

## Economic and Demographic Forecasts Study

**Warwick District Council & Coventry City Council** 

**Final Report** 

December 2012

## **Prepared by**

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## **Quality Standards Control**

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#### 1 INTRODUCTION

- 1.1 Warwick District Council and Coventry City Council have commissioned this report to consider economic growth prospects in Warwick District and Coventry City, and to examine the implications of this on housing requirements. The report builds on the Strategic Housing Market Assessments (SHMAs) prepared for the two authorities by GL Hearn.
- 1.2 The report presents forecasts for economic growth in Warwick District over the period to 2028 and in Coventry City over the period to 2029, to align with strategic planning timeframes. The report also provides updated demographic projections for both Warwick District and Coventry City which take account of economic growth prospects. The demographic projections update those contained within the Coventry Strategic Housing Market Assessment (GL Hearn, 2012) and Warwick District Strategic Housing Market Assessment (GL Hearn, 2011).
- 1.3 The report has been commissioned against a context of a planning application received by the two authorities in September 2012 for a major technology and logistics park on land to the north-east and south of Coventry Airport. The majority of the proposed development lies within Warwick District but its delivery would be dependent on provision of suitable access and improvements to highways infrastructure in the City of Coventry. The planning application has been submitted by the Coventry and Warwickshire Development Partnership LLP, a joint venture company between Rigby Holdings and Roxhill Developments.
- 1.4 The proposed development is known as the Coventry and Warwickshire Gateway scheme. It comprises two elements:
  - Development of a Manufacturing and Distribution Park to the south of the existing Middlemarch Business Park and Coventry Airport; and
  - Development of a Technology Park fronting the A45 on the north-western side of the Airport.
- 1.5 The proposed development has the potential to create up to 10,000 jobs. This level of employment growth could feasibly have an impact on the housing market within the sub-region and support demand for additional housing provision.
- 1.6 Against this context, the report considers potential economic performance, population growth and associated housing requirements both with and without the delivery of the proposed Coventry and Warwickshire Gateway scheme.

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- 1.7 The report thus addresses the following objectives:
  - Development of econometric growth forecasts for the City of Coventry and Warwick District over the period to 2028 / 2029;
  - Assessment of the job creation arising from the proposed Coventry & Warwickshire Gateway development scheme;
  - Drawing the above together to provide scenarios for economic growth with and without the Gateway development scheme;
  - Updated and consistent demographic modelling for Coventy and Warwick District taking account
    of the latest available data and trends;
  - Assessment of the impact of the Gateway scheme on creating additional demand for housing and over what timescales.
- 1.8 The report has been prepared by a consultancy team comprising GL Hearn, Cambridge Econometrics and SQW. It has been informed by analysis together with discussions with both Councils as well as Roxhill Developments.
- 1.9 The report has been prepared jointly for the two authorities which are collaborating to consider the Gateway proposals for strategic development and associated infrastructure, which will impact on both districts; as well as more broadly in regard to strategic planning policies in view of the 'duty to cooperate' introduced by the 2011 Localism Act.
- 1.10 The remainder of the report is structured as follows:
  - Section 3: Context
  - Section 4: Baseline Economic Performance
  - Section 5: Economic Impact of the Gateway Scheme
  - Section 6: Impacts on Housing Demand
  - Section 7: Conclusions

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#### 2 CONTEXT

2.1 This section summarises policies for housing and employment within the Warwick Local Plan Preferred Options and Coventry Proposed Submission Core Strategy. It also summarises the components of the proposed Coventry & Warwickshire Gateway Development Scheme.

## Warwick Local Plan Preferred Options

- 2.2 Warwick District Council published Local Plan Preferred Options for consultation in May 2012. The preferred option proposed was for provision of 10,800 dwellings over the 2011-29 plan period, an average of 600 new homes per annum.
- 2.3 The Council's Strategic Housing Market Assessment (GL Hearn, March 2012) provided the evidence base for this. The level of housing provision proposed was consistent to Projection 1 in the SHMA which was based on past population trends.
- 2.4 The evidence in the Local Plan points to committed housing sites, small urban SHLAA sites and other windfall sites providing potential for 3,814 dwellings.
- 2.5 In addition to this, the plan proposed 480 dwellings on urban brownfield sites, 6,250 dwellings on sites on the edge of Warwick, Leamington and Witnash, 770 dwellings on the edge of Kenilworth and 830 dwellings through village development (in defined Category 1 and Category 2 villages). All in all, the level of identified land provides potential to accommodate 8,360 dwellings (over and above the 3816 identified above), providing an additional supply of 1,370 to provide a flexible land supply.
- 2.6 The Plan's economic strategy seeks to meet businesses needs and support knowledge industries and the low carbon economy. It proposes a number of strategic employment allocations, south of Warwick/Leamington, and at Thickthorn between Kenilworth and the A43.

#### Coventry Proposed Submission Core Strategy

- 2.7 Coventry City Council published its Core Strategy Proposed Submission Document for consultation in July 2012. This proposes provision of a minimum of 11,373 dwellings over the 2011-28 plan period, an average of 669 new homes.
- 2.8 The Council's Strategic Housing Market Assessment (GL Hearn, July 2012) provides the evidence base for this. The level of housing provision proposed is based on an economic-driven projection for

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- housing requirements informed by 2010 economic forecasts from the West Midlands Integrated Policy Model (developed by Cambridge Econometrics).
- 2.9 The level of housing provision proposed was lower than that based on continuation past demographic trends, recognising that economic performance moving forward (together with growth in student numbers) could influence future migration to/from the City. The SHMA recommended that further work was undertaken to consider economic growth potential (which this report does).
- 2.10 The Core Strategy proposes that in addition to the planned level of housing provision, an additional buffer will be applied when applied to allow for flexibility of land supply in accordance with the NPPF. A total housing supply of 15,053 dwellings is identified. This includes 6,852 dwellings on sites with planning permission, 921 dwellings delivered in 2011-12, 783 dwellings on sites under construction. In addition a capacity for 5,178 dwellings is identified on SHLAA sites, of which 922 dwellings are on outstanding sites allocated in the Coventry Development Plan. The Council identify a small site windfall allowance of 396 dwellings.
- 2.11 The Core Strategy policy seeks to prioritise development in the existing built-up area. Development of greenfield and/ or green belt land is thus prohibited unless an express need is established and a 5-year supply of housing land cannot be demonstrated which would trigger review of the SHLAA/ land supply.
- 2.12 The Council's Employment Land Review Update (Jan 2012) estimated provision of 33,071 new jobs between 2011-28.

#### The proposed Coventry & Warwickshire Gateway Development Scheme

- 2.13 The proposed development scheme comprises two components. A manufacturing and distribution park is proposed on land to the south of Middlemarch Business Park. This will deliver up to 343,740 sq.m of B2 and B8 floorspace, of which the B2 floorspace will be up to 104,000 sq.m (30%). This area is termed Zone A and has a net developable area of 88 hectares.
- An Advanced Manufacturing and Technology Park is then proposed, with a net developable area of 33.6 hectares, on land on the northern side of Coventry Airport accessed directly from a junction on the A46. This part of the scheme is expected to support development of up to 83,794 sq.m of B1b/B1c buildings (targeted at automotive, aerospace and digital technology sectors), together with a hotel (up to 11,617 sq.m), car showroom (up to 4,645 sq.m), and up to 2,300 sq.m of ancilliary A1, A3, A4 and A5 floorspace.
- 2.15 The development scheme will be supported by improvements to infrastructure, including improvements to the A46 Toll Bar Roundabout.

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#### 3 BASELINE ECONOMIC PERFORMANCE

#### Introduction

- 3.1 The baseline projections presented below provide an indication of the future path of the Coventry and Warwick economies in the absence of the Coventry and Warwickshire Gateway development. They have been developed using versions of Cambridge Econometrics' (CE) Local Economy Forecasting Model (LEFM) tailored to each economy.
- 3.2 The projections take as their underlying context the forecasts for the UK and West Midlands economy published by CE in May 2012. The local area projections are founded on a starting point that the past performance of sectors in each economy relative to the sectors in the region as a whole continues. So, if say growth in engineering in Coventry has tended to be more 'extreme' than in the West Midlands as a whole, its projected future growth will exceed that forecast for the sector in the West Midlands. This does not mean that future growth in a locality continues at past rates.
- 3.3 The projections have further been informed by an assessment of known developments in the economies.

## **Baseline Projections for Coventry**

- In 2000-08, the period up to the recent recession, the Coventry economy underperformed both the West Midlands economy and the UK, with GVA growing at just over ½% pa compared to around 1½% pa in the West Midlands and 2½% pa in the UK. In the same period, employment in Coventry grew by an average of ½% pa compared to ½% and 1% in the West Midlands and UK respectively. Since the start of the recession, GVA has fallen steeply, by an average of -2½% pa. This is a sharper decline than that estimated for the West Midlands and UK (a fall of between ½-¾% pa). However, the rate of decline in employment over this period in Coventry was similar to that seen in the West Midlands (around 2% pa), although it was twice that seen nationally (-1%pa).
- 3.5 Despite experiencing a much sharper fall in output during the recession than the region, the outlook going forward is more positive. The outlook is for employment growth to be in line with that for the West Midlands as a whole, but for this to be translated into stronger output growth than will be seen in the region. This is a similar relative performance as seen over the 1990s. However, growth in Coventry is still expected to lag the UK as a whole.

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Figure 1: Key LEFM Indicators for Coventry, West Midlands and UK

KLI LL	FM INDICAT		JO V EIVI I I I	, **E31 WII	DEAILDO A		μα
	2011 (£m)	1990- 2000	2000- 2008	2008- 2011	2011- 2015	2015- 2020	2020- 2025
GVA							
Coventry West	5230.8	2.5	0.6	-2.5	1.9	2.5	2.8
Midlands	86795.2	2.1	1.6	-0.7	1.7	2.4	2.6
UK	1167622.6	2.4	2.5	-0.6	1.9	2.6	2.9
Employment							
	2011 (000s)	1990- 2000	2000- 2008	2008- 2011	2011- 2015	2015- 2020	2020- 2025
Coventry West	151.0	-0.7	0.5	-1.9	-0.1	0.7	0.7
Midlands	2550.8	-0.3	0.6	-2.0	-0.2	0.7	0.7
UK	31101.8	0.1	1.0	-1.0	0.1	0.8	0.7

Notes: GVA is chained volume measure (CVM), reference year 2008

Source: LEFM Baseline consistent with Cambridge Econometrics' UK Regional Economic Forecasts, July 2012.

## **Sector Prospects**

- 3.6 Figure 2 shows the baseline projections for GVA by sector in Coventry and the West Midlands.
- 3.7 The table clearly shows the primary factor behind the poor performance since 2000 is the sharp decline in manufacturing output (and, as seen in Figure 3, employment). Motor vehicles, other transport equipment and mechanical engineering in particular contributed to this decline. In contrast, financial & business services and distribution, hotels & catering performed relatively well over this period.
- 3.8 In the short term, the overall prospects for manufacturing are expected to remain weaker than in the region as a whole, though the size of the differential performance is much reduced. This in part reflects the impact of the recession, which has meant that some sectors where underlying growth is expected to remain weak are less important to the local economy, and also a sense that the effect of the recession has been to leave the business base in the sector with the stronger, more innovative companies. In the longer term the overall effect could be that output growth exceeds the average for the West Midlands.

- 3.9 With the exception of Financial & Business Services, all broad service sectors in Coventry are projected to grow faster than the West Midlands. Prospects in retailing and hotels & catering will be aided by the planned redevelopment of the city centre. This will also support financial & business services, but growth will be held back given the intense competition with Birmingham to attract and develop higher value-added activities.
- 3.10 In the medium and longer term employment growth is expected still to come from services, particularly financial & business services and distribution, hotels & catering. The downward trend in manufacturing employment is projected to continue, but at a much more modest rate than has been seen over the last decade. However, the level of employment is not expected to return to its pre-recession levels until into the 2020s.

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Figure 2: GVA Growth by Sector in Coventry and the West Midlands

GVA GROWTH BY SECTOR IN COVENTRY AND THE WEST MIDLANDS (% pa)					
	2000- 2008	2008- 2011	2011- 2015	2015- 2020	2020- 2025
Coventry					
Agriculture etc	17.8	-100.0	0.0	0.0	0.0
Mining & Quarrying	14.2	-29.7	1.5	1.1	1.1
Manufacturing	-6.2	-7.8	1.9	1.6	1.6
Electricity, Gas & Water	1.0	-51.1	0.9	3.3	2.6
Construction	4.6	-4.3	2.3	3.5	2.4
Distribution, Hotels & Catering Transport &	2.5	0.3	2.6	3.1	3.1
Communications Financial & Business	2.5	-1.8	3.5	4.0	4.1
Services Government & Other	3.6	0.7	3.4	3.6	4.0
Services	-0.2	1.9	0.8	1.9	2.6
Total	0.6	-2.5	1.9	2.5	2.8
West Midlands					
Agriculture etc	3.4	0.5	0.8	0.6	1.0
Mining & Quarrying	-3.8	-7.8	-1.5	-1.4	-1.1
Manufacturing	-1.9	-3.2	2.5	1.6	1.4
Electricity, Gas & Water	-2.4	-2.7	-0.1	0.5	0.6
Construction Distribution, Hotels &	2.6	-0.8	1.8	2.9	2.2
Catering Transport &	2.4	-0.7	2.7	3.0	2.9
Communications Financial & Business	2.9	-1.9	3.1	3.3	3.5
Services Government & Other	2.8	-0.4	3.1	3.9	4.3
Services	1.7	1.1	0.2	1.9	2.6
Total	1.6	-0.7	1.7	2.4	2.6

Notes: GVA is chained volume measure (CVM), reference year 2008 Source: LEFM Baseline consistent with Cambridge Econometrics' UK Regional Economic Forecasts, July 2012.

Figure 3: Employment Growth by Sector in Coventry and the West Midlands

EMPLOYMENT GROWTH BY SECTOR IN COVENTRY AND THE WEST MIDLANDS (% pa)					
	MIDEAN	70 (70 pa)			
	2000- 2008	2008- 2011	2011- 2015	2015- 2020	2020- 2025
Coventry					
Agriculture etc	13.4	-100.0	0.0	0.0	0.0
Mining & Quarrying	13.8	-14.7	-0.8	-0.5	-0.5
Manufacturing	-6.7	-4.2	-1.9	-0.3	-0.2
Electricity, Gas & Water	2.6	-38.5	-1.2	-1.8	-1.4
Construction Distribution, Hotels &	5.5	-10.4	1.6	2.0	0.6
Catering	1.3	-0.7	-0.4	0.4	0.4
Transport & Communications Financial & Business	0.4	-1.8	0.4	0.3	0.4
Services Government & Other	4.2	-2.2	1.0	1.1	1.1
Services	8.0	0.3	-0.5	0.7	0.9
Total	0.5	-1.9	-0.1	0.7	0.7
West Midlands					
Agriculture etc	1.7	-2.1	-0.8	-1.6	-0.8
Mining & Quarrying	-2.7	-9.3	-2.5	-1.1	-1.0
Manufacturing	-5.3	-3.4	-1.0	-0.1	-0.4
Electricity, Gas & Water	-3.2	13.0	-2.4	-3.4	-2.6
Construction Distribution, Hotels &	1.9	-7.2	1.1	1.5	0.5
Catering	0.7	-2.6	-0.3	0.4	0.2
Transport & Communications Financial & Business	2.2	-1.9	0.6	0.5	0.6
Services Government & Other	3.2	-0.9	1.0	1.4	1.7
Services	1.8	-0.7	-1.1	0.7	1.0
Total	0.6	-2.0	-0.2	0.7	0.7

Source: LEFM Baseline consistent with Cambridge Econometrics' UK Regional Economic Forecasts, July 2012.

## **Employment by occupation**

3.11 Figure 4 shows the projected change in workplace occupations. They result from sectoral changes in employment and projected trends of the occupation requirements of sectors.

Figure 4: Employment Growth by Occupation in Coventry

EMPLOYMENT GROWTH BY OCCUPATION IN COVENTRY (% pa)					
	2000- 2008	2008- 2011	2011- 2015	2015- 2020	2020- 2025
Coventry					
Managers and proprietors	1.7	-1.4	1.5	2.1	2.0
Professionals	1.9	-2.0	1.5	2.0	1.9
Associate professions	2.6	0.1	0.8	1.8	1.7
Clerical/secretarial	-1.0	-3.9	-2.3	-1.8	-1.4
Skilled trades	-3.4	-6.6	-2.2	-1.5	-1.8
Personal service occupations	4.2	2.4	0.7	1.8	1.8
Sales/Customer services	2.8	-0.6	-0.2	0.8	0.7
Plant/machine operatives	-2.5	-3.2	-1.2	-0.4	-0.4
Elementary occupations	-0.6	-3.0	-1.3	-1.0	-1.2
Total	0.5	-1.9	-0.1	0.7	0.7

Source: LEFM Baseline consistent with Cambridge Econometrics' UK Regional Economic Forecasts, July 2012.

3.12 Given the anticipated sector profile behind the employment growth, the strongest future demand is expected to be for managers and professional occupations and for personal service occupations. A further decline is projected in the number of jobs for skilled trades alongside falling manufacturing employment. The number of elementary occupation jobs is also projected to fall, as is the number of job opportunities for plant and machine operatives. However, the rate of decline for this latter group is less severe than for the other occupations.

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## **Baseline Projections for Warwick**

- In contrast to the Coventry economy, the Warwick economy outperformed both the West Midlands economy and the UK in the period leading up to the recent recession. Over 2000-08, the Warwick economy grew by 3¾% pa, compared to 1½% pa and 2½% pa in the West Midlands and the UK respectively, while employment grew by 1¾% pa compared to just over ½% pa in the West Midlands as a whole and 1% pa in the UK. Since the start of the recession, employment in Warwick is estimated to have fallen slightly, by less than ¼% pa. However, there was little impact on output. Indeed, output from the economy in 2011 is estimated to be slightly larger than it was in 2008. This is in sharp contrast to the outcome in the West Midlands and the UK, where output fell by around ½-3¼% pa.
- 3.14 The underlying outlook for the Warwick economy is that it will continue to outperform the West Midlands economy in both the medium and long term, with both GVA and employment growing at a faster rate than the region as a whole.

Figure 5: Key LEFM Indicators for Warwick, West Midlands and UK

KEY LEFM INDICATORS FOR WARWICK, WEST MIDLANDS AND UK (% pa)							
	2011 (£m)	1990- 2000	2000- 2008	2008- 2011	2011- 2015	2015- 2020	2020- 2025
GVA							
Warwick West	3209.6	2.2	3.8	0.2	2.0	2.6	2.9
Midlands	86795.2	2.1	1.6	-0.7	1.7	2.4	2.6
UK	1167622.6	2.4	2.5	-0.6	1.9	2.6	2.9
Employment							
	2011 (000s)	1990- 2000	2000- 2008	2008- 2011	2011- 2015	2015- 2020	2020- 2025
Warwick West	88.2	0.2	1.7	-0.1	0.1	0.6	0.8
Midlands	2550.8	-0.3	0.6	-2.0	-0.2	0.7	0.7
UK	31101.8	0.1	1.0	-1.0	0.1	0.8	0.7

Notes: GVA is chained volume measure (CVM), reference year 2008

Source: LEFM Baseline consistent with Cambridge Econometrics' UK Regional Economic Forecasts, July 2012.

## **Sector Prospects**

- 3.15 Figure 6 shows the baseline projections for GVA by sector in Warwick and West Midlands.
- 3.16 The outlook for many broad sectors is more favourable in Warwick than in the West Midlands as a whole, including Manufacturing; Transport & Communications; and Financial & Business Services.
- 3.17 Manufacturing in Warwick is dominated by food and drink, and mechanical engineering, though it also has clusters of activity in higher value activities including motor vehicles and electronics. The motor vehicles sector in particular was badly affected during the recession. The outlook for manufacturing is relatively strong, with growth expected to exceed that in the West Midlands as a whole. The clusters of high technology-focused activities in particular are expected to perform well. However, growth prospects in the food sector are much weaker and the sector's large presence in the local economy has the effect of holding back overall growth.
- 3.18 Prospects in distribution, hotels & catering are broadly in line with those for the region as a whole.

  The sector in Warwick will be supported by strong employment growth, but the larger regional retailing centres will continue to draw in spending from residents.
- 3.19 Overall, most sectors in Warwick are expected to see employment grow in line with that in the region, with growth in the Financial & Business Services sector the only major sector where growth is expected to exceed that in the West Midlands as a whole. Professional Services is the largest sub-sector and is expected to continue to create new employment opportunities in Warwick, but at a slightly slower rate than expected in the West Midlands as a whole. Nevertheless, the subsector's relative importance locally is an important factor behind the wider sector locally outperforming the region.
- 3.20 Overall employment in Warwick is projected to return to its pre-recession peak by 2020.

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Figure 6: GVA Growth by Sector in Warwick and the West Midlands

GVA GROWTH BY SECTOR IN WARWICK AND THE WEST MIDLANDS (% pa)					
	2000- 2008	2008- 2011	2011- 2015	2015- 2020	2020- 2025
Warwick					
Agriculture etc	0.8	-12.4	0.7	0.5	1.0
Mining & Quarrying	0.0	-29.9	1.4	1.1	1.1
Manufacturing	-4.2	-5.0	2.7	1.7	1.8
Electricity, Gas & Water	27.8	-6.4	1.7	2.5	2.6
Construction Distribution, Hotels &	1.8	-0.3	1.3	2.3	2.0
Catering Transport &	1.4	-0.2	2.6	2.9	3.0
Communications Financial & Business	5.7	12.9	3.2	3.7	3.6
Services Government & Other	6.0	-4.8	4.0	4.2	4.5
Services	2.7	8.0	0.5	1.7	2.4
Total	3.8	0.2	2.0	2.6	2.9
West Midlands					
Agriculture etc	3.4	0.5	8.0	0.6	1.0
Mining & Quarrying	-3.8	-7.8	-1.5	-1.4	-1.1
Manufacturing	-1.9	-3.2	2.5	1.6	1.4
Electricity, Gas & Water	-2.4	-2.7	-0.1	0.5	0.6
Construction Distribution, Hotels &	2.6	-0.8	1.8	2.9	2.2
Catering Transport &	2.4	-0.7	2.7	3.0	2.9
Communications Financial & Business	2.9	-1.9	3.1	3.3	3.5
Services Government & Other	2.8	-0.4	3.1	3.9	4.3
Services	1.7	1.1	0.2	1.9	2.6
Total	1.6	-0.7	1.7	2.4	2.6

Notes: GVA is chained volume measure (CVM), reference year 2008 Source: LEFM Baseline consistent with Cambridge Econometrics' UK Regional Economic Forecasts, July 2012.

Figure 7: Employment Growth by Sector in Warwick and the West Midlands

EMPLOYMENT GROWTH BY SECTOR IN WARWICK AND THE WEST MIDLANDS (% pa)					
	2000- 2008	2008- 2011	2011- 2015	2015- 2020	2020- 2025
Warwick					
Agriculture etc	-2.9	-14.1	-1.0	-1.9	-1.0
Mining & Quarrying	0.0	-25.0	-9.5	-6.6	-5.2
Manufacturing	-7.3	-5.8	-1.2	-0.1	-0.3
Electricity, Gas & Water	26.8	6.8	-4.0	-3.4	-2.5
Construction Distribution, Hotels &	2.7	-6.6	0.6	0.8	0.2
Catering	0.4	-2.4	-0.2	0.3	0.4
Transport & Communications Financial & Business	3.8	13.2	-0.3	-0.3	-0.3
Services Government & Other	5.5	-4.4	1.8	1.5	1.9
Services	3.1	5.4	-0.5	0.6	0.9
Total	1.7	-0.1	0.1	0.6	0.8
West Midlands					
Agriculture etc	1.7	-2.1	-0.8	-1.6	-0.8
Mining & Quarrying	-2.7	-9.3	-2.5	-1.1	-1.0
Manufacturing	-5.3	-3.4	-1.0	-0.1	-0.4
Electricity, Gas & Water	-3.2	13.0	-2.4	-3.4	-2.6
Construction Distribution, Hotels &	1.9	-7.2	1.1	1.5	0.5
Catering	0.7	-2.6	-0.3	0.4	0.2
Transport & Communications Financial & Business	2.2	-1.9	0.6	0.5	0.6
Services Government & Other	3.2	-0.9	1.0	1.4	1.7
Services	1.8	-0.7	-1.1	0.7	1.0
Total	0.6	-2.0	-0.2	0.7	0.7

Source: LEFM Baseline consistent with Cambridge Econometrics' UK Regional Economic Forecasts, July 2012.

## **Employment by Occupation**

3.21 Figure 8 shows the projected change in workplace occupations. They result from sectoral changes in employment and projected trends of the occupation requirements of sectors.

Figure 8: Employment Growth by Occupation in Warwick

EMPLOYMENT GROWTH BY OCCUPATION IN WARWICK (% pa)						
	2000-	2008-	2011-	2015-	2020-	
	2008	2011	2015	2020	2025	
Warwick						
Managers and proprietors	3.5	0.4	0.5	0.8	0.8	
Professionals	5.2	1.7	0.1	0.7	0.7	
Associate professions	3.7	1.0	0.7	1.1	1.2	
Clerical/secretarial	-0.6	-1.5	-1.0	-0.6	-0.4	
Skilled trades	-2.7	-2.2	-4.3	-3.9	-3.5	
Personal service occupations	5.0	1.8	2.3	3.0	3.2	
Sales/Customer services	0.5	-2.2	1.5	2.1	2.2	
Plant/machine operatives	-4.8	-1.9	-2.4	-1.8	-1.4	
Elementary occupations	-1.0	-2.8	-0.3	0.0	0.4	
Total	1.7	0.0	0.1	0.6	0.8	

Source: LEFM Baseline consistent with Cambridge Econometrics' UK Regional Economic Forecasts, July 2012.

3.22 The strongest underlying growth is expected for personal service and sales occupations followed by associate professions. The number of managers and proprietors, and professionals is also expected to increase, but at a similar rate to overall employment growth. The number of jobs for plant & machine operatives is expected to fall alongside manufacturing employment, but this is likely to have a greater impact on the number of skilled trades, In contrast, the number of elementary occupation jobs is projected to rise slightly, though at a slower rate than for overall employment. The increase in construction jobs will be a factor supporting the increase.

Economic and Demographic Forecasts Study
Warwick District Council & Coventry City Council, Final Report, December 2012

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#### 4 ECONOMIC IMPACT OF THE GATEWAY SCHEME

#### Introduction

- 4.1 A 'high-level' assessment of the potential economic impact of the Gateway on the Coventry and Warwick economies is provided below. The focus is on the long term impact of the development on the two economies from operations on the developed site rather than on the temporary impacts that would occur during the development phase itself. The analysis considers:
  - the number of jobs that might be created on the Gateway site, together with their sector and occupational characteristics;
  - the potential for activity to be displaced from elsewhere in Coventry and Warwick; and
  - where those working on the Gateway site may reside.
- 4.2 A number of alternative scenarios are developed in order to address the inherent uncertainty behind any assumptions made.

## Components of the Gateway Scheme

4.3 The key components of the Gateway scheme are:

#### Zone A: Distribution and Logistics

• 343,740 sq.m of B2 and B8 floorspace

#### Zone B: Advanced Manufacturing and Technology Park

- Up to 83,794 sq.m of B1b/B1c buildings
- Hotel (up to 11,617 sq.m)
- Car Showroom (up to 4,645 sq.m)
- Up to 2,300 sq.m of ancilliary A1, A3, A4 and A5 floorspace.
- 4.4 GLH met Roxhill in September 2012 to consider further the nature of the scheme, marketing and sectoral focus. We consider the two 'zones' separately below.
- 4.5 The Advanced Manufacturing and Technology Park is intended to be B1 floorspace but focused on research and development with some light industrial activities. Substantial B1a office floorspace is not proposed so as not to conflict with regeneration proposals in Coventry City Centre (eg. Friargate). This element of the scheme is to be targeted at the following core sectors:
  - Automotive the focus here is on Tier 1 suppliers to existing companies in the sub-region such as Jaguar Land Rover and Peugeot;

- Carbon Technologies a growth sector identified by the Local Enterprise Partnership, with opportunities associated with existing companies/sectors present in the sub-region;
- Aerospace although the application is not associated with the airport, there are opportunities for R&D and light industrial activities, including parts manufacturing, associated with this sector.
- 4.6 While the development will not provide exclusively for these sectors, these are the three main / target areas. The LEP is keen to support digital technologies as well and this will be explored further by the developer.
- 4.7 The nature of the Zone A element of the scheme will be delivery of a high quality, landscaped business park. It will be focused on buildings of 50,000 100,000 sq.ft which is one of the differentiating factors relative to other schemes / locations in Coventry and will target inward investment from beyond the sub-region.
- 4.8 Jaguar Land Rover are supportive of the proposals in respect of providing a 'supplier park' with synergies to and in support of their World HQ at Whitley. Coventry University are also supportive and there may be opportunities to provide space for small businesses where space is not available or of the wrong nature at Coventry Technology Park.
- 4.9 The Zone B proposals are targeted at manufacturing and logistics space, capitalising on the location of the scheme within the 'Golden Triangle' at the centre of the UK with good access to the strategic road/ motorway network. This element of the scheme will provide units of between 200,000 1 million sq.ft. Roxhill expect the demand profile to be particularly targeted at large floorsplate units of over 500,000 sq.m. Demand is expected to be stronger for B8 space, with growth in online retailing driving demand for large distribution centres.
- 4.10 In regards to delivery timescales, Roxhill indicate that construction of the development could commence from 2013. The site would start delivering new space as part of development in Zone B from 2014. The build-out period for this element of the scheme might vary between 4-10 years (i.e. completion between 2018-26 subject to demand and economic conditions).
- 4.11 The Zone A proposals, focused on warehousing, are likely to be phased slightly later, given upfront requirements for remediation of the Severn Trent Sewage Treatment Works. Roxhill has indicated that development will start to be delivered in late 2014/ early 2015. Again whilst the delivery period will be influenced by economic performance, this element of the scheme could be delivered within 4-5 years, i.e. by 2021. Roxhill point to limited availability of land suitable for large format warehouse floorspace and supporting these potential delivery timescales.
- 4.12 This high-level understanding of the potential development scheme, informed by discussions with the two Councils and Roxhill, has informed the scenarios set out in the remainder of this section. It should be noted that this report was prepared in advance of work undertaken by GLH on reviewing

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the *Need and Comparative Site Assessment Study* prepared by Savills and submitted in support of the planning application for the development.

## Potential Employment Levels & Sectoral Distribution

- 4.13 In May 2012, Lawrence Walker Limited produced a technical note on trip generation rates for the proposed Coventry and Warwickshire Gateway development. At the front of this note was a breakdown of the spatial characteristics of the proposed Gateway development, with the Gateway described in terms of two distinct components; a business park, and a manufacturing/distribution element. Drawing on this, SQW has sought to assess the employment generation associated with the development scheme.
- 4.14 The floor space size of each of these elements was set out in the Lawrence Walker Technical Note. Using this as the basis for progressing the impact of the development, SQW's first task was to use these floor-space sizes to estimate the numbers of jobs that could result from the development of the Gateway as proposed. Using recognised guidance set out in the Homes and Communities Agency's Employment Densities, 2nd Edition (2010), employment densities were applied to the floor spaces to yield employment numbers for each component of the development; in total, this gave a total of around 10,000 jobs on site for the Gateway scheme as a whole. The following table breaks this total down into the two components of the scheme, and their sub-parts.

Figure 9: Indicative Floorspace and Jobs at the Coventry and Warwickshire Gateway

Gateway element	Floor space (m <sup>2</sup> )	Jobs created
Business Park		
B1(b)	46,500	3,294
B1(c)	18,500	1,310
A1/A3	2,300	109
Hotel (350 bed)	11,550	175
Car Showroom	4,650	41
Manufacturing & Distribution		
B2	103,200	2,064
B8	240,800	3,211
Total	511,000	10,204

Source: SQW

4.15 As the next stage, using local knowledge, advice from the scheme's developer, and desk research on the key sectors and priorities for the area moving forward, an indicative breakdown by sector of the proposed employment numbers was then proposed for each element of the Gateway. In broad terms, this posited that the business park will be focused on automotive, aerospace, low carbon and digital, whilst the manufacturing and distribution element of the Gateway will be predominantly focusses on logistics. Finer grain detail is set out in the table immediately below.

Figure 10: Indicative Sectoral emphasis of Jobs at Coventry & Warwickshire Gateway

	Business pa	ark				Manufacturing a	and distribution
Sector	B1(b)	B1(c)	A1/A3	Hotel	Car showroom	B2	B8
Rubber & Plastics						5%	
Non-Metallic Mineral Products						5%	
Basic Metals						5%	
Metal Goods		10%				10%	5%
Mechanical Engineering	20%	30%				20%	5%
Electrical Engineering & Instrumentation	5%					10%	
Motor Vehicles	20%	60%				20%	10%
Other Transport Equipment	20%					20%	
Manufacturing not elsewhere specified						5%	5%
Distribution							75%
Retailing			50%		100%		
Hotels & Catering			50%	100%			
Computing Services	20%						
Other Business Services	15%						

Source: SQW

## Competition

- 4.16 Having established the scale and sectroal scope of the Gateway development, the next element of SQW's work was to map out the key competitors to the development, within the local area and further afield. Isochrones at 10 and 20 km radi from the Gateway were defined, and within each of these the key developments, both actual or near market, with a similar emphases to that proposed by the Gateway were mapped and characterised.
- 4.17 Key potential competitor sites within the 10km radius include ProLogis Ryton, Whitley Business Park, Ansty, and Lyons Park and Rugby Gateway. Beyond 10km, Birch Coppice Business Park, MIRA, and the Daventry International Rail Freight Terminal are major potential competitors.
- 4.18 The competitors were determined not only by their sectoral emphases, but also by their scale, with DIRFT alone having 718,000 m2 of floor space in the pipeline. Important to note here is also the fact that this space is in the pipeline. Space that already exists and is full is less of a concern. Instead, the sites where the emphasis is similar to that of the Gateway, and where this coincides with a large supply of empty space or pipeline development, are seen as the potential major competitors, as they are also seeking to fill floor space. Around two million square metres of floor space are either proposed or available at the key competitor sites.
- 4.19 This assessment represents an initial high-level view based on considering available supply. Competitor sites for the two elements of the proposed development scheme are considered in further detail in the *Review of Need and Comparative Site Assessment Study* prepared by GL Hearn. This was undertaken subsequent to the completion of this report.

#### Assumptions and Alternative Scenarios

- 4.20 For the purposes of modelling in this report, the following assumptions are made by SQW for activity on the site when fully-occupied:
  - 9,500 jobs by 2022 (employment on the site remains at this level thereafter);
  - Of the jobs, 24% are in Distribution, 22% in Motor Vehicles and 17% in Mechanical Engineering;
     and
  - Given the occupational characteristics of these sectors, most job opportunities are for corporate managers, and skilled metals and electrical trade occupations.

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#### **Scenarios**

- 4.21 Informed by the scope and scale of the Coventry and Warwickshire Gateway development relative to its key competitors, three illustrative scenarios were modelled, considering where demand at the Gateway might come from. All three scenarios assumed the Gateway development to go ahead in its spatial entirety.
- 4.22 Displacement effects of 25% were applied to one scenario, and 50% displacement applied to the other. The third scenario considers the economic impacts should there be no displacement.
- 4.23 Displacement here is considered to be the amount of occupied floorspace at the Gateway which is at the expense of other sites within the 10km isochrone of the development (i.e. from nearby competitor sites), and allowing for whether this is space already built, or space in the pipeline that does not get built as a result.
- 4.24 These scenarios are illustrative, but demonstrate that displacement affects across the various components of the Coventry and Warwickshire Gateway development could differ. For instance, on the B1(b) and B1(c) elements of the proposed scheme, there are a number of nearby developments that have not yet been completed, or indeed been commenced, whilst space is vacant at a number of them.
- 4.25 With high quality development at the Gateway, displacement from competitor sites could be high, with development potentially not going ahead elsewhere or space being vacated on poorer quality sites. However, looking at the B8 component, where a number of substantial competitors are located in more optimal sites for logistics, such as the Rugby Gateway which has the benefit of being directly adjacent to the M6, displacement from better located competitors to the Gateway may be lower, even though the Coventry and Warwickshire Gateway has the benefit of proximity to Jaguar Land Rover.
- 4.26 Due to differences in employment densities depending on the land use, running the 25% and 50% displacement scenarios for floor space lead to net new employment totals within a 10km radius of Coventry and Warwickshire of around 60% and 40%, respectively, as in the table below. The table below presents each scenario, with Scenario 2 showing 25% displacement and Scenario 3 showing 50% displacement. Scenario 1 assumes 100% net new jobs.

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Figure 11: Illustrative Floorspace & Employment Scenarios for the Gateway Scheme

	Scenario 1 – displacemen	100% net new, 0% t	Scenario 2 – 75 displacement w	% net new, 25% ithin 10km	Scenario 3 – 50% net new, 50% displacement within 10km		
	Gross new space (m²)	Net employment impact	Gross new space (m <sup>2</sup> )	Net employment impact	Gross new space (m <sup>2</sup> )	Net employment impact	
Business I	Park						
B1(b)	46,500	3,294	21,390	1,515	13,020	922	
B1(c)	18,500	1,310	7,400	524	3,700	262	
A1/A3	2,300	109	2,300	109	2,300	109	
Hotel	11,550	175	11,550	175	11,550	175	
Car showroo m	4,650	41	4,650	41	4,650	41	
Manufactu	ring & Distrik	oution					
B2	103,200	1,858	72,240	1,300	36,120	650	
B8	240,800	3,096	195,050	2,508	149,295	1,920	
	Net Jobs	9,883	Net Jobs	6,172	Net Jobs	4,079	

Source: SQW

On the basis of the above, the three scenarios are thus labelled as follows:

- Scenario 1: Full take-up of the Gateway and no displacement of activity from elsewhere in Coventry and Warwick;
- Scenario 2: Full take-up of the Gateway and 25% displacement (by floor space) from elsewhere; and
- Scenario 3: Full take-up of the Gateway and 50% displacement (by floor space) from elsewhere.

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4.27 Scenario 1 is the most 'optimistic' scenario, where all activity on the Gateway site is additional to what would otherwise be expected to occur in the two economies.

#### Impacts on Output and Jobs

Figure 12: Impact of Scenarios on Output and Employment in Coventry and Warwick

SCENARIO IMPACT ON GVA AND EMPLOYMENT										
	GVA	Impact		Employment Impact						
	% of base			Thousand			% of base			
	2017	2025		2017 2025			2017	2025		
Scenario 1										
Coventry	0	0		0	0		0	0		
Warwick	6.8	13.8		4.5 9.5			5.0	10.0		
Scenario 2										
Coventry	-1.1	-2.4		-1.2	-2.6		-0.8	-1.6		
Warwick	6.0	12.0		4.0	8.4		4.5	8.9		
Scenario 3										
Coventry	-1.8	-3.7		-1.9	-4.0		-1.2	-2.5		
Warwick	5.5	11.1		3.7	7.8		4.1	8.2		

4.28 Figure 12 shows that the direct economic impact of the Gateway is in Warwick, with GVA and employment forecast to increase in 2025 by around 14% and 10% respectively. When displacement is taken into consideration, there is a net negative effect (in workplace terms) on the Coventry economy, as it does not directly benefit from the creation of jobs (the Gateway site is in Warwick). In Scenario 2, GVA in Coventry is 2½% lower in 2025 and employment 1½% lower, with the outlook worsening in Scenario 3, with GVA and employment 3¾% and 2½% lower respectively than in the baseline. At the same time, in Scenario 2 GVA in Warwick is some 12% higher in 2025 than in the baseline and employment almost 9% higher.

#### Impact on Residents in Employment

- 4.29 Although the Gateway side is located in Warwick District, its precise location on the boundary with Coventry and near a major residential area means that the employment opportunities created will be easily accessed by Coventry residents. Therefore, the commuting profile for jobs on the Gateway site is likely to be very different to that for jobs in Warwick as a whole.
- 4.30 Figure 13 below shows the extent to which the proportion of people employed in either Coventry or Warwick also reside in the district. Although the data are taken from the Census 2001, it clearly shows most occupations other than managers and senior officials, and professional occupations

have higher self-containment in Coventry. The 2001 Census provides the most recent comprehensive data on commuting flows by occupation which is available at the time of writing.

Figure 13: Proportion of Workplace Jobs

PROPORTION OF WORKPLACE JOBS (%) TAKEN BY RESIDENTS		
	Coventry	Warwick
Managers and senior officials	47	50
Professional occupations	46	53
Associate professional and technical occupations	59	55
Administrative clerical & secretarial occupations	72	63
Skilled trades occupations	71	66
Personal service occupations	86	74
Sales and customer service occupations	81	70
Process plant & machine operators	72	63
Elementary occupations	85	66

4.31 Figure 14 shows the impact of residents in employment for each scenario assuming that the commuting characteristics of those filling jobs on the Gateway are those for jobs in Coventry as a whole. For example, 47% of managers on the Gateway site will reside in Coventry, as will 71% of those in skilled trade occupations.

Figure 14: Impact on Residents in Employment

IMPACT ON RESIDENTS IN EMPLOYMENT							
	Thousand			% of base			
	2017	2025		2017	2025		
Scenario 1							
Coventry	3.04	6.33		2.26	4.50		
Warwick	0.20	0.46		0.28	0.58		
Scenario 2							
Coventry	2.18	4.51		1.62	3.21		
Warwick	-0.14	-0.30		-0.19	-0.38		
Scenario 3							
Coventry	0.67	3.48		0.49	2.48		
Warwick	-0.15	-0.73		-0.21	-0.92		

4.32 Although Warwick experiences the workplace employment impact, Coventry sees the largest absolute and percentage increase in residents in employment. The largest impact occurs in

Coventry in Scenario 1 with residents in employment forecast to increase by 4½% in 2025, falling to 3¼% and 2½% in Scenario 2 and 3 respectively. On the other hand, the number of residents in employment in Warwick is just over ½% higher in 2025 in Scenario 1 than in the baseline, but ½% and 1% lower in Scenarios 2 and 3 respectively, due to more residents being in jobs displaced from the local economy than in jobs created on the Gateway.

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#### 5 IMPACTS ON HOUSING DEMAND

- 5.1 This section considers the implications of the economic forecasts on housing requirements. It takes each of the economic scenarios and considers what level of housing provision would be required to support this, in both Warwick District and Coventry.
- 5.2 For comparative purposes it also updates projections based on past migration trends and the housing trajectories in the Warwick Local Plan Preferred Option and Coventry Submission Core Strategy. These projections update those previously presented in the two Strategic Housing Market Assessments (SHMAs).
- 5.3 The economic-driven projections start with a 'baseline' projections provided by Cambridge Econometrics (CE) with additional scenarios being run to look at the potential impact of the Gateway development.
- The projections were run at a time when considerable new data had recently been published by ONS including initial outputs from the 2011 Census and new interim 2011-based subnational population projections (which included 2011 mid-year population estimates). As a result the projections underwent a number of small adjustments throughout the project with the final figures in this report using the most up-to-date information available, as of the middle of October 2012.

#### 2011 Population Base

- 5.5 The Warwick District and Coventry SHMAs developed a range of projections for future housing requirements based on different scenarios. In both cases the projections were run from mid-2011 with figures being based on best estimates from data available at that time of preparation.
- As an initial analysis it is therefore of interest to compare the baseline population and household figures used in the SHMAs with those in this report. The comparison for population (by five-year age bands) is shown in Figure 15.
- 5.7 ONS' estimated population in Coventry in mid 2011 is slightly lower than that assumed in the SHMA although there are some notable differences for individual age bands. In particular the latest ONS figures, which take account of the 2011 Census, suggests that previous data (and the SHMA) overestimated the population in age bands 20-29 and under-estimated the numbers aged 15-19 (and to a lesser extent those aged 10-14).

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In Warwick the 2011 base population assumed in the SHMA was also slightly higher than is now suggested by ONS. The biggest differences are for the population aged 25-34 (fewer people in ONS figures) and those aged 20-24 (where ONS now estimate that the population is higher).

Figure 15: Comparing Baseline Population Estimates in SHMAs and ONS Mid-Year Population Estimates (2011)

	Coventry					War	wick	
Age	SHMA	Revised	Difference	%	SHMA	Revised	Difference	%
group	popn	(ONS)	from	difference	popn	(ONS)	from	difference
group		popn	SHMA	from		popn	SHMA	from
				SHMA				SHMA
0-4	22,243	22,585	342	1.5%	7,669	7,893	224	2.9%
5-9	18,208	18,553	345	1.9%	7,005	7,191	186	2.6%
10-14	17,114	17,820	706	4.1%	7,127	7,109	-18	-0.3%
15-19	22,459	23,508	1,049	4.7%	7,368	7,651	283	3.8%
20-24	32,404	30,632	-1,772	-5.5%	11,269	11,969	700	6.2%
25-29	26,966	24,908	-2,058	-7.6%	10,949	9,284	-1,665	-15.2%
30-34	21,185	21,685	500	2.4%	10,219	9,217	-1,002	-9.8%
35-39	20,016	20,550	534	2.7%	8,951	9,487	536	6.0%
40-44	21,508	21,334	-174	-0.8%	10,058	10,054	-4	0.0%
45-49	20,365	20,225	-140	-0.7%	9,942	10,148	206	2.1%
50-54	18,387	17,907	-480	-2.6%	8,638	8,669	31	0.4%
55-59	15,598	15,450	-148	-1.0%	7,684	7,691	7	0.1%
60-64	14,828	15,280	452	3.0%	8,032	8,147	115	1.4%
65-69	12,702	13,378	676	5.3%	6,752	6,842	90	1.3%
70-74	11,074	10,757	-317	-2.9%	5,217	5,156	-61	-1.2%
75-79	9,041	8,828	-213	-2.4%	4,271	4,285	14	0.3%
80-84	6,913	6,782	-131	-1.9%	3,542	3,453	-89	-2.5%
85 & over	7,050	6,733	-317	-4.5%	3,977	3,490	-487	-12.3%
TOTAL	318,062	316,915	-1,147	-0.4%	138,670	137,736	-934	-0.7%

Source: Coventry 2012 SHMA, Warwick 2011 SHMA and ONS

5.9 We can also compare the estimated number of households in each area with those in the SHMA research (see Figure 16). Whilst new mid-year population figures have been provided we do not yet have an official estimate of the number of households. Household estimates for mid-2011 have therefore been based on the ratio of households to population shown in the 2011 Census – this is then applied to the overall population shown by mid-year estimates. The difference between Census and mid-year population figures for overall population (and indeed the age profile) is not great and so this approximation will be of the right order.

5.10 The data shows for Coventry that the SHMA over-estimated the number of households by around 1% with virtually no difference being observed in the case of Warwick. Projecting forward these differences are unlikely to have any significant impact on the outputs.

Figure 16: Comparing Household Estimates from SHMAs and 2011 Census

	Coventry	Warwick
SHMA households (2011)	129,867	58,575
Estimated households (ONS/Census)	128,574	58,717
Difference from SHMA	-1,293	142
% difference from SHMA	-1.0%	0.2%

Source: Coventry 2012 SHMA, Warwick 2011 SHMA and ONS

## Overview of Projections Methodology

- 5.11 We have used a consistent approach to demographic projections in this report as in the two SHMA Studies. The projections approach is summarised in Figure xx below.
- 5.12 The approach is based on a cohort survival methodology, which considers how likely it is that women in individual age bands will give birth (the fertility rate); how likely it is that people will die (the death rate) and how likely it is that people will move into or out of each local authority area. These are the principal components of population change and are used to construct our population projections. Figure 17 shows the key stages of the projection analysis through to the assessment of housing requirements.
- 5.13 Headship rates (the proportion of the population in a given age group who are heads of a household) are used to covert population into households, with a frictional vacancy allowance of 2.5% included to support turnover of properties as part of a functioning housing market.

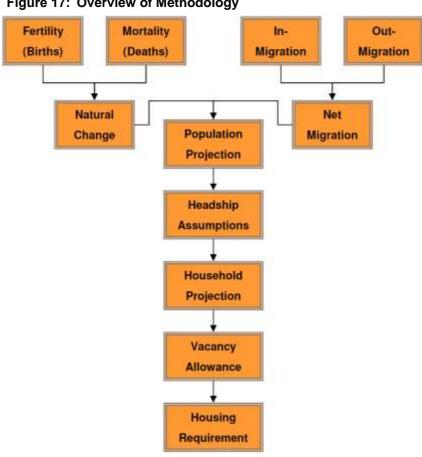


Figure 17: Overview of Methodology

## Overview of Projections and Input Assumptions

- 5.14 Six projections have been prepared on a consistent basis for Coventry and Warwick District. Each of the projections considers and provides linked projections for growth in population, dwellings and residents in employment.
- 5.15 Projections 1-4 relate to the four economic scenarios – the 'revised baseline' (without the delivery of the Gateway proposals) and the three scenarios modelling the potential impacts of the Gateway scheme. Projection 5 models growth in population and dwellings based on past demographic trends. Projection 6 has been developed for comparative purposes and models the demographic implications of the delivery of the levels of housing provision proposed in the Coventry Submission Core Strategy and Warwick District Local Plan Preferred Option.

## 5.16 The projections thus comprise:

- PROJ 1 Revised Baseline linked to the increases in residents in employment modelled in the revised baseline economic scenario, with no development at the Gateway;
- PROJ 2 Gateway Scenario 1 linked to increases in employment modelled assuming full-take up of employment floorspace at the Gateway and no displacement;
- PROJ 3 Gateway Scenario 2 linked to increases in employment modelled assuming full-take up of employment floorspace at the Gateway and 25% displacement (on a floorspace basis);
- PROJ 4 Gateway Scenario 3 linked to increases in employment modelled assuming full-take up of employment floorspace at the Gateway and 50% displacement (on a floorspace basis);
- PROJ 5 Past Demographic Trends linked to past demographic trends, assuming average levels of net migration over the past five years are maintained moving forwards; and
- PROJ 6 Housing Trajectory linked to the levels and phasing of housing delivery proposed in the Coventry Submission Core Strategy (10,800 dwellings between 2011-29 in Warwick District and 11,373 dwellings in Coventry between 2011-28).
- 5.17 The economic-driven scenarios (Projections 1-4) are linked to an estimate of change in the number of people living in an area who are working (residents in employment). Figures 18 and 19 below show cumulative changes in residents in employment in each district for each of these scenarios.
- 5.18 In Coventry the projections indicate that the number of working residents is expected to fall in the short-term before starting to rise from about 2014 onwards. Under each of the three 'with Gateway' scenarios employment change becomes positive in 2014-15 earlier than in the Revised Baseline Scenario.

14,000

PROJ 1 - Baseline

PROJ 2 - Scenario 1

PROJ 3 - Scenario 2

PROJ 4 - Scenario 3

Figure 18: Cumulative Change in Residents in Employment from 2011 - Coventry

Source: Cambridge Econometrics

5.19 In Warwick, for the reasons explored previously, the differences between growth in residents in employment across the four economic scenarios are more moderate. Changes in the number of residents in employment varies across the scenarios from 8,745 to 9,929 persons over the 2011-29 plan period.

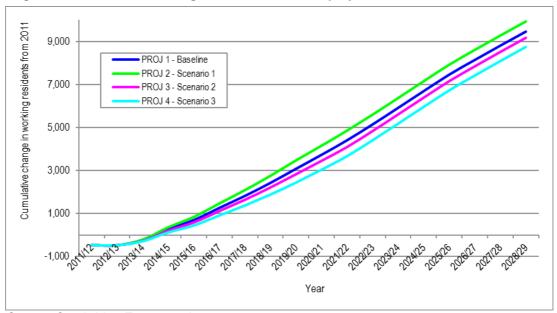


Figure 19: Cumulative Change in Residents in Employment from 2011 – Warwick District

Source: Cambridge Econometrics

- 5.20 The trend-based projections (PROJ 5) are linked to the average level of net migration to each local authority over the past five years. For the purposes of this analysis and to be consistent with previous SHMA work the level of migration is taken to be constant over the whole projection period.
- 5.21 The trend migration data covers the period from 2006-2011. Data for 2006-10 has been taken from ONS migration indicators and has been adjusted to take account of data published in November 2011 which made adjustments to this as a result of an ONS exercise to improve migration statistics. Data for 2010-11 has been taken directly from the components of change contained within the 2011 Mid-Year Population Estimates.
- 5.22 Over the five year period studied, the average level of net migration to Coventry has been estimated to be 1,626 persons per annum with a figure of 116 persons per annum for Warwick. These compare with SHMA estimates of 840 persons per annum and 460 persons per annum respectively.
- 5.23 The housing trajectory projection for each authority (PROJ 6) has been based on data provided by the Councils and is largely taken from Annual Monitoring Report data. GLH has made some adjustments to the profiling of housing delivery to take account of market circumstances and

provide a smooth pattern for modelling purposes. Figures 20 and 21 show for both areas that housing provision is expected to be fairly low at the start of the projection period, rising into and through the early 2020s before dropping off towards the end of the 2020s. In Warwick the housing trajectory is more back-end loaded than is the case in Coventry.

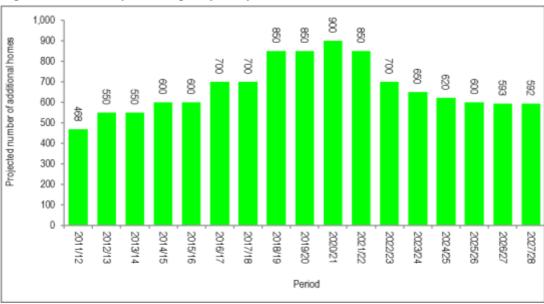


Figure 20: Coventry Housing Trajectory

Source: Coventry City Council Annual Monitoring Report/ GL Hearn

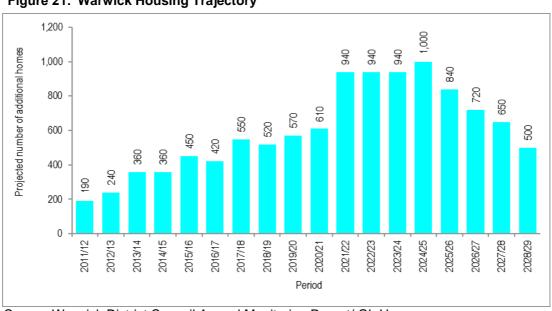


Figure 21: Warwick Housing Trajectory

Source: Warwick District Council Annual Monitoring Report/ GL Hearn

### **Fertility and Mortality Rate Assumptions**

5.24 Fertility (birth) rates have been modelled based on assumptions within the ONS 2010-based population projections. For the period from 2011 to 2028/29 the total fertility rate (the expected average number of live births per woman throughout their childbearing lifespan) is shown in Figure 22 below. Fertility rates are expected to be higher in Coventry than Warwick. In both cases fertility is expected to rise slightly from 2011/12 to 2013/14 before reducing over the remainder of the projection period. In Coventry the Total Fertility Rate (TFR) is projected to fall from 2.03 in 2011/12 to 1.84 in 2027/28 and in Warwick from 1.71 in 2011/12 to 1.59 in 2028/29.

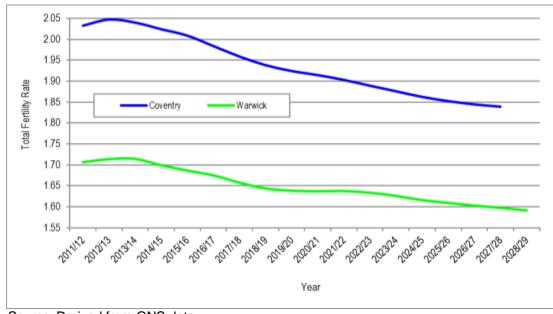


Figure 22: Total Fertility Rate Assumptions

Source: Derived from ONS data

5.25 Modelling of death rates is also consistent to the ONS 2010-based Sub-National Population Projections. These indicate that life expectancy is expected to increase over time for both males and females in both areas. The projections of life expectancy are shown in Figure 23 below. The data suggests that life expectancy in Warwick is better than seen in Coventry whilst in both areas (and for both sexes) we can expect an increase of about three years over the period studied.

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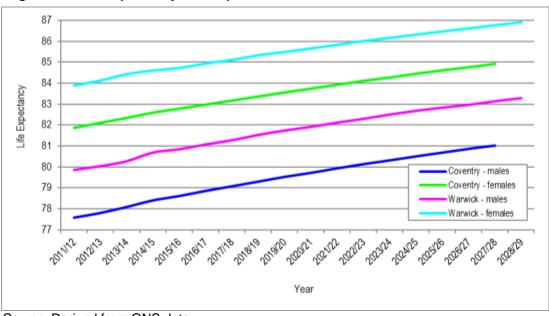


Figure 23: Life Expectancy Assumptions

Source: Derived from ONS data

### **Migration Assumptions**

- 5.26 Migration assumptions are adjusted between scenarios. For the purposes of understanding the profile of migrants we have again drawn on the ONS 2010-based Sub-National Population Projections. Figures for in-migration have been adjusted to match the scenario being tested (i.e. we have adjusted migration numbers (but not the profile of migration) to match employment growth estimates).
- 5.27 Figure 24 shows the estimated average levels of in-, out- and net-migration associated with our baseline projection (PROJ 1) for Coventry. Over the period from 2011 to 2028 the modelling shows an average annual level of net out-migration of 869 made up of in-migration of 19,909 and out-migration of 20,778. The data clearly shows that the most important age groups are from 15 to 34. The data is interesting in that it shows net in-migration of those aged 15-19 but net out-migration for most other age groups this is linked to the student population associated with the two universities in the City.

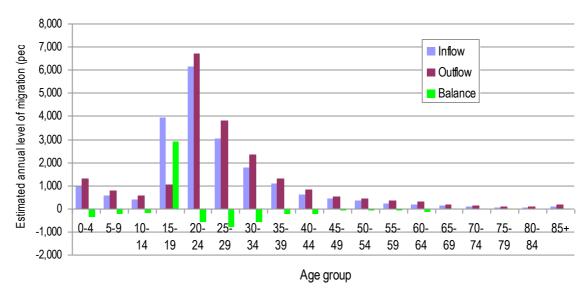


Figure 24: Annual Migration by Five-Year Age Band to/from Coventry in Projection 1

Source: JGC, derived from ONS 2010-based Sub-National Population Projections

5.28 Figure 25 shows the estimated average levels of in-, out- and net-migration associated with our baseline projection (PROJ 1) for Warwick District. Over the period from 2011 to 2029 the modelling shows an average annual level of net in-migration of 855 persons a year made up of in-migration of 10,347 and out-migration of 9,492. Again the data shows that the most important age groups are from 15 to 34. We see a large level of net in-migration of those aged 15-19 and out-migration of those aged 20-24 (which is largely linked to student movements).

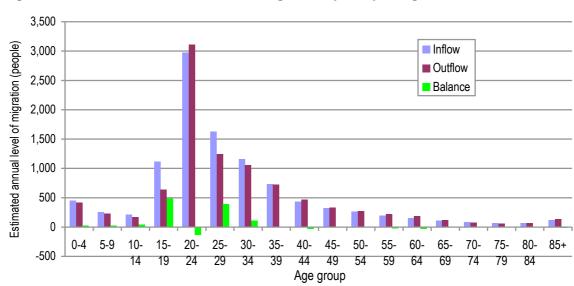


Figure 25: Estimated annual level of net migration by five-year age band - Warwick

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Source: JGC, derived from ONS 2010-based Sub-National Population Projections

5.29 As noted above, when projecting migration patterns for scenarios other than the baseline projection (PROJ 1) we have used the migration data and adjusted levels of in-migration to match the requirements of our scenario (e.g. when testing what level of migration is required to support a certain level of growth in residents in employment). This approach has been adopted consistently across all analysis.

### **Employment Rate Assumptions**

- 5.30 To link changes in residents in employment to the overall population it is necessary to consider employment rate and how these vary for different age groups.
- 5.31 Figure 26 tracks the proportion of the population aged 16-64 who are working in each of Coventry and Warwick. The variation over time partly reflects the sample survey from which the data is drawn. In Coventry there does however appear to be a downward trend post 2007/8. The trend in Warwick District is less conclusive, with the data suggesting that the employment rate did fall between 2008-10 but has since recovered.

80% of those aged 16-64 who are working 75% 70% 65% Coventry 60% M. O. Lec. SM 11. IDEC 1 la go toc go Moemol Julo T.Jun 08 IN OS JULOS Nat OF The Co My Chu, Jan Octor Year

Figure 26: Employment Rates

Source: Annual Population Survey

5.32 Due to the variability of the data shown above we have grouped and averaged figures for all cells with a particular date in them (e.g. for 2005 we have taken the above data for Apr 04-Mar 05 to Oct 05-Sep 06). This is shown in Figure 27 together with similar data on unemployment.

5.33 Employment rates in Coventry have declined as a result of the economic downturn. In Warwick the data suggests employment fell in 2009 but has recovered the lost ground. The unemployment data tends to support these findings. We have further 'smoothed' the data for the periods 2006-2008 (pre-economic downturn) and 2009-2011 (post-economic downturn).

Figure 27: Employment Rate Estimates (based on grouped data)

	Cov	rentry	Wa	rwick
Year including	Employment	Unemployment	Employment	Unemployment
	rate	rate	rate	rate
2004	70.3%	5.6%	74.9%	3.1%
2005	69.9%	6.0%	73.4%	3.6%
2006	70.5%	6.5%	73.0%	4.0%
2007	70.5%	6.7%	74.6%	4.2%
2008	67.6%	8.0%	74.2%	5.0%
2009	66.3%	9.4%	71.9%	5.9%
2010	66.0%	9.4%	72.3%	5.5%
2011	64.7%	9.5%	75.7%	5.2%
2006-2008	69.5%	7.1%	74.0%	4.4%
2009-2011	65.7%	9.4%	73.3%	5.6%

Source: Annual Population Survey

- 5.34 The demographic projections assume that employment rates start around the average levels shown for the 2009-11 period in the table above.
- In Coventry the CE employment projections suggest some decrease in employment in the short-term and we have therefore modelled that the employment rate will continue to drop slightly from 2011 to 2013 before recovering to get back to the 2011 position by about 2015 and then improve thereafter. However, given that the employment rate has dropped quite significantly in Coventry it appears too optimistic at the present time to assume that rates will return to pre-economic downturn averages of 69%-70%. To achieve growth back to previous highs would require a very good match between new jobs and the skills/experiences of the latent labour force. Our modelling has therefore assumed that it would be reasonable for age specific employment rates to return (by 2031) to the mid-point between pre- and post-economic downturn levels.
- 5.36 In Warwick there is less scope to support economic growth through improvements in employment rates. The immediate prospects (as evidenced by the CE projections) suggest that employment rates can be expected to remain fairly flat in the short-term. We have therefore set employment rates as constant for the period from 2011-14 and then returning to pre-2008 levels to 2031.
- 5.37 The modelling (for both areas) includes provision for potential increases in employment rates linked to changes in pensionable age. This is based on studying the age-specific 'drop-off' in employment

as people get older. The modelled improvement to employment rates will also have the effect of reducing unemployment.

5.38 Figure 28 shows how employment rates (for the population aged 16-74) are projected to change over the projection period, assuming a constant age structure.

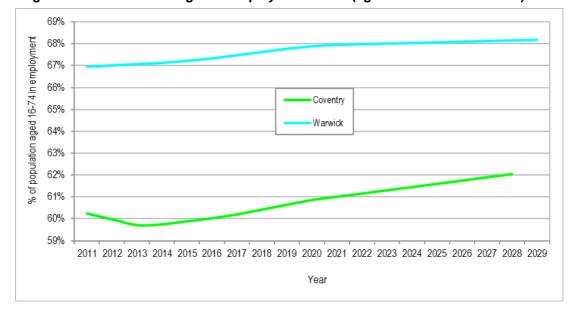


Figure 28: Modelled Changes in Employment Rates (age standardised for 2011)

Source: JGC

In Coventry, the employment rate (16-74) is 2011 of 60.2%. This is projected to drop to 59.7% in 2013 before rising to 62.0% in 2028. For Warwick District the rate starts at 67.0% in 2011 and rises to reach 68.2% in 2029.

# **Headship Rate Assumptions**

- 5.40 Headship rates describe the number of people in a particular age group who are counted as heads of households (or in this case the more widely used Household Reference Person (HRP)).
- 5.41 For the purposes of this analysis we have used data on headship rates from the 2008-based CLG Household Projections. We have however also taken account of recent trends in household formation which have generally seen less households being formed from the population than was projected in the CLG 2008-based Household Projections.
- 5.42 Figure 29 shows the estimated average household size in both Coventry and Warwick in 2001 and 2011 and compares this to the trend in household size projected in the CLG 2008-based Household Projections. It indicates that whilst CLG Projections expected a drop in average household size

from 2001 to 2011 (particularly in Warwick), the 2011 Census data indicates that in fact there has been little change.

5.43 We have rebased headship rate assumptions to the 2011 Census data. The projections then assume, moving forwards, that household sizes do fall – but at a less rapid rate than projected in the CLG 2008-based Household Projections. The projected changes to average household sizes shown take account of the headship rate assumptions, and the expected changes to the population structure over the plan period.

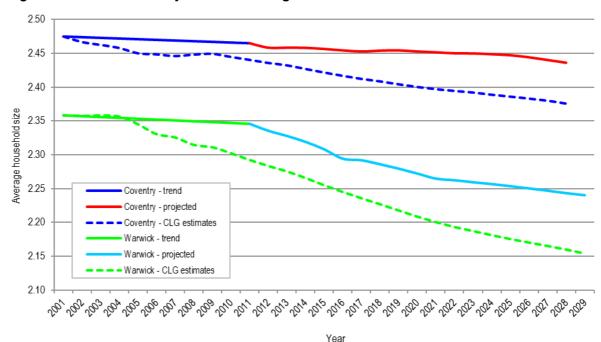


Figure 29: Trends and Projections in Average Household Sizes

Source: JGC, derived from ONS and CLG data

## **Frictional Vacancy Allowance**

5.44 We have included an allowance for frictional vacancy within new housing in estimating the number of dwellings required to accommodate projected growth in households. We assume that 2.5% of new build housing stock will be vacant, to support turnover within a properly functioning housing market for example to facilitate moves within the market or repair to properties. The assumption around vacant homes makes very little difference to the outputs of the analysis.

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# **Population Projections**

### Coventry

- 5.45 Figure 30 indicates population growth for each of the six projection scenarios for Coventry.
- 5.46 The projection based on past population trends (PROJ 5) indicates significant population growth of 23.5% over the 17-year plan period an increase in population of 74,443 people. Comparing the trend-based projection in this report with that contained in the SHMA we see that population growth would now be expected to be higher. This projection suggests an annual increase in the population of 4,379 people which compares with a previous estimate of 3,628. However for the reasons set out in the SHMA we consider that this is perhaps an overly-optimistic projection which particularly reflects short-term migration trends and student growth.
- 5.47 Projections 1-4 present the economic scenarios. In the Revised Baseline Scenario (PROJ 1), the population is expected to increase by around 20,500 people over the 17-year period with population growth of 6.5% over the 2011-28 plan period or about 0.4% per annum.
- 5.48 Delivery of the Gateway development would support higher levels of population growth than in the Revised Baseline Scenario. With full delivery of the scheme and no displacement (PROJ 1), the projections indicate population growth of 10.4% in Coventry over the 2011-28 period. With 25% displacement (PROJ 3) this falls to 9.3% population growth and for 50% displacement to 8.6% population growth in the City over the 2011-28 period.
- 5.49 For comparison the Submission Core Strategy policies would support population growth of 7.4% over the plan period.

Figure 30: Population Estimates 2011 to 2028 - Coventry

	2011	2016	2021	2026	2028
PROJ 1 - Baseline	316,915	319,881	327,158	334,793	337,393
	0.0%	0.9%	3.2%	5.6%	6.5%
PROJ 2 – Scenario 1	316,915	323,930	338,287	346,874	349,836
	0.0%	2.2%	6.7%	9.5%	10.4%
PROJ 3 – Scenario 2	316,915	322,772	335,155	343,393	346,259
	0.0%	1.8%	5.8%	8.4%	9.3%
PROJ 4 – Scenario 3	316,915	322,108	333,339	341,429	344,233
	0.0%	1.6%	5.2%	7.7%	8.6%
PROJ 5 - Trend-	316,915	336,894	358,535	381,738	391,358
based	0.0%	6.3%	13.1%	20.5%	23.5%
PROJ 6 - Housing	316,915	322,546	331,903	338,668	340,275
Trajectory	0.0%	1.8%	4.7%	6.9%	7.4%

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5.50 Figure 31 charts population growth in Coventry over the plan period in each of these scenarios. It indicates that the Gateway development would result in stronger population growth in the City than in the Revised Baseline (i.e. without Gateway) scenario. In addition the analysis indicates – based on expected economic performance - that Coventry can expect very little population growth over the initial period to 2014.

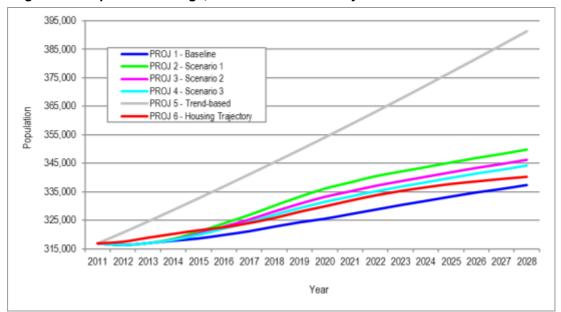


Figure 31: Population Change, 2011 – 2028 – Coventry

### **Warwick District**

- 5.51 Figure 32 indicates population growth for each of the six projection scenarios for Warwick District.
- 5.52 The projection based on past population trends (PROJ 5) indicates modest population growth of 6.2% over the 18-year plan period an increase in population of around 8,500 persons. Comparing the trend-based projection in this report with that contained in the SHMA we see that population growth would now be expected to be lower. This projection suggests an annual increase in the population of 473 people which compares with a previous estimate of 914.
- 5.53 Consistent with the forecasts of changes in residents in employment, the four economic projections show relatively similar overall levels of population growth in the District. The baseline economic projection (with no development at the Gateway) results in population growth of 17.0% over the 2011-29 plan period. Should the Gateway scheme be fully delivered, with no displacement, population growth of 17.6% could result. With Gateway Scenario 2 (25% displacement) sees the forecast population growth over the plan period fall to 16.7%, with a lower population growth of 16.1% forecast in Scenario 3 (50% displacement on a floorspace basis).

5.54 For comparison the Local Plan Preferred Options would support population growth of 11.8% over the plan period.

Figure 32: Population Estimates 2011 to 2029 – Warwick

	2011	2016	2021	2026	2029
PROJ 1 – Baseline	137,736	139,910	147,184	156,225	161,197
	0.0%	1.6%	6.9%	13.4%	17.0%
PROJ 2 – Scenario 1	137,736	140,154	147,878	157,008	162,037
	0.0%	1.8%	7.4%	14.0%	17.6%
PROJ 3 – Scenario 2	137,736	139,726	146,723	155,711	160,680
	0.0%	1.4%	6.5%	13.1%	16.7%
PROJ 4 – Scenario 3	137,736	139,482	146,048	154,988	159,920
	0.0%	1.3%	6.0%	12.5%	16.1%
PROJ 5 - Trend-	137,736	140,712	143,270	145,346	146,243
based	0.0%	2.2%	4.0%	5.5%	6.2%
PROJ 6 – Housing	137,736	137,891	141,506	151,134	154,001
Trajectory	0.0%	0.1%	2.7%	9.7%	11.8%

- Figure 33 charts population growth in Coventry over the plan period in each of these scenarios. Population growth in each of the four economic scenarios is relatively similar, but above that which would be supported by the current Local Plan proposals and based on continuation of past demographic trends.
- As with Coventry, the economic-led projections and the housing trajectory indicate limited population growth in the early part of the projection period for these. The trend-based projection (PROJ 5) shows steady (but low) population growth throughout the projection period.

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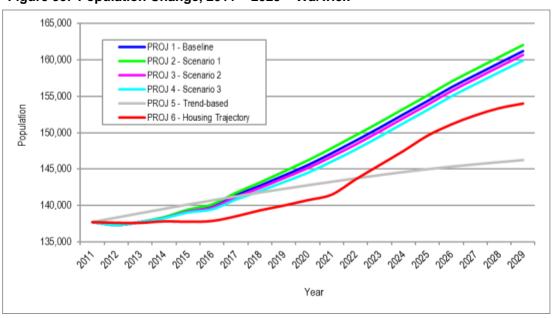


Figure 33: Population Change, 2011 - 2029 - Warwick

# Residents in Employment

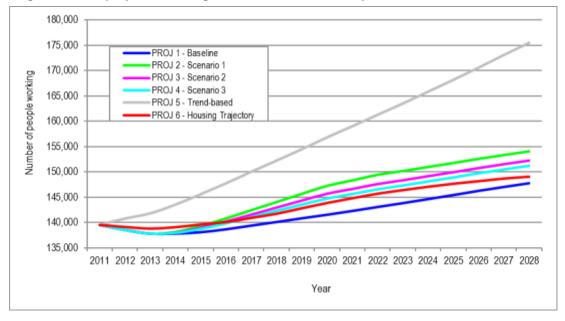
- 5.57 The table below, Figure 34, shows projected changes in the number of residents in employment in Coventry. The figures in the economic-led scenarios (PROJ 1 -4) are consistent with the economic modelling presented in Section 6, resulting in a 6% and 10% increase in residents in employment between 2011 to 2028. The trend-based projection (PROJ 5) would support a 26% increase in residents in employment. The Submission Core Strategy housing provision would support an increase in residents in employment of about 7% over the 17-years.
- 5.58 The analysis for Coventry here is important. It demonstrates that should housing provision in Coventry be based on projected demographic trends, this would result in a growth in the labour supply of almost 36,000, while the economic scenarios demonstrate that the economy might support growth in labour supply of between 8,200 15,500 persons.
- 5.59 Whilst accepting that stronger population growth could create some additional employment in population-related sectors, there is a clear risk that planning on the basis of past population trends might well support a growing imbalance between population and employment in Coventry, sustained high worklessness in Coventry and/or an increase in out-commuting.

Figure 34: Employment Estimates 2011 to 2028 - Coventry

	2011	2016	2021	2026	2028
PROJ 1 - Baseline	139,527	138,663	142,280	146,253	147,756
	0.0%	-0.6%	2.0%	4.8%	5.9%
PROJ 2 - Scenario 1	139,527	140,808	148,313	152,571	154,056
	0.0%	0.9%	6.3%	9.3%	10.4%
PROJ 3 – Scenario 2	139,527	140,193	146,618	150,750	152,240
	0.0%	0.5%	5.1%	8.0%	9.1%
PROJ 4 – Scenario 3	139,527	139,842	145,633	149,723	151,216
	0.0%	0.2%	4.4%	7.3%	8.4%
PROJ 5 - Trend-based	139,527	147,741	159,013	170,582	175,487
	0.0%	5.9%	14.0%	22.3%	25.8%
PROJ 6 – Housing	139,527	140,096	144,793	148,159	149,043
Trajectory	0.0%	0.4%	3.8%	6.2%	6.8%

This analysis is replicated in the graph below. The graph shows that in the economic-driven projections and the housing trajectory scenario, there is not expected to be any growth in employment levels in the early part of the projection period (up until about 2016) with steady growth thereafter. The trend-based projection (PROJ 5) indicates strong and steady growth in the number of working-age residents throughout the projection period.

Figure 35: Employment Change, 2011 - 2028 - Coventry



5.61 In Warwick the four economic driven scenarios (PROJ 1 to PROJ 4) suggest employment increases of between about 13% and 14%. The trend-based scenario (PROJ 5) shows virtually no

employment growth overall (increasing by less than 1% over time) whilst the projection linked to a housing trajectory (PROJ 6) also shows a fairly modest growth in local residents who are working – up about 8% over the 18-year projection period.

5.62 Comparing the trend-based projection in this report with that contained in the SHMA we see that employment growth would now be expected to be lower. This projection suggests an annual increase in the number of people who are working of just 28 which compares with a previous estimate of 413.

Figure 36: Employment Estimates 20	011 to 2029 - Warwick
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	2011	2016	2021	2026	2029
PROJ 1 - Baseline	68,891	69,591	72,623	76,348	78,348
	0.0%	1.0%	5.4%	10.8%	13.7%
PROJ 2 – Scenario 1	68,891	69,735	73,044	76,811	78,820
	0.0%	1.2%	6.0%	11.5%	14.4%
PROJ 3 – Scenario 2	68,891	69,482	72,343	76,046	78,059
	0.0%	0.9%	5.0%	10.4%	13.3%
PROJ 4 – Scenario 3	68,891	69,338	71,933	75,619	77,635
	0.0%	0.6%	4.4%	9.8%	12.7%
PROJ 5 - Trend-	68,891	70,077	70,258	69,741	69,399
based	0.0%	1.7%	2.0%	1.2%	0.7%
PROJ 6 – Housing	68,891	68,395	69,176	73,356	74,332
Trajectory	0.0%	-0.7%	0.4%	6.5%	7.9%

- 5.63 This analysis is replicated in the graph below. The economic-driven scenarios (PROJ 1 PROJ 4) would support fairly consistent increases in the residents in employment from 2014 onwards. This contrasts with the continuation of past population trends which would support increases in residents in employment in the short-term to 2016, with limited growth thereafter to 2021, and a decline in residents in employment in the latter part of the projection period.
- In contrast the housing trajectory in the Local Plan Preferred Options (PROJ 6) is projected to result in a modest decline in residents in employment in the short-term, with recovery beginning in 2017 but stronger growth in employment supported post 2021.
- 5.65 The figure below shows this data for each year of the projection. The four economic driven projections shows an initial decline in the number of people who are working with figures from about 2013 showing a steady increase. The housing trajectory projection (PROJ 6) also shows an initial decrease in employment levels and the number of people working does not exceed the number estimated in 2011 until 2020 the figure increases quite notably following that. Finally, the trend-

based projection (PROJ 5) shows some initial increase in the number of people in employment but this largely stops in 2016 and then starts to fall post-2020.

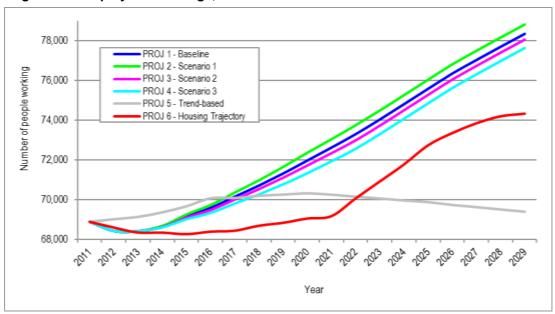


Figure 37: Employment Change, 2011 - 2029 - Warwick

# Household Growth & Housing Requirements

5.66 In this sub-section we present the results of the modelling of growth in households and dwellings (the latter including the frictional vacancy allowance).

### Coventry

- 5.67 Figures 38 and 39 show the projected growth in the number of households under each of the six scenarios in Coventry.
- 5.68 Continuation of past population trends would result in household growth of 1,752 per annum over the 17-year plan period from 2011-28. This is slightly above the level projected in the SHMA (1674 households per annum) based on new demographic data. For the reasons explained, we consider that there are potentially significant consequences for the labour market and potentially the housing market in planning for this level of provision.
- 5.69 Household growth of around 8% would be required to support the Revised Baseline economic projection (PROJ 1), equating to growth in households of around 580 per annum. Development of the Gateway would support enhanced employment growth and a higher level of housing would be needed to support this the extent of additional housing necessary depending on the degree of displacement. With no displacement, projected household growth of 14,700 is forecast over the

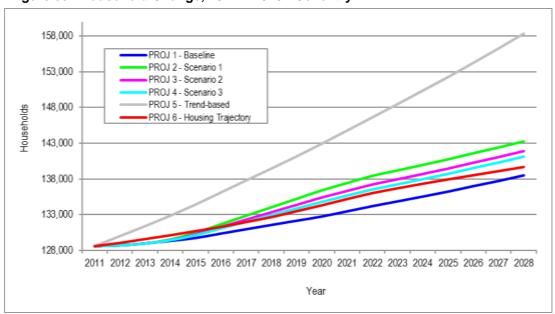
plan period (11.4% growth). This falls to just over 12,500 (9.8% growth) with 50% displacement on a floorspace basis.

Figure 38: Household Estimates 2011 to 2028 - Coventry

	2011	2016	2021	2026	2028
PROJ 1 - Baseline	128,574	130,339	133,456	136,984	138,501
	0.0%	1.4%	3.8%	6.5%	7.7%
PROJ 2 – Scenario 1	128,574	131,644	137,421	141,599	143,265
	0.0%	2.4%	6.9%	10.1%	11.4%
PROJ 3 – Scenario 2	128,574	131,269	136,308	140,273	141,896
	0.0%	2.1%	6.0%	9.1%	10.4%
PROJ 4 – Scenario 3	128,574	131,055	135,660	139,522	141,120
	0.0%	1.9%	5.5%	8.5%	9.8%
PROJ 5 - Trend-	128,574	136,093	144,770	154,258	158,355
based	0.0%	5.8%	12.6%	20.0%	23.2%
PROJ 6 - Housing	128,574	131,275	135,177	138,513	139,670
Trajectory	0.0%	2.1%	5.1%	7.7%	8.6%

5.70 Figure 39 shows household growth under each of these scenarios. From 2011 to 2014 the economic scenarios show only show moderate household growth.

Figure 39: Household Change, 2011 - 2028 - Coventry



#### **Warwick District**

- 5.71 Comparable data for Warwick District is shown below. Over the 18-year projection period the projected increase in the number of households based on the economic-led scenarios with the Gateway development varies from 12,700 (PROJ 4 Scenario 3) to 13,600 (PROJ 2 Scenario 1). The economic based projections are all higher than is suggested by either trend-based (PROJ 5) or housing trajectory (PROJ 6) projections which suggest household growth of 13% and 18% respectively.
- 5.72 Comparing the trend-based projection in this report with that contained in the SHMA we see that household growth would now be expected to be lower. This projection suggests an annual increase in the number of households of 419 which compares with a previous estimate of 581.

Figure 40: Household Estimates 2011 to 2029 – Warwick

	2011	2016	2021	2026	2029
PROJ 1 - Baseline	58,717	60,982	64,987	69,423	71,953
	0.0%	3.9%	10.7%	18.2%	22.5%
PROJ 2 – Scenario 1	58,717	61,067	65,245	69,728	72,277
	0.0%	4.0%	11.1%	18.8%	23.1%
PROJ 3 – Scenario 2	58,717	60,918	64,815	69,223	71,754
	0.0%	3.7%	10.4%	17.9%	22.2%
PROJ 4 – Scenario 3	58,717	60,834	64,564	68,941	71,460
	0.0%	3.6%	10.0%	17.4%	21.7%
PROJ 5 – Trend-	58,717	61,282	63,596	65,350	66,266
based	0.0%	4.4%	8.3%	11.3%	12.9%
PROJ 6 - Housing	58,717	60,278	62,883	67,429	69,254
Trajectory	0.0%	2.7%	7.1%	14.8%	17.9%

5.73 Figure 41 shows household growth under each of these scenarios. The trend-based projection (PROJ 5) shows more constant household increases over time relative to the economic-scenarios whilst the housing trajectory projection (PROJ 6) shows fairly modest increases in the earlier part of the projection period and increasing more rapidly from about 2021.

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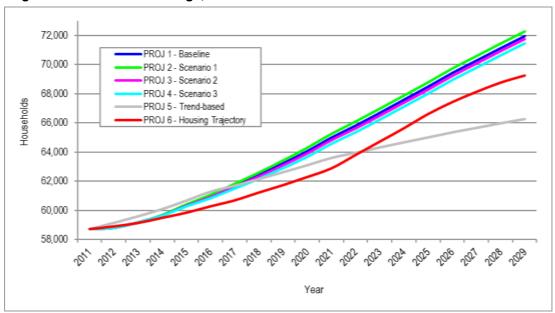


Figure 41: Household Change, 2011 - 2029 - Warwick

5.74 Figures 42 and 43 below show the resultant dwelling requirements for each of the projections. These include the vacancy allowance to support frictional turnover of properties within a functioning housing market.

Figure 42: Dwelling Requirements - Coventry, 2011-28

	Anı	nual	2011-2028		
Projection	Household growth	Dwelling requirement	Household growth	Dwelling requirement	
	growuri	requirement		<u> </u>	
PROJ 1 – Baseline	584	599	9,927	10,175	
PROJ 2 – Scenario 1	864	886	14,691	15,059	
PROJ 3 – Scenario 2	784	803	13,322	13,655	
PROJ 4 – Scenario 3	738	756	12,546	12,860	
PROJ 5 - Trend-based	1,752	1,796	29,781	30,526	
PROJ 6 – Housing Trajectory	653	669	11,096	11,373	

Figure 43: Dwelling Requirements – Warwick District, 2011-29

	Anr	nual	2011-2029		
Projection	Household growth	Dwelling requirement	Household growth	Dwelling requirement	
PROJ 1 – Baseline	735	754	13,236	13,567	
PROJ 2 – Scenario 1	753	772	13,560	13,899	
PROJ 3 – Scenario 2	724	742	13,037	13,362	
PROJ 4 – Scenario 3	708	726	12,743	13,062	
PROJ 5 - Trend-based	419	430	7,549	7,738	
PROJ 6 – Housing Trajectory	585	600	10,537	10,800	

### 6 CONCLUSIONS

6.1 This report has provided updated forecasts for the performance of both the Coventry and Warwick District economies.

#### Warwick District

- 6.2 Warwick District's economy is forecast to continue to outperform the West Midlands economy in both the medium and long-term, with both GVA and employment growing faster than the region as a whole. While employment growth over the next couple of years is expected to be limited, employment in the District is expected to return to its pre-recession peak by 2020 in the Revised Baseline Econometric Scenario (without development of the Gateway).
- 6.3 The Revised Baseline Scenario is projected to result in a growth in employment in Warwick District of 9,500 over the 2011-29 plan period. The strongest forecast growth in proportional terms is expected in financial and business services.
- It is anticipated that the Gateway scheme provides the opportunity to boost workplace employment in Warwick District, delivering up to 9,500 additional jobs within the District's boundaries. It will provide a strong boost to economic statistics to the District over the period to 2025. The direct economic impact of the development could support an increase in employment of up to 10% and an increase in economic output (GVA) of up to 14% over the period to 2025. The precise impact will be influenced by the success of the development scheme in attracting occupiers and the degree of displacement associated with the development.
- 6.5 However given the location of the Gateway development, a significant proportion of the workforce is expected to be drawn from Coventry, and thus the housing market impact of the proposed development is expected to be greater in Coventry. If there was no displacement effect, the number of residents in employment in Warwick District could be expected to be around ½% higher in 2025 than in the Revised Baseline Scenario. However because of the potential displacement effects of the development on other employment locations, growth in residents in employment in Warwick District could actually be between ½ 1% lower in 2025 than in the Revised Baseline Scenario. The differences are however relatively moderate.
- Turning to look at the implications on population growth and housing requirements, the impacts of the Gateway development for Warwick District are relatively moderate. The economic-led scenarios developed suggest a housing requirement in Warwick District of between 13,100 13,900 (rounded to the nearest 100 dwellings) over the 2011-29 plan period. This equates to between 726 772 per annum.

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Figure 44: Summary of Demographic Projections 2011 to 2029 - Total - Warwick District

Projection	Population Growth		Dwelling Requirement		Growth in Residents in Employment	
	Total	% change	Total	% change	Total	% change
PROJ 1 – Baseline	23,461	17.0%	13,567	22.5%	9,457	13.7%
PROJ 2 – Scenario 1	24,301	17.6%	13,899	23.1%	9,929	14.4%
PROJ 3 – Scenario 2	22,944	16.7%	13,362	22.2%	9,168	13.3%
PROJ 4 – Scenario 3	22,184	16.1%	13,062	21.7%	8,745	12.7%
PROJ 5 - Trend-based	8,507	6.2%	7,738	12.9%	508	0.7%
PROJ 6 – Housing Trajectory	16,265	11.8%	10,800	17.9%	5,441	7.9%

Figure 45: Summary of Demographic Projections 2011 to 2029 - Annual - Warwick District

Projection	Population Growth			Dwelling Requirement		Growth in Residents in Employment	
Projection	Per	% change	Per	% change	Per	% change	
	annum		annum		annum		
PROJ 1 – Baseline	1,303	0.9%	754	1.3%	525	0.8%	
PROJ 2 – Scenario 1	1,350	1.0%	772	1.3%	552	0.8%	
PROJ 3 – Scenario 2	1,275	0.9%	742	1.2%	509	0.7%	
PROJ 4 – Scenario 3	1,232	0.9%	726	1.2%	486	0.7%	
PROJ 5 - Trend-based	473	0.3%	430	0.7%	28	0.0%	
PROJ 6 – Housing Trajectory	904	0.7%	600	1.0%	302	0.4%	

- 6.7 Each of the economic-driven projections results in relatively strong growth in residents in employment in Warwick District, consistent with the economic evidence which suggests that the District's economy is expected to perform relatively better than the region over the plan period.
- 6.8 The economic-driven projections however result in notably stronger population growth (and housing requirements) than the projection based on past population trends (over the 2006-11 period) would indicate. Projecting forward past demographic trends would result in a housing requirement for 7,740 dwellings over the 2011-29 plan period (430 per annum).

## **Coventry City**

- 6.9 Coventry City's economy has performed relatively poorly relative to the West Midlands since 2000, with GVA growing by just over ½% per annum relative to 1½% per annum across the West Midlands and 2½% across the UK. Furthermore the City has witnessed a sharp contraction in output through the recession. There is a clear rationale for intervention to support economic regeneration.
- 6.10 Looking forward, whilst the outlook for employment growth is in line with that for the West Midlands,

but with stronger relative output growth (GVA). In the medium-to-long term net employment growth is expected to come from services, particularly financial & business services, and distribution, hotels and catering (albeit that manufacturing will remain very important to output growth and wealth creation). Employment is not however expected to return to its pre-recession levels until into the 2020s.

- 6.11 The Revised Baseline Scenario is projected to result in a growth in employment in Coventry of 13,500 jobs over the 2011-28 plan period. Much of this however will recoup jobs lost over the last few years, such that in 2028 employment is forecast to be only 4,500 higher than in 2008.
- 6.12 The potential impact of the Gateway scheme is expected to be principally to provide jobs for Coventry residents. If there was no displacement effects of the development on other employment locations, growth in residents in employment in Coventry could be 2½% 4½% higher in 2025 relative to the Revised Baseline Scenario based on the displacement scenarios considered.
- Again, turning to look at the implications on population growth and housing requirements, the forecasts provide an updated assessment linked to projected economic growth (PROJ 1). This relates across to PROJ 5 in the SHMA which forms the basis of the housing requirement in the Submission Core Strategy. This indicates a lower dwelling requirement particularly driven by differences in the population structure and headship rate assumptions. The level of growth in residents in employment in the Revised Baseline Scenario (PROJ 1) is actually slightly higher than in PROJ 5 in the SHMA. This reflects more recent economic forecasts.
- 6.14 Turning to look at the potential impacts of the Gateway development, the delivery of the Gateway could support stronger growth than in residents in employment in Coventry than in the Revised Baseline Scenario (of between 3,500 6,400 persons). This can be expected to create additional demand for homes. The three scenarios linked to delivery of the Gateway scheme would require provision of between 12,900 15,100 dwellings over the 2011-28 plan period.

Figure 46: Summary of projections 2011 to 2028 – total – Coventry

Projection	Population Growth		Dwelling		Growth in Residents	
			Requirement		in Employment	
	Total	% change	Total	% change	Total	% change
PROJ 1 - Baseline	20,478	6.5%	10,175	7.7%	8,229	5.9%
PROJ 2 – Scenario 1	32,921	10.4%	15,059	11.4%	14,529	10.4%
PROJ 3 – Scenario 2	29,344	9.3%	13,655	10.4%	12,713	9.1%
PROJ 4 – Scenario 3	27,318	8.6%	12,860	9.8%	11,689	8.4%
PROJ 5 - Trend-based	74,443	23.5%	30,526	23.2%	35,961	25.8%
PROJ 6 – Housing Trajectory	23,360	7.4%	11,373	8.6%	9,516	6.8%

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Figure 47: Summary of projections 2011 to 2028 - annual - Coventry

Projection	Population Growth		Dwelling Requirement		Growth in Residents in Employment	
	Per	% change	Per	% change	Per	% change
	annum		annum		annum	
PROJ 1 – Baseline	1,205	0.4%	599	0.5%	484	0.3%
PROJ 2 – Scenario 1	1,937	0.6%	886	0.7%	855	0.6%
PROJ 3 – Scenario 2	1,726	0.5%	803	0.6%	748	0.5%
PROJ 4 – Scenario 3	1,607	0.5%	756	0.6%	688	0.5%
PROJ 5 - Trend-based	4,379	1.4%	1,796	1.4%	2,115	1.5%
PROJ 6 – Housing	1,374	0.4%	669	0.5%	560	0.4%
Trajectory						

6.15 Whilst the Revised Baseline Scenario results in a lower housing requirement than in the Submission Core Strategy, the Gateway scheme could support additional demand for homes potentially over and above that proposed in the Submission Core Strategy.

# Towards Determining Appropriate Strategic Planning Policies

- 6.16 In considering the level of housing provision which should be set out in the Warwick Local Plan, the Council particularly needs to consider what weight to ascribe to the economic evidence. For Coventry City Council, as we have set out an economic-led approach seems appropriate reflecting the City's specific circumstances. The issue is however is what level of displacement might result from delivery of the Gateway proposals.
- 6.17 National planning policy is not specific in regard to the weight which should be attached to economic evidence in setting policies for housing provision. It sets out that local plans should set out a positive vision for the plan area, should proactively drive and support sustainable economic development, and should meet objectively assessed development needs with flexibility to respond to demographic change unless the impacts of doing so are inconsistent with the principles of sustainable development.
- 6.18 The economy and the housing market clearly interact, but the relationship is complex. Availability of employment opportunities can influence migration patterns, levels of economic participation and commuting dynamics. The complexity of the relationship and availability of data however make it difficult to model this to a very precise level because of the multiple assumptions which need to be made regarding changes to economic participation and particularly to commuting dynamics (and the lack of up-to-date data on commuting dynamics and trends in commuting patterns). Coupled with the uncertainty inherent in long-term economic forecasting, employment-based scenarios need

to be treated with some caution. These factors need to be considered in 'taking a view' regarding future levels of housing provision.

- 6.19 This said the commuting assumptions in the modelling undertaken here take account of the profile of commuting by occupation, which is a more advanced approach than used in the Warwick or Coventry SHMAs. Furthermore this study has development of up-to-date forecasts for the local economy which reflect local circumstances using LEFM, and thus the quality of the economic-driven scenarios is better than the equivalent economic-driven projections in the SHMA. These factors need to be balanced against the assumptions and uncertainty inherent in long-term forecasting.
- 6.20 This report has explored the impact of the Gateway on housing requirements using three different scenarios ranging from no displacement to 50% displacement. However, this report has not assessed which is the most likely level of displacement. This issue is considered further within the subsequent report entitled *Review of Need and Comparative Site Assessment Study* prepared by GL Hearn and dated December 2012
- 6.21 For Warwick District, a more explicit recognition of the economic evidence in considering housing requirements would support a consistency of approach to that of Coventry City Council.
- 6.22 For Coventry, as we have explained, we consider that economic growth potential is unlikely to support the level of population growth projected on the basis of past demographic trends (PROJ 5) and that indeed there are notable potential downsides to planning on this basis in terms of the potential to improve economic participation rates amongst the existing population, and the potential for issues of low and changing demand to re-emerge in specific areas and parts of the housing stock in the City (as described in the SHMA).
- 6.23 Coventry City Council's Submission Core Strategy adopts an economic-led approach. Its proposed housing requirement is based on an economic-led projection presented in the SHMA. The SHMA however recommended that further work was necessary to consider further economic growth potential. This Study has addressed this and provides up-to-date econometric forecasts based on more recent evidence and data, and more detailed consideration of the economic growth potential of the local economy. It thus provides a stronger basis for considering housing requirements.
- 6.24 On the basis of the above commentary and the more detailed analysis of economic dynamics, should the Gateway scheme be progressed it would be reasonable to plan for provision of between 12,800 13,800 homes in Coventry over the 2011-28 plan period. The lower parameter aligns to Gateway Scenario 3. The higher parameter might be considered should the two Councils working together assess that stronger provision of homes at Coventry was appropriate or that the displacement effect associated with the scheme was lower than in this scenario.

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