BIDWELLS

GREATER CAMBRIDGE ISSUES AND OPTIONS HOUSING NEEDS REPORT

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Summary

Bidwells LLP has reviewed the Objectively Assessed Need (OAN) for housing and employment in Cambridge City and South Cambridgeshire District ("Greater Cambridge") to inform the Issues and Options consultation for the emerging Greater Cambridge Local Plan.

However, a full OAN for housing has not been undertaken at this point in time due to methodological and timing issues that would render such work out of date. It is more appropriate to wait until later in 2020 when there is more certainty about the Standard Methodology and the latest household projections have been published.

Accordingly, it is more appropriate to use projections of employment to give an assessment of the magnitude of housing that will be needed up to 2041. We have considered the economic growth projections of the East of England Forecasting Model (EEFM) and work by the Cambridgeshire & Peterborough Independent Economic Commission (CPIEC).

EEFM models show both the employment growth and housing demand.

The model that uses past-household formation rates suggests some 36,700 dwellings would be required by 2041; however, this is based on household formation rates which were overly high and so likely overestimate the demand for housing; however, this model output is limited in its use as it does not take into account employment-led housing demand which would increase the housing need.

EEFM suggests job growth of 34,400 between 2018 and 2041. However, this is likely to be an under estimation, given its starting point for jobs in 2018 (200,0000) was already exceeded in 2017 (215,000 jobs), as recorded by the ONS Annual Population Survey.

The model suggests net in-commuting of +43,200 by 2041, but this is likely to already have been reached (Annual Population Survey records net in-commuting in 2019 of 44,000 workers). Furthermore, the decline in resident working age population means net commuting is likely to grow at a faster rate than anticipated by this model.

IEC undertook research into the economic performance and potential of the Cambridgeshire and Peterborough economy reporting, its findings in an Interim Report and Final Report (CPIER) which have informed this paper. Its detailed research into local companies indicate official statistics have historically under reported employment growth in the last five years, suggesting growth rates of 3.3% compared to ONS rates of 2.4% and EEFM rates 1.7%. IEC suggests this has led to a potential backlog of housing delivery given targets, concluding that delivery in the decade to 2018 has fallen short by just under 10,000 homes in C&P.

IEC modelled four employment growth scenarios, not to forecast future growth but to model the potential impacts on growth in Cambridgeshire and Peterborough. Employment growth in Cambridgeshire and Peterborough ranged from c100,000- 400,000 jobs between 2020 and 2041.

The lowest growth scenario modelled a continuation of current local plan growth assumptions, which effects business costs and eventually reducing employment. In the case of Cambridge these kick-in quickly, pegging employment back to current levels by 2051.

Model option 4 (short term employment growth rate, returning to longer growth rate - which is thought by IEC to be the most realistic), suggests employment in Cambridge and South Cambridge will reach c.175,000 in each district. An increase of c.135,000 jobs since 2017 (215,000 jobs) in Greater Cambridge. This is significantly higher than the 34,400 jobs projected by the EEFM model.

There is very little capacity in the current workforce to undertake these jobs given high levels of employment among the economically activity, low unemployment and declining part-time work among residents.

The number of jobs per resident has been growing steadily in both districts for many years, such that economic growth in the region is reliant on in-commuting. All industrial sectors must rely on in-commuting and broadly speaking lower paid occupations have fewer residents per job. This reflects worsening housing affordability, particularly for lower earners. This highlights the need for more affordable accommodation.

These pressures are changing people's attitudes to housing, particularly in Cambridge, where occupiers are willing to forego internal and external space in lieu of not being car reliant, although people still expect gardens and parking in villages.

To conclude, the need for housing in Greater Cambridge is largely driven by employment growth which is necessary to meet the target of doubling GVA by 2041. Further work is required to determine which growth predictions are most appropriate, it is clear from IECs research that the quantum of land for housing needs to be significantly above that currently planned for in the Local Plans.

1.0 Introduction

1.1 Bidwells LLP has reviewed the objectively assessed need for housing and employment in Cambridge City and South Cambridgeshire District ("Greater Cambridge") to inform the Issues and Options consultation for the emerging Greater Cambridge Local Plan.

1.2 While the Government's National Planning Policy Framework (NPPF) makes clear that the minimum number of homes a plan-making authority should plan for should be calculated using the Local Housing Need Standard Method (LHNSM), the presumption in favour of sustainable development and the tests of soundness still require an objective assessment of need (OAN) to determine if a higher number of homes should be targeted. This OAN for housing should be based on demographic need and housing market signals. However, in a rapidly growing economy, such as Greater Cambridge, it is impossible to ignore the demand for housing generated by the incoming workforce. The alternatives would be to either stymie that economic growth or accept increased inflow of commuters; neither of which are compatible with the presumption in favour of sustainable development, or the Government's aspirations for the Cambridge – Oxford Arc.

1.3 The timing of the Issues and Options consultation is not ideal with both the data and methods used for calculating housing need currently in a period of transition. First, the Government recognised in February 2019 that the LHNSM requires replacing for it to work with the latest household projections; it currently uses the 2014-based projections, not the 2016-based. An 18 month timeline was suggested in February 2019 which will almost certainly be delayed as a result of the changes in Government seen over the past year. However, it cannot be delayed significantly because the 2018-based household projections will be published in 2020 (the underlying 2018-based Sub National Population Projections (2018SNPP) will be published on 24 March 2020). To continue to use the 2014HP is likely to be untenable at this stage.

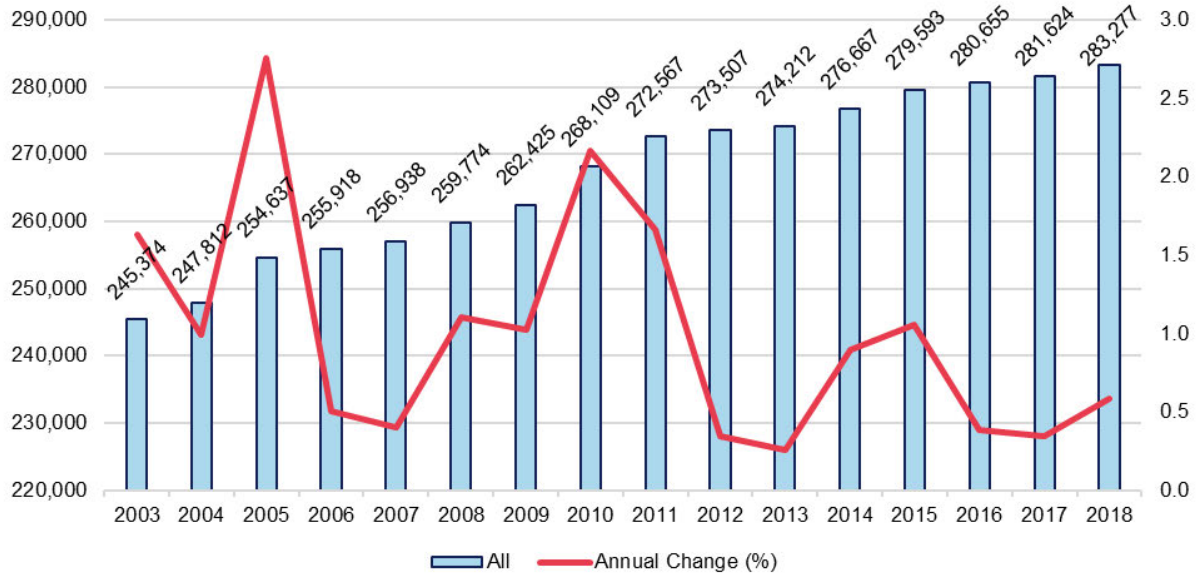
1.4 Another issue is the lack of Government guidance on calculating the OAN for housing and employment with the previous sections of the Planning Practice Guidance (PPG) removed with the introduction of the LHNSM.

1.5 Given these issues, it is not considered appropriate timing to provide a fully modelled assessment of housing and employment need; it is more useful to wait until later in 2020 when there is more certainty about the LHNSM and the latest household projections have been published. Notwithstanding this, it is possible to consider the data currently available and possible future trends compared to the evidence that underpinned the currently adopted local plans. While this will not give a definitive conclusion, it will give an indication of the overall magnitude of need in Greater Cambridge.

2.0 Population Profile

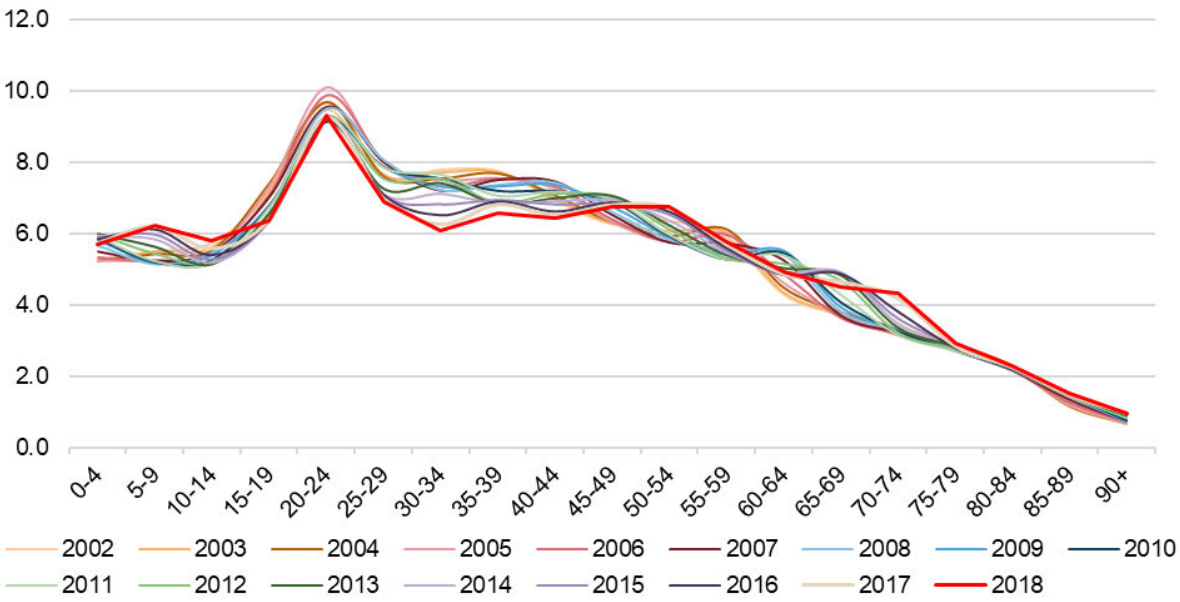
2.1 **Figure 2.1** shows that population growth has largely stalled since 2011 despite the obvious economic growth. Average population growth over the last fifteen years was 1.0% per annum. Over the last ten years this reduces to 0.9% per annum and 0.7% for the last five years. More fundamentally for economic growth, average growth amongst those aged 15-64 has declined from an average of 0.6% per annum over the last fifteen years to 0.3% per annum over the last ten years and 0.1% per annum over the last five years. Indeed, over the last three years it has declined to -0.1% per annum.

Figure 2.1: Mid Year Population Estimates for Greater Cambridge



Source: ONS

Figure 2.2: Proportional Change in Age Cohorts in Greater Cambridge



Source: ONS

2.2 **Figure 2.2** shows the changes that have occurred to the Greater Cambridge population profile in recent years. While the area still has a relatively young population compared to the national average, it is ageing at a similar rate despite the constant replacement of students in their 20s. Indeed, the data shows that there has been a year-on-year decline in the proportion of 15-44-year olds in the population profile. This is offset by increases in those aged 5-9 (the result of the increase in births seen in the last decade, which are now again in decline), 50-54 and 70-74. The latter two reflect the baby booms of the late 1940s and early 1960s.

2.3 The 2016SNPP population projections have been reasonably accurate over the last two years. They suggest the population will increase to 301,000 by 2041. However, in terms of those aged 15-64, the projections suggest that these will decrease from 187,000 people in 2016 to 186,000 in 2041. In effect therefore, these would suggest that any increase in the labour force would rely on either those aged 65+ or commuters into the area. Clearly this is not an appropriate basis on which to formulate an economic strategy for substantial growth.

3.0 Employment Need

East of England Forecasting Model

3.1 The East of England Forecasting Model (EEFM) is an integrated demographic, housing and economic model providing a range of outputs. The most recent version is the 2017EEFM, which uses the 2014SNPP updated to reflect the mid-year population estimates for 2015. While the model is comprehensive, it is not entirely suitable for land use planning where ideally some variables would be fixed to understand the implications of different policy interventions.

3.2 An example of this is the interplay between the resident population and employee jobs in local consumer demand sectors. These jobs are limited to the number 'required' by the resident population with little consideration of the cross-border flow of services or commuting. This is likely to subdue the growth of these jobs.

3.3 Once the total number of people in employment is understood, it is calculated how many are likely to be employed in the same area and how many are likely to commute to a different area, using a fixed matrix derived from the 2011 Census. This is an issue in that it does not reflect the differences in both population and economic growth since 2011. The level of in-commuting is then the residual number of unfilled workspaces in the area. No consideration is given to where this in-commuting will come from.

3.4 Notwithstanding these issues, it could still provide a reasonable starting projection of future economic growth:

- The population elements of the model are too out-of-date to be realistic since it predates major revisions to the mid-year population estimates for 2012-2016 that happened in 2018. These revisions resulted in the total population of Greater Cambridge being reduced by approximately 7,500 people. Most of these were of working age. No confidence can be given to the growth in the working age population suggested by the 2017EEFM.
- The model estimates that there will be 200,000 jobs in the area in 2018. However, the most recent total job estimates from ONS would suggest that in 2017 some 215,000 jobs had already been achieved.
- Overall, the model suggests growth of 34,400 jobs between 2018 and 2041, at an annualised rate of 1,496 jobs. However, with jobs already appearing to be significantly higher than those modelled, it seems probable that job creation could be far higher.
- The estimates of the number of residents in employment for 2019 does accurately reflect the estimates in the ONS Annual Population Survey (APS) at 154,000 people. However, the model suggests there would be approximately 194,000 workplaces in the area when the APS suggests that there are likely to be approximately 198,000 workplaces.
- The model suggests that net commuting in 2019 would be +38,500 workers but the APS suggests that this is more likely to be +44,000 workers.
- The model suggests, even with notable growth in the resident working age population, that by 2041 net commuting will reach +43,200 workers. As indicated above, this is more than likely to have already been reached and, due to the decline in the resident working age population, net commuting is likely to grow at a far greater rate than anticipated by this model.

- The estimates of housing demand in 2018 are generally consistent with the numbers that were completed that year. The model suggests that some 36,700 dwellings would be required up to 2041 at an annualised rate of 1,596 dwellings. However, this is based on the 2014HP formation rates that were revised in the subsequent 2016HP which nationally reduced household formation by approximately 6%. It would therefore seem likely that the modelled population would result in a lower demand for housing.

CPIER

3.5 Cambridge and Peterborough Independent Economic Commission (IEC), set up by the C&PCA, undertook in-depth analysis[1] of the region's economy, with findings presented in the Cambridgeshire and Peterborough Independent Economic Review (CPIER) in November 2018. The report is an authoritative and endorsed evidence based assessment of the economic performance and potential of the C&P economy, which has been used to inform the C&P industrial Strategy. It has considered both past rates of employment growth and scenarios for future growth.

3.6 The IEC concluded that past levels of economic growth have been higher than the rates recorded by the Office for National Statistics (ONS) in its Business Register and Employment Survey data (BRES) and those of the EEFM.

3.7 The IEC used a comprehensive database of companies in the area, compiled by the Centre for Business Registration (CBR) at Cambridge University, and reviewed company accounts. Differences in the nature of data collected by BRES and CBR helps to explain the CBRs higher growth rates.

- BRES includes the self-employed, sole proprietorships and the public sector; CBR does not;
- CBR captures small companies, while BRES only looks at those registered for VAT. In an area with significant numbers of small start-up companies, this could be a significant cause of discrepancies.
- CBR records company employment growth, which may include growth outside of the region. However, extensive company surveys suggest that growth in the sub area is very closely aligned to company growth.

3.8 To take account of businesses not included in the database, IEC created a blended rate of growth using some BRES Data to overcome the limitations of the CBR database. A comparison of ONS and CBR/BRES blended rates is shown in Figure 3.1. This blended rate suggests past employment growth to be 3.3% per annum, while official ONS rates are 2.4%. No uplift was found in Cambridge, but South Cambridgeshire rates at 4.2%, were almost twice that recorded by ONS, and even higher than the 1.7% annual growth rate in jobs recorded in the EEFM.

3.9 These growth rates suggest that there is already a potential backlog of housing delivery given targets in current local plans were informed by the EEFM and ONS data. Indeed, IEC conclude that delivery in the decade to 2018 has fallen short by just under 10,000 homes in C&P.

[1] CPIER September 2018

Figure 3.1 Average employment growth rates per annum in Cambridgeshire and Peterborough – a comparison between ONS and CPIER figures.

Comparison with BRES	6yrs 2010-2016	
District	**ONS (BRES) Data**	**CPIER/BRES Blended Data**
Cambridge	2.4%	2.4%
South Cambridgeshire	2.3%	4.2%
East Cambridgeshire	3.9%	4.4%
Huntingdonshire	1.5%	2.1%
Peterborough	2.5%	3.5%
Fenland	2.3%	3.1%
Cambridgeshire & Peterborough	**2.4%**	**3.3%**

Source: CPIER, p45

Growth projections

3.10 The GCPCA devolution deal set an ambitious target of doubling the regional economic growth (GVA) over the next 25 years (to 2041). The IEC concluded that this level of growth is realistic but requires the area going beyond what it has achieved in the past. Economic growth has been 2.5% per annum since 1998, yet 2.81% growth is required to meet the target. Achieving this requires employment growth and productivity growth, as the area is already at comparatively high levels of employment

3.11 IEC developed an employment driven economic model, not to forecast future growth but model the potential impacts on growth in Cambridgeshire and Peterborough. As the number of employees grows, demand for housing and pressure on infrastructure increases which can create additional costs to business and inhibit growth. Four employment growth scenarios were used to explore the impact of job growth on costs to businesses, factoring in these negative externalities of growth:

1. Local land use plans – to create land use plans, councils make forecasts as to how employment will grow, derived from the East of England Forecasting Model (EEFM). This scenario captures these forecasts, with an extrapolation to 2051. This is the lowest employment growth forecast.

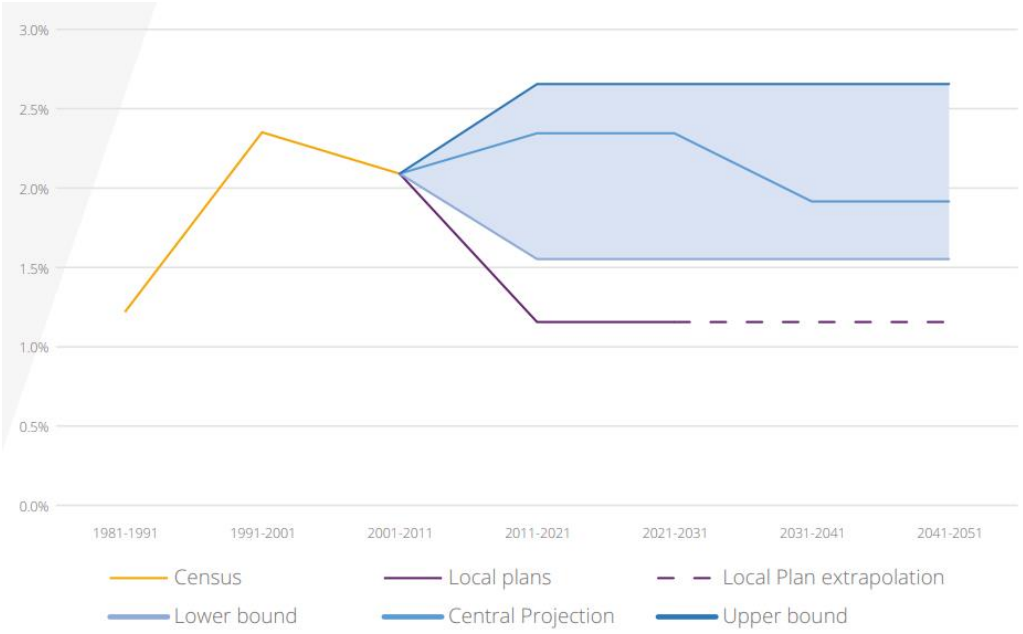
2. Employment Growth – longer term rate. This projection is a continuation of the 1981-2016 trend of employment growth.

3. Employment Growth – shorter term rate. This projection is a continuation of the 2010-2015 employment growth trends based upon recent CPIER data, which suggest much higher rates of growth have been occurring recently.

4. Employment Growth – shorter term (ST) rate returning to longer term (LT) rate. This projection is the central projection of the four. It assumes first a continuation of growth rates closer to higher recent Office of National Statistics (ONS) employment growth rates, before gradually returning to longer term ONS growth rates.

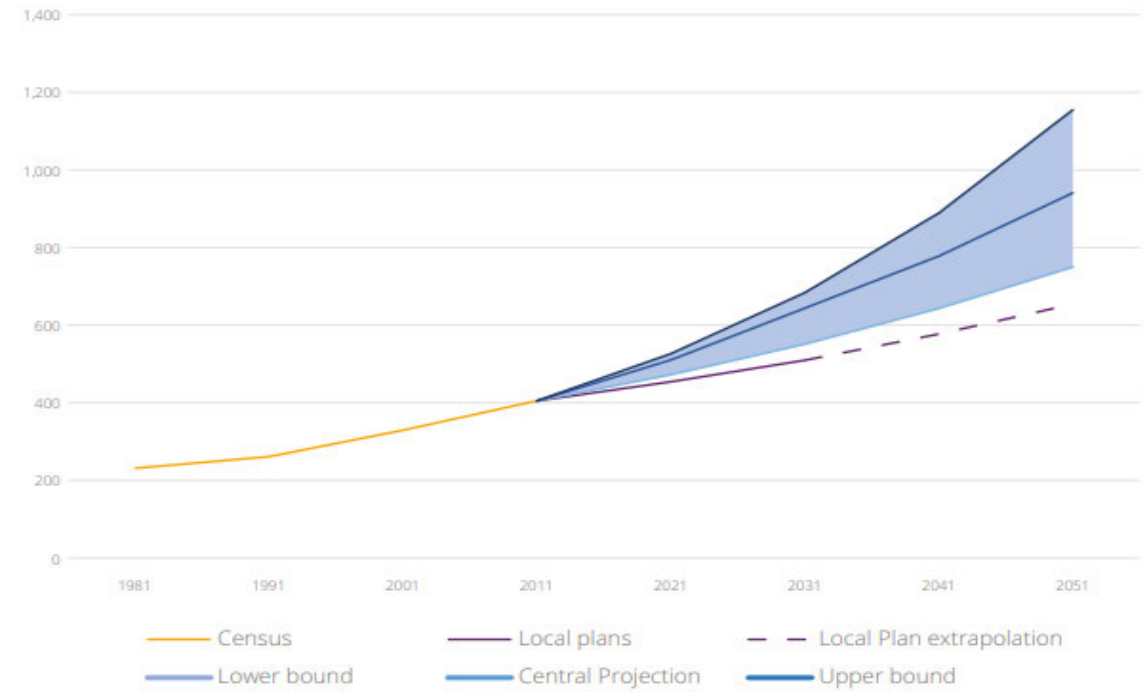
3.12 Figure 3.2 shows that growth rates in the scenario of only delivering development in accordance with the current Local Plans is substantially lower than all three IEC growth rate scenarios. The implications for job growth is shown in Figure 3.3.

Figure 3.2 Cambridgeshire and Peterborough yearly employment growth rates – Actual and projected



Source: Dr Ying Jin, Department of Architecture, University of Cambridge

Figure 3.3 Employment projections for Cambridgeshire and Peterborough (000's people)



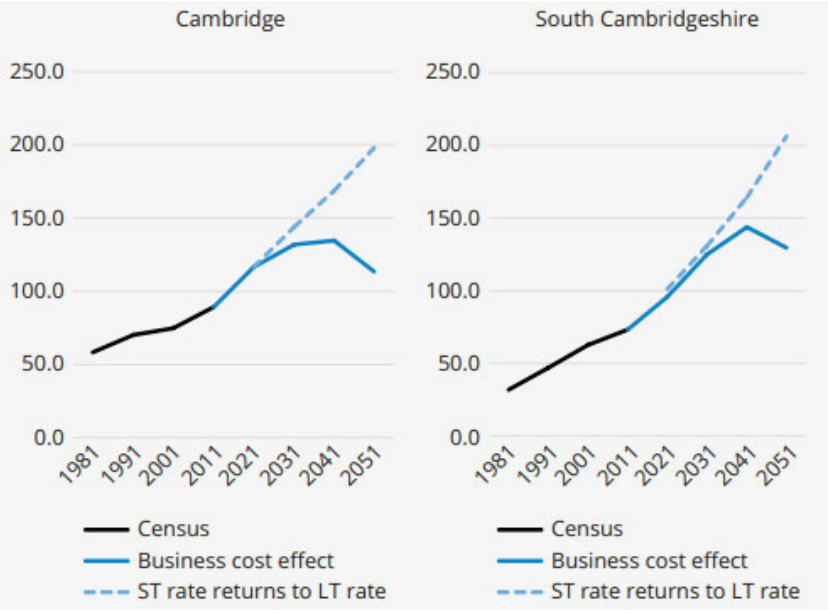
Source: Dr Ying Jin, Department of Architecture, University of Cambridge

Source: CPIER Interim Report May 2018, p35

3.13 The IEC considered how the low growth scenario would likely play out in Cambridge and South Cambridgeshire. It projects that business costs effects will kick in more quickly in Cambridge and peg employment growth back to current levels by 2051. (Figure 3.4).

"*We find an inconsistency between the plans for infrastructure and housing development and this hypothetical rate of employment growth. In fact, the costs in this scenario soar – particularly in areas where there is already a backlog, such as Cambridge and South Cambridgeshire. When these costs are fed back into the model, employment growth begins to slow by 2021, and actually goes into reverse beyond 2031. That is, businesses start shrinking and moving away from the area, as the Cambridge area overheats so much that it burns out*."[2]

Figure 3.4 Rising business costs damage employment growth



Source: CPIER p47 Figure 15

3.14 Using model option 4 assumptions (short term employment growth rate, returning to longer growth rate), which is thought by IEC to be the most realistic, employment in Cambridge and South Cambridge will reach c.175,000 in each district; an increase of 135,000 jobs since 2017 (215,000 jobs) in Greater Cambridge. This is significantly higher than the 34,400 jobs projected by the EEFM model.

3.15 Clearly, it is essential that realistic and fully evidenced based economic growth is used by GC LPA when setting housing need targets in the combined local plan. Without it, any assessment of housing need is not meaningful.

[2] CPIER p46

4.0 Workforce Capacity

4.1 When considering the relationship between job growth and housing need it is important to understand the capacity of the existing workforce to undertake new jobs.

Figure 3.5. Unemployment rate (year to Sept.) Figure 3.6 Part Time Employment of Residents

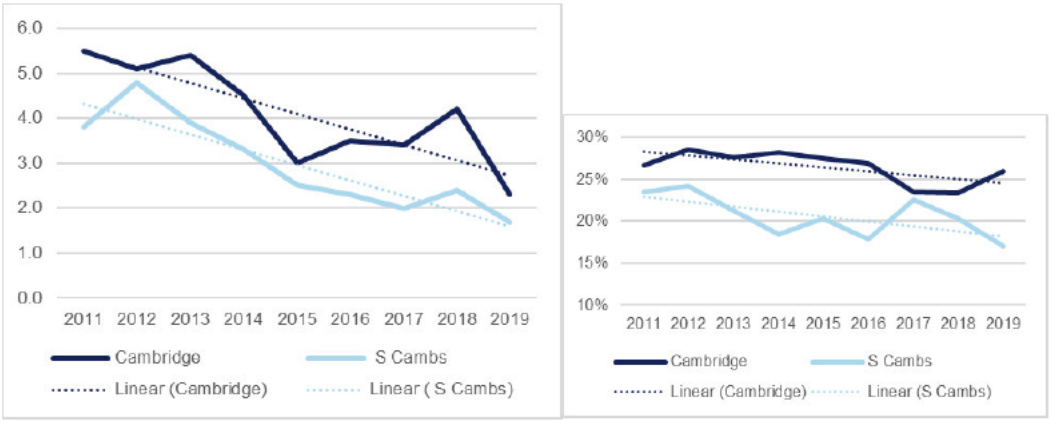


Figure 3.7 Gross Weekly Pay

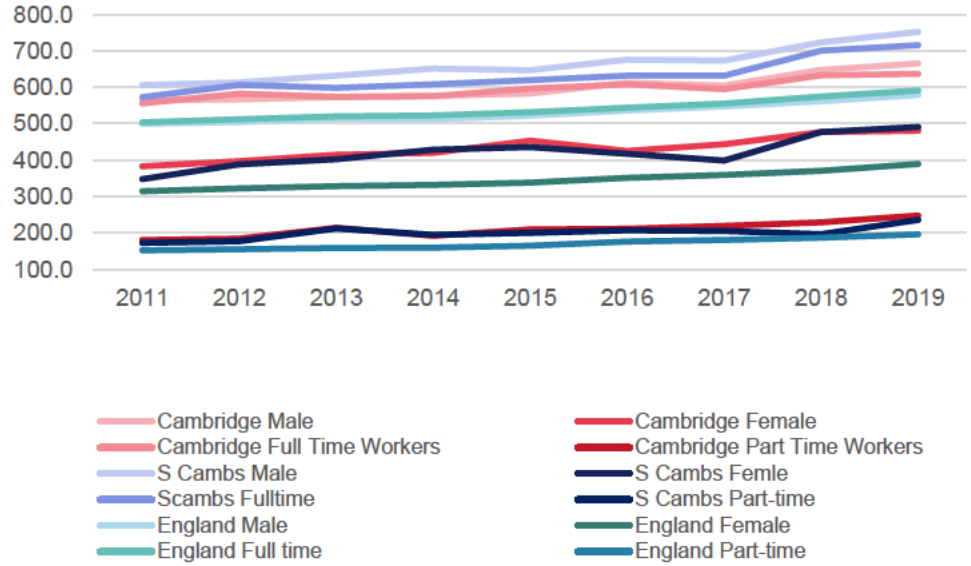
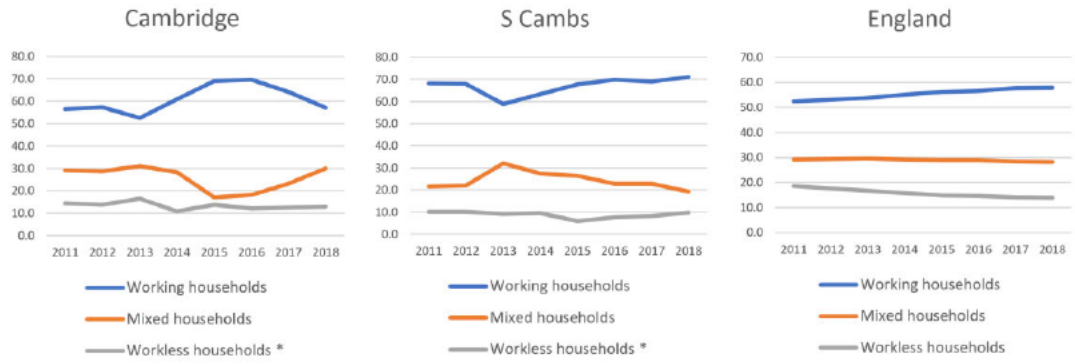


Figure 3.7 % of Households With Economically Active Residents



Source All: Annual Population as at April 2019

4.2 These indicators suggest there is little capacity among Greater Cambridge residents to expand the workforce.

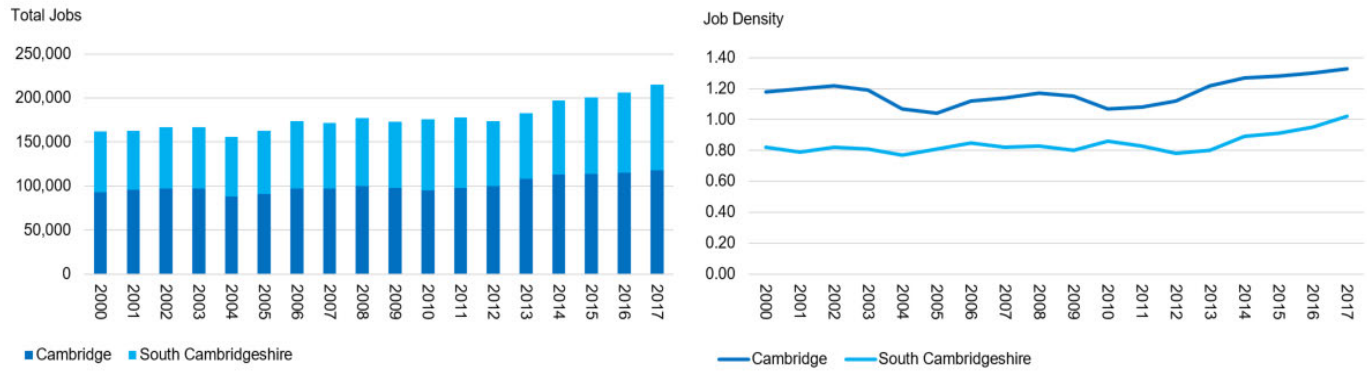
- Unemployment rates (proportion of economically active population in employment) have been falling since 2011, to less than 3% in Cambridge and less than 2% in South Cambridgeshire;
- Declining part-time work among residents as the percentage of those working fulltime has risen in both districts since 2011;
- Gross weekly pay within the Cambridge and S Cambridgeshire workplaces is above national average for men, women, full and part-time;
- In the UK, the % of households in which all economically active people are working is only just reaching 60%. In S Cambridgeshire working households has been above this at 70% for many years. Cambridge households are also well above national activity levels, despite a recent dip.

5.0 Workforce Shortage and Affordability

5.1 The need for homes in Greater Cambridge is made clear when looking at job density – the number of jobs per resident. When jobs exceed residents. then economic growth is inhibited or significant commuting takes place.

5.2 In Cambridge, the larger job market, jobs per resident rose from c 93,000 in 2000 to 118,000 in 2019, while in South Cambridgeshire they increased from 69,000 to 97,000. Cambridge job densities at 1.33 jobs per residents (aged 16-64) are higher than South Cambridgeshire which has just over 1 job per resident in 2017, reflecting the districts larger population. In both locations, the economic strength of the area requires in-commuting to fill a significant proportion of jobs. (See Figure 5.1)

Figure 5.1 Job Densities



Source: NOMIS

5.3 Analysis by industry (Figure 5.2) shows that all industries have fewer than one resident / job. Construction (0.59) and banking, finance and insurance (0.67) have the fewest skilled residents in Greater Cambridge. All other sectors have a ratio in the range of 0.8 to 0.89. The lack of construction workers raises particularly concerns given future development needs.

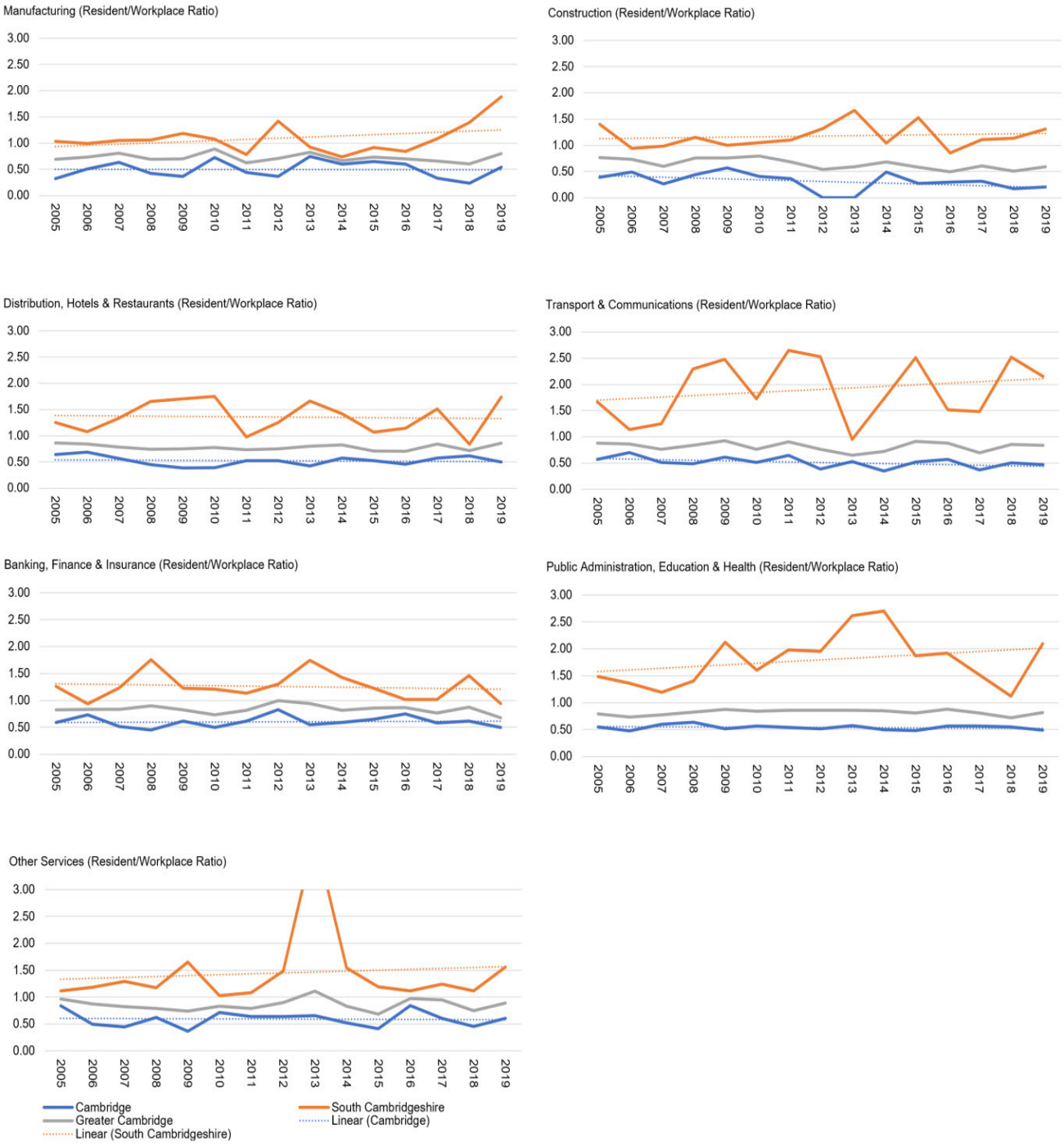
5.4 Looking in more detail at the number of jobs by occupation and comparing this with the occupations of Greater Cambridge residents helps identify what type of skills currently have to be recruited from outside Greater Cambridge.

5.5 According to the 2019 Annual Population:

- The only occupation with at least one resident per job is sales and customers services;
- All other occupations have fewer than one resident per job, although Managers / officials are close with 0.92;
- Occupations fewest residents per job are personal service occupations, elementary, skilled trades, and administrative / secretarial; and
- Professional and associate professional occupations are better supplied with around three residents for every four jobs.

5.6 It is evident that all industries generate a significant amount of in-commuting, and broadly speaking, lower paid occupations have fewer residents per job, highlighting the need for more affordable accommodation.

Figure 5.2 Resident Per Workplace Ratios - By Industrial Sector



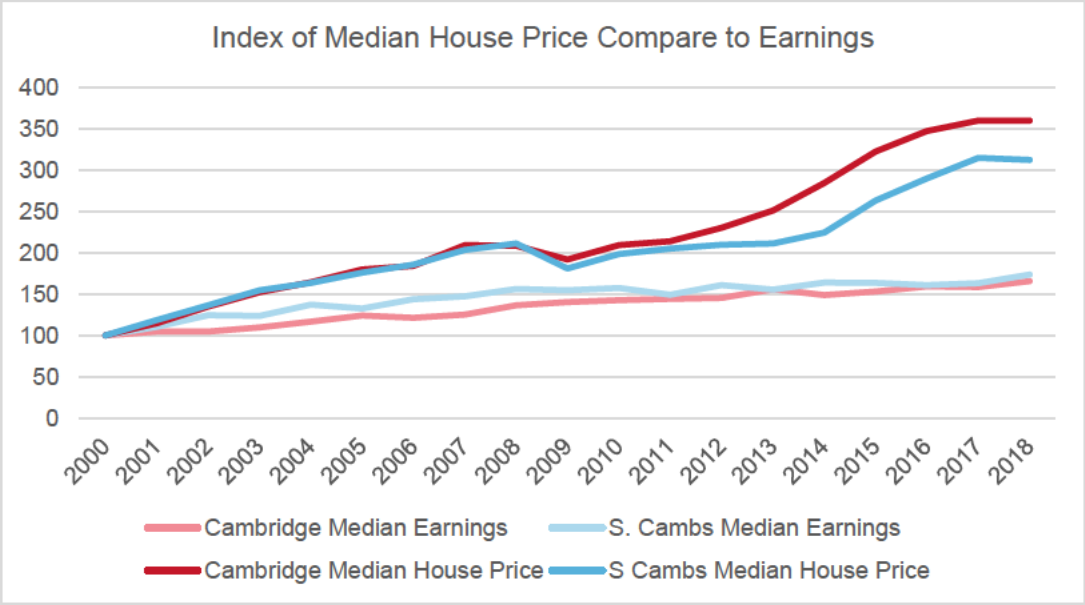
Source: APS 2019

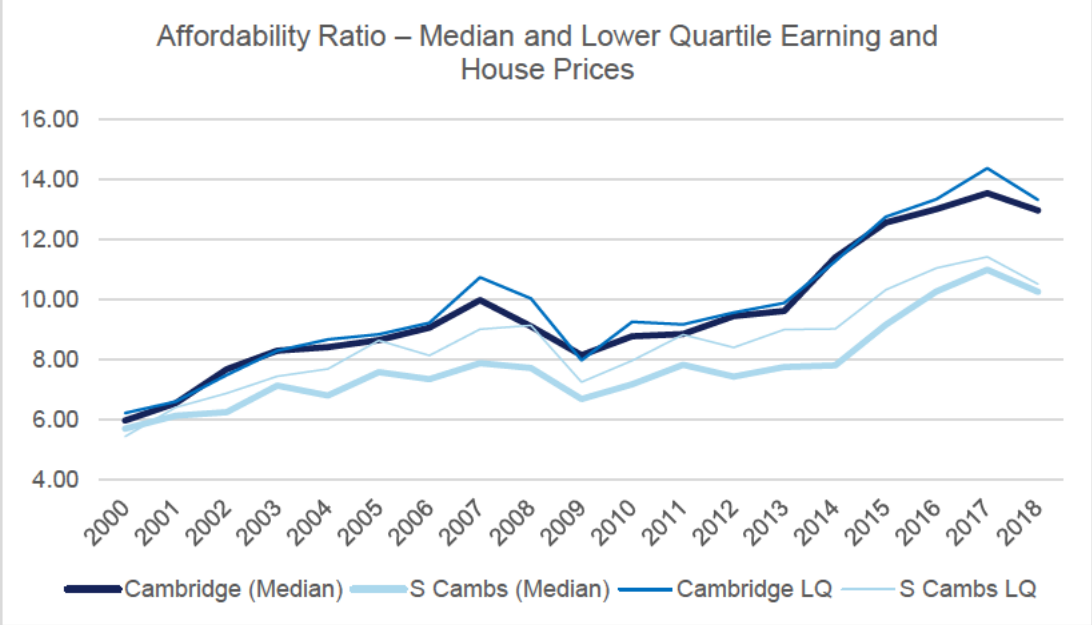
Affordability

5.7 Greater Cambridge is an increasingly expensive and unaffordable place to live, as house price increases outpace wage increases. Median house prices are 12.95 times median earnings in Cambridge, 10.25 in South Cambridgeshire, compared to 9.9 and 7.3 in the East and England.

5.8 The affordability of cheaper housing compared to lower earnings (lowest quartile in each case) is even worse: homes cost 13.31 times earnings in Cambridge and 10.5 in South Cambridgeshire. (Fig 5.4)

Figure 5.4 Housing Affordability





Source: ONS

5.9 The rental market is also increasingly expensive. Within Cambridgeshire, rental values have increased by c. 3% in the past 12 months to an average rent of £1250pcm. The market remains strong in existing and new communities driven by:

- Many short-term economic opportunities in the City, particularly for overseas occupiers;
- Strong demand from people moving into the area who 'try before they buy';
- The general unknown quality of the large new settlements;
- Young economically active population in Cambridge, for whom working location is more fluid;
- Short term rental market for people selling in order to be a 'cash' buyer in a highly completive sales market;
- Slowing growth / price reductions on new developments has increased rental interest while people watch for bargain prices;
- Strong competition for secondary school places, prompts families to take short term let within school catchment during the application process;
- Evidence of more speculative buy to let activity in locations where transport infrastructure is proposed.

Impact on Housing Requirements

5.10 Affordability and increased cost and time associated with commuting is affecting requirements:

- Buyers and investors are paying more for locations with good transport connections;
- Occupiers in Cambridge are willing to forego internal and external space in lieu of not being car reliant, although people still expect gardens and parking in villages;
- 'Connected' locations with good green public open space provision and community infrastructure have proved most popular;
- Efficient movers. People opting for fewer house moves typically start with a 1-2 bed apartment and then as large a property as they can afford, typically a 3 or 4 bed property within a village where it is cheaper than Cambridge;
- More first-time buyers in the 3-bed market, having rented for a long time;
- 'Bank of Mum and Dad' helping to fund first purchase of 1-2 bed apartment, second move then to as large a premise as can be afforded.

6.0 Conclusions

6.1 The Greater Cambridge area has experienced economic success which generates a need for a labour greater than its resident population can serve, and so places an increasing pressure on the housing market. A lack of housing supply in the face of such demand has reduced the affordability of homes, particularly for those in lower incomes.

6.2 The housing requirement for the Greater Cambridge area for the next Local Plan period must take into account the economic and affordability context; to reflect the housing-pressure already in the system arising from economic growth already experienced and to take account of the aspiration to see that economic growth continue, which is most clearly expressed by the CPIER to double the GVA of the Combined Authority area, which itself is driven by the success of Greater Cambridge. This will be further fuelled by the extensive infrastructure improvements planned or committed for the area.

6.3 Without a significant increase in the volume of house building, to serve all employment locations, economic growth in Greater Cambridge will stall. In the words of the IEC:

"*it is indisputable that high rates of employment growth have put great strain on the housing market in Cambridgeshire and Peterborough, particularly around Cambridge. The result is exceedingly high living costs, longer commutes, social stratification, and extra cost for business. Ambitions for house building should be increased to deal with a housing deficit that has grown up following under-projections of growth*." (CPIER, p 77)

6.4 It is clear from a number of different and objective housing studies and models, summarised by this report, that the quantum of land required for new housing must be significantly above that currently planned for; this is certainly the case to be able to meaningfully address the worsening affordability issue and to support the planned economic growth.

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