

**Fylde Addendum 2: Analysis of
Housing Need in light of the 2012
Sub-National Household
Projections**

Fylde Borough Council

May 2015

Contents

1.	Introduction & Report Scope	1
2.	Introducing the 2012 SNHP	3
3.	Impact of the 2012 SNHP on previous modelling	5
4.	Examining Market Signals and Household Formation Rates	10
5.	Implications	29
Appendix 1: Model Outputs 2011 – 2030 (SHMA projection period)		35
Appendix 2: DCLG SNHP Headship Rate Analysis		36
Appendix 3: Edge Analytics: Data inputs, assumptions & methodology		38

Client

Fylde Borough Council

15 May 2015

1. Introduction & Report Scope

- 1.1 Turley in partnership with specialist demographic consultancy Edge Analytics completed a Strategic Housing Market Assessment (SHMA) for the Fylde Coast authorities of Blackpool, Fylde and Wyre in 2013, with the final report published in February 2014.
- 1.2 In November 2014 Turley and Edge Analytics published an 'Addendum' to the original 2013 SHMA to establish the implications of the 2012-based Sub-National Population Projections (SNPP), which were released in May 2014, on the conclusions of the 2013 SHMA, and in particular the range of objectively assessed need arrived at within the study. This study was titled '*Analysis of Housing Need in light of the 2012 Sub-National Population Projections*' and hereafter in this report is referred to as the Addendum 1 report.
- 1.3 The Addendum 1 report included the outputs of a re-modelling of a number of demographic and employment-led scenarios, as was undertaken within the 2013 SHMA, using the latest input assumptions from the 2012 SNPP as well as a number of other updates to modelling assumptions¹. This resulted in the generation of a range of updated population and household projections of need in each of the Fylde Coast authorities.
- 1.4 The Addendum 1 report recognised the anticipated release of the 2012 Sub National Household Projections (SNHP) by the DCLG². It was concluded that:

"The 2012 SNHP will include new headship rate (household formation rate) assumptions. These are anticipated for release in early 2015. Evidently as with all demographic datasets they will be subject to critique and may require local level analysis to understand the appropriateness of their application in the context of historic factors influencing their projection base (as per the PPG). We would suggest that this should form the basis of a separate future update."
- 1.5 The DCLG published the 2012 SNHP dataset on the 27th February 2015. The release of this dataset also prompted the Planning Practice Guidance (PPG) to be amended to recognise that the most recent Household Projections updated the 2011-based interim projections and represent the most up-to-date estimate of future household growth³. This report, in accordance with the recommendation of the Addendum 1 report, therefore seeks to consider the implications of the dataset on the analysis presented within both the 2013 SHMA and subsequent Addendum 1.
- 1.6 This report has been separately commissioned by Fylde Borough Council and is referred to as the 'Fylde Addendum 2' study. Turley and Edge Analytics were previously commissioned by Blackpool Council to assess the implications of the dataset recognising the timing of the release prior to the Core Strategy EiP in May 2015. The outputs of this assessment were separately presented in two published papers. It is

¹ A comparison of modelling assumptions is included in Table 6 of Appendix 1 to the 2014 Fylde Coast SHMA Addendum.

² Paragraph 7.31 1st bullet of the Addendum 1 report (November 2014)

³ http://planningguidance.planningportal.gov.uk/blog/guidance/housing-and-economic-development-needs-assessments/methodology-assessing-housing-need/#paragraph_016

anticipated that Wyre Borough Council will also be commissioning a similar study to update the analysis to take account of this dataset and updated employment land evidence.

- 1.7 As with the Addendum 1 report it is important to recognise that this report does not seek to represent a full update to the 2013 SHMA and should be read alongside the two preceding documents.
- 1.8 It is important to note when considering the modelling outputs presented in this report that the projection period for which results are presented has been changed to 2011 – 2032⁴ as opposed to 2011 – 2030 as presented in the 2013 SHMA and 2014 Addendum 1 documents. This reflects Fylde's Plan Period. For reference the outputs of the modelling for the period 2011 – 2030 are included at Appendix 1 to allow for direct comparison with modelling outputs previously presented.

Structure

- 1.9 This Addendum 2 adheres to the following structure:
- Section 2 – Introducing the 2012 SNHP: A short section introducing the dataset and methodological points of note.
 - Section 3 – Impact on the 2012 SNHP on previous modelling: Edge Analytics have re-modelled the scenarios presented within the Addendum 1 report using the household formation rates from the 2012 SNHP dataset. The outputs of this modelling are presented and compared against the previous presented modelling.
 - Section 4 – Examining market signals and household formation rates: Following the PPG the household formation rates within the 2012 SNHP are considered in detail. This is accompanied by an updated analysis of market signals in Fylde in order to understand the extent to which household formation rates are likely to have been constrained and the justification / rationale for an upward adjustment to modelled projections of need.
 - Section 5 – Implications: The final section succinctly draws together the analysis presented and explains the implications for the conclusions around the OAN in Fylde as reached in the 2013 SHMA and Addendum 1. It is noted that the analysis in this report has been limited to Fylde. The 2013 SHMA identified the Fylde Coast as a Housing Market Area and therefore the conclusions of this report will need to be considered and compared against the updated modelling prepared separately for Blackpool and Wyre.

⁴ As set out in Addendum 1 (paragraph 1.8) it is important to note that whilst the 2012 SNPP takes mid-2012 as the base point of the projections the modelling undertaken by Edge Analytics in this report, as with the Addendum 1, takes mid-2013 as its base with the population growth in 2012-13 period taken from the official ONS mid-year population estimates.

2. Introducing the 2012 SNHP

- 2.1 The PPG states that household projections published by DCLG should provide the 'starting point' for informing the OAN.
- 2.2 The 2012 sub-national household projections (SNHP) were released in February 2015, representing a full new official dataset published by DCLG.
- 2.3 For Fylde, the 2012 SNHP project an increase of 4,641 households over the period 2011 – 2032, equivalent to an average of 221 new households per annum over this period.
- 2.4 The 2012 SNHP is underpinned by the population growth projected under the 2012 sub-national population projections (SNPP), published by ONS. The 2012 SNPP was released in May 2014 and as set out in the Addendum 1 report provides the latest official benchmark for the analysis of population growth, taking full account of the results of the 2011 Census.
- 2.5 Prior to the release of the 2012 SNHP, the 2008 SNHP represented the latest full sub-national set of household projections, with the 2011 SNHP representing only an interim release with a ten year horizon.
- 2.6 The latest 2012 SNHP dataset includes a number of important updates on the previous interim 2011 SNHP, with the inclusion of the following new information⁵:
 - 2012-based SNPP by sex and age that extend to 2037 (rather than to 2021 as was the case in the 2011-based interim projections);
 - Household population by sex, age and relationship-status consistent with the 2011 Census (rather than estimates for 2011, which were derived from 2001 Census data, projections national trends, as used in the 2011-interim projections);
 - Communal population statistics by age and sex consistent with the 2011 Census (rather than the previous estimate, which were calibrated to the total communal population from the 2011 Census);
 - Further information on household representatives from the 2011 Census relating to aggregate household representative rates by relationship status and age;
 - Aggregate household representative rates at a local authority level, controlled to the national rate, based on the total number of households divided by the total adult population (rather than the total number of households divided by the total household population); and
 - Adjustments to the projections of the household representative rates in 2012 based on the Labour Force Survey (LFS).

⁵ DCLG (2015) Household Projections 2012-based: Methodological Report

- 2.7 The DCLG household projection methodology consists of two distinct stages. Stage One produces the national and local authority projections for the total number of households by age-group and relationship-status group over the projection period. All Stage One output and assumptions have been released by DCLG.
- 2.8 Stage Two provides the detailed 'household-type' projection by age-group, controlled to the previous Stage One totals. Seventeen different household types are typically included in household model outputs⁶. Stage Two assumptions and output, which provide the more detailed household-type statistics, have yet to be released by DCLG.
- 2.9 It is noted within the PPG that the DCLG anticipate updating the input assumptions to the dataset, which may have implications for the modelling presented within this report⁷. In addition, it is anticipated that the dataset will be subject to scrutiny by the Planning Inspectorate through the consideration of evidence base reports at Local Plan Examinations, and it is therefore considered advisable that the Council monitor any updates and interpretation of this dataset and its implications for the analysis presented in this SHMA report.
- 2.10 In the following section of this report, the Stage One 2012-based data is used to provide the basis for the evaluation of the impact of the 2012-based DCLG model assumptions upon the household growth outcomes for Fylde of the scenarios presented within the Addendum 1 report.

⁶ These are listed at Table 1 of Appendix 1 to the Addendum 1 report.

⁷ http://planningguidance.planningportal.gov.uk/blog/guidance/housing-and-economic-development-needs-assessments/methodology-assessing-housing-need/#paragraph_016

3. Impact of the 2012 SNHP on previous modelling

3.1 Edge Analytics have used the POPGROUP model to run additional scenarios of population and household growth for Fylde Council. This modelling has involved applying the headship rate data within the 2012 SNHP to the population projection modelling presented in the Addendum 1 report.

3.2 This section presents the outputs of this modelling but firstly setting it in the context of the approach adopted in the 2013 SHMA and 2014 Addendum 1 reports.

Household Headship Rates

3.3 The 2011 Census defines a household as:

“one person living alone, or a group of people (not necessarily related) living at the same address who share cooking facilities and share a living room or sitting room or dining area.”⁸

3.4 The DCLG household projections are derived through the application of projected household representative rates (also referred to as headship rates) to a projection of the private household population.

3.5 A household headship rate (also known as household representative rate) is the:

“probability of anyone in a particular demographic group being classified as being a household representative.”⁹

Approach to modelling Household Growth in the 2013 SHMA and Addendum 2

3.6 In the demographic analysis for the SHMA and the Addendum 1, the household and dwelling growth outcomes were modelled and presented using both the 2011 Interim SNHP headship rates and the 2008 SNHP headship rates. This led to two alternative household-growth outcomes for each projection of population growth.

3.7 The SHMA 2013 highlighted the importance of not basing future projections of household growth solely on the 2011 SNHP headship rates, recognising concerns that these projected forward a continuation of a suppressed position reflecting an unprecedented set of market and economic conditions nationally, as well as the limitations of the underpinning 2011 SNPP population projections¹⁰.

⁸ <http://www.ons.gov.uk/ons/guide-method/census/2011/census-data/2011-census-user-guide/glossary/index.html>

⁹ Household Projections 2012-based: Methodological Report. Department for Communities and Local Government (February 2015). <https://www.gov.uk/government/statistics/2012-based-household-projections-methodology>

¹⁰ Further detail is set out in the section titled 'household projections' within Section 7 of the 2013 SHMA. At paragraph 7.35 of the SHMA the challenges of projecting forward on the basis of a continuation of trend using either dataset is highlighted: 'Evidently the period to 2008 represented a comparatively buoyant period in the housing market with derived rates therefore not taking account of the unprecedented economic conditions that have occurred since 2008. Equally, the fact that these are unprecedented conditions also means that taking a 2011 base point has the inherent

- 3.8 A mid-point (average) between the two alternative household growth outcomes for each scenario was presented by Edge Analytics. This provided a balanced position regarding the different historically derived trends implied by both household growth outcomes¹¹ reflecting the uncertainty over future rates of household formation and the limitations of the 2011-based interim household projection model¹².

Using the 2012 SNHP dataset

- 3.9 Edge Analytics have applied the 2012-based SNHP household headship rates to inform the analysis presented in this report.
- 3.10 In all the scenarios presented, as with those presented in the Addendum 1 report using 2008 and 2011 headship rates, a dwelling vacancy rate of 6.6% (derived from the 2011 Census) has been applied.
- 3.11 As with the modelling in the SHMA and Addendum 1 report and as consistent with the DCLG approach to modelling household projections in translating population into households the number of people living in private households i.e. removing the 'communal population' has been modelled. The projections presented in this section use the updated 'communal population' statistics (i.e. the population not living in households). The communal population is similar to that used in the scenarios presented in the Addendum 1 report, using 2008 and 2011 headship rate assumptions, but its age and sex profile is consistent with the 2011 Census output.
- 3.12 In POPGROUP, the 2012-based headship rates are defined by age, sex and relationship status. These rates therefore determine the likelihood of a person of a particular age-group, sex and relationship status being head of a household in a particular year, given the age-sex structure of the population.

Comparison of DCLG Household Projections

- 3.13 In the context of the methodology set out in the PPG, it is considered useful to compare and contrast the variant headship rate assumptions proposed within these datasets, recognising that they span different economic conditions. It is, however, important in this context to recognise that – in line with the PPG – the 2012 SNHP are *'the most up-to-date estimate of future household growth'*¹³.
- 3.14 The different DCLG SNHP datasets evidently are all underpinned by different levels of population growth, as considered within the Addendum 1 report, however, in order to highlight the impact of assumptions around the formation of households in the datasets the following chart shows the different projected assumptions around household size in each dataset.

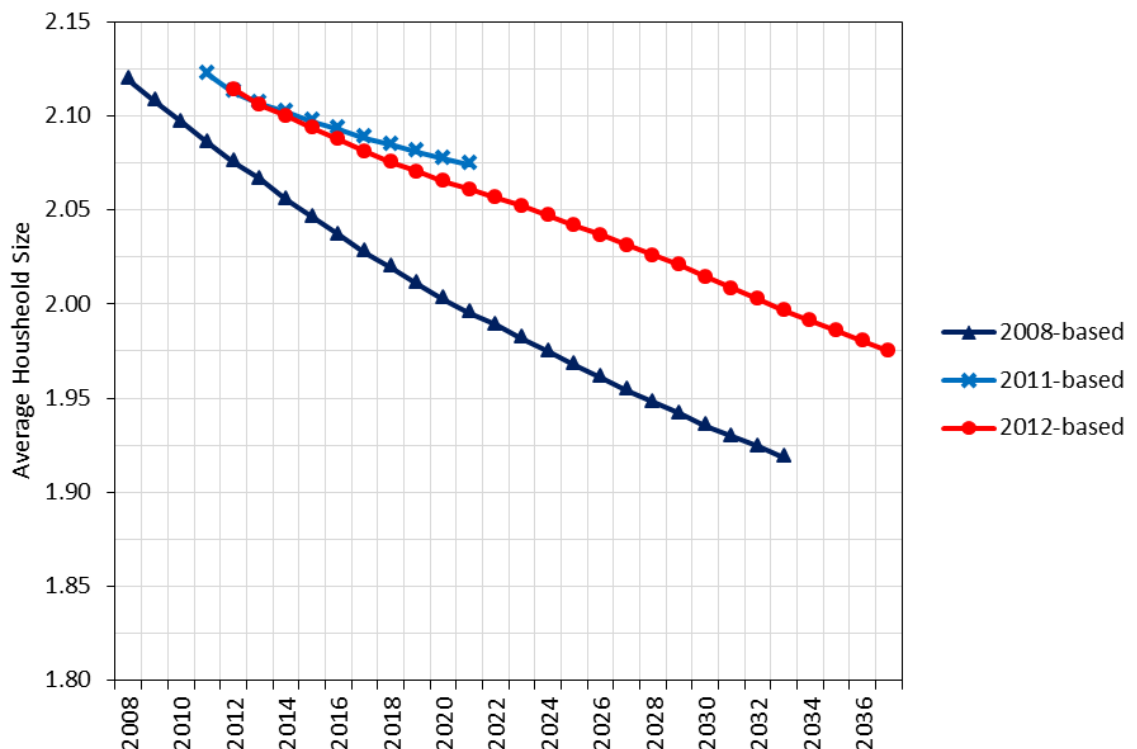
weakness of projecting forward the current market conditions [footnote reference to analysis in section 5 of the SHMA]/ position over the long term."

¹¹ Paragraph 7.44 of the 2013 SHMA

¹² As the Edge Analytics 2015 report identifies this has been recognised as a 'logical approach' through a recent EiP examination (paragraph 4.13)

¹³ http://planningguidance.planningportal.gov.uk/blog/guidance/housing-and-economic-development-needs-assessments/methodology-assessing-housing-need/#paragraph_016

Figure 3.1: Average household size under the 2008-based, 2011-based and 2012-based household Projection models



Source: DCLG, Edge Analytics, 2015

- 3.15 All three of the household projections models expected the average household size in Fylde to fall over the respective projection periods.
- 3.16 Under the 2008-based household projection model, household size was projected to decrease from 2.12 to 1.92 over the 2008 – 2033 period. Evidently the projected fall in household size in this dataset between 2008 and 2011 was not realised on the basis of the 2011 Census results, with household size only falling to 2.11 by 2011.
- 3.17 The 2011-based model also projected a fall from approximately 2.11 to 2.07 over the ten year projection period of the dataset 2011 – 2021.
- 3.18 The 2012-based household model projects a fall from 2.11 to 1.98 over the 2012 – 2037 period. This scale of projected fall sits between the two preceding household models.

Introducing the updated projections of Household Growth

- 3.19 As stated in the introduction to this report the Addendum 1 report presented a range of modelled projections of population and household growth scenarios to respond to the PPG methodology.
- 3.20 This included the integration of the latest ONS demographic data in terms of both the 2012 SNPP dataset and the ONS Mid-Year Population Estimates (MYEs). This led to the production of a range of demographic projections of growth based on a longer-term historic period (10 years) and also variant projections including and excluding the

Unattributable Population Change (UPC) component¹⁴. The report also presented updated employment-led scenarios aligning job growth to population via differing levels of migration. These scenarios used the latest input labour-force assumptions as well as common demographic inputs from the 2012 SNPP but did not seek to update the input forecast levels of job growth with these retained from the 2013 SHMA.

- 3.21 The modelling presented within this report has retained all of the assumptions used within the Addendum 1 report with the exception of the headship rate assumptions applied in converting projected population growth into household growth and subsequently estimated need for dwellings.

2012 SNHP Headship Rate Scenarios

- 3.22 Figure 3.2 shows the outputs of the updated modelling produced by Edge Analytics.

Figure 3.2: Updated Scenarios modelled using the 2012 SNHP Headship Rate Assumptions: 2011 - 2032

Scenario	Change 2011–2032				Average per year	
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings
Employment -led (Oxford Economics)	14,437	19.0%	8,567	24.5%	991	437
Employment -led (AECOM Policy On)	14,135	18.6%	8,421	24.0%	980	429
Migration-led 10 Year (X)	9,879	13.0%	7,056	20.1%	802	360
Migration-led 10 Year	8,775	11.5%	6,027	17.2%	735	307
Employment -led (Experian)	8,461	11.1%	5,933	16.9%	724	303
SNPP-2012	5,667	7.4%	4,641	13.2%	596	237

Source: Edge Analytics, 2015

Comparing the Scenarios with Addendum 1 Outputs

- 3.23 As identified above in the demographic analysis for the 2013 SHMA, the household and dwelling growth outcomes of each scenario were presented as separate outputs (or alternative model runs), using headship rates from the 2008-based and the 2011-based interim household projection models.
- 3.24 In light of uncertainty over future rates of household formation, and the differences between the 2008-based and 2011-based household projection models, Edge Analytics presented an average of the two different dwelling requirements derived using the 2008-

¹⁴ A full consideration of UPC in the context of the three Fylde Coast authorities is included at paragraphs 3.9 – 3.13 of the Addendum 1 (2014) report.

based and 2011-based headship rates. This provided a 'mid-point' between the alternative dwelling growth outcomes¹⁵.

- 3.25 The following table compares the modelled annual average need for dwellings under the entire different headship rate variants produced, including the 'mid-point' figures presented in the conclusions of the Addendum 1 for each of the scenarios. In order to show consistency with the results presented in the Addendum 1 report the projection outputs are presented over the time period 2011 – 2030.

Figure 3.3: Average annual modelled need for housing under the 2008-based, 2011-based and 2012-based headship rates: 2011 - 2030

Scenario	Average annual need for dwellings 2011–2030			
	Interim 2011 Headship Rates	2008 Headship Rates	Mid-point or average of 2011 / 2008 outputs	2012 Headship Rates
Employment -led (Oxford Economics)	398	471	434	437
Employment -led (AECOM Policy On)	390	463	427	429
Migration-led 10 Year (X)	316	385	351	360
Migration-led 10 Year	272	339	306	307
Employment -led (Experian)	268	335	302	303
SNPP-2012	204	269	236	237

Source: Edge Analytics, 2015

- 3.26 It is apparent from the data presented in Figure 3.3 that under the 2012 SNHP headship rates, the dwelling requirements are higher than the 2011 Interim headship rates but lower than the 2008 headship rates. In all cases the projected estimates of dwelling need are within the range suggested by the outcomes of the two headship rate variants presented in the Addendum 1 report.
- 3.27 Indeed the 2012 headship rate outputs of the model for all scenarios in Fylde align very closely with the mid-point figures which were used in the presentation of outputs in the Addendum 1 report.

¹⁵ This approach has been routinely used previously by Edge Analytics and is one that is considered to be appropriate given the uncertainties involved in selecting a definitive set of household formation rate assumptions.

4. Examining Market Signals and Household Formation Rates

- 4.1 Fylde Borough Council in assembling their evidence to underpin the development of housing policies within the emerging Local Plan have updated a number of the elements of analysis around the active market than that presented within the 2013 SHMA. This has been structured around the market signals indicators identified within the PPG.
- 4.2 This section presents analysis under each of the market signals indicators drawing upon the evidence assembled by Fylde Council and complementing it as appropriate where further data has been identified.
- 4.3 This provides an important context for considering the underlying household formation rates in the 2012 SNHP dataset in recognition of the need to assess the extent to which they have been influenced historically by the operation of the market. This is asserted as an important methodological step in the PPG:

“The household projection-based estimate of housing need may require adjustment to reflect factors affecting local demography and household formation rates which are not captured in past trends. For example, formation rates may have been suppressed historically by under-supply and worsening affordability of housing. The assessment will therefore need to reflect the consequences of past under delivery of housing. As household projections do not reflect unmet housing need, local planning authorities should take a view based on available evidence of the extent to which household formation rates are or have been constrained by supply.”¹⁶

- 4.4 The section therefore considers in detail the household formation rates by individual age groups by age, comparing them against the national picture.

Market Signals Analysis

- 4.5 The PPG highlights the importance of taking market signals into account when assessing housing need, given that they provide an indication of the balance between demand and supply. This is particularly important to consider given the significant and well-documented changes in the housing market over recent years, which were exacerbated by the economic downturn and subsequent issues in obtaining mortgage finance.
- 4.6 The PPG states:

“The housing need number suggested by household projections (the starting point) should be adjusted to reflect appropriate market signals, as well as other market indicators of the balance between the demand for and supply of dwellings. Prices or

¹⁶ http://planningguidance.planningportal.gov.uk/blog/guidance/housing-and-economic-development-needs-assessments/methodology-assessing-housing-need/#paragraph_015

rents rising faster than the national/local average may well indicate particular market undersupply relative to demand.”¹⁷

4.7 Six market signals are identified for review in the PPG:

- **House prices** – assessing proportionate levels of inflation as an indicator of long-term imbalances between supply and demand;
- **Rents** – consideration of rental values as an indicator of long-term imbalances between supply and demand;
- **Affordability** – comparing house prices against residents’ ability to pay;
- **Rate of development** – assessing the rate at which development has kept pace with planning targets, in order to establish whether a position of backlog or undersupply exists which should be addressed through future provision;
- **Land prices** – identification of price premiums as an indicator of demand for land relative to supply; and
- **Overcrowding** – considering changing levels of overcrowding, concealed and shared households, homelessness and numbers in temporary accommodation, as an indicator of undersupply.

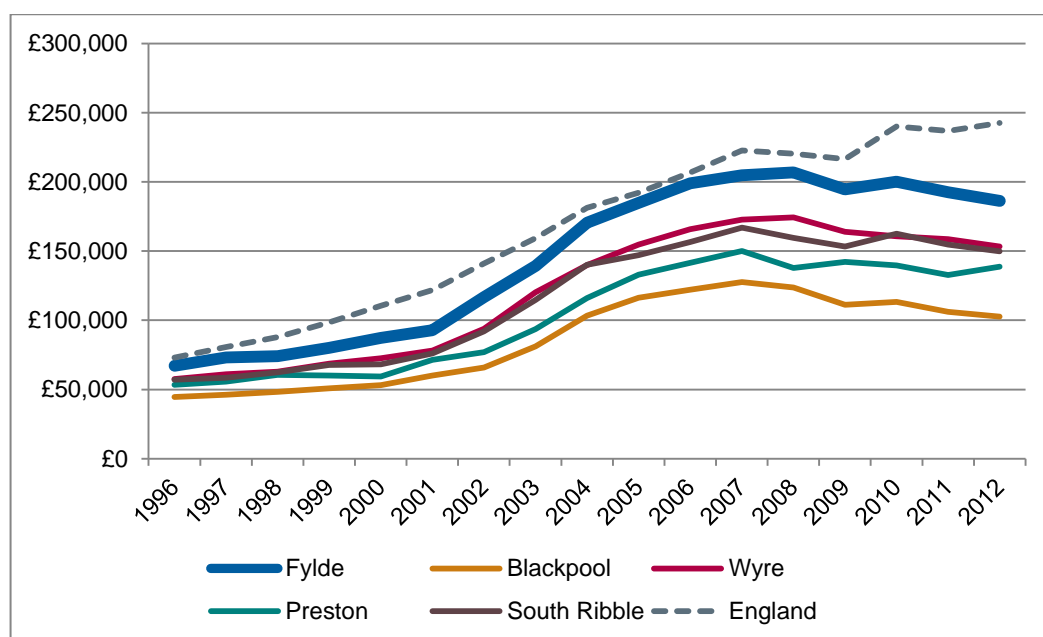
4.8 Each of these factors is considered in turn below, building upon the analysis within the SHMA and subsequent evidence prepared by the Council. Section 6 of the SHMA considered active market evidence, which included a number of the market signals indicators since introduced in the PPG. This includes house prices (Figures 6.1 – 6.6), affordability (Figures 6.9 and 6.10) and rents (Figures 6.7 and 6.8). The analysis in Section 4 of the SHMA also considered other market signals, including overcrowding (Figure 4.10), rates of development (Figures 4.6 and 4.7) and vacancy (Figures 4.8 and 4.9).

House Prices

4.9 The PPG states that longer term increases in house prices can be indicative of an imbalance between supply and demand. DCLG provides information on mean house prices – based on Land Registry data – enabling the analysis of long-term house price trends. The graph below shows how mean house prices have changed since 1996, with England and neighbouring authorities also shown for context.

¹⁷ http://planningguidance.planningportal.gov.uk/blog/guidance/housing-and-economic-development-needs-assessments/methodology-assessing-housing-need/#paragraph_019

Figure 4.1: Change in Mean House Prices 1996 – 2012



Source: DCLG, 2015

- 4.10 As highlighted in the SHMA, house prices in Fylde have historically been higher than neighbouring authorities but lower than the national average. Prior to 2008 Fylde saw a steep growth with average values coming close to the national average. Since 2008, however, prices have fallen consistently, as they have done in neighbouring areas, with this contrasting to a national picture which has seen a modest uplift in prices over this period.
- 4.11 Data published by DCLG covers a period to 2012, and – given the continued national recovery in the housing market – it is important to consider the latest available data to understand more recent house price trends. The following table uses Land Registry data to calculate the mean price paid in Fylde, neighbouring authorities and England in the calendar years of 2001 and 2014.

Figure 4.2: Change in Mean House Prices 2001 – 2014

	2001	2014	% Change
England	£121,768	£264,350	117.1%
South Ribble	£75,925	£164,038	116.1%
Fylde	£93,028	£200,811	115.9%
Preston	£67,759	£138,677	104.7%
Wyre	£78,641	£159,373	102.7%
Blackpool	£53,836	£107,311	99.3%

Source: Land Registry, 2015

- 4.12 Fylde has seen a rate of house price growth between 2001 and 2014 which has exceeded other authorities in the Fylde Coast housing market area, although slightly lower than neighbouring South Ribble. Compared to the national level of growth Fylde has still seen a lower level of growth in prices over this period, although the data suggests that the local market has been more positive over recent years when compared to the trends up to 2012.
- 4.13 While the analysis above focuses on mean house prices, it is also beneficial to consider the cost of housing at entry level, given that disproportionate growth in lower value housing can constrain the ability of newly forming households to access housing. The following table therefore compares lower quartile house prices in 2001 and 2014, with the rate of growth shown for Fylde, neighbouring authorities and England.

Figure 4.3: Change in Lower Quartile House Prices 2001 – 2014

	2001	2014	% Change
England	£54,000	£133,500	147.2%
South Ribble	£48,750	£116,000	137.9%
Preston	£37,500	£85,000	126.7%
Fylde	£56,000	£125,000	123.2%
Wyre	£51,000	£105,000	105.9%
Blackpool	£37,500	£76,000	102.7%

Source: Land Registry, 2015

- 4.14 As shown, lower quartile house prices in Fylde have again grown to a greater extent than seen in Blackpool and Wyre, but the scale of growth falls below that seen in Preston and South Ribble. It has also increased at a notably lower rate than the national rate.

Rents

- 4.15 The PPG suggests that the rental market should also be considered as a market signal, with longer term changes in rental levels indicative of a potential imbalance between the demand for and the supply of housing.
- 4.16 Data published by the Valuation Office Agency (VOA) collates information provided by private rental landlords, with the latest available data covering the period from October 2013 to September 2014. This includes both lower quartile and mean rents to show the cost of rental properties. This can be compared against the first comparable dataset released by the VOA – which covered the year to June 2011 – to show how rents have changed in Fylde, neighbouring authorities and England.
- 4.17 This is summarised in the following table, initially for mean rents.

Figure 4.4: Change in Mean Rents 2010/11 – 2013/14

	2010/11	2013/14	Change
Preston	£432	£495	14.5%
England	£694	£742	7.0%
South Ribble	£548	£578	5.6%
Fylde	£576	£583	1.2%
Wyre	£569	£555	-2.5%
Blackpool	£513	£495	-3.6%

Source: VOA, 2014

- 4.18 Mean rents have seen a very modest increase in Fylde over the period shown. This contrasts with the other Fylde Coast authorities where there has been a decline in average rents. The scale of growth falls below that seen in South Ribble and – most notably – Preston, and also falls significantly below the national average.
- 4.19 Again, it is beneficial to also consider change in lower quartile rents in order to illustrate growth at the lower end of the market, which could have implications for newly forming households. This is summarised in the following table.

Figure 4.5: Change in Lower Quartile Rents 2010/11 – 2013/14

	2010/11	2013/14	Change
Preston	£260	£395	51.9%
England	£450	£475	5.6%
South Ribble	£495	£495	0.0%
Fylde	£450	£450	0.0%
Wyre	£495	£475	-4.0%
Blackpool	£425	£390	-8.2%

Source: VOA, 2014

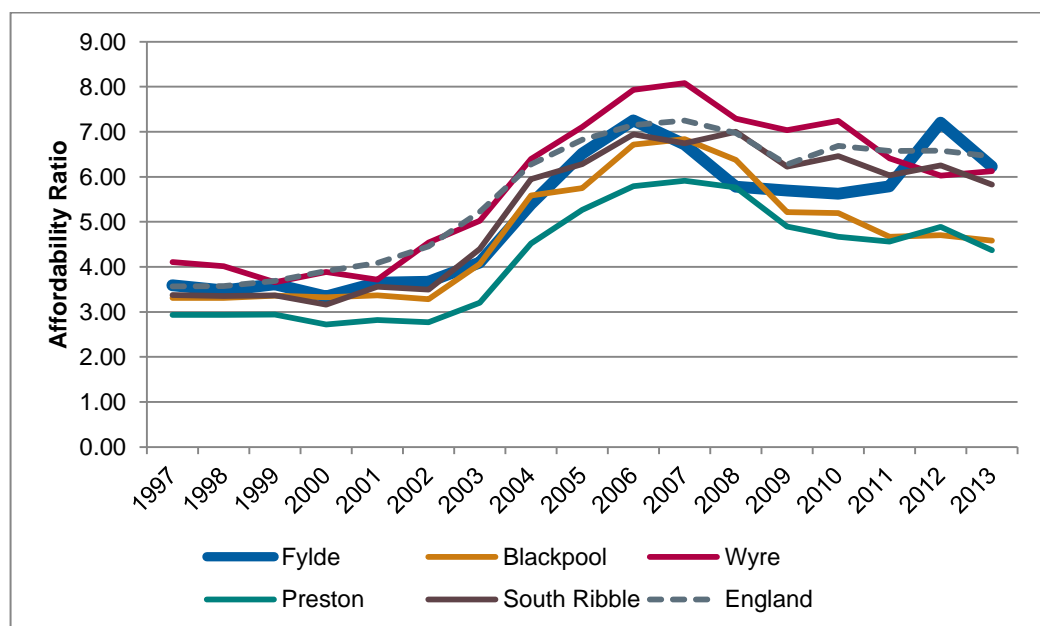
- 4.20 Lower quartile rents have been static in Fylde over the period shown, with Preston again seeing the greatest scale of increase and the other Fylde Coast authorities again seeing a decline in rental values. Fylde and all of the comparison areas contrast significantly with the national picture which has seen lower quartile rents increase by over 50% over this period.

Affordability

- 4.21 The PPG states that an assessment of the relative affordability of housing within an area should be undertaken, through a comparison of the cost of housing and the ability of households to pay.

- 4.22 Nationally, the housing market has undergone significant change in recent years, with the recent economic downturn constraining the availability of mortgage finance. First time buyers – and those households purchasing at the height of the market – now find themselves in a much more challenging position when looking to either buy a home or move home. Many younger households are increasingly turning to parents for deposit contributions, or looking to alternative housing products with lower immediate financial requirements.
- 4.23 Nationally, this has resulted in a considerable reduction in the number of residential transactions – which has been mirrored in the Fylde Coast, as shown in the SHMA – with many households either saving for a deposit, deciding to remain in their current home due to economic insecurity or looking to the social rented or private rented sector as an alternative option.
- 4.24 The impact of rising house prices on affordability of homes in Fylde is illustrated in the following graph, which shows the ratio of lower quartile house prices to lower quartile earnings.

Figure 4.6: Ratio of Lower Quartile House Price to Earnings (1997 – 2013)



Source: DCLG, 2015

- 4.25 Overall, the affordability ratio in Fylde has been lower than the national rate, suggesting that households typically pay less – relative to income – than the national profile. The dataset does suggest, however, that ratios in Fylde increased quite sharply between 2011 and 2012, suggesting a worsening of affordability, and the latest data suggests that the borough is now relatively less affordable than Wyre. This represents a divergence from the historic trend. It will be important to monitor this position in the future as evidently the following year suggests a return to a ratio which is lower than the national average and comparable to Wyre.

- 4.26 When assessing the rate of change in the affordability ratio, it is clear – as shown in the following table – that Fylde has seen a change in the relationship between lower quartile house prices and income which exceeds that seen in the other Fylde Coast authorities and the other comparative neighbouring authorities. The proportionate increase in the affordability rate still falls below the change seen nationally however.

Figure 4.7: Change in Affordability Ratio 1997 – 2013

	1997	2013	Change
England	3.57	6.45	80.9%
Fylde	3.59	6.22	73.2%
South Ribble	3.37	5.83	72.8%
Wyre	4.10	6.12	49.2%
Preston	2.93	4.37	49.0%
Blackpool	3.31	4.59	38.4%

Source: DCLG, 2015

Affordable Housing Need

- 4.27 The 2013 SHMA included an assessment of the need for affordable housing, suggesting that there was a relatively small backlog of need in Fylde, with the majority of future need newly arising. The analysis within the SHMA suggested that there was a net annual affordable housing need for 207 affordable homes per annum over the initial five years of the plan period, falling to 204 per annum once the backlog was cleared.
- 4.28 A key component of this calculation is the annual gross household formation rate, which was updated in the 2014 Addendum 1 report to take account of the 2012-based population projections. This resulted in an increase to the overall net annual affordable housing need, from 207 to 249 per annum.
- 4.29 The absence of the Stage 2 outputs of the 2012 SNHP dataset, as set out in section 2 of this report, represents a challenge in providing a comparable update using the latest headship rate data. It is of note that as set out in section 3 there is a strong alignment between the resultant household formation levels derived from the 2012 SNHP and the 'mid-point' position adopted in the SHMA. This would suggest that any adjustment would be less likely to be significant. This will, however, need to be considered further following subsequent releases of data by the DCLG which will allow for a comparable level of analysis and update.

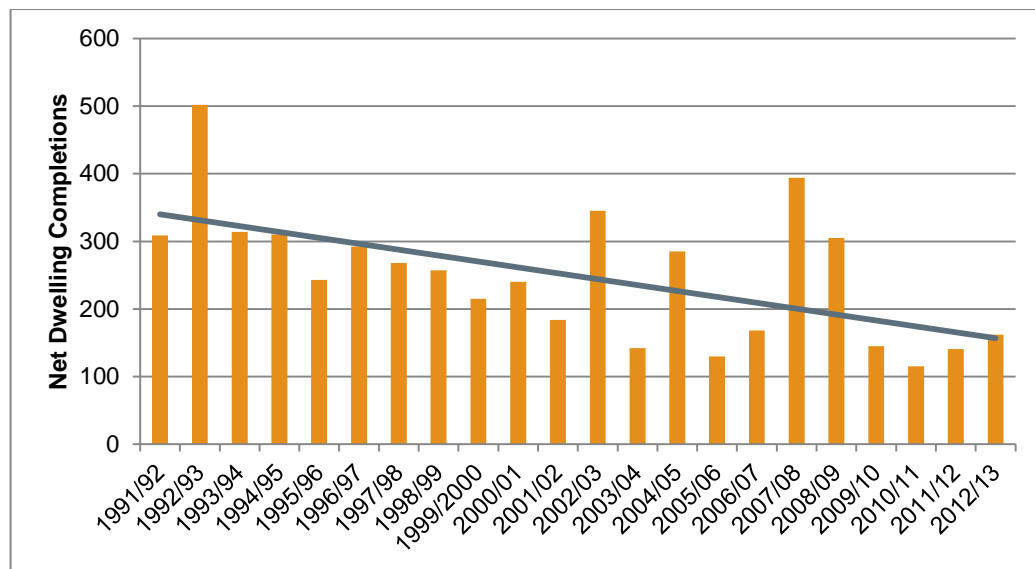
Rate of Development

- 4.30 The PPG suggests that the recent supply of new dwellings should be analysed in order to identify any shortfalls against planned provision as an indicator of previous under-delivery. The PPG states that:

“If the historic rate of development shows that actual supply falls below planned supply, future supply should be increased to reflect the likelihood of under-delivery of a plan.”¹⁸

- 4.31 Monitoring undertaken by the Council allows net completions to be analysed over a long-term period from 1991, and this is illustrated in the following graph. A trend line has also been overlaid.

Figure 4.8: Net Completions 1991/92 – 2012/13



Source: Fylde Borough Council

- 4.32 Evidently, there has been a long-term fall in the rate of net completions in Fylde, with an average of around 199 net dwellings completed annually over the past decade compared to 248 net dwellings per annum over the whole period shown. In 2007/08 – 2008/09 the authority did, however, see comparatively strong rates of development, exceeding 300 units in both years a level which was only surpassed in one year previously prior to 1995.
- 4.33 Whilst it is likely that since 2008/09 the fall has at least in part been influenced by the impact of the recession, therefore reflecting a national picture, it is also important to recognise that – even before the recession – the rate of development fell below that seen in the 1990s. This is likely to be driven by a range of factors, including policy interventions in the form of the moratorium which was in place in the borough for a limited period of time.
- 4.34 It is noted that since 2010/11 the rate of development has increased, with this potentially linked to an increase in the number of commitments in the borough over this period. It is, though, important to note that Council monitoring data shows that completions expressed as a proportion of commitments has not increased, remaining at 7%. This suggests that although commitments have increased significantly, they are not necessarily being progressed through to.

¹⁸ http://planningguidance.planningportal.gov.uk/blog/guidance/housing-and-economic-development-needs-assessments/methodology-assessing-housing-need/#paragraph_019

- 4.35 In setting the above levels of completions in a planning context the Joint Lancashire Structure Plan set a requirement for 2,325 dwellings between 2001 and 2016. This suggests an average rate of 155 dwellings per annum, which was largely exceeded whilst the plan represented the adopted requirement. It is understood that this target remained in place until 2007/08, and this indicates that a surplus was accumulated relative to the target in the Structure Plan of 563 dwellings¹⁹.
- 4.36 The Structure Plan was replaced by the North West Regional Spatial Strategy (RSS) which was adopted in 2008. This established a requirement for the provision of at least 5,500 dwellings between 2003 and 2021, equivalent to 306 dwellings per annum. This target has only been met once – in 2007/08 – and indeed a backlog of 764 dwellings has accumulated from 2003 to 2011 against this target, which is the base date for the new Local Plan. It is important to reference that the Government announced in the 2010 that the RSS was to be revoked with this finally in place in 2013. However, taking the RSS figure as a the planned supply figure forward to the base date of the modelling undertaken by Edge Analytics (2012/13), would suggest that a backlog of 1,073 dwellings has been generated against the former RSS target.
- 4.37 It is important to acknowledge judgement from the High Court which asserted that the previous policy figure – in this case the RSS – should not be used to assess the existence of a backlog, noting:
- “...There was no methodological error in the way these competing estimates for the period 2011-2031 were drawn up by reason of the notional ‘shortfall’ in housing delivery between 2006 and 2011 by comparison with the average annual figure for additional housing indicated in the South East Plan... There was no reason whatever for a person in 2011 seeking to draw up a current estimate of population growth and housing requirements looking into the future from that date to 2031 and using up-to-date evidence to do so, to add on to the estimated figures any shortfall against what had been estimated to be needed in the first phase of the previously modelled period included in the South East Plan..”²⁰*
- 4.38 The judgement continues:
- “According to Mr Cahill’s suggestion, the modellers in 2011 should have begun by saying that there was a shortfall of 854 homes against a previous estimate and then should have added that on their own modelled estimates for new homes for 2011-2031 to produce the relevant total figure. In fact, none of them proceeded in that way, and rightly so. In my view, they would clearly have been wrong if they had tried to do so. Their own modelling for 2011-2031 is self-contained, with its own evidence base, and would have been badly distorted by trying to add in a figure derived from a different estimate using a different evidence base. That would have involved mixing apples and oranges in an unjustifiable way.”²¹*

¹⁹ Based on total completions between 2001/02 and 2007/08, compared to annual target of 155 dwellings in the Joint Lancashire Structure Plan over the same period

²⁰ Zurich Assurance Limited v Winchester City Council and South Downs National Park Authority, [2014] EWHC 758 (Admin) at [94] 18th March 2014

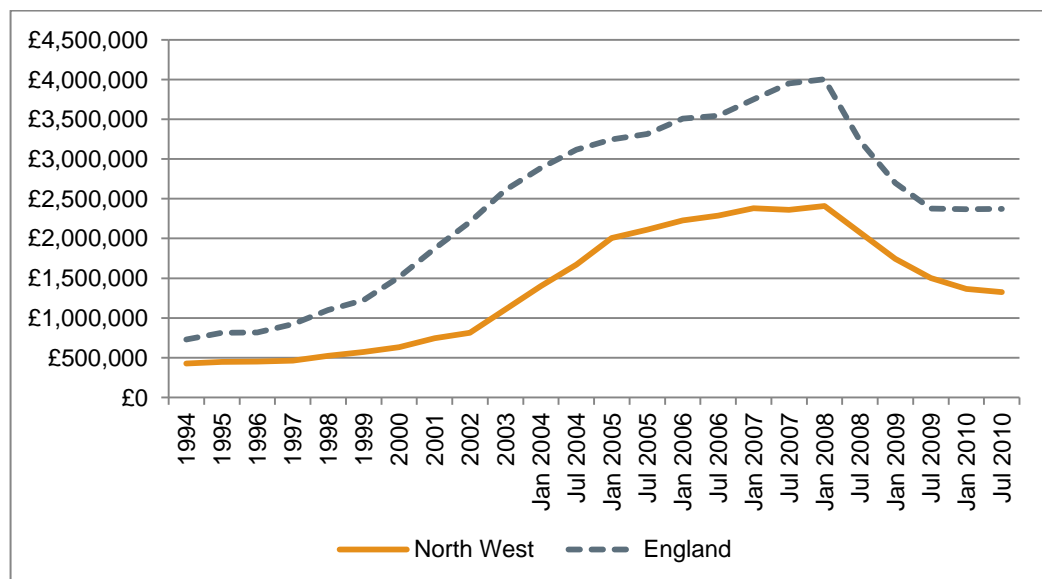
²¹ Ibid [95]

- 4.39 This suggests that a backlog against RSS targets should not simply be added on to projections of housing need, although the PPG does continue to suggest that the rate of development should be considered against planned targets when considering whether there is justification for uplifting from the 'starting point' of the official household projections (i.e. the 2012 SNHP). For Fylde, this suggests that the rate of development has consistently fallen below the planned target, which may have resulted in needs not being met and potentially restricted the formation of new households. This needs to be considered when analysing household projections which are based on historic trends over this period, given that they may project forward a constrained position.

Land Prices

- 4.40 The PPG notes that land prices are indicative of the demand for land relative to supply, with price premiums providing direct information on a shortage of land within an area.
- 4.41 Data published by DCLG shows the average valuation of residential building land with planning permission over the period from 1994 to 2010. This data is only available at a regional level, but nevertheless provides an indication of historic supply and demand in the wider North West. Land price trends are also presented for England to enable comparison.

Figure 4.9: Average Valuations of Residential Building Land with Outline Planning Permission



Source: DCLG, 2015

- 4.42 Historically, the value of residential building land with outline planning permission has been lower in the North West compared to England as a whole, although there was notable growth in values ahead of the recession. This dataset does not extend beyond 2010 due to a decline in market activity.
- 4.43 The discontinuation of these datasets means that it is challenging to understand how land values have recovered. DCLG have, however, recently published a report setting

out estimates of land value for policy appraisal²². This sets out an estimated value per hectare of a typical residential site in each local authority in England, and allows a comparison between estimated values in Fylde and its neighbours. A weighted average for England – excluding London – is also shown for context.

Figure 4.10: Estimated Value of Typical Residential Site

	Estimated value per hectare
Fylde	£2,688,000
England (excluding London)	£1,958,000
Preston	£1,756,000
Wyre	£1,594,000
Blackpool	£1,325,000
South Ribble	£963,000

Source: DCLG, 2015

- 4.44 This evidence suggests that residential land in Fylde is characterised by notably high values, which exceed the weighted average for England excluding London and also exceed all neighbouring authorities.
- 4.45 This does, however, deviate from the findings of a stakeholder workshop event held in 2013 to inform the Council's Viability Study, where landowners and developers felt that a land value of £1 million per hectare was appropriate.
- 4.46 Overall, therefore, there is conflicting evidence on whether there is a significant price premium on residential land in Fylde and the evidence does not provide a consistent or strong market signal indicator. Values should, however, continue to be monitored as further local information becomes available.

Overcrowding

- 4.47 The PPG suggests that indicators on overcrowding, concealed and sharing households, homelessness and the numbers in temporary accommodation should be analysed, given that they can be indicative of unmet need for housing.
- 4.48 The PPG states that:
- “Longer term increase in the number of such households may be a signal to consider increasing planned housing numbers”²³*
- 4.49 The SHMA includes an analysis of the proportion of households who have at least one fewer bedroom than required, based on the bedroom standard, and this shows that only 1.5% of households in Fylde are overcrowded. This is lower than the national average and the levels seen in the other Fylde Coast authorities.

²² DCLG (2015) Land value estimates for policy appraisal

²³ http://planningguidance.planningportal.gov.uk/blog/guidance/housing-and-economic-development-needs-assessments/methodology-assessing-housing-need/#paragraph_019

- 4.50 The PPG highlights the importance of considering change in overcrowded households, although – given that the number of bedrooms was not recorded in the 2001 Census – it is difficult to profile how the level of overcrowding has changed in Fylde over recent years. However, the Census in both 2001 and 2011 recorded an occupancy rating based on the number of rooms in a household, allowing an understanding of whether there has been an increase in the number of overcrowded households based on the room standard. This is presented in the following table, showing change in the number of households with at least one fewer room than required.

Figure 4.11: Number of Households Overcrowded (Rooms) 2001 – 2011

	2001	2011	% Change
England	1,457,512	1,928,596	32.3%
South Ribble	1,112	1,396	25.5%
Preston	3,536	4,292	21.4%
Fylde	1,337	1,348	0.8%
Wyre	1,593	1,603	0.6%
Blackpool	4,653	4,590	-1.4%

Source: Census 2011; Census 2001

- 4.51 Fylde has seen only a marginal increase in the number of households with at least one fewer bedroom than required, which has nevertheless exceeded the rates seen elsewhere in the Fylde Coast housing market area. This is significantly lower than the rates seen in South Ribble and Preston, or indeed the national average.
- 4.52 A further indicator of overcrowding and concealment is the number of families who are classified as concealed, given that they are a family reference person (FRP) but not a household reference person (HRP). This suggests that a family is not the main family in a household. The following table shows how the number of concealed families in Fylde, neighbouring authorities and England has changed between 2001 and 2011, based on Census data.

Figure 4.12: Change in Concealed Families 2001 – 2011

	2001	2011	% Change
England	161,254	275,954	71.1%
South Ribble	262	444	69.5%
Wyre	256	386	50.8%
Preston	558	814	45.9%
Blackpool	504	724	43.7%
Fylde	178	247	38.8%

Source: Census 2011; Census 2001

- 4.53 While the number of concealed families in Fylde has increased by 69, the proportionate increase falls below that seen in all neighbouring authorities, and is significantly lower than the national average. In 2011, 1.1% of families in Fylde were classified as concealed, which again falls below all of the comparator areas presented.

Summary and Implications

- 4.54 This section has drawn together evidence on market signals – as required by the PPG – in order to determine whether there is an imbalance between supply and demand in Fylde.
- 4.55 The PPG states that the rate of change is important to consider, and understanding how Fylde compares with neighbouring areas – and the national profile – provides valuable wider context. The following table therefore compares selected key market signals – where comparable data on change is available across this wider geography – to consider change in house prices, rents, affordability, overcrowding and concealed families. This brings together the analysis undertaken throughout this section.
- 4.56 A rank of 1 – coloured in orange – indicates that the area has the worst market signal relative to the other areas shown, while a rank of 6 – coloured in blue – suggests more favourable market signals.

Figure 4.13: Selected Market Signals Summary

	Fylde	Blackpool	Wyre	Preston	South Ribble	England
House prices						
Change (mean) 2001 – 2014	3	6	5	4	2	1
Change (LQ) 2001 – 2014	4	6	5	3	2	1
Rents						
Change (mean) 2011 – 2014	4	6	5	1	3	2
Change (LQ) 2011 – 2014	3	6	5	1	3	2
Affordability						
Change 1997 – 2013	2	6	4	5	3	1
Overcrowding						
Change 2001 – 2011	4	6	5	3	2	1
Concealed families						
Change 2001 – 2011	6	5	3	4	2	1

Source: Turley, 2015

- 4.57 Based on this table – and the analysis throughout this section – it is clear that change in market signals in Fylde has not been significantly worse than many neighbouring authorities or the national picture, ranking in an average position for most indicators. The evidence suggests that affordability has worsened to a relatively large extent – albeit less than seen nationally – while there has been very little growth in the number of concealed families, relative to the comparator areas.
- 4.58 Furthermore, the analysis within this section has shown that the rate of development has not met planned targets, resulting in the accumulation of a significant backlog against the housing targets in the RSS. As per the PPG, this may justify an uplift to the official household projections, which represent the ‘starting point’ for assessments of housing need. There is also evidence to suggest that there may be relatively high land prices in the borough, although this is unclear and does not align with earlier evidence produced by the Council.
- 4.59 Overall, therefore, while there is little evidence to suggest that there has been a significant worsening of market signals in Fylde, a modest uplift applied to the household projections could help to address affordability issues in the borough, and can ensure that a relatively constrained position – in terms of the backlog against planned supply – is not projected forward.

Assessing Headship Rates trends

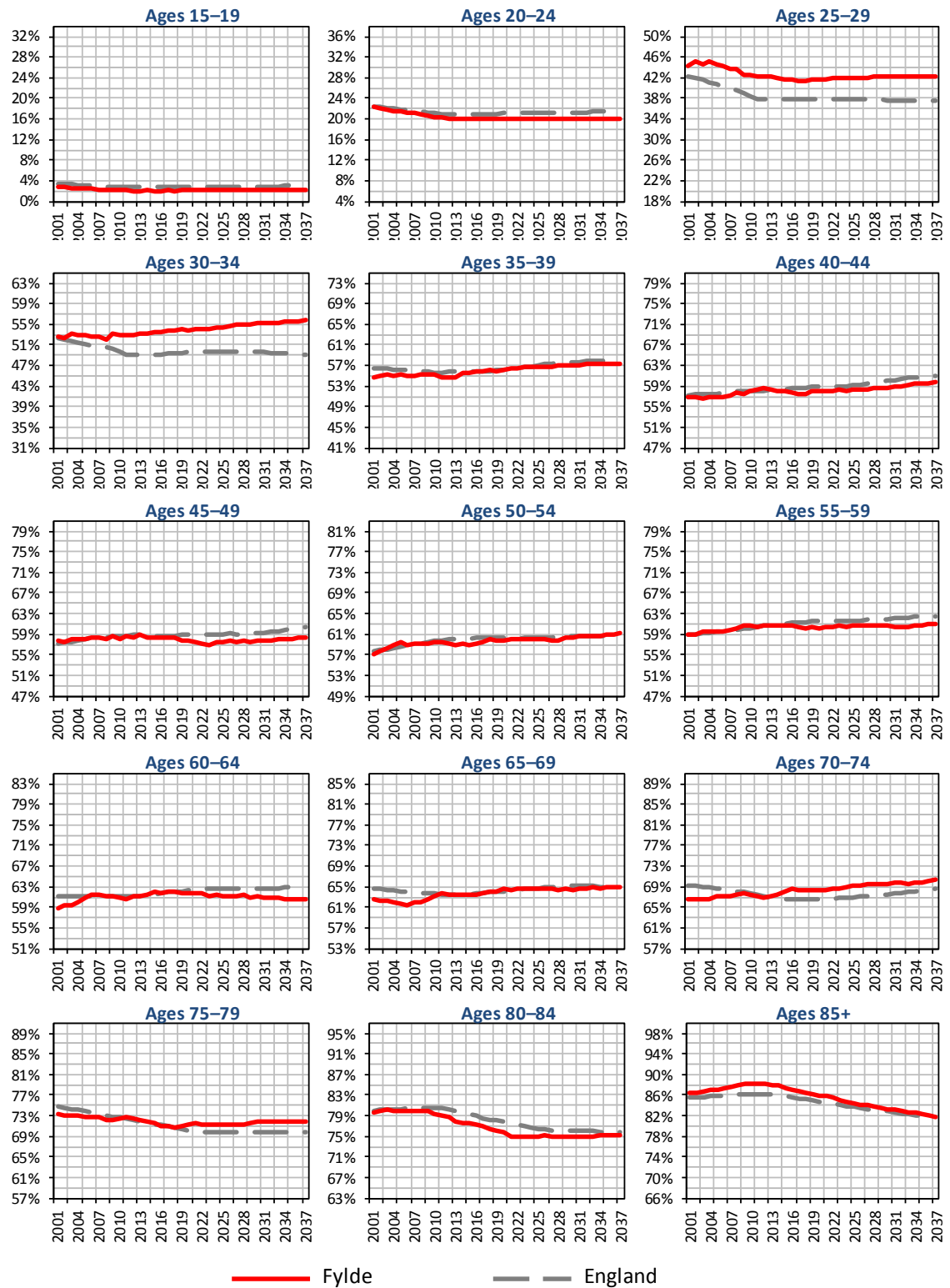
- 4.60 The DCLG 2012 SNHP methodological report confirms:

“At the present time the results from the Census 2011 show that the 2008-based projections were overestimating the rate of household formation and support the evidence from the Labour Force Survey that household representative rates for some (particularly younger) age groups have fallen markedly since the 2001 Census. However for this update, it has not been possible to include detailed data on Stage One household representative from the Census 2011.”

- 4.61 Whilst it is acknowledged that the DCLG will be publishing further modelling outputs to take account of further 2011 Census data it is important, in accordance with the PPG to assess how household formation rates have changed historically by individual age groups. Figure 3.2 presents the historic and projected household formation rates under the DCLG 2012 SNHP model for 5 year age groups for Fylde with the England figures included for context in the following charts.

Figure 4.14: Fylde and England: DCLG 2012-based Headship Rates

Fylde and England: DCLG 2012-based Headship Rates



Source: DCLG, Edge Analytics, 2015

- 4.62 It is largely considered that housing market factors, including affordability, are most likely to have impacted on younger households (i.e. those aged 20 – 39) with regards to their capacity and ability to form households.
- 4.63 Considering the charts above it is apparent that a number of the 5 year age bands within this younger household's classification have seen household formation rates fall in Fylde since 2001. It is also evident that for a number of the age groups the 2012 SNHP dataset does not suggest a recovery to rates seen in 2001 but rather a continuation or marginal uplift. This is true of the age groups where the head of the household is aged between 20 – 24 and 25 – 29.
- 4.64 The factors behind the constraining of formation rates of households of these age groups in Fylde is further reinforced and evidenced when considering a number of the market signals indicators identified in the PPG, as analysed in this section. This includes:
- an evidenced worsening of affordability ratios in the context of neighbouring areas;
 - sustained evidence of a need for affordable housing within the borough; and
 - a cumulative under-provision against the former RSS planned level of provision.
- 4.65 It is also useful to compare the different headship rate assumptions under the 2012 SNHP against the previous SNHP data models (2008 and 2011 Interim), recognising that they span different economic conditions. It is important in this context, however, to recognise that – in line with the PPG – the 2012 SNHP '*are the most up-to-date estimate of future household growth*'²⁴. A full set of charts comparing the three household projection models is included at Appendix 2. In headline terms these suggest:
- Younger Age Groups – For younger age groups whilst the 2008 SNHP projected a comparatively modest increase in formation rates up to 2011 with this trend projected to continue, the 2011 Census evidently indicated that rates fell notably over this period. This fall in household formation rates was projected to continue under the 2011 SNHP, however, whilst the 2012 SNHP projects a modest recovery, as noted above, rates are not projected to return to the level seen in 2001.
 - More mature households – those households whose head of household is aged between 35 and 54 generally saw a modest uplift in rates between the Census years. However, the 2008 SNHP projected a notable increase in formation rates for those falling within this age band with this also mirrored to a lesser extent in the 2011 dataset. By contrast the 2012 SNHP suggests a more modest uplift more in accordance with that seen over the period 2001 – 2011, although it is important to note that under all datasets rates are projected to increase above those seen in 2001.

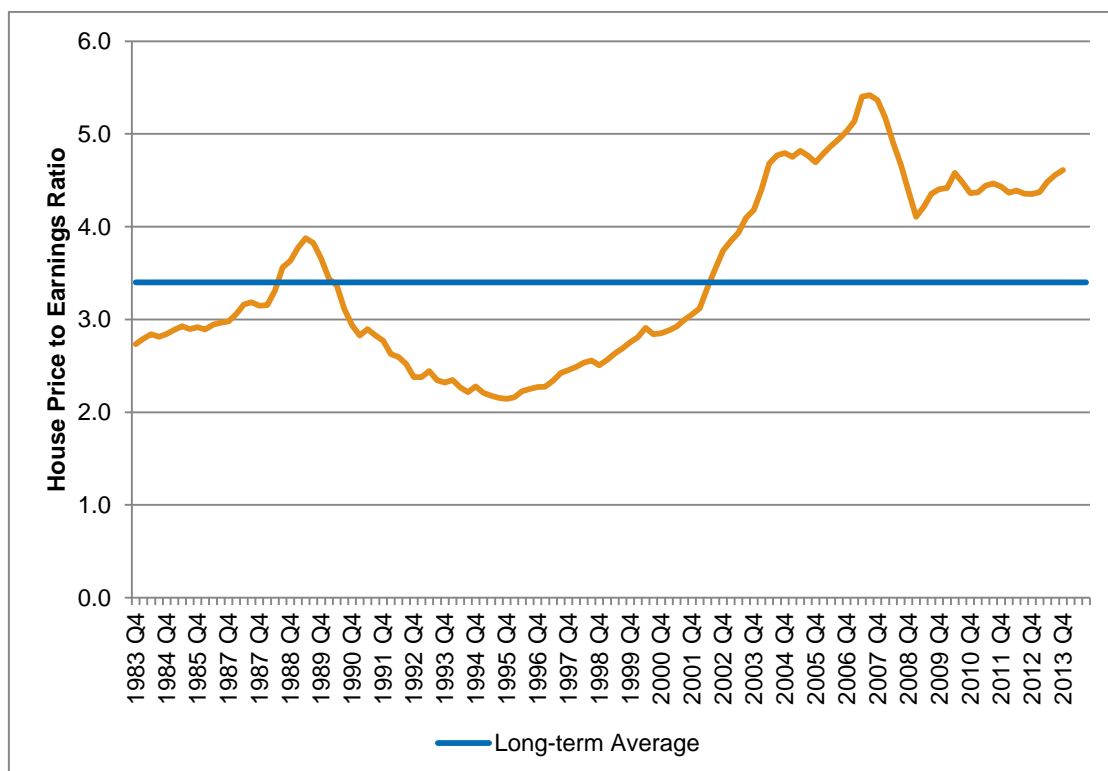
²⁴ http://planningguidance.planningportal.gov.uk/blog/guidance/housing-and-economic-development-needs-assessments/methodology-assessing-housing-need/#paragraph_016

- Older households - for the majority of the older age groups, the 2012 SNHP suggests that household formation rates will be higher than the other datasets.

Sensitivity Analysis: Adjustments to Headship Rates

- 4.66 In recognition that formation rates of younger households in Fylde may have been suppressed as a result of market factors over this period modelling has been undertaken applying a sensitivity analysis of headship rates to these age groups to illustrate the implication of alternative rates being applied.
- 4.67 The sensitivity scenario explores the impact of a reversal of this trend – where this is not already anticipated in the 2012 SNHP dataset – to a level previously seen in 2001 for those younger age groups for which this applies. The year 2001 is used as a benchmark, as it is widely acknowledged that since 2001 the housing market has seen a period of significant growth with prices far exceeding comparable rises in incomes resulting in affordability issues. This is illustrated in the affordability chart at a national level, included as figure 4.15. A return to 2001 rates of household formation therefore could be viewed as exploring the impact of returning to a set of market conditions which suggests a healthier market situation, although it is noted that the supply of housing in 2001 at a national level was still falling short of projected levels of need and therefore potentially continued to inhibit the ability of households to form.

Figure 4.15: First Time Buyer Gross House Price to Earnings Ratio – UK



Source: Nationwide, ONS

4.68 The outputs of applying this sensitivity are shown in Figure 4.16. This includes the outputs of the modelling as shown in Figure 3.2 which used the 2012 SNHP headship rates without adjustment.

Figure 4.16: Population and Household Projections Application of Headship Rate Sensitivity: Fylde 2011 – 2032

Scenario	Change 2011–2032				Average per year	
	Population Change	Population Change %	Households Change	Households Change %	Dwellings – Headship Rate Sensitivity	Dwellings – 2012 SNHP Headship Rates
Employment -led (Oxford Economics)	14,437	19.0%	8,770	25.0%	447	437
Employment -led (AECOM Policy On)	14,135	18.6%	8,625	24.6%	440	429
Migration-led 10 Year (X)	9,879	13.0%	7,250	20.7%	370	360
Migration-led 10 Year	8,775	11.5%	6,215	17.7%	317	307
Employment -led (Experian)	8,461	11.1%	6,116	17.5%	312	303
SNPP-2012	5,667	7.4%	4,815	13.7%	246	237

Source: Edge Analytics, 2015

4.69 The application of the sensitivity serves to adjust the average need for housing by between 10 and 11 dwellings per annum across all of the scenarios.

4.70 It is considered that this adjustment is justified in the context of the market signals in order to ensure that household formation rates do not simply extrapolate forward historic trends which have been influenced by comparatively low rates of development and slightly worsening local affordability issues. This needs to be also considered in the context of adjustment to projected population growth in the context of the official 2012 SNPP dataset as considered in the Addendum 1 report.

5. Implications

- 5.1 This report provides an update to Fylde Borough Council of the modelling presented in the Addendum 1 report to take into account the release of the DCLG 2012 SNHP dataset in February 2015.
- 5.2 The report has included an assessment of the underpinning available data within the 2012 SNHP, in accordance with the PPG, to examine the extent to which household formation rates may have been constrained by market conditions. This has included the presentation of an updated analysis of market signals for Fylde, which has drawn upon analysis undertaken by the Council to inform their own policy development.
- 5.3 The updating of the modelling in this report has been limited to a consideration of the new headship rate data within the 2012 SNHP dataset. This recognises that the full suite of population projections were updated within the November 2014 Addendum 1 report and the analysis in this report should be read in the context of the information presented in the Addendum 1 report and the original 2013 SHMA.
- 5.4 In recognition of the fact that the modelled household and dwelling derived levels of need have been updated as a result of the use of the latest household projection dataset this section considers the implications of this latest modelling on the OAN range identified within the 2013 SHMA.
- 5.5 The data is presented recognising that the plan period has been extended to cover the period 2011 – 2032. In order to enable direct comparison with the results presented in section 7 of the Addendum 1 report in a number of instances the modelled outputs are also presented for the period 2011 – 2030.

Background to the SHMA OAN range

- 5.6 The Fylde Coast SHMA (December 2013) represented an important update to the housing evidence for Fylde, alongside Blackpool and Wyre. The report was undertaken post the publication of the NPPF but prior to the publication of the PPG, albeit the draft version of the PPG was available and used to inform the SHMA analysis.
- 5.7 Section 11 of the SHMA included the identification of an OAN across the Fylde Coast broken down by each of the three constituent authorities. Following the NPPF and the then draft PPG the assessment of need sought to evaluate alternative projections of need on the basis of:
- Demographic factors including variant population projections taking account of alternative levels of migration;
 - Supporting likely job growth; and
 - Providing sufficient housing to reflect affordable housing need and respond to market signals²⁵.

²⁵ Paragraph 11.4 of the 2013 SHMA

- 5.8 The above methodological steps were used to evaluate and appraise the implied levels of projected household need based on a range of scenarios modelled by Edge Analytics. These scenarios included ones based on longer-term demographic trend projections using the latest ONS MYE datasets as well as scenarios aligned to economic forecasts.
- 5.9 Importantly, at the time the analysis was undertaken the latest household projections available were the 2011 Interim SNHP. These showed a projected growth of 265 households per annum for Fylde (2011 – 2021) which was broadly comparable with the previously published 2008 SNHP which projected a growth of 278 households per annum (2011 - 2030)²⁶.
- 5.10 The evaluation of the scenarios highlighted that, in order to provide a supporting level of labour growth to align with the economic forecasts considered in the SHMA, the authority would need to experience an increase in migration levels from those seen in more recent years. This was reinforced through the presentation of a range of demographic scenarios, which based future projections of population growth on a longer-term ten year horizon, recognising that recent levels contrasted significantly with levels earlier in the decade, with a range of factors likely to have contributed to these different levels. This provided a justification for increasing the projected population growth above that implied by the 2011 SNPP / SNHP.
- 5.11 Within the SHMA, Section 6 considered 'active market' evidence which included a number of the PPG 'market signals' indicators including house prices (Figures 6.1 – 6.6), affordability (Figures 6.9 and 6.10) and rents (Figures 6.7 and 6.8). The analysis in Section 4 considered evidence of other market signals, including overcrowding (Figure 4.10), rates of development (Figures 4.6 and 4.7) and vacancy (Figures 4.8 and 4.9).
- 5.12 In translating population growth into households Edge Analytics modelled the implications of using both the 2011 SNHP headship rates and the 2008 SNHP headship rates (producing two alternative household-growth outcomes for each scenario). The SHMA 2013 highlighted the importance of not basing future projections solely on the 2011 SNHP headship rates, recognising concerns that these projected forward a continuation of a suppressed position reflecting an unprecedented set of market and economic conditions nationally, as well as the limitations of the underpinning 2011 SNPP population projections²⁷.
- 5.13 A mid-point (average) between the two alternative household growth outcomes for each scenario was presented by Edge Analytics. This provided a balanced position regarding the different historically derived trends implied by both household growth outcomes²⁸ reflecting the uncertainty over future rates of household formation and the limitations of the 2011-based interim household projection model.

²⁶ Figures referenced from paragraphs 7.8 and 7.11 of the 2013 SHMA

²⁷ Further detail is set out in the section titled 'household projections' within Section 7 of the 2013 SHMA. At paragraph 7.35 of the SHMA the challenges of projecting forward on the basis of a continuation of trend using either dataset is highlighted: *'Evidently the period to 2008 represented a comparatively buoyant period in the housing market with derived rates therefore not taking account of the unprecedented economic conditions that have occurred since 2008. Equally, the fact that these are unprecedented conditions also means that taking a 2011 base point has the inherent weakness of projecting forward the current market conditions [footnote reference to analysis in section 5 of the SHMA]/ position over the long term.'*

²⁸ Paragraph 7.44 of the 2013 SHMA

- 5.14 The evaluation of the OAN scenarios within the SHMA also highlighted the importance of ensuring that tenure choice, including affordable housing, was enabled through the overall provision of housing²⁹ with this important in the selection of an appropriate level of provision within the identified range as the Council progressed to translating the evidence into policy.
- 5.15 The SHMA concluded with a range of assessed housing need in Fylde of between 300 and 420 dwellings per annum over the period 2011 - 2030. This range reflected the different employment-led projections and incorporated the longer term demographic projection of need. It also reflected the application of an upward adjustment to headship rates from the 2011 SNHP to a mid-point between this and the 2008 SNHP. The 2013 SHMA highlighted the importance, in the context of the then draft PPG, of the Council reviewing the range in the context of economic and market signals as they refined their evidence base and policy response, including an updating of analysis to reflect new data releases³⁰.
- 5.16 The release of the 2012 SNPP in May 2014 led to the Council re-commissioning Edge Analytics and Turley to prepare an Addendum report³¹, assessing the implications of the dataset on the OAN range, hereafter referred to as the 2014 Addendum Report.
- 5.17 This involved a full re-modelling of a number of demographic and employment-led scenarios using the latest input assumptions from the 2012 SNPP as well as a number of other updates to modelling assumptions³².
- 5.18 The report included scenarios considering the scale of housing need associated with the 2012 SNPP projection. In order to be consistent with the SHMA, the same approach to taking a mid-point between scenarios using the 2011 SNHP and 2008 SNHP headship rates was applied. The modelling outputs were compared against those previously contained within the SHMA³³. The Addendum concluded in section 7:

“Several scenarios fall within the previously concluded range of 300 to 420 dwellings per annum. Delivery at the lower end of this range would come close to meeting need based on longer-term migration levels, taking into account the inclusion of UPC, but would not enable a growth in employment within the authority. Whilst the re-modelled Experian 2013 forecast job change would be accommodated at this end of the range this suggests a forecast job loss from 2013 as opposed to the increase from 2012 considered in the 2013 SHMA.

Recognising the uncertainty around the UPC component would suggest that a prudent approach would be to consider carefully the implications of a demographic based need towards the upper range of the ten year migration scenarios as a minimum. This would suggest a higher base level of demographic base need than the lower end of the range identified in the 2013 SHMA at 350 dwellings per annum.

²⁹ Paragraph 11.35 of the 2013 SHMA

³⁰ Paragraph 12.21 of the 2013 SHMA

³¹ 'Analysis of Housing Need in light of the 2012 Sub-National Population Projections – Fylde Coast SHMA – Addendum', November 2014

³² A comparison of modelling assumptions is included in Table 6 of Appendix 1 to the 2014 Fylde Coast SHMA Addendum.

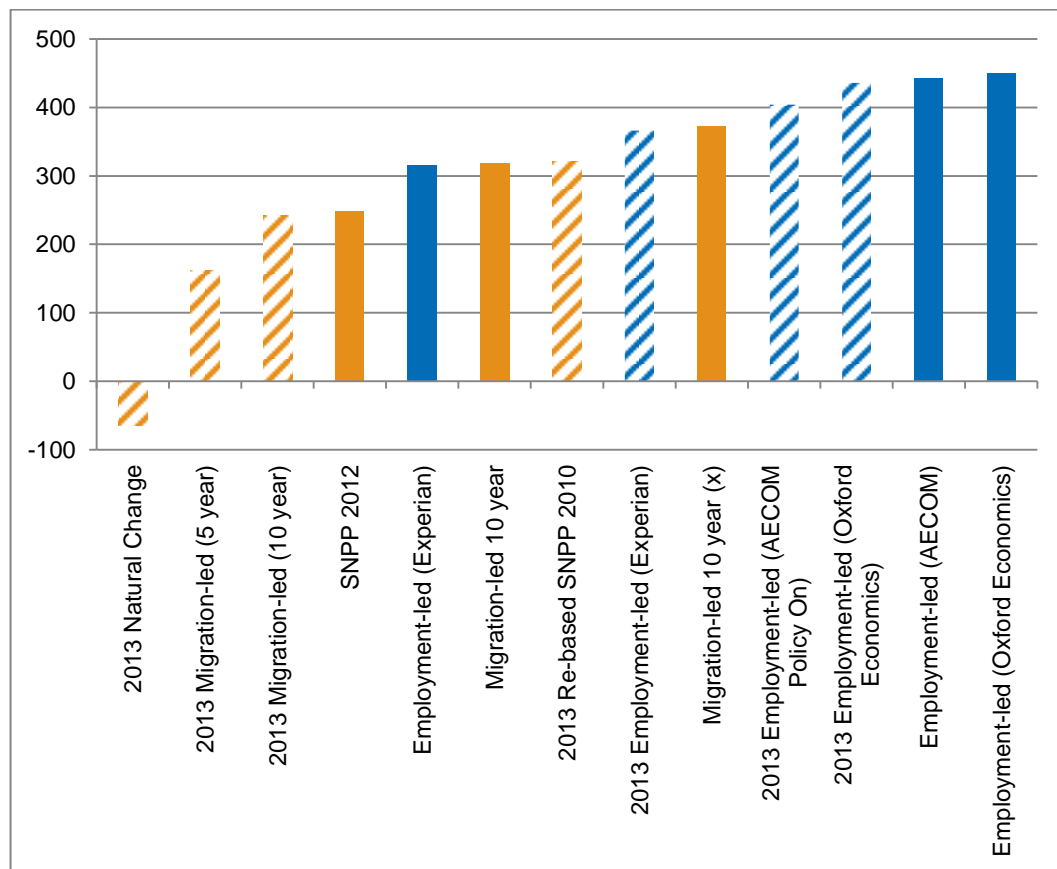
³³ A comparison of the modelled levels of need is set out in Figure 7.2 of the 2014 SHMA Addendum.

The upper end of the range does, however, now fall slightly below the level of housing required to support the more ambitious economic forecasts linked to the AECOM 2012 work and continues to fall below that suggested by the Oxford Economics forecasts, indicating that a housing target towards the upper end of this range would be more likely to be required based upon a stronger employment growth position aligned with the Councils existing evidence base. This needs to be considered in the context of the evaluation of the range as set out within the 2013 SHMA.”

Addendum 2 Updated Scenario Outputs

- 5.19 The analysis presented within this report has primarily focussed on an assessment of the 2012 SNHP and the underpinning household formation rates within the dataset.
- 5.20 For Fylde, the 2012 SNHP project an increase of 4,641 households over the period 2011 – 2032, equivalent to an average of 221 new households per annum over this period. Figure 3.2 identifies that this is translated into a modelled need for approximately 237 dwellings per annum.
- 5.21 The analysis presented in section 4 of this report has highlighted that historic market conditions, including slightly worsening affordability and historic under-provision of housing against plan targets, in Fylde are likely to have impacted upon projections of household formation rates of selected younger households groups.
- 5.22 On this basis a sensitivity has been applied which assumes a return to levels of household formation for these age groups as seen in 2001 by 2022. This represents an upwards adjustment to the projection trend within the 2012 SNHP dataset. This adjustment is considered appropriate, alongside the uplifts associated with the projected level of population growth, to address the evidence of market signals within the 2013 SHMA and the updated position in this report.
- 5.23 Figure 5.1 presents the outputs of the updated modelling applying the 2012 headship rate sensitivity headship rates by way of an update to the chart included as Figure 7.2 of the Addendum 1 report. The solid colour bars therefore represent a replacement for those previously included in this chart in the Addendum 1 report (Figure 7.2 of the Addendum 1), which used a mid-point of the 2008 and 2011 DCLG headship rate modelled scenarios (as explained in section 3 of this report).

Figure 5.1: Updated Figure 7.2 from the Addendum 1 Report: Average Annual Housing Need – Fylde 2011 – 2030



Source: Edge Analytics, 2015

- 5.24 Whilst the above chart presents for the period 2011 – 2030 to enable a direct update of the information presented within the Addendum 1 report the analysis within this report has focused on the presentation of results over the period 2011 – 2032 in recognition of the amended plan period. This is reflected in the consideration of the implications for the range of OAN below.
- 5.25 The updated modelling in this report suggests that the lower end of the previous OAN range now falls below the implied level of need based on the longer-term migration scenarios. The migration-led scenario including the UPC suggests a need for approximately 320 dwellings per annum. With this level of need also aligning with the re-modelled Experian 2013 level of forecast job change, which as noted in the Addendum 1 forecasts a loss of jobs over the forecast period modelled³⁴.
- 5.26 In accordance with the Addendum 1 conclusion, using the migration-led scenario which excludes the UPC component as a prudent representation of demographic need would imply a slightly higher **base demographic assessment of need of approximately 370 dwellings per annum**. This represents a comparatively substantial uplift, over 50%, from the 2012 SNHP 'starting point' projection of household growth and need. As the

³⁴ Further explanation is provided at paragraph 5.24 of the Addendum 1 report as to the difference between the positive employment growth forecast in the 2013 SHMA using the 2013 Experian dataset and the loss implied in the Addendum 1 modelling.

Addendum 1 report identifies based on the prudent economic assumptions used in the modelling, noting this does not make a specific allowance for an improvement to unemployment rates in the authority, would essentially support a stabilisation of levels of employment in Fylde. If unemployment rates were assumed to improve modestly this would mean that this scenario would support a slightly stronger level of job growth³⁵.

- 5.27 The re-modelling in this report continues to identify that at the upper end, the range identified within the 2013 SHMA falls below the re-modelled outputs presented in this Addendum. The Employment-led AECOM and Oxford Economics scenarios suggest a **need for between 440 and 450 dwellings** per annum based upon the application of the adjusted headship rate assumptions presented within this report.
- 5.28 As the Addendum 1 report concludes the upper end of the range would represent the OAN on the basis of the considered economic position within the Council's evidence base. It is recognised that the authority's current economic evidence base will continue to be updated and this will therefore need to be considered carefully alongside subsequent updates of the analysis of housing need.

³⁵ This is based upon the analysis in the Addendum 1 report Figure 5.6 for the period 2011 – 2030. Figure 5.11 of the Addendum 1 report also highlights that based on the previous approach to headship rates the projected level of job growth under the AECOM scenario could be accommodated through the provision of approximately 400 dpa assuming a fall in unemployment rates.

Appendix 1: Model Outputs 2011 – 2030 (SHMA projection period)

The following table presents the outputs of the Edge Analytics modelling using the 2012 SNHP headship rate assumptions for the period 2011 – 2030. This enables direct comparison with the outputs presented within the Addendum 1 report.

Scenario	Change 2011–2030				Average per year	
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings
Employment -led (Oxford Economics)	13,238	17.4%	7,791	22.2%	990	439
Employment -led (AECOM Policy On)	12,971	17.0%	7,659	21.9%	980	432
Migration-led 10 Year (X)	9,039	11.9%	6,418	18.3%	795	362
Migration-led 10 Year	8,016	10.5%	5,464	15.6%	728	308
Employment -led (Experian)	7,788	10.2%	5,418	15.5%	720	305
SNPP-2012	5,204	6.8%	4,228	12.1%	589	238

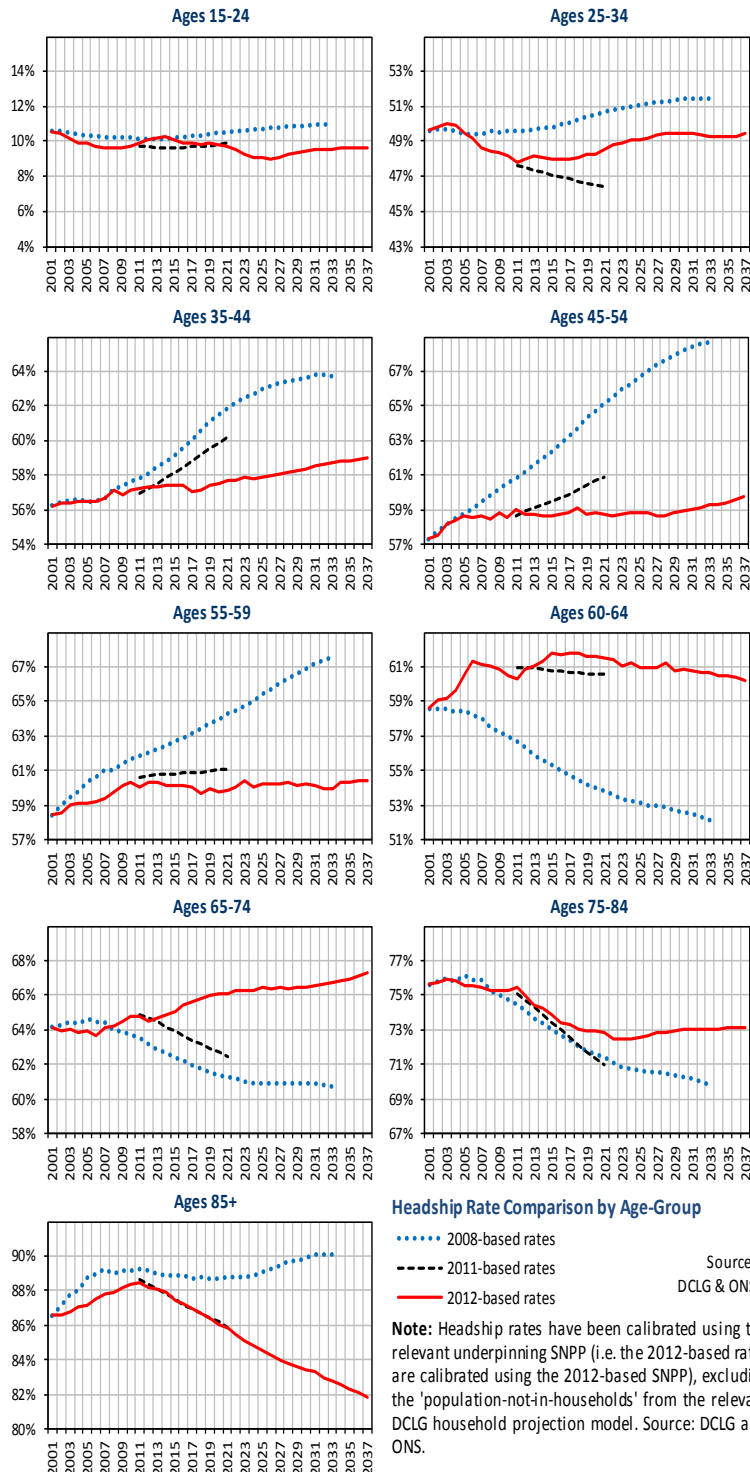
The modelling outputs for the same period of time, 2011 – 2030, are also shown in the following table with the headship rate sensitivity applied (as described in section 4 of the main report).

Scenario	Change 2011–2030				Average per year	
	Population Change	Population Change %	Households Change	Households Change %	Net Migration	Dwellings
Employment -led (Oxford Economics)	13,238	17.4%	7,986	22.8%	990	450
Employment -led (AECOM Policy On)	12,971	17.0%	7,855	22.4%	980	443
Migration-led 10 Year (X)	9,039	11.9%	6,606	18.9%	795	372
Migration-led 10 Year	8,016	10.5%	5,646	16.1%	728	318
Employment -led (Experian)	7,788	10.2%	5,594	16.0%	720	315
SNPP-2012	5,204	6.8%	4,396	12.6%	589	248

Appendix 2: DCLG SNHP Headship Rate Analysis

A series of charts are presented below, comparing the household representative rates projected under each of the last three DCLG SNHP models broken down by age groupings for Fylde.

Headship Rates by Age Group 2001–2037: Fylde



In many cases, it is apparent from the charts that there are notable differences in the projected change to household formation rates between different projections. The 2011 SNHP dataset in particular stands out in terms of presenting a notable variation of trend to the other two datasets in a number of examples.

It is possible to pick out a number of important apparent differences and trends:

- Younger Age Groups – For the age group 15 – 24 the projections are relatively consistent with all essentially showing formation rates holding steady albeit whilst the 2012 SNHP shows a slight fall over the projection period the 2008 SNHP shows a modest increase. For the age group 25-34 whilst the 2008 SNHP also projected a comparatively increase in formation rates, the 2011 Census evidently indicated that rates fell notably. This fall was projected to continue under the 2011 SNHP, however, the 2012 SNHP projects a modest recovery although rates do not return to the level seen in 2001.
- More mature households – the age group 35-44 is shown to have had a relatively limited uplift in rates between the two Census years. The 2008 SNHP projected a notable increase in formation rates for this age group with this also mirrored in the 2011 dataset. By contrast the 2012 SNHP suggests a more modest uplift more in accordance with that seen over the period 2001 – 2011. A similar picture is also apparent for the age group 45 – 54. Whilst this age group, according to the historic data, did see a comparatively significant increase up to 2005 (i.e. a 4 year period) it then subsequently saw little change to 2011. The 2008 dataset sustains the scale of growth seen prior to 2005 over the remaining projection period, with this also replicated to an extent under the 2011 dataset. The 2012 data by contrast suggests little change in headship rate formation over the projection period with a slight increase projected post 2029. These age groups are less likely to be affected by affordability issues, in terms of their ability to form, and it could be reasonable to assume that it is more likely that other factors – including changing relationship status trends – are shaping future projections. It is also important to note that the 2012 SNHP projections consistently assume an increase in formation rates from 2001 levels.
- Older households - for the majority of the older age groups, the 2012 SNHP suggests that household formation rates will be higher than the other datasets. The only exception is for those where the head of household is aged 85+. Again, it is considered that these older age groups are less likely to be directly affected by affordability issues as a factor in constraining their ability to form.

Appendix 3: Edge Analytics: Data inputs, assumptions & methodology



Fylde

Data inputs, assumptions & methodology

June 2015

edgeanalytics

Leeds Innovation Centre | 103 Clarendon Road | Leeds | LS2 9DF

0113 384 6087 | www.edgeanalytics.co.uk

POPGROUP Methodology

Forecasting Methodology

- 1.1 Evidence is often challenged on the basis of the appropriateness of the methodology that has been employed to develop growth forecasts. The use of a recognised forecasting product which incorporates an industry-standard methodology (a cohort component model) removes this obstacle and enables a focus on assumptions and output, rather than methods.
- 1.2 Demographic forecasts have been developed using the POPGROUP suite of products. POPGROUP is a family of demographic models that enables forecasts to be derived for population, households and the labour force, for areas and social groups. The main POPGROUP model (Figure 1) is a cohort component model, which enables the development of population forecasts based on births, deaths and migration inputs and assumptions.
- 1.3 The Derived Forecast (DF) model (Figure 2) sits alongside the population model, providing a headship rate model for household projections and an economic activity rate model for labour-force projections.
- 1.4 The latest development in the POPGROUP suite of demographic models is POPGROUP v.4, which was released in January 2014. A number of changes have been made to the POPGROUP model to improve its operation and to ensure greater consistency with ONS forecasting methods. The most significant methodological change relates to the handling of internal migration in the POPGROUP forecasting model. The level of internal in-migration to an area is now calculated as a rate of migration relative to a defined 'reference population' (by default the UK population), rather than as a rate of migration relative to the population of the area itself (as in POPGROUP v3.1). This approach ensures a closer alignment with the 'multi-regional' approach to modelling migration that is used by ONS.
- 1.5 For further information on POPGROUP, please refer to the Edge Analytics website: <http://edgeanalytics.co.uk/popgroup>.

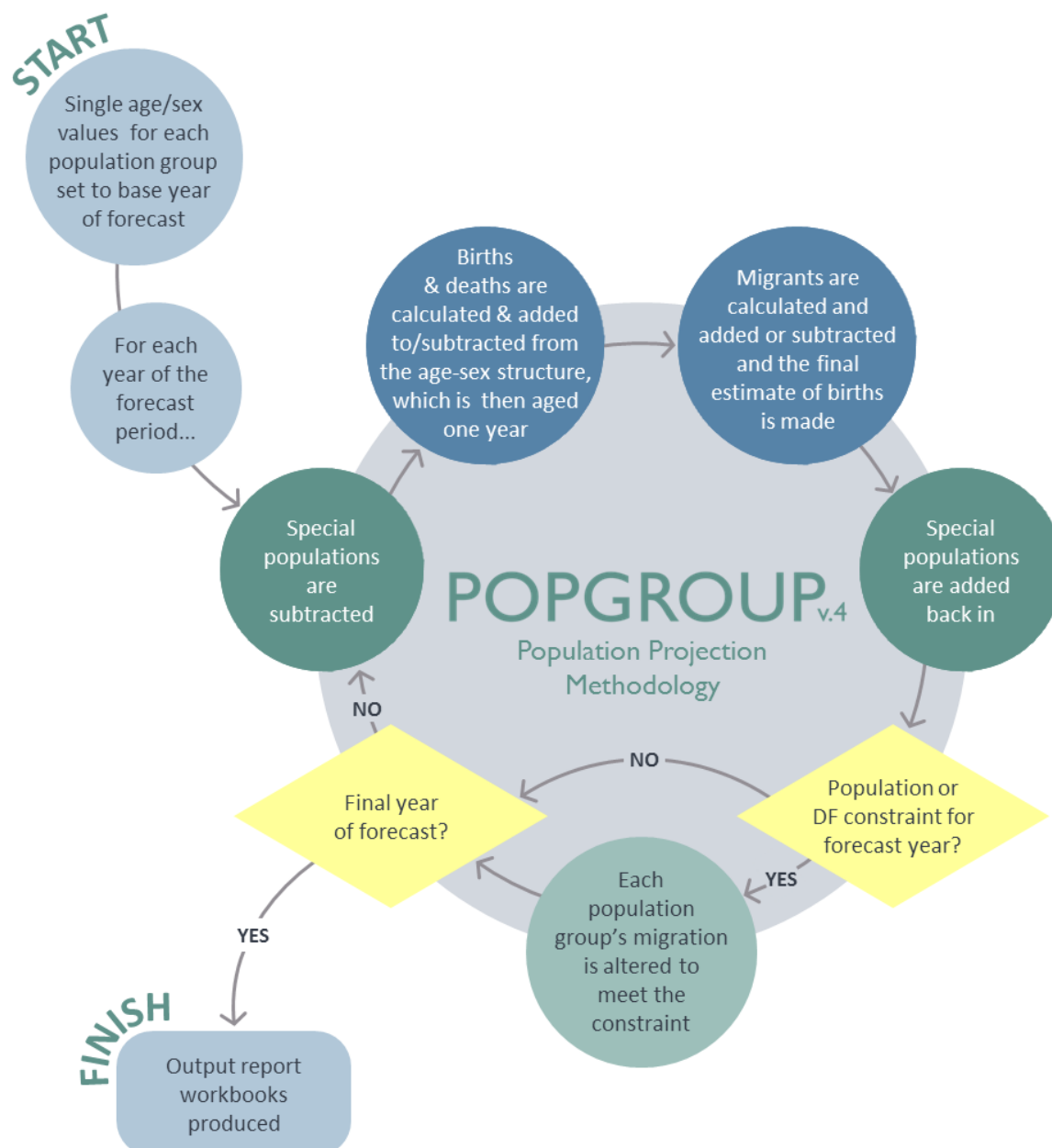
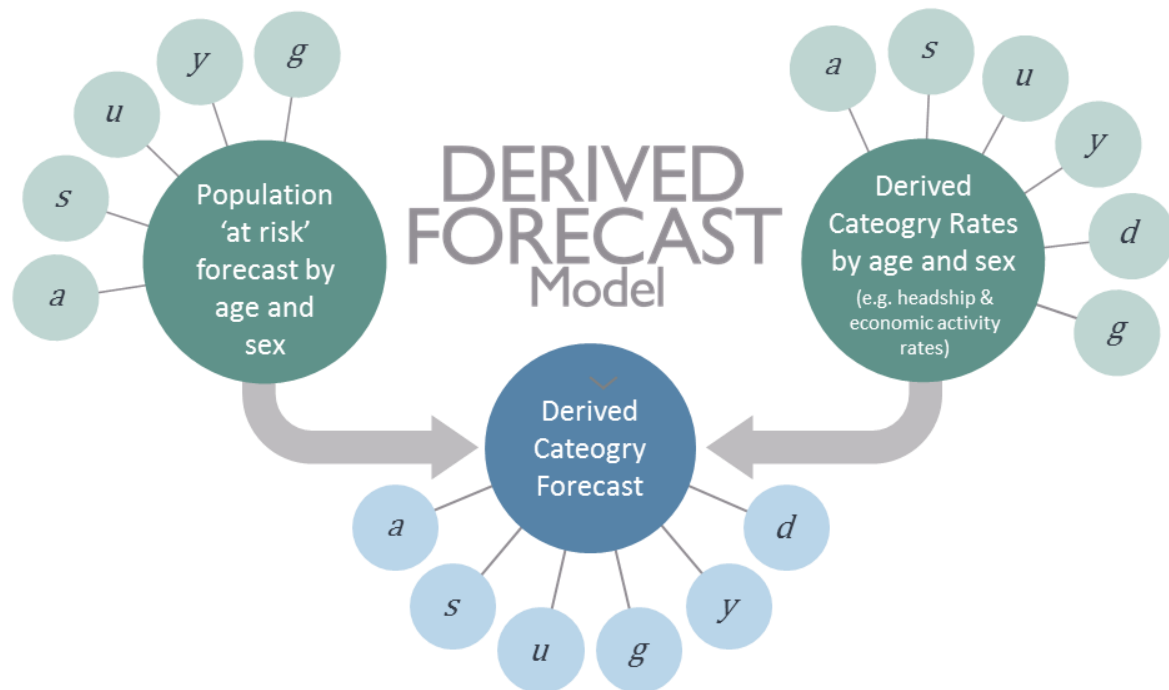


Figure 1: POPGROUP population projection methodology



$$D_{a,s,u,y,d,g} = \frac{P_{a,s,u,y,g} R_{a,s,u,y,d,g}}{100}$$

<i>D</i>	Derived Category Forecast	<i>y</i>	Year
<i>P</i>	Population 'at risk' Forecast	<i>d</i>	Derived category
<i>R</i>	Derived Category Rates	<i>g</i>	Group (usually an area, but can be an ethnic group or social group)
<i>a</i>	Age-group		
<i>s</i>	Sex		
<i>u</i>	Sub-population		

Figure 2: Derived Forecast (DF) methodology

2 Data Inputs & Assumptions

Introduction

- 2.1 Edge Analytics has developed a suite of demographic scenarios for Fylde using POPGROUP v.4 and the Derived Forecast model. The POPGROUP suite of demographic models draw data from a number of sources, building an historical picture of population, households, fertility, mortality and migration on which to base its scenario forecasts. Using historical data evidence for 2001–2013, in conjunction with information from ONS sub-national population projections (SNPPs) and DCLG household projections, a series of assumptions have been derived which drive the scenario forecasts.
- 2.2 The following scenarios have been produced:
- SNPP-2012
 - PG-10yr
 - PG-10yr-X
 - Jobs-led Experian 2013
 - Jobs-led AECOM
 - Jobs-led Oxford Economics
- 2.3 In each scenario, household growth has been assessed using assumptions from the 2012-based household projection model from the Department for Communities and Local Government (DCLG). These scenarios are identified by the '**HH-12**' suffix.
- 2.4 In addition, each scenario listed above in paragraph 2.2 has been run using an adjusted set of 2012-based headship rates. In this set of rates, the aggregate headship rates for the following age groups are returned to their respective 2001 values by 2022:
- 20–24
 - 25–29

- 2.5 These scenarios are identified using the '**HH-12 Return**' suffix.
- 2.6 In the following sections, a narrative on the data inputs and assumptions underpinning the scenarios is presented.

Scenario Definitions

Official Projection

- 2.7 In accordance with the PPG, the scenario alternatives are 'benchmarked' against the most recent official population projections from the ONS, the 2012-based SNPP, which was released in May 2014. The '**SNPP-2012**' scenario replicates this official population projection.

Alternative Trend

- 2.8 The following 'alternative trend' scenarios have been developed, based upon the latest demographic evidence:
- **PG-10yr**: internal migration rates and international migration flow assumptions are based on the last 10 years of historical evidence (2003/04 to 2012/13). The UPC component is *included* in the international migration assumptions.
 - **PG-10yr-X**: internal migration rates and international migration flow assumptions are based on the last 10 years of historical evidence (2003/04 to 2012/13). The UPC component is *excluded* in the international migration assumptions.

Jobs-led

- 2.9 In a 'jobs-led' scenario, population growth is determined by the scale of future jobs growth within an area. Migration is used to balance the relationship between the size of the population's labour force and the forecast number of jobs. A higher level of net in-migration will occur if there is insufficient population and resident labour force to meet the forecast number of jobs. A higher level of net out-migration will occur if the population is too high relative to the forecast number of jobs.
- 2.10 The following jobs-led scenarios have been developed:

- **Jobs-led Experian 2013:** population growth is determined by an annual change in jobs numbers as specified in the Experian 2013 employment forecast for Fylde.
- **Jobs-led AECOM:** population growth is determined by an annual change in jobs numbers as specified in the AECOM employment forecast for Fylde
- **Jobs-led Oxford Economics:** population growth is determined by an annual change in jobs numbers as specified in the Oxford Economics employment forecast for Fylde

Population, Births & Deaths

Population

- 2.11 In each scenario, historical population statistics are provided by the mid-year population estimates for 2001–2013, with all data recorded by single-year of age and sex. These data include the revised mid-year population estimates for 2002–2010, which were released by the ONS in May 2013. The revised mid-year population estimates provide consistency in the measurement of the components of change (i.e. births, deaths, internal migration and international migration) between the 2001 and 2011 Censuses.
- 2.12 In the **SNPP-2012** scenario, future population counts are provided by single-year of age and sex to ensure consistency with the trajectory of the ONS 2012-based SNPP.

Births & Fertility

- 2.13 In each scenario, historical mid-year to mid-year counts of births by sex from 2001/02 to 2012/13 have been sourced from ONS Vital Statistics.
- 2.14 In the **SNPP-2012** scenario, future counts of births are specified to ensure consistency with the official projections.
- 2.15 In the other scenarios, a 'local' (i.e. area-specific) age-specific fertility rate (ASFR) schedule, which measures the expected fertility rates by age and sex in 2013/14, is included in the POPGROUP model assumptions. This is derived from the ONS 2012-based SNPP.
- 2.16 Long-term assumptions on changes in age-specific fertility rates are taken from the ONS 2012-based SNPP.

- 2.17 In combination with the ‘population-at-risk’ (i.e. all women between the ages of 15–49), the area-specific ASFR and future fertility rate assumptions provide the basis for the calculation of births in each year of the forecast period.

Deaths & Mortality

- 2.18 In each scenario, historical mid-year to mid-year counts of deaths by age and sex from 2001/02 to 2012/13 have been sourced from ONS Vital Statistics.
- 2.19 In the **SNPP-2012** scenario, future counts of deaths are specified to ensure consistency with the official projections.
- 2.20 In the other scenarios, a ‘local’ (i.e. area-specific) age-specific mortality rate (ASMR) schedule, which measures the expected mortality rates by age and sex in 2013/14 is included the POPGROUP model assumptions. This is derived from the ONS 2012-based SNPP.
- 2.21 Long-term assumptions on changes in age-specific mortality rates are taken from the ONS 2012-based SNPP.
- 2.22 In combination with the ‘population-at-risk’ (i.e. the total population), the area-specific ASMR and future mortality rate assumptions provide the basis for the calculation of deaths in each year of the forecast period.

Migration

Internal Migration

- 2.23 In all scenarios, historical mid-year to mid-year counts of in- and out-migration by five year age group and sex from 2001/02 to 2012/13 have been sourced from the ‘components of change’ files that underpin the ONS MYEs. The original source of these internal migration statistics is the Patient Register Data Service (PRDS), which captures the movement of patients as they register with a GP. This data provides an accurate representation of inter-area flows, albeit with some issues with regard to potential under-registration in certain age groups (young males in particular).

- 2.24 In the **SNPP-2012** scenarios, future counts of internal migrants are specified, to ensure consistency with the official projections.
- 2.25 In the alternative trend-based scenarios, age-specific migration rate (ASMigR) schedules are derived from the area-specific historical migration data. In the **PG-10Yr** and **PG-10Yr-X** scenarios, a ten year internal migration history is used (2003/04–2012/13).
- 2.26 The **jobs-led** scenarios calculate their own internal migration assumptions to ensure an appropriate balance between the population and the targeted increase in the number of jobs that is defined in each year of the forecast period. In the jobs-led scenarios, a higher level of net internal migration will occur if there is insufficient population and resident labour force to meet the forecast number of jobs. In the jobs-led scenarios, the profile of internal migrants is defined by an ASMigR schedule, derived from the ONS 2012-based SNPP.
- 2.27 Rather than the schedule of rates being applied to the area-specific population – as is the case with the other components (i.e. births, deaths and international migration) – in the case of internal in-migration the ASMigR schedule of rates is applied to an external ‘reference’ population (i.e. the population ‘at-risk’ of migrating into the area). In the case of Fylde Coast, the reference population is defined as the total population of the districts where 70% of the in-migrants to the Lancashire Local Economic Partnership (LEP) come from.

International Migration

- 2.28 Historical mid-year to mid-year counts of total immigration and emigration from 2001/02 to 2012/13 have been sourced from the ‘components of change’ files that underpin the ONS MYEs. Any ‘adjustments’ made to the MYEs to account for asylum cases are included in the international migration balance.
- 2.29 In all scenarios, future international migration assumptions are defined as ‘counts’ of migration.
- 2.30 In the **SNPP-2012** scenarios, the international in- and out-migration counts are drawn directly from the official projections.
- 2.31 Implied within the international migration component of change in all scenarios (apart from the **PG-10Yr-X** scenario) is an ‘unattributable population change’ (UPC) figure, which ONS identified within its latest MYE revisions. The POPGROUP model has assigned the UPC to international

migration as it is the component with the greatest uncertainty associated with its estimation. In the **PG-10Yr-X** scenario, the UPC is not considered when calculating the migration assumptions.

2.32 In the alternative trend-based (**PG-10yr** and **PG-10yr-X**) scenarios, the international in- and out-migration counts are derived from the area-specific historical migration data. In the **PG-10yr** and **PG-10yr-X** scenarios, a ten year international migration history is used (2003/04–2012/13). An ASMigR schedule of rates is derived from a ten year migration history and is used to distribute future counts by single year of age.

2.33 In the **jobs-led** scenarios, international migration counts are taken from the ONS 2012-based SNPP (i.e. counts are consistent with the SNPP-2012 scenario). An ASMigR schedule of rates from the ONS 2012-based SNPP is used to distribute future counts by single year of age.

Households & Dwellings

2.34 The 2011 Census defines a household as:

“one person living alone, or a group of people (not necessarily related) living at the same address who share cooking facilities and share a living room or sitting room or dining area.”¹

2.35 A dwelling is defined as a unit of accommodation which may comprise one or more household spaces (a household space is the accommodation used or available for use by an individual household).

2.36 For each scenario, the household and dwelling implications of the population growth trajectory have been evaluated through the application of headship rate statistics, communal population statistics and a dwelling vacancy rate. These data assumptions have been sourced from the 2001 and 2011 Censuses and 2012-based household projection model from the DCLG.

¹ <http://www.ons.gov.uk/ons/guide-method/census/2011/census-data/2011-census-user-guide/glossary/index.html>

Household Headship Rates

- 2.37 A household headship rate (also known as household representative rate) is the *“probability of anyone in a particular demographic group being classified as being a household representative”*².
- 2.38 The household headship rates used in the POPGROUP modelling have been taken from the DCLG 2012-based household projections. The 2012-based household projections were released for local authority districts in England in February/March 2015, superseding the 2011-based model.
- 2.39 The DCLG household projections are derived through the application of projected household representative rates (also referred to as headship rates) to a projection of the private household population.
- 2.40 In the scenarios presented here, the following headship rate assumptions have been applied:
- In the **HH-12** outcome, the 2012-based DCLG headship rates are applied.
 - In the **HH-12 Return** outcome, the headship rates for ages 20–24 and 25–29 are incrementally adjusted from 2012, returning to their respective 2001 values by 2022. After 2022, the rate of change from the original 2012-based headship rates is followed. The headship rates for all other age groups remain unchanged and are consistent with the rates used in the HH-12 scenario alternatives.
- 2.41 In POPGROUP, the 2012-based headship rates are defined by age, sex and relationship status. These rates therefore determine the likelihood of person of a particular age-group, sex and relationship status being head of a household in a particular year, given the age-sex structure of the population. The methodological basis of the 2012-based household projections is consistent with that employed in the previous 2008-based and 2011-based interim household projections. The methodology used by DCLG in its household projection models consists of two distinct stages:
- **Stage One** produces the national and local authority projections for the total number of households by sex, age-group and relationship-status group over the projection period. All Stage One output and assumptions for the 2012-based household projection model has been released by DCLG.

² Household Projections 2012-based: Methodological Report. Department for Communities and Local Government (February 2015). <https://www.gov.uk/government/statistics/2012-based-household-projections-methodology>

- **Stage Two** provides the detailed ‘household-type’ projection by age-group, controlled to the previous Stage One totals. Stage Two assumptions and output for the 2012-based model have yet to be released by DCLG.

2.42 Whilst methodologically similar to previous releases, the 2012-based household projections provide an important update on the 2011-based interim household projections with the inclusion of the following new information:

- 2012-based SNPP by sex and age that extend to 2037 (rather than to 2021 as was the case in the 2011-based interim projections).
- Household population by sex, age and relationship-status consistent with the 2011 Census (rather than estimates for 2011, which were derived from 2001 Census data, projections and national trends, as used in the 2011-interim projections).
- Communal population statistics by age and sex consistent with the 2011 Census (rather than the previous estimate, which were calibrated to the total communal population from the 2011 Census).
- Further information on household representatives from the 2011 Census relating to aggregate household representative rates by relationship status and age.
- Aggregate household representative rates at local authority level, controlled to the national rate, based on the total number of households divided by the total adult household population (rather than the total number of households divided to the total household population).
- Adjustments to the projections of the household representative rates in 2012 based on the Labour Force Survey (LFS).

(Source: DCLG Methodology³, page 5)

³ Household Projections 2012-based: Methodological Report. Department for Communities and Local Government (February 2015). <https://www.gov.uk/government/statistics/2012-based-household-projections-methodology>

Communal Population

- 2.43 Household projections in POPGROUP exclude the population 'not-in-households' (i.e. the communal/institutional population). These data are drawn from the DCLG 2012-based household projection, which uses statistics from the 2011 Census. Examples of communal establishments include prisons, residential care homes and student halls of residence.
- 2.44 For ages 0–74, the number of people in each age group 'not-in-households' is kept fixed throughout the forecast period. For ages 75–85+, the proportion of the population 'not-in-households' is recorded. Therefore, the population not-in-households for ages 75–85+ varies across the forecast period depending on the size of the population.

Vacancy Rate

- 2.45 The relationship between households and dwellings is modelled using a 'vacancy rate', sourced from the 2011 Census.
- 2.46 A vacancy rate of 6.6% for Fylde has been applied, fixed throughout the forecast period. Using this vacancy rate, the 'dwelling requirement' of the each household growth trajectory has been calculated.

Labour Force & Jobs

- 2.47 For each scenario (apart from the **jobs-led** scenarios), the labour force and jobs implications of the population growth trajectory have been evaluated through the application of three key data items: economic activity rates, a commuting ratio and an unemployment rate.
- 2.48 In the **jobs-led** scenarios, these three data items are used to determine the population growth required by a particular jobs growth trajectory.

Economic Activity Rates

- 2.49 The level of labour force participation is recorded in the economic activity rates. Economic activity rates by five year age group (ages 16-74) and sex have been derived from 2001 and 2011 Census statistics. The 2011 Census statistics include an open-ended 65+ age category, so

economic activity rates for the 65–69 and 70–74 age groups have been estimated using a combination of Census 2011 tables, disaggregated using evidence from the 2001 Census. Between 2001 and 2011, the rates are linearly interpolated.

2.50 For Fylde, rates of economic activity increased for all age groups between 20–74 between the 2001 and 2011 Censuses most noticeably for women (Figure 3).

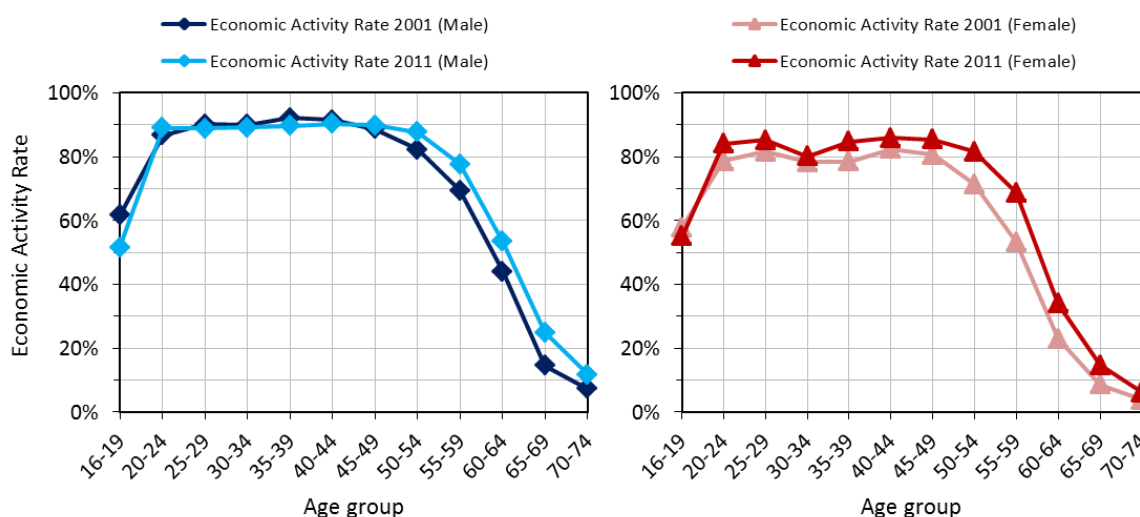


Figure 3: Fylde Economic activity rates: 2001 and 2011 Census comparison (source: ONS)

2.51 In all scenarios, Edge Analytics has made changes to the age-sex specific economic activity rates to take account of changes to the State Pension Age (SPA) and to accommodate potential changes in economic participation which might result from an ageing but healthier population in the older labour-force age-groups.

2.52 The SPA for women is increasing from 60 to 65 by 2018, bringing it in line with that for men. Between December 2018 and April 2020, the SPA for both men and women will then rise to 66. Under current legislation, the SPA will be increased to 67 between 2034 and 2036 and 68 between 2044 and 2046. It has been proposed that the rise in the SPA to 67 is brought forward to 2026–2028⁴.

2.53 ONS published its last set of economic activity rate forecasts from a 2006 base⁵. These incorporated an increase in SPA for women to 65 by 2020 but this has since been altered to an

⁴ <https://www.gov.uk/changes-state-pension>

⁵ ONS January 2006, Projections of the UK labour force, 2006 to 2020

<http://www.ons.gov.uk/ons/rel/lms/labour-market-trends--discontinued-/volume-114--no--1/projections-of-the-uk-labour-force--2006-to-2020.pdf>

accelerated transition by 2018 plus a further extension to 66 by 2020. Over the 2011–2020 period, the ONS forecasts suggested that male economic activity rates would rise by 5.6% and 11.9% in the 60–64 and 65–69 age groups respectively. Corresponding female rates would rise by 33.4% and 16.3% (Figure 4).

2.54 To take account of planned changes to the SPA, the following modifications have been made to the Edge Analytics economic activity rates:

- Women aged 60–64: 40% increase from 2011 to 2020.
- Women aged 65–69: 20% increase from 2011 to 2020.
- Men aged 60–64: 5% increase from 2011 to 2020.
- Men aged 65–69: 10% increase from 2011 to 2020

2.55 Note that the rates for women in the 60–64 age and 65–69 age-groups are higher than the original ONS figures (Figure 4), accounting for the accelerated pace of change in the SPA. No changes have been applied to other age-groups. In addition, no changes have been applied to economic activity rates beyond 2020. This is an appropriately prudent approach given the uncertainty associated with forecasting future rates of economic participation.

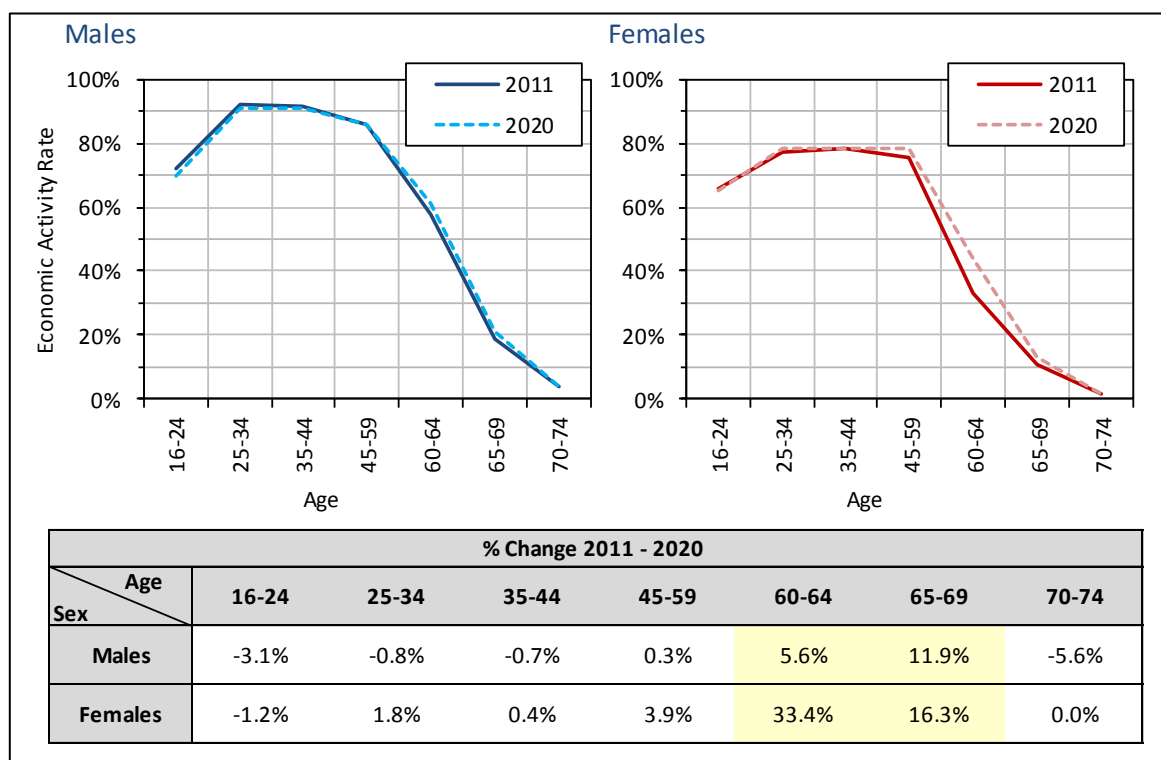


Figure 4: ONS Labour Force Projection 2006 – Economic Activity Rates 2011–2020. Source: ONS

2.56 Given the accelerated pace of change in the female SPA and the clear trends for increased female labour force participation across all age-groups in the last decade (Figure 5), these 2011–2020 rate increases (Figure 5) would appear to be relatively conservative assumptions.

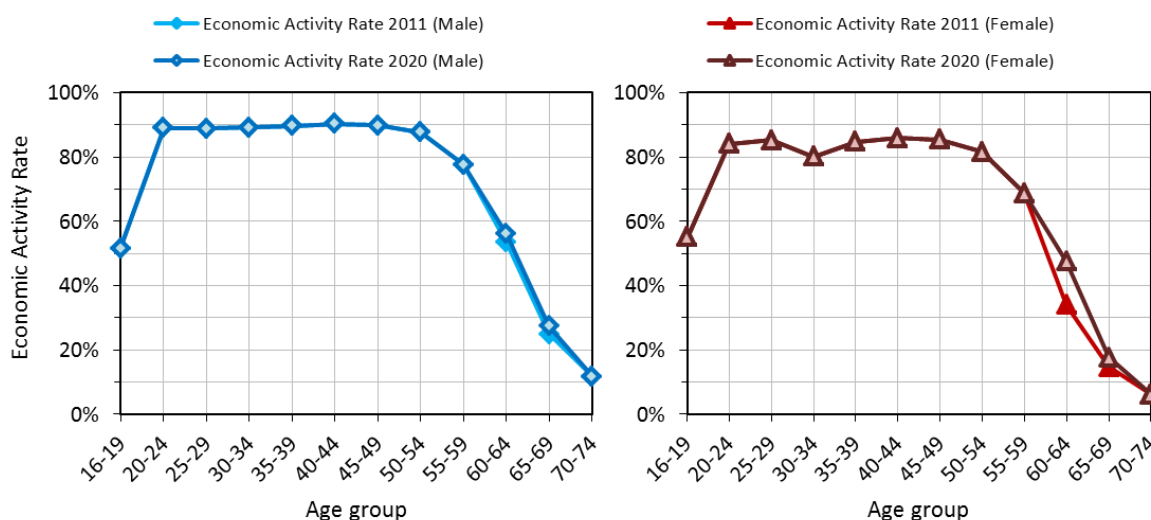


Figure 5: Edge Analytics economic activity rate profiles for Fylde, 2011 and 2020 comparison.

Commuting Ratio

2.57 The commuting ratio, together with the unemployment rate, controls the balance between the number of workers living in a district (i.e. the resident labour force) and the number of jobs available in the district.

2.58 A commuting ratio greater than 1.00 indicates that the size of the resident workforce exceeds the number of jobs available in the district, resulting in a net out-commute. A commuting ratio less than 1.00 indicates that the number of jobs in the district exceeds the size of the labour force, resulting in a net in-commute.

2.59 From the 2011 Census 'Travel to Work' statistics, published by ONS in July 2014, a commuting ratio has been derived for Fylde. This is compared to the 2001 Census value in Table 1.

Table 1: Commuting Ratio Comparison

Fylde		2001 Census	2011 Census
Workers	<i>a</i>	32,235	34,510
Jobs	<i>b</i>	40,633	43,000
Commuting Ratio	<i>a/b</i>	0.79	0.80

Note: 2001 data from Census Table *T101 – UK Travel Flows*; 2011 data from Census Table *WU02UK - Location of usual residence and place of work by age*.

Unemployment Rate

- 2.60 The unemployment rate, together with the commuting ratio, controls the balance between the size of the labour force and the number of jobs available within an area. In all scenarios, a ‘recession’ unemployment rate (2008–2013 average) of 5.3% has been applied, fixed throughout the forecast period.

Turley
1 New York Street
Manchester
M1 4HD

T 0161 233 7676