Warrington BC

Analysis - A review of economic forecasts and housing numbers

October 2016

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Introduction

Warrington BC is gathering evidence which will inform the preparation of a new Local Plan for the Borough. One of the key elements of this plan will be the level of housing growth which is predicted and how this can be accommodated. The town has achieved high economic growth in the past, been a beacon for economic growth within the sub-region, and has aspirations to continue this growth over the next 20 years. As a result, the plans need to assume economic growth, employment and the housing provision to ensure that the cost of economic growth is not unsustainable commuting. All housing projections must now, for planning purposes, be linked to employment forecasts.

Some detailed work has also been carried out at a sub-regional level and this work is helping to inform the thinking within the Council. GL Hearn has carried out the 'Mid Mersey Strategic Housing Market Assessment' and this was completed in 2016. Work is also being completed on the employment land requirements of the Borough in the Economic Development Needs Assessment (EDNA) being completed by BE Group and Mickledore.

As a result of the growth agenda and the wider reports, Warrington sought to reflect on the various economic forecasts and what they could mean for future housing requirements. This paper was prepared by Mickledore Ltd. and does not seek to arrive at a final prediction of housing requirements – but does review the evidence for Warrington and the methodologies which can reasonably be employed to capture the housing requirements.

As such the work considers the following:

1. The economic forecasts prepared by Oxford Economics
2. Previous employment trends based on absolute employment increases
3. The Devolution Bid employment forecasts
4. What could be achieved under Northern Powerhouse growth projections

In addition, for context the report also considers:

1. Long term housing completions by different Local Authorities in the area
2. Demographic trends within Warrington and population / household projections

These are mentioned briefly below and then examined in more detail in the appendices.

Long term housing completions by different Local Authorities in the area

It is acknowledged that Warrington is seeking to grow over the next 20 years and that this growth will lead to a requirement for housing. On this basis some care needs to be taken when using past trends in establishing a future target – but they do give an indication of what is likely to be achievable.

In the 14 years covering 8 Local Authorities in the adjoining areas (112 records) there are only 10 DCLG records where housing completions exceeded 1,000 units per annum. DCLG record an average number of completions in Warrington as 627 units per annum 2003-2016 although Warrington BC records an average of 840 units per annum over the same period due to different data sources. This is set out fully in Appendix 1.

Demographic trends within Warrington and population projections

DCLG data forecasts that there will be 16,789 more households in Warrington by 2037 than in 2014 (the reference date for the data).

This number of new households would account for 730 units per annum – although slightly more if it is assumed that a fixed percentage of the housing stock will always lie vacant.

The detail relating to household projections is set out in Appendix 2.

General Approach

The two sections above ignore the link between employment and housing. The link between employment and housing is an important aspect to consider as part of any housing need projection since an increase in employment is likely to lead to an increasing requirement for housing if an increase in commuting is to be avoided.

The link is not straightforward however because an increase in employment could be filled by an increase in the economic activity rate, a reduction in unemployment, new entrants to the workplace or people taking second jobs – none of which would require new housing or an increase in commuting.

The reality, therefore, is that any link that is created between employment and housing need is always a forecast based on a number of assumptions. There is no absolute formula.

GL Hearn considered the link between employment and housing need in their January 2016 Mid Mersey Strategic Housing Market Assessment.

Their work suggested that employment growth should be adjusted as follows:

Increase in workers needing housing = increase in estimated Local Authority employment x proportion of employees who live and work in the Borough[1] x proportion who only have a single job x increase in economic activity rate.

Even after these adjustments the answer for the new housing required is not straightforward. Households may contain more than one worker taking up employment within the Local Authority and detailed housing predictions also need to reflect this.

Household growth forecasts therefore require additional modelling but the starting point us the employment forecasts and these require review and validation.

The economic forecasts prepared by Oxford Economics

The starting point for such a review of projections is the Oxford Economics employment forecast for Warrington. This shows the following predicted increase in employment:

Forecast Employment Growth in Warrington

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[1] This adjustment is made as an assumption that the commuter rate remains the same.

	2016	2019	2024	2029	2034	2037
Employment	136,393	139,503	145,616	149,983	153,731	156,052

Source: Oxford economics

Overall the Oxford Economics forecasts suggest employment growth to 2037 of 19,659.

The commuting statistics for Warrington (Census 2011) show net in-commuting to Warrington and that total employment in the town only represents 88% of the total workforce size of the town. As a result, to maintain the commuting rates at the same level the total employment growth can be multiplied by 0.88.

The number of people with two jobs in Warrington is estimated by GL Hearn at 3.1%. Therefore 96.9% of the employment growth should be counted for the purposes of calculating the required change in the workforce.

GL Hearn then use the Oxford Economics forecasts for change in employment rates. If a greater number of existing residents enter the labour market the total number of new residents to fill the vacancies will be reduced. It is noted that employment rates are likely to increase over time not least because of the changes in the retirement age.

GL Hearn publish Oxford Economics forecasts on employment rate changes by age and sex. This study has applied these employment rate changes to the projected population changes published by ONS to arrive at an overall average increase in employment rate. This is calculated as a 10.55% increase in the employment rate suggesting that 89.45% of any increase in employment will be from new arrivals into the labourforce.

Therefore, the calculation of the number of new residents required to fill the 19,659 projected increase in employment is 19,659 x 0.88 x 0.969 x 0.8945 = 14,995.

As described above, further modelling is then required to predict the number of households which would be required to accommodate this number of residents. This paper does not seek to replicate or provide an alternative approach to that already created by GL Hearn as this could lead to confusion.

A more detailed review of the Oxford Economics forecast for Warrington as well as the corresponding Cambridge Econometrics forecast is provided in the EDNA.

Previous employment trends

The model for employment based housing requirements is established in the section above and an identical methodology can be attributed to different increases in employment predicted by different forecasting approaches.

Warrington BC has noted that the Oxford Economics predicted uplift in employment is below the long-term trend in the Borough.

The long term trend in the Borough has shown average employment growth of 1,573 over the 23-year period 1992-2014. If the same rate of growth was projected from 2016-2037 employment would have increased to 170,975 representing an increase of 36,175.

The calculation of the number of residents required to fill a projected increase of 36,175 jobs is 36,175 x 0.88 x 0.969 x 0.8945 = 27,593.

Devolution Deal policy trend

The Cheshire and Warrington LEP has undertaken some work on its own aspirations for growth in the area. These aspirations have included forecasts in a Strategic Economic Plan which sought funding through the Single Local Growth Fund and were then updated in a Devolution Deal bid which demonstrated the growth which was predicted if significant amounts of government funding could be devolved to the local area.

Under the devolution deal 31,000 additional jobs were projected over the 25-year period from 2015 to 2040 for Warrington which (on a straight line basis) predicts 1,240 jobs per year which is below the long term average but above the Oxford baseline forecast.

It is understood that it is the Council's aspiration to deliver this level of growth as part of its ambitions for Warrington to progress from a New Town to a 'New City'.

Using this figure over the 22-year period 2016-2037 as above the total employment growth is 27,280 and using the same calculations as above this would require an increase in residents of 20,808.

Northern Powerhouse policy trend

A further growth scenario which can be considered is that the Northern Powerhouse initiative is carried out in full by Government and the employment growth predicted rises in line with the forecasts made by SQW in the Northern Powerhouse Independent Economic Review.

Within this review SQW predicted that the Northern Powerhouse initiative could increase employment by 119% over trend growth for the region as a whole. Clearly this level of growth may not be equally spatially distributed and their model predicted the increase by 2050.

If a 119% increase in employment is achieved over the current OE growth scenario and this growth is assumed to be linear, the employment in Warrington by 2037 would be 342,000 and this would represent an increase of 205,000.

Using the same formula as above this would suggest an increase of residents of 156,365.

Clearly such a forecast appears somewhat unlikely although it should be noted that the output predictions set out by SQW are for the entire Northern Powerhouse area and unlike here, SQW do not apportion growth by Local Authority. It is also likely that the majority of the predicted Northern Powerhouse growth will be beyond the 2037 reference period of this report as momentum in economic growth is achieved later and only once significant investment in infrastructure has been undertaken.

Review of the Outputs analysed

The following graphs simply represent the differences in the employment trends forecast and what these translate into in terms of additional residents required.

Employment growth of different forecasts

Forecast required increase in LA Residents
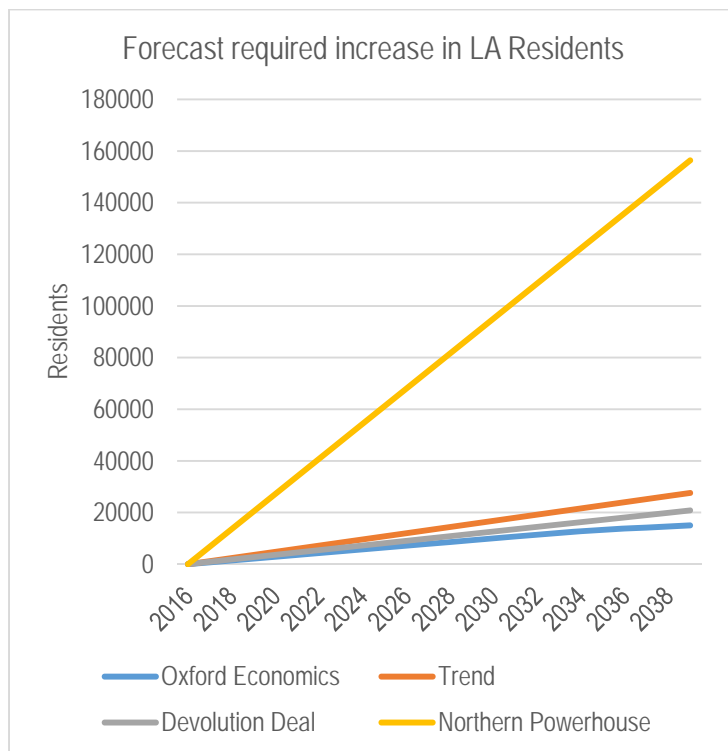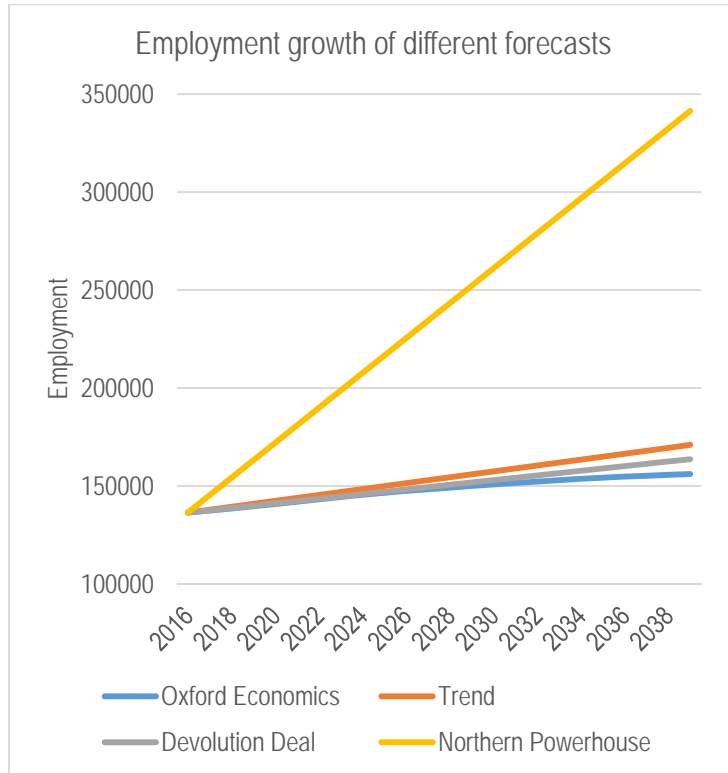
Clearly the graphs demonstrate the scale of ambition within the Northern Powerhouse scenario but in order to allow a clearer distinction to be illustrated between the three other scenarios, the graphs below show the same data but without the Northern Powerhouse figures skewing the illustration.

Employment growth of different forecasts

Forecast required increase in LA Residents
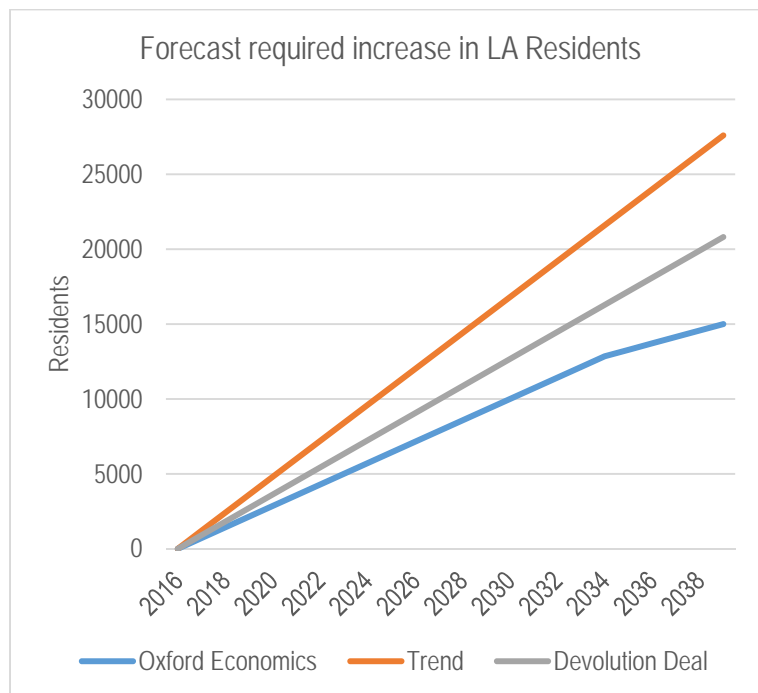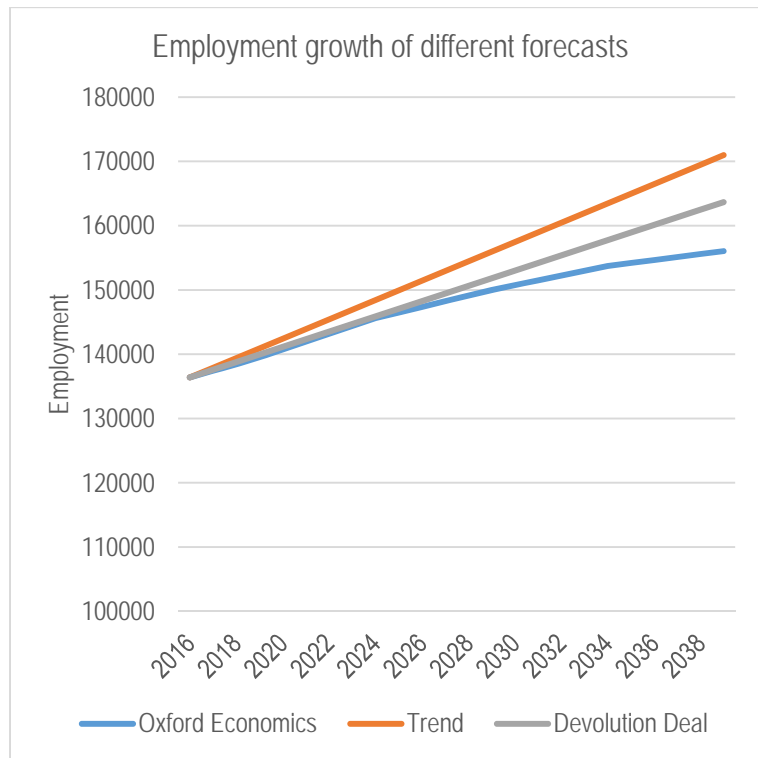
'Policy-on' scenarios

Some caution should be exercised when examining so called 'policy-on' scenarios. The suggestion is that baseline growth forecasts of the type produced by Oxford Economics are somehow inevitably going to take place with no intervention or significant commercial land provision.

The reality is that forecast or trend data is created based to some extent on prior performance. In order for Warrington to have grown substantially in the past, sites were made available – recently in locations such as Birchwood Park, Centre Park and Omega. New employment projections are location 'blind' but implicit in their findings is that further commercial locations will come forward. It would therefore be wrong to inflate economic

forecasts because individual sites were coming forward – inflating forecasts would only be justified if significant additional sites were coming forward ahead of trend.

The presumption, therefore, is that as a former new town with significant attention focused on the development of the town, that Warrington has recently been a 'policy on' location and forecasts well ahead of trend are difficult to explain especially over a long planning horizon. On this basis the Devolution Bid deal of 31,000 jobs over a 25 year-period is considered to be realistic based on comparison with the level of job growth Warrington has achieved over the last 20 years and if the level of employment land identified in the EDNA is brought forward for delivery.

It should also be noted that if the additional 27,280 jobs under the devolution proposal to 2037 are added to the number of jobs in the Oxford baseline forecast at 2016, this gives a total number of jobs at 2037 of 163,673. This is a very similar total to the 162,800 jobs that Cambridge Econometrics are forecasting at 2037, albeit their estimate of the current jobs in Warrington is higher than that contained in the Oxford forecast.

Reconciliation with other models.

In order to arise at a final housing forecast, there is a need to use the growth in employment alongside other data and plug this into specialist housing prediction models.

This can be explained because in addition to 'pure' employment related housing needs there is an additional baseline housing need in any location. This baseline is made up of:

- Changes in the existing working population requiring additional housing through the general reduction in household size.
- The economically inactive still requiring housing – and the economically inactive is likely to increase through an ageing population.

The result is that the housing requirement generated by employment growth only predict part of the total additional housing demand. A more sophisticated model will take account of all of the factors.

It is understood that in light of these factors Warrington BC is now using the employment numbers generated from the devolution proposal to re-perform the housing model calculations used within the Mid Mersey Strategic Housing Market Assessment.

Appendices

It is acknowledged that Warrington is seeking to grow over the next 20 years and that this growth will lead to a requirement for housing. On this basis past trends are of limited use in establishing the future target – but they do give an indication of what may be achievable.

The following tables show (A1) housing completions have been recorded by the various Local Authorities in the sub-region and (A2) completions recorded by Warrington BC. In fact, the figures maintained by Warrington show a different number of completions from DCLG and are based on different sources of information. DCLG maintain records from building control data whereas Warrington maintain their own data through the Local Authority planning and inspection regime. Warrington BC therefore believe their own figures to be more accurate for the purposes of measuring completions.

Table A1 Housing Completions

y/e 31st March	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Average
Salford	480	810	1,210	1,490	500	1,130	690	260	290	300	450	380	670	490	654
Trafford	510	670	750	670	500	460	390	410	290	220	260	260	170	300	419
Cheshire West & Chester	840	790	650	740	210	610	550	-	-	480	470	620	970	1,220	679
Cheshire East	890	1,150	1,150	1,200	910	720	390	440	350	320	600	610	890	1,090	765
Halton	250	730	430	590	430	690	300	-	-	310	340	350	310	370	425
St. Helens	-	-	840	-	530	-	450	220	210	250	260	300	340	370	377
Wigan	620	850	830	-	1,350	1,420	560	420	370	390	390	370	340	450	643
Warrington	480	-	620	1,050	710	980	510	340	-	430	640	590	580	590	627

Source: DCLG Live tables (number 253)

Table A2 Warrington BC record of completions

y/e 31st March	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Average
Warrington	949	700	1106	1287	1362	1565	633	388	527	600	647	693	687	616	840

Source: Warrington BC records

The data table above shows the reported housing completions for all tenure types for a selection of neighbouring Local Authorities. The data covers a period of 14 years from 31st March 2003-31st March 2016. During this period the Local Authority recording the highest average annual completions was Cheshire East which reported an average of 765 completions per annum. Warrington achieved an average of 627 completions per annum. Over the same period the largest number of annual completions was recorded by any local authority was recorded by Wigan. In 2008 there were 1,420 housing completions recorded in Wigan. The highest number of annual completions recorded in Warrington during the period were recorded in 2006 when 1,050 housing completions were achieved.

In the 14 years covering 8 Local Authorities (112 records) there are only 10 records where housing completions exceeded 1,000 per annum.

Warrington's own data gives an average rate of 840 completions per annum, with completions exceeding 1,000 over the 4 years from 2005 to 2008.

2. Demographic trends within Warrington and population projections

In order to place housing projections in context, it is useful to consider the number of households that are expected to be created using the Office of National Statistics (ONS) projections for Warrington.

Household projection tables based on 2014 data modelling were published by Local Authority in 2016. This data shows the following total household statistics for Warrington:

Total projected households in Warrington

	2014	2019	2024	2029	2034	2037
Households	87,947	92,400	96,402	99,906	103,007	104,736

Source: DCLG Live tables (number 406)

This data shows that it is anticipated that there will be 16,789 more households in Warrington by 2037 than in 2014 (the reference date for the data).

This number of new households would account for 730 units per annum – although slightly more if it is assumed that a fixed percentage of the housing stock will always lie vacant.

Clearly, the 730 housing units required per annum surpasses the recent DCLG average build rate 2003-2016 of 627 units per annum but is below the average level of units completed recorded by Warrington (of 840) over the same period.