Topic Paper 2
Housing Need

for the Crawley Borough Local Plan 2015-2030

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Crawley Borough Council

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1. Introduction

1.1 This paper is part of the evidence base for the Crawley Borough Local Plan 2015-2030. It clarifies the objectively assessed housing need for Crawley over the Plan period 2015-30 and provides a summary of the technical information on housing need supporting the council's approach to housing which is detailed in the submission Local Plan policies:

- H1: Housing Provision;
- H2: Key Housing Sites;
- H3: Future Housing Mix;
- H4: Affordable and Low Cost Housing; and
- H6: Houses in Multiple Occupation.

1.2 The National Planning Policy Framework (NPPF) requires local authorities to demonstrate that they are meeting the full, objectively assessed needs for market and affordable housing in the Housing Market Area, providing this is consistent with the policies of the Framework.

1.3 Policy H1 Housing Provision sets a minimum figure for housing provision of 5,010 net dwellings in the borough in the period to 2030, which is supported by the Sustainability Appraisal[1]. The housing figure identified in Policy H1 represents a 'supply-led' requirement, and reflects the compact nature of the borough, its limited land availability and significant environmental, airport noise and safeguarding constraints. Topic Paper 3: Housing Supply[2] details the evidence to justify this approach. The council's approach to calculating and meeting the accommodation needs of Gypsies and Travellers is set out in the Crawley Gypsy, Traveller and Travelling Showpeople Accommodation Needs Assessment[3].

1.4 The NPPF states that local planning authorities should have a clear understanding of the housing needs of their area. In doing so, they should prepare a Strategic Housing Market Assessment to assess their full housing needs, working with neighbouring authorities where housing market areas cross administrative boundaries. The Strategic Housing Market Assessment should identify the scale and mix of housing and range of tenures likely to be needed over the Plan period which meets household and population projections and takes account of migration and demographic change.

2. Identifying Need

2.1 Although the NPPF places significant weight on the concept of objectively assessed need, it does not provide any definition of need or specify how it should be calculated. However, paragraph 159 of the framework identifies that objectively assessed need includes demand for housing from all households, both affordable and market. The need to meet population and household projections, taking account of migration and demographic change, is identified as a key component of objectively assessed housing needs.

[1] Crawley Sustainability Appraisal/Strategic Environmental Assessment (CBC, August 2014) Core Document Library Reference: LP003
[2] Topic Paper 3: Housing Land Supply (Crawley Borough Council, November 2014) Core Document Library Reference: LP012
[3] Crawley Borough Council Gypsy, Traveller and Travelling Showpeople Accommodation Needs Assessment (Crawley Borough Council, August 2014) Core Document Library Reference: LP094

2.2 The NPPF suggests that objectively assessed need should be measured by household and population projections but does not give specific advice about how this should be measured. The Planning Advisory Service has provided some clarification that authorities should use the most recently released sub-national population projections (published by the Office for National Statistics) and household projections (published by the Department for Communities and Local Government)[4].

2.3 The National Planning Practice Guidance Note on Housing and Economic Development Needs Assessments (March 2014) identifies that the need for housing in the context of objectively assessed need relates to the scale and mix of housing and the range of tenures that is likely to be needed in the housing market area over the plan period. It should cater for the housing demand of the area and identify the scale of housing supply required to meet that demand. The Guidance acknowledges that establishing future need for housing is not an exact science and should focus primarily on secondary sources of data (e.g. 2011 Census, Sub National Population Projections and Household Projections).

2.4 'What Homes Where' is an interactive web based tool which allows exploration of the characteristics of the local population including how and why population has changed over time, and is forecast to change in the future. However, it uses 2008 based population projections and needs to be updated with the 2011 Census information in order to provide a meaningful understanding of current Objectively Assessed Housing Need.

Demographic Need

Government Projections

2.5 There are two key projections issued by the government which must be taken into account when determining objectively assessed housing needs. Firstly, the Office for National Statistics (ONS) publishes Sub-National Population Projections (SNPP), which show population growth by age and sex based on rolling forward past rates of natural change (births minus deaths) and taking account of migration for each demographic group. The Department for Communities and Local Government (DCLG) then converts each Sub National Population Projection into a Household Projection by applying 'headship' or household formation rates. The most recent Household Projections, the 2011 Interim Projections, were published in April 2013 and provide an indication of household formation levels in the period 2011 to 2021. These projections are based on the 2011 interim Sub-National Population Projections.

2.6 The Household Projections are produced by applying household representative rates to the population projections published by the Office for National Statistics. Projected household representative rates are based on trends observed in the 2011 Census and Labour Force Survey. It is important to recognise that the assumptions underlying national and population projections are demographic-led, and do not attempt to predict the impact of future government policies, changing economic factors or other factors which might impact on population and household changes.

[4] 'Ten key principles for owning your housing number – finding your objectively assessed needs' (Planning Advisory Service, July 2013)

Data Limitations

2.7 The 2011-based population and household projections take account of the 2011 Census, although this is only partially in terms of the baseline population at 2011 and updated household formation rates. However, the migration rates that the 2011 population projections use are taken from the 2010 estimates, which predate the 2011 Census. The Office for National Statistics (ONS) published the 2012-based Sub National Population Projections in May 2014 (at a Local Authority level[5]), using new migration rates updated in the light of the 2011 Census. It is anticipated that these will be translated into DCLG household projections in late 2014 and the publication of these figures will necessitate a further update to the council's Objectively Assessed Housing Needs.

3. Crawley's Objectively Assessed Housing Need

3.1 In 2011, an assessment of local housing need over the period 2010 to 2031 was undertaken by Nathaniel Lichfield and Partners[6]. The report was published in November 2011 (prior to the publication of the NPPF). The Locally Generated Housing Needs Assessment modelled nine different scenarios to determine future housing requirements (4 demographic, 4 economic and 1 based upon meeting identified Housing Need) using the 2008-based Sub National Population Projections and 2008-based Household Estimates. The assessment identified the amount of new housing which would be required by 2031 to meet differing assumptions on demographic change, migration, economic growth, commuting and affordable housing need (see Table 1, below).

Table 1: 2011 Locally Generated Housing Needs Assessment

Nine Scenarios	Housing Requirement (2010-31)
A. Baseline	542 dwellings p.a. (11,379 total)
B. Zero Net Migration	428 dwellings p.a. (8,984 total)
C. Long Term Past Migration	511 dwellings p.a. (10,726 total)
D. Short Term Past Migration	664 dwellings p.a. (13,953 total)
E. Static Employment	120 dwellings p.a. (2,529 total)
F. 'Hybrid' Economic Growth	287 dwellings p.a. (6,018 total)
G. 'Hybrid' Economic Growth and Strategic Employment Site	350 dwellings p.a. (7,345 total)
H. ELR 'Hybrid' Economic Growth Nil Additional In-Commuting	400 dwellings p.a. (8,390 total)
I. Affordable Housing Scenario	204-252 dwellings p.a. to meet affordable housing needs. This requires 510-630 p.a. general needs housing in order to meet affordable housing of 204-254 dwellings at a rate of 40%[7].

[5] 2012 Based Sub National Population Projections for Local Authorities in England (Office for National Statistics, 29 May 2014)

[6] Crawley Borough Council Locally Generated Housing Needs Assessment (Nathaniel Lichfield and Partners, November 2011) Core Document Library Reference: LP084

[7] This scenario is based on the 2009 Strategic Housing Market Assessment (SHMA) estimate of affordable housing need. It uses the assumption that 50% of new households will fall into need, which is then applied to household growth in Scenario A, to estimate how many houses will be required in the future to meet affordable housing.

3.2 The 2011 Housing Needs Assessment[8] is not a market-led or capacity-led assessment of demand. It is purely a quantitative assessment of the need for housing according to a number of scenarios. Each scenario is independent from the other and illustrates what could happen if a particular demographic, economic, migration or affordable housing scenario were to prevail. The assessment relates solely to meeting the future housing needs of Crawley and does not explore the housing needs of the wider Housing Market Area, including the Northern West Sussex and East Surrey Housing Market Areas.

3.3 In doing so, the assessment incorporated the housing needs associated with the current operation of Gatwick as a single runway, two terminal airport. As set out in Topic Paper 1: Future of Gatwick Airport and Implications for the Local Plan[9], whilst the Local Plan has been prepared on the basis of 'business as usual' growth at Gatwick Airport, once a final decision is made at a national level on the future of airport runway capacity in the South East a review of the Local Plan is likely to be triggered. This will factor in the need to update the projections for housing and employment needs.

3.4 In addition to differing housing requirements, each scenario has different demographic and economic implications for the borough. However, there are a number of common demographic and economic issues across all scenarios. These are summarised below:

- A high level of natural change, where births are projected to exceed deaths (i.e. population growth), is identified as the key driver of growth in both household formation and local labour force, with migration identified as being of less importance.
- The structure of Crawley's population is considerably younger than the rest of the South East with almost two-thirds of residents below the age of 45.
- Unlike many locations in the region, where an ageing population structure means that the number of economically active people is projected to fall, in Crawley, the younger population structure means that natural growth is set to drive increases in the indigenous labour force.

3.5 The housing requirements based on demographic factors (Scenarios A-D, above) are much higher, meaning that accommodating (2008) projected population increases would require greater housing delivery. By contrast, the requirement for housing based on purely economic factors (Scenarios E-G) is lower. This means that the level of labour force (i.e. number of people in work) required to support any of the economic growth scenarios, is considerably less than is projected to occur naturally. At the time that the report was published, it raised important considerations in terms of the relationship between future population change and employment, in terms of having too many economically active residents than required to support any of the economic scenarios. Other than the static employment scenario, the three economic scenarios modelled in the assessment (Scenarios F-H, 'Hybrid', 'Hybrid plus Strategic Employment Site' and 'Hybrid Nil Additional In-Commuting') reflect those identified in the 2010 Employment Land Review which reflected the most up-to-date assessment of the borough's future economic potential at that time.

[8] See http://www.crawley.gov.uk/pw/web/int228228
[9] Topic Paper 1: Future of Gatwick Airport & Local Plan Review (Crawley Borough Council, November 2014) Core Document Library Reference: LP010

2009 Strategic Housing Market Assessment and 2012 Update

3.6 The 2009 Northern West Sussex Strategic Housing Market Assessment (SHMA) was commissioned for Crawley, Horsham and Mid-Sussex[10], the three authorities which make up the vast majority of the northern West Sussex Housing Market Area. The Assessment was revisited in October 2012[11] to provide an update on the current and future housing market and affordable housing needs in Northern West Sussex. A further (PPG compliant) update is being undertaken with Horsham and Mid Sussex District Councils to provide a more up-to-date picture of affordable housing needs given that the private sector housing market has changed considerably since 2012.

3.7 Both the 2009 and 2012 SHMA provide a low and high estimate of need. The low estimate is derived from those on the housing waiting list classified as being in greatest need ('reasonable preference'), whilst the high estimate includes all those on the waiting list (excluding transfers). The 2009 SHMA identified that affordable housing need within Crawley ranged between 103 (low estimate) and 250 (high estimate) dwellings per annum. This is based upon addressing the identified backlog of need over a 10 year period whilst accounting for the identified supply of affordable housing in 2009. This is predicated upon 50% of new households in Crawley being unable to access market housing and falling into need.

3.8 The 2012 SHMA also provides a low and high estimate of need based on those households in greatest need ('reasonable preference') and the entire waiting list (excluding transfers). In 2013, the 'reasonable preference' group within Crawley comprised 48% of the council's entire waiting list. The 2012 SHMA identified that 59% of newly forming households in Crawley would be unable to rent private sector housing without support with 69% unable to buy. Net affordable housing need was identified as ranging from 82 to 382 homes per annum dependent upon levels of new house building ranging from 300, 400 and 500 dwellings per annum. Whilst this represents a snapshot picture of affordability levels, it illustrates the extent of the Affordable Need requirement in Crawley and how this varies according to future levels of house building.

4. Northern West Sussex Housing Market Area: Needs Assessment

4.1 Crawley's housing market functions within a wider geographic area – identified as the Northern West Sussex Housing Market Area, which is predominantly within the local authority administrative areas of Crawley Borough, Horsham and Mid Sussex Districts; extending northwards into the administrative area of Reigate and Banstead Borough. Taken as a whole, the towns within the Northern West Sussex housing market area complement one another, offering housing opportunities for the local population and workforce for each stage and socio-economic position within lifecycles, and providing housing for employees working at Gatwick Airport, Manor Royal, and within and beyond the Gatwick Diamond. This highlights a critical inter-dependence and reliance between areas with regard to housing and economic growth.

[10] Northern West Sussex Strategic Housing Market Assessment (GVA Grimley, March 2009) Core Document Library Reference: LP082

[11] Northern West Sussex – Crawley Strategic Housing Market Assessment Update (GVA, 2012) Core Document Library Reference: LP083

4.2 Technical work has been undertaken to compare the housing needs assessments of Horsham and Mid Sussex District with that of Crawley. This has led to a detailed understanding between the three authorities of the factors that influence population growth in the Housing Market Area. Consequently, the process of establishing an understanding of the objectively assessed housing need has been carried out in a joint approach.

5. Review of 2011 Objectively Assessed Housing Need

5.1 The 2011 Locally Generated Housing Needs Assessment was based on the most up to date published information at that time and did not include any data from the 2011 Census of Population as it was not available. Whilst much of the data from the 2011 Census (population, age and gender, number of households, economic activity) has now been published at a Local Authority Level, other data which is critical to assessing Objectively Assessed Housing Needs, such as Travel to Work and Migration Data, is not anticipated to be published until summer 2014. It is therefore not possible to directly assess the full implications of the 2011 Census at present. However, the council has undertaken an update to the 2011 assessment using the latest population and household projections, published in September 2012 and April 2013.[12]

5.2 The council considers that a demographic 'baseline' scenario based upon ONS projections for fertility, mortality and migration (to 2021) and DCLG Projections of Household Growth (2011 to 2021) is most closely aligned with objectively assessed housing need as identified in the NPPF. Two further scenarios were remodelled to provide a comparison with the demographic led scenario. These are a 'zero net migration' and 'employment growth' scenario.

5.3 At this stage, only the demographic scenario and zero net migration scenario can be remodelled because the data required to re-model the economic growth scenario is not fully available. Any economic growth scenario is partly dependent on the Travel to Work 2011 Census data being released, because it is this dataset which provides information about in/out commuting and the numbers of residents who work in the borough. The 2001 Census is the only source of this information at present. The council anticipates that Travel to Work patterns will have changed since the 2001 Census and this may have a significant effect on the number of homes required within the borough by 2030, particularly in relation to those people living and working in Crawley. In 2001, only 7% of economically active residents worked at/or from home and whilst it is assumed that this percentage will have increased in the last 10 years, it is difficult to estimate the extent to which the percentage of residents living and working in Crawley has changed.

5.4 The key findings of the 2014 Northern West Sussex Economic Growth Assessment (EGA)[13], explained in Topic Paper 4: Economic Growth, commissioned on a partnership basis by Crawley Borough Council, and Horsham and Mid Sussex District Councils, will also need to be factored into a revised assessment of housing needs.

5.5 The EGA models three key scenarios: 'baseline', 'higher growth' and 'potential site capacity'. Even at the baseline level, the EGA forecasts significant growth across the Gatwick Diamond, far greater than growth levels previously identified. For Crawley, the baseline scenario identifies demand for

[12] ONS Interim 2011-based sub national population projections for England (September 2012) and DCLG Household Interim Projections, 2011 to 2021 (April 2013) England.
[13] Northern West Sussex Economic Growth Assessment (April 2014), Nathaniel Lichfield and Partners

a further 16,500 jobs over the Plan period to 2030, with traditional business uses (B1, B2, B8 use classes) alone requiring an estimated land take of 77 hectares. Taking into account Crawley's existing employment land supply of 42 hectares from permissions and allocations, this results in a significant shortfall of 35 hectares, that will be difficult to accommodate given land supply constraints including a tight administrative boundary and the safeguarding of land for a possible second runway at Gatwick Airport.

5.6 Given that land supply constraints present challenges to delivering even the baseline growth scenario, it is not considered realistic to plan for the 'higher growth' or 'potential sites capacity' scenarios, and the EGA is clear that in planning to accommodate the baseline growth scenario, Crawley would be planning positively for growth as required by the NPPF. Further detail on these scenarios and underlying assumptions is provided in the council's Topic Paper 4: Economic Growth[14].

Benchmarking Exercise

5.7 Through continued engagement with Mid Sussex and Horsham Districts, the council has discussed its assessment of housing needs and shared the methodologies and conclusions of the 2011 Locally Generated Housing Needs Assessment. Similarly, Mid Sussex and Horsham Districts have discussed the methodology underpinning their respective housing needs assessments and key findings. This has enabled a greater understanding of each others' objectively assessed need and how this is calculated.

5.8 A benchmarking exercise has also been undertaken with Mid Sussex and Horsham Districts to ascertain the degree of commonality between the authorities' housing needs assessment. Three comparable scenarios were chosen for this exercise:

- Demographic Trends (Births/Deaths/Migration)
- Zero-Net Migration (same no. out-migrants as in-migrants)
- Employment Growth (3% GVA[15]).

5.9 This exercise was undertaken in 2013, using the same data sources as the 2011 Locally Generated Housing Needs Assessment: the 2001 Census and 2008 based Sub National Population Projections and 2010 Household Estimates.

5.10 This work has established that the methodologies and results of the Mid Sussex and Crawley and Horsham studies are broadly compatible and comparable, as illustrated in Table 2 below, with the equivalent process applied to Horsham's figures set out in Appendix C. The greater difference in the results of the zero net migration scenario for Crawley may be explained by the lower influence of migration on Crawley's figures compared to within Mid Sussex.

[14] Topic Paper 4: Economic Growth (Crawley Borough Council, November 2014) Core Document Library Reference: LP013

[15] This is from the 'target' derived from the findings of the Employment Land Review (2009), which was 3% increase in GVA per annum. The ELR equated a 3% annual GVA increase as 380 jobs per annum for Mid Sussex. This was 344 for Crawley. The 3% figure was chosen as this was the target in the South East Plan. In general, it is not the 3% figure that is used in any of the modelling, it is the "job target" figure.

Table 2: Application of Mid Sussex Methodology to Crawley and comparison with 2011 Objectively Assessed Housing Need

	Crawley – published Locally Generate Need Study (2011)	Crawley – using Mid Sussex Model (2013)	Result
Demographic Trends	542 dpa	535 dpa	-7dpa
Zero Net Migration	428 dpa	506 dpa	+78dpa
Employment Growth (3% GVA)[16]	350 dpa	365 dpa	+15dpa

Methodology

5.10 The methodology for the three revised scenarios is explained below:

Demographic Led 'Baseline' Scenario

5.11 The demographic led scenario is based upon ONS assumptions and projections for fertility, mortality and migration. The projected population in 2030 is derived from the ONS Sub-National Population Projections (2011 base) released in 2012. This published data only projects forward to 2021 so additional work has been undertaken with Mid Sussex to project trends in births, deaths and migration forward for the last 10 years, using a 5 year rolling average trend. This is consistent with the methodology used in the Sub-National Population Projections data for births and deaths and, although not precisely the same for migration, it provides a 'best estimate' given the sources available.

5.12 The predicted 2030 population is then 'converted' to numbers of households. This is undertaken by using the projected average household size in 2030 based on DCLG Interim Household Estimates (interim, April 2013) including the household reference person ('head of household')[17]. Finally, the predicted number of households in 2030 is subtracted from the actual number of households in 2011 to give the 19 year increase, as shown in Figure 1, Appendix A.

Zero Net Migration

5.13 This is a further demographic scenario whereby both net internal and international migration is equal, meaning there is no direct population growth from net in-migration. This does not represent a scenario of providing only for the needs of indigenous residents (i.e. a zero migration scenario, where the population remains static and nobody moves in or out) as there will continue to be displacement effects through population churn. For example, whilst the same number of people move in as move out, they would not necessarily be the same age or gender and therefore the population structure would change. This scenario provides a useful benchmark against which to consider balancing housing needs for existing residents with those resulting from net in-migration.

[16] This formed one of the scenarios in the Mid Sussex Local Housing Assessment. There is no directly comparable scenario within Crawley's assessment however it is closest to Scenario G.

[17] The 'Head of Household' is used as a proxy for the "number of households". The head of household is the person within the household with the highest income and if incomes are equal, the oldest person. This is expressed as a percentage of the entire population by gender (i.e. x% of males are heads of household, x% of females). The number of males and females who are heads of household is then predicted multiplied by the percentage of "heads of households" to give a total number of households.

5.14 Zero net migration is modelled by setting the migration component of the scenario to '0' for the period 2011-2030 whereby out migration balances in migration. This scenario is modelled in Figure 2, Appendix A.

Employment Growth

5.15 A separate model is used to determine the population required in 2030 in order to meet job growth aspirations. This model is based on economic factors such as economic activity, employment rates, employed/self employed (2011 Census data) and travel to work data and factors all of these components in to determine what population would be required in order to meet a specified job target, i.e. predicted number of additional jobs in any future year. The travel to work data is presently only available from the 2001 Census, so whilst not necessarily unreliable, caution must be taken as to its reliability at present. The model predicts the potential workforce within the borough taking into account economic factors, as well as commuting patterns.

5.16 The estimated number of jobs in the borough in 2011 is calculated, with the annual job requirement added to this figure for all years to 2030. The forecast population is then increased/decreased until the potential workforce matches the number of jobs in 2030. Once the predicted level of population in 2031 is determined, it is then converted to numbers of households. This is undertaken by using the projected average household size in 2030, based on DCLG Interim Household Estimates (April 2013) including the household reference person rates.

5.17 Finally, the predicted number of households in 2030 is subtracted from the actual number of households in 2011 to give the 19 year increase, as shown within Figure 3, Appendix A.

5.18 The results for each of the above scenarios are shown in Table 3, below. The table also highlights the difference, in terms of number of dwellings per annum, with the same three scenarios modelled in the 2011 assessment.

Table 3: 2014 Objectively Assessed Housing Need, First Model Run

	Crawley – published Locally Generate Need Study (2011)	2014 First Update	Difference
Demographic Trends	542 dpa	636 dpa	+115 dpa
Zero Net Migration	428 dpa	395 dpa	-13 dpa
Employment Growth (3% GVA)[18]	350 dpa	483dpa	+164 dpa

5.19 In order to understand the difference between the 2011 and 2014 assessment of Objectively Assessed Need, further analysis was undertaken on the components that make up each result, in particular migration and household size/formation.

Further analysis of components

Migration

5.20 The key difference between the figures identified in the 2011 and 2013 assessment of Objectively Assessed Housing Need (Table 2 and 3) is the

[18] This formed one of the scenarios in the Mid Sussex Local Housing Assessment. There is no directly comparable scenario within Crawley's assessment however it is closest to Scenario G.

level of inward migration expected in the borough between 2021 and 2031. The most recent sub-national population projections (2011 based) predict only as far ahead as 2021 and further work is required to project forward for the whole Plan period.

5.21 It was assumed in the 2013 first update that the level of migration from 2015 onwards (the base date of the Local Plan) would continue at broadly the same level (+500 per annum) for the 15 years of the Plan. However, for reasons of lower housing delivery linked to physical limits on housing land supply in the latter years of the Plan period, particularly from 2025/6 onwards, this is considered unrealistic. It is more likely that migration will decline from this period onwards due to limited housing land supply and will not continue at past levels. Indeed, migration levels which drop off in the latter part of the Plan period are evident in both the 2008 and 2010 based Sub-National Population Projections data. Although this could be considered 'policy-based', it is argued that it represents a more realistic scenario on the basis of limited land supply in the latter part of the Plan and can be justified.

5.22 An approach which seeks to interrogate the migration component of the population projections in more detail was considered appropriate by the Inspector examining the Reigate and Banstead Core Strategy Local Plan[19] who accepted the link between housing delivery and in-migration. It was agreed that migration levels would not continue at past levels over the Plan period due to future levels of housing delivery being significantly lower than delivery levels of the "Growth Point" housing and that population projections do not always provide a reliable indication of future population growth.

5.23 By way of comparison, the total (net) level of migration has been compared for various data sources over the 20 year period, see Table 4 below.

Table 4: Comparison of various migration figures to 2030

	Migration (persons)				
Year	**a) 2011-2030:** Sub-national Population Projections (2008 base to 2031)	**b) 2011-2030:** Sub-national Population Projections (2010 base to 2031)	**c) 2011-2030:** 5 year rolling average based on previous 10 year estimates	**d) 2011-2021:** As c) **2022-2030:** Zero net migration	**e) 2011-2021:** 2011-based SNPP **2022-2030:** 2010-based SNPP
TOTAL Migration (net)	2800	3800	10184	6078	5700

5.24 Table 4 demonstrates that estimates and projections of migration levels have continued to increase as each subsequent population projection has been published. It also demonstrates that the figure for migration (Option c) used in the 2014 First Model Run (Table 3), above is likely to have over-stated the level of migration.

5.25 As migration is difficult to predict, it is considered most realistic to use Option e) shown in Table 4 which is a hybrid of two recognised and published sources. This is considered more realistic than using a) or b) which could be low when considered over the Plan period due to recessionary influences at the time the projections were published. It is also more realistic than c) in that it doesn't unrealistically over-state migration to levels much higher (as much

[19] See Reigate and Banstead Core Strategy Local Plan, Inspector's Report, January 2014, para 21-25

as three times higher) than previously predicted. Annualised migration figures for each scenario from 2011 to 2030 are given in Appendix B, Table 1.

Average Household Size

5.26 Detailed analysis of household formation and average household size has been undertaken, as this is a key component of the assessment of the council's Housing Need. The two published sources where this data can be obtained are the 2008 and 2011 Household Estimates, published by the Department of Communities and Local Government. The following average household sizes are predicted in the 2008 and 2011 household projections.

Table 5: Average Household Size 2008 and 2011 household projections

	2011	2016	2021	2026	2030
2008 Base	2.42	2.39	2.37	2.34	2.32
2011 Base	2.48	2.47	2.46	2.45	2.45

5.27 There is a significant difference between the two sets of figures. The 2008 data may have taken account of pre-recessionary levels of new household formation and reducing household size, when it would have been easier to obtain a mortgage as lending arrangements were less restrictive. The 2011 Household Projections, which use the 2011 Census as a base, may reflect in part the economic recession in dampening household formation at a time when it was difficult to obtain mortgage finance. It may also reflect decreasing delivery of housing in the borough in recent years due to a fall in new houses being completed and added to the housing market (See Table 6, below). However, it is difficult to predict the effect of the recession on household formation and to accurately predict when the longer term trend of reduced household size identified in the 2008 Household Projections will resume. It is therefore suggested that the most appropriate approach is to use the most up-to-date household information at the time, namely the 2011 Household Projections.

Table 6: Net Housing Completions

Year	Net Housing Completions
2006/2007	468
2007/2008	679
2008/2009	368
2009/2010	409
2010/2011	384
2011/2012	202
2012/2013	78
2013/2014	157

5.28 Using the more detailed approach to migration and average household size, the overall objectively assessed need for Crawley is considered as 535 dwellings per annum (as set out in Table 7 below).

Table 7: 2014 Objectively Assessed Housing Need, Second Model Run

	Crawley – published Locally Generate Need Study (2011)	2014 Second Update	Difference
Demographic Trends	542 dpa	535 dpa	-15 dpa
Zero Net Migration	428 dpa	395 dpa	-13 dpa
Employment Growth (3% GVA)[20]	350 dpa	483 dpa	+164 dpa

6. Conclusion

6.1 The technical work required to determine the objectively assessed housing needs of Crawley borough over the period 2015 and 2030 has been undertaken in four distinct yet interrelated phases.

- 2011 Local Generated Housing Needs Assessment (Nathaniel Lichfield and Partners)
- 2013 Benchmarking Exercise with Horsham and Mid Sussex District
- 2014 First Model Run, based on updated 2011 Census data
- 2014 Second Model Run, based on updated 2011 Census data with refinements to migration.

6.2 The 2013 benchmarking exercise demonstrated that the Crawley, Horsham and Mid Sussex assessment of housing needs undertaken separately in 2011 were broadly compatible in terms of output (number of dwellings per annum). The compatibility of the three scenarios (demographic trends, zero net migration and employment growth) ranged from 83% to 118%. The demographic trends scenario is considered to be that which most closely aligns with 'objectively assessed housing need' as identified in the NPPF. Compatibility ranged from 99% for Crawley and 88% for Horsham which is considered a close match given the number of variables involved and sensitivity of data. This demonstrates a clear fit between the housing needs work undertaken by all three authorities in 2011. The greatest correlation occurs with the demographic trends scenario, that which most closely aligns with 'objectively assessed housing need'.

6.3 The 2014 First Model Run for Crawley generated an annual housing requirement well in excess of those previously published (See Table 3, above). Further analysis was undertaken to understand what had changed in the datasets between the 2001 Census, 2008 Population Projections and 2010 Household Estimates used in the 2011 Locally Generated Housing Needs Assessment and 2013 Benchmarking Exercise and the 2011 Census, 2011 Population Projections and 2012 Household Estimates used in the 2013 First Model Run. Migration was identified as the key factor which varied between the datasets used to identify objectively assessed housing need in 2011 and 2013 Benchmarking Exercise and 2014 First Model Run.

6.4 Migration figures were subsequently adjusted to better reflect the reality of what is likely to occur in the latter part of the Plan period from 2025/26 to 2030 due to limitations on housing land supply and delivery. This exercise,

[20] This formed one of the scenarios in the Mid Sussex Local Housing Assessment. There is no directly comparable scenario within Crawley's assessment however it is closest to Scenario G.

the 2014 Second Model Run, identified an annual housing requirement of 535 dwellings per annum.

6.5 The population and associated housing figures (535dpa) were then run through the economic model to determine the number of jobs created which determined that 399 jobs per annum would result. This is broadly in line with the baseline level of job creation anticipated in the borough over the 15 year Plan period (392 jobs per annum) (based on the Economic Growth Assessment) and can therefore be considered as an appropriate measure of objectively assessed housing need for Crawley.

Northern West Sussex Housing Market Area: Objectively Assessed Housing Need

6.6 The understanding of the need for new housing across the housing market area over the next 20 years is detailed in the Northern West Sussex Position Statement. This Position Statement was initially agreed in September 2013 with a subsequent update reviewed in July 2014. Table 8 below, sets out the three authorities' respective objectively assessed housing need (at both September 2013 and July 2014).

6.7 In conclusion, it is estimated that a total of 1,611 net dwellings would be required per annum to meet baseline demographic needs across the Northern West Sussex Authorities. This is the need that arises naturally from increasing birth rates, decreasing death rates and historic levels of net migration.

Table 8: Northern West Sussex Authorities Objectively Assessed Housing Needs and Proposed Housing Provision

		Crawley	**Mid Sussex**	**Horsham**	**Total**
2013	Objectively Assessed Need	542	411	550-595	1,503-1,548 net dwellings per annum
2014	**Objectively Assessed Need**	**535**	**516**	**560**	**1,611 net dwellings per annum**

Source: Northern West Sussex Position Statement (September 2013 and July Review 2014)

APPENDIX A

Figure 1 - Appendix A

Demographic Trends

Year	Population	Households
2011	107100	42727
2012	108300	43723
2013	109900	44379
2014	111500	45086
2015	113100	45714
2016	114625	46370
2017	116125	47013
2018	117625	47664
2019	119050	48304
2020	120450	48907
2021	121850	49543
2022	123175	50066
2023	124535	50660
2024	125912	51260
2025	127284	51856
2026	128651	52456
2027	130012	53045
2028	131379	53636
2029	132748	54226
2030	134115	54813
Household Increase:		12086 (2011-2030)
Per Year:		636

Figure 2- Appendix A

Zero Net Migration

Year	Population	Households
2011	107100	42727
2012	107900	43562
2013	108720	43903
2014	109544	44295
2015	110393	44619
2016	111231	44997
2017	112058	45367
2018	112889	45745
2019	113723	46143
2020	114559	46515
2021	115392	46917
2022	116224	47241
2023	117057	47618
2024	117891	47994
2025	118725	48368
2026	119558	48748
2027	120391	49120
2028	121224	49491
2029	122058	49859
2030	122891	50226
Household Increase:		7499 (2011-2030)
Per Year:		395

Figure 3- Appendix A

Employment Growth

Year	Population	Jobs	Households
2011	107100	85384	42727
2030	127000	92886	51905
Job Increase:		7502	
Household Increase:		9178	(2011-2030)
Per Year:		483	

APPENDIX B

Table 1:

MIGRATION

Year	Sub-national Population Projections (2008 base)	Sub-national Population Projections (2010 base)	MSDC Modelled Migration – First Model Run	MSDC Modelled Migration – Second Model Run (Hybrid)	2011- based (2011-2021) and 2010-based (2022-2031)
2011	400	300	440	440	600
2012	400	400	488	488	600
2013	400	400	506	506	500
2014	300	400	547	547	500
2015	300	300	516	516	500
2016	300	300	499	499	500
2017	200	300	511	511	400
2018	200	200	516	516	400
2019	100	200	518	518	400
2020	100	200	512	512	400
2021	100	200	511	511	300
2022	0	200	514	514	200
2023	0	100	514	0	100
2024	100	100	514	0	100
2025	100	100	513	0	100
2026	0	100	513	0	100
2027	0	0	513	0	0
2028	-100	0	513	0	0
2029	-100	0	513	0	0
2030	0	0	513	0	0
TOTAL	2800	3800	10184	6078	5700

Figure 1 - Appendix A

Demographic Trends

Year	Population	Households
2011	107100	42727
2012	108300	43723
2013	109900	44379
2014	111500	45086
2015	113100	45714
2016	114625	46370
2017	116125	47013
2018	117625	47664
2019	119050	48304
2020	120450	48907
2021	121850	49543
2022	123175	50066
2023	124535	50660
2024	125912	51260
2025	127284	51856
2026	128651	52456
2027	130012	53045
2028	131379	53636
2029	132748	54226
2030	134115	54813
Household Increase:		12086 (2011-2030)
Per Year:		636

Figure 2- Appendix A

Zero Net Migration

Year	Population	Households
2011	107100	42727
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2013	108720	43903
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2023	117057	47618
2024	117891	47994
2025	118725	48368
2026	119558	48748
2027	120391	49120
2028	121224	49491
2029	122058	49859
2030	122891	50226
Household Increase:		7499 (2011-2030)
Per Year:		395

Figure 3- Appendix A

Employment Growth

Year	Population	Jobs	Households
2011	107100	85384	42727
2030	127000	92886	51905
Job Increase:		7502	
Household Increase:		9178	(2011-2030)
Per Year:		483	

APPENDIX C

Application of Mid Sussex Methodology to Horsham and Comparison with Horsham's Locally Generated Need Study (2009)

	Horsham published Locally Generate Need Study (2010)	Horsham – using Mid Sussex Model	Result
Demographic Trends	769 dpa	679 dpa	-90dpa
Zero Net Migration	298 dpa	266 dpa	-32dpa
Employment Growth (3% GVA)[21]	713 dpa	591dpa	-122dpa

[21] This formed one of the scenarios in the Mid Sussex Local Housing Assessment. There is no directly comparable scenario within Crawley's assessment however it is closest to Scenario G.