

GROWTH AND HOUSING NEED IN NORTH LINCOLNSHIRE

INTRODUCTION

Oxford Economics has been commissioned by North Lincolnshire Council to (1) assess the implications of the High Growth scenario for local housing need over the entire plan period and (2) assess the number of jobs that could be supported in North Lincolnshire by the delivery of 396 homes per annum over the plan period.

In earlier work for the first part of this requirement, we considered a ten-year time horizon, from 2020 to 2030, to align with the standard method. For this report we have assessed the entire local plan period from 2020 to 2038. To ensure consistency with the previous work, the same model and baseline forecasts have been used for this report.

For the second element of the work, we have constructed a simple demographic model that calculates the potential population and labour market implications of successful delivery of 396 homes per annum over the plan period. The model uses a series of assumptions which have been set out alongside the results.

HIGH GROWTH SCENARIO

SUMMARY

Oxford Economics' baseline forecast provides a 'policy-off' projection for the local economy. To explore the additional job growth unlocked in North Lincolnshire, over and above the baseline forecast, we have developed an economic impact model to derive the High Growth scenario.

The impact model estimates the additional indirect (supply chain) and induced (consumer spending) jobs created as a result of additional 'direct' jobs locally.

It also reconciles additional 'workplace' employment growth with the 'resident' labour market: adjustments are made to allow for some jobs to be taken up by in-commuters, residents who would otherwise be unemployed or economically inactive, and by new migrant workers attracted to the area as a consequence of additional employment opportunities.

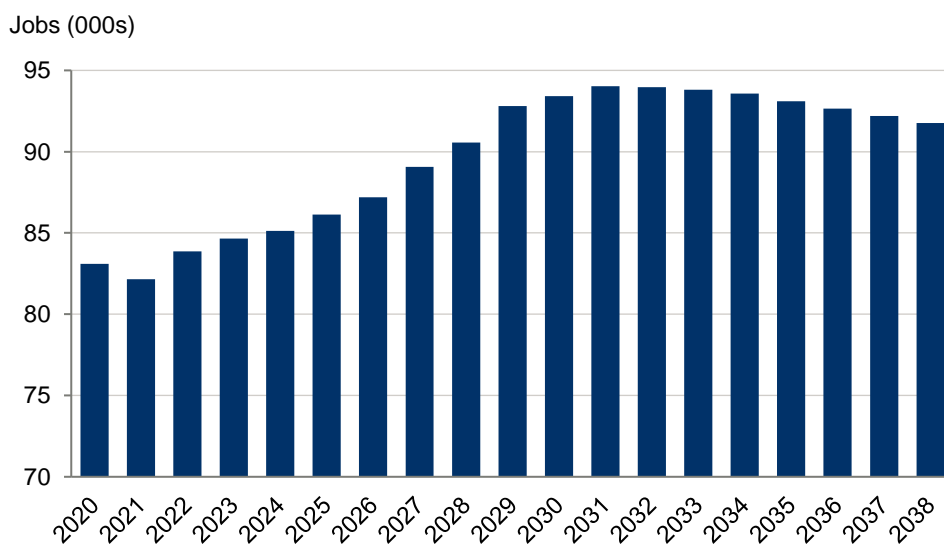
Additional migrant workers moving to the area, alongside non-economically active household members (e.g. children, stay-at-home parents), in turn boost the local population. The population numbers are then converted to households using assumptions about average household size.

The model provides an indication of the likely minimum housing requirement if the number of additional jobs under the scenario is achieved.

Workplace jobs

The High Growth scenario will see overall employment increase within North Lincolnshire. On a workplace basis the number of jobs supported in the local economy will total 91,600 by 2038, an increase of 8,500 jobs on 2020 (83,100 jobs). This equates to an annual increase of 474 jobs per year.

Fig. 1: Jobs, High Growth scenario, North Lincolnshire, 2020 to 2038



Source: ONS, Oxford Economics

Residents-based employment and commuting

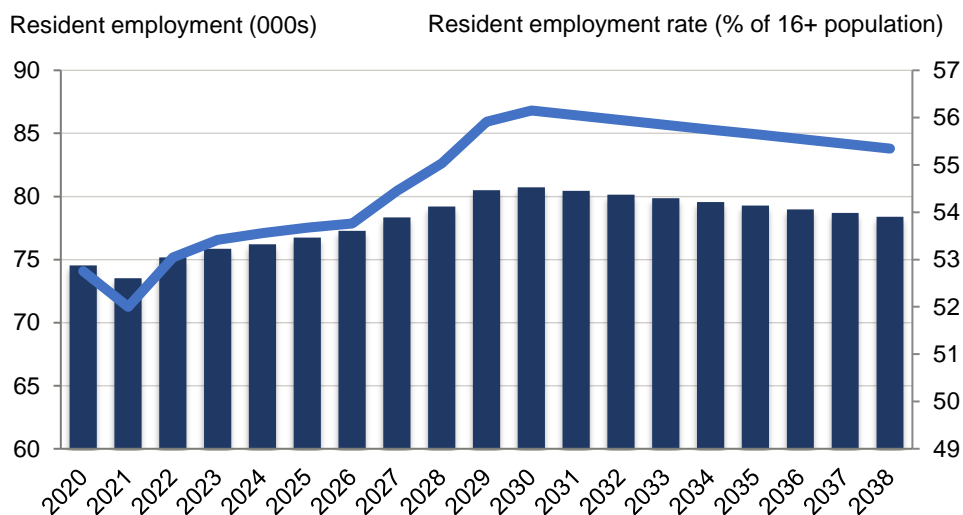
Increasing workplace-based employment will result in an increase in the number of residents of North Lincolnshire who are employed. By 2038, the High Growth scenario will see resident employment total

78,400, an increase of 3,900 resident workers on 2020 levels (74,500). The rise in resident employment will cause a fall in unemployment under the scenario. The unemployment rate will fall from 6.4% in 2020 to 4.1% in 2038.

Not all new jobs created in North Lincolnshire will be taken by residents. This is due to a number of factors. First, resident employment is expected to fall in the baseline forecast—a reflection of weaker long-term employment prospects both in North Lincolnshire and other nearby local authority areas. Further, while the High Growth scenario will unlock additional workplace jobs in North Lincolnshire, not all will be taken up by residents: aligning to data from the 2011 Census, we expect around a third of additional jobs created in the High Growth scenario in North Lincolnshire to be taken up by residents of other local authority areas, commuting into the area to work. Under the scenario, net commuting will rise from 8,300 in 2020 to 10,200 in 2038. Finally, our resident-based measure of employment (workers) is lower than our workplace-based measure (jobs), reflecting the varying propensity for some workers to have more than one job across different sectors of the economy. Note that under the scenario it is assumed that the ratio between new jobs created under the scenario to people is 1:1.

Additional resident workers will partly result from increasing participation in the labour market of the existing population. The resident employment rate (measured as a proportion of the adult population) is forecast to increase from 52.8% in 2020 to 55.3% by 2038.

Fig. 2: Resident employment, High Growth scenario, North Lincolnshire, 2020 to 2038



Source: ONS, Oxford Economics

Economic activity rates by age

The baseline and scenario forecasts assume a rise in economic activity rates over the local plan period. Under the High Growth scenario, the economic activity rate rises from 76% in 2020 to 83% in 2038. This is reflective of past trends, since activity rates have been rising over time and also captures future rises in the stage pension age, which we assume will mean people work until later in their lives. As a result of the latter, the rise in economic activity rates is found mainly in the older population, most notably for women aged 50-64 and men and women aged over 65 (though rates for this group remain low relative to younger age groups). Activity rates for younger male age groups are assumed to stay broadly flat, whilst those for younger females increase gradually over time.

Increasing labour market participation will only go some way to meeting employment demand locally. In our baseline forecast, weaker employment opportunities lead to a net outflow of migrants each

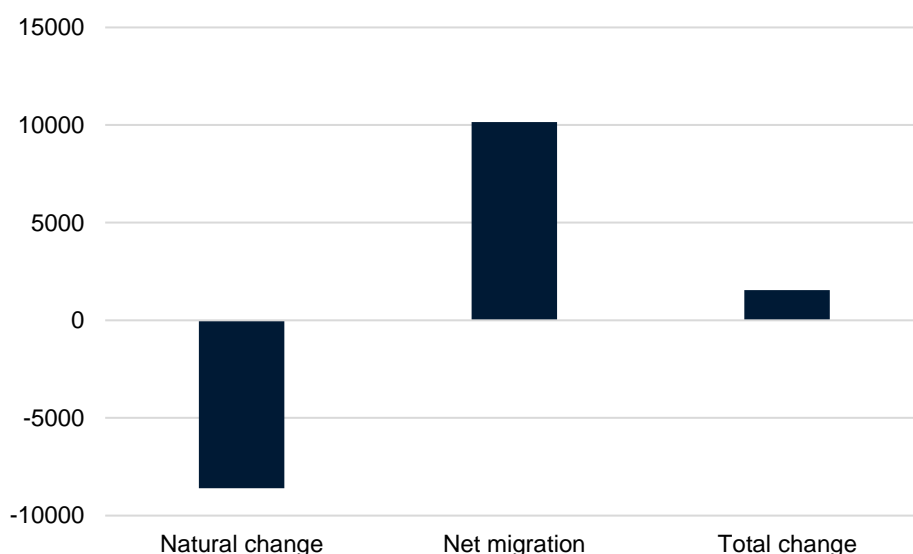
year, while natural change—essentially a higher death- than birth-rate—will also contribute to a declining population.

Population growth – natural change and migration

In the High Growth scenario, migrant workers will be attracted to the area to take up job opportunities and net migration will be the key factor in supporting population growth. Figure 3 shows that over the plan period 2020-2038, cumulative net migration into North Lincolnshire is 10,000, or an annual average of 564 people. The equivalent figure for the ONS 2018 sub-national projections is 710 people per annum. Natural change (births minus deaths) will cause the population to fall by 8,600 over the plan period.

In total over the plan period to 2038, the High Growth scenario will see total population increase by 1,550 residents, to 175,000 in 2038.

Fig. 3: Components of population growth, High Growth scenario, North Lincolnshire, 2020 to 2038



Population by age

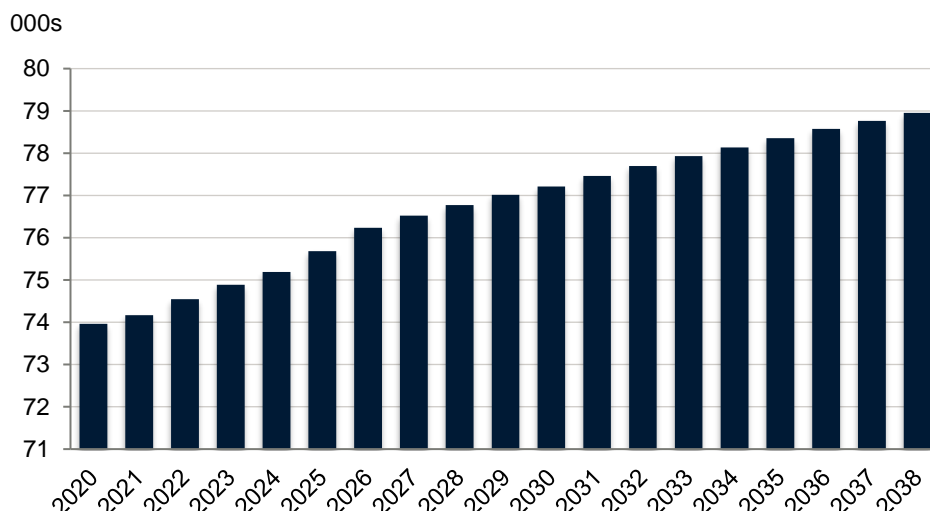
The model includes population split by broad age groups. The working age population is forecast to decline sharply under the baseline, from 106,900 in 2020 to 92,400 in 2038. Some of the decline is offset under the scenario, as additional jobs attract inward migrants, most of whom are of working age. Under the scenario, working age population is 99,000 in 2038, some 6,600 higher than under the baseline. The working age population will account for 57% of the total population by 2038, down from 62% in 2020. Population growth will be mainly concentrated in older age groups, and the population over working age will rise from 34,600 in 2020 to 48,800 in 2038.

The population aged 0 to 15 is expected to decline from 31,500 in 2020 to 27,100 in 2038.

Households

Our outlook for households draws on the population forecast, while taking account of the changing composition of households—the average household size is expected to fall from 2.34 residents in 2020, to 2.22 by 2038. As a consequence, the number of households will increase 5,000 over the plan period, from 74,000 in 2020 to 79,000 in 2038, or an average increase of 277 households per year.

Fig. 4: Households, High Growth scenario, North Lincolnshire, 2020 to 2038

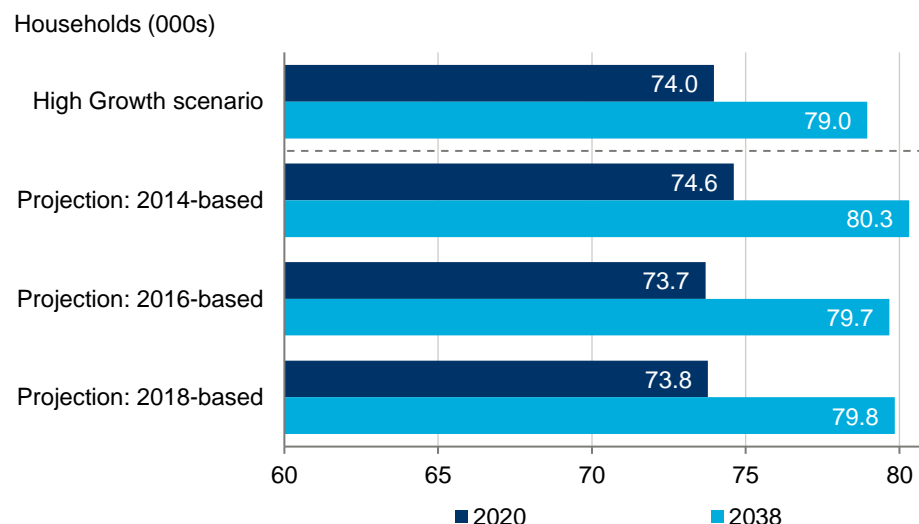


Source: ONS, Oxford Economics

COMPARISON TO OFFICIAL PROJECTIONS

The outlook for households in the High Growth scenario is a little weaker than ONS projections. In the High Growth scenario, we estimate household numbers to increase by 5,000, to 79,000 by 2038. This equates to an average of 277 additional households per year over the plan period. The average increase in households is lower than the different vintages of household projections for the same period, with the 2014-based projections at 317 households per year, the 2016-based projections at 332 households per year and 2018-based projections at 337 households per year.

Fig. 6: Household projections, North Lincolnshire, 2020 to 2038



Source: MHCLG, ONS, Oxford Economics

IMPLICATIONS FOR ANNUAL LOCAL HOUSING NEED

We can then compare North Lincolnshire Council’s current estimates of annual local housing need, drawn from official household projections and estimates of the local ‘affordability ratio’, to annual local housing need implied by High Growth scenario. Additional data provided by the Council on net

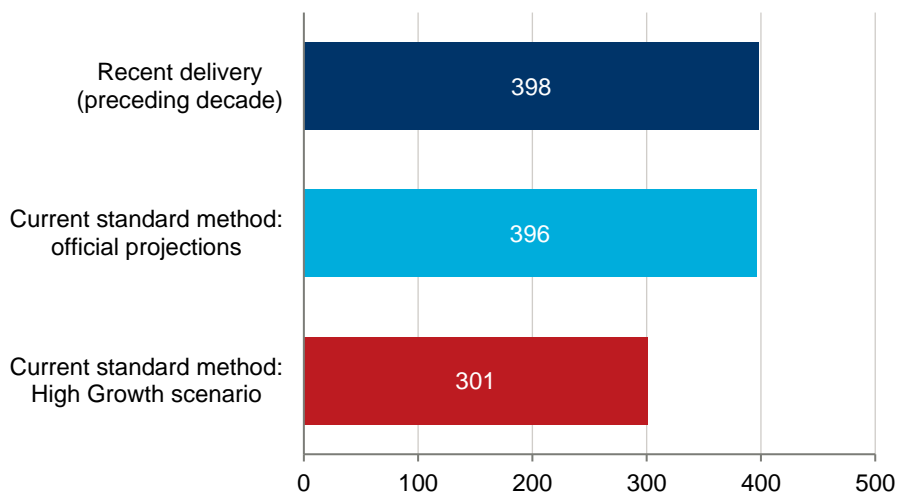
additional housing completions over the preceding decade also enables a comparison with recent housing delivery.

Applying the current standard method across the plan period 2020 to 2038, we estimate a local housing need of a minimum of 301 dwellings per year in the High Growth scenario.

On the basis of this evidence, we can conclude that the High Growth scenario will not result in a requirement for housing beyond the existing assessment of local housing need using the standard method over the plan period—nor will it exceed recent rates of housing delivery across North Lincolnshire.

Fig. 7: Recent delivery and future annual local housing need, North Lincolnshire, 2020 to 2038

Annual dwellings



Source: North Lincolnshire Council, Oxford Economics

ASSESSMENT OF JOBS THAT COULD BE SUPPORTED BY DELIVERY OF THE HOUSING TARGET

THE HOUSING TARGET

Using the Standard Method, the Council has set a target to deliver 396 homes per year over the local plan period from 2020 to 2038. This equates to the delivery of a total of 7,128 homes over the period. The objective of the analysis in this section is to calculate how many jobs could be supported in North Lincolnshire by the successful delivery of this number of homes.

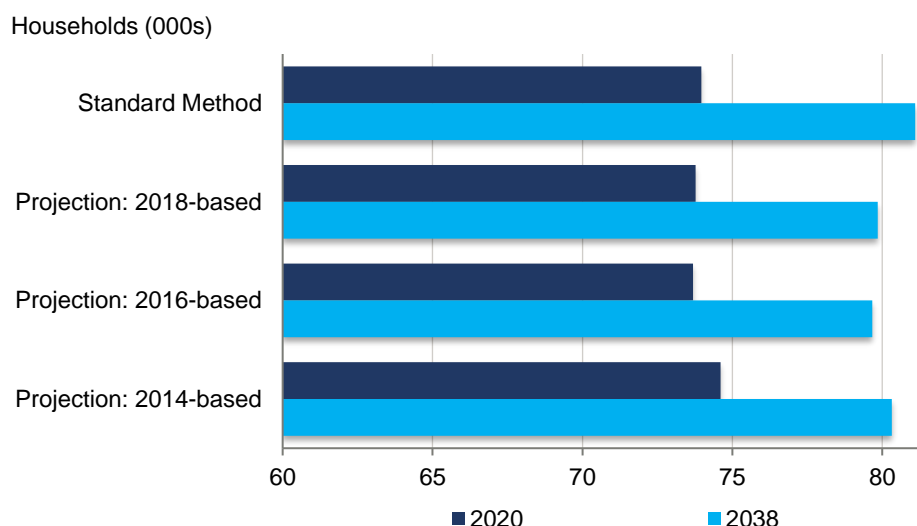
APPROACH

A simple demographic model has been constructed which applies assumptions about key determinants of population growth and economic activity to determine the size of the labour force in North Lincolnshire assuming the delivery of the housing target. We can then assess the number of jobs that the labour force could support within the district. Note that the analysis does not attempt to estimate the number of jobs associated with the delivery of the annual housing target nor does the analysis consider whether demand constraints would limit the extent that the labour force is fully utilised.

Total households and population

It has been assumed that 396 homes are built and then occupied by a household each year. Using the Standard Method results in a total of 81,100 households by 2038 in North Lincolnshire. This is higher than other projections, notably the 2014-based projections which form the basis for the Standard Method.

Fig. 8: Household projections, North Lincolnshire, 2020 to 2038



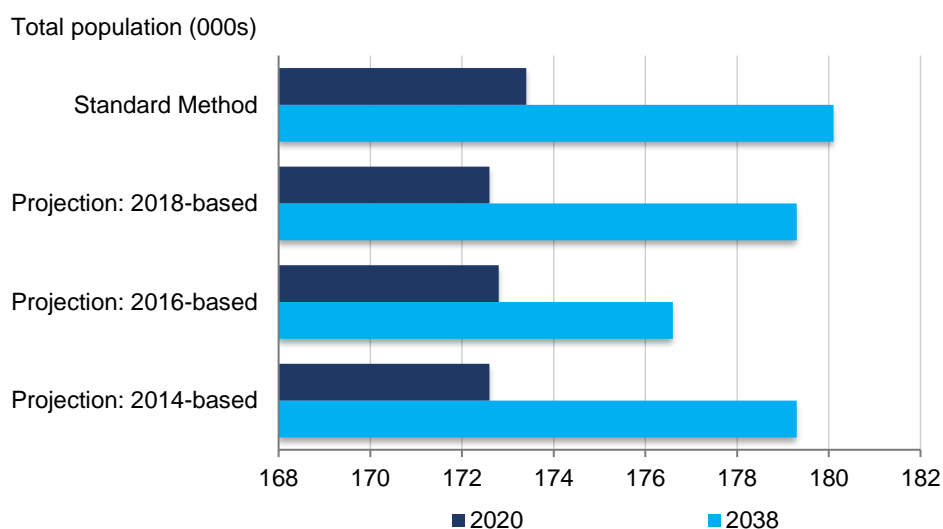
Source: MHCLG, ONS, Oxford Economics

The model converts households to total population using assumptions about average household size. Assumptions for average household size are taken from the ONS 2018-based household projections.

The assumptions are common to the analysis used in the first stage of the work for the high growth scenario and also to the Standard Method, which uses the 2014-based projections. The assumptions show average household size falling from 2.34 in 2020 to 2.22 in 2038.

Using this approach, the Standard Method implies that total population grows to 180,100 by 2038, some 6,700 higher than in 2020. This is higher than population growth under official projections and the high growth scenario. This is because the Standard Method on which the target of 396 homes per year is itself based, uses the 2014-based projections as a basis for its calculation. The 2014-based projections for North Lincolnshire are stronger than subsequent projections and are boosted further by the affordability adjustment of the Standard Method, resulting in a higher outturn for population.

Fig. 9: Population projections, North Lincolnshire, 2020 to 2038



Source: MHCLG, ONS, Oxford Economics

Total population by age

The model includes assumptions about natural change (births minus deaths) which are derived from the ONS 2018-based sub-national population projections. The model then calculates the proportion of new homes that will be filled by natural population change. Any excess homes are assumed to be taken by migrants. The age profile of migrants is derived from the same ONS projections, with migrants tending to have a younger age profile than the population as a whole.

Despite increased migration, the working age population falls from 107,300 to 104,600 in 2038. This is less than the decline in the ONS 2018-based population projections and is attributable to the increase in net migration resulting from the additional homes built in North Lincolnshire over the plan period.

The population aged 0-15 is estimated to decline from 31,500 in 2020 to 28,600 by 2038. The older population (aged above working age) will grow to reach 46,900 by 2038, up from 34,000 in 2020. The aging of the population is less severe than under the baseline or high growth scenario. This is attributable to higher net migration as outlined above.

Economic activity

The model includes assumptions about economic activity rates which are applied to the working age population to estimate the available labour force in North Lincolnshire. Economic activity rates are estimated at 74% in North Lincolnshire in 2020, this is somewhat lower than the Yorkshire and the Humber region (77%) and the UK (78.5%). The baseline and high growth scenario both assume that

economic activity rates will increase over time at the UK and local level. This is particularly the case for older age groups, especially for women and relates to the rise in participation rates seen over time and the rise in state pension age which is likely to result in more older people working later in their lives.

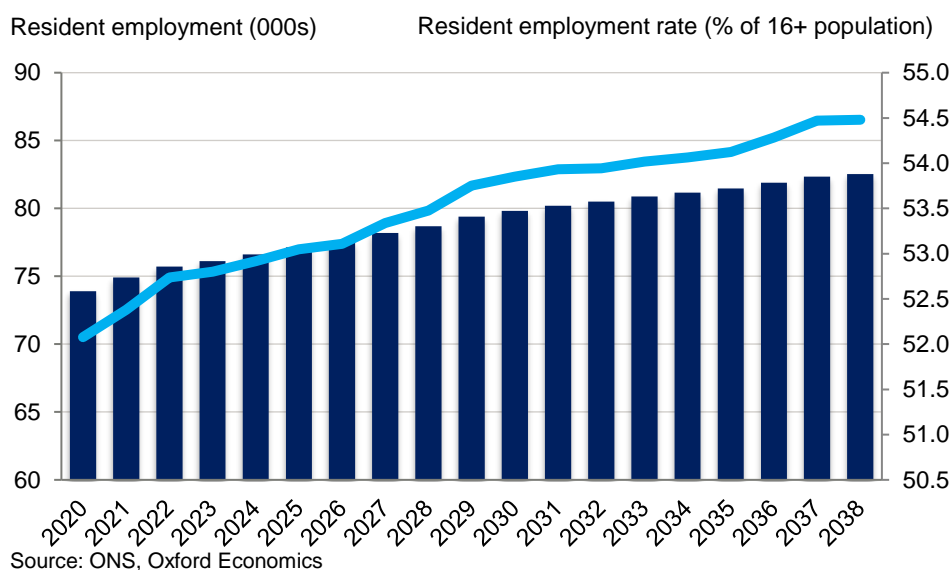
The assumptions in the model show economic activity rates for the working age population increasing from 74% in 2020 to 82% in 2038. As a result, the economically active population rises from 79,300 to 86,400 by 2038—an increase of 7,100.

Commuting and jobs

The next step is to assess the number of jobs that the labour force could support within the district. The approach does not attempt to model the jobs associated with the successful delivery of 396 homes per year nor does our analysis consider whether demand constraints would limit the extent that the labour force is fully utilised.

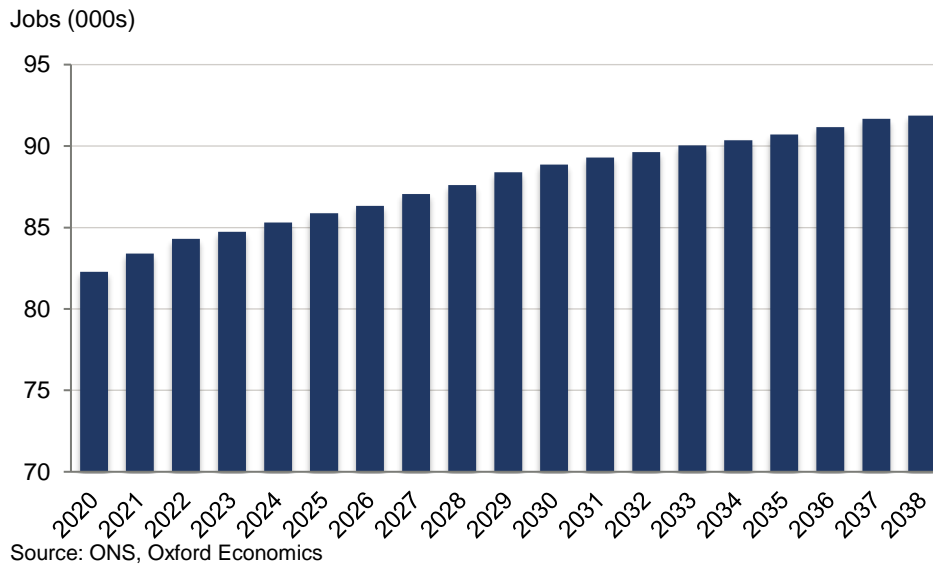
We assume that employment rates will rise over time and unemployment rates will fall over the local plan period. Unemployment rates fall from 6.5% in 2020 to 4.5% in 2038. Accordingly, resident employment rises from 73,900 to 82,500 in 2038 as increase of 8,600. The employment rate (resident employment / 16+ population) reaches 54.5% in 2038, up from 52.1% in 2020.

Fig. 10: Resident employment, North Lincolnshire, 2020 to 2038



The baseline data suggest that workplace jobs in North Lincolnshire have grown more quickly than resident employment over the last 10 years. We estimate that in 2020 there were more jobs in North Lincolnshire than there were residents in employment, with net commuting of over 8,000 or a commuting ratio of 1.1 (workplace jobs (people)/resident jobs)). Maintaining a commuting ratio of 1.1 over the plan period would result in 9,600 new workplace jobs in North Lincolnshire by 2038.

Fig. 11: Workplace jobs, North Lincolnshire, 2020 to 2038

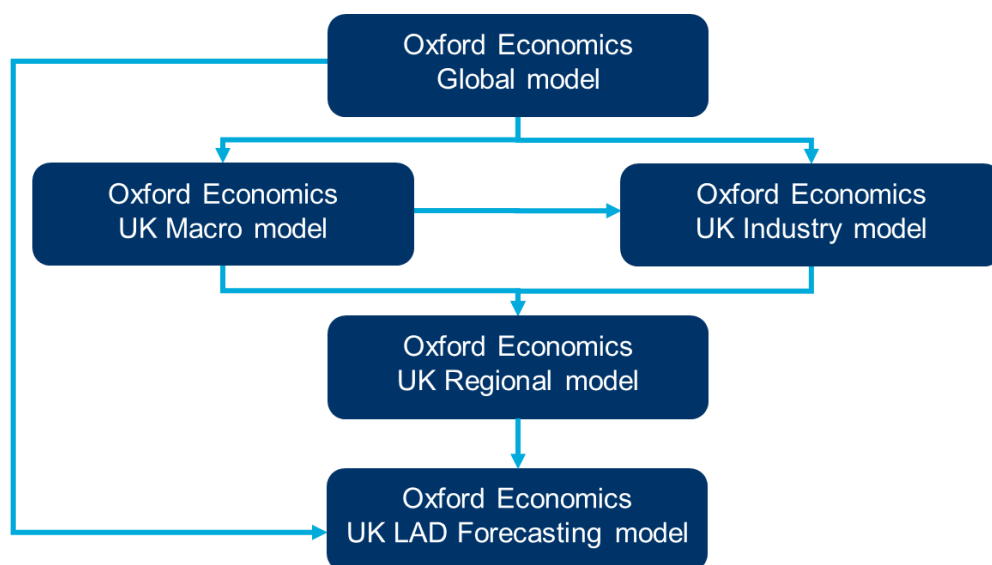


APPENDIX A: BASELINE FORECASTING METHODOLOGY

Local Authority District Forecasting Model

The baseline forecast is derived from Oxford Economics' Local Authority District Forecast Model. This model sits within a suite of forecasting models, a structure that ensures global and national factors (such as developments in the Eurozone and UK Government fiscal policy) have an appropriate impact on the forecasts at a local authority level.

Fig. 8: Hierarchal structure of Oxford Economics' suite of models



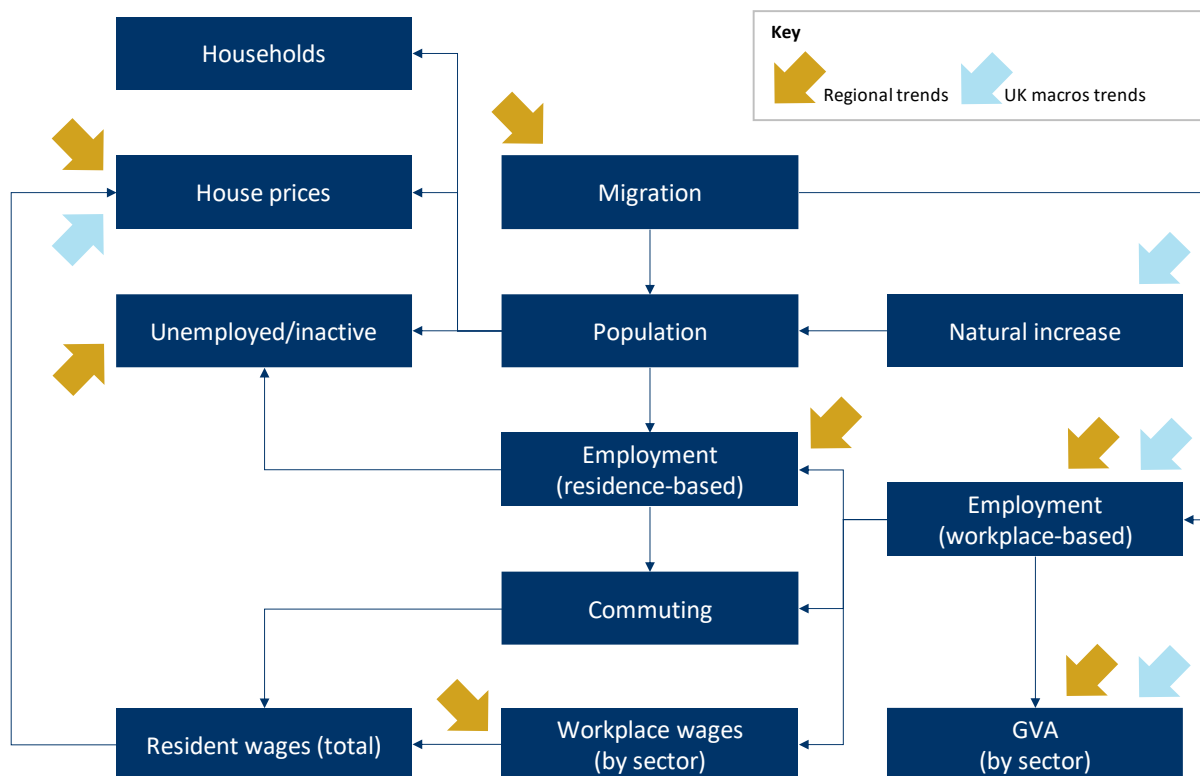
This empirical framework (or set of 'controls') is critical in ensuring that the forecasts are much more than just an extrapolation of historical trends. Rather, the trends in our global, national and sectoral forecasts have an impact on the local area forecasts. In the current economic climate this means most, if not all, local areas will face challenges in the short-term, irrespective of how they have performed historically. Our local forecasting model depends essentially upon three factors:

- National/regional outlooks: all the forecasting models we operate are fully consistent with the broader global and national forecasts which are updated on a monthly basis.
- Historical trends in an area/which implicitly factor in supply side factors (impinging on demand), augmented where appropriate by local knowledge and understanding of patterns of economic development built up over decades of expertise, and
- Fundamental economic relationships which interlink the various elements of the outlook.

The main internal relationships between variables are summarised in Fig. 2. Each variable is related to others within the models. Key variables are also related to variables in the other Oxford Economics models.

Sectoral structure is a key driver of the workplace-based employment outlook (jobs). Our baseline forecast estimates a decline in jobs across the North Lincolnshire economy over the plan period (to 2038), as the local economy is typically less well-represented in the types of sectors, such as information & communication and other business services, which we expect to drive growth across the UK.

Fig. 9: Main relationships between variables in the LAD Forecasting Model



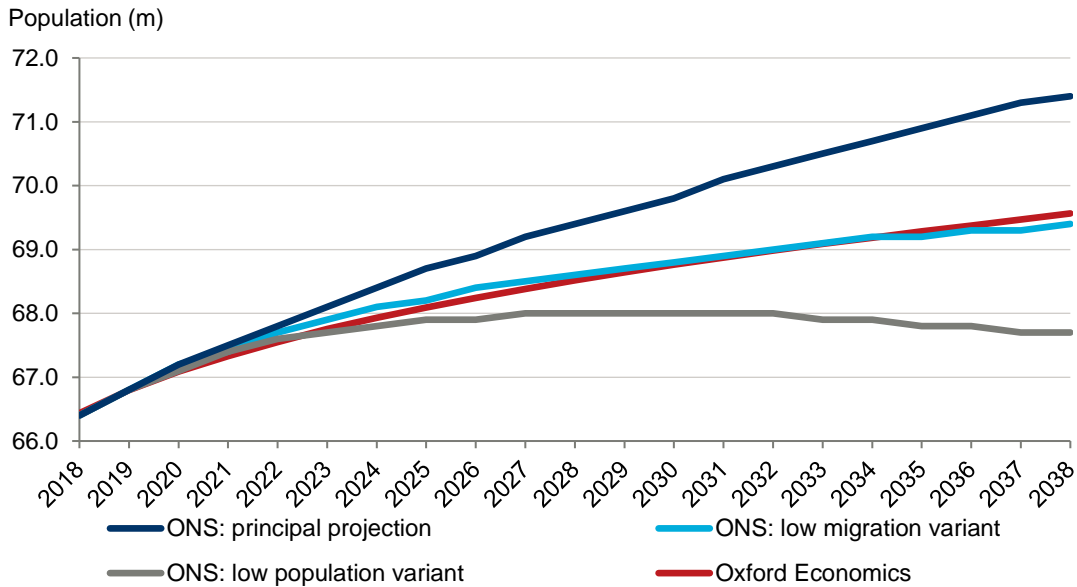
Population

While official population projections are largely an extrapolation of historical trends, population is a derived variable in our forecasting model (as highlighted in Fig. 2 above). The outlook for both population and households in the baseline forecast do not therefore necessarily align to official projections.

While the rate of births and deaths are taken from ONS projections, at a local level, migration is linked to the resident employment rate forecast: if the employment rate within an area is falling too fast, net in-migration slows as the model assumes fewer people would be attracted into this area to live, given weaker local employment prospects. This ensures a sensible relationship between economic and demographic variables.

Our net migration assumptions also vary from official projections at a national level. We expect levels of net migration to fall in the long run, as a reflection of the government’s policy to end free movement of labour, and actively reduce levels of immigration. We therefore expect net migration to fall to around 90,000 per year from the mid-2020s onwards. This is broadly similar to the scale of population growth in the ONS’ ‘low migration’ population projection variant.

Fig. 10: Population projections, UK, 2018 to 2038



Source: ONS, Oxford Economics

April 2022

All data shown in tables and charts are Oxford Economics' own data, except where otherwise stated and cited in footnotes, and are copyright © Oxford Economics Ltd.

This report is confidential to **North Lincolnshire Council** and may not be published or distributed without their prior written permission.

The modelling and results presented here are based on information provided by third parties, upon which Oxford Economics has relied in producing its report and forecasts in good faith. Any subsequent revision or update of those data will affect the assessments and projections shown.

To discuss the report further please contact:

Tim Lyne: tlyne@oxfordeconomics.com

Oxford Economics

4 Millbank, London SW1P 3JA, UK

Tel: +44 203 910 8000