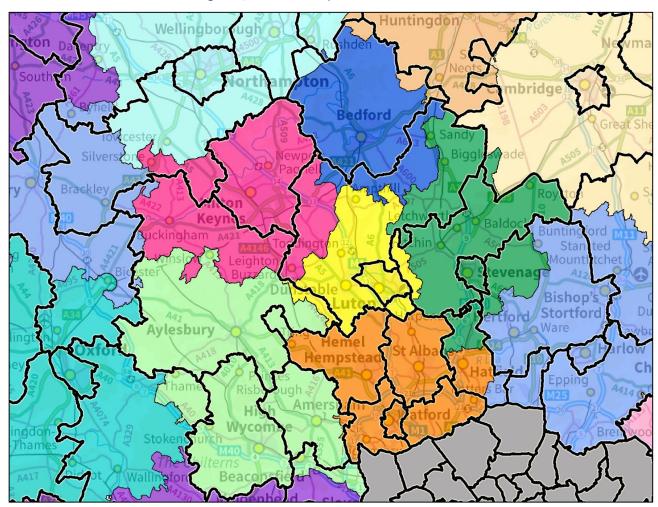
## HMAs in Bedfordshire and the surrounding areas: Updating the evidence on Migration

## Reviewing migration data from the 2001 and 2011 Census

- Opinion Research Services (ORS) was commissioned in 2015 by a partnership of seven councils (Central Bedfordshire Council, Bedford Borough Council, Luton Borough Council, Milton Keynes Council, North Hertfordshire District Council, Stevenage Borough Council and Aylesbury Vale District Council) to identify Housing Market Areas (HMAs) for the partnership and surrounding areas. The report was published in December 2015 as "Housing Market Areas in Bedfordshire and surrounding areas" (referred to in this report as the "2015 Study").
- The 2015 Study used the latest commuting flows, house prices and Broad Rental Market Area (BRMA) data currently available, including commuting data from the 2011 Census. Nevertheless, detailed migration flows from the 2011 Census has not been published as public data, so migration data from the 2001 Census was used instead. Based on the available evidence, the study concluded that the areas shown in Figure 1 provide the most appropriate and up-to-date housing market geographies.

Figure 1: Functional housing market areas in Bedfordshire and the surrounding area (Source: Housing Market Areas in Bedfordshire and surrounding areas, December 2015)



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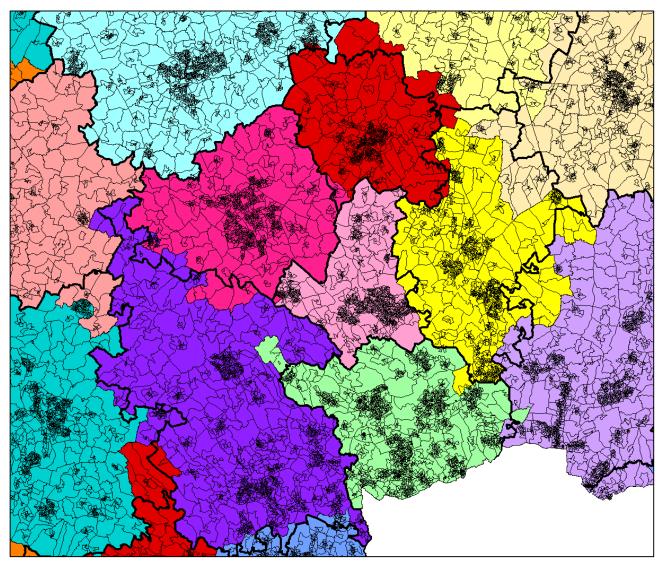
- Since the 2015 Study was completed, ORS has been granted access to the safeguarded migration flow data from the 2011 Census through the ONS Virtual Microdata Laboratory (VML). Therefore, to ensure that the evidence that informed the analysis of Housing Market Areas (HMAs) in Bedfordshire and the surrounding area remains as up-to-date and robust as possible, ORS has analysed the migration flow data from the 2011 Census alongside the 2001 Census data which informed our original analysis.
- This paper reviews the outcomes of this additional analysis in the context of our conclusions about the functional HMAs set out in the 2015 Study and the associated recommendations for "best fit" joint working arrangements.

## **Identifying Migration Zones**

Using migration flow data from the 2001 Census, the 2015 Study showed that the strongest relationships in terms of migration mirrored the strongest commuting relationships (based on commuting flow data from the 2011 Census). On this basis, migration zones were identified using the strongest relationships in terms of migration flows for each MSOA. Through replicating this analysis using migration flow data from the 2011 Census, we have updated the migration zones using the strongest relationships from the new data.

Figure 2: Comparing migration zones based on 2001 and 2011 data (Source: 2001 Census and 2011 Census, ONS.

Note: Coloured areas show 2001-based migration zones; heavy black lines show 2011-based migration zones)



- <sup>6.</sup> It is evident that the 2011-based migration zones largely mirror the 2001-based zones, although there are some differences at the edges:
  - » Bedford: the 2011-based zone includes slightly fewer areas in Hertfordshire, Huntingdonshire and Northamptonshire, but does include some additional areas in Central Bedfordshire that were in the Milton Keynes 2001-based zone;
  - » Central Buckinghamshire: the 2011-based zone no longer includes Thame (which is now in the Oxford migration zone) and some areas on the outskirts of Buckingham are in the Milton Keynes zone now. Nevertheless, the 2011-based zone includes some additional areas between Aylesbury and Milton Keynes and also extends slightly further south, now including additional areas near Gerard's Cross and to the south of Marlow;
  - » **Luton:** there is very little difference between the 2001-based and 2011-based migration zones, although there are some minor changes on the borders with both Stevenage and Milton Keynes;
  - » Milton Keynes: once again, there is little difference between the 2001-based and 2011-based zones; though, as noted above, some areas to the north have transferred to the Bedford zone and Milton Keynes has gained some areas near Buckingham and lost some areas north of Aylesbury; and
  - » Stevenage: this is the migration zone that has possibly had most change from 2001 to 2011, gaining areas to the north whilst losing other areas to the east. Nevertheless, most of the changes relate to largely rural areas and there do not appear to be any significant settlements that have either been gained or lost.
- Figure 3 and Figure 4 set out the updated key statistics for each of the identified migration zones based on the two migration containment ratios set out in the PAS OAN technical advice note (second edition, paragraph 5.15), with long-distance moves continuing to compare thresholds of 20 miles and 50 miles:

"Supply side (origin); moves within the area divided by all moves whose origin is in the area, excluding long-distance moves

Demand side (destination): moves within the area divided by all moves whose destination is in the area, excluding long-distance moves."

Figure 3: Supply side (origin) statistics for Migration Zones (Source: 2011 Census, ONS)

			Migration Zone							
		Bedford	Central Bucks	Luton	Milton Keynes	Stevenage				
Moved within area			10,900	25,841	24,264	20,840	20,613			
Moved to elsewhere	Moves of up to 2	20 miles	2,267	4,188	4,321	3,045	3,756			
	Moves of 20 to 5	60 miles	1,483	6,587	3,158	3,228	3,991			
	Moves of 50 mile	es or more	2,398	8,383	4,558	4,342	5,438			
Total supply side moves			17,048	44,999	36,301	31,455	33,798			
Moves within area as	% of all moves	2011 data	63.9%	57.4%	66.8%	66.3%	61.0%			
		2001 data	63.4%	54.7%	63.4%	62.4%	59.4%			
	% of moves up to 50 miles	2011 data	74.4%	70.6%	76.4%	76.9%	72.7%			
		2001 data	75.6%	70.2%	74.8%	74.8%	71.8%			
	% of moves up to 20 miles	2011 data	82.8%	86.1%	84.9%	87.3%	84.6%			
		2001 data	83.3%	82.8%	84.6%	84.1%	82.2%			

Figure 4: Demand side (destination) statistics for Migration Zones (Source: 2011 Census, ONS)

			Migration Zone							
		Bedford	Central Bucks	Luton	Milton Keynes	Stevenage				
Moved within area			10,900	25,841	24,264	20,840	20,613			
Moved from elsewhere	Moves of up to 2	0 miles	2,754	5,696	3,728	3,617	4,947			
	Moves of 20 to 5	0 miles	1,721	7,045	3,734	3,752	4,764			
	Moves of 50 mile	s or more	2,074	5,644	3,199	3,876	3,495			
Total demand side moves			17,449	44,226	34,925	32,085	33,819			
Moves within area as	% of all moves	2011 data	62.5%	58.4%	69.5%	65.0%	61.0%			
		2001 data	53.8%	49.0%	57.8%	52.9%	52.0%			
	% of moves up to 50 miles	2011 data	70.9%	67.0%	76.5%	73.9%	68.0%			
		2001 data	70.0%	67.8%	73.7%	71.4%	66.0%			
	% of moves up to 20 miles	2011 data	79.8%	81.9%	86.7%	85.2%	80.6%			
		2001 data	79.0%	80.2%	85.4%	84.2%	76.7%			

- It is evident that the statistics for the 2011-based migration zones are similar to the 2001-based zones in terms of the proportion of moves within the area. However, the proportion of moves of up to 50 miles and up to 20 miles is slightly higher based on the 2011-based zones that it was when the 2001-based zones were analysed. There are only two exceptions:
  - » Bedford: the proportion of supply side moves has reduced; from 75.6% to 74.4% based on the 50 mile threshold, and from 83.3% to 82.8% based on the 20 mile threshold; and
  - » Central Buckinghamshire: the proportion of supply side moves has reduced from 67.8% to 67.0% based on the 50 mile threshold, however the proportion has increased from 80.2% to 81.9% based on the 20 mile threshold.
- <sup>9.</sup> Based on the original statistics, the 2015 Study concluded that a "relatively high proportion of household moves" are contained within the migration zones identified at that time. As most of the 2011-based migration zones have a higher proportion of moves within the area, this conclusion remains appropriate for the updated zones so these functional areas all meet the requirements of PPG in this regard.

## **Updating the Functional Housing Market Areas**

- <sup>10.</sup> The 2015 Study took account of the evidence based on commuting zones, migration zones and house prices to establish the most appropriate functional housing market areas, based on majority agreement between the three geographies. Areas which fell within the same commuting zone, migration zone and BRMA were evidently allocated to that functional housing market area. Where there was disagreement between the three geographies, the functional housing market area was allocated based on the two geographies that did agree (and determined by the commuting zone in the few areas where all three geographies differed).
- As the 2011-based migration zones differ slightly from the 2001-based zones that were previously identified, we have repeated this process to identify the most appropriate functional housing market areas. Figure 5 illustrates the outcome of this analysis. When compared to the original functional housing market areas (Figure 1), it is evident that there are very few changes.

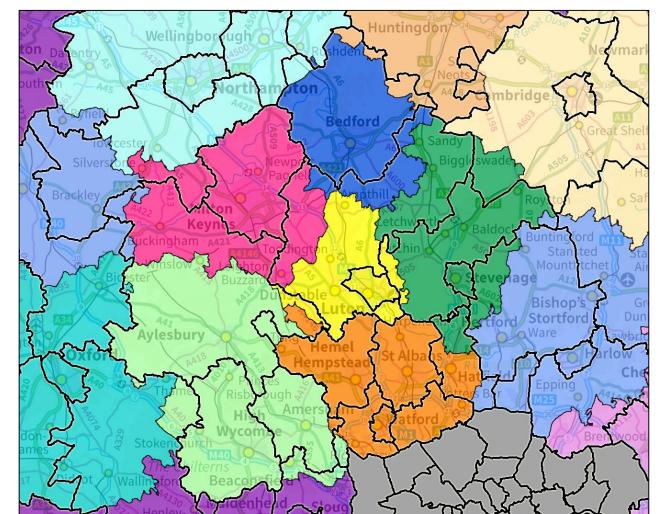


Figure 5: Functional Housing Market Areas (updated using 2011-based migration zones) with Local Authority Boundaries

<sup>12.</sup> Figure 6 details the distribution of the resident population for the five updated functional housing market areas by local authority. Cells have been highlighted in dark green where two thirds or more of the population for a local authority area are resident in a functional housing market area. Cells have been highlighted in light green where at least a third of the population for a local authority are resident in a functional HMA.

Figure 6: Functional Housing Market Areas Resident Population by Local Authority Area updated (Source: 2011 Census, ONS. Note: Population rounded to nearest 100. Figures may not sum due to rounding)

Local Authority Area	Functional Housing Market Area											
	Bedford		Central Bucks		Luton		Milton Keynes		Stevenage		Elsewhere	
	N	%	N	%	N	%	N	%	N	%	N	%
Partner LAs												
Aylesbury Vale	-	-	137,900	80.8%	2,800	1.6%	28,000	16.4%	-	-	2,000	1.2%
Bedford	151,800	98.2%	-	-	-	-	-	-	-	-	2,700	1.8%
Central Beds	15,400	6.1%	-	-	112,900	44.8%	50,200	19.9%	73,600	29.2%	-	-
Luton	-	-	-	-	201,500	100.0%	-	-	-	-	-	-
Milton Keynes	-	-	-	-	-	-	246,700	100.0%	-	-	-	-
North Herts	-	-	-	-	1,400	1.1%	-	-	124,300	98.8%	100	0.1%
Stevenage	-	-	-	-	-	-	-	-	83,400	100.0%	-	-
Surrounding LAs												
Chiltern	-	-	91,600	99.7%	-	-	-	-	-	-	200	0.3%
Dacorum	-	-	1,400	1.0%	-	-	-	-	-	-	141,500	99.0%
East Herts	-	-	-	-	-	-	-	-	8,500	6.3%	127,300	93.7%
East Northants	200	0.3%	-	-	-	-	-	-	-	-	68,100	99.7%
South Bucks	-	-	25,600	38.9%	-	-	-	-	-	-	40,200	61.1%
South Cambs	-	-	-	-	-	-	-	-	6,900	4.7%	139,900	95.3%
South Northants	-	-	-	-	-	-	12,400	14.72%	-	-	72,100	85.3%
South Oxon	-	-	8,500	6.5%	-	-	-	-	-	-	123,000	93.5%
Three Rivers	-	-	6,200	7.3%	-	-	-	-	-	-	80,100	92.8%
Welwyn Hatfield	-	-	-	-	-	-	-	-	56,800	53.2%	50,000	46.8%
Wycombe	-	-	169,000	100.0%	-	-	-	-	-	-	-	-
TOTAL	167,400	-	440,200	-	318,600	-	337,400	-	353,500	-	-	-

- There are no substantive differences in the distribution of population based on the original functional housing market areas (that used 2001-based migration zones) or the updated functional areas, defined using the 2011-based migration zones.
- On this basis, the 2015 Study conclusions remain appropriate and we would continue to recommend to the commissioning partners that the most pragmatically appropriate "best fit" for housing market areas in Bedfordshire and the surrounding areas comprises:
  - » Bedford HMA: Bedford borough;
  - » Central Buckinghamshire HMA: Aylesbury Vale district, Chiltern district and Wycombe borough;
  - » Luton HMA: Luton borough and Central Bedfordshire;
  - » Milton Keynes HMA: Milton Keynes borough; and
  - » Stevenage HMA: Stevenage borough and North Hertfordshire district.
- <sup>15.</sup> It is important to note that these "best fit" groupings do not change the actual geography of the functional housing market areas identified in Figure 5 they simply provide a pragmatic arrangement for the purposes of establishing the evidence required and developing local policies, as suggested by the CLG advice note and reaffirmed by the PAS technical advice note.
- <sup>16.</sup> The functional housing market areas continue to provide the most appropriate framework for spatial planning, so it will still be important for the local planning authorities to maintain dialogue with all of their neighbouring areas under the Duty to Cooperate.

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Opinion Research Services | The Strand, Swansea SA1 1AF Jonathan Lee | Trevor Baker | Hugo Marchant enquiries: 01792 535300 · info@ors.org.uk · www.ors.org.uk

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