Town and Country Planning Act 1990
Section 78
Appeal by Persimmon Homes Ltd
Land to the East of Bell Lane, Kesgrave
PINS ref APP/J3530/W/16/3160194
LPA ref 15/4672/OUT

Rebuttal proof of Cristina Howick
On behalf of the local planning authority

Peter Brett Associates
July 2017

Peter Brett Associates LLP16 Brewhouse Yard, Clerkenwell, London EC1V 4LJ
T: +44 (0)207 566 8600 E: london@peterbrett.com

Project Ref 41605

THIS DOCUMENT IS FORMATTED FOR DOUBLE-SIDED PRINTING.

.

CONTENTS

APPENDIX

1 INTRODUCTION

1.1 This rebuttal evidence relates to the objectively assessed housing need (OAN) for Suffolk Coastal district and responds to Charles William Collins's evidence on behalf of the appellant (July 2011). Mr Collins disagrees with the Council about the housing requirement that should be used in the calculation of five-year land supply for this appeal. He maintains that the calculation should be based on the OAN, and specifically the OAN of 647 dwellings per annum (11,000 new homes from 2010 to 2027) supported by the Core Strategy Inspector in 2013. By contrast, the Council considers that:

- The land supply calculation should use the adopted requirement of 465 dpa (7,900 homes 2010-27) at policy SP2 of the Core Strategy.
- Should the Inspector disagree, the OAN should not be taken from the Core Strategy, but from the recent Strategic Housing Market Assessment (SHMA). The SHMA calculated the OAN as 460 dpa (10,111 homes from 2014 to 2036). Mr Collins dismisses this figure on two grounds: that it is '*untested*' and it has '*potential flaws and shortcomings*', as identified in the Pegasus report at Appendix 7 of his proof.

1.2 My rebuttal relates to the second of these points. In Section 2 below I show why the objectively assessed need should be taken from the SHMA, rather than the earlier figure of 647 dpa. The remainder of my evidence responds to the criticisms of the SHMA set out in the Pegasus report. Sections 3-5 deal with the alleged 'flaws and shortcomings' of the SHMA, discussing in turn demographic projections, market signals and the alignment of jobs and homes. My conclusions are summarised in Section 6.

2 THE STATUS OF THE SHMA

2.1 Mr Collins considers that the land supply calculation in this appeal should be based on the objectively assessed housing need; and that need should be 647 dpa supported by the Core Strategy. My own view is that this figure is now out of date, and should be replaced with the need assessed in the SHMA. I base this view on para 030 of the PPG, which I am surprised neither Mr Collins nor the Pegasus report refer to:

*'**What is the starting point for the 5-year housing supply?***

… Housing requirement figures in up-to-date adopted Local Plans should be used as the starting point for calculating the 5 year supply. Considerable weight should be given to the housing requirement figures in adopted Local Plans, which have successfully passed through the examination process, unless significant new evidence comes to light. It should be borne in mind that evidence which dates back several years, such as that drawn from revoked regional strategies, may not adequately reflect current needs.

Where evidence in Local Plans has become outdated and policies in emerging plans are not yet capable of carrying sufficient weight, information provided in the latest full assessment of housing needs should be considered. But the weight given to these assessments should take account of the fact they have not been tested or moderated against relevant constraints. Where there is no robust recent assessment of full housing needs, the household projections published by the Department for Communities and Local Government should be used as the starting point, but the weight given to these should take account of the fact that they have not been tested (which could evidence a different housing requirement to the projection, for example because past events that affect the projection are unlikely to occur again or because of market signals) or moderated against relevant constraints (for example environmental or infrastructure).'[1]

2.2 In summary, if policy requirements in adopted Local Plans are out of date the calculation of five-year land supply should be based on the evidence of the latest full assessment of housing need. Older evidence, which dates back several years, is suspect. A recent needs assessment that has not yet been tested is relevant nonetheless, although it carries less weight. If the latest full needs assessment is not robust for any reason, the fall-back is the latest CLG household projection, it is not an earlier or outdated needs assessment.

2.3 Based on this guidance, it seems obvious that, if the land supply calculation is based on objectively assessed housing need, that OAN should be taken from the SHMA:

- The SHMA, published in May 2017, is the latest full assessment of housing need and uses the most recent available information.

[1] Paragraph: 030 Reference ID: 3-030-20140306

- Contrary to repeated assertions in Mr Collins' proof, it is not a draft[2], but has been signed off as a final report by the authorities that commissioned it including Suffolk Coastal.

2.4 By contrast, the previously assessed need is very much out of date, being taken from an EEFM forecast issued in 2010:

- As noted in my main proof, the figure of 647 dpa relates to a period of which almost half is now in the past, and the demographic data and projections that underpinned the EEFM forecast are even older.
- Since 2010 there have been two new rounds of official demographic projections, both informed by the results of the Census – which were not available in 2010 and radically changed our understanding of demographic trends.
- The examination of the Core Strategy took place in 2012 and 2013 and therefore pre-dated the publication of the PPG. The previously assessed need is not based on the assessment method now recommended by the PPG and cannot now be regarded as the OAN.
- In addition, the analysis in my main proof – which was not available to the Core Strategy Inspector – suggests that the EEFM, irrespective of vintage, does not provide a valid measure of housing need for Suffolk Coastal. That analysis is summarised in Section 5 below.

2.5 I accept that the SHMA has not been tested at examination, and in line with the PPG this reduces the weight it should be given. But it clearly should carry more weight than an assessment which is badly out of date. If the appellant were able to establish that the SHMA was not robust (and still assuming that the Core Strategy requirement is not considered relevant), then in line with the PPG the land supply calculation should be based on the latest CLG household projection. But the SHMA is robust, as I demonstrate in Sections 3-5 below.

2.6 I also accept that the Bredfield appeal decision, quoted in the appellant's evidence, dismissed the SHMA's needs assessment in favour of the Core Strategy figure. The Inspector gave two reasons for this view: that the SHMA was untested and that it was not clear whether the SHMA's figure included 'imported' unmet need for Ipswich. My evidence above responds to both these points:

- In relation to the first point, I have shown that the PPG recommends that the latest housing needs assessment be used, even if it has not yet been tested. The PPG also warns against using out-of-date evidence; I have demonstrated that the Core Strategy need figure is based on such evidence, long since superseded.
- My main evidence has confirmed that the SHMA figure does not include any cross-boundary unmet need; it is clear from the PPG that such 'imported need' is not part of the OAN.

[2] I note that Mr Hewett in his proof of evidence does not seek to suggest the SHMA is draft (para. 4.6)

3 THE DEMOGRAPHIC STARTING POINT

3.1 The Pegasus report (paragraphs 5.17-5.30) considers that the use of short-term migration trends, as the basis for deriving what it refers to as 'a baseline demographic projection of housing need', is a deficiency of the SHMA. I respond to this criticism below.

The PAS advice note

3.2 The Pegasus report states that it is 'surprising' that the SHMA's demographic starting point is based on a five-year reference period. In other words, the SHMA, like the official demographic projections, rolls forward into the future the demographic trends of the previous five years. In support of this point, Pegasus refers, at paragraph 5.19, to the Planning Advisory Service advice note – of which I am the principal author (CD 11.29). However, the Pegasus report is selective in the review of the advice note; it does not say that a longer-term trend should be used in all circumstances. Rather, the advice note states that:

> *'Other things being equal, a 10-to-15-year base period should provide more stable and more robust projections than the ONS's five years. But sometimes other things will not be equal, because the early years of this long period included untypical one-off events as described earlier. If so, a shorter base period despite its disadvantages could be preferable.'*[3]

3.3 At paragraph 5.20, the Pegasus report makes the same point with reference to the representations that I, with a number of other parties, submitted on the standardised method proposed by LPEG. Again, the report fails to acknowledge the very important caveat made in those representations that if a 10-year projection were adopted as part of a standardised method, it would still need to be tested to establish whether all other things were equal so that it could be regarded as reasonable basis upon which to project forward. I repeat below the point made in those representations:

> *'In line with the general rule at paragraph 2.16 above, it should be allowed to correct the 10-year-based projections (in either direction) if there is convincing evidence that they are seriously distorted by special factors. Examples of such factors include unusual events in the base period.'*[4]

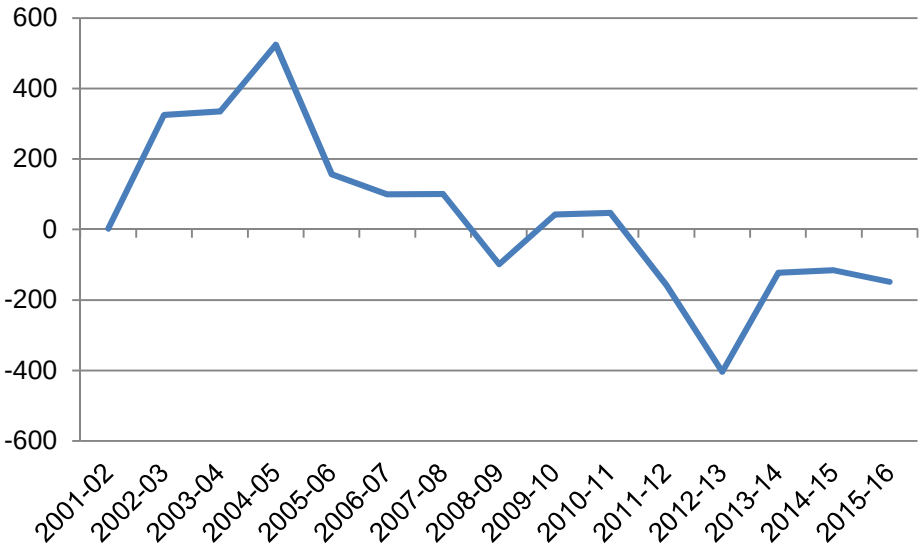
International migration

3.4 The Pegasus report states that it is '*of significance that international net migration has declined very significantly in the most recent five-year period, which the SHMA choses* (sic) *as the period to derive its baseline demographic forecast*'[5]. However, as I have explained in my proof and as set out in the SHMA, while it

[3] Para. 6.24 pg. 23
[4] Para. 2.16 CD 11.33
[5] Para. 5.21

true that it has declined, the peak from which this decline occurred resulted from the one-off event of the EU accession.

Figure 3.1 Net international migration, Suffolk Coastal

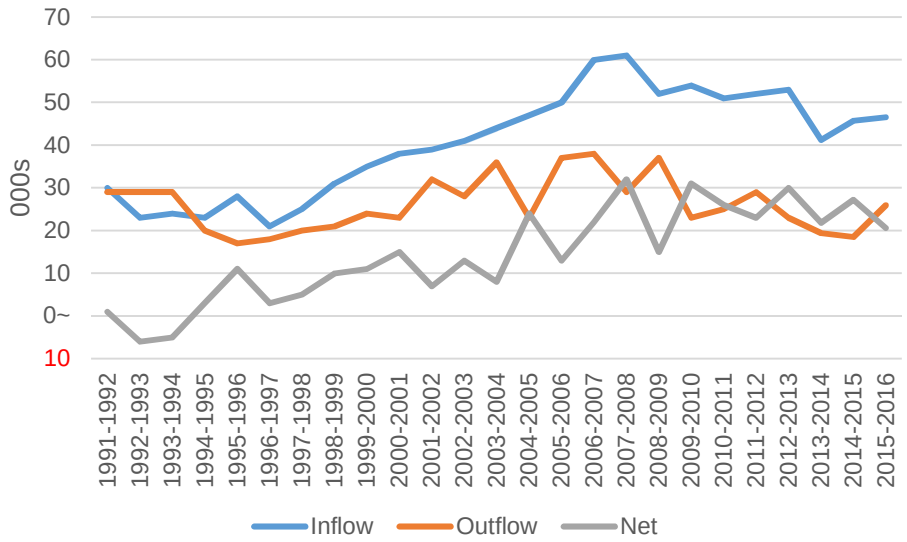


Source: ONS MYE

3.5 In accordance with the PPG, the 'demographic starting point' projection should not roll forward this untypical event of high international migration. It is unlikely that there will be a return to the levels of international migration experienced in the early 2000s, especially given the UK's departure from the EU. So, contrary to the Pegasus report, I do not believe the SHMA is deficient in its consideration of international migration.

3.6 The Pegasus report reference to a peak and trough in migration implies that the effect of the EU accession is somehow cyclical. This is incorrect. There is no reason to believe that the one-off peak in international migration would be followed by a corresponding trough and then a further peak, merely that it would return to more normal levels. This is clear from the figure below, which shows international migration into the East of England (data for local authority areas are not available). The chart shows relatively lower levels of international migration prior to the EU accession from the early 2000s; after this, the level of international migration has become more stable. The Pegasus report's suggestion of a subsequent trough therefore lacks foundation.

Figure 3.2 International migration, East of England (1991-2016)



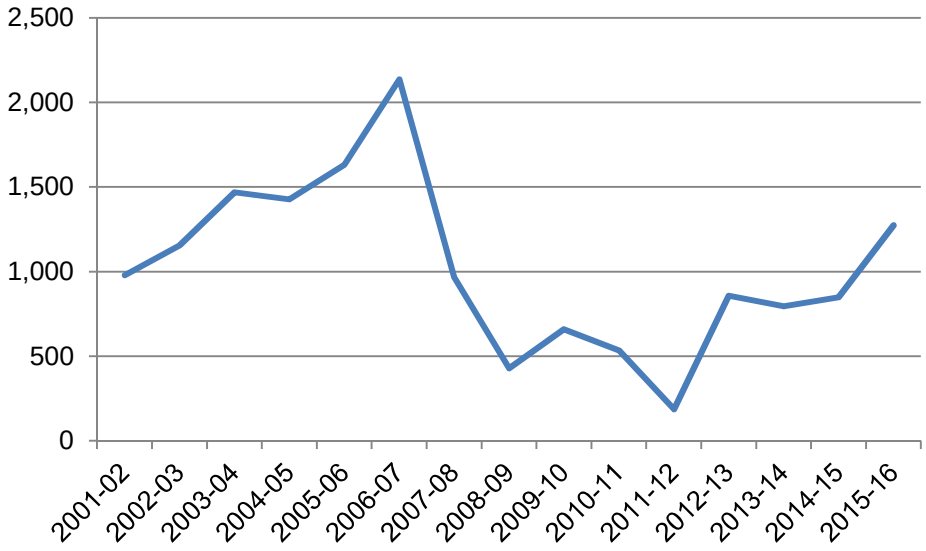
Source: ONS Table 211

Domestic migration

3.7 In relation to domestic migration, the Pegasus report says that the SHMA's five-year-based projection, based on the period 2010-15, underestimates housing need because it carries forward a period of exceptionally low migration.

3.8 But this is not the case, as we can see from the chart below. Net domestic migration in Suffolk Coastal was exceptionally high around the middle of the last decade. One likely reason for this is the indirect impact of EU accession, as people who arrived in the UK as international migrants moved on from their first destination, this time being labelled as domestic migrants. Despite a rising trend in recent years, migration has not remotely returned to the earlier peak – confirming that the upswing of the mid-2000s was an exceptional event.

Figure 3.3 Net UK migration, Suffolk Coastal



Source: ONS MYEs

3.9 Furthermore, having regard to the NPPF and PPG, in testing the projections, the SHMA considers the HMA as a whole. It is clear from the analysis we provided in Appendix E of the SHMA that, for the HMA as a whole, the difference between the long and short-term domestic trends are far less pronounced that the difference in long and short-term international trends.

Table 3.1 Comparing long and short term migration in the IHMA[6]

Persons	Domestic	International	Total
Net five-year average (2010-15)	1,643	-338	1,305
Net 12-year average (2002-15)	2,010	415	2,424
Difference	367	753	1,119
	33%	67%	100%

Source: SHMA Table E1

3.10 While at a district level, the difference in the level of domestic migration between the short and long-term trends is higher, to have adopted the higher projection, which included this exceptional event carried with it the substantial risk of overstating migration in the projection to the rest of the HMA.

3.11 It may be that an undersupply of development land contributed to lower net migration in Suffolk Coastal in the base period of our projection. The SHMA deals with this through a market signals adjustment, as recommended by the PPG.

3.12 The Pegasus report has not presented any compelling evidence to demonstrate why a five-year base period is not appropriate in this instance.

Unattributable population change

3.13 The SHMA is criticised at paragraph 5.28 the Pegasus report for including in its preferred demographic projections Unattributable Population Change (UPC). The report states that taking account of the UPC reduces the assessed housing need, which goes against the spirit of positive planning.

3.14 It is true that including the UPC reduces the assessed housing need for Suffolk Coastal district. But the reduction amounts to just nine dpa, from 409 to 400 dpa, as shown in Table 5.3 of the SHMA. Thus the inclusion of the UPC has an insignificant impact on Suffolk Coastal. The same applies to two of the three other districts in the Ipswich HMA, Babergh and Mid Suffolk. But the UPC increases the OAN for Ipswich by 37 dpa, and for the HMA as a whole, by 34 dpa.

3.15 Thus, for the HMA as a whole taking account of the UPC increases the assessed housing need, albeit not by very much. This positive impact is the reason why, in the spirit of positive planning, the SHMA's preferred demographic projection

[6] Table may not sum due to rounding.

includes the UPC. For Suffolk Coastal considered in isolation, the inclusion of the UPC makes no real difference.

4 MARKET SIGNALS

4.1 Paragraph 5.16 of the Pegasus report asserts that, as the basis upon which to establish the extent of a market signals uplift to demographic starting point, the assessment of past under-delivery of housing set out in the SHMA is inadequate. This point is then expanded at paragraphs 5.31-5.35 of the report.

4.2 These paragraphs deal exclusively with past housing delivery and do not make any comment on the market signals identified in the PPG and also considered in Section 6 of the SHMA. So while the PPG requires the starting point to be adjusted to reflect appropriate market signals[7], the Pegasus criticism appears to relate exclusively to past housing delivery.

The SHMA analysis of past housing delivery

4.3 The Pegasus report says '*the SHMA misses entirely the point that the plan targets in Suffolk Coastal, and the Core Strategy target of 465 in particular, are lower than housing need'*. This is incorrect. Indeed, the Pegasus report 'misses entirely the point'.

4.4 As set out at paragraph 6.7 of the SHMA, in looking at past housing delivery:

> *'the analysis searches for evidence that housing land in that period was* ***undersupplied against demand****, and therefore the projections underestimate demand and should be adjusted upwards'* (my emphasis)

4.5 The assertion that '*the downward trend in household projections set out in* (Table 2 of the Pegasus report) *is in large part explained by the persistent failure of supply to meet demand*'[8] ignores completely that delivery at a local level cannot be considered in isolation from the national picture. As we explain at paragraph 6.7 of the SHMA:

> *'… we compare local trends in completions with national totals. If the local area follows a similar path to the national total, this suggests that variations in completions over the period were due to the economic cycle, which is a macroeconomic issue beyond the control of the local authority. Conversely, if completions do not follow the national pattern this may reflect local supply constraints, which may have suppressed development below the level of demand.'*

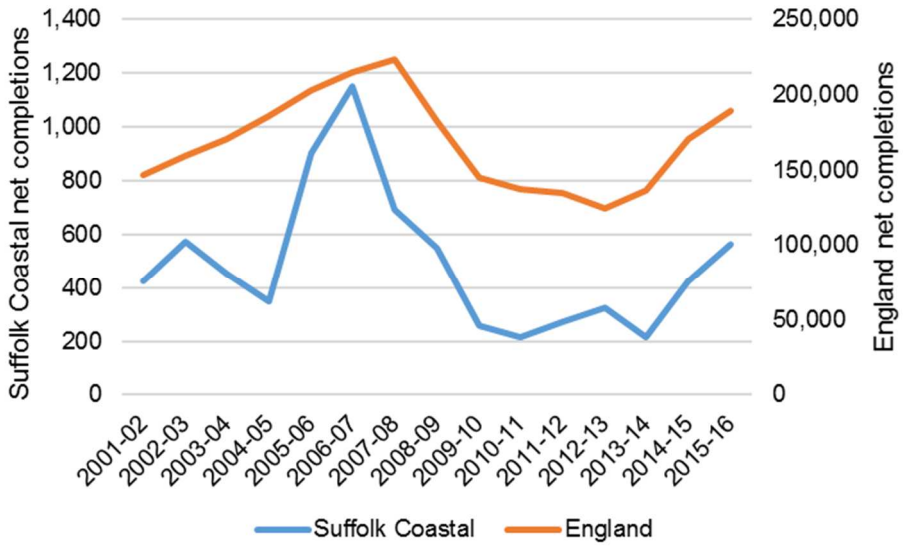
4.6 For the reasons I have already explained, for Suffolk Coastal, the demographic starting point is underpinned by a 2010 to 2015 trend projection. The market signals analysis set out in Section 6 of the SHMA therefore focuses on that period to understand whether there is any evidence of constraint.

[7] 2a-019-20140306

[8] Para. 5.34

4.7 The chart below shows that net completions within Suffolk Coastal have broadly followed the national pattern since 2001; they are in large part explained with reference to macroeconomic issues beyond the control of the local authority.

Figure 4.1 Net housing completions – Suffolk Coastal and England (2001-16)



Source: SHMA and ONS Table 122

4.8 Focusing on the base period informing the demographic starting point, as we acknowledged in the SHMA, there was a decline in completions which did not accord with the national trend.

4.9 So responding to the Pegasus point that the 'downward trend' in the household projections can be largely explained by factors specific to Suffolk Coastal, it is clear from the chart above that in fact Suffolk Coastal's 'downward trend' aligned with the national 'downward trend'.

4.10 In my opinion, the Pegasus report's Table 2 is misleading because it has no regard to the national trends. Analysis of the official CLG household projections does show declining demand in Suffolk Coastal. However, this is in the context of a decline in demand at a national level.

4.11 Furthermore, I agree with the Pegasus report that there is evidence of undersupply. We explicitly recognise this at paragraph 6.18 of the SHMA, we concluded that in relation to past housing delivery the 'evidence suggests that an uplift to the demographic projections [might] be necessary'. We revisit this initial conclusion at paragraph 6.55 of the SHMA:

> *'Suffolk Coastal 2010-15 experienced a slowing down of completions and did not meet its delivery targets, which may be the result of a lack of a five-year housing land supply in 2010-14. House prices in the district were high and affordability poor. This suggests that housing over the period was relatively undersupplied. In our view a market signals uplift of 15% is justified.'*

4.12 Thus, the SHMA acknowledges that housing land in Suffolk Coastal been undersupplied against demand. Taking account of that, and in the context of

other inspectors' decisions, we recommended a 15% uplift. And while the Pegasus report concludes that a 15% market signals uplift is 'inadequate', no alternative figure is suggested.

4.13 In summary, I consider that the Pegasus report does not raise any points of substance in relation to market signals.

5 JOBS AND HOMES

5.1 The SHMA's findings on the balance of jobs and homes are considered at paragraphs 5.36-5.50 of the Pegasus report. The report starts with an overview of the SHMA's method and then focuses in on one particular issue, economic activity rates. Like the SHMA itself, it compares findings with those of the East of England Forecasting Model (EEFM), provided by Cambridge Econometrics (CE). Below, I respond to the points raised in the Pegasus report in turn, also comparing the SHMA and EEFM.

Overview

Introduction

5.2 The Pegasus report's discussion of jobs and homes starts on a positive note. At para. 5.36, it notes that the SHMA complies with the PPG, in that it starts from a preferred demographic projection, and then tests this projection to see if it would provide a labour force sufficient to match future jobs growth in the district.

5.3 The Pegasus report also notes that to administer this test the SHMA uses an Experian model, and goes on as follows (my emphasis);

> *'5.37 The Experian model is population-led and uses the 2014-based ONS projections. It therefore sets the population levels as a control and allows other variables to 'flex',* ***in a way that is not explained****, so as to match the resultant labour force with that required to meet 'Jobs Demand' in the District. 'Jobs Demand' is explained in paragraph 7.34* ***somewhat opaquely****, but implies a jobs forecast based on applying sector growth rates to the structure of the local economy.'*

5.4 The words in bold suggest that the modelling used in the SHMA is not clearly explained, and therefore may be deficient. It is true that economic forecasting models, being complex mathematical entities made of many simultaneous equations, are not easy to explain in words - especially to non-economists, and while keeping documents to a reasonable length. But this is not a peculiarity of Experian. It is a feature of all economic forecasting models, including EEFM – which we must accept if we want to use economic forecasts at all.

5.5 More specifically, the Pegasus report paragraph quoted above suggests that two aspects of the Experian modelling are unclear: the forecast of job demand is explained *'somewhat opaquely'* and the 'flexing' that reconciles that demand with labour supply is '*not explained'.* I clarify these two points in turn below, expanding on the explanations in the SHMA, and comparing the Experian modelling it used with EEFM.

Labour demand

5.6 To predict local job demand – the number of jobs that employers will want to fill - Experian and EEFM (like other forecasters) use a similar method, sometimes

described as 'shift-share'. Experian's Regional Planning Service *Data Guide* (June 2017) explains this as follows:

> *'… demand for labour is estimated. This is done at the industry level by linking job growth in a local area to growth in the same industry at the regional level and then constraining demand for jobs by industry to demand for jobs for the same industry at the regional level. The effect of this is:*
>
> - *Demand for jobs at the local level is fastest in those industries which are performing best at the regional level.*
> - *Total demand for jobs at the local level depends on its industrial structure. Those local areas which have a more than proportionate share of the best performing industries will perform best'*

5.7 Earlier the Data Guide explains, more briefly, that a similar process is used to derive the regional job growth from the UK total:

> *'… drivers [of regional job demand] include the industry mix and the performance of industries at the UK level. If industries with a high share in the region are performing well at the UK level, this will benefit the region.'*

5.8 EEFM uses a similar method, which is described at length in Section 3.2 of their 2016 Technical Report (CD 11.36) under the heading '*Workplace employees (jobs)'*. Again the process is driven by an area's sector mix and the relative performance of different sectors at national level – so that areas which have many jobs in nationally fast-growing sectors get more new jobs in total. (Conversely, areas with many jobs in nationally declining sectors get fewer new jobs or even lose jobs in total.)

5.9 Thus, in relation to forecast local labour demand the Experian modelling used in the SHMA is no more (or less) opaque that the EEFM modelling favoured by Pegasus. The two forecasters provide written documentation to explain their methods, and we have worked with both to clarify them further. Both use similar methods, driven by the sector mix of different local authority areas and the expected growth of different sectors at national level. It is unsurprising, therefore, that EEFM and Experian take similar views of future change. It is also unsurprising that they do not take exactly the same view, bearing in mind the very reasonable caveats in the EEFM Technical Report:

> ***'Forecasting models will not all agree***
>
> *The EEFM's baseline forecasts can be compared with other published forecasts, but close agreement should not be expected and sometimes there can be wide divergences. These can arise from even small differences in underlying assumptions and in the timing and definitions of the data used. But with an awareness of these factors, the EEFM forecasts provide a useful starting point for an understanding of regional and local economic trends in the East of England, particularly when the baseline is accompanied by alternative scenario forecasts with which it can be compared.'*

Labour supply and market balance

5.10 I now turn to the 'flexing' of different variables to balance demand and supply, to provide a more detailed explanation of the Experian modelling and compare it with EEFM.

5.11 To start with simple principles, and at the risk of stating the obvious, I note that there is nothing dubious or underhand about such flexing. On the contrary, it is the central mechanism of economic change. Economic forecasting models aim to replicate its working best they can, across different markets (for labour, goods and services, currencies etc.) and different geographies (UK, regional, local).

5.12 Specifically, in relation to local labour markets, Experian and EEFM again take broadly similar approaches. To establish the balance of demand and supply, both models proceed in three steps:

i First the forecasters make trend-driven demographic projections, which show how population would change if earlier demographic trends continued in the future.

ii The second step is to test these projections against future job growth (labour demand), to see if they would provide enough workers (labour supply) to meet demand (fill the jobs on offer).

iii Thirdly, *if* the projections fail the test, the models forecast the additional net in-migration – over and above past trends - that would be required to close the gap between demand and supply.

5.13 This sequence is precisely what the PPG recommends, as summarised by in the Pegasus report at para. 5.36, which I quoted earlier.

5.14 For each of the steps in the sequence, there are of course technical differences between the two forecasting models. The EEFM method is described in detail at in the Technical Guide (CD 11.36). Below, I summarise how each forecaster approaches each step

Trend-driven demographic projections, to show how population would change if earlier demographic trends continued in the future

Experian

5.15 As its 'starting point' demographic projection Experian use the latest ONS sub-national population projections (SNPP), which provides each year's population by age and sex. This detailed information is helpful in calculating labour supply, because economic activity rates (the proportion of people who are working or available for work) of course varies greatly between according to age.

EEFM

5.16 In EEFM, trend-driven migration is called 'non-economic migration' and is calculated differently. At local level it is a constant, i.e. a fixed number of people in each year of the forecast, based on the local trend in 2001-11 but controlled to the future regional total from the SNPP. Age and sex profiles for local areas are

not calculated specifically, but rather assumed to parallel regional trends, as explained in my main proof of evidence.

Comment

5.17 The Pegasus report (para 5.37) states that the Experian model '*is population-led and uses the 2014-based ONS projections. It therefore sets the population level as a control and allows other variables to "flex" … so as to match the resultant labour force growth with that required to meet "jobs demand" in the district*'. This is an implied criticism, suggesting that the model does not allow the possibility that the projected population will not provide enough workers to meet labour demand.

5.18 This statement is untrue and the criticism is unfounded, because the modelling does not end with the trend-driven population projection. Rather, the projection is only a starting point, which later in the process will be tested to see if it is enough to meet job demand. This method – start with a trend-driven projection and then test it against job demand – is exactly what the PPG recommends, as I noted earlier. EEFM uses the exact same method (though a different projection). One reason why both forecasters and the PPG take the same approach is that in technical terms there is no alternative.

Test these projections against future job growth (labour demand), to see if they would provide enough workers (labour supply) to meet that demand

Experian

5.19 At this step, the Experian local model compares the forecast labour demand with the supply generated by the SNPP. The Data Guide describes the process as follows:

- 'Total demand for jobs for each local area is converted into demand for workers according to the historic[al] ratio between jobs and workers in that local area.
- The inflow and outflow of workers across the regional boundary is shared out between local areas according to their historic commuting patterns leading to an adjustment in
  - *The remaining demand for labour for a local area (inflow)*
  - *The remaining available labour for a local area (outflow)*
- Workplace demands for workers are converted into residence-based demands according to historic commuting patterns.
  - *If unemployment is sufficiently high, these demands are satisfied out of the growth in the labour supply and the pool of available (unemployed) workers.*
  - *If unemployment is sufficiently low, these demands can only be satisfied out of the growth in the labour supply.*

- *If unemployment is above its lower bound but not too high, a proportion of demands are satisfied out of the pool of available workers and the rest are satisfied out of the growth in the labour supply.*
- *The model makes short-term adjustments in the labour supply in response to demand conditions to reflect the economic reality that*
  - *When demand is high, the participation rate [economic activity rate] rises as potential workers are drawn into the labour force by the relatively buoyant conditions;*
  - *When demand is low, the participation rate declines as disillusioned workers leave the labour force because of the poor job market conditions*.'

5.20 In summary, the Experian model flexes unemployment, commuting and economic activity rates ('participation rates') in response to the balance of demand and supply in different areas. This flexing is of course what happens in the real economy, at national as well as local level. Nationally, it is the reason why in recessions UK unemployment increases and activity rates fall. Locally, it is the reason why places where job demand is falling have higher unemployment, lower activity rates and more net out-commuting.

5.21 The Experian calculation may produce one of two results:

- The labour supply resulting from the SNPP may be less than the forecast demand. In that case the excess of demand over supply is shown in the forecast output as 'unfilled jobs' or 'excess jobs'. The forecast is saying that job growth in the locality will be constrained by a lack of workers.
- Labour supply may be more than, or equal to, the forecast demand. In that case there are no 'unfilled jobs' and job growth is not constrained by labour supply.

5.22 In Experian's standard published tables, the number of workplace jobs in each area (labelled by Experian 'workforce jobs') is based on the lower of forecast demand and forecast supply. Thus, for an area where job numbers are supply-constrained, the tables show the constrained job number, which is less than the forecast demand. For areas which are not supply-constrained, the tables show the forecast demand.

5.23 For many users of the Experian forecasts, these published outputs are all that is needed. But for the purpose of housing needs assessment a constrained job number is not the end of the story. In line with the NPPF and PPG, if the forecast shows 'unfilled jobs' the plan-maker should go on to calculate how many additional people – and hence additional homes – will be required to close the gap. Before discussing this third step in the jobs-to-homes calculation, I briefly describe how EEFM deals with the second step.

EEFM

5.24 In the EEFM, the 'flexing' of labour market variables is based on the same logic but a more simplified calculation method. That method is set out in the Technical Report (CD 11.36), in Sections 3.2 (Unemployment) and 3.3 (Migration). Briefly,

the model first forecasts unemployment, based on a comparison of forecast jobs demand with the demographically projected supply:

- If that forecast unemployment rate is at or above the regional average[9], the model is saying that the demographically projected population will provide enough or more than enough workers to meet demand.
- Conversely, if the forecast local unemployment is below the regional rate[9], the projected population will not provide enough workers to meet demand. In the Experian equivalent, this would translate into 'unfilled jobs'.

5.25 But, unlike Experian, EEFM does not display such 'unfilled jobs'. Rather, it goes directly to the third step of the demand-supply calculation, to determine how many additional people will be required to fill the jobs on offer, so any gap between labour demand and supply is closed. I discuss that third step in the next section.

If the projections fail the test, forecast the additional net in-migration – over and above past trends - that would be required to close the gap between demand and supply

Experian

5.26 As noted earlier, in the Experian model this final step is appropriate if the standard forecast predicts 'unfilled jobs' – indicating that the SNPP population will not provide enough workers to meet demand. Where that is the case, the plan-maker should use an alternative scenario, to show the additional population that would be required to close the gap, so that the local economy is not constrained by a shortage of labour. This population will arise from economic, or job-led, net migration, over and above past demographic trends.

5.27 Experian provides such scenarios as part of its service, and my team has used them in relation to other areas – including Ipswich, which is covered by the same SHMA as Suffolk Coastal district. But for Suffolk Coastal an alternative scenario is not appropriate (or indeed possible), because, as we show in the SHMA[10], the model predicts that there will be no 'unfilled jobs'.

EEFM

5.28 In EEFM, as mentioned earlier, economic migration into local areas is triggered by unemployment below the regional average. The formula that translates the unemployment rate into net migration is set out in the Technical Report (Section 3.3). In the case of Suffolk Coastal, it shows substantial economic migration over and above past demographic trends (whether projected by the SNPP or EEFM's own method). The result is that, for the period 2014-36, EEFM shows housing need of 776 dpa (in my main evidence I wrongly quoted this figure as 676 dpa). Thus EEFM predicts housing demand far above the official demographic

[9] Strictly speaking the threshold is the regional average unemployment rate plus 0.06 percentage points. This constant reflects the fact that the East of England region as a whole is forecast to receive some economic migration from other regions and/or other countries.

[10] Page 77

projections (402 dpa), the SHMA's own preferred demographic projection (400 dpa) and the SHMA's OAN after the market signals uplift (460 dpa).

Conclusion

5.29 The Pegasus report levels two criticisms at the PBA's analysis of jobs and homes. It says that the method used is not clearly explained, and also suggests that it is wrong because '*it sets the* [officially projected SNPP] *population as a control, and it flexes economic variables to balance the resulting labour supply with expected demand*'.

5.30 My analysis above has answered these criticisms. I have provided an expanded, step-by-step explanation of the method used in the SHMA. Among other things, this shows that:

- The official population projection is not used as a control; rather, it is a starting point that is tested at the first step of the analysis, exactly as the PPG requires.
- There is nothing wrong with 'flexing' economic variables to balance demand and supply; such 'flexing' is a main driver of all economic forecasts, and indeed a main driver of the real economy, which the forecasts do their best to mimic.

5.31 I have also demonstrated that the Experian modelling that underpins the SHMA follows the same logic as the EEFM forecast - which the Pegasus report supports and relies on, as I will show later. Experian and EEFM use the same logic and flex the same variables for the same reasons.

5.32 Despite these similarities, however, the SHMA and EEFM produce very different results. The Pegasus report, at para. 5.52, suggests that the activity rates used by Experian are too high, which explains this difference and casts doubt on the SHMA's findings. I discuss these matters in the next section.

Economic activity rates

The forecasts

5.33 The Pegasus report notes that the Experian employment forecasts show a steep increase in economic activity among people aged 65+ - so from 2014 to 2036 this age sees large increases in economic activity rates and the numbers economically active.

5.34 In the table below I summarise the underlying Experian numbers – which split the adult population into two age groups, 16-64 and 65+. The table is an expanded version of Table 5 in the Pegasus report. For comparison, it also shows EEFM's forecast of population and economic activity – which is only available in total, without a split by age group.

Table 5.1 Economic activity by age group, Suffolk Coastal 2014-36

	2014	2036	Change	% change
Experian baseline				
Ages 16-64				
Population, thousands	71.1	62.7	-8.4	-12%
Economic activity rate, %	83	85	2	2%
Labour force, thousands	59.3	53.4	-5.9	-10%
Ages 65+				
Population, thousands	32.4	50.6	18.2	56%
Economic activity rate, %	14	28	15	107%
Labour force, thousands	4.4	14.3	9.9	223%
Total 16+				
Population, thousands	103.6	113.3	9.8	9%
Economic activity rate, %	62	60	-2	-3%
Labour force, thousands	63.8	67.8	4.0	6%
EEFM baseline				
Total 16+				
Population, thousands	103.5	125.9	22.4	22%
Economic activity rate, %	56	53	-3	-4%
Labour force, thousands	57.9	67.3	9.4	16%

Source: Experian, EEFM

5.35 The Experian forecast shows the impact of an ageing population on labour supply:

- In the base year, 2014, people aged 16-64 have a much higher activity rate than older people – 83% against 14% for those aged 65+.
- Over the forecast period, the population 16-64 falls by some 8,000 people (12%), while the activity rate for this age group is almost unchanged – rising from 83% to 85%. Hence the labour force (number of economically active people) in this age group falls, by some 6,000.
- In contrast, the population aged 65+ rises steeply, by some 10,000 people. The activity rate in this age group also rises steeply (though naturally it remains much lower than for younger people – 28% in 2036, against 85% for those aged 16-64). Hence the labour force in this age group increases substantially, by some 10,000.
- The overall outcome, for the total population aged 16+, is that the labour force grows by 4,000 over the forecast period.

The criticism

5.36 The Pegasus report says that '*given the ageing of the population, it is not unreasonable to assume that economic activity rates among people aged 65+ will see an increase in the future'.* But it argues that the increases forecast by

Experian are unrealistically high. In support of this view, the Pegasus report relies on just one piece of evidence: the statistics at Table 4, which shows that at present the 65+ age group is estimated to account for just 4% of total employment, both in the UK and East of England region. From this fact, the Pegasus report infers that the economy in future '*will still see the majority of the labour force drawn from the age group below 65'.*

5.37 I agree that this is a very reasonable expectation. But it tells us nothing about the credibility or otherwise of the Experian forecast. The forecast does not remotely say that the majority of the labour force will be drawn from the 65+ age group. On the contrary, it predicts that by 2036:

- The 65+ age group will still be a minority of the labour force, so in Suffolk Coastal it will account for just over one fifth of the total.
- That group will still have much lower activity rates than younger people. For Suffolk Coastal in 2036, the forecast shows 28% of over-65s as being economically active, against 85% of people aged 16-64.

5.38 Nor does the Pegasus report consider *why* economic activity rates are expected to increase. The only reason it mentions is the ageing of the population – which is one of the reasons why there will be more 65+s in the labour force, but has no direct bearing on the activity rate in that group. Rather, the main drivers of increasing activity rates are rising State Pension ages, and the factor behind these rises – that people are living longer and staying in good health for longer. Experian summarises recent and forthcoming changes in State Pension ages as follows:

- '*The state pension age for women is rising from 60 to 65, equal with males. Both will then rise, in step, to 67 in our current forecast period.*
- *Female state retirement age started to increase from 60 in April 2012 and will reach 65 by 2018q4.*
- *From April 2019, both men and women will see their state retirement age rise from 65 to 66, with men reaching 66 by April 2020, and women a few months later in October 2020.*
- *The move from 66 to 67 is scheduled from April 2026 until April 2028 for both men and women.'*[11]

5.39 Since the above was written, the Government has announced a further increase in the pension age, from 67 to 68 for both men and women, to take effect in 2037.

5.40 The above are major and unprecedented changes, so it seems reasonable to expect that they will have major and unprecedented impacts on the labour market. But the Pegasus report does not mention rising pension ages and life expectancies, nor does it put forward its own view of future activity rates and the resulting OAN. For an alternative view of the OAN it relies on EEFM figures. I discuss these figures further below.

[11] Experian Data Guide, 2017

Experian vs EEFM

Comparing activity rates

5.41 As an alternative view of the future to Experian, the Pegasus report relies solely on EEFM - which, as noted earlier, predicts that much more population growth will be needed to fill a similar number of jobs. The implication is that EEFM is less optimistic than Experian about activity rates, and this explains the difference in population growth and housing need between the two forecasts.

5.42 However, this is not the case. For Suffolk Coastal in 2014-36 Experian and EEFM show virtually the same change in the overall economic activity rate, for all people aged 16+. As Table 5.1 shows, from 2014 to 2036 both forecasts expect that overall activity rate to fall very slightly, by 3-4% (2-3 percentage points). (EEFM does not model local economic activity by age group, so a more detailed comparison is not possible.)

5.43 There are many points of difference between EEFM and Experian, including the level of economic activity rates. But the change in activity rates is not one of those differences. On the contrary, the two forecasts show almost exactly the same change in the local activity rate over the forecast period –a very slight reduction. There is nothing in EEFM to support the Pegasus view that Experian is over-optimistic about future activity rates.

Why do EEFM and Experian show different housing needs?

5.44 My analysis has shown that EEFM and Experian have important similarities, both generally in their logical structure and specifically in relation to future activity rates. Nevertheless, EEFM forecasts that much greater population growth, and hence more housing, will be required over the forecast period to fill a similar number of jobs. The reasons for this are clear from the discussion of EEFM in my main proof of evidence (para 3.10-3.31), which concludes that:

- EEFM 2016 is not robust as regards population growth and hence housing need in Suffolk Coastal.
- The reason is that the district has an exceptionally elderly population profile, which EEFM's broad-brush approach to local demography does not capture.
- The result is that EEFM's job-led housing need of 776 dpa in 2014-36 is not a credible view of the district's housing need.

5.45 These findings are reinforced by caveats in the EEFM Technical Guide, as follows:

> ***'Reality is more complex than any model***
>
> *Several of the modelled relationships are complicated and their treatment in the EEFM is necessarily simplified, despite its large size. In particular, the demand for housing is complex and not all the factors may be fully captured…*
>
> ***Forecasting models will not all agree***

The EEFM's baseline forecasts can be compared with other published forecasts, but close agreement should not be expected and sometimes there can be wide divergences. These can arise from even small differences in underlying assumptions and in the timing and definitions of the data used. But with an awareness of these factors, the EEFM forecasts provide a useful starting point for an understanding of regional and local economic trends in the East of England, particularly when the baseline is accompanied by alternative scenario forecasts with which it can be compared.'

5.46 Cambridge Econometrics, who worked with PBA on the analysis of EEFM in my main evidence, have also written a separate note on demographic aspects of the model. The note is in the Appendix below. It confirms my view of the limitations of EEFM in relation to demography, noting that:

'EEFM is a regional economic model. It is not a detailed local area-level demographic model, and as such users need to be aware of local areas that may be an outlier compared to the regional average. For areas that are outliers, it may be better to use a more detailed demographic approach to model the demographic element of the model.'

Conclusion

5.47 The Pegasus report maintains that the Experian forecast that informed the SHMA is over-optimistic about future change in economic activity rates, and therefore it under-estimates the numbers of people and homes required to fill future jobs. However, the Pegasus report does not put forward another view of how activity rates will change in and the housing need that would result. As an alternative to the SHMA the Pegasus report favours the EEFM, suggesting that the much higher housing number in the EEFM is due to a more pessimistic view of future activity rates.

5.48 I have shown that this suggestion is factually wrong, because EEFM forecasts virtually the same change in activity rates as Experian. The difference in activity rates between the two forecasts is nothing to do with economic activity rates. Rather, it is due to the lack of demographic detail in EEFM. For an area with an unusual age profile, such as Suffolk Coastal, CE advise that it may be better to use a model that provides more demographic detail. This is what the Experian modelling in the SHMA does, and why in the case of Suffolk Coastal the Experian forecast is the more robust.

5.49 If the Pegasus view of future activity rates is different from that shared by EEFM and Experian, to assess the resulting housing need one would have to model a separate labour market forecast. As discussed in my main proof (paras 3.38 onwards), it would not make sense to take future job numbers from EEFM or Experian and use different activity rates to calculate the population needed to fill those jobs.

5.50 This is because, as also set out in my main evidence, is that the job numbers in each forecast already incorporate view of future activity rates, for the UK as a whole. If such national activity rates were lower than those expected by the forecasters, their predicted job demand would also be lower, both for the UK and

for each local authority area. I will provide to the inquiry an alternative forecast scenario that demonstrates this.

5.51 In summary, the Pegasus report maintains that the SHMA is based on over-optimistic expectations regarding future activity rates, and this results in a too-low housing needs figure. But Pegasus provide no valid evidence to support either of these assertions. Nor does the Pegasus report put forward another view of how activity rates will change in future and what the resulting OAN will be. Instead, as an alternative to the SHMA the Pegasus report relies on the EEFM forecast, which does produce a much higher OAN. But this alternative forecast shows virtually the same change in activity rates as the Experian forecast used in the SHMA; the reason why it shows greater housing need than the SHMA relates to demography. Therefore, the Pegasus report has failed to demonstrate either that the SHMA uses too-high activity rates or that lower activity rates would produce a higher housing need.

6 SUMMARY

Scope of evidence

6.1 This rebuttal evidence relates to the objectively assessed housing need (OAN) for Suffolk Coastal district and responds to Charles William Collins's evidence on behalf of the appellant (July 2011). Mr Collins disagrees with the Council about the housing requirement that should be used in the calculation of five-year land supply for this appeal. He maintains that the calculation should be based on the OAN, and specifically the OAN of 647 dwellings per annum (11,000 new homes from 2010 to 2027) supported by the Core Strategy Inspector in 2013. By contrast, the Council considers that:

- The land supply calculation should use the adopted requirement of 465 dpa (7,900 homes 2010-27) at policy SP2 of the Core Strategy.
- Should the Inspector disagree, the OAN should not be taken from the Core Strategy, but from the recent Strategic Housing Market Assessment (SHMA). The SHMA calculated the OAN as 460 dpa (10,111 homes from 2014 to 2036). Mr Collins dismisses this figure on two grounds: that it is '*untested*' and it has '*potential flaws and shortcomings*', as identified in the Pegasus report at Appendix 7 of his proof.

6.2 My rebuttal relates to the second of these points. I aim to demonstrate that:

- The objectively assessed need should be taken from the SHMA, rather than the earlier figure of 647 dpa;
- The Pegasus criticisms of the SHMA are unfounded.

The status of the SHMA

6.3 Mr Collins considers that the land supply calculation in this appeal should be based on the objectively assessed housing need; and that need should be 647 dpa supported by the Core Strategy. My own view is that this figure should be replaced with the need assessed in the SHMA. I base this on the PPG advice that, where evidence in Local Plans has become outdated, the land supply test should use the latest full assessment of housing needs – although the weight given to it should take account of the fact that it has not been tested or moderated against constraints. I have demonstrated that the Core Strategy number is now badly out of date, because it was based on seven-year-old forecast, underpinned by historical data that were even older and have long since been superseded and pre-dated the publication of the PPG method to establish the OAN.

Why the SHMA's OAN is robust

6.4 The Pegasus report challenges three aspects of the SHMA's housing need calculation: the 'demographic starting point' projection, the market signals uplift and the alignment of homes and jobs. I discuss these issues in turn below.

Demographic projections

6.5 The Pegasus report considers that the demographic projections used in the housing needs assessment should carry forward a base period of 10 years or longer, rather than the five years used in the SHMA and in the official demographic projections. In Section 3 above I have shown that a long base period would include a period of exceptionally high in-migration – both international and domestic – associated with the enlargement of the EU around the middle of the last decade. The resulting projections would be unrealistically high, and even more so for the housing market area as a whole than for Suffolk Coastal.

6.6 The Pegasus report also challenges the inclusion of Unattributable Population Change (UPC) in the SHMA's demographic projections. It states that taking account of the UPC reduces the assessed housing need, which goes against the spirit of positive planning. However, the impact of the UPC for Suffolk Coastal district is insignificant, as it reduces the assessed need by just nine new dwellings per annum (dpa). In contrast, for the housing market area as a whole including the UPC lifts the housing number slightly, by 34 dpa. This is why, in the spirit of positive planning, the SHMA's preferred demographic projection includes the UPC. For Suffolk Coastal considered in isolation, the inclusion of the UPC makes no real difference.

Market signals

6.7 I have shown above that the Pegasus criticism that the market signals uplift applied is inadequate is unfounded. Pegasus say that the downward trend in the housing projections for Suffolk Coastal can largely be explained by factors specific to the district, namely the undersupply of housing. However, Pegasus give no consideration to the national context; I have done so and have demonstrated that while there is evidence of some constraint, in large part, it is national factors that explain the falling need figures.

6.8 I have explained that, in assessing market signals, the SHMA acknowledged that there has been a constraint to the supply of housing land and so completions had fallen. Having regard to the scale of uplift applied elsewhere, proposed a 15% uplift to the demographic starting point on this basis.

6.9 I have shown that the Pegasus report has failed to show how the uplift proposed in the SHMA is inadequate. And in any event, despite making these unfounded criticisms, no alternative is proposed.

Jobs and homes

Overview

6.10 The Pegasus report challenges the SHMA's approach to labour market alignment on the grounds that it is not clearly explained, and 'it sets the [officially projected SNPP] population as a control, and it flexes economic variables to balance the resulting labour supply with expected demand'.

6.11 My analysis above has answered these criticisms. I have provided an expanded, step-by-step explanation of the method used in the SHMA. Among other things, this shows that:

- The official population projection is not used as a control; rather, it is a starting point that is tested at the first step of the analysis, exactly as the PPG requires.
- There is nothing wrong with 'flexing' economic variables to balance demand and supply; such 'flexing' is a main driver of all economic forecasts, and indeed a main driver of the real economy, which the forecasts do their best to mimic.

6.12 I have also demonstrated that the Experian modelling that underpins the SHMA follows the same logic as the EEFM forecast - which the Pegasus report supports and relies on.

Economic activity rates

6.13 More specifically, the Pegasus report maintains that the SHMA is based on over-optimistic expectations regarding future activity rates, and this results in a too-low housing needs figure. But Pegasus provide no valid evidence to support either of these assertions. Nor does Pegasus put forward another view of how activity rates will change in future and what the resulting OAN will be. Instead, as an alternative to the SHMA Pegasus relies on the EEFM forecast, which does produce a much higher OAN. But this alternative forecast shows virtually the same change in activity rates as the Experian forecast used in the SHMA; the reason why it shows greater housing need than the SHMA relates to demography. Therefore, the Pegasus report has failed to demonstrate either that the SHMA uses too-high activity rates or that lower activity rates would produce a higher housing need.

APPENDIX
CAMBRIDGE ECONOMETRICS NOTE

East of England Forecasting Model 2016 – Comments on the Demographic Projections

Overview

The East of England Forecasting Model (EEFM) was originally developed by Oxford Economics to project economic, demographic and housing trends in a consistent fashion and in a way that would help inform spatial economic planning in the East of England. Cambridge Econometrics (CE) took over the maintenance and operation of the model in 2015. The local authority level EEFM projections are based on extrapolating past trends in data series and relationships between data series, at regional and local levels. The model avoids complex econometric relationships to increase transparency and understanding, and in order to be easily updated and maintained. The overall model structure captures the interdependence of the economy, demographic change and housing at a local level, as well as reflecting the impact of broader economic trends on the East of England.

As in all models, projections are subject to margins of error which increase at more detailed geographical levels and further into the future, and care should be taken in their use.

Demographic projections from EEFM

It is important to note that EEFM is designed to look at how regional growth may be distributed around the region on the basis of underlying trends in development/attractiveness of an area (i.e. 'allocating' regional jobs and people), while other more detailed demographic models are designed to look at population dynamics in an area in more detail. Consequently, different models can give different population outcomes for a given employment projection even with the same activity rate assumptions, because EEFM takes more account of the relative attractiveness of an area (of which relative local unemployment rates will be part of the reason).

In EEFM, regional population (by age) is based on ONS's mid-year estimates to 2014, and the ONS 2012-based subnational population projections are used thereafter (scaled to the UK 2014-based national population projections). At the local level, total population is projected as last year's population plus natural increase plus net migration (domestic and international). Future trends in the regional population are then used to estimate local area future population by three broad age groups. The local area population projections are scaled to be consistent with the regional figures. In this way, it is a different approach from projections arising from a pure demographic model such as Chelmer or POPGROUP, which typically consider the prospects for a single location in isolation on the basis of assumed trends (by more detailed age groups) in migration/house building/employment.

Summary

As mentioned above, EEFM is a regional economic model. It is not a detailed local area-level demographic model, and as such users need to be aware of local areas that may be an outlier compared to the regional average. It may be advisable not to rely on one model when developing an evidence base, and in particular, for areas that are outliers, it may be better to use a more detailed demographic approach to model the demographic element of the model, and make comparisons with outputs from other models. Analysis undertaken by PBA has

highlighted the need to compare the EEFM results with more detailed demographic approaches, particularly in areas where the expected change in detailed age bands are not reflected accurately in the EEFM population projections, due to the method used to estimate the age bands in the model, and the age bands being limited to three broad age groups.