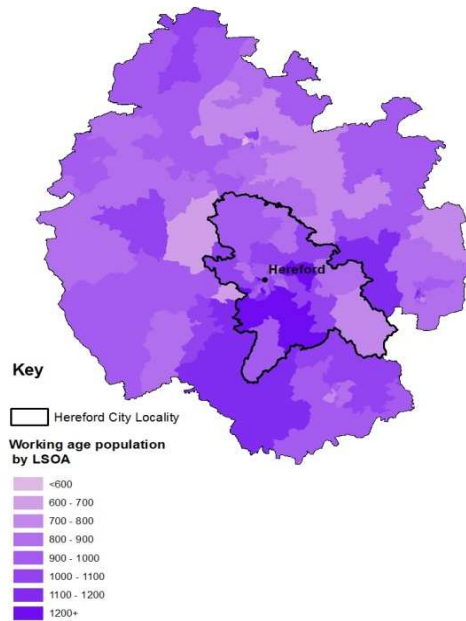
<sup>33</sup> Office for National Statistics, Mid-year Population Estimates 2009

The Hereford City Locality has a population of 73,100<sup>33</sup>, 41% of the county's total population of 179,300.

The working age population living in the Hereford City Locality stands at 46,100 accounting for 63% of the total population. This compares with an average of 61% in Herefordshire and 65% nationally. The adjacent map shows the distribution of the working age population across the county, from which it appears the south has the highest concentration of people living there.

According to Sub National Population Projections, the working age population of Herefordshire is predicted to fall after 2012 to 16,900 by 2024 where it is thought to remain until 2033, due to the retirement of the post war baby boomers and the out migration of young people. Although it must be noted that the area has a high proportion of 65-74 year olds still active in the labour market relating to high rates of self-employment (20% versus 13%) and employment in the agricultural sector where people tend to work to an older age.

The aging population will have implications for future labour supply and ultimately the productivity potential of the economy).



Migration statistics between Herefordshire and other local authorities across the UK show that in 2010, a total of 10,800 people migrated from the county whilst 11,290 migrated in to the county. This results in a net migration inflow of 490 people. Depending on the demographic of the net inflow of people to the county this could be a positive situation for Herefordshire as it will provide a source of labour for the job opportunities created within the County that are unable to be met by existing local labour supply.

Source: ONS Mid-Year population statistics, experimental forecasts and NHSCR moves within the UK and Isle of Man

## Labour Supply

Table B-3 : Labour supply indicators

Herefordshire has a high level of economic activity at 79.7% compared with the national average of 76.2% in 2010. Three quarters of the area's working age population are in employment compared with 70.3% nationally. The county also has a significantly larger proportion of its economically active population in self-employment (14.5%) compared with a national average of only 9.1%.

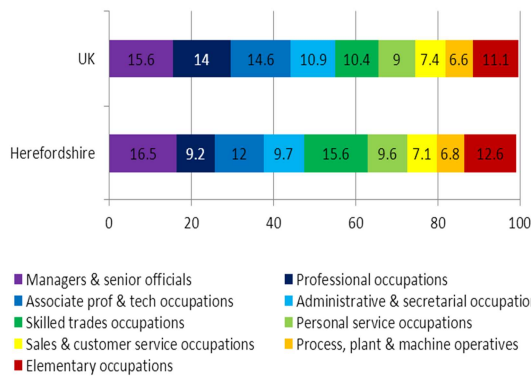
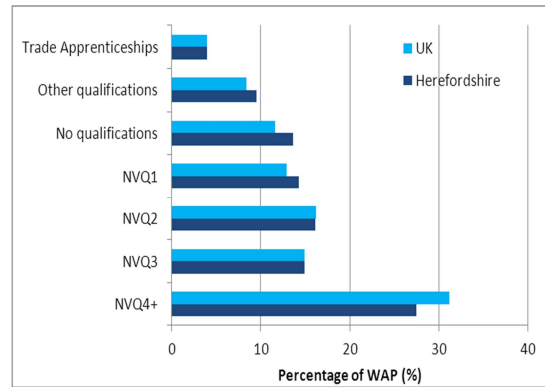
It therefore follows that unemployment in the county is low at 5.3% compared with a national average of 7.7%, although it has risen in recent years owing to the recession (this has resulted in a slight rise in the proportion of the working age population claiming Job Seekers Allowance to 3%, marginally lower than the national average of 4%). The duration over which those out of work in Herefordshire claim benefits for is less than the national average at all age levels suggesting that people are able to find employment opportunities. At the small spatial scale, there are some unemployment hot spots in the county, Belmont and St Martins and Hinton Wards in the South of the city, where up to 8% of the working age population are claiming Job Seekers Allowance. Three Elms Ward in the North of the City also has high level of claimants.

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**Skills** are an important driver of productivity, influencing the demand and capabilities of the workforce. As depicted in the adjacent figure, attainment is high in the County compared with other local authorities in the West Midlands and broadly following UK average. However, the county has a lower proportion of the working age population in possession of NVQ4+ (27.5% compared with 31.2%), and there is a higher proportion of people that have little or no skills

A fifth of companies reported the existence of skills gaps in the National Employers Skills Survey 2009. Overall the skills that's most needed improving were technical, practical or job-specific skills (74%), problem solving skills (45%), customer handling skills (41%) and team working skills (40%).



The greatest proportion of workers in Herefordshire by **occupational group** was in managers and senior official positions (16.5%) followed by those in skilled trade occupations (16.1%) and associated professional and technical (12%). Overall, the proportion of people working in high end occupations in Herefordshire is slightly below the national average at 37.7% compared with 44.2%.

However, projections suggest that by 2026, the proportion of employees (residence based) that are managers and senior officials will increase by 19% whilst those in skilled trades will reduce by 24%. At the other end of the spectrum elementary and administrative and clerical staff are projected to decrease by 27% and 18% respectively.

Herefordshire's work based **earnings** (£19,763 pa gross salaries) are low compared to the national average (£25,879) and the gap is getting wider. Residence based wages in the county are higher (£20,678) suggesting, higher skilled workers may commute out for better paid more skilled work outside of the County.

Within Hereford there are areas of particularly low income such as the South Wye wards where residents also experience higher levels of health and employment needs. Because of the density, range and nature of the housing stock, the South Wye area will continue to be a geographic area where people with lower incomes tend to live<sup>34</sup>. The work that has taken place in the area in the last 10 years has seen advancement and improvement, as well as future investment in Rotherwas (as a focus for employment in the area) and the new Hereford Academy has already seen outstanding results in qualifications.

Source: NOMIS: Annual Population Survey, Annual Survey of Hours and Earnings

<sup>34</sup> Herefordshire Council, Hereford City Locality Profile

## Labour Demand

Table B-4 : Labour demand indicators

At the end of 2007, Herefordshire was home to 9,220 VAT registered businesses<sup>35</sup>, 26% of which were in the agricultural sector with a further 22% operating within the real estate sector (which has a high churn accounting for almost a third of registrations and deregistrations in 2007). Wholesale and retail accounted for a further 17% and 11% was accounted for by construction. Manufacturing only accounted for 7% of registered businesses although still remains an important sector for the area. In comparison with the UK profile, the sector make up of Herefordshire is similar with the exception of the high proportion of agricultural businesses offset by an increased proportion of businesses in the real estate sector.

Encouragingly, new business start-ups are surviving longer than the regional average according to Business Demography data. The greatest difference is at the 5 year rate where 53.5% survive compared with only 46.8%.

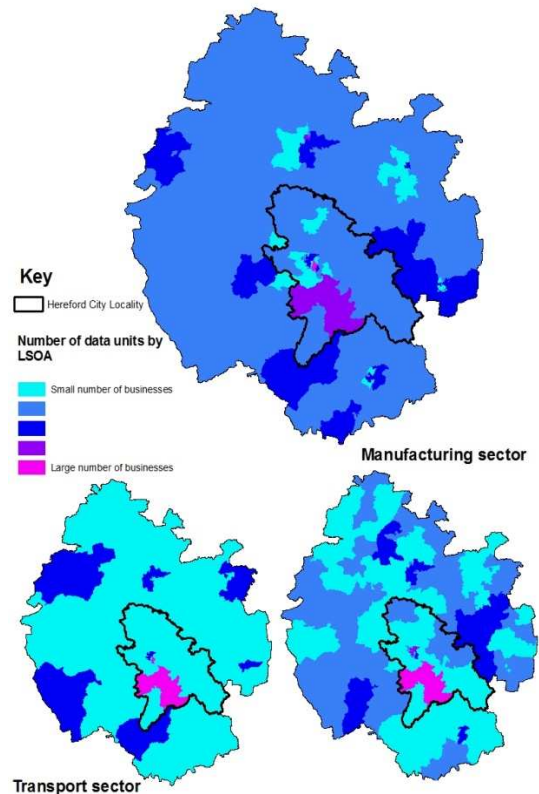
Data from the ABI on the number of data units captures those businesses that are not captured by the £68k VAT threshold number; it refers to business premises rather than businesses per se, however it is still a good measure of enterprise activity. According to this dataset, the county of Herefordshire had around 8,800 data units in 2008, of which 14% were in the construction sector, 12% were in the retail sector and 11% were in the professional, scientific and technical sector<sup>36</sup>.

The distribution of these data units in the manufacturing and transport sectors can be seen in the adjacent map. These sectors are extremely reliant on freight transport and it is therefore essential that the relief road takes into account the requirements of businesses in these sectors. The transport companies are based towards the south and west of the city whilst manufacturing is predominantly in the south and east of the city.

Hereford itself has a very mixed economy, which includes some of the larger companies such as Cargill and Bulmers (which together account for 11% of the City workforce<sup>37</sup>) with more medium sized companies particularly focused on the business centres of Rotherwas, Westfields, Holmer Road, Three Elms and Beech Business Park. Hereford also has a high proportion of the service and defence sectors that use the city as their base. In 2008, the Hereford Locality had 3,400 data units located within it. The sector profile of data units in the Hereford Locality mirrors that of the county and national profile with the highest proportions of businesses being in the construction (14%), retail (13%) and professional, scientific and technical sectors (9%).

Herefordshire has relatively low rateable values for its commercial property which should be a draw for existing and start-up companies in the current financial climate depending on the quality of the space available. That said, in 2010 there were 836 empty commercial properties within the county.

Herefordshire has a smaller proportion of employees in **Knowledge Intensive Industries** (34%= 26,000) than nationally (48%). The number of data units in these industries was also lower than the national average at 31% (2,700 data units) compared with 37%. Activity in these industries is concentrated in Hereford city and Bromyard.<sup>38</sup>



<sup>35</sup> This data set has been used as it provides a sector breakdown of businesses in the area, which is unavailable through the latest business demography data.

<sup>36</sup> Sectors defined by 2007 SIC

<sup>37</sup> Herefordshire LEA

<sup>38</sup> Annual Business Inquiry 2008 (Herefordshire LEA)

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Encouragingly, new business start-ups are surviving longer than the regional average according to Business Demography data. The greatest difference is at the 5 year rate where 53.5% survive compared with only 46.8%.

Herefordshire had a total of 70,800 employees in 2008, 55% (38,800) of which were within the Hereford City Locality.

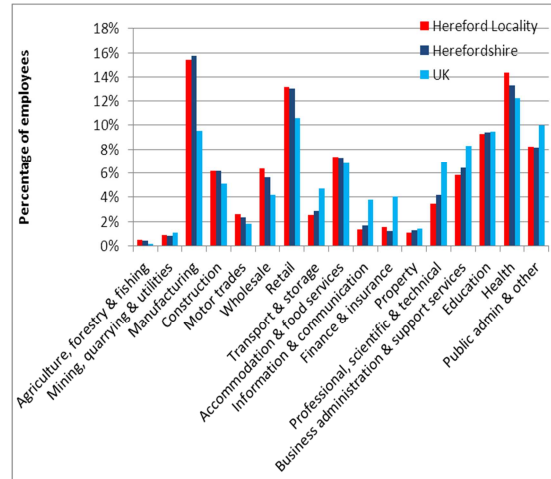
The sectoral distribution of employees is displayed in the adjacent graph.

Agriculture remains an important sector for the county increasingly so in recent times owing to improvements in livestock and grain prices, and the increased range of fruit grown to supply local food and drink producers many of whom have national awards for their produce<sup>39</sup>.

The largest sub-sectors of manufacturing in the area are rubber, plastics, food and fabricated metal products many of which are in niche areas and require specialist knowledge and skills; however these businesses are threatened by foreign competition<sup>40</sup>.

Both of these sectors have diversified in recent years to maximise the growth in other sectors. For agriculture this has been in tourism (the area boasts 4.7m visitors pa), whilst manufacturing has explored opportunities in defence, food and drink and the creative industries.

Over the period until 2026, the number of jobs in Herefordshire is predicted to decline<sup>41</sup>. The sectors expected to be most affected are agriculture (-59%), and manufacturing (-21%) although some of this is likely to be offset by small increases in other sectors with chief increasing sectors being financial and business services (+19%) and construction (+33%).



<sup>39</sup> Herefordshire Council LEA

<sup>40</sup> Herefordshire Council LEA

<sup>41</sup> SQW 2010, The economic demand for housing in the West Midlands 2006-2026

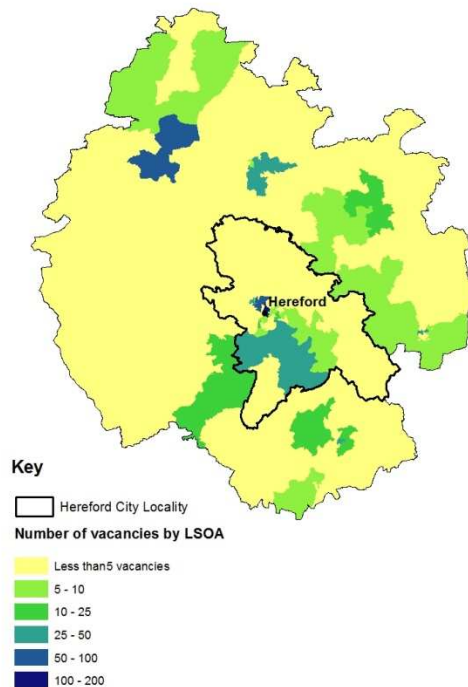


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Encouragingly, new business start-ups are surviving longer than the regional average according to Business Demography data. The greatest difference is at the 5 year rate where 53.5% survive compared with only 46.8%.

A quarter of businesses in Herefordshire reported hard to fill **vacancies** in the National Employers Skills Survey 2009, mostly due to there being a low number of applicants with the required skills (66%). Vacancies for skilled trades are the hardest to fill due to lack of skills in the labour market.

As shown, the 1,008 vacancies reported in 2011 are distributed across the county, with particularly high concentrations in the centre and the north of the county.



Source: Nomis, VAT stocks and registrations, Annual Business Inquiry, Vacancies

## Commuting Patterns

Table B-5 : Commuting indicators

Herefordshire is 87% self-contained, with three quarters of Hereford city residents working there. Those that do commute mainly commute to the neighbouring authorities of Malvern Hills, Forest of Dean, South Shropshire, Powys and Monmouthshire, however there has been an increase in commuting to Worcester over recent years<sup>42</sup>. North Hereford is the county's main centre for employment excluding Rotherwas (business centres include Westfields, Holmer road, Three Elms and the Beech Business park), nearly half of all people in employment in the county work in the North yet only a third live there.

The county is well linked with neighbouring economic centres such as Ross on Wye, Gloucestershire, Powys and Worcestershire (in particular Ledbury, Malvern, Bromyard and Worcester). There are also pulls to Newport, Cardiff, Bristol, Gloucester, Cheltenham and Tewkesbury although limited interaction with the central West Midlands due to travelling times<sup>43</sup>.

The car is the most common mode of transport for residents of Herefordshire, as public transport connections in the north and west is poor. The area has high levels of car ownership in the area – 37% of households have two cars of more compared with 30% nationally<sup>44</sup>.

Source: Annual Population Survey,

<sup>42</sup> Annual Population Survey special analysis showed an increase from 1% to 3% from 2001 to 2008.

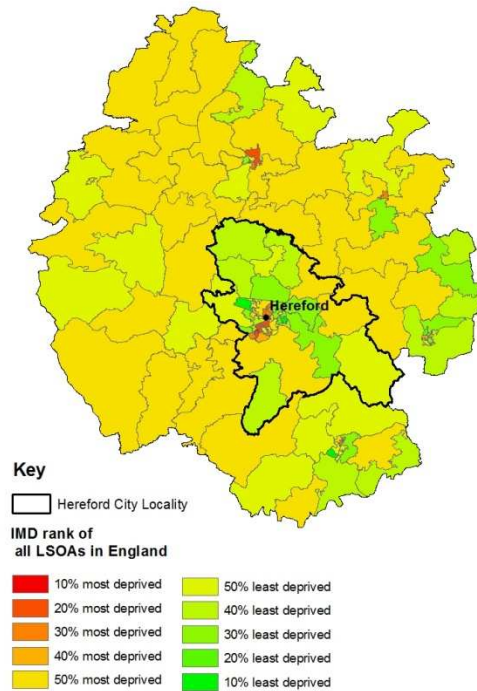
<sup>43</sup> Herefordshire Council LEA

<sup>44</sup> Herefordshire LEA, 2010

## Quality of Life

Table B-6 : Quality of life indicators

Deprivation is relatively low across the county as illustrated by the adjacent map; however, there are pockets in areas such as Leominster Ridgemoor and Golden Post-Newton Farm that experience high levels of income, health and employment deprivation. Five of the Hereford City Locality LSOAs, are in the top 20% most deprived in the country, all of these are located in the south of outside. There are also some pocket of deprivation outside the city in Rural Herefordshire, in Leominster. There are also three LSOA's in South Hereford that are the 20% most deprived in terms of employment. Housing affordability is an issue in the area with an affordability ratio of 8.5 (earnings to lower quartile house prices 2009). The area of South Wye is disadvantaged and has significant health and employment needs.



Source: Neighbourhood Statistics Indices of Multiple Deprivation 2010

## Annex C: Hereford City Locality Definition

C.1 The table below presents the Lower Level Super Output Area (LSOA) and Wards that form the Hereford City Locality.

LSOA Code	Ward	Sub- Locality
E01013989	Aylestone	North Hereford
E01013986	Aylestone	North Hereford
E01013988	Aylestone	North Hereford
E01013987	Aylestone	North Hereford
E01013991	Backbury	Hereford rural / Ledbury rural
E01013990	Backbury	Hereford rural
E01013995	Belmont	South Hereford
E01013994	Belmont	South Hereford
E01013993	Belmont	South Hereford
E01013992	Belmont	South Hereford
E01013996	Belmont	South Hereford
E01013997	Belmont	South Hereford
E01014006	Burghill Holmer and Lyde	Hereford rural
E01014007	Burghill Holmer and Lyde	Hereford rural
E01014010	Central	North Hereford
E01014011	Central	North Hereford
E01014012	Credenhill	Hereford rural / Weobley
E01014023	Hagley	Hereford rural
E01014022	Hagley	Hereford rural
E01014026	Hollington	Hereford rural
E01014054	Old Gore	Hereford rural / Ross rural / Ledbury rural
E01014060	Pontrilas	Golden Valley / Hereford rural / Ross rural
E01014071	St Martins and Hinton	South Hereford
E01014074	St Martins and Hinton	South Hereford
E01014073	St Martins and Hinton	South Hereford
E01014072	St Martins and Hinton	South Hereford
E01014068	St Martins and Hinton	South Hereford
E01014069	St Martins and Hinton	South Hereford
E01014070	St Martins and Hinton	South Hereford
E01014076	St Nicholas	North Hereford
E01014078	St Nicholas	North Hereford
E01014075	St Nicholas	North Hereford
E01014077	St Nicholas	North Hereford
E01014082	Sutton Walls	Hereford rural
E01014081	Sutton Walls	Hereford rural
E01014086	Three Elms	North Hereford
E01014085	Three Elms	North Hereford
E01014088	Three Elms	North Hereford

<b>LSOA Code</b>	<b>Ward</b>	<b>Sub- Locality</b>
E01014084	Three Elms	North Hereford
E01014089	Three Elms	North Hereford
E01014087	Three Elms	North Hereford
E01014083	Three Elms	North Hereford
E01014092	Tupsley	North Hereford
E01014095	Tupsley	North Hereford
E01014093	Tupsley	North Hereford
E01014094	Tupsley	North Hereford
E01014091	Tupsley	North Hereford
E01014090	Tupsley	North Hereford
E01014100	Wormsley Ridge	Hereford rural / Weobley

*Source: Herefordshire Council*

## Annex D: Consultees

D.1 The table below lists individuals consulted as part of this study.

Table D-1 : Consultees	
Name	Department/Organisation
<b>Herefordshire Council and Hereford Futures</b>	
David Nicholson	Strategic Delivery Manager, Herefordshire Council
Nick Webster	Economic Development Manager, Herefordshire Council
Samantha Banks	Senior Planning Officer, Herefordshire Council
Steven Burgess	Transportation Manager, Herefordshire Council
Ben Watts	Senior Transportation Planning Officer, Herefordshire Council
Peter Ding	Lifelong Learning Development Manager, Herefordshire Council
Clem Attwood	Researcher, Herefordshire Council
Ian Edwards	Programme Director, Hereford Futures
<b>Landowners (and representatives)</b>	
Andrew Horner	Great West Investments Ltd
Kevin Virgo	Tomhead Ltd
Phil Collins	Collins Design and Build
Tracey Goodwin	Goodwin Trustees
Ben Simpson	Drivers Jonas Deloitte (on behalf of Church Commissioners)
<b>Developers and commercial agents</b>	
Jon Turner	Turner and Company
Adrian Rowley	Alder King
Paul Hodgson	Cross and James Commercial
<b>Businesses</b>	
Allen Green	Managing Director – AK Industries
Anna Turner	Operations Manager – Emo Oil Ltd
Chris Ashdon	Store Manager – Ron Smith Mowers
D Watkins	Hereford Galvanisers
Damien Holloway	Operations Manager – DHS Systems
Gabe Cook	Public Relations Manager - Heineken / H P Bulmers
Geoff Davies	Gelpack Excelsior Ltd
Hadrian Spooner	Partner – HMS Engineering
John Lane	Director – Taylor Lane
Mike Harley	Westcom Business Communications
R Gardiner	STD Pharmaceuticals
Steve Ashworth	Director – Wydale Nurseries

Source: SQW

## **Annex E: Detailed consultation feedback - views on the potential impacts of the scheme from landowners, developers and businesses**

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- E.1 In this Annex, we summarise the key messages from a series of consultations with local landowners, developers/commercial agents and businesses on the proposed relief road and potential impacts.

### **Landowners**

- E.2 A total of five landowners have been consulted as part of this study, three in the south of Herefordshire spread across inner and outer Hereford, two in the north/north west. The land to the north is a business park serving local, national and international markets and includes businesses serving the defence sector, plastic manufacturers, sportswear manufacturers and air conditioning producers, and the site in the north west is intended for housing developments. The site also houses some high end automotive retailers. The southern sites are currently arable farming land, woodland and cider fruit which is sold to Westerns and Bulmers and storage, warehousing and factory space.

#### *Plans for the future*

- E.3 The northern business park plans to develop a further 5,000 sq ft of land for industrial premises over the next five years, a further 160 acres has been ear marked by the Council. The remainder of the site is planned for lodges over the next 10-15 years. The north western site is at Three Elms, where there is an allocation of 1000 houses (to 2031) on around 100 ha as noted in Section 2. Part of the land to the south 70-80 acres is held in an agreement with a housing developer another 16-18 acres falls inside the Enterprise Zone and is to be given over to the Council and developers. Another site intends to develop a further 12,000 sq ft for industrial space over short term and has planning permission to do so.

#### *General challenges/constraints to land development and growth*

- E.4 For landowners in the north/north west, there is some concern about potential negative implications of the Enterprise Zone, and some (manageable) flooding issues. In the South there are issues finding customers to fill the existing industrial units and also regarding utilities infrastructure in particular sewage holding tanks. In one consultee's view, there is also a "desperate need" for a river crossing in the East of the county.

#### *Transport issues*

- E.5 The site in the north reported transport issues, which they believe causes delays, increases the amount of diesel required (and therefore the cost of production), and reduces their competitive advantage as it is necessary to leave more time for deliveries. Although the site is currently full, in the future this landowner would like to attract larger businesses that would potentially occupy a large area of the site. However, such firms have refused to locate on the site as they believe it is located too far away (45 minutes) from the nearest motorway. The

landowner in the north west also noted transport issues and congestion in Hereford. This consultee's site will be developed for housing uses, and there was some concern about linking these residents/workers to job opportunities (many of which are now likely to be in the south east at the Rotherwas Enterprise Zone) because of the congestion faced in the centre of Hereford.

- E.6 The landowners in the south commented that improvements to the Rotherwas access road (A49) have already improved access to their sites. However, there remains pressure on lead-in times to/from the site for businesses located there and there are staffing implications due to long delays and being stuck in congestion. All commented on the bridge crossing being the main pinch point – they believe that easing congestion here will be important to attract businesses from outside of Herefordshire and prevent international companies from leaving.

*Impacts in the absence of a Relief Road*

- E.7 The landowner to the north believed that current business activity will be constrained and will not be able to flourish if there is no relief road to create quicker access to the motorway. Although further development may go ahead, this will not be to the same scale (as they will not be able to attract the larger tenants required). The landowner in the north west believed that development would go ahead to the same scale, but a lack of a relief road may slow down delivery. In the south, the opinion of landowners is generally that current business activity and development will be very slow if the relief road is not implemented. They also believed that the scale of the potential gains from the Enterprise Zone status may be reduced without a relief road, as this would reduce the attractiveness of Hereford and firms may choose to locate elsewhere with similar incentives.
- E.8 In terms of wider economic performance of the County, most consultees thought the economy would continue to “tick along” but be “stuck in a rut” without a relief road. Businesses would cope but would not expand and grow. In addition, consultees argued that empty space would not be filled and further development would be halted. The distribution and manufacturing sector would suffer the most as they are the most reliant on the road network. There are additional concerns that the only bridge will be reduced to one lane to reduce the weight burden (as it was not originally built for large scale industrial traffic) which will exacerbate the situation further.
- E.9 Also, one consultee argued that it would be difficult to develop Hereford's office market without good road networks – a decision not to implement a relief road would “make it difficult for Hereford to achieve its aspirations” in this respect. Congestion issues also influence people's choices on where to live. There is a concern that Hereford's congestion deters some (especially higher skilled that may commute further) from locating in the area.

*Relief road to the West*

- E.10 The landowner in the north believes that there will be an increase in business activity on their site if the road is implemented on the west of Hereford, as it would improve access to Gloucester, Worcester and the motorway network in general. This would also accelerate future developments (at least a further 100 acres would be developed) and increase the demand for labour in the area. The landowner in the north west also believed that a western

relief road would be positive for the development of their site, especially if the sustainable transport measures included a park and ride in the area.

- E.11 One landowner in the south believes the implementation of the road to the west will accelerate the take up of employment land by 20 years - and this will result in an upsurge in the demand for housing as more people are attracted to (the increasing) employment opportunities in the area. Another consultee in the south was less positive about a western route, with the perception that there is a lack of employment opportunities on that side of Hereford.
- E.12 More widely, consultees believed that the economic performance and growth of Herefordshire would thrive, as would overall confidence in the town, if a relief road was implemented on the western side of Hereford (compared to the “do minimum” option).

#### *Relief road to the East*

- E.13 The landowner in the north argued that the primary benefit would be seen at the Rotherwas site and the Enterprise Zone. There is a real concern that sites not located at Rotherwas will experience a rapid decrease in demand (particularly as many of the leases on sites in the north expire in the next one/two years and the Enterprise Zone is focusing on the same sectors that are currently located at that site), and that a relief road on the east would displace business activity towards the south east further. More widely, one consultee believes that an eastern relief road would create a divide between the North/West and the South/East of the City. However, it is acknowledged that an eastern relief road would help to reduce traffic in the centre of Hereford, and therefore would still benefit businesses/landowners located elsewhere in the City (but to a lesser extent).
- E.14 One landowner in the south believes that the demand for their land would increase by 50% if the relief road is implemented on the east. Also, it is argued that the eastern route is complementary to the Enterprise Zone scheme, and would help the Enterprise Zone achieve its objectives (one consultee argued that the Enterprise Zone would be completely full within 10 years if an eastern route is adopted, but in its absence the site would only be a third full). Another landowner believes that an eastern route would create the demand required for their expansion plans to be accelerated.

#### *Support for relief road*

- E.15 Overall, four of the five landowners consulted for this study are in support of a relief road. As we might expect, those on the west would prefer a western relief road in order to maximise the benefits to their site, and the landowners in the south are in support of the implementation of a relief road to the east as it will increase demand for their sites. The one landowner not in support of the relief road (based in the south of Hereford) believes that two new bridge crossings, one to the East and one to the west with linking A roads, is all that is required.



## Developers and commercial agents

- E.16 In this sub-section, we summarise the key messages from consultations with three developers/commercial agents actively working in the Hereford area.

### **Current context**

- E.17 Consultee's views on current levels of demand were mixed. Some agents felt there was a reasonable level of demand (especially around the Rotherwas area) but others felt the market was flat elsewhere. The main barriers to commercial property development are access to funding (for both developers and occupiers) and a lack of demand. One consultee also noted that firms are reluctant to locate in the south of Hereford (south of the river) because of congestion crossing the river at peak times, and the difficulties that this creates in terms of access to the city centre and a large proportion of Hereford's workforce, and the ability of customers to reach their premises.

### **Impact of a relief road**

- E.18 All consultees were in favour of a relief road in order to relieve congestion pressures in the centre of Hereford. They strongly believe that a relief road will enable economic growth, and maximise the potential of the Enterprise Zone, which will lead to an increase in the number of jobs in Hereford (which they believe is a priority for the area). It would also make it easier for workers in Hereford to access these jobs.
- E.19 There was also a concern that the proposed retail development at the old cattle market in the centre of Hereford would be seriously constrained if the congestion issue was not addressed (congestion, it is argued, already deters some potential visitors coming to the city to shop). This would also have positive implications for other businesses operating in the area.
- E.20 One consultee argued that a relief road would "enhance greatly" the chances of inward investment decisions being made in favour of Hereford (particularly for businesses where locational decisions are dependent upon transport/access). To date, access has been poor and agents have found it difficult to convince firms to invest. The ability to offer an integrated, uncongested transport structure would make the business case for investing in Hereford much stronger. It would also help to improve the image and environment of Hereford, and thereby helping to encourage the decision-makers of major businesses to want to locate/live in the area.
- E.21 Most consultees did not have a real preference as to whether the road took the western or eastern route, and did not believe that the impact of a relief road on commercial development would differ significantly if it went west or east (even though two had significant interests in the Rotherwas site). The priority for these consultees was to "implement a relief road, no matter which direction it takes". Whilst agents thought an eastern route would be more logical (in terms of access to markets/motorways, and linking up with the Enterprise Zone at Rotherwas), most accepted that the eastern route was unlikely to be implemented due to environmental constraints. If the route was implemented to the west, consultees did not believe that displacement away from the east would be a major issue, especially given the new Enterprise Zone.

## Local businesses

E.22 A total of 12 major businesses located across Hereford have been interviewed as part of this study, to ascertain their views on the likely impact of the implementation of a relief road to the east or west of the city. The profile of companies include:

- six located in the east
- six are located in the west
- six manufacturing firms, three from the retail sector, one from the construction sector, one from the telecommunications sector and one from the distributions sector
- all are large firms with the majority having an annual turnover of above £1m with staff numbers ranging from six to 250 FTE
- all are well established in the area, and in most cases Hereford is their primary site.

### **Current context**

#### *Challenges to growth and viability*

E.23 The businesses all cited individual challenges and constraints facing their viability and growth prospects, however an overarching issue was the current state of the economy and associated cuts in government spending. Other constraints to growth included outgrowing their current premises, the availability of suitable land for expansion, the cost of logistics between their sites (all of which were based in Hereford), difficulties obtaining planning permission for a new site, the increased cost of inputs impacting on their ability to secure new business, the ability to find high quality staff and the cost of overtime as a result of traffic.

#### *Strengths and weaknesses of current locations*

E.24 Hereford was considered to be a good location for business operations primarily due to its low cost base, proximity to local suppliers, access to an experienced labour force, lack of local competition and the overall quality of life that the locality offers. Conversely, all businesses consider the local infrastructure, both broadband and transport, to be poor. Most have taken steps to avoid periods of heavy congestion by introducing different shift patterns, but two businesses commented that they frequently encounter delays (one stated that this has resulted in additional costs to the businesses as they are unable to fulfil contracted timescale agreements). One business also had concerns regarding the net out-migration of 18-40 year olds from the local area.

#### *Movement of goods, business travel and commuting*

E.25 The movement of goods to and from consultees' sites was considered critical by all of the businesses, with multiple movements in both directions occurring daily for most, which involves a constant flow of HGVs across the city. Seven out of the twelve companies we spoke with use haulage companies, a further two mix the use of haulage firms with

transporting their own goods. The average cost of moving goods being between 3% and 15% of their annual turnover.

- E.26 Business travel is considered important to most (nine) of the businesses we spoke to. Most businesses travel several times a week around the UK, one also claiming to travel internationally three to four times per month. The retail and telecommunications firms travelled consistently from job to job locally. Issues encountered in regard to business travel included delays getting in and out of their industrial estate, having to travel at antisocial hours to avoid traffic, it taking longer and costing more than necessary in staff time and fuel and being stuck in traffic.
- E.27 The majority of staff employed by the businesses consulted live locally within Herefordshire, and most drive (although cycling/walking to work is also relatively common). Only one of the firms stated that they have issues with their staff travelling to work at present with regular delays resulting in up to 60% of staff being 30-45 minutes late: this results in lengthy queues for customers on the phone, late deliveries and ultimately a loss of business. Three have taken action regarding the re-organisation of shifts to avoid busy times.

### ***Impact of the Relief Road***

- E.28 In the absence of a relief road, businesses anticipate growth over next five years ranges between 3% and 300%, with an average around 25%. Explanations for this anticipated growth included expansion, moving to single site to benefit from reduced overheads and economies of scale, the development of a new customer base, the return of business to the UK from Asian competitors, and launching a new product offer. Two businesses do not expect to growth in the short-medium term until the economic climate improves.
- E.29 Seven out of twelve intend to expand operations at their existing site over the next five to ten years. One of the manufacturing firms stated that they have a substantial amount of land available to them at their current site should they wish to expand in the future, although at current levels of demand this land will not be required in the next ten years. Only two firms stated that they plan to relocate over the next five to ten years.
- E.30 The table below sets out consultees' views on the potential impact of a relief road to the west and east. Overall, it would appear that:
- both routes would have a positive impact on business efficiency, improving access to existing and new markets (including opportunities in Wales), increasing turnover and profitability (due to a reduction in transport overheads) - the number of businesses noting these impacts varies little between the east and west.
  - An eastern route is expected to have a greater impact on access to suppliers and labour (enabling residents to avoid commuting through the city centre to access employment opportunities on the east), expanding production, and taking on more staff – however, there does not appear to be a significant difference in impacts compared to a western route.
  - Neither route is expected to contribute significantly towards preventing job losses

E.31 It is important to note that the majority of businesses consulted were unable to quantify the scale of potential impacts.

Table E-1 : Impact of implementation of the relief road on the East and West

Implementation of a relief road to the West	Implementation of a relief road to the East
Seven anticipate improved efficiency of their business/reduced costs as primarily it will reduce transport costs. Other comments regarding efficiency and cost reduction included the freeing up staff time and allowing more customers to be visited in a day.	Nine businesses thought that the relief road would lead to improvements in efficiency and cost reductions due to reduced transport costs. Comments in support of this included an anticipated reduction in unit costs, the freeing up of staff time and improve site access. One business specified that they anticipate a 30% reduction in staff costs due to a reduced need to pay overtime.
Four businesses thought it would improve access to suppliers.	
Four business thought it would improve access to labour	Eight expect access to suppliers to improve as they are located on the east. Improved access to suppliers is likely to reduce delivery costs for one business by £17k per month as they will be more likely to secure the delivery slot to take advantage of market prices for their inputs.
Six businesses thought it would improve access to existing and new markets as it will allow them to take advantage of opportunities in Wales and the North West.	Eight expect access to labour to improve as it will be a draw for staff to avoid commuting through Hereford and have better access to staff further afield.
Two thought it will lead to expanding production indirectly through population growth.	Six anticipate access to new and existing markets to improve. One business anticipates that it will generate an additional £2kin turnover per month as a result of better access to new customers.
Five thought it will lead to increased turnover and/or profitability.	Five think they will expand production.
One thought it would prevent job losses through increased production.	Seven anticipate turnover and profitability to increase due to a reduction in transport and staff overheads. One businesses was able to quantify the extent of this impact as 2.5% increase in both turnover and profitability
Three were likely to take on more employees.	Two anticipate the prevention of job losses due to increased productivity
A road to the West would decrease the likelihood of relocating away from the current location for two businesses, and increase the likelihood of expansion at their current site for another. Nine believe that the relief road to the west will have no effect on their future plans.	Five think they are likely to take on more employees – one quantified this as up to 50 staff over ten years. Two firms do not believe the road will have any impact on their business at all
	A relief road to the East would decrease the likelihood of relocation away from current location for three firms, increase the likelihood of relocation for one ,decrease the likelihood of contraction for one and increase the likelihood of expansion for another

Source: SQW business consultations

E.32 The responses above are displayed graphically in Figure E-1 below. Responses provided by business according to their location to the east or west of the city have also been disaggregated. Overall, impacts are perceived to be greater if the road is implemented in the east, even from firms located in the west of the City. However, it is important to note again that these results are based on a small sample.

Figure E-1 : Impact of implementation of the relief road on the East and West (percentage of responses – please note the small sample size)

**All businesses (n=12)**



**Businesses located on the East (n=6)**



**Businesses located on the West (n=6)**



Source: SQW analysis of business consultations

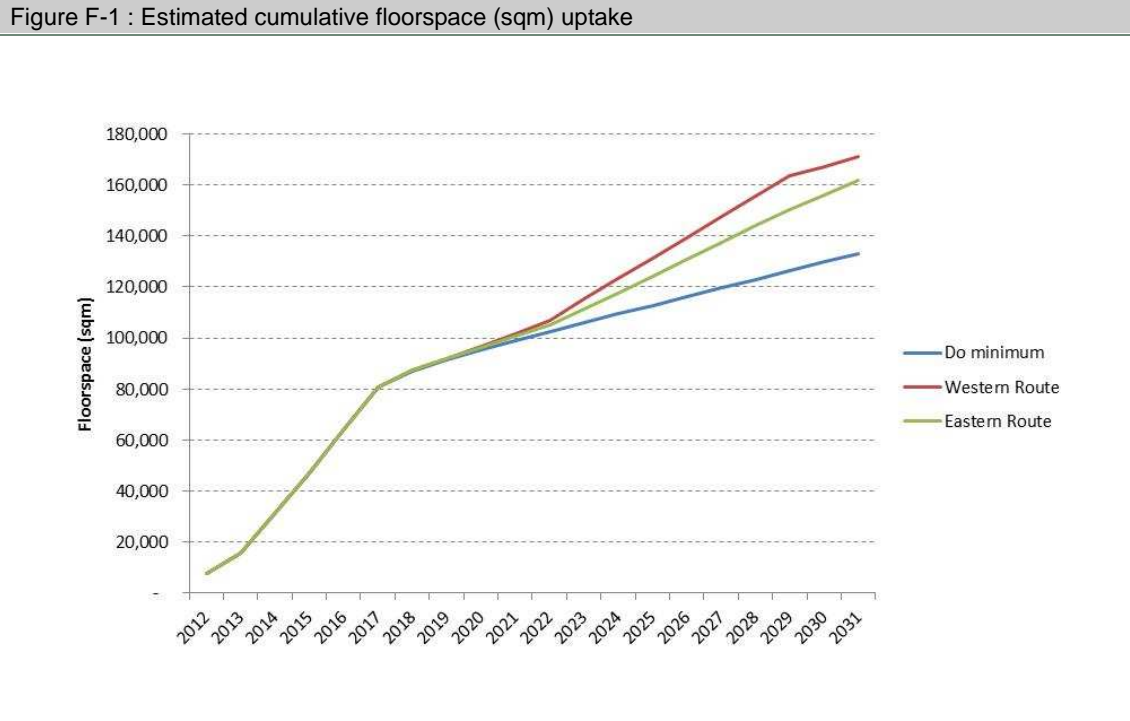
E.33 Overall, eleven out of the twelve firms we spoke to were in favour of the relief road. Of these:

- Six think that the benefits would be greater on the east as it would be easier to connect with suppliers, other employment centres and has a larger catchment area.
- Two would prefer it to be on the west so that it does not ruin the landscape on the east and would be able to exploit opportunities in Wales.
- Three had no preference for either route.

- E.34 Businesses in general believed that there would be positive impacts in terms of employment and business activity for Hereford as a whole, regardless of which side the road was implemented. One business thought that it would be particularly beneficial for the tourism sector in encouraging people to visit the county, increasing business creation and employment opportunities. In their view, a relief road would provide easier access to Hereford (making it less likely for businesses to locate in Worcester and Gloucester) and therefore increase the demand for jobs, improve access to the south, south west and Wales, boost the new retail core and increase the success of the Enterprise Zone. Consultees believed it is likely to be of greatest benefit to those located in the north and west of the city as they are more isolated and also to those that do not live/work in the centre of Hereford. However, one consultee noted that the road may have a negative impact on those businesses reliant on through traffic as well as to businesses more generally during the construction period.

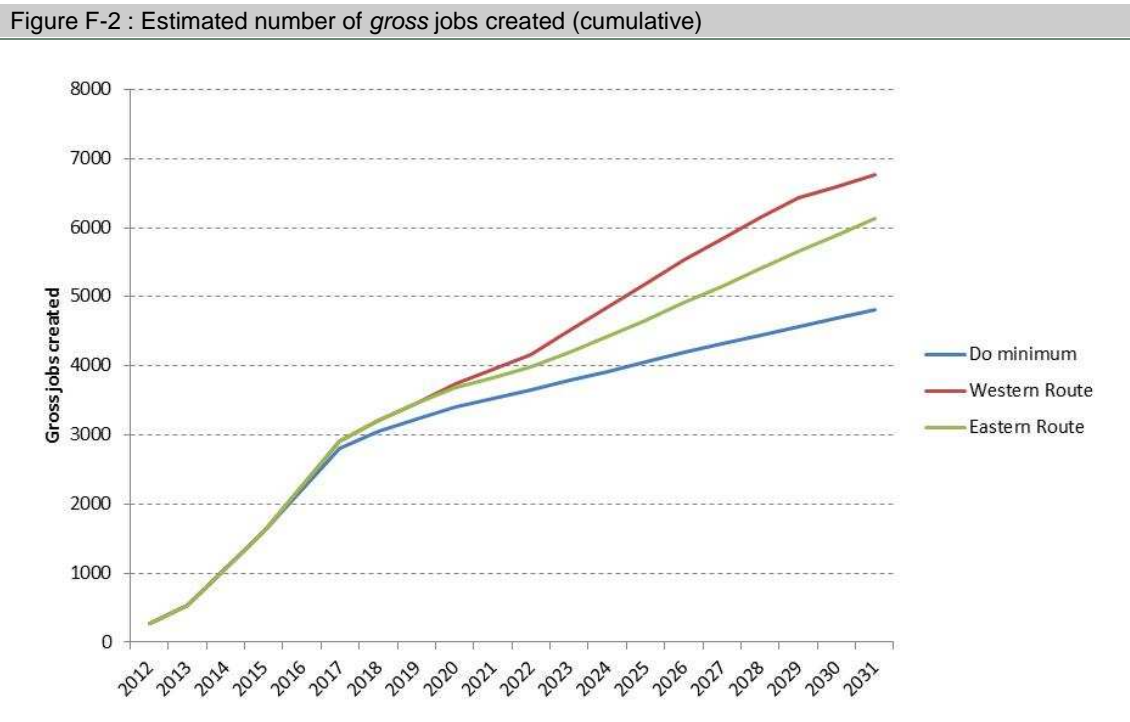
## Annex F: Detailed Impact Modelling

F.1 The graph below presents the estimated up-take of floorspace (cumulative) for each scenario.



Source: SQW

F.2 The graph below presents the estimated number of gross jobs created (cumulative) for each scenario.



Source: SQW