

Note on Past Trends in Jobs

The purpose of this note is to set out, as requested by the Inspector, past trends in employment in Warwick District and the wider Coventry & Warwickshire HMA.

A key issue here is that there is no census of employment. ONS publishes two sources of employment estimates at local authority level. The first is the Business Register and Employment Survey (BRES), a survey of businesses which is completed by businesses owners who are registered for VAT / PAYE. The second is the Annual Population Survey, a quarterly survey of households which incorporates the Labour Force Survey.

“Estimates” of jobs are compiled principally from these two data sources. There are notable potential data issues associated with employment statistics. BRES does not capture some small businesses (such as those falling below the VAT threshold), not armed forces personnel or those on official government training schemes. There can also be instances when all business employees can be counted at the registered address of the business, when in fact the jobs may actually take place at locations across the UK. This typically affects certain business sectors, including business services which is strongly represented in Warwick District.

APS data is modelled from a sample survey at people’s doors, and thus there is potential for some overlap with BRES data. It is a residence-based survey, but does ask where people work. However its sample means that the data can have a relatively large error margin, the impact of which can be seen in the volatility of the data year-on-year.

Because of these data issues it is necessary to “model” past employment trends. A number of economic forecasters (such as Experian) do this. In addition, ONS publishes for total jobs as part of its ‘jobs density’ dataset, held on NOMIS – the ONS website for official labour market statistics.

The evidence base for the Warwick District includes three econometric forecasts, these being:

- Cambridge Econometrics 2012
- Cambridge Econometrics 2013
- Experian 2013

To be as transparent as possible, we have set out the data on employment numbers from each of these datasets, and from the ONS total jobs estimates from NOMIS.

The datasets cover different periods, and indeed figures for individual years across the datasets can vary – reflecting the difficulty in actually ‘counting’ employment. The other factor to highlight is the variability in employment numbers year-on-year. This means that the time period used to calculate annual employment change can have a significant impact on the figures.

Warwick District

The table below summarises employment growth from the three econometric forecasts for Warwick District. The CE forecasts include data from 1981, the Experian forecasts from 1997.

In general the 2013 CE forecasts show stronger employment growth in the past relative to the 2012 dataset. This is most likely to reflect changes in how total employment has been modelled, rather than new or improved data. As such the 2013 forecasts are not in essence 'better' as they are more recent. GL Hearn has identified some issues with the 2013 CE forecast figures.

Over the period since 1981, employment growth in the CE 2012 forecasts averaged c. 540 jobs per annum. This is similar to the projected growth in these forecasts moving forward – on which the evidence in the 2013 Employment Land Review and the Local Plan are based.

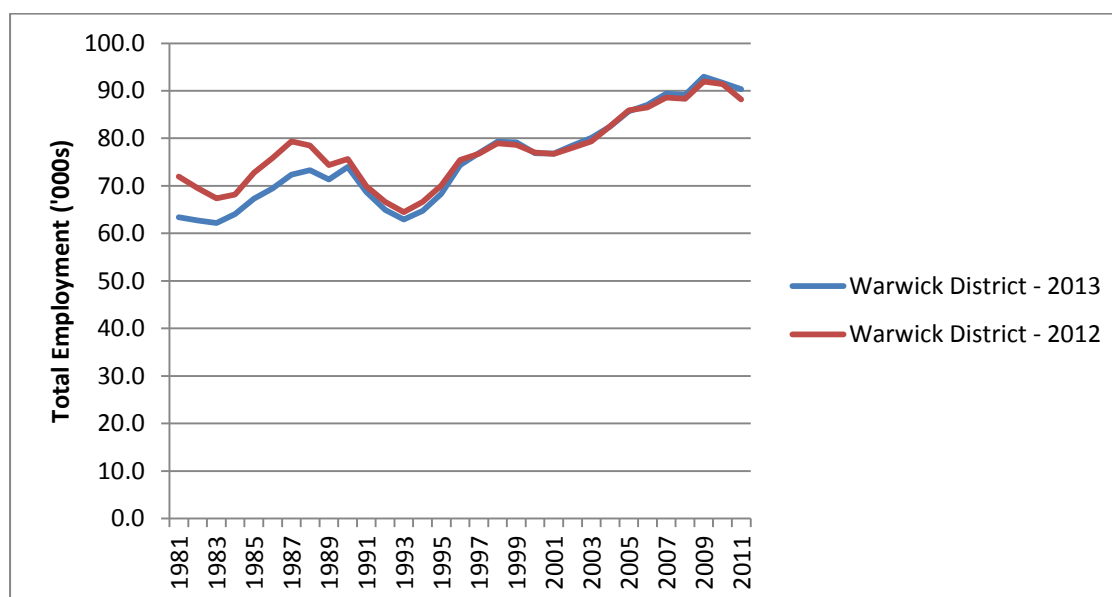
The Experian figures which were used in the 2013 Joint Strategic Housing Market Assessment show employment growth of 590 jobs per annum over the 1997-2011 period.

Annual Average Employment Growth – Warwick District

Average Annual Growth	1981-2011	1991-2011	2001-2011	1997-2011
Warwick District - CE 2013	898	1081	1357	962
Warwick District - CE 2012	541	911	1148	818
Warwick District - Experian 2013				593

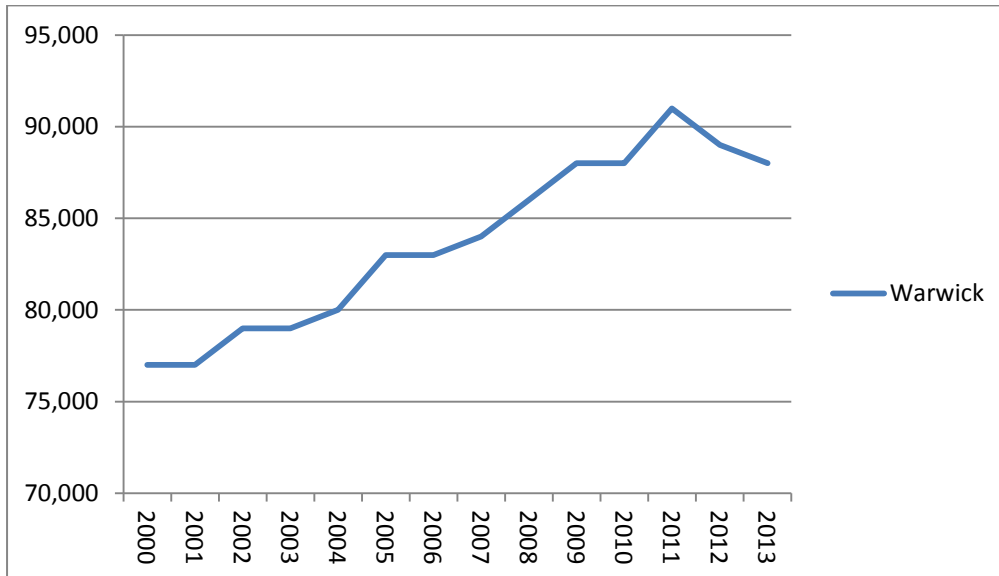
The chart below highlights the differences between the two runs of CE's LEFM Model. It suggests much of the difference between the forecasts relates to trends in employment in the early 1990s. However it also clearly highlights the cyclical nature of employment trends – with periods of growth and recession. This emphasises the importance of looking over a number of economic cycles.

Trends in Total Employment in Warwick District – Cambridge Econometrics



The ONS total jobs dataset is similarly ‘modelled’ but covers the shortest timeframe. Over the 2000-2013 period (the longest period for which it provides data), it shows employment growth of c. 850 jobs per annum. However as the previous graph shows, this period saw stronger relative growth than has been seen in the District if a longer-term perspective is adopted.

ONS Total Jobs Estimates – Warwick District



For Warwick District, 530 jobs per annum results in a need for between 579 dwellings per annum (based on 2012 headship rates) and 599 dwellings per annum (based on the part-return to trend headship rates), as explained at the hearing sessions.

The plan however makes provision for 714 dwellings per annum. This would support stronger growth in the workforce and thus provides flexibility to support higher employment growth than the 530 dpa.

Coventry and Warwickshire HMA

Across the wider HMA, the key data available are the following projections:

- Cambridge Econometrics 2013
- Experian 2013

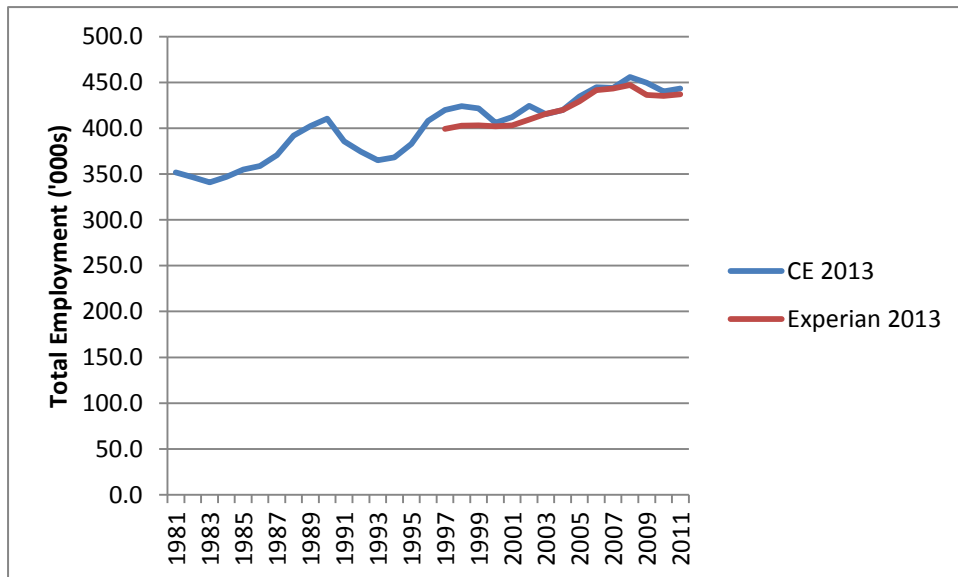
The chart overleaf plots employment trends from each. Again the figures vary depending on the timeframe uses, and which set of forecasts/ dataset.

As the ONS total jobs dataset includes rounded data (to the nearest 1,000), we have not sought to aggregate this to HMA level. To do so would introduce a notable potential error margin.

Annual Average Employment Growth – Coventry & Warwickshire HMA

	1981-2011	1991-2011	2001-2011	1997-2011
CE 2013	3052	2880	3111	1675
Experian 2013				2694

Employment Trends – HMA



At an HMA level, the forward projections from 2013 onwards see annual growth of 2,815 jobs per annum (Experian) and 3,710 jobs per annum (Cambridge Econometrics). These result in a housing need as explained at the hearing sessions for between 3,494 – 3,991 dwellings per annum to 2031.

Coventry & Warwickshire

('000s)	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
CE 2013	351.8	346.4	340.8	346.8	354.8	358.7	370.7	391.8	402.4	410.3	385.7	374.4	365.0	368.1	382.9	407.8	419.9	423.9	421.6	405.8
Experian 2013																	399.2	402.6	402.9	402.1

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
412.2	424.5	415.4	419.9	434.4	444.5	443.8	455.9	449.5	440.3	443.3
402.9	409.5	415.6	419.8	429.3	441.5	443.3	447.3	436.4	435.3	436.9

Warwick District

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
CE 2012	71.9	69.5	67.4	68.2	72.7	75.8	79.4	78.5	74.4	75.7	70.0	66.6	64.5	66.6	70.1	75.5	76.7	79.0	78.6	77.0
CE 2013	63.4	62.7	62.2	64.0	67.3	69.4	72.4	73.3	71.3	73.9	68.7	64.9	62.9	64.7	68.3	74.4	76.9	79.3	79.2	76.9
Experian 2013																	78.8	79.3	79.6	79.3

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
76.7	78.0	79.3	82.5	85.9	86.5	88.6	88.3	91.9	91.4	88.2
76.8	78.5	80.1	82.4	85.7	87.0	89.4	89.1	93.0	91.7	90.4
79.4	81.0	82.8	83.9	86.1	88.6	88.9	89.5	87.6	87.0	87.1

ONS Workforce Jobs Estimates

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Coventry	158,000	159,000	160,000	158,000	157,000	158,000	156,000	156,000	154,000	152,000	155,000	156,000	158,000	168,000
North Warwickshire	29,000	30,000	30,000	31,000	32,000	33,000	38,000	39,000	43,000	42,000	41,000	44,000	42,000	38,000
Nuneaton and Bedworth	39,000	43,000	44,000	41,000	45,000	46,000	45,000	44,000	43,000	43,000	45,000	49,000	45,000	48,000
Rugby	46,000	48,000	47,000	46,000	46,000	49,000	48,000	49,000	49,000	46,000	47,000	50,000	52,000	53,000
Stratford-on- Avon	58,000	60,000	61,000	60,000	63,000	68,000	71,000	75,000	74,000	71,000	69,000	70,000	71,000	72,000
Warwick	77,000	77,000	79,000	79,000	80,000	83,000	83,000	84,000	86,000	88,000	88,000	91,000	89,000	88,000