Con

Detailed affordability analysis

Cambridge and South Cambridgeshire

FINAL REPORT

savills.co.uk

Contents

Table of figures

Executive Summary

- House prices are very high relative to local incomes in Cambridge and South Cambridgeshire. In Cambridge the lower quartile house price is 13.0 times the lower quartile income of those working in the area, compared with 11.0 in South Cambridgeshire and 7.0 nationally, according to DCLG.

- Relatively high levels of new homes have been delivered in the Greater Cambridge area over the past few years, but a low proportion of the market homes were affordable to those on lower incomes:

    - A typical household with an income of £30,000 would be unlikely to be able to afford even a one bedroom shared ownership property in Cambridge. The same household would be able to afford to afford only 6% of one bedroom private rented properties in the city. Larger market properties would not be affordable on this income.
    - In South Cambridgeshire this income goes slightly further. 14% of private rented one beds would be affordable but only 1% of private rented two beds. Purchasing a one or two bed property might be possible through shared ownership, but supply is limited and raising the c.£5,000 minimum deposit could be difficult (local data on household savings is not available).
    - In general private renting costs are not significantly lower than buying on a monthly basis (given the prevailing yields and mortgage rates private rents could be higher than mortgage repayments), but renting offers an option to households without sufficient capital for a deposit.

- There is clear evidence of younger households moving out of Cambridge or not forming at all. Those that do stay tend to be in private rented accommodation, a tenure that has grown substantially.

- The clearest gap in terms of housing provision affects households with annual incomes of £20,000 to £40,000, potentially stretching above this in Cambridge for those needing larger properties. Discounted rental homes are likely to be the only option to meet need in the city at this income level. Across the Greater Cambridge area:

    - For a household income of £20,000, a discount to typical market values of around 50-70% would be needed to access a three bed rental property, compared with ~40-60% for a two bed and ~30-50% for a one bed.
    - For a household income of £40,000, a discount to typical market values of around 10-40% would be needed to access a three bed rental property. Smaller rental properties are affordable at this income apart from in higher value areas of Cambridge city.

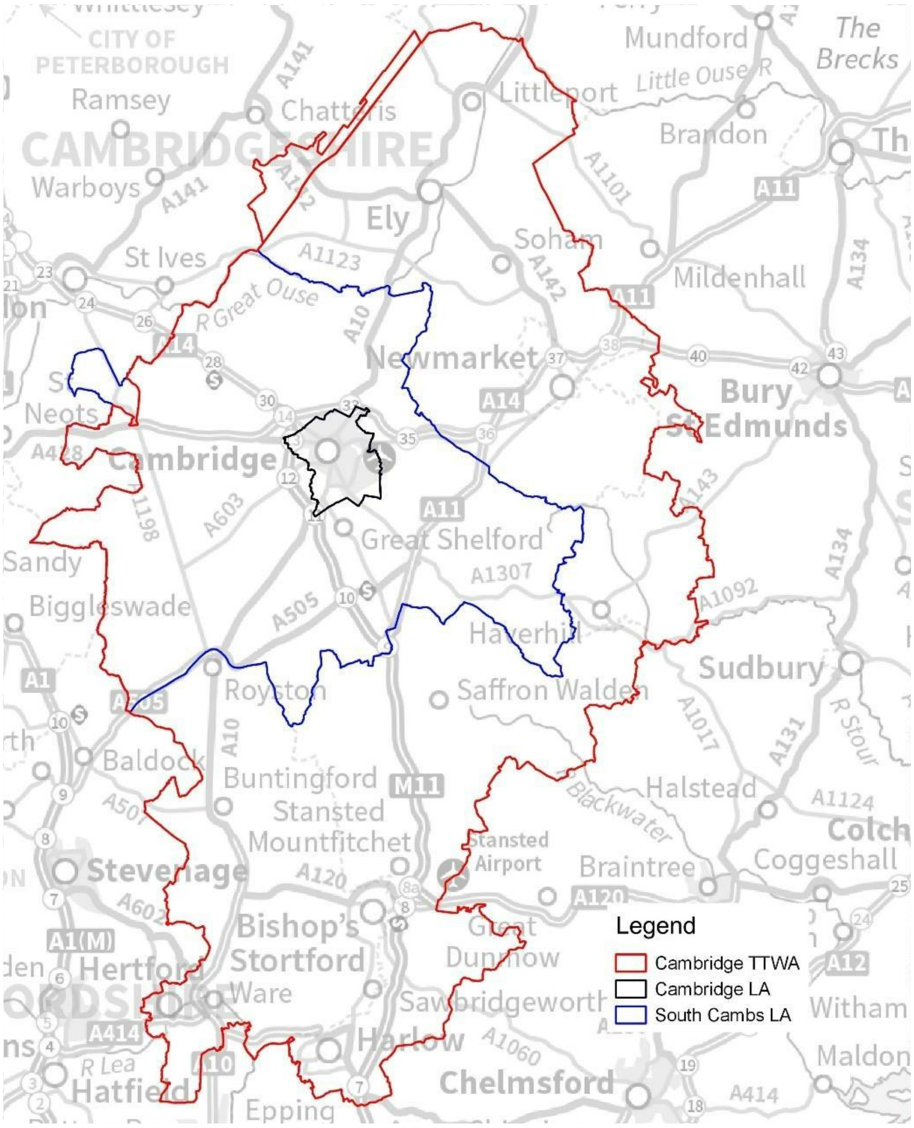
- These two markets are not distinct and will be providing housing for many of the same people. Those who are priced out of Cambridge are likely to look to South Cambridgeshire as an alternative. The shortfall in supply should therefore be addressed across the two authorities.
    - However, looking at the new settlement of Cambourne as an example, accounting for additional commuting costs on top of housing removes much of the saving relative to Cambridge. Building in lower value areas connected to Cambridge to provide suitable housing for those on lower incomes may be part of the solution but is unlikely to completely meet this need or be suitable for all households. In addition the corresponding increase in commuting may be undesirable unless sustainable travel options can be encouraged.

1. Introduction

This research aims to understand the range of housing required, in terms of locations, size, and price points, to meet the needs of a fast growing population and local economy. The focus is on identifying what is affordable to households across the full income range, in particular working-age households.

Cambridge and South Cambridgeshire local authorities have been analysed but the methodology is applicable to the wider housing market area which includes: Fenland, Huntingdonshire, East Cambridgeshire, St. Edmundsbury, and Forest Heath. Peterborough could also be included as part of the Local Enterprise Partnership (LEP). For reference the 2011 Cambridge travel to work area (TTWA) is shown below, with Cambridge and South Cambridgeshire local authorities highlighted.

Figure 1 – Cambridge travel to work area



Source: OS OpenData

The project brief set out the following questions:

1. Affordability – current household income spreads against current housing market ownership and rental
2. Demand for shared ownership and other 'intermediate housing' products
3. Place for Starter homes
4. Place of PRS provision
5. Evidence of population moving away/not moving in
6. Nature of households needing homes e.g. characteristics of newly forming households – affordability for these specific households
7. Impacts of travel costs and childcare on household affordability
8. What product/prices are needed to meet overall housing demand

We have approached this as follows:

Section 2 uses the latest Land Registry and Rightmove data to review the local housing market, including analysis of capital values, rental costs and transaction levels.

Section 3 uses income and earnings data from CACI and the Annual Survey of Hours and Earnings to assess affordability of property in the local markets, with particular focus on how new supply of market and affordable properties fit into the market.

Section 4 looks at recent and projected demographic changes to consider the impact the property markets are having on tenure, household formation and migration behaviour.

Section 5 draws together the findings to review the implications, highlighting issues and proposing potential solutions.

Note that in our recommendations the aim is to simply set out estimates of what households' are able to access in the current market, based on their likely housing requirements and incomes. We will not explicitly consider the deliverability of such housing products under current or future affordable housing policy or funding programmes, but we acknowledge that in practice local authorities are constrained by funding programmes and policies such as high value council house sales, rent policy, right to buy, fixed-term tenancies, etc. In the course of this project a snap General Election was called for 8th June, resulting in a minority government, so there is potential for further policy uncertainty over the short term.

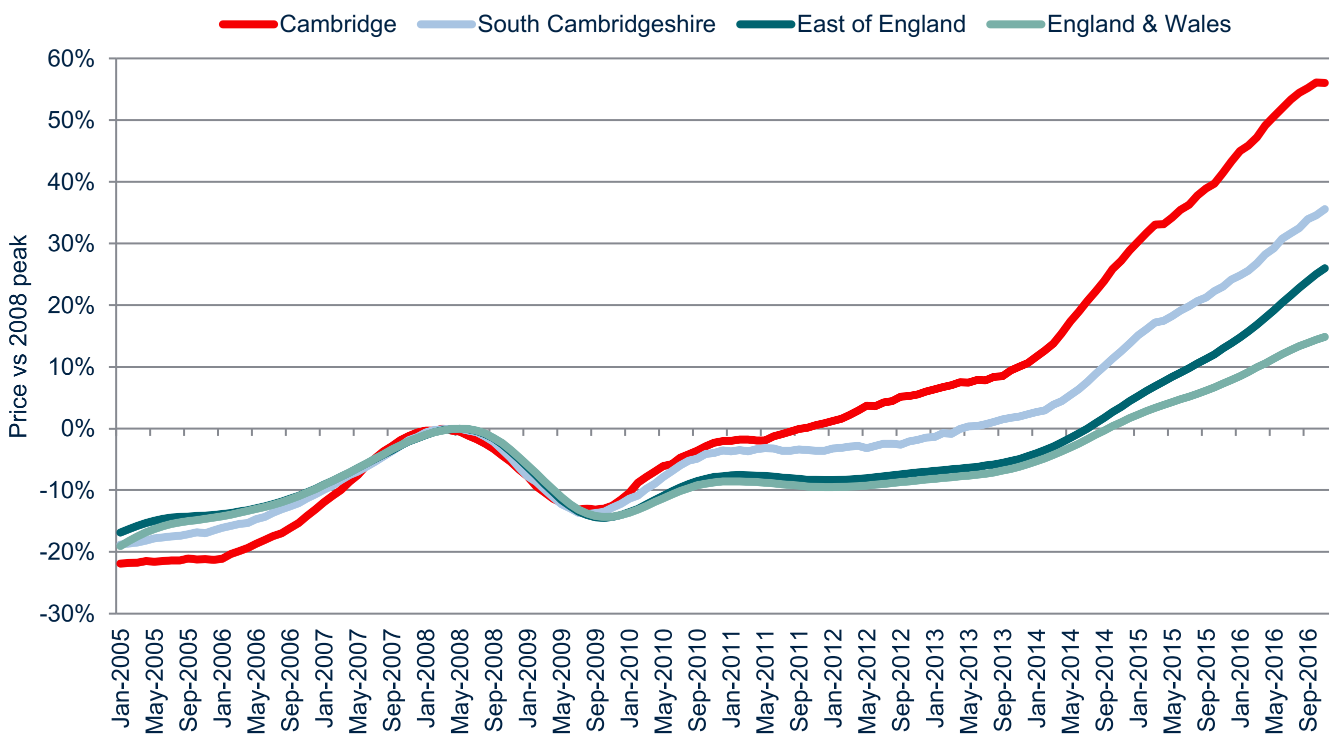
2. Housing Costs

In order to better understand the affordability of housing in Cambridge and South Cambridgeshire it is important to establish the cost of different types and tenure of housing, with reference to the region and the country as a whole. This section looks at what houses cost to buy and rent.

2.1. Capital values

Since the 2008 downturn Cambridge house prices have increased strongly, recovering to pre-downturn highs quickly and since rising to 56% above their previous peak. In terms of its transaction and price recovery Cambridge has performed more in line with the London market than any other local authority. South Cambridgeshire has seen significant value growth to 35% above previous peak.

Figure 2 – House price indices

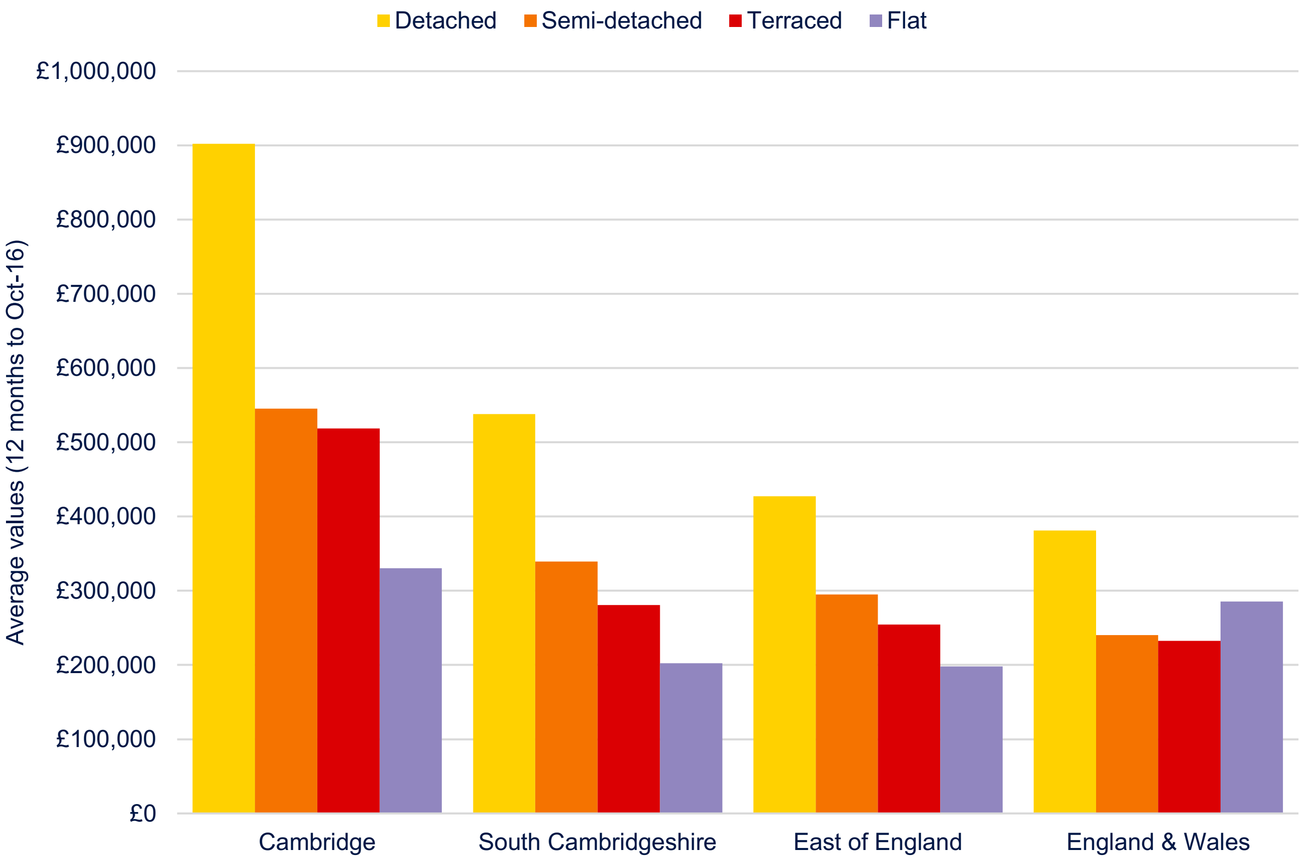


Source: Land Registry

Detailed affordability analysis

In 2016 the average price of a property in Cambridge was £482,000, more than 50% higher than the average for the East of England (£305,000) and 23% above the South Cambridgeshire average of £392,000.

Figure 3 – Average house prices by type



Source: Land Registry

Comparing these values to the Hometrack data used for Cambridgeshire Insight *Housing Market bulletins*[1], which includes data from their valuations as well as recorded Land Registry transactions, shows much similarity. The average of the Hometrack data from the June and December 2016 reports, which covers the 12 months used in the above analysis, gives average values of £497,000 for Cambridge and £403,000 for South Cambridgeshire, within 3% in both cases.

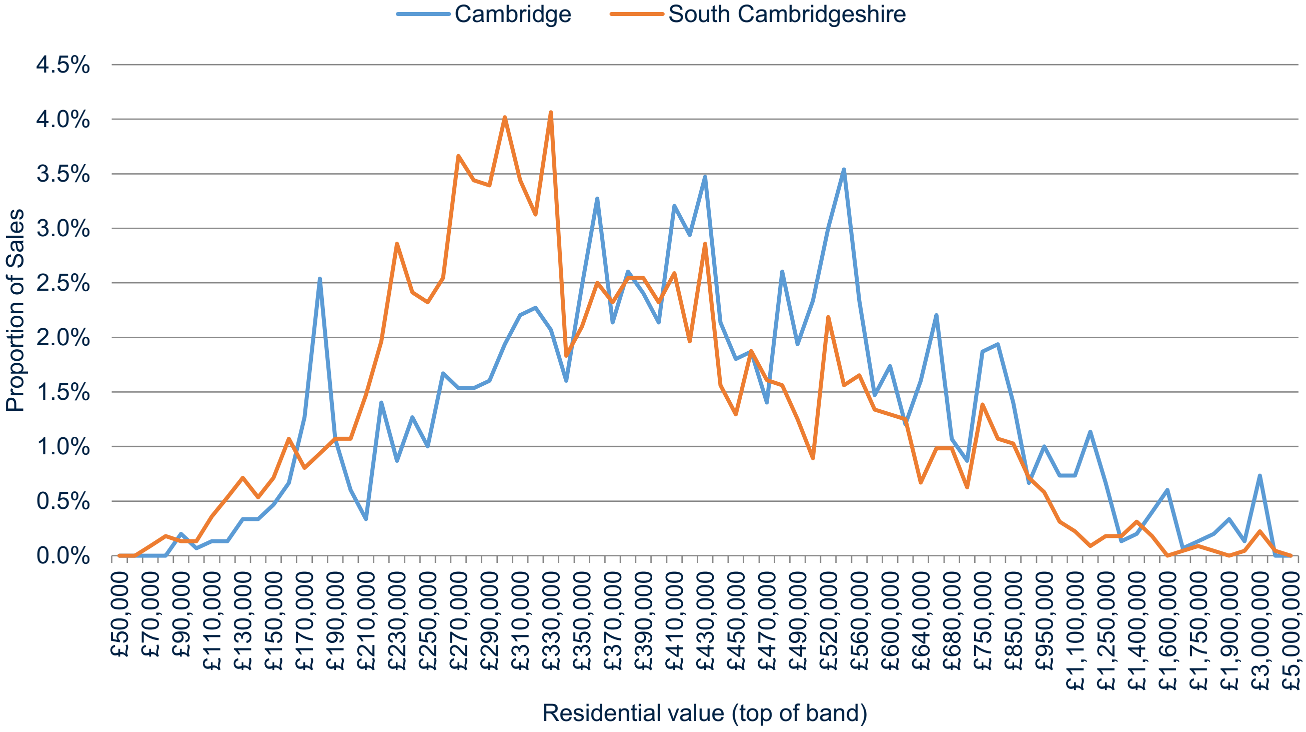
[1] http://cambridgeshireinsight.org.uk/Housingmarketbulletin

Detailed affordability analysis

Cambridge and South Cambridgeshire

Figure 4 shows proportions of sales in value bands for 2016, with transactions most common in the £250-300,000 band for South Cambridgeshire against £350-500,000 for Cambridge. Despite the difference in average values and historical growth patterns, this data on transaction profiles shows that there is substantial overlap between the markets of Cambridge and South Cambridgeshire. This illustrates that, to potential purchasers and occupants, the administrative boundary between the local authorities is unlikely to factor in to decisions on where to live.

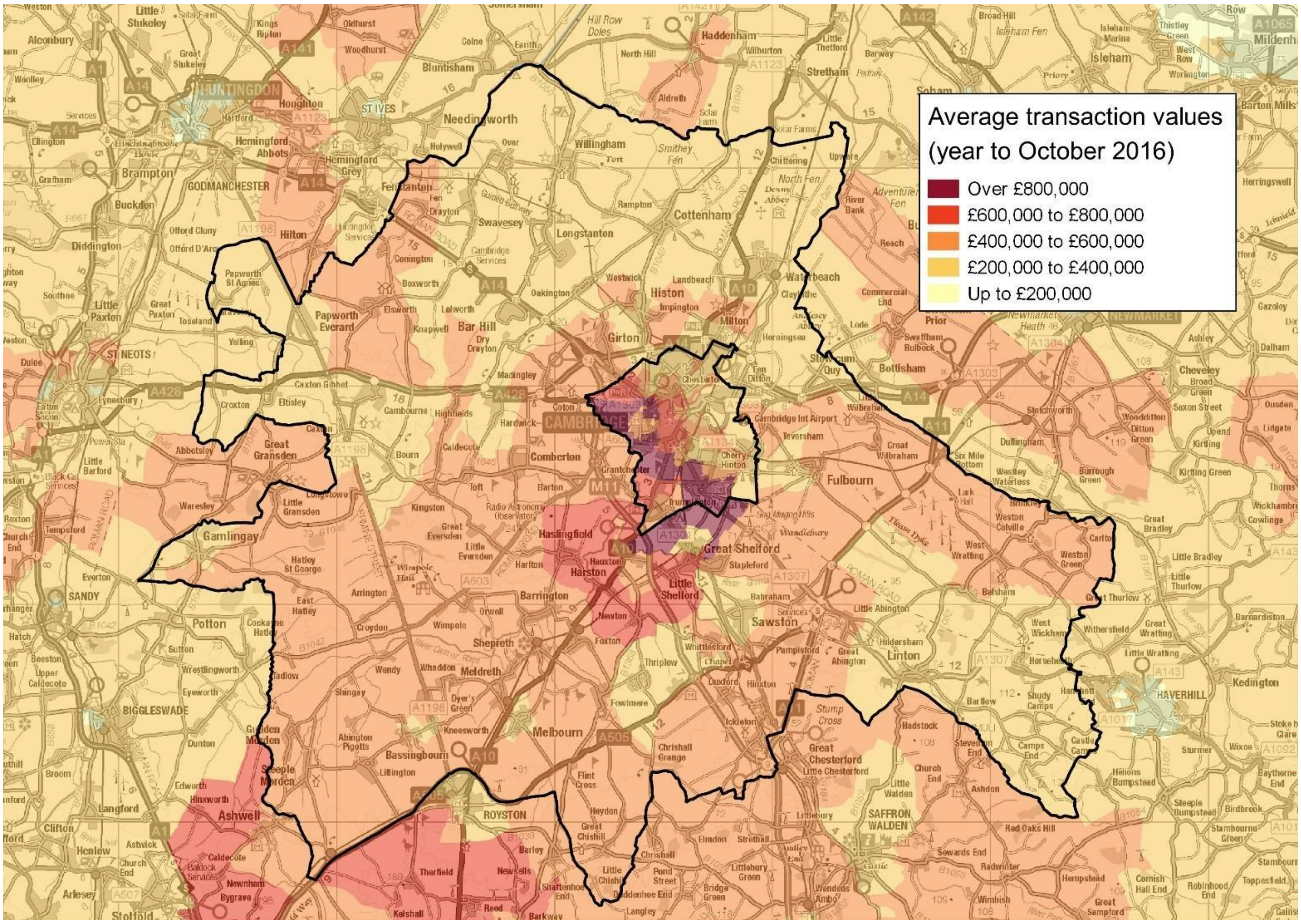
Figure 4 – Depth of market: Cambridge vs. South Cambridgeshire



Source: Land Registry

The highest values in Cambridge are on the fringes of city centre, particularly towards the south and west. Values in Cherry Hinton and Chesterton are markedly lower than other areas of Cambridge. Moving into to South Cambridgeshire values are higher in the south of the authority and lower to the north. Values in both South Cambridgeshire and Cambridge are above the Cambridgeshire average with neighbouring authorities seeing significantly lower capital values.

Figure 5 – Average values heat map



Source: Land Registry, OS OpenData

2.2. Rental values

Costs in the private rented sector are shown in Table 1, based on Rightmove data.

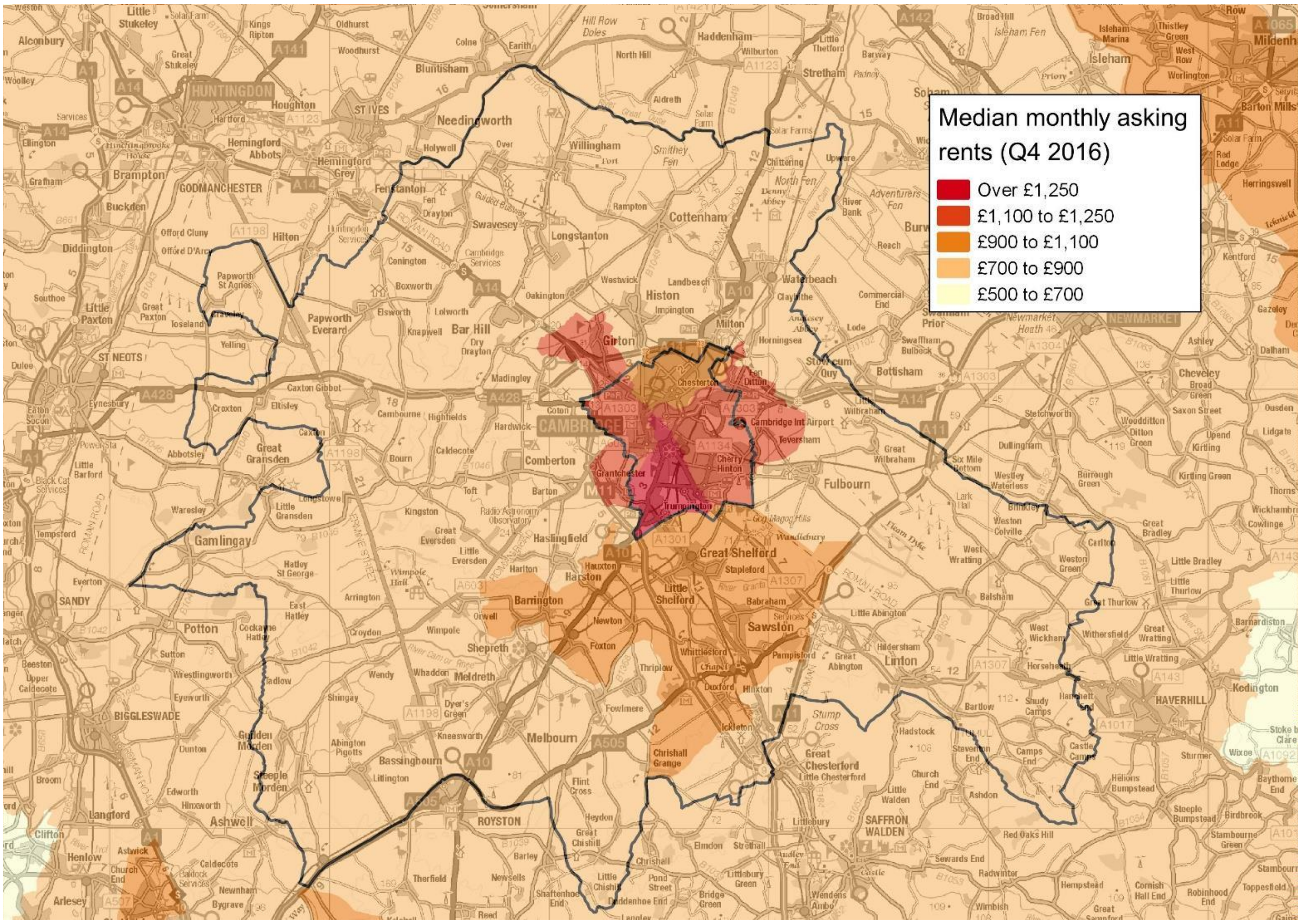
Table 1 – Monthly asking rents (Q4 2016)

Bedrooms	Cambridge		South Cambridgeshire	
	Median	Upper Quartile	Median	Upper Quartile
1	£909	£1,078	£705	£775
2	£1,215	£1,392	£847	£898
3	£1,353	£1,549	£1,058	£1,215
4	£1,825	£2,128	£1,409	£1,684

Source: Rightmove

The highest rental values are confined to a relatively small area in Cambridge, in the city centre and stretching south. Higher rental values in South Cambridgeshire follow the major roads leading south out towards Royston and Saffron Walden.

Figure 6 – Median monthly rent, 2 bed property, Q4 2016



Source: Rightmove, OS OpenData

Detailed affordability analysis

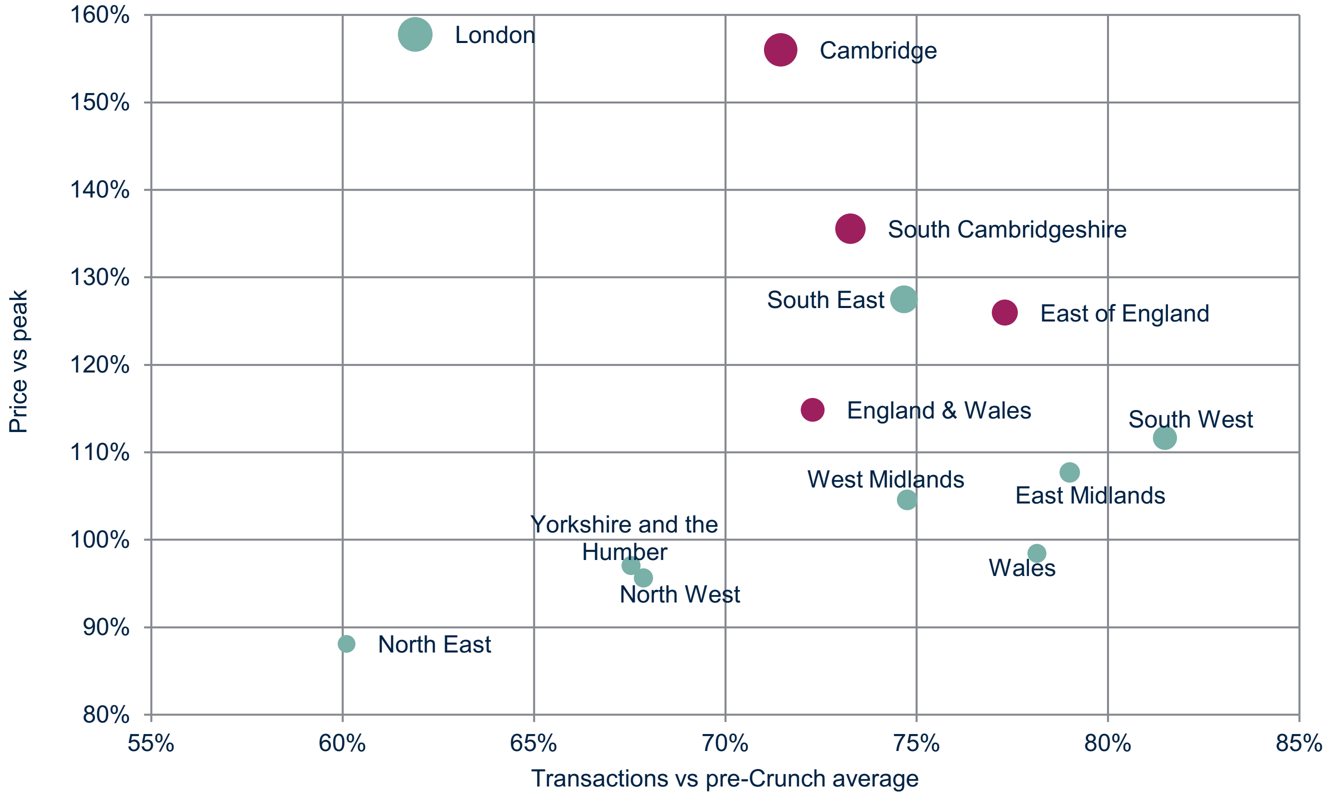
Cambridge and South Cambridgeshire

2.3. Transactions

Despite a period of strong price growth across the East of England, and particularly in Cambridge and South Cambridgeshire, transactions have yet to recover to their pre-downturn average.

Figure 7 illustrates Cambridge's strong price recovery since 2007/08, in line with London. However, transaction volumes are currently behind the level of recovery in the East of England.

Figure 7 – Performance against peak



Source: Savills using Land Registry

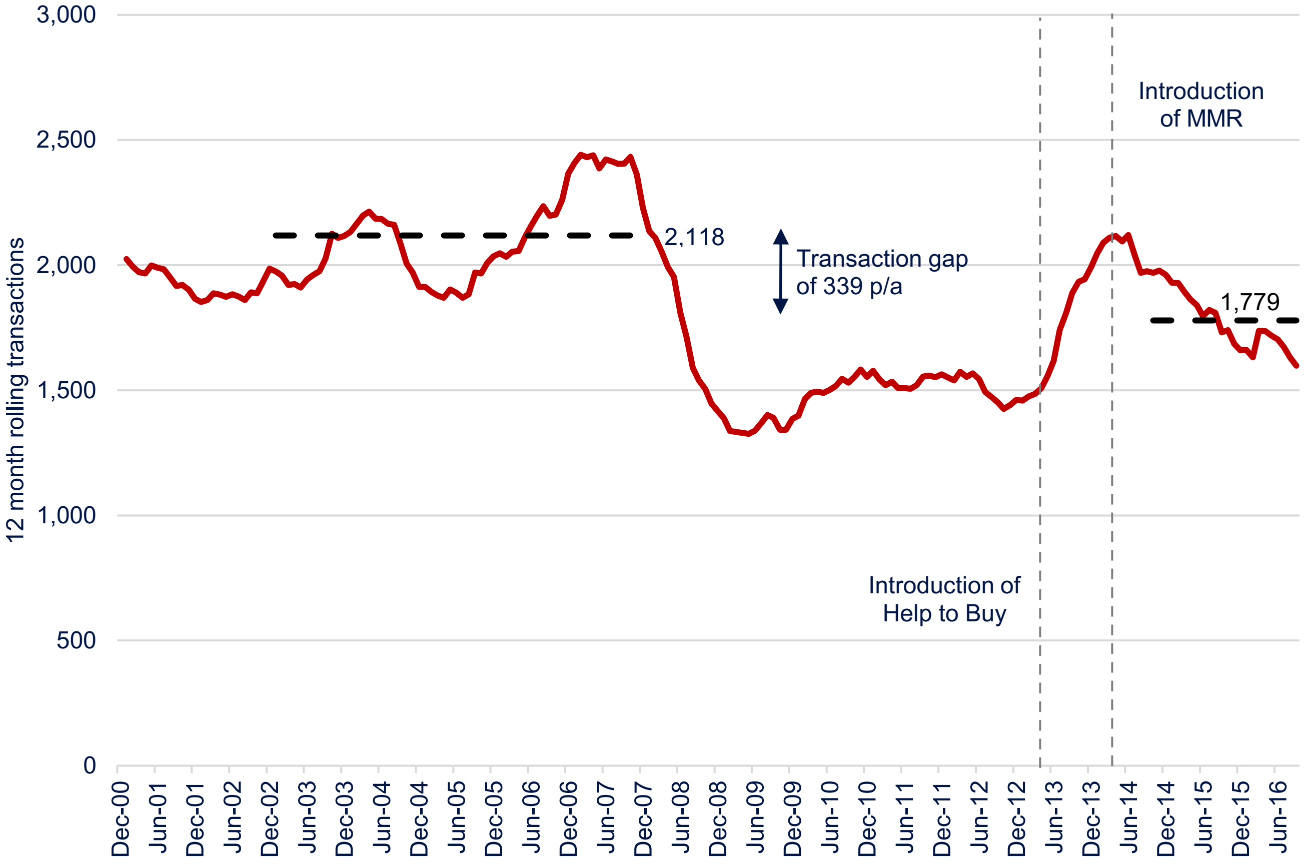
Detailed affordability analysis

Cambridge and South Cambridgeshire

The following two charts show transaction levels over time for Cambridge and South Cambridgeshire. Compared to typical pre-downturn levels there has been a period of sharp decline followed by gradual recovery in both areas. The introduction of Help to Buy in April 2013 gave a significant boost to market activity amongst first time buyers, which drove transaction volumes up. This was dampened slightly by new lending rules as part of the Mortgage Market Review (MMR) in 2014, which tightened mortgage regulation substantially.

In Cambridge the average 2002-07 level was around 2,100 sales per year, falling to around 1,500 in 2009-12, then quickly recovering through 2013 back to around 2,000, a time of very strong house price inflation (refer back to Figure 2). Since 2014 transaction levels have been falling sharply again, with the gap between annual transaction levels now compared to 2002-07 at 339. The reasons for this are complex but likely to involve a mix of tighter post-MMR lending criteria and decreasing affordability.

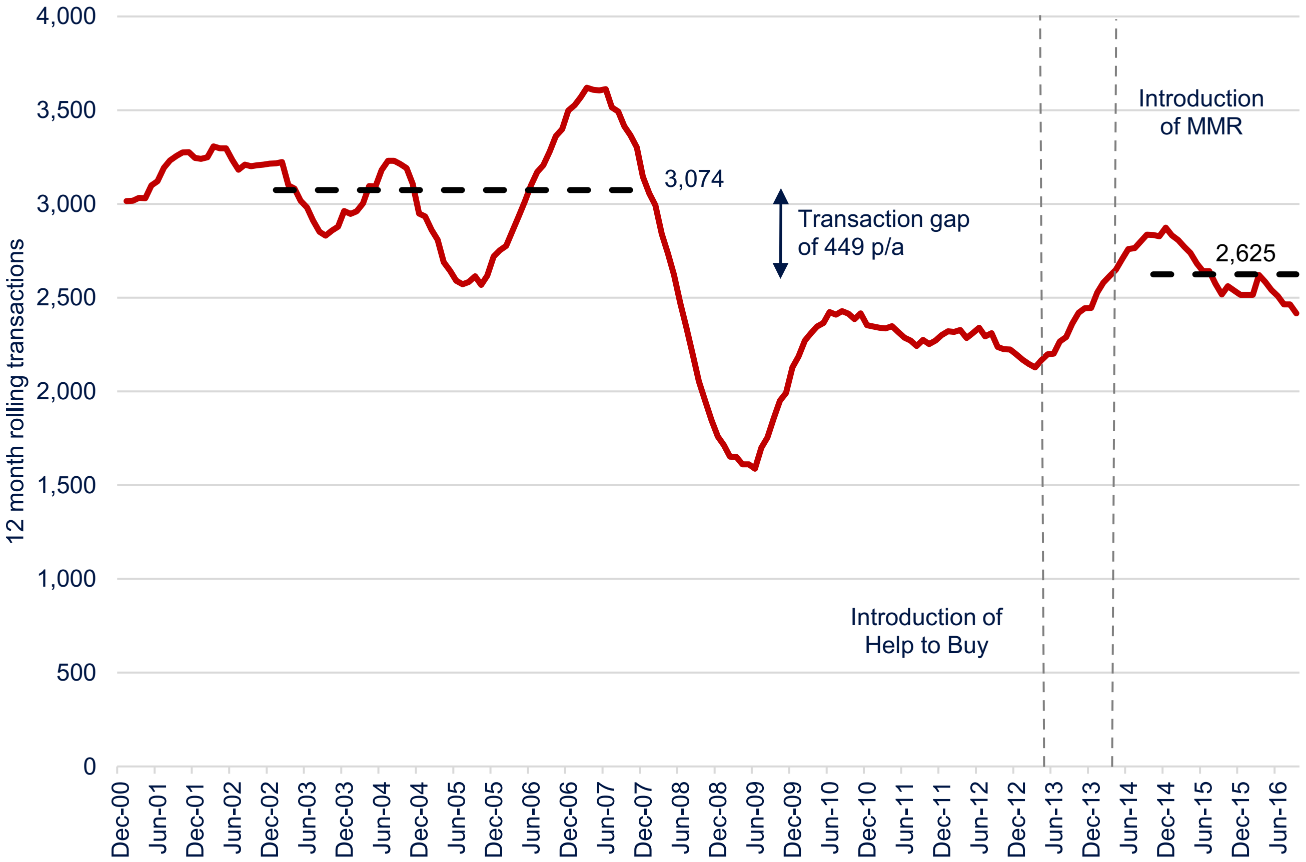
Figure 8 – Transaction gap in Cambridge



Source: Savills using Land Registry

The picture is similar in South Cambridgeshire, although the falls since 2014 have not been as steep. Note that in both locations there was an uptick in the number of transactions in March 2016, as buyers brought forward transactions before the introduction of Stamp Duty changes in April. This has distorted the apparent severity of transaction falls over the rest of the year.

Figure 9 – Transaction gap in South Cambridgeshire



Source: Savills using Land Registry

2.4. Summary

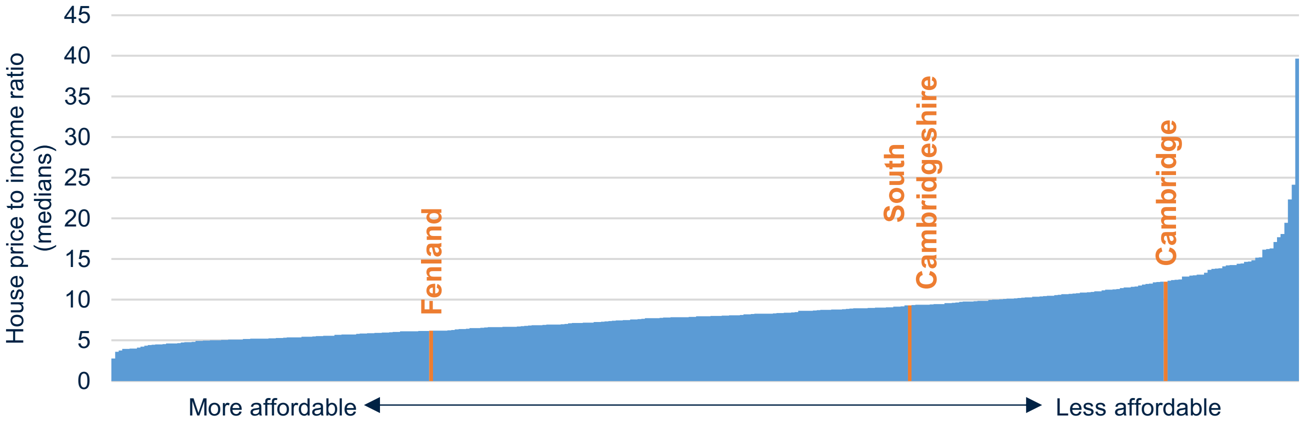
Both areas have seen rapid house price growth in the past three years, but a limited recovery in transaction levels. Capital values are significantly higher in Cambridge city compared with the surrounding area, with the highest rental values limited to an even more central area. There is evidence that a combination of rising prices and tightening mortgage lending conditions have led to a recent decline in transaction levels, which is likely to impact buyers with the least equity most strongly, e.g. younger and first time buyers.

3. Affordability

3.1. House prices vs. incomes

Cambridge and South Cambridgeshire are some of the least affordable areas in the country outside of London. They stand out in the East of England as areas with particularly constrained affordability. The chart below shows all 326 districts in England ranked in order of affordability, with Cambridge's position very much at the less affordable end of the spectrum. The most affordable district in Cambridgeshire on this measure, Fenland, is also shown for comparison.

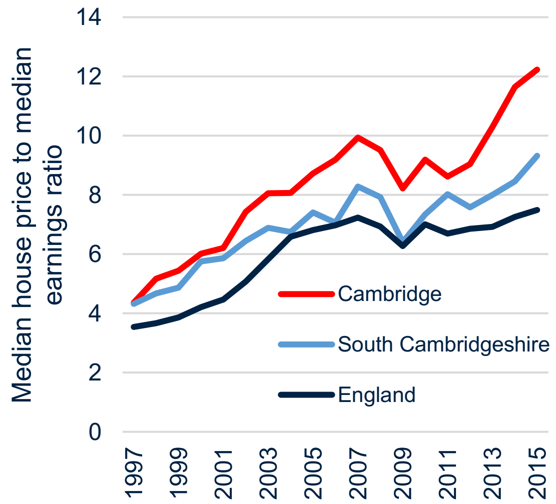
Figure 10 – Median house price to median earnings ratio, all districts in England

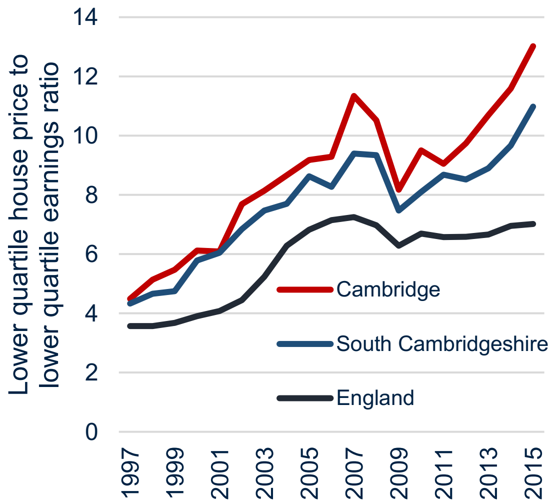


Source: DCLG (Open Data Communities)

Since the late 1990s housing affordability in Cambridge has decreased. This trend has accelerated in recent years. The charts below show that the gap between affordability in the city and South Cambridgeshire has widened over time. In Cambridge the median house price is now 12.2 times the median income of those working in the area, compared with 9.3 in South Cambridgeshire and 7.5 nationally. The trend for lower quartile ratios is similar although South Cambridgeshire is closer to the city on this measure.

Figure 11 –House price to earnings ratios over time



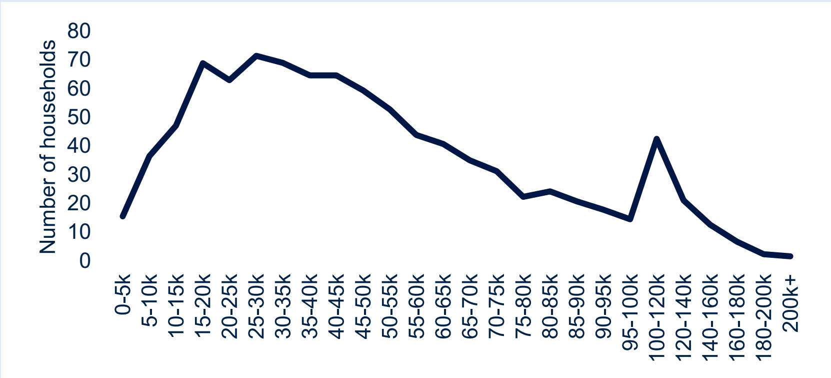


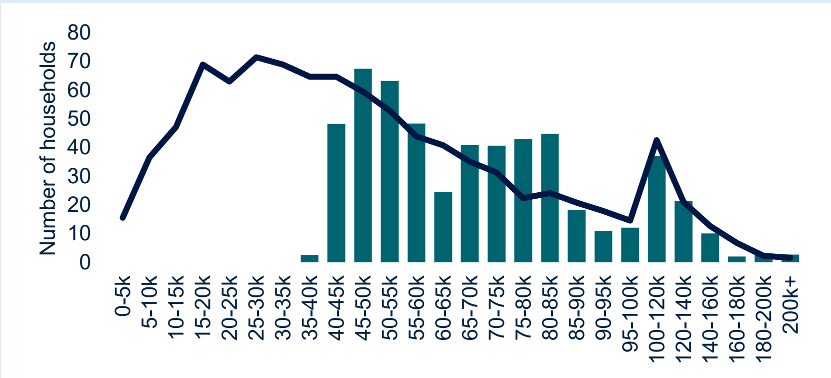
Source: DCLG (Open Data Communities)

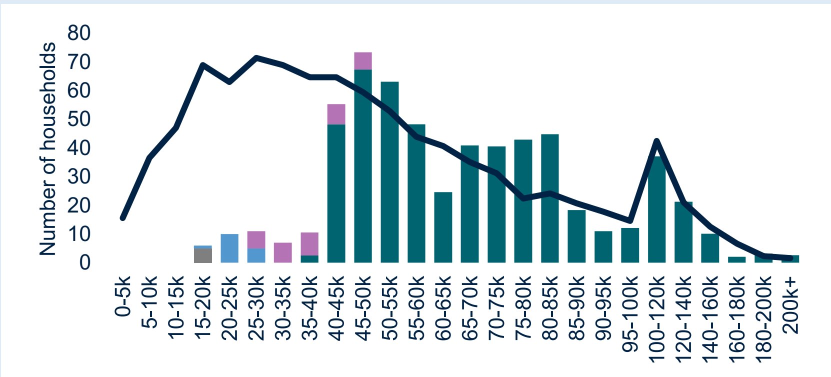
3.2. Is new development providing affordable housing?

Method: example data

The charts in this section look at how new supply fits into the market. The dark blue line in the chart below shows the income distribution, scaled to match the number of emerging new households in the area (according to the annual housing need figures from the Strategic Housing Market Assessment). This assumes that emerging households have the same income profiles as existing ones, although in reality they could be a wider mix given we can expect new arrivals to the area to have a diverse range of jobs and incomes (examining the likely incomes of new arrivals is outside the scope of this report and would be an interesting area of further work).







Step 1: The black line shows the objectively assessed need figure (from a local Strategic Housing Market Assessment (SHMA)), scaled according to the distribution of existing households by income band.

This gives an indication of the level of annual need at each price point.

Step 2: The market delivery for the last year is then added according to actual sales prices. Sale price is converted to income based on an assumption that a maximum of 25% of gross income can be spent on mortgage repayments (private rent is included within this, as the ongoing costs are likely to be similar to buying).

In this example it illustrates the lack of market supply for households with lower, or even average, incomes.

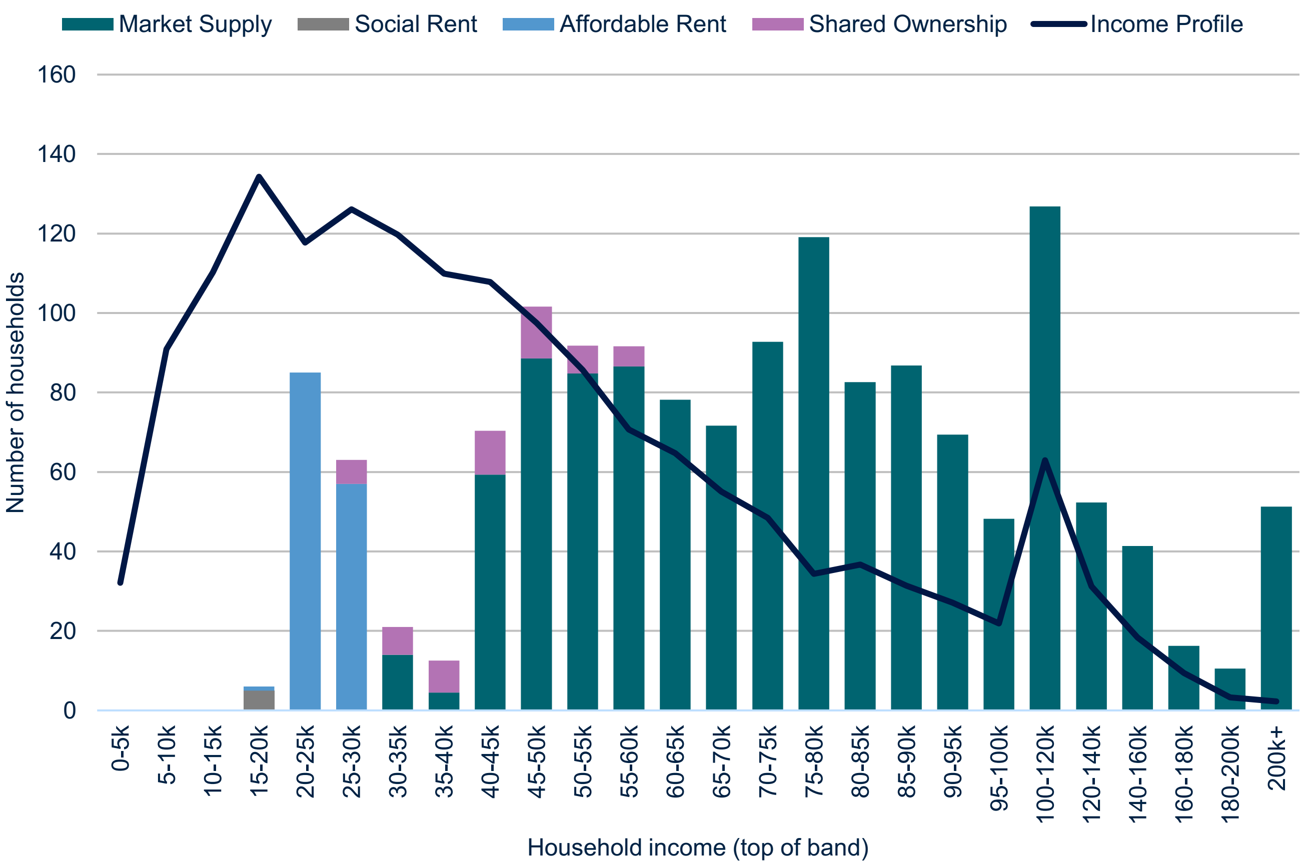
Step 3: Affordable tenures are then added (shared ownership in pink, affordable rent in blue, social rent in grey).

The shared ownership is assessed with the same spend assumption and is based on actual properties currently on the market. It accounts both for mortgage and rent repayments.

The pink bars are shared ownership, based on the prevailing pricing of currently available homes, not including service charges. Blue is affordable rent and grey is social rent, with affordability based on the rents being paid according to the HCA Statistical Data Return. In reality this housing is likely to go to the lowest income groups, with any shortfall being met by housing benefit.

Figure 12 shows the supply and demand profile for Greater Cambridge (i.e. Cambridge and South Cambridgeshire combined). The chart shows that there is a lack of affordable new supply for households on incomes below £45,000. This leaves a large portion of the demand un-catered for.

Figure 12 – Affordability of new homes in Cambridge (2015/16)



Source: Savills using Land Registry, DCLG, HCA SDR

Although the level of new market supply is high it is not well aligned with local incomes, with most homes only affordable for those with incomes of £45,000 or more. Above £60,000 household income there are many more property sales than local households able to purchase them (at 25% spend ratio). This suggests that buyers of new homes have incomes well above the local norms, and that the market is not meeting the needs of local people.

Shared ownership delivery is only having a small impact on filling the upper end of this 'gap', with some larger shared ownership properties in Cambridge requiring incomes up towards the £60,000 income limit (at the time – note current limit of £80,000).

Affordable rent provision is shown according to the rental values recorded by the HCA SDR, so provision appears to be concentrated around income levels of £20-30,000. In reality this housing is likely to be occupied by some households with lower incomes with part or all of their housing costs covered by housing benefit. Similarly the very few new social rent properties delivered appear in the £15-20,000 income band but would be available to those in the lowest income bands.

In total the gap in provision for households on incomes below £40,000 (the area between the line and the bars) is around **380 homes per year**. A mix of discounts and tenures are required to meet this need.

3.3. Comparing different tenures / products

Method – example using national data

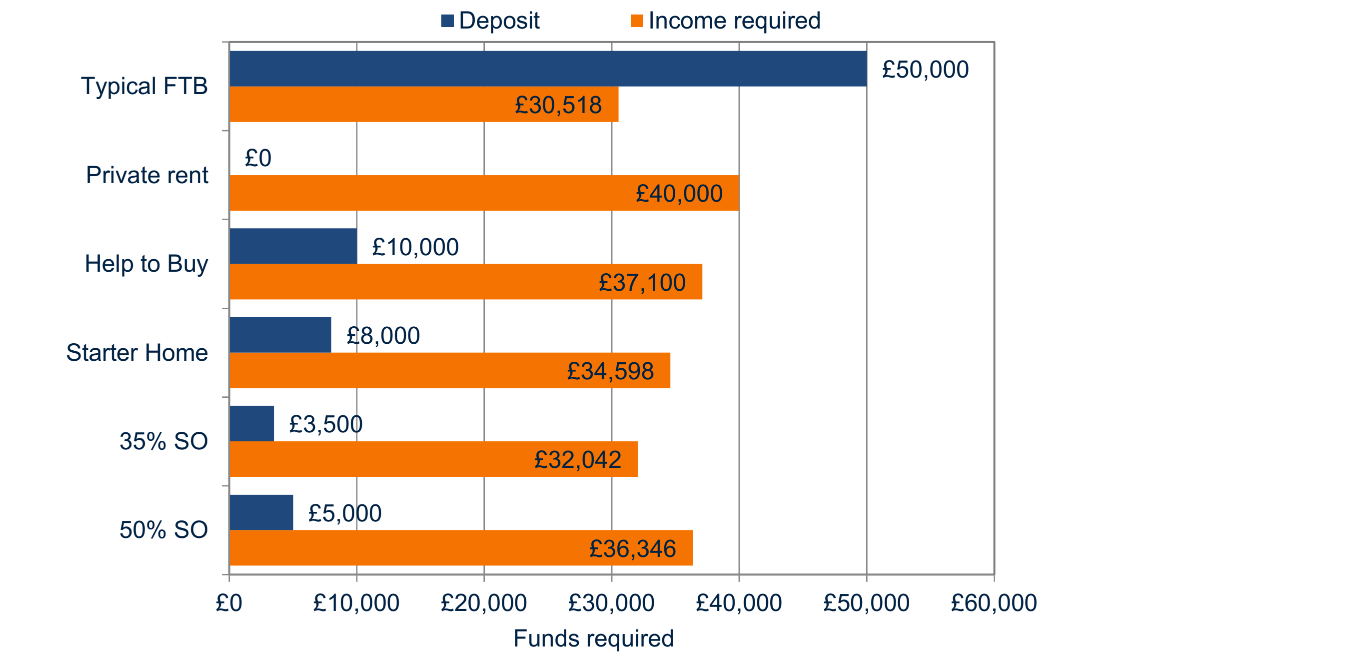
The charts below show estimated deposit and income requirements for different kinds of home occupation. In 2016 the median first time buyer in England purchased a home worth £170,000, with an income of £42,000 (loan to income ratio is therefore 3.6), requiring 18% of their income to make mortgage repayments. But this is only the median, so if we are considering the limits of affordability is it both likely and possible that many first time buyers have larger loan to income ratios and pay more of their income towards their mortgage in order to access the market.

Given we are looking at new supply and there is likely to be a premium for new build property, the example calculation in Figure 13 is based on a property value of £200,000. We have assumed that buyers/tenants can spend up to 25% of their gross income on mortgage repayments or rent, with the other assumptions for each type of purchase set out below:

- 'Typical FTB': 25% deposit (usual minimum required for new build). 25 year mortgage, indicative interest rate 2.0%.
- Private rent: Assume no deposit (in reality, a refundable deposit is usually required), indicative 5% yield on capital value to estimate rental value.
- Help to Buy: 5% deposit and 20% equity loan (loan repayments start after 5 years but are assessed at the start at 3% for affordability purposes). 25 year mortgage, initial rate 2.5%.
- Starter Home: 20% discount from market value. Then 5% deposit, 25 year mortgage at 3.0% initial rate. (Max. Value outside London of £250,000. Note that following publication of the Government Housing White Paper the Starter Home initiative appears to have been watered down, and the product is still yet to be fully defined, it is difficult therefore to say what discount would need to be achieved. Deposit and rate assumptions are therefore estimates)
- Shared ownership (SO): two examples, with either 35% or 50% initial share purchase. Both assume 5% of the share as deposit, 25 year mortgage and 4.5% interest rate and that the rent on the unsold equity is 2.75% per year.

Note: All mortgage rate assumptions are based on a recent sample of typical products from mainstream lenders.

Figure 13 – Affordability calculator (England & Wales)



Source: CML, Savills Research, ONS

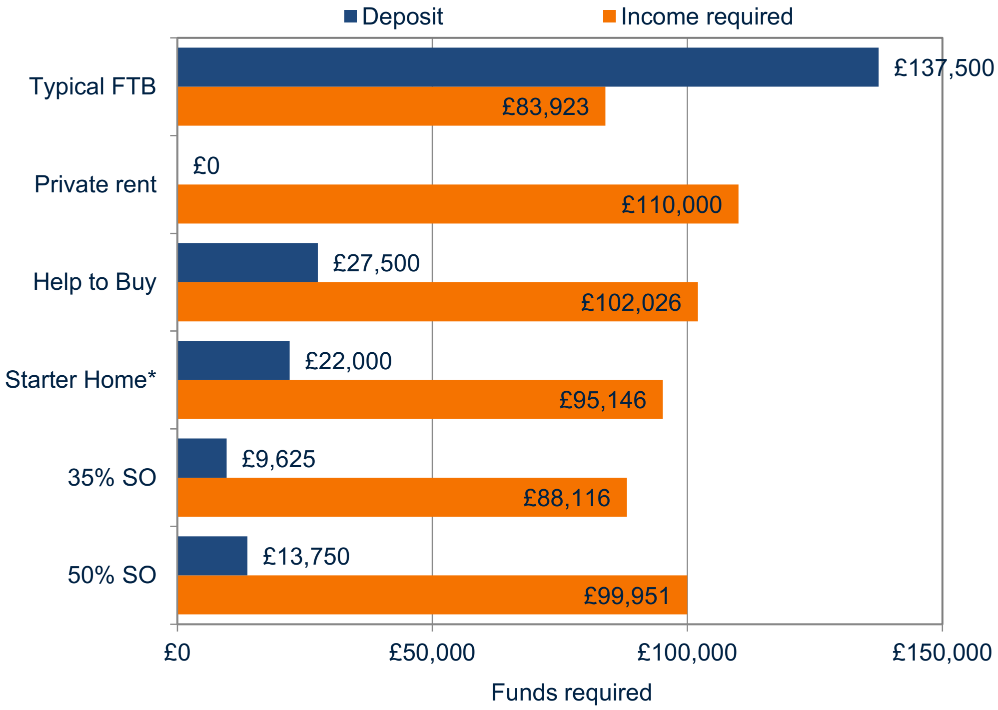
The national example shows that shared ownership significantly reduces the minimum amount of deposit required to buy a property. However, the fact that the mortgage attracts a higher rate (reflecting perceived higher risk borrowers) and that rent on the remaining equity has to be paid means that income requirements are in line with, if not higher than, Help to Buy and Starter Homes. All home ownership products have an initial monthly payment lower than the equivalent monthly rent.

Cambridge

Shared ownership would therefore seem to offer an alternative for households that are unable to save the large deposits needed to buy at full market value. However, when the same calculations are applied to typical new homes in Cambridge the discount fails to reach those on lower incomes. Typical full market value for a new three bedroom shared ownership house in Cambridge is currently around £550,000, compared to £420,000 for a two bedroom flat.

Based on these prices a household would need a deposit of around £10-14,000 and an annual income of over £88,000 in order to afford a three bedroom shared ownership property in Cambridge. But any household with an income over £80,000 no longer qualifies for shared ownership, so buying a typical three bedroom shared ownership home in Cambridge would therefore not be possible while remaining under the upper income threshold[2].

Figure 14 – Cambridge affordability calculator (£550,000 3 bed)



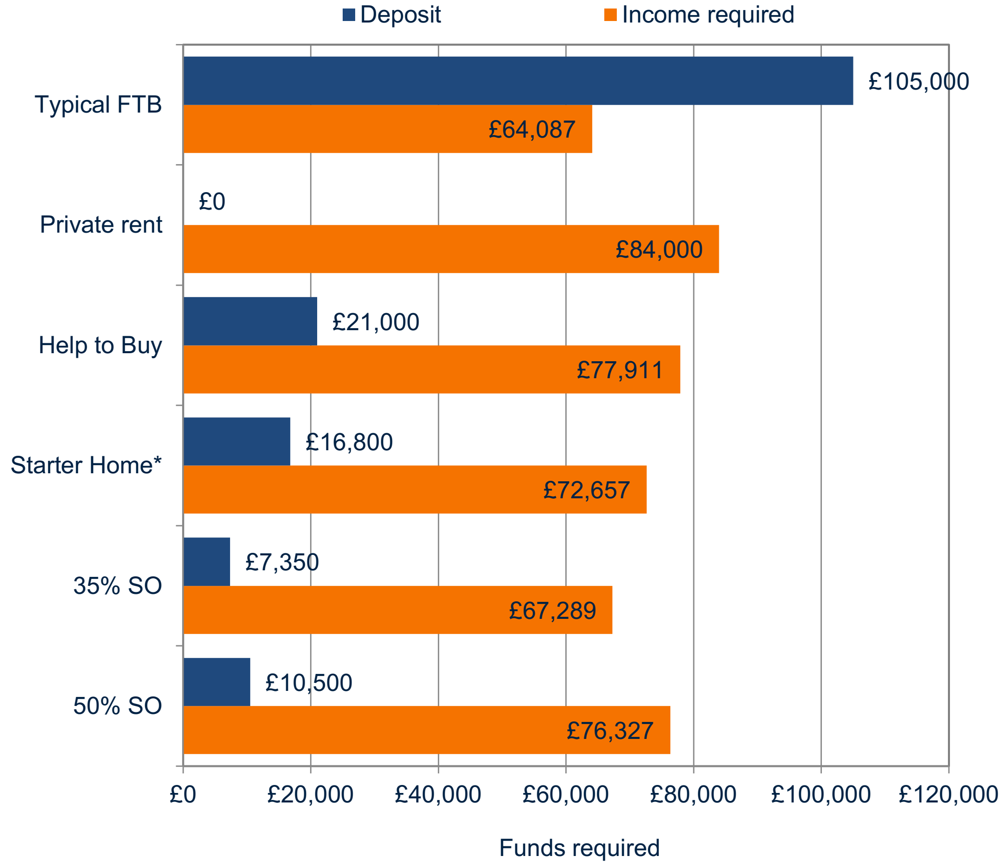
Source: CML, Savills Research

**Note: Starter Home shown for comparison but likely to not be available at this price point. To meet the proposed £250k price cap a discount of 55% would be required from market value.*

[2] If available, additional deposit could be paid to reduce the amount borrowed and therefore the income requirement. Alternatively, the rent on the unsold equity could be lowered, reducing the income requirement but also the value of the property to the freeholder (typically a housing association).

Two bed properties also require high incomes and deposits for potential buyers, with shared ownership units requiring minimum deposits of £7-10,000 (depending on initial share) and incomes of over £65,000. 80% of the households in Cambridge have incomes below this.

Figure 15 – Cambridge affordability calculator (£420,000 2 bed)



Source: CML, Savills Research

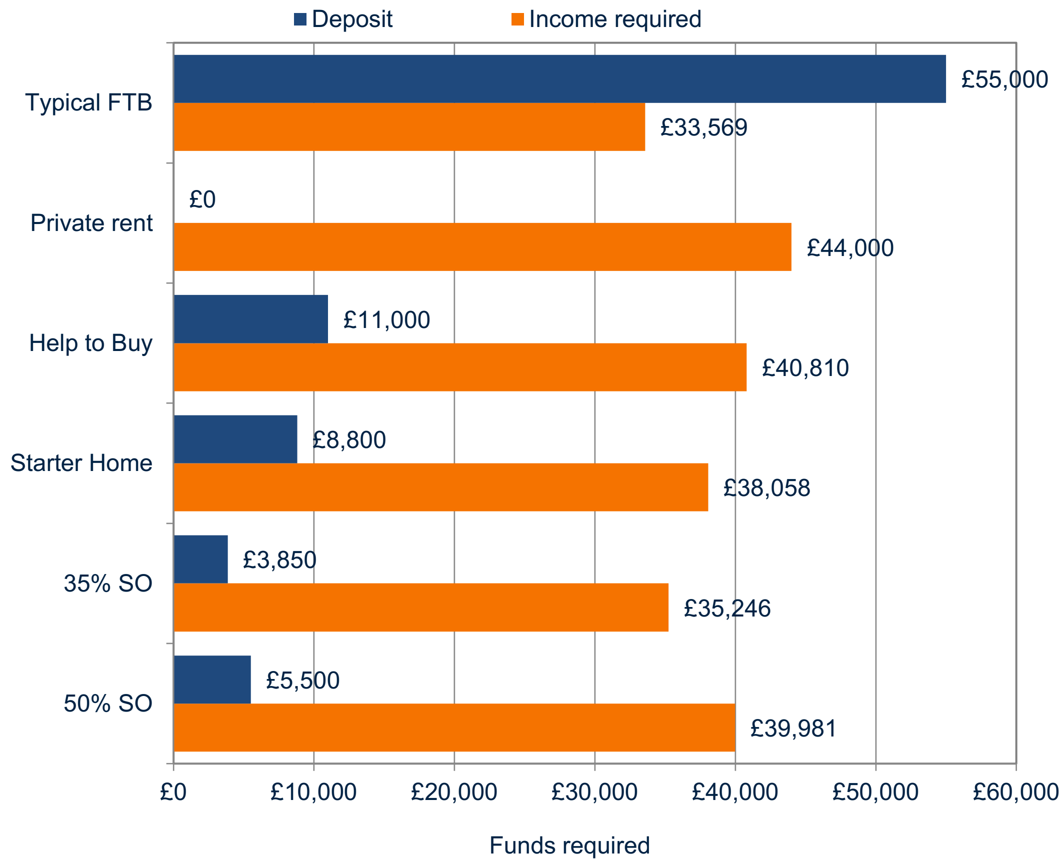
**Note: Starter Home shown for comparison but likely to not be available at this price point. To meet the proposed £250k price cap a discount of 40% would be required from market value.*

Given the small amount of equity involved in the purchase, the higher mortgage interest rate, and the requirement to pay rent on the unsold equity, a higher income can be needed to afford a shared ownership purchase than to service a mortgage for a property bought at market value. Shared ownership may therefore help high earning households who would struggle to save an average first time buyer deposit whilst renting in the PRS. However, it does not seem able to provide affordable housing to lower income households in Cambridge.

South Cambridgeshire

Shared ownership properties in South Cambridgeshire are more likely to be affordable to households on lower income bands than those in Cambridge. However, South Cambridgeshire remains considerably more expensive than other neighbouring local authorities like Huntingdonshire and Fenland. The figures in the chart below are based on a £220,000 property, the starting point for a new build two bed. Depending on the share purchased, the income needed to afford a typical shared ownership purchase in South Cambridgeshire ranges from £35,000 to £40,000. Approximately 60% of South Cambridgeshire households have incomes over £35,000, so it is a more achievable home-ownership option compared to Cambridge.

Figure 16 – South Cambridgeshire affordability calculator (2 bed)



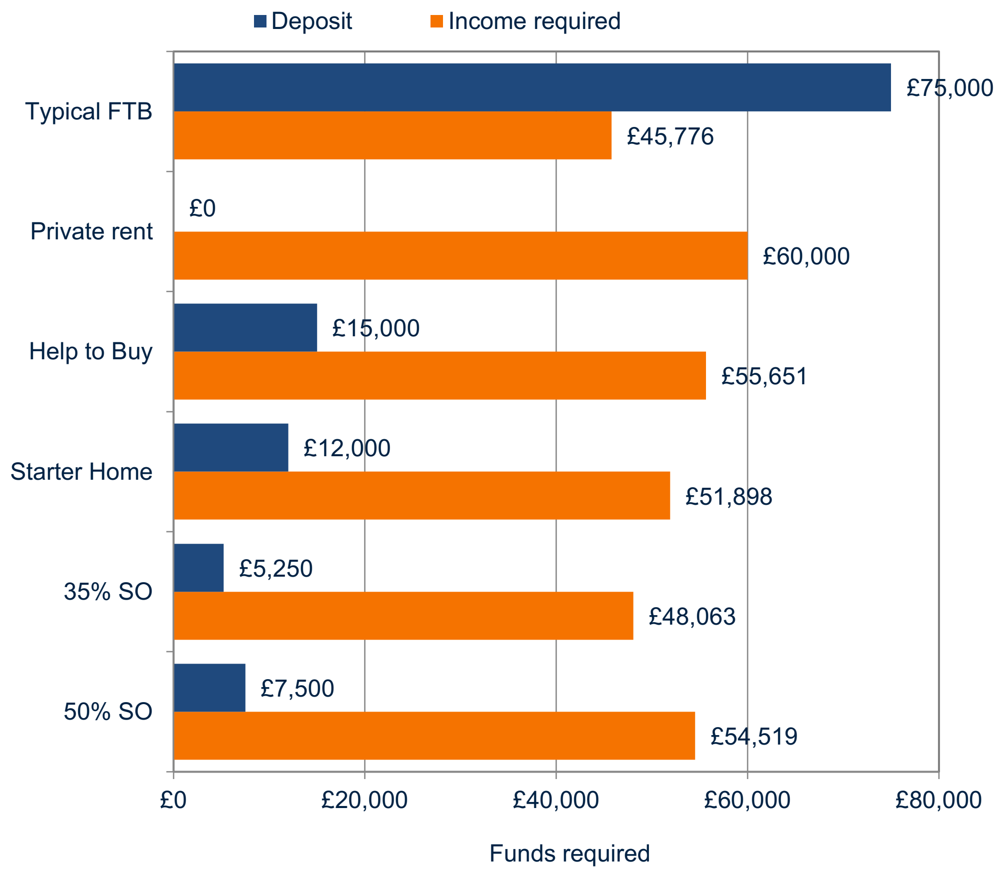
Source: CML, Savills Research

Detailed affordability analysis

Cambridge and South Cambridgeshire

The deposit required for a new three bed shared ownership property in South Cambridgeshire is between £5,000 and £7,500, based on a property value of £300,000. The household income required to support this purchase is over £48,000, which is lower than that needed to purchase a two bed shared ownership property in central Cambridge. This could represent the difference between a household being able to afford a family home as opposed to a flat. It does still require the household to have an above average income.

Figure 17 – South Cambridgeshire affordability calculator (3 bed)



Source: CML, Savills Research

3.4. How can housing be paid for?

Looking at individual earnings rather than household incomes, even with multiple earners Cambridge house prices look very unaffordable for those on lower incomes. Two lower quartile full time salaries are not sufficient to access any of the ownership options for even a two bed in the city. By contrast, on the same measure for South Cambridgeshire both Help to Buy and shared ownership are affordable on an income basis, assuming the deposit can be raised. One full and one part time earner would meet the income requirement for a typical two bed shared ownership property in South Cambridgeshire.

Table 2 – Lower quartile earnings, residence based

Working arrangement	Cambridge	South Cambridgeshire
Two full time workers	£48,054	£47,494
One full time worker	£24,027	£23,747
One full time one part time worker*	£30,087	£29,807
Two part time workers*	£12,120	£12,120

*Source: ASHE *Part-time earnings represent the LQ in Cambridgeshire as a whole, as district data was not available. Full-time earnings are LA specific.*

3.5. Summary

This section suggests that the local housing market is not providing homes that are affordable to many households in the area, particularly in Cambridge. Households with annual incomes of £50,000 may even be excluded from the market depending on their property requirements. The large amount of over new supply absorbed at values over and above what might be expected from the local income distribution suggests that sales may be being supported by investor buyers and higher salaries (potentially including London commuters).

The next section therefore analyses historical and projected demographic changes in the local area, to investigate potential impacts of the affordability issues highlighted above.

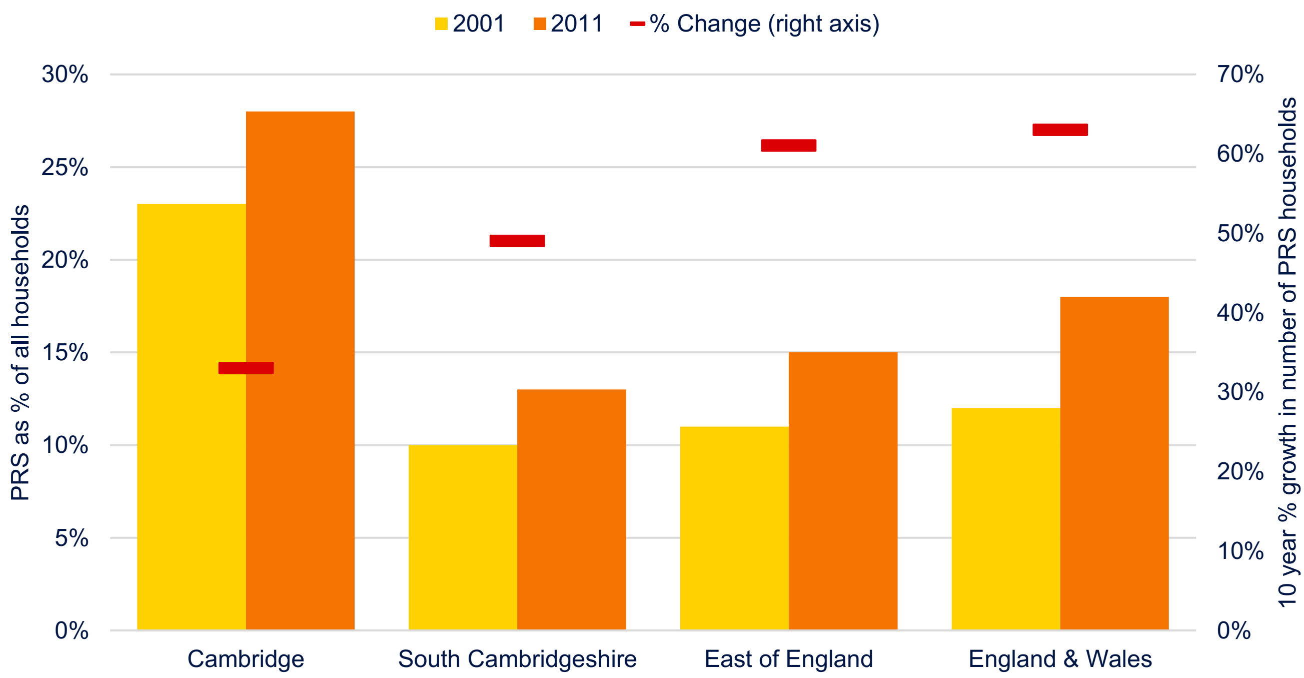
4. Demographics

The high house prices and worsening affordability highlighted in previous sections are likely to have led to changes in household behaviour in the local area. Cambridge and South Cambridgeshire have seen a shift in tenure composition that mirrors that of the UK in the last fifteen years. The expansion of the private rented sector (PRS) has altered the dynamics of the housing market. Not only has the PRS grown substantially in this period but the profile of renters has altered too. This section looks at the growing dominance of the PRS and the demographic changes that have been seen across Cambridge and South Cambridgeshire.

4.1. Tenure trends

Between the 2001 and 2011 Censuses the PRS grew significantly in both Cambridge and South Cambridgeshire. 13% of households in South Cambridgeshire live in the PRS, compared to 28% in Cambridge. However, PRS growth was greater in South Cambridgeshire in the period between Censuses. The PRS was already well established in Cambridge by 2001 which accounts in part for much more significant growth in the number of PRS households in South Cambridgeshire and the wider region in the period between Censuses. Both saw lower rates of growth compared with the region and nationally, shown with the red markers in the chart below.

Figure 18 – Change in PRS between 2001 and 2011

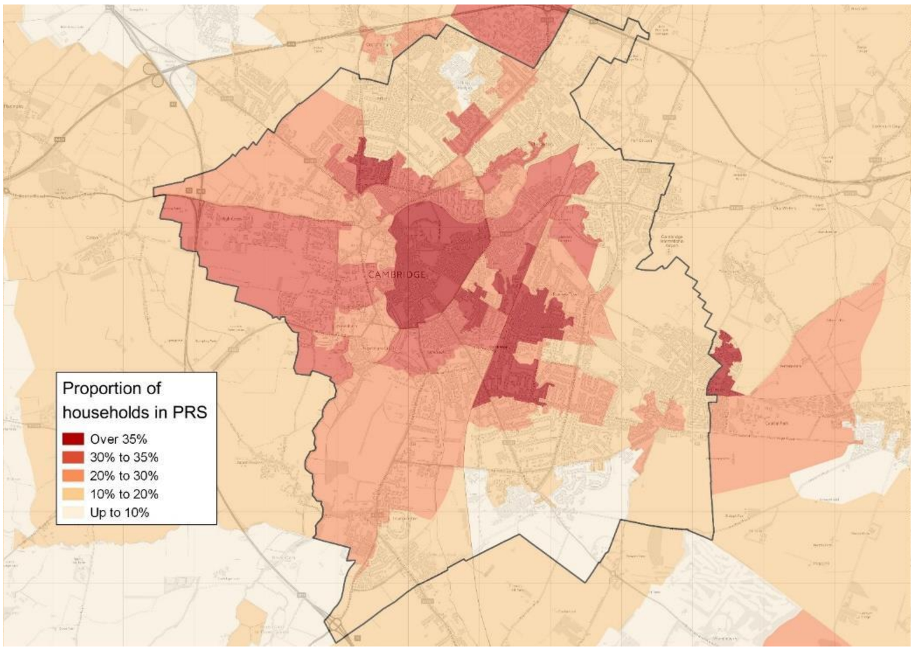


Source: Census, 2001, 2011

The English Housing Survey reports significant growth in PRS since 2011. Outside of London the sector has grown a further 3.4% since the last Census. A trend that is likely to be reflected across the East of England. Affordability will be playing a big part in driving this change as more households are priced out of ownership.

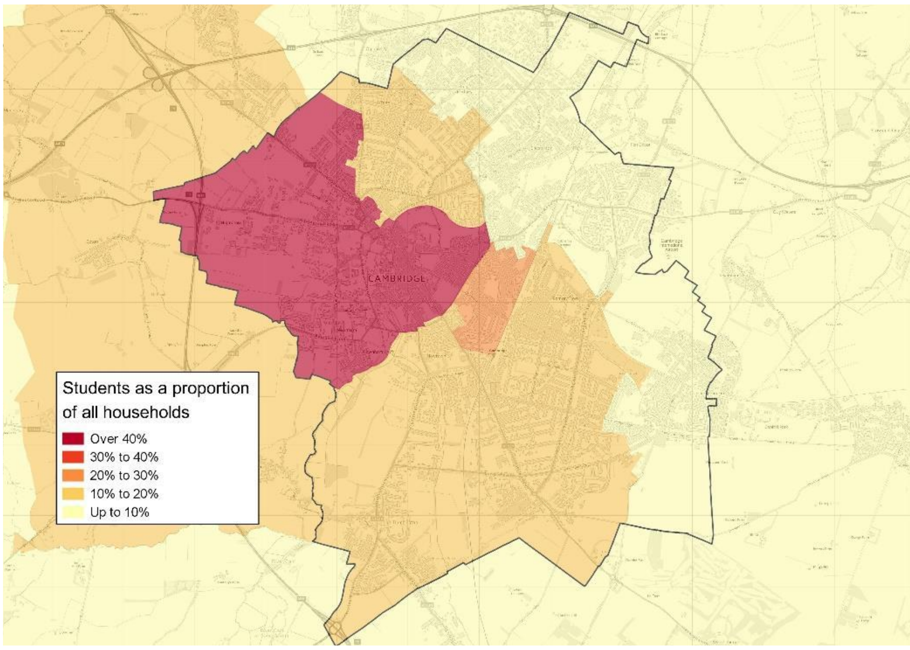
Figure 19 shows the number of privately rented households as a proportion of all households at lower super output area level. The centre of Cambridge and areas surrounding the station to the east see high concentrations of rented households. There is a strong correlation between student density and PRS in the city centre. However, the student density (as shown in Figure 20) falls away swiftly moving east out of the centre, suggesting a different kind of household occupies PRS in those areas.

Figure 19 – PRS density in Cambridge



Source: Census 2011, OS OpenData

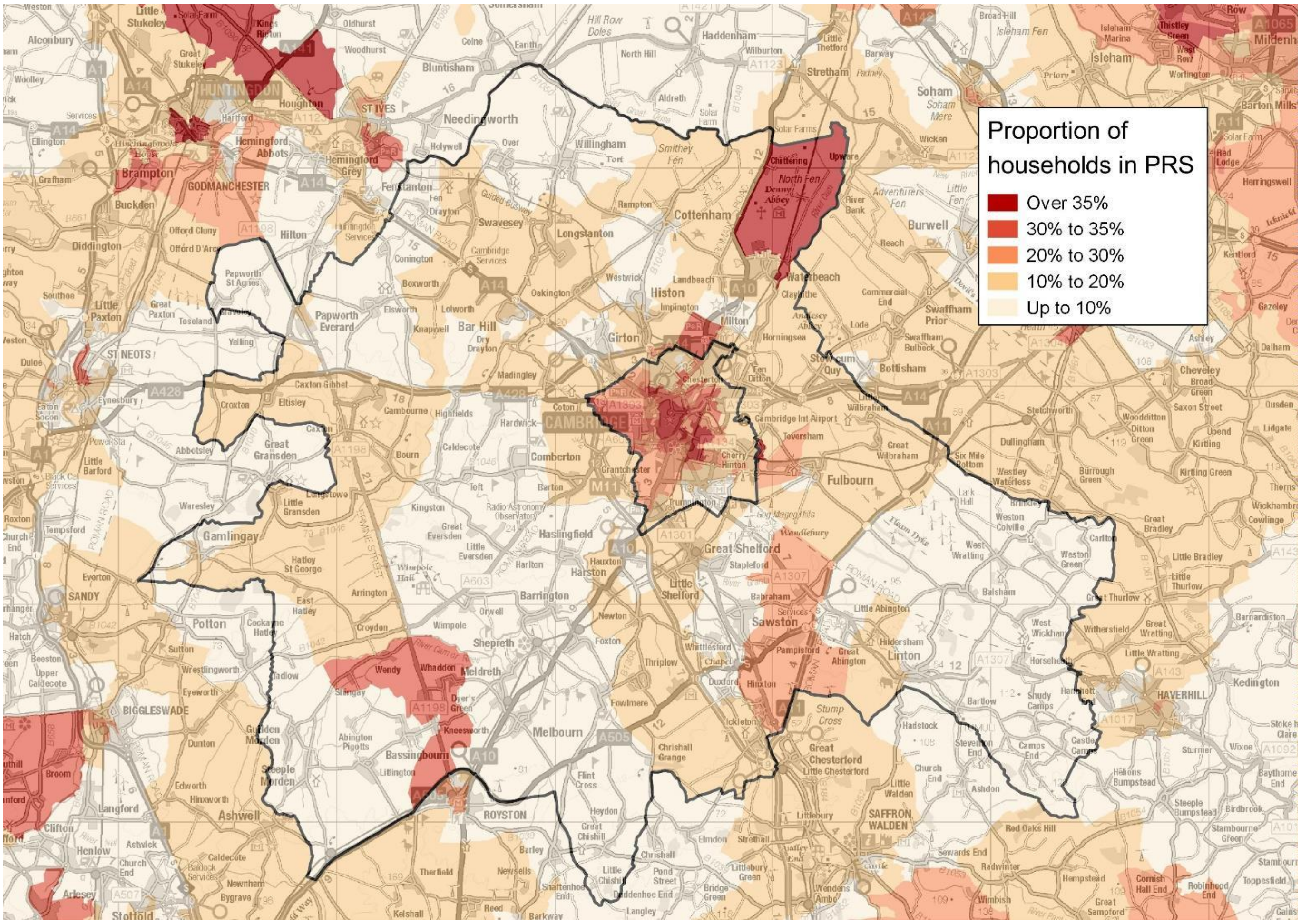
Figure 20 – Student households in Cambridge



Source: Census 2011, OS OpenData

Areas with lots of private rental property are less common in South Cambridgeshire. Although there are pockets of PRS dominated areas on the map below, most are military barracks like Waterbeach and Bassingbourn. Levels of PRS in most areas are relatively low and this is likely to be particularly true in villages and more rural locations. Given the national data on recent PRS growth it is likely that the PRS has also grown in South Cambridgeshire since the 2011 Census, but its concentration in any one area may still be limited given the relatively low starting point.

Figure 21 – PRS density in South Cambridgeshire



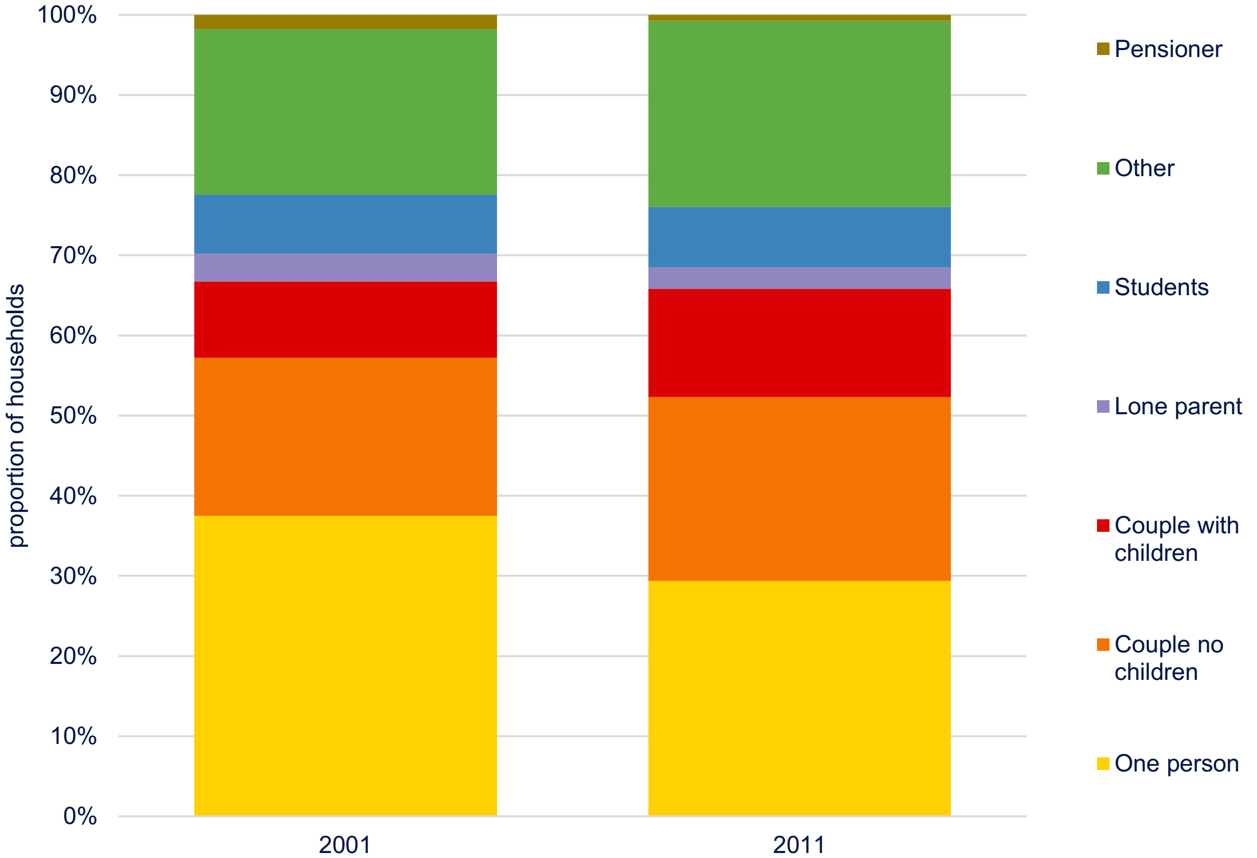
Source: Census 2011, OS OpenData

4.2. PRS households

In the ten years between the two Censuses the demographic profile of rented households has shifted. In Cambridge this has seen the emergence of larger households in the PRS, more families, and more young professionals. The following charts compare the composition of the PRS in 2001 and 2011.

Figure 22 shows that a significantly higher proportion of couples, with and without children, were living in PRS in 2011 compared to 2001. The "other" group also grew substantially. This group could include professional sharers, non-student houses of multiple occupation (HMOs) and multi-generational families. The growth of this group might indicate that some people are struggling to set up independent households who would have done in the past.

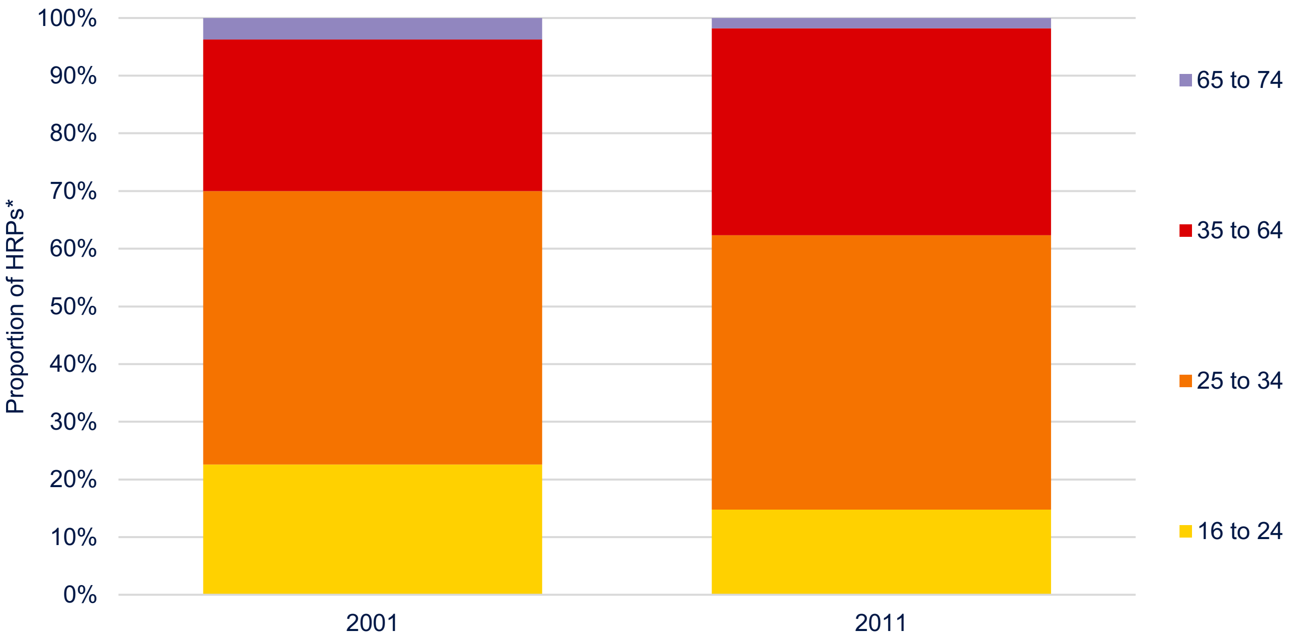
Figure 22 – Household composition (Cambridge)



Source: Census, 2001, 2011

PRS households also got older in the period with a much higher proportion of households in the 25 to 34 age range renting. 71% of renters in the 35 to 64 band are in fact aged 35 to 49.

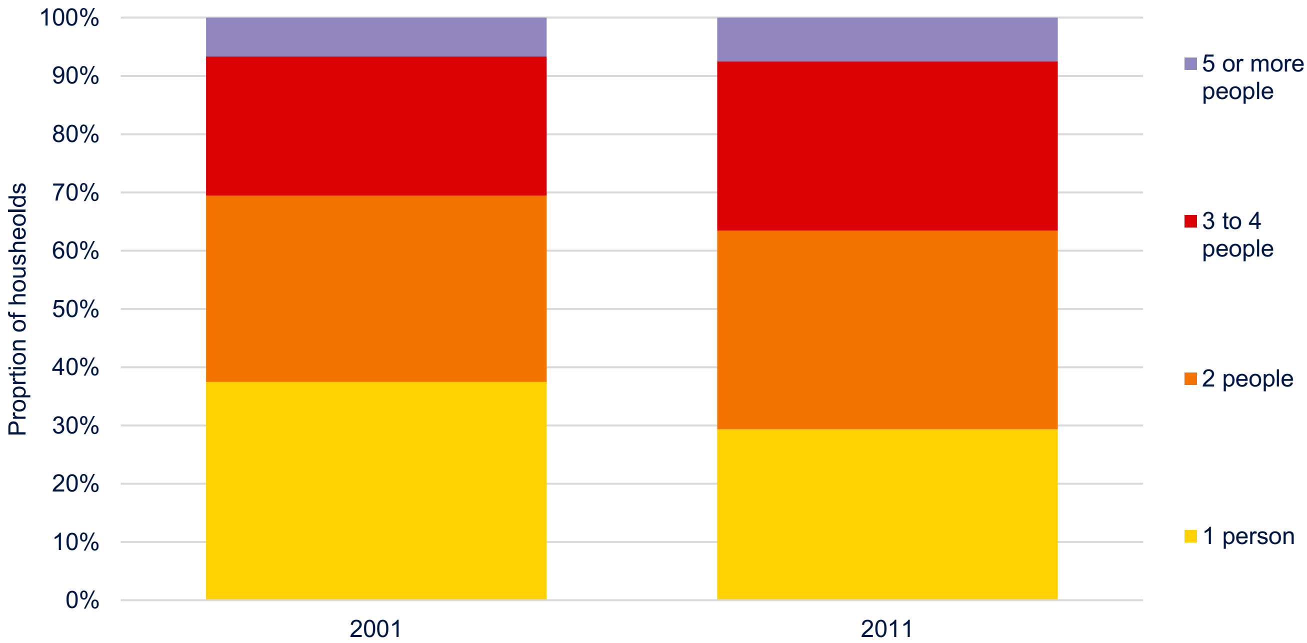
Figure 23 – Household age profile (Cambridge)



Source: Census, 2001, 2011 **HRP is Household Reference Person, oldest economically active household member.*

Larger PRS households have also started to make up a greater proportion of renters. Two to four person households grew between the two censuses, suggesting more sharers and more families are now in the PRS.

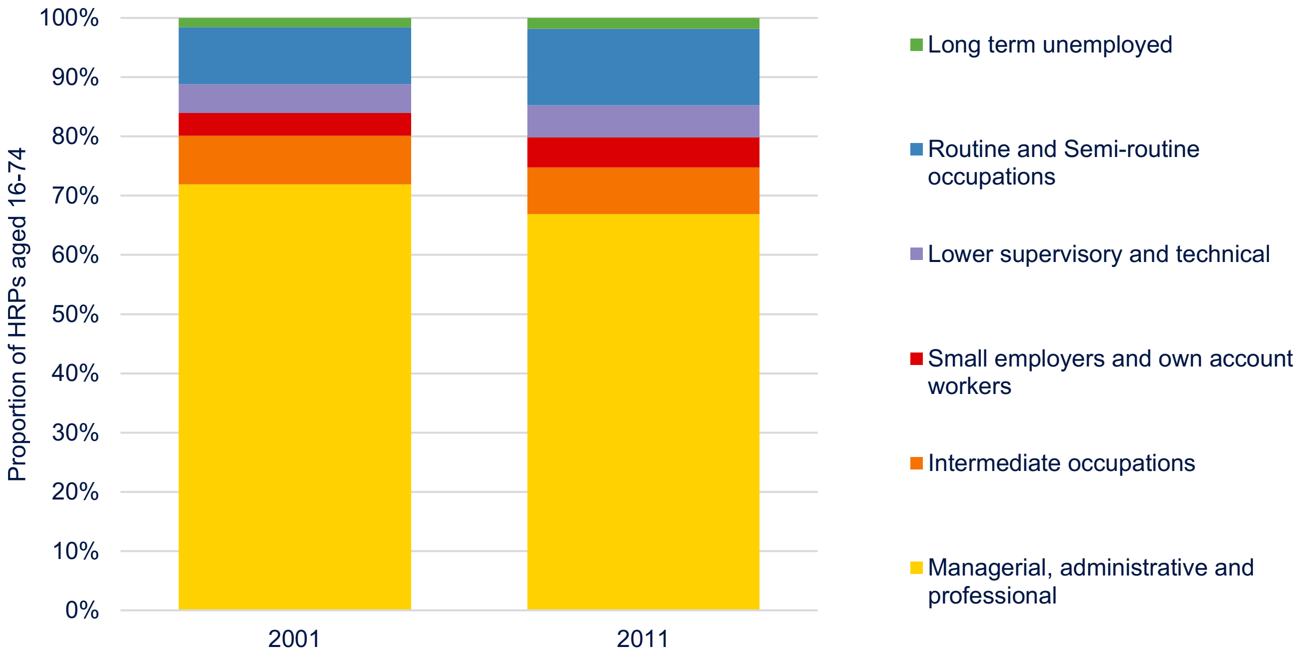
Figure 24 – Household size (Cambridge)



Source: Census, 2001, 2011

A larger proportion of renters were employed in routine and semi-routine jobs in 2011 than in 2001. The majority of renters, 75%, are employed in managerial, professional, or intermediate occupations (the top two NS-Sec classes). This means the Cambridge PRS represents a relatively affluent population.

Figure 25 – Renters affluence profile (Cambridge)



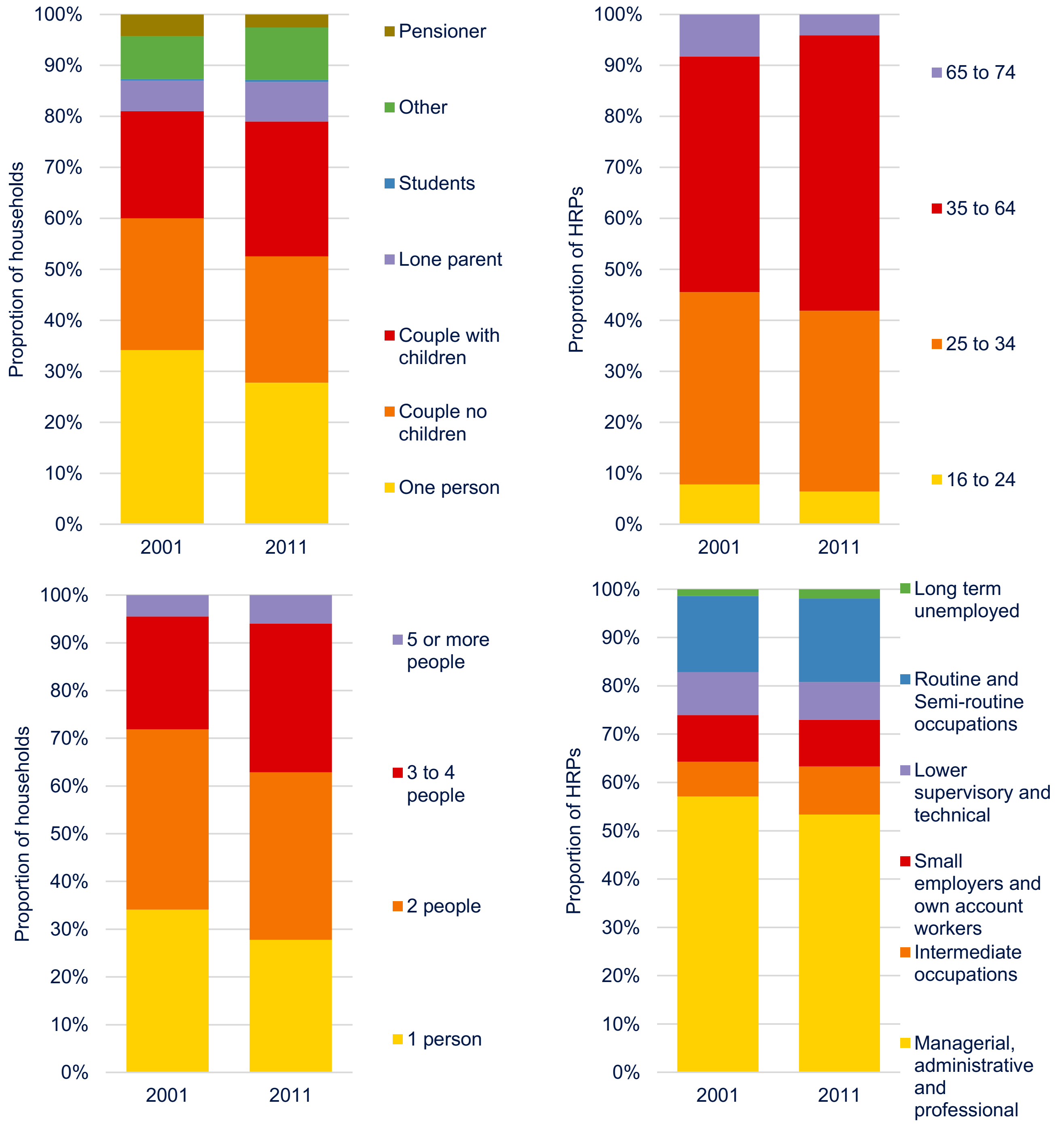
Source: Census, 2001, 2011

Detailed affordability analysis

Cambridge and South Cambridgeshire

The changes in South Cambridgeshire tell a similar story. Rented households are getting larger as more families and sharers enter the rental market. The characteristics of the private rented sector are clearly changing as it begins to absorb more households who may traditionally have bought a home.

Figure 26 – South Cambridgeshire renters' demographic profile



Source: Census 2001, 2011

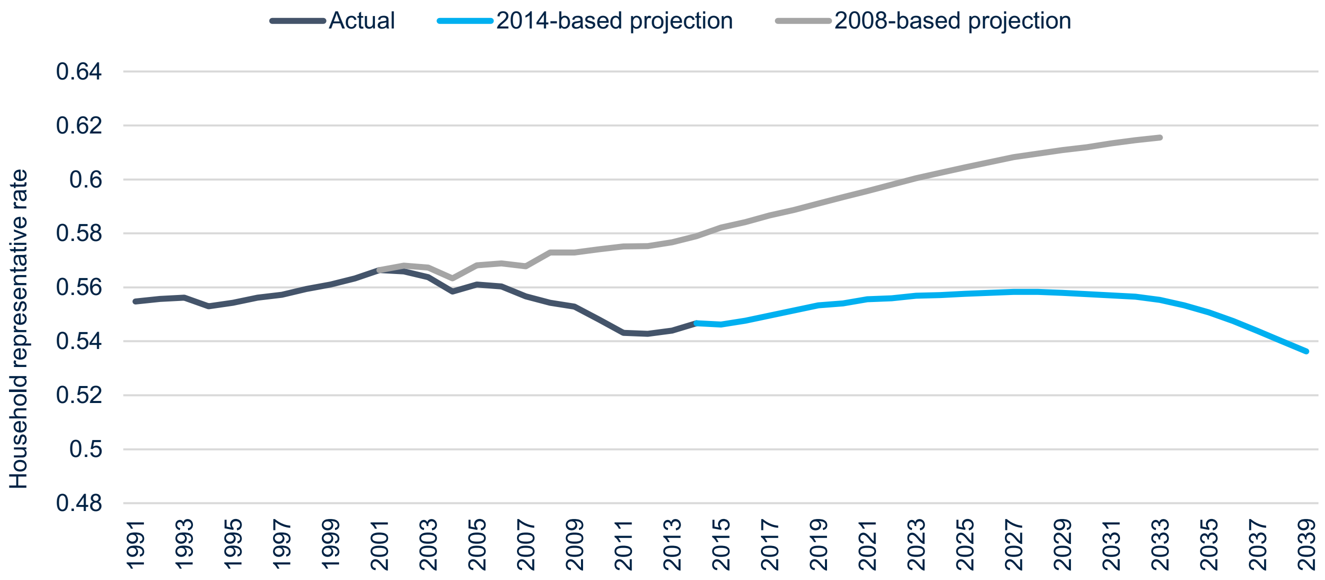
4.3. Household formation

The analysis in this section and the next looks at household formation amongst households headed by 30 to 44 year olds, which are a key age band including many potential first time buyers and young families looking to 'put down roots'. Homeownership rates amongst households headed by 45+ year olds are much higher, suggesting they have less difficulty accessing the market.

The household representative rate illustrated in Figure 27 represents the proportion of people aged 30 to 44 who head their own household. In the 2008-based household projections, significant growth in the rate was predicted. In the year immediately following these projections the household representative rate declined sharply, falling below that from the early 1990s. By the time of the 2014-based household projections the optimistic forecasts of 2008 had been replaced by a predicted period of slow growth followed by further decline.

The difference between these two projections illustrates the dramatic shift in the housing market, and to an extent the difficulty that young households now face in trying to set up their own household. Since 2013 there have been signs of recovery in the number of household representatives in Cambridge, which may be related to the introduction of Help to Buy in April of that year.

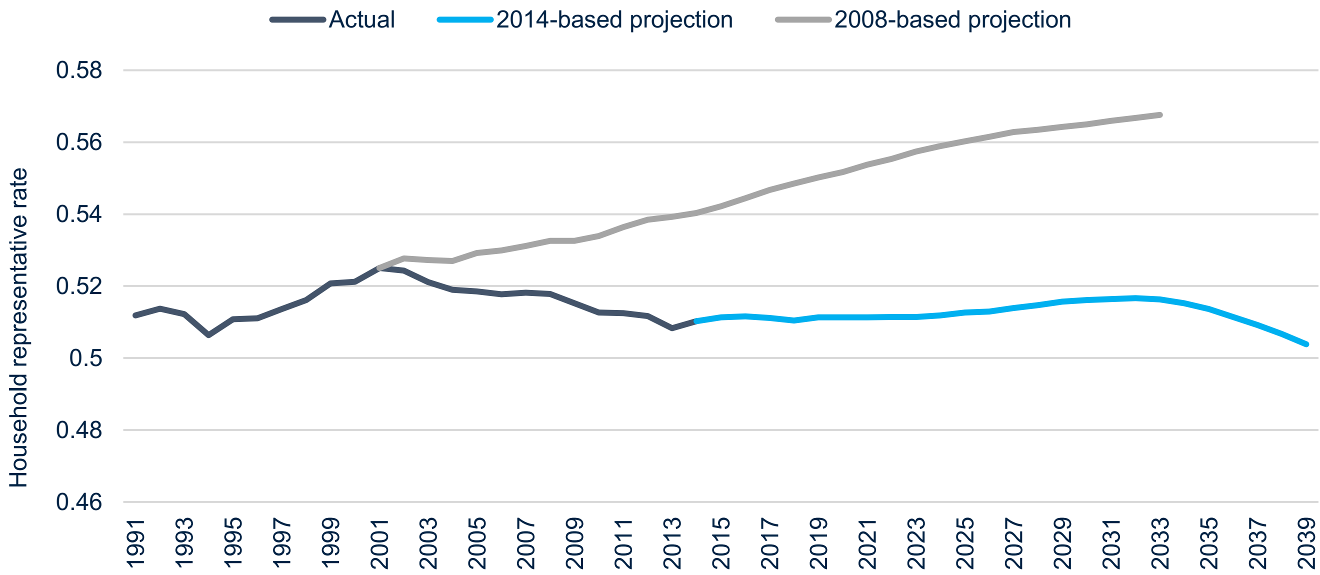
Figure 27 – Cambridge household representative rate (30 to 44 year olds)



Source: DCLG

The disparity between the 2008 and 2014 based projections is similarly stark in South Cambridgeshire. However, decline in household formation following 2008 was not as severe as in Cambridge and remains above the 1991 rate. The long term forecast in both authorities is that after 2030 household formation will begin to decline again. The 2014 projections do not anticipate household formation rates returning to their peak in either Cambridge or South Cambridgeshire.

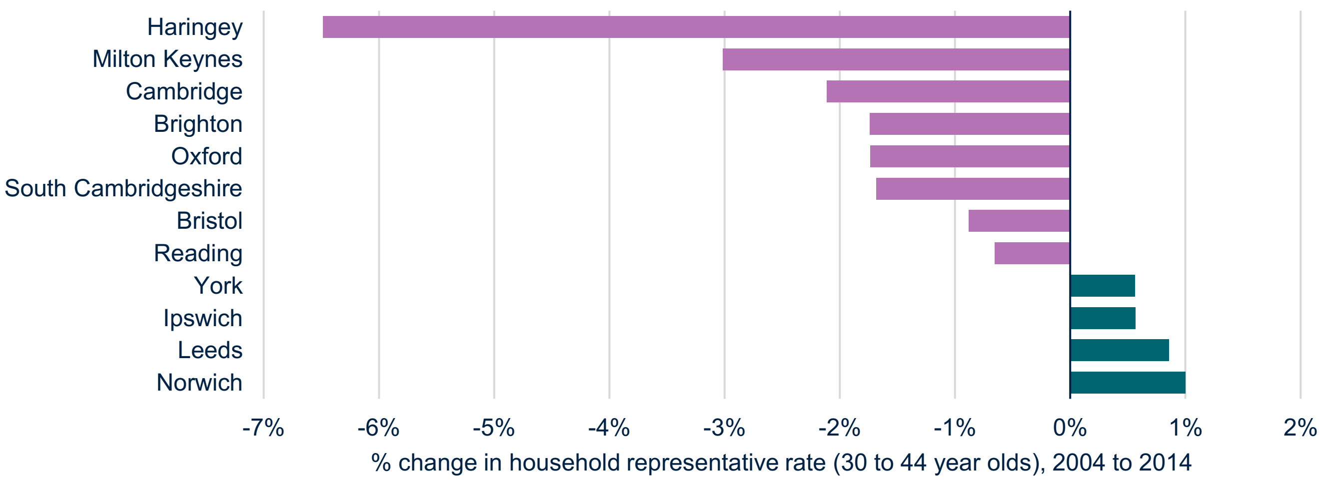
Figure 28 – South Cambridgeshire household representative rate (30 to 44 year olds)



Source: DCLG

Following steady growth between 1991 and 2004 household formation has started a decline that looks set to continue in Cambridge and South Cambridgeshire. This decline in household formation has affected many urban local authorities, but it has accelerated in Cambridge more so than in other areas. Nearby Norwich and Ipswich saw an increase in household formation over the period 2004 to 2014.

Figure 29 – Household formation trends in similar authorities

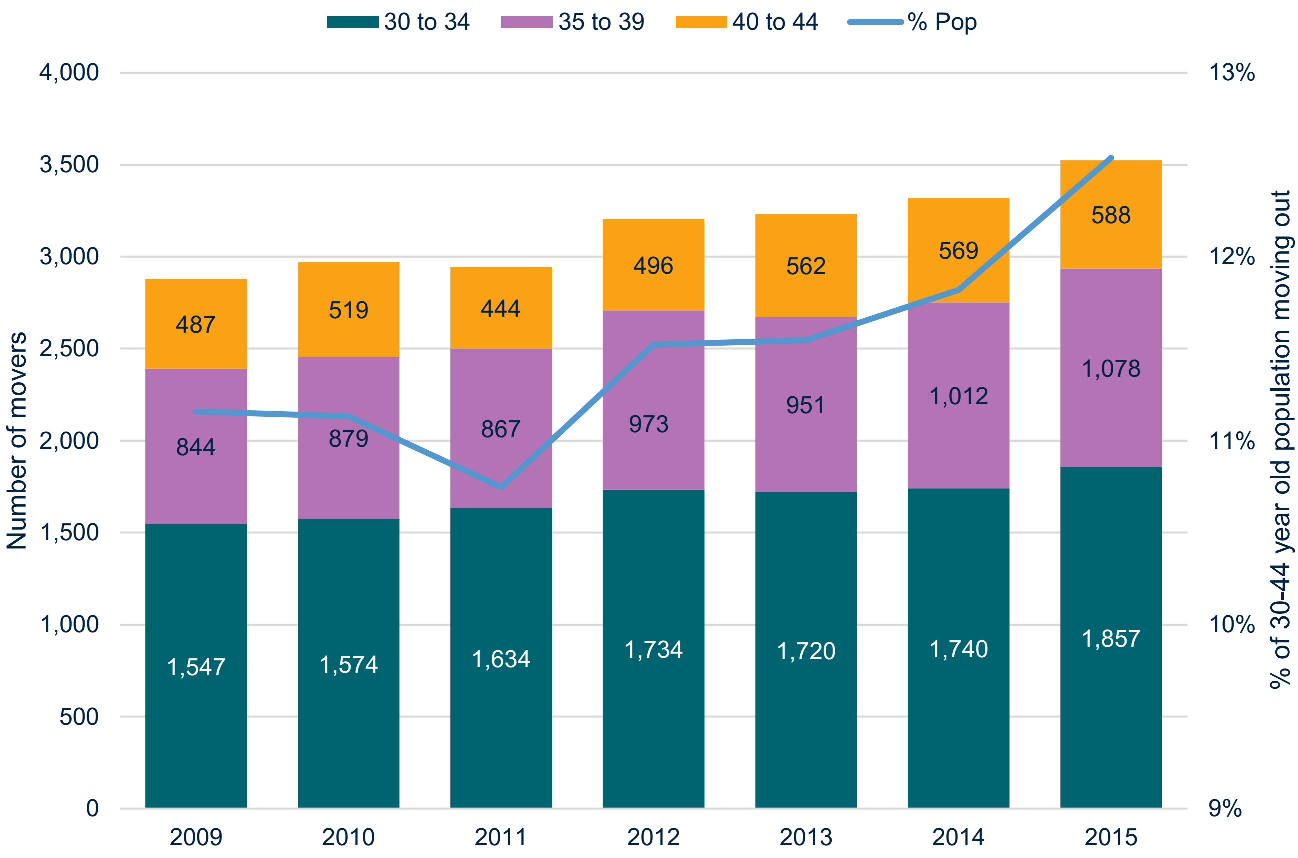


Source: DCLG

4.4. Migration

Between 2009 and 2015 the annual proportion of the 30 to 44 year olds moving out of Cambridge grew steadily, with a slight decline in migration in 2011 which bounced back in 2012. 12.5% of this age group moved out of Cambridge in 2015. 17% of 30 to 34 year olds left the authority. Though not a dramatic increase over the period Figure 30 illustrates a definite trend of higher migration levels, particularly when compared to South Cambridgeshire which has be relatively static over the period.

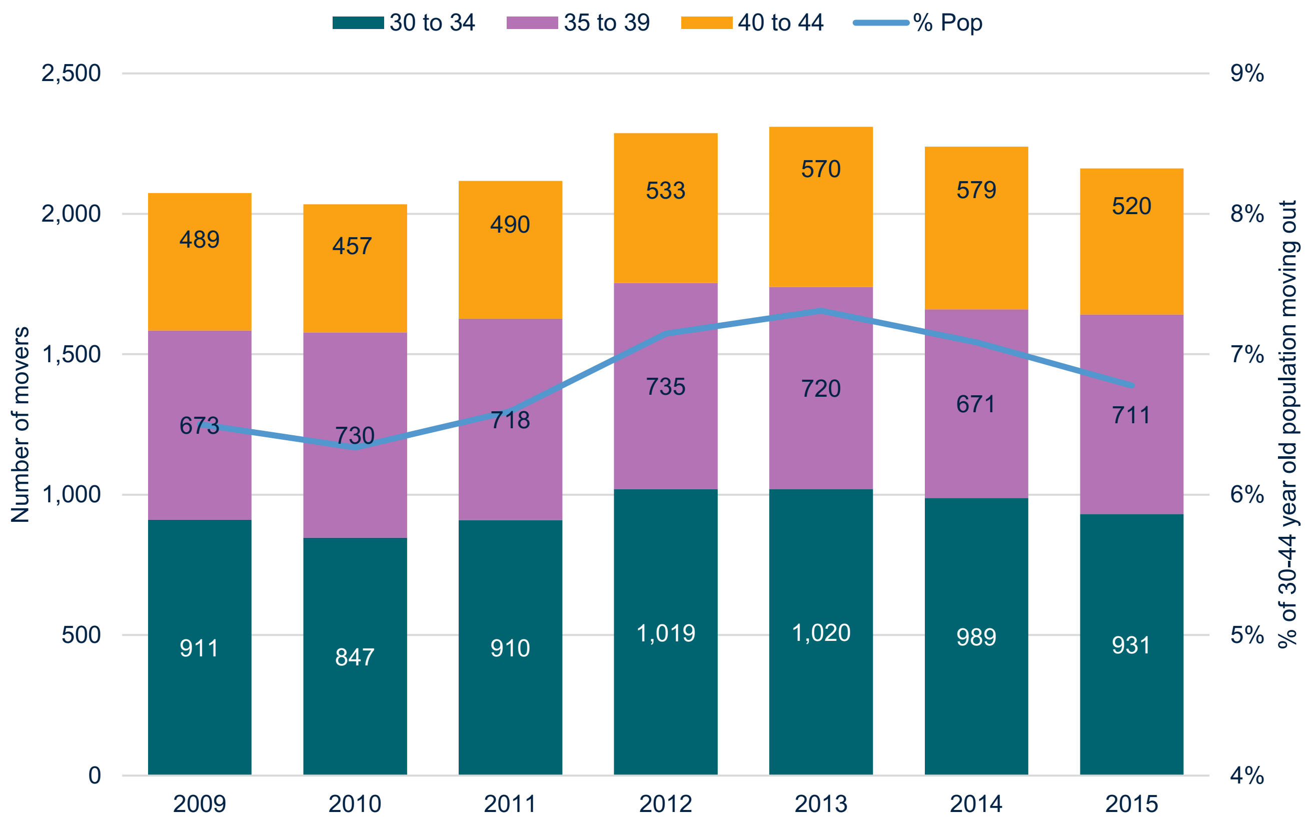
Figure 30 – Migration out of Cambridge (gross)



Source: DCLG, ONS

Migration of 30 to 44 year olds in South Cambridgeshire has been relatively stable since 2009 at around 6-7% of the population each year. Having peaked between 2012 and 2013 migration out of the authority has decreased since.

Figure 31 – Migration out of South Cambridgeshire (gross)



Source: ONS

Compared with other major urban areas in the south and east, Cambridge has high levels of out migration amongst 30-44 year olds.

Table 3 – Proportion of 30-44 year old population moving out

Local authority	% moving out
Norwich	9%
Reading	10%
Bristol	8%
Brighton	8%
Oxford	11%
Milton Keynes	5%
Cambridge	**13%**
South Cambridgeshire	**7%**

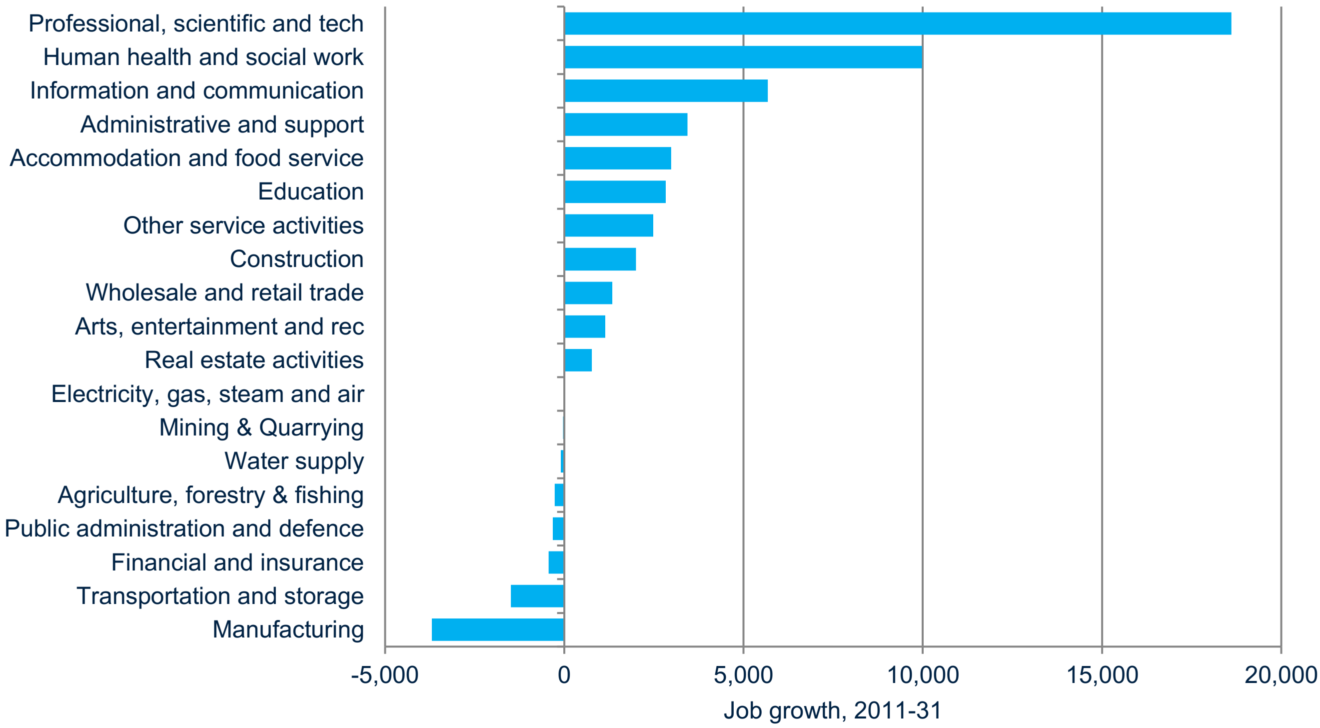
Source: ONS

4.5. Future trends

Employment growth is likely to play a significant role in future population growth, and therefore housing need, in and around Cambridge. The Cambridgeshire County Council *Population, Housing and Employment Forecasts* from 2013, which feed in to the current SHMA, project 44,000 extra jobs in Cambridge and South Cambridgeshire between 2011 and 2031. Many of these jobs are expected to be filled by people migrating to the area, the Cambridge Sub-regional Housing Board suggested as many as half of the total.

While it is not possible to know the exact housing requirements or job details of these new arrivals, we can infer some trends from the forecast employment growth by sector. Over 40% of the new jobs expected to be added are in the 'professional, scientific and tech' sector, and the next largest growth sector is 'human health and social work'.

Figure 32 – Forecast employment growth by sector, Cambridge and South Cambridgeshire



Source: Oxford Economics

Entry-level salaries for scientists and researchers in the private sector are typically around £30,000, rising to £40-45,000 for a senior scientist. In the public sector, a typical salary for a nurse is in the mid-£20,000s and a junior doctor starts in the high-£20,000s (high-£30,000s for one specialising). How these incomes relate to housing choice is strongly dependent on an individual household's situation; it is very different for a family with one earner who require a three bed compared to a young professional couple who are both working and need a one or two bed. Housing that is affordable to potential incomers is therefore a critical factor in ensuring jobs can be taken up, contributing to better productivity and continuing economic growth.

The next section looks at what products are required for households, focussing on those unable to access the market.

4.6. Summary

More professional couples and families are moving into the PRS, and given the findings of the previous sections it is likely that this has in part been caused by decreasing affordability and a lack of access to appropriately priced new homes for lower income households. The knock-on effects from this are a decrease in household formation and an increase in out-migration amongst younger people.

5. Implications and conclusions

There is evidence that constrained affordability is suppressing household formation in Cambridge, as younger households move out into surrounding areas and household representative rates drop significantly. There is less evidence for suppressed household formation in South Cambridgeshire where migration out of the district has remained stable over the last five years, suggesting appropriate affordable housing is more widely available. This is backed up by the results of the detailed affordability analysis in Section 3.3. Where there is supply it is more widely affordable to the range of household incomes in the area but Increased supply is necessary to meet the need across both districts.

The income of households in Cambridge not currently served by the new market and affordable housing being delivered stretches up towards £50,000, which is well above the local median household income, showing the extent of the problem. The types of shared ownership home being delivered in the city tend to be at prices overlapping with market sale homes, requiring correspondingly high incomes.

If we assume that a typical working household in Cambridge has an income of £30,000 (approximately in the middle of the 'gap' identified in Section 3), this gives a range of housing options inside and outside of the city, depending on the size and type of property required. Assuming 25% of income is spent on housing, this allows £625 per month for rent or mortgage repayments – the table below sets out some scenarios on this basis.

The summary table shows that, even for the same household income, the affordability situation can be very different depending on housing needs. A £30,000 income allows some access to lower end of the rental market in Cambridge for households requiring only one bedroom, while those looking to buy would need to look to South Cambridgeshire and a small shared ownership property, assuming a sufficient deposit of at least £3,000 could be raised. In addition, for single people a room in a shared house or flat would be affordable for £625 per month in Cambridge.

For households requiring two or more bedrooms, a discounted rental product is likely to be the only affordable option in both Cambridge and South Cambridgeshire.. In Cambridge, discounts of at least 50% to the median market rent are required to be affordable for households with income of £30,000 or below. In South Cambridgeshire, a low initial share (minimum is 25%) of a typical two bed shared ownership property would require a deposit of around £3,000 and total monthly repayments (mortgage plus rent) of £670; at a 25% spend ratio this equates to a required minimum income of £32,000.

Overall, we can conclude that for Cambridge workers on mid to low incomes, home ownership in the city is unlikely to affordable, even through schemes such as shared ownership or Help to Buy (or Starter Homes, if and when any are delivered). This is on an income basis, and ability to raise the required deposit for house purchase is likely to limit access to the market even further.

In South Cambridgeshire, homeownership may be more achievable, subject to deposit requirements and the type of housing needed. Therefore the next section looks at the costs of housing and commuting to the city from Cambourne, a new settlement in the district and source of large volumes of new housing over recent years, and how the overall costs compare to living in Cambridge.

Table 4 – Affordability summary, £30,000 household income

Scenario	Property type required	Afford market property in Cambridge?	Discount required for Cambridge property?	Afford market property in S Cambs?
Single person or couple	One bedroom	**Borderline**. ▪ In 2016 only 6% of one beds in the PRS in Cambridge had asking prices below £625. ▪ Shared ownership 1 beds, which start at around £235k market value, would require an income of >£34k to afford the minimum 25% initial share. ▪ Buying outright is not affordable, without access to a deposit of >£50k.	A ~50% discount to the median market rent would bring the spend ratio down below 25%.	**Yes**. ▪ In 2016 14% of one beds in the PRS in S Cambs had asking prices below £625. ▪ Small shared ownership properties may also be affordable in S Cambs assuming the small deposit plus purchase costs were available (c.£3,000).
Couple or single parent with one child	Two bedroom	**No**. ▪ Less than 1% of two beds in the PRS in Cambridge had asking prices below £625 per month. ▪ Shared ownership 2 beds, which start at around £350k market value in the city, require income >£40k so are not affordable. ▪ Buying outright is not affordable.	A ~60% discount to the median market rent is required for a 2 bed to be affordable with £30k household income.	**Borderline**. ▪ Only 1% of two beds in the PRS in S Cambs had asking prices below £625 per month. ▪ Typical 2 bed shared ownership (market value = £220k) would not be affordable even at 25% initial share. ▪ Buying outright is not affordable.
Couple or single parent with two or more children	Three or more bedrooms	**No**. ▪ Less than 1% of three beds in the PRS in Cambridge had asking prices below £625 per month. ▪ Shared ownership or buying outright are not affordable.	A ~70% discount to the median market rent is required for a 3 bed to be affordable with £30k household income.	**No**. ▪ Less than 1% of three beds in the PRS in S Cambs had asking prices below £625 per month. ▪ Typical 3 bed shared ownership (market value = £300k) would not be affordable even at 25% initial share. ▪ Buying outright is not affordable.

Source: Savills Research, Rightmove, Land Registry

Case study: Cambourne

33% of working people who live in Cambourne work in central Cambridge, eight miles away. Other commuting hot spots from Cambourne include the Milton Road Science Park and Addenbrooke's Hospital.

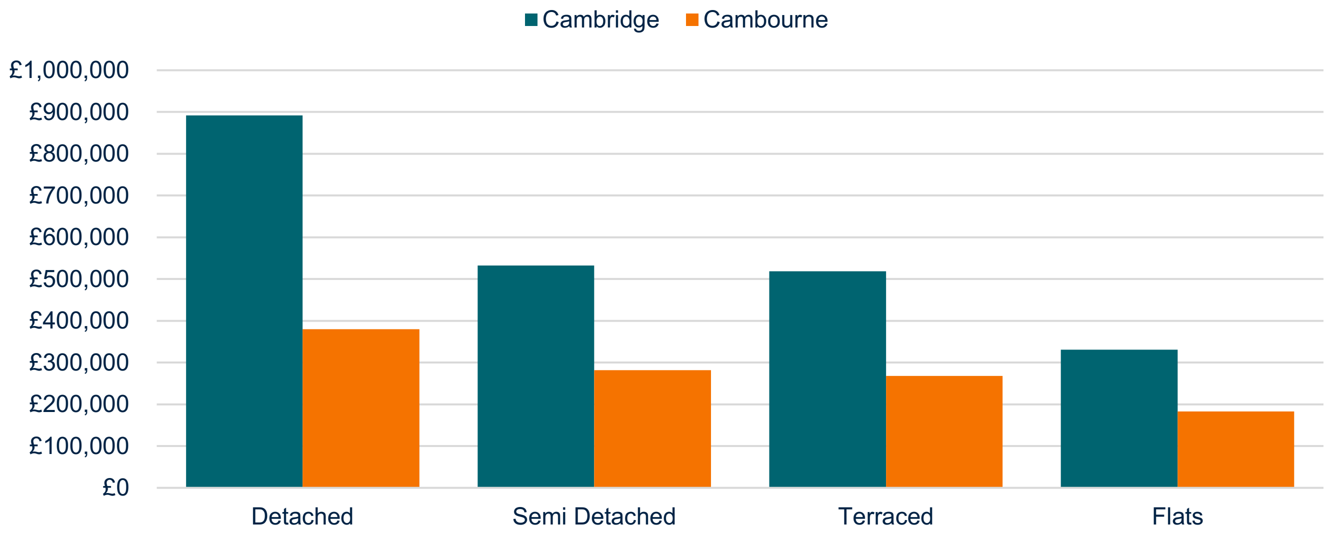
Cambourne has very low levels of travel-to-work self-containment. According to the 2011 Census, only 10% of people living in Cambourne work there, with most employees commuting in from neighbouring areas; only 14% of workers in Cambourne live there.

Figure 33 – Cambourne location map

Source: OS OpenData, Bing

House prices in Cambourne are on average over 50% lower than in Cambridge for the same property type, as shown below. Homes in the new settlement are therefore affordable to a wider range of households in terms of affluence and income.

Figure 34 – House prices in Cambourne compared to Cambridge



Source: Land Registry

But the 'average' first time buyer is unlikely to purchase the average property. If we assume instead that a typical first time buyer home is priced at around the lower quartile value for all local properties, the difference between Cambridge and Cambourne prices is smaller but still significant: £384,375 vs. £260,000.

However, a daily commute into Cambridge city centre or the employment hubs in its outskirts generates additional transportation costs. The price for commuting by car is based on the standard expenses claim per mile, and Cambridge council's set parking costs. The bus price is representative of Stagecoach's local season ticket prices.

Table 5 – Annual travel costs

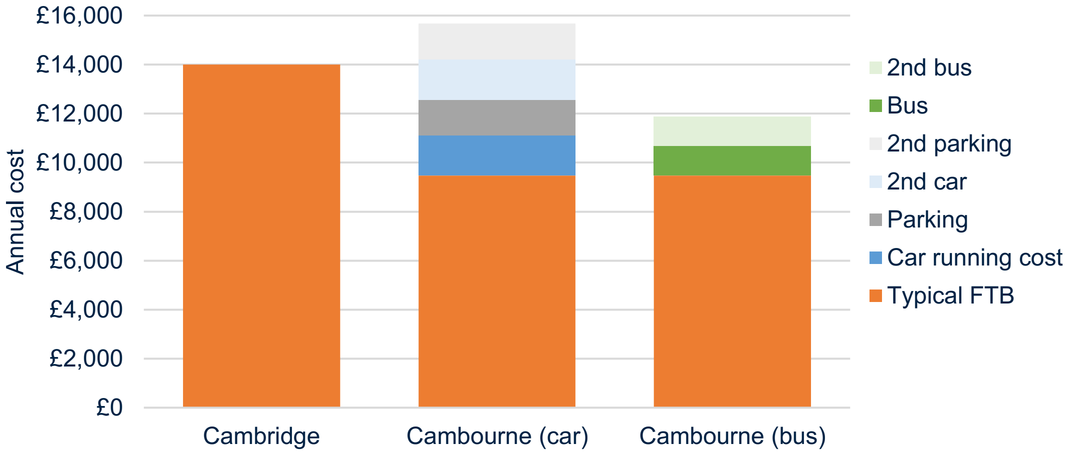
Transport type		Approximate travel costs p/a
Car	Free parking	£1,650
	Council parking	£3,100
Bus (with weekly season ticket)		£1,200

Source: Savills Research, Stagecoach

The travel costs are substantial addition to household outgoings for those on lower incomes. Even with two full time workers car sharing the bus still appears cheaper than commuting by car. A 2006 survey from Cambourne indicates that over 70% of the population do commute by car and that 55% of households have more than one car.

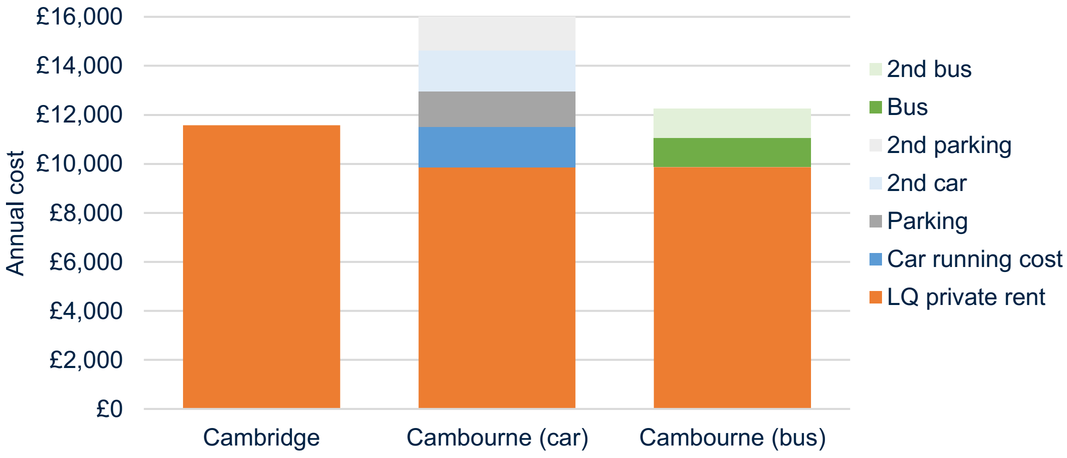
The charts below convert the lower quartile properties into estimated annual costs (same assumption on % spend and mortgage payments as Section 3.3) and adds estimated travel costs to the Cambourne example. It shows that the cost of making the Cambourne-Cambridge commute by car removes much of the saving derived from the house price discount, depending on whether one or two cars are required and the cost of parking. Adding the cost of two bus season tickets removes over half of the discount. For renters there is less difference in housing costs so the impact of the commuting costs is felt more strongly, two bus season tickets added to rent make Cambourne more expensive than Cambridge.

Figure 35 – Lower quartile housing cost plus commuting – home purchase



Source: Savills Research, Land Registry

Figure 36 – Lower quartile housing cost plus commuting – private rent



Source: Savills Research, Land Registry

Important Note

Finally, in accordance with our normal practice, we would state that this report is for general informative purposes only and does not constitute a formal valuation, appraisal or recommendation. It is only for the use of the persons to whom it is addressed and no responsibility can be accepted to any third party for the whole or any part of its contents. It may not be published, reproduced or quoted in part or in whole, nor may it be used as a basis for any contract, prospectus, agreement or other document without prior consent, which will not be unreasonably withheld.

Our findings are based on the assumptions given. As is customary with market studies, our findings should be regarded as valid for a limited period of time and should be subject to examination at regular intervals.

Whilst every effort has been made to ensure that the data contained in it is correct, no responsibility can be taken for omissions or erroneous data provided by a third party or due to information being unavailable or inaccessible during the research period. The estimates and conclusions contained in this report have been conscientiously prepared in the light of our experience in the property market and information that we were able to collect, but their accuracy is in no way guaranteed.

Acknowledgement

We note and thank the Cambridge Sub-regional Housing Board for their input into the project, which comprised initial discussions and supporting and background data. The team comprised:
Stephen Hills, Director of Housing, South Cambridgeshire District Council
Sue Beecroft, Sub-regional housing strategy co-ordinator, Cambridgeshire Insight
Helen Reed, Housing Strategy Manager, Cambridge City Council
Simon King, Programme Manager, Cambridge Biomedical Campus
Julie Fletcher, Head of Housing Strategy, South Cambridgeshire District Council