

Berkshire (including South Bucks) Strategic Housing Market Assessment

**Berkshire Authorities and Thames
Valley Berkshire Local Enterprise
Partnership**

Final Report

February 2016

Prepared by

GL Hearn Limited
280 High Holborn
London WC1V 7EE

T +44 (0)20 7851 4900
glhearn.com

Contents

Section	Page
1 INTRODUCTION	29
2 DEFINING THE HOUSING MARKET AREAS	37
3 CHARACTERISTICS OF THE HOUSING MARKET AREAS	104
4 DEMOGRAPHIC-LED HOUSING NEED	128
5 ECONOMIC-LED HOUSING NEEDS	164
6 AFFORDABLE HOUSING NEED	205
7 HOUSING MARKET DYNAMICS AND MARKET SIGNALS	241
8 NEED FOR DIFFERENT SIZES OF HOMES	283
9 HOUSING NEEDS OF PARTICULAR GROUPS	298
10 CONCLUSIONS ON OBJECTIVELY ASSESSED NEED	353

List of Figures

FIGURE 1: BERKSHIRE LOCAL AUTHORITIES AND SOUTH BUCKS	30
FIGURE 2: OVERVIEW OF APPROACH	36
FIGURE 3: FRAMEWORK HOUSING MARKET AREAS COVERING BERKSHIRE AND SURROUNDING AREAS	41
FIGURE 4: CURDS – DEFINED LOCAL HOUSING MARKET AREAS	43
FIGURE 5: CURDS – DEFINED SINGLE-TIER HOUSING MARKET AREAS	44
FIGURE 6: HOUSING MARKET AREAS IN THE SOUTH EAST	46
FIGURE 7: DTZ BERKSHIRE HMAS	48
FIGURE 8: FUNCTIONAL HOUSING MARKET AREAS DEFINED THROUGH ORS BUCKINGHAMSHIRE RESEARCH BASED ON MSOA BOUNDARIES, WITH LOCAL AUTHORITY BOUNDARIES	51
FIGURE 9: SUB-REGIONAL HOUSING MARKET AREAS IN CENTRAL HAMPSHIRE	55
FIGURE 10: UNDERSTANDING HOUSING DEMAND DRIVERS	58
FIGURE 11: PRICES OF ALL HOMES SOLD, 2014	60

FIGURE 12:	PRICES OF SEMI-DETACHED AND TERRACED HOMES SOLD, 2014	61
FIGURE 13:	SEMI-DETACHED AND TERRACED HOMES SOLD – BERKSHIRE, 2014	62
FIGURE 14:	CHANGE IN HOUSE PRICES (ALL PROPERTIES), 2009-14	64
FIGURE 15:	CHANGE IN HOUSE PRICES (ALL PROPERTIES), 2007-12	65
FIGURE 16:	CHANGE IN HOUSE PRICES (ALL PROPERTIES), 1997-12	66
FIGURE 17:	MEDIAN AFFORDABILITY RATIO (1997 – 2013)	68
FIGURE 18:	GROSS MIGRATION FLOWS BETWEEN LOCAL AUTHORITIES, 2010-11	71
FIGURE 19:	NET MIGRATION FLOWS BETWEEN LOCAL AUTHORITIES, 2010-11	73
FIGURE 20:	SHORT DISTANCE MOVES DEFINITION	77
FIGURE 21:	2001 ONS TRAVEL TO WORK AREAS	83
FIGURE 22:	2011 ONS TRAVEL TO WORK AREAS	84
FIGURE 23:	COMMUTING TO LONDON (% OF THOSE IN EMPLOYMENT IN GIVEN MSOA) (2011)	86
FIGURE 24:	BERKSHIRE AND WIDER AREA	92
FIGURE 25:	MAJOR EMPLOYMENT CENTRES (2011)	93
FIGURE 26:	CATCHMENT OF MAJOR EMPLOYMENT CENTRES	94
FIGURE 27:	BERKSHIRE AND SOUTH BUCKS TTWA (2011)	96
FIGURE 28:	BROAD RENTAL MARKET AREAS	97
FIGURE 29:	LARGER URBAN ZONES	98
FIGURE 30:	HOUSING MARKET AREAS (2015)	102
FIGURE 31:	POPULATION GROWTH BY HMAS, 1981-2013	105
FIGURE 32:	BENCHMARKING POPULATION GROWTH, 2003-13	106
FIGURE 33:	ETHNICITY, 2011	108
FIGURE 34:	ECONOMIC ACTIVITY, 2011	109
FIGURE 35:	OCCUPATIONAL PROFILE (2011)	111
FIGURE 36:	QUALIFICATIONS, 2011	112
FIGURE 37:	EARNINGS BY RESIDENTS IN FULL TIME EMPLOYMENT, 2013	113
FIGURE 38:	EARNINGS BY WORKPLACE, 2013	114

FIGURE 39:	HOUSEHOLD TYPES AS A PERCENTAGE OF ALL HOUSEHOLDS, 2011	118
FIGURE 40:	CHANGE IN HOUSEHOLDS BY TYPE, 2001-2011	120
FIGURE 41:	HOUSING TYPES, % OF DWELLINGS, 2011	121
FIGURE 42:	DWELLING SIZE BY NUMBER OF BEDROOMS, 2011	122
FIGURE 43:	TENURE PROFILE, 2011	123
FIGURE 44:	DWELLING % BY COUNCIL TAX BAND, 2011	125
FIGURE 45:	INDEXED POPULATION GROWTH (1981-2013)	129
FIGURE 46:	INDEXED POPULATION GROWTH (1981-2013) – BY LOCAL AUTHORITY	130
FIGURE 47:	COMPONENTS OF POPULATION CHANGE, MID-2001 TO MID-2013 – STUDY AREA	131
FIGURE 48:	POPULATION AGE PROFILE (2013)	134
FIGURE 49:	PAST AND PROJECTED POPULATION GROWTH – STUDY AREA	138
FIGURE 50:	PAST AND PROJECTED POPULATION GROWTH – BY LOCAL AUTHORITY	140
FIGURE 51:	COMPONENTS OF POPULATION CHANGE, MID-2001 TO MID-2036 – STUDY AREA	142
FIGURE 52:	INDEXED HOUSEHOLD GROWTH (1991-2036) – STUDY AREA	145
FIGURE 53:	ANNUAL CHANGE IN HOUSEHOLD GROWTH (1991-2036)	145
FIGURE 54:	INDEXED HOUSEHOLD GROWTH (1991-2036) – BY LOCAL AUTHORITY	146
FIGURE 55:	PAST AND PROJECTED TRENDS IN AVERAGE HOUSEHOLD SIZE – STUDY AREA	147
FIGURE 56:	PROJECTED HOUSEHOLD FORMATION RATES BY AGE OF HEAD OF HOUSEHOLD –STUDY AREA	148
FIGURE 57:	INTERROGATING MIGRATION FLOWS BETWEEN LONDON AND THE WESTERN BERKSHIRE HMA	155
FIGURE 58:	INTERROGATING MIGRATION FLOWS BETWEEN LONDON AND THE EASTERN BERKS AND SOUTH BUCKS HMA	156
FIGURE 59:	HOUSING NEED PER ANNUM (2013-36) – DEMOGRAPHIC SCENARIOS DEVELOPED – HMAS	162
FIGURE 60:	HOUSING NEED PER ANNUM (2013-36) – DEMOGRAPHIC SCENARIOS DEVELOPED – LOCAL AUTHORITIES	162
FIGURE 61:	TOTAL EMPLOYMENT IN ‘000 IN BERKSHIRE AND SOUTH BUCKS 1981-2013	169

FIGURE 62:	JOB DENSITIES OF BERKSHIRE-SOUTH BUCKINGHAMSHIRE, INNER LONDON AND LONDON 2000-2013 (NUMBER OF JOBS PER RESIDENT AGED 16-64)	185
FIGURE 63:	ROLLING 5 YEAR AVERAGE EMPLOYMENT TREND AND FORECAST FOR HMAS	186
FIGURE 64:	COMPARATIVE ASSESSMENT OF ECONOMIC GROWTH TRENDS & PROJECTIONS	191
FIGURE 65:	PAST AND PROJECTED CHANGE IN EMPLOYMENT RATE (1994-2036)	201
FIGURE 66:	DEMOGRAPHIC VS ECONOMIC-LED PROJECTIONS FOR HOUSING NEED	203
FIGURE 67:	INDICATIVE HOUSEHOLD INCOME REQUIRED TO PURCHASE/RENT WITHOUT ADDITIONAL SUBSIDY	213
FIGURE 68:	DISTRIBUTION OF HOUSEHOLDS BY INCOME IN STUDY AREA (MID-2014 ESTIMATES)	215
FIGURE 69:	OVERVIEW OF AFFORDABLE HOUSING NEEDS ASSESSMENT MODEL	217
FIGURE 70:	OVERLAP BETWEEN AFFORDABLE HOUSING TENURES	238
FIGURE 71:	UK GDP CHANGE, 1997-2014	242
FIGURE 72:	UK TRENDS IN GROSS MORTGAGE LENDING	243
FIGURE 73:	FIRST-TIME BUYER NUMBERS	244
FIGURE 74:	TOTAL MORTGAGES AND % TO FIRST TIME BUYERS AND HOME MOVERS	245
FIGURE 75:	UK TRENDS IN BUY-TO-LET LENDING	246
FIGURE 76:	MEDIAN HOUSE PRICE TRENDS, 1997-2007	249
FIGURE 77:	MEDIAN HOUSE PRICE TRENDS BY LOCAL AUTHORITY, 1997-2007	251
FIGURE 78:	MEDIAN HOUSE PRICE TRENDS, 2008-13	253
FIGURE 79:	MEDIAN HOUSE PRICE TRENDS BY LOCAL AUTHORITY, 2008-13	254
FIGURE 80:	MEDIAN HOUSE PRICES BY LOCAL AUTHORITY, 2014	255
FIGURE 81:	ALL SALES BY DWELLING TYPE (2014)	256
FIGURE 82:	ALL SALES BY DWELLING TYPE BY LOCAL AUTHORITY (2014)	256
FIGURE 83:	INDEXED ANALYSIS OF SALES TRENDS, 1996 – 2012	257
FIGURE 84:	INDEXED ANALYSIS OF SALES TRENDS BY LOCAL AUTHORITY, 1996 – 2012	258
FIGURE 85:	MEDIAN MONTHLY RENTAL COSTS BY SIZE, YEAR TO MARCH 2015	260

FIGURE 86:	LOWER QUARTILE MONTHLY RENTAL COSTS BY SIZE, YEAR TO MARCH 2015	261
FIGURE 87:	MEDIAN MONTHLY RENTAL COSTS BY SIZE AND BY LOCAL AUTHORITY, YEAR TO MARCH 2015	262
FIGURE 88:	LOWER QUARTILE MONTHLY RENTAL COSTS BY SIZE AND BY LOCAL AUTHORITY, YEAR TO MARCH 2015	263
FIGURE 89:	AVERAGE WEEKLY REFERENCE RENTS BY BRMA (2009-2014)	264
FIGURE 90:	RENTAL TRANSACTIONS BY LOCAL AUTHORITY, 2011-2014	265
FIGURE 91:	LOWER QUARTILE AFFORDABILITY TREND, 1997-2013	266
FIGURE 92:	LOWER QUARTILE AFFORDABILITY TREND, 1997-2013	267
FIGURE 93:	MEDIAN AFFORDABILITY RATIO (1997 – 2013)	268
FIGURE 94:	CHANGE IN HOUSEHOLDS BY TENURE, 2001-11	271
FIGURE 95:	CHANGE IN HOUSEHOLDS BY TENURE – LOCAL AUTHORITY, 2001-11	272
FIGURE 96:	NET HOUSING CHANGE EASTERN BERKS AND SOUTH BUCKS HMA (2001/2-2013/2014),	275
FIGURE 97:	NET HOUSING CHANGE WESTERN BERKSHIRE HMA (2001/2-2013/2014),	276
FIGURE 98:	PROJECTED HOUSEHOLD FORMATION RATES FOR THOSE AGED UNDER 45 – EXAMPLE AREA	280
FIGURE 99:	STAGES IN THE HOUSING MARKET MODEL	284
FIGURE 100:	AVERAGE BEDROOMS BY AGE, SEX AND TENURE – BERKSHIRE AND SOUTH BUCKS	285
FIGURE 101:	IMPACT OF DEMOGRAPHIC TRENDS ON MARKET HOUSING REQUIREMENTS BY HOUSE SIZE, 2013 AND 2036 – STUDY AREA	288
FIGURE 102:	IMPACT OF DEMOGRAPHIC TRENDS ON AFFORDABLE HOUSING REQUIREMENTS BY HOUSE SIZE, 2013 AND 2036 – BERKSHIRE AND SOUTH BUCKS	291
FIGURE 103:	SIZE OF HOUSING REQUIRED 2013 TO 2036 – BERKSHIRE AND SOUTH BUCKS	293
FIGURE 104:	TENURE OF OLDER PERSON HOUSEHOLDS – BERKSHIRE AND SOUTH BUCKS	302
FIGURE 105:	TENURE OF OLDER PERSON HOUSEHOLDS – BY LOCAL AUTHORITY	303
FIGURE 106:	OCCUPANCY RATING OF OLDER PERSON HOUSEHOLDS – BERKSHIRE AND SOUTH BUCKS	304

FIGURE 107:	OCCUPANCY RATING OF OLDER PERSON HOUSEHOLDS – BY LOCAL AUTHORITY AND HMA	304
FIGURE 108:	POPULATION WITH LONG-TERM HEALTH PROBLEM OR DISABILITY IN EACH AGE BAND	318
FIGURE 109:	POPULATION WITH LONG-TERM HEALTH PROBLEM OR DISABILITY IN EACH AGE BAND – BY LOCAL AUTHORITY	319
FIGURE 110:	TENURE OF PEOPLE WITH LTHPD – BERKSHIRE/SOUTH BUCKS	321
FIGURE 111:	TENURE OF PEOPLE WITH LTHPD – BY LOCAL AUTHORITY	321
FIGURE 112:	POPULATION AGE PROFILE (2011) – WESTERN BERKSHIRE HMA	326
FIGURE 113:	POPULATION AGE PROFILE (2011) – EASTERN BERKS & SOUTH BUCKS HMA	326
FIGURE 114:	TENURE BY ETHNIC GROUP IN THE WESTERN BERKSHIRE HMA	327
FIGURE 115:	TENURE BY ETHNIC GROUP IN THE EASTERN BERKS & SOUTH BUCKS HMA	327
FIGURE 116:	TENURE OF BME HOUSEHOLDS – BY DISTRICT	328
FIGURE 117:	OCCUPANCY RATING BY ETHNIC GROUP – WESTERN BERKSHIRE HMA	329
FIGURE 118:	OCCUPANCY RATING BY ETHNIC GROUP – EASTERN BERKS & SOUTH BUCKS HMA	329
FIGURE 119:	OCCUPANCY RATING OF BME HOUSEHOLDS – BY LOCAL AUTHORITY	330
FIGURE 120:	TENURE OF HOUSEHOLDS WITH DEPENDENT CHILDREN – WESTERN BERKSHIRE HMA	332
FIGURE 121:	TENURE OF HOUSEHOLDS WITH DEPENDENT CHILDREN – EASTERN BERKS & SOUTH BUCKS HMA	333
FIGURE 122:	TENURE OF HOUSEHOLDS WITH DEPENDENT CHILDREN – BY LOCAL AUTHORITY	334
FIGURE 123:	OCCUPANCY RATING AND HOUSEHOLDS WITH DEPENDENT CHILDREN – WESTERN BERKSHIRE HMA	335
FIGURE 124:	OCCUPANCY RATING AND HOUSEHOLDS WITH DEPENDENT CHILDREN – EASTERN BERKS & SOUTH BUCKS HMA	335
FIGURE 125:	OCCUPANCY RATING AND HOUSEHOLDS WITH DEPENDENT CHILDREN – BY LOCAL AUTHORITY	336
FIGURE 126:	TENURE BY AGE OF HRP – WESTERN BERKSHIRE HMA	341
FIGURE 127:	TENURE BY AGE OF HRP – EASTERN BERKSHIRE & SOUTH BUCKS HMA	341

FIGURE 128:	TENURE OF HOUSEHOLDS AGED UNDER 35 – BY LOCAL AUTHORITY	342
FIGURE 129:	ECONOMIC ACTIVITY BY AGE – WESTERN BERKSHIRE HMA	343
FIGURE 130:	ECONOMIC ACTIVITY BY AGE – EASTERN BERKS & SOUTH BUCKS HMA	343
FIGURE 131:	ECONOMIC ACTIVITY BY LOCATION (PEOPLE AGED 16-34)	344
FIGURE 132:	TRENDS IN STUDENT NUMBERS, UNIVERSITY OF READING, 2001/2-12/13	345
FIGURE 133:	GROWTH IN FULL TIME STUDENTS AT UNIVERSITY OF READING, 2001-13	346
FIGURE 134:	OVERSEAS STUDENTS, READING UNIVERSITY, 2001/2 – 2012/13	347
FIGURE 135:	CHANGES IN DOMESTIC STUDENT POPULATION	347
FIGURE 136:	FLOW CHART OF DEVELOPING A HOUSING TARGET	355
FIGURE 137:	COMPARATIVE ASSESSMENT OF ECONOMIC GROWTH TRENDS & PROJECTIONS	360
FIGURE 138:	DEMOGRAPHIC VS ECONOMIC-LED PROJECTIONS FOR HOUSING NEED	362
FIGURE 139:	CONCLUSIONS ON FULL OBJECTIVELY-ASSESSED HOUSING NEED BY HMA,	368
FIGURE 140:	GROSS NEED FOR DIFFERENT TYPES OF AFFORDABLE HOUSING	372

List of Tables

TABLE 1:	AVERAGE HOUSE PRICES BY TYPE (2014)	63
TABLE 2:	MONTHLY MEDIAN RENTS (2014)	67
TABLE 3:	SELF-CONTAINMENT OF MIGRATION FLOWS WITHIN INDIVIDUAL AUTHORITIES, 2010-11	69
TABLE 4:	IN MIGRATION BY AGE (2011)	70
TABLE 5:	NET MIGRATION BY AGE (2011)	74
TABLE 6:	MAJOR MIGRATION FLOWS (2011)	75
TABLE 7:	MAJOR MIGRATION FLOWS (2011)	75
TABLE 8:	STATISTICALLY SIGNIFICANT NET RELATIONSHIPS BETWEEN LOCAL AUTHORITIES (2011 - 2014)	76
TABLE 9:	MIGRATION SELF-CONTAINMENT LEVELS, 2010-11	78
TABLE 10:	MIGRATION SELF-CONTAINMENT LEVELS (EXCLUDING LONG DISTANCE), 2010-11	78

TABLE 11:	MIGRATION SELF-CONTAINMENT LEVELS – EXCLUDING LONG DISTANCE MOVES AND GREATER LONDON, 2010-11	79
TABLE 12:	MOVEMENTS BETWEEN BERKSHIRE AND SOUTH BUCKS AUTHORITIES (2011)	80
TABLE 13:	COMMUTING SELF CONTAINMENT RATES BY LOCAL AUTHORITY (2011)	85
TABLE 14:	MAJOR COMMUTING FLOWS FROM THE COMMISSIONING AUTHORITIES (2011)	87
TABLE 15:	MAJOR COMMUTING FLOWS FROM SOUTH BUCKS (2011)	88
TABLE 16:	STATISTICALLY SIGNIFICANT COMMUTING RELATIONSHIPS (2011)	89
TABLE 17:	COMMUTING SELF CONTAINMENT RATES BY DIFFERENT GROUPINGS OF LOCAL AUTHORITIES (2011)	90
TABLE 18:	SELF-CONTAINMENT RATES OF COMMUTER CATCHMENT AREAS	95
TABLE 19:	MID-YEAR POPULATION ESTIMATE, 2013	104
TABLE 20:	SUMMARY OF POPULATION BY STAGE OF LIFE (2013)	107
TABLE 21:	SUMMARY OF POPULATION BY ETHNICITY (2011)	108
TABLE 22:	ECONOMIC ACTIVITY BY LOCAL AUTHORITY, 2011	110
TABLE 23:	OCCUPATIONAL PROFILE BY LOCAL AUTHORITY (2011)	111
TABLE 24:	OCCUPATIONAL PROFILE	112
TABLE 25:	COUNT OF DWELLINGS AND HOUSEHOLDS (2011)	115
TABLE 26:	HOUSEHOLD SIZE (2011)	116
TABLE 27:	HOUSEHOLDS BY TYPE (2011)	117
TABLE 28:	HOUSING TYPES, % OF DWELLINGS BY LOCAL AUTHORITY, 2011	122
TABLE 29:	DWELLING SIZE BY NUMBER OF BEDROOMS, 2011	123
TABLE 30:	DWELLINGS BY TENURE TYPE, 2013	124
TABLE 31:	DWELLING % BY COUNCIL TAX BAND, 2011	126
TABLE 32:	COMPONENTS OF POPULATION CHANGE (2001-13) – STUDY AREA	132
TABLE 33:	COMPONENTS OF POPULATION CHANGE (2001-13) – WESTERN BERKSHIRE HMA	132
TABLE 34:	COMPONENTS OF POPULATION CHANGE (2001-13) – EASTERN BERKS & SOUTH BUCKS HMA	133

TABLE 35:	CHANGE IN AGE STRUCTURE 2001 TO 2013 – STUDY AREAS	134
TABLE 36:	CHANGE IN AGE STRUCTURE 2001 TO 2013 – WESTERN BERKSHIRE HMA	135
TABLE 37:	CHANGE IN AGE STRUCTURE 2001 TO 2013 – EASTERN BERKS & SOUTH BUCKS HMA	135
TABLE 38:	HOUSEHOLD GROWTH PROJECTED BY CLG (2013-36)	136
TABLE 39:	PROJECTED POPULATION GROWTH (2013-2036)	137
TABLE 40:	POPULATION CHANGE 2013 TO 2036 BY FIFTEEN-YEAR AGE BANDS (2012-BASED SNPP) – STUDY AREA	143
TABLE 41:	PROJECTED HOUSEHOLD GROWTH (2013-2036)	144
TABLE 42:	PROJECTED HOUSEHOLD GROWTH 2013-36 – 2012-BASED SNPP (ADJUSTED) AND 2012- BASED HEADSHIP RATES	150
TABLE 43:	PROJECTED HOUSEHOLD GROWTH 2013-36 – 10-YEAR MIGRATION TRENDS AND 2012-BASED HEADSHIP RATES	152
TABLE 44:	PROJECTED HOUSEHOLD GROWTH 2013-36 – 12-YEAR MIGRATION TRENDS AND 2012-BASED HEADSHIP RATES	153
TABLE 45:	PROJECTED HOUSEHOLD GROWTH 2013-36 – 2012-BASED SNPP WITH UPC ADJUSTMENT AND 2012-BASED HEADSHIP RATES	153
TABLE 46:	MIGRATION TO- AND FROM- LONDON AND BERKSHIRE/SOUTH BUCKS LOCAL AUTHORITIES (PERSONS PER ANNUM)	157
TABLE 47:	PROJECTED HOUSEHOLD GROWTH 2013-36 – LONDON MIGRATION SENSITIVITY ANALYSIS AND 2012-BASED HEADSHIP RATES	158
TABLE 48:	COMPARING POPULATION GROWTH IN THE 2013-14 PERIOD IN THE 2014 MID-YEAR POPULATION ESTIMATES AND THE SNPP (AS USED IN THE SHMA)	159
TABLE 49:	COMPARING NET MIGRATION IN THE 2013-14 PERIOD IN THE 2014 MID-YEAR POPULATION ESTIMATES AND THE SNPP (AS USED IN THE SHMA)	160
TABLE 50:	HOUSING NEED PER ANNUM (2013-36) – DEMOGRAPHIC SCENARIOS DEVELOPED	161
TABLE 51:	TOTAL EMPLOYMENT GROWTH 1990-2008 IN ‘000 BY HMA AND LOCAL AUTHORITY	170
TABLE 52:	TOTAL EMPLOYMENT GROWTH 1992-2009 BY HMA AND LOCAL AUTHORITY	171
TABLE 53:	TOTAL EMPLOYMENT GROWTH 1995-2009 BY HMA AND LOCAL AUTHORITY	172

TABLE 54:	CE FORECAST EMPLOYMENT GROWTH 2013-36 BY HMA AND LOCAL AUTHORITY	173
TABLE 55:	SCENARIO A: FORECAST EMPLOYMENT GROWTH 2013-36 BY HMA AND LOCAL AUTHORITY	189
TABLE 56:	SCENARIO B: TOTAL EMPLOYMENT GROWTH 1992-2009 BY HMA AND LOCAL AUTHORITY	189
TABLE 57:	SCENARIO C: TOTAL EMPLOYMENT GROWTH 1995-2009 BY HMA AND LOCAL AUTHORITY	190
TABLE 58:	SCENARIO D: TOTAL EMPLOYMENT GROWTH BASED ON PEAK TO PEAK TREND (1990-2008) BY HMA AND LOCAL AUTHORITY	190
TABLE 59:	EXPECTED EMPLOYMENT GROWTH LEVELS/ DISTRIBUTION	195
TABLE 60:	COMMUTING PATTERNS IN THE STUDY AREA AND LOCAL AUTHORITIES (2011)	197
TABLE 61:	JOBS GROWTH AND CHANGE IN RESIDENT WORKFORCE (2013-36) – CE	199
TABLE 62:	EMPLOYMENT RATES BY AGE AND SEX	200
TABLE 63:	HOUSING NEED TO MEET JOB GROWTH FORECASTS (WITH 2012-BASED CLG HEADSHIP RATES)	202
TABLE 64:	LOWER QUARTILE SALES PRICES BY TYPE (2014)	208
TABLE 65:	LOWER QUARTILE PRIVATE RENTS BY SIZE AND LOCATION (YEAR TO SEPTEMBER 2014) – PER MONTH	208
TABLE 66:	BROAD RENTAL MARKET AREAS WITHIN BERKSHIRE AND SOUTH BUCKS	209
TABLE 67:	MAXIMUM LHA PAYMENTS BY SIZE AND BRMA (PER MONTH)	210
TABLE 68:	MONTHLY SOCIAL RENT LEVELS (GENERAL NEEDS HOUSING ONLY)	210
TABLE 69:	ESTIMATED AFFORDABILITY THRESHOLDS USING A RESIDUAL INCOME METHOD AND COMPARING WITH REGIONAL AND NATIONAL BENCHMARKS	212
TABLE 70:	HOUSEHOLD INCOME BY LOCAL AUTHORITY AND HMA (MID-2014 ESTIMATES)	216
TABLE 71:	MAIN SOURCES FOR ASSESSING THE CURRENT UNMET NEED FOR AFFORDABLE HOUSING	219
TABLE 72:	ESTIMATED NUMBER OF HOUSEHOLDS LIVING IN UNSUITABLE HOUSING (STUDY AREA – 2013)	220
TABLE 73:	ESTIMATED NUMBER OF HOUSEHOLDS LIVING IN UNSUITABLE HOUSING (2013 – HMAS AND LOCAL AUTHORITIES)	221

TABLE 74:	UNSUITABLE HOUSING BY TENURE AND NUMBERS TO TAKE FORWARD INTO AFFORDABILITY MODELLING (STUDY AREAS) – 2013	222
TABLE 75:	ESTIMATED CURRENT AFFORDABLE HOUSING NEED (2013)	223
TABLE 76:	ESTIMATED LEVEL OF AFFORDABLE HOUSING NEED FROM NEWLY FORMING HOUSEHOLDS (PER ANNUM) – 2013-36	224
TABLE 77:	ESTIMATED LEVEL OF HOUSING NEED FROM EXISTING HOUSEHOLDS (PER ANNUM)	225
TABLE 78:	ANALYSIS OF PAST SOCIAL/AFFORDABLE RENTED HOUSING SUPPLY (PER ANNUM – BASED ON DATA FOR THE 2012-14 PERIOD)	226
TABLE 79:	SUPPLY OF AFFORDABLE HOUSING	227
TABLE 80:	ESTIMATED LEVEL OF AFFORDABLE HOUSING NEED (2013-36) – STUDY AREAS	227
TABLE 81:	ESTIMATED LEVEL OF AFFORDABLE HOUSING NEED PER ANNUM – BY HMA AND LOCAL AUTHORITY	228
TABLE 82:	ESTIMATED LEVEL OF AFFORDABLE HOUSING NEED (PER ANNUM) AT VARIANT INCOME THRESHOLDS	229
TABLE 83:	PIPELINE SUPPLY OF AFFORDABLE HOMES AND REVISED NET AFFORDABLE HOUSING NEED	230
TABLE 84:	AFFORDABLE NEED AS % DEMOGRAPHIC-BASED PROJECTIONS	233
TABLE 85:	GROSS NEED FOR INTERMEDIATE AFFORDABLE HOUSING (PER ANNUM)	239
TABLE 86:	POST PERMISSION RESIDENTIAL LAND VALUE ESTIMATES, PER HECTARE	247
TABLE 87:	AVERAGE HOUSE PRICES IN THE HOUSING MARKET AREA (2014)	248
TABLE 88:	ABSOLUTE AND PERCENTAGE CHANGE IN MEDIAN HOUSE PRICES (1997-2013)	250
TABLE 89:	ABSOLUTE AND PERCENTAGE CHANGE IN MEDIAN HOUSE PRICES (1997-2013)	252
TABLE 90:	AVERAGE, MEDIAN AND LOWER QUARTILE RENTAL PRICES (YEAR TO MARCH 2015)	259
TABLE 91:	AFFORDABILITY RATIOS, 2013	269
TABLE 92:	RENTAL AFFORDABILITY (2014)	270
TABLE 93:	CHANGE IN CONCEALED HOUSEHOLDS (2001 -2011)	273
TABLE 94:	CHANGES IN OVER OCCUPIED HOUSES AND SHARED DWELLINGS (2001-2011)	274

TABLE 95:	CHANGE IN NET HOUSING STOCK (2001/2 – 2013/14)	275
TABLE 96:	ADJUSTMENTS TO IMPROVE AFFORDABILITY (PER ANNUM)	281
TABLE 97:	ESTIMATED PROFILE OF ACCOMMODATION TYPE IN 2013 BY SIZE – BERKSHIRE AND SOUTH BUCKS	286
TABLE 98:	ESTIMATED PROFILE OF ACCOMMODATION TYPE IN 2013 BY SIZE – WESTERN BERKSHIRE HMA	286
TABLE 99:	ESTIMATED PROFILE OF ACCOMMODATION TYPE IN 2013 BY SIZE – EASTERN BERKS & SOUTH BUCKS HMA	287
TABLE 100:	ESTIMATED SIZE OF ACCOMMODATION TYPE NEEDED 2013 TO 2036 – MARKET HOUSING – BERKSHIRE AND SOUTH BUCKS	288
TABLE 101:	ESTIMATED SIZE OF ACCOMMODATION TYPE REQUIRED 2013 TO 2036 – MARKET HOUSING – WESTERN BERKSHIRE HMA	289
TABLE 102:	ESTIMATED SIZE OF ACCOMMODATION TYPE REQUIRED 2013 TO 2036 – MARKET HOUSING – EASTERN BERKS & SOUTH BUCKS HMA	289
TABLE 103:	ESTIMATED SIZE OF ACCOMMODATION TYPE REQUIRED 2013 TO 2036 – AFFORDABLE HOUSING – BERKSHIRE AND SOUTH BUCKS	290
TABLE 104:	ESTIMATED SIZE OF ACCOMMODATION TYPE REQUIRED 2013 TO 2036 – AFFORDABLE HOUSING – WESTERN BERKSHIRE HMA	291
TABLE 105:	ESTIMATED SIZE OF ACCOMMODATION TYPE REQUIRED 2013 TO 2036 – AFFORDABLE HOUSING – EASTERN BERKS & SOUTH BUCKS HMA	292
TABLE 106:	ESTIMATED DWELLING REQUIREMENT BY NUMBER OF BEDROOMS (2013 TO 2036) – BERKSHIRE AND SOUTH BUCKS	292
TABLE 107:	ESTIMATED SIZE OF ACCOMMODATION REQUIRED BY NUMBER OF BEDROOMS (2013 TO 2036) – MARKET SECTOR	295
TABLE 108:	ESTIMATED SIZE OF ACCOMMODATION REQUIRED BY NUMBER OF BEDROOMS (2013 TO 2036) – AFFORDABLE SECTOR	296
TABLE 109:	OLDER PERSON POPULATION (2013)	299
TABLE 110:	PROJECTED CHANGE IN POPULATION OF OLDER PERSONS (2013 TO 2036)	300
TABLE 111:	OLDER PERSON (+65) HOUSEHOLDS (CENSUS 2011)	301
TABLE 112:	OLDER PERSON HOUSEHOLDS WITH OCCUPANCY RATING OF +2 OR MORE BY TENURE (STUDY AREA)	305
TABLE 113:	OLDER PERSON HOUSEHOLDS WITH OCCUPANCY RATING OF +2 OR MORE BY TENURE – BY LOCAL AUTHORITY	306

TABLE 114:	ESTIMATED POPULATION CHANGE FOR RANGE OF HEALTH ISSUES (2013 TO 2036)	307
TABLE 115:	CURRENT SUPPLY OF SPECIALIST HOUSING FOR OLDER PEOPLE	309
TABLE 116:	PROJECTED NEED FOR SPECIALIST HOUSING FOR OLDER PEOPLE (2013-36)	310
TABLE 117:	PROJECTED NEED FOR OLDER PERSONS ACCOMMODATION (INCLUDING SPECIALIST HOUSING) – BY BROAD TENURE (2013-36)	314
TABLE 118:	POTENTIAL NEED FOR RESIDENTIAL CARE HOUSING	315
TABLE 119:	HOUSEHOLDS AND PEOPLE WITH LONG-TERM HEALTH PROBLEM OR DISABILITY (2011)	317
TABLE 120:	ESTIMATED CHANGE IN POPULATION WITH LTHPD (2013-36)	320
TABLE 121:	BLACK AND MINORITY ETHNIC POPULATION (2011)	322
TABLE 122:	BLACK AND MINORITY ETHNIC POPULATION (2011)	323
TABLE 123:	CHANGE IN BME GROUPS 2001 TO 2011 (BERKSHIRE/SOUTH BUCKS)	324
TABLE 124:	CHANGE IN NON-WHITE (BRITISH/IRISH) POPULATION – 2001-11	325
TABLE 125:	HOUSEHOLDS WITH DEPENDENT CHILDREN (2011)	331
TABLE 126:	ESTIMATED CHANGE IN POPULATION AGED 15 AND UNDER (2013-36)	332
TABLE 127:	AVERAGE MOD PERSONNEL (2011-2015)	336
TABLE 128:	ESTIMATED CHANGE IN HOUSEHOLDS HEADED BY SOMEONE AGED UNDER 35 (2013-36) – USING 2012-BASED CLG HOUSEHOLD FORMATION RATES	338
TABLE 129:	ESTIMATED CHANGE IN HOUSEHOLDS HEADED BY SOMEONE AGED UNDER 35 (2013-36) – USING 2012-BASED CLG HOUSEHOLD FORMATION RATES AND A ‘MARKET SIGNALS’ UPLIFT	339
TABLE 130:	HOUSEHOLDS WITH NON-DEPENDENT CHILDREN (2011)	340
TABLE 131:	STUDENT NUMBERS AT THE UNIVERSITY OF READING	348
TABLE 132:	AVAILABILITY OF CUSTOM/SELF BUILD PLOTS (OCTOBER 2015)	350
TABLE 133:	2012-BASED HOUSEHOLD PROJECTIONS, 2013-36	357
TABLE 134:	SENSITIVITY ANALYSIS – TREND-BASED DEMOGRAPHIC PROJECTIONS – HOUSING NEED PER YEAR, 2013-36	358
TABLE 135:	EXPECTED EMPLOYMENT GROWTH LEVELS/ DISTRIBUTION	361

TABLE 136:	DEMOGRAPHIC/ECONOMIC LED HOUSING NEED (PER ANNUM) – 2013- 2036	363
TABLE 137:	ESTIMATED LEVEL OF AFFORDABLE HOUSING NEED PER ANNUM – BY LOCAL AUTHORITY (AFFORDABLE HOMES PER ANNUM)	364
TABLE 138:	UPLIFTS TO IMPROVE AFFORDABILITY	367
TABLE 139:	CONCLUSIONS ON FULL OBJECTIVELY-ASSESSED HOUSING NEED BY OAN, 2013-36	369
TABLE 140:	RECOMMENDED HOUSING MIX – WESTERN BERKSHIRE HMA	370
TABLE 141:	RECOMMENDED HOUSING MIX – EASTERN BERKS AND SOUTH BUCKS HMA	370
TABLE 142:	NEED FOR SPECIALIST HOUSING FOR OLDER PERSONS, 2013-36	373
TABLE 143:	NEED FOR RESIDENTIAL CARE HOUSING	374

Appendices

APPENDIX A:	LIST OF ABBREVIATIONS	376
APPENDIX B:	HOUSEHOLD FORMATION RATES BY AGE IN EACH LOCAL AUTHORITY	378
APPENDIX C:	COMPONENTS OF CHANGE BY LOCAL AUTHORITY (2001/2 – 2012/13)	385
APPENDIX D:	CONSULTATION STATEMENT AND QUALITATIVE EVIDENCE	389

Quality Standards Control

The signatories below verify that this document has been prepared in accordance with our quality control requirements. These procedures do not affect the content and views expressed by the originator.

This document must only be treated as a draft unless it has been signed by the Originators and approved by a Business or Associate Director.

DATE
FEBRUARY 2016

ORIGINATORS
Paul McColgan
Associate Director

APPROVED
Nick Ireland
Director





Limitations

This document has been prepared for the stated objective and should not be used for any other purpose without the prior written authority of GL Hearn; we accept no responsibility or liability for the consequences of this document being used for a purpose other than for which it was commissioned.

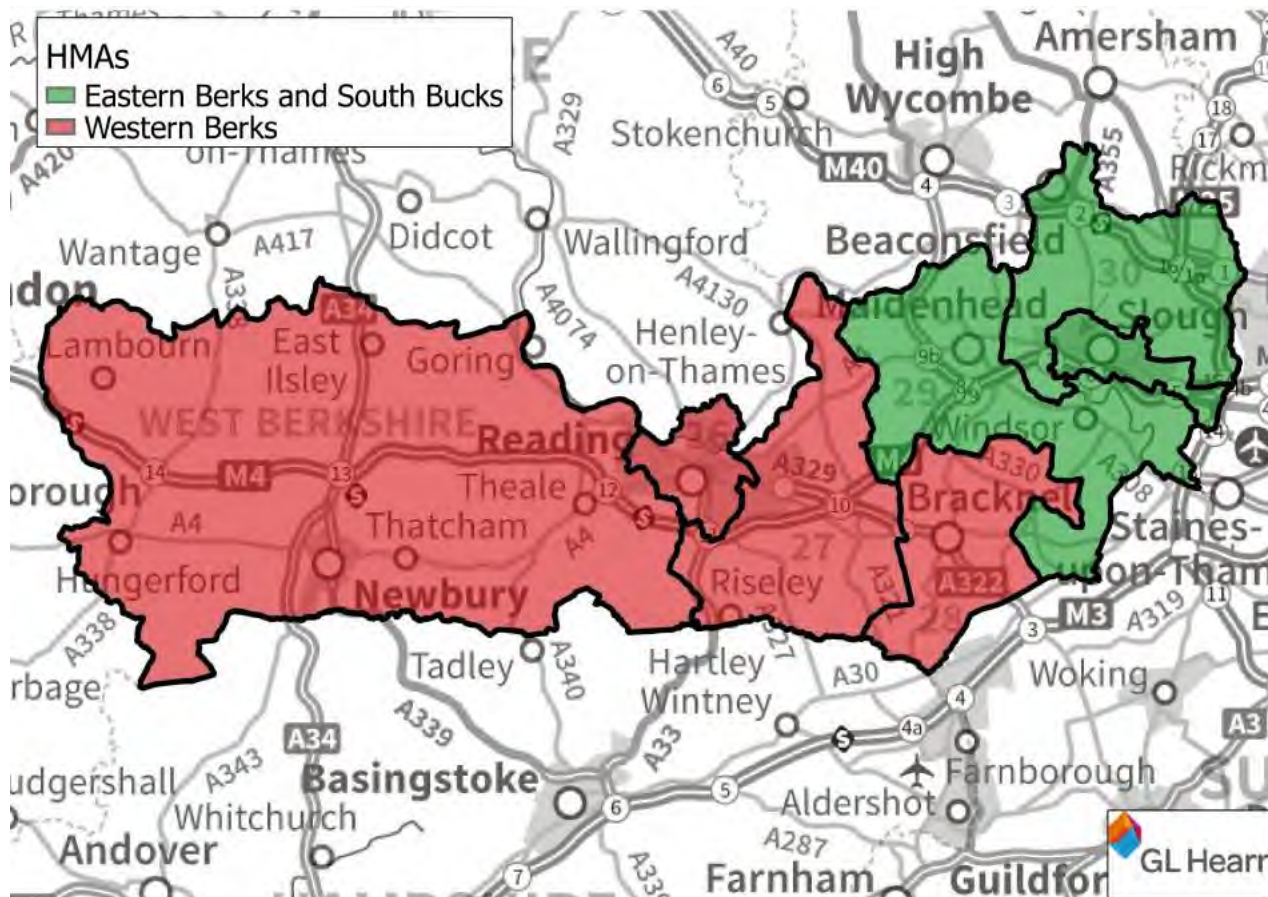
EXECUTIVE SUMMARY

- 1 This Executive Summary sets out the key findings of the Berkshire (including South Bucks) Strategic Housing Market Assessment (SHMA). The SHMA is National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG) compliant.
- 2 The NPPF requires local authorities to “have a clear understanding of housing needs in their area” and that they should prepare a SHMA to “assess their full housing needs”. The SHMA should “identify the scale and mix of housing and the range of tenures that the local population is likely to need over the plan period which:
 - meets household and population projections, taking account of migration and demographic change;
 - addresses the need for all types of housing, including affordable housing and the needs of different groups in the community (such as, but not limited to, families with children, older people, people with disabilities, service families and people wishing to build their own homes); and
 - caters for housing demand and the scale of housing supply necessary to meet this demand”.
- 3 The SHMA considers the objectively assessed need (OAN) for housing. The OAN does not take account of possible constraints to future housing supply including land supply, development constraints and infrastructure. These factors will subsequently be considered by the local authorities as part of the local plan process for individual local authorities before establishing the final housing requirements.

Housing Market Areas

- 4 Initially the SHMA has sought to review Housing Market Area (HMA) geographies taking account of:
 - House prices and rates of change in house prices;
 - Household migration and search patterns; and
 - Contextual data (for example travel to work area boundaries)
- 5 Using a best fit to local authority boundaries, there is strong evidence to support definition of two separate HMAs containing the Berkshire authorities and South Bucks – a Western Berkshire HMA covering Bracknell Forest, Wokingham Borough, Reading Borough and West Berkshire; and an Eastern Berks and South Bucks HMA comprising Slough Borough and the Royal Borough of Windsor and Maidenhead (RBWM) together with South Bucks (see overleaf).

Map of Housing Market Areas



6 The main differences between the HMAs are the links to London and the impact this has on migration, travel to work and house prices. There is also a significant level of self-containment within both HMAs with the Eastern Berks & South Bucks area having a lower level due to its proximity to London and the volume of people moving to and from the capital.

Assessing Housing Need

7 The PPG paragraph 15 (ID: 2a-015-20140306) sets out that household projections published by the Department of Communities and Local Government (CLG) should provide the starting point estimate of overall housing need. The latest official household projections currently available are the CLG 2012-based Household Projections. The PPG emphasises the use of the latest official projections, as they are based on a nationally consistent methodology and assumptions.

8 The projections are trend-based and the PPG outlines that the SHMA needs to consider whether it is sustainable to plan on the basis of past trends, or whether wider evidence suggests that the level of housing provision (in the absence of development constraints) should be adjusted to take account of:

- Employment trends
- Market signals
- Need for affordable housing

- 9 Broadly, the process of deriving an objective assessment of housing need starts with a consideration of the suitability of published demographic projections and makes adjustments if these seem unreasonable. We next consider whether the level of demographic growth is likely to constrain local economic growth based on employment trends or forecasts. The PPG sets out that employment trends should be considered in order to assess whether an alternative level or distribution of housing provision is necessary to support economic growth.
- 10 Finally, we also consider whether housing provision should be adjusted upwards to improve the affordability of market housing or to reflect affordable housing need. The SHMA seeks to follow this approach. We have summarised each of these steps, and how this is brought together to define overall housing need.
- 11 The Table below outlines the level of housing need shown by the Department of Communities and Local Government (CLG) 2012-based Household Projections (as updated to take account of 2013 Mid-Year Population Estimates). The conversion to homes per annum reflects a level of vacancy within the housing stock.

2012-based Household Projections, 2013-36

	Population Growth, 2013-36	Household Growth, 2013-36	Household Growth per Annum	Homes per Annum
West Berkshire	12.4%	11,910	518	537
Reading	11.4%	11,875	516	541
Wokingham	17.1%	15,095	656	680
Bracknell Forest	18.9%	11,995	522	535
Western Berkshire HMA	14.7%	50,875	2,212	2,293
RBWM	17.3%	14,474	629	657
Slough	24.1%	19,662	855	875
South Bucks	21.4%	7,450	324	339
Eastern Berks & South Bucks HMA	20.8%	41,586	1,808	1,871
Study area	17.0%	92,461	4,020	4,164

- 12 A need for 2,293 homes per year in the Western Berkshire HMA is identified; with a need for 1,871 homes per annum in the Eastern Berks and South Bucks HMA over the 2013-36 period. Sensitivity analysis has been undertaken to consider longer-term migration trends (over 10 and 12 years), and the potential implications of Unattributable Population Change (UPC).

Sensitivity Analysis – Trend-based Demographic Projections – Housing Need per Year

	10 Year Migration	12 Year Migration	SNPP with UPC Adjustment	London Sensitivity Analysis
West Berkshire	563	493	528	551
Reading	551	425	1,018	609
Wokingham	818	727	212	698
Bracknell Forest	579	546	294	559
Western Berkshire HMA	2,511	2,192	2,051	2,417
RBWM	713	668	633	658
Slough	1,019	908	1,199	865
South Bucks	343	311	319	330
Eastern Berks and South Bucks HMA	2,075	1,887	2,151	1,853
Study Area	4,586	4,079	4,202	4,270

- 13 GL Hearn consider that the updated Sub-National Population Projections and associated CLG Household Projections provide a sound starting point for assessing housing need, based on past demographic trends. However, there was some merit in the sensitivity analysis that considered the migration trends to/from London. This takes account of the Greater London Authority's (GLA) planning assumptions in the Further Alterations to the London Plan (FALP) which expects out-migration from London to increase as the economy and housing market recover, post-recession.
- 14 Our calculations suggest that an adjustment to the demographic baseline in the order of 124 homes per annum across the Western Berkshire HMA would be appropriate to meet this need. This can be disaggregated on the following basis:
- West Berkshire – 14 homes per annum
 - Reading – 68 homes per annum
 - Wokingham – 18 homes per annum
 - Bracknell Forest – 24 homes per annum
- 15 This is considered to be the most appropriate demographic based assessment of housing need.

Employment Growth

- 16 The SHMA has also considered the interaction between potential employment growth and housing need. In doing so we have considered historic employment trends across a number of timeframes as well as Cambridge Econometrics (CE) forecasts. This was augmented using local knowledge of local economic dynamics with regard to how these are likely to influence demand.
- 17 We have included forecasts for each of the local authorities. In drawing conclusions on what scale of employment growth is potentially reasonable, as a planning assumption, we have sought to take account of:
- Past trends, as shown above; together with the CE projections; and
 - Wider understanding of factors which may affect future performance, in particular where these have not been present 'historically'.

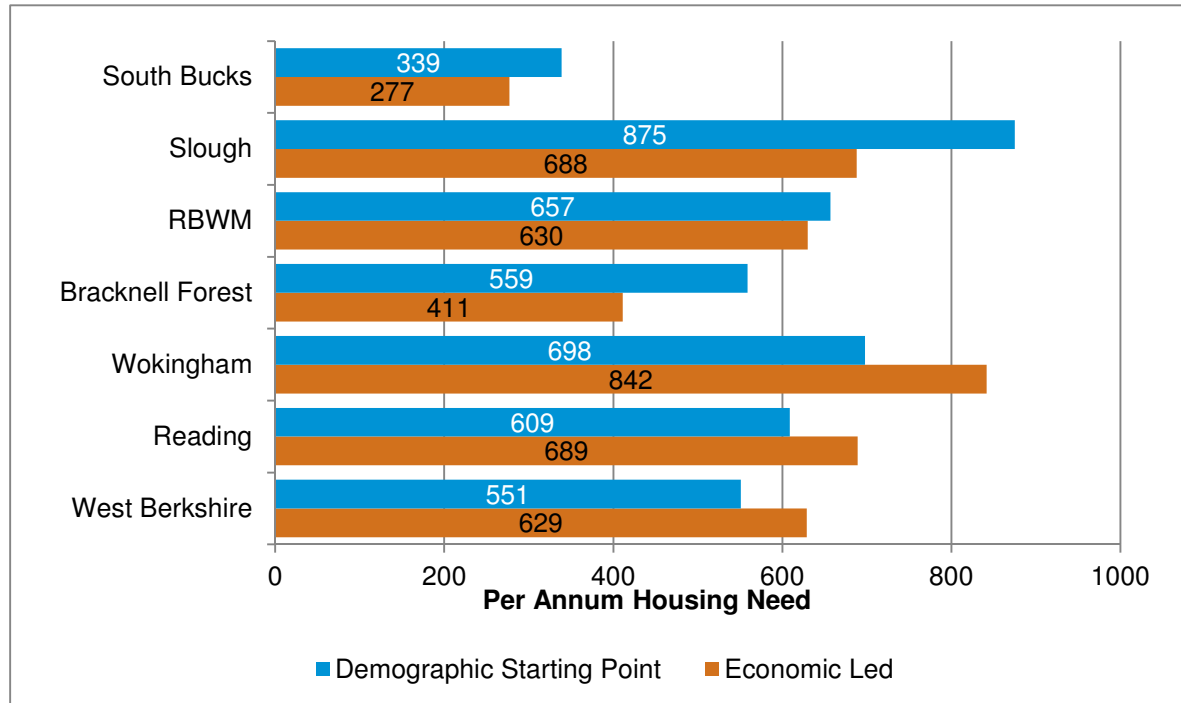
The level of job growth anticipated is set out in the table overleaf.

Expected Employment Growth Levels/ Distribution

Scenario	Employment in '000			Compound Annual Growth Rate
	2013	2036	Change 2013-2036	
Slough	92.9	109.1	16.2	0.7%
RBWM	90.5	103.0	12.5	0.6%
South Bucks	38.6	43.3	4.7	0.5%
Eastern Berks and South Bucks HMA	222.0	255.4	33.4	0.6%
Bracknell Forest	70.5	77.9	7.4	0.4%
Reading	114.8	131.7	16.9	0.6%
West Berkshire	108.0	120.0	12.0	0.5%
Wokingham	83.2	99.9	16.7	0.8%
Western Berkshire HMA	376.5	429.6	53.1	0.6%
Study area	598.5	684.9	86.4	0.6%

- 18 0.6% pa growth is forecast in each of the two HMAs, which is slightly more positive than the baseline CE forecasts (0.5% pa in each). In terms of total numbers, total jobs growth anticipated (3,800 per annum) is slightly higher than the CE forecasts (3,400 pa).
- 19 In relating employment growth and housing need, assumptions have been made regarding people with more than one job, and commuting patterns. On a policy-off basis, the modelling assumes that current levels of double jobbing and the commuting balance are maintained moving forwards. Employment rates are modelled to increase, taking account of recent trends and the added future impetus provided by changes to state pension age.
- 20 The resultant housing needs against those arising from the demographic starting point are set out overleaf. In both cases, the housing needs are derived from household formation rates from the 2012-based projections.

Demographic vs Economic-led Projections for Housing Need



- 21 In the Western Berkshire HMA, the evidence provides some justification for considering higher housing provision to support economic growth. Our calculations suggest that on a local authority level West Berkshire, Wokingham and Reading would (combined) need to increase their housing need by a collective 302 homes per annum.
- 22 However, across the HMA the level of demographic growth is only slightly below the economic need. By assuming that the labour force is mobile across the HMA then the uplift from the demographic growth is minimised. By aligning the uplift to meet the level of housing need required to service the economy across the HMA (2,571 homes per annum) this reduces the overall housing need by 148 dwellings per annum compared to if the uplift was made at an individual local authority level. The revised housing need is set out in the Table overleaf:

Demographic/Economic Led Housing Need (Per Annum) – 2013- 2016

	Demographic / Economic	Economic Uplift
West Berkshire	586	35
Reading	642	33
Wokingham	784	86
Bracknell Forest	559	0
Western Berkshire HMA	2,571	154
RBWM	657	0
Slough	875	0
South Bucks	339	0
Eastern Berks & South Bucks HMA	1,871	0
Study Area	4,166	154

Affordable Housing Need

- 23 An assessment of affordable housing need has been undertaken, following the methodology in the PPG, to quantify the number of households who require support in meeting their housing needs.
- 24 The affordable housing needs model looks at the balance between needs arising and the supply of affordable housing. As set out in the table below, there is a net need from 2,537 households per annum who require support in meeting their housing needs, comprising 1,263 households per annum in the Western Berkshire HMA and 1,273 households per annum in the Eastern Berks and South Bucks HMA. This level of need can be reduced to take into account the historic delivery and the pipeline supply of affordable housing.

Estimated level of Affordable Housing Need per annum – by Local Authority (Affordable Homes per annum)

Area	Current need	Newly forming households	Existing households falling into need	Total Need	Supply	Net Need
West Berkshire	44	393	208	645	457	189
Reading	105	522	343	970	564	406
Wokingham	42	477	76	594	153	441
Bracknell Forest	40	426	135	601	374	227
Western Berkshire HMA	231	1,818	762	2,810	1,548	1,263
RBWM	68	548	154	769	335	434
Slough	180	743	282	1,205	534	671
South Bucks	29	207	51	287	120	167
Eastern Berks & South Bucks HMA	277	1,498	487	2,261	988	1,273
Study area	508	3,315	1,248	5,072	2,535	2,537

- 25 There have been a number of notable high court judgements relating to Affordable Housing Need and its relationship with OAN. The most recent judgement is clear that an assessment of affordable housing need should be carried out, but that the level of affordable need shown by analysis does not have to be met in full within the assessment of the OAN.
- 26 In interpreting the relationship between affordable need and total housing provision, it is important to understand the basis of the affordable housing needs model. As the PPG sets out, the calculation of affordable need involves “adding together the current unmet housing need and the projected future housing need and then subtracting this from the current supply of affordable stock.” The affordable housing need does therefore not represent an assessment of what proportion of additional households might require affordable housing. Instead the model considers:
- What need can be expected to arise from both existing and newly-forming households who require financial support to access suitable housing;
 - This is then compared with the projected supply of affordable housing expected to arise from the turnover of existing stock, and affordable housing in the development pipeline.
- 27 The affordable housing model thus includes supply-side factors. The net need figures derived are influenced by the current stock of affordable housing and turnover of this. This has been influenced by past policies and investment decisions (at both the national and local levels). Funding mechanisms for affordable housing have influenced past delivery, which in turn influence the need today.
- 28 It is also important to recognise that the model includes needs arising from both new households and existing households. Part of the needs included are from households who might require an additional home, such as:
- Newly-forming households;
 - Those in temporary accommodation;
 - Concealed households; and
 - Homeless households.
- 29 These figures also include needs arising from households who will require a different form of home, but who – by moving to another property – would release an existing property for another household. On this basis, these elements of the affordable housing need are not directly relevant to considering overall housing need and housing targets (which are typically measured in terms of net dwellings).
- 30 In considering the overall need for housing, only those who are concealed or homeless would result in potentially an additional need for housing. Numbers of newly-forming households in the modelling are established specifically from the demographic projections.

Market Signals

- 31 The market signals analysis highlights a fundamental shift in housing market conditions nationally since 2007, particularly in relation to confidence and credit availability.
- 32 Housing market conditions have been relatively stable over the past few years but sales market activity has been low. Housing costs in Berkshire and South Bucks, for both purchasing and renting, are generally higher than (and increasingly diverging from) the wider comparators. Affordability pressures across both HMAs are also significant.
- 33 The median and lower quartile costs of market housing are on average around nine times the equivalent earnings. There has also been a large shift in the tenure profile across both HMAs - with a notable reduction in the number of homeowners with a mortgage or loan and a similarly significant growth in the Private Rented Sector. We have also seen increased levels of concealed households, people living in shared and overcrowded households.

- 34 Overall, the analysis of market signals clearly points to affordability pressures across both HMAs, although in particular the Eastern Berks and South Bucks HMA. It would therefore be appropriate to consider an upward adjustment to the demographic assessment of housing need to improve affordability over time.

Improving Affordability

- 35 The PPG outlines that adjustments to the assessed housing need should be made where evidence points to particular affordability issues, or a supply-demand imbalance. It does not however set out how such an adjustment should be quantified. It simply sets out that it should be 'reasonable.'
- 36 GL Hearn considers that in respect of demographics, the key impact of an improvement in affordability and affordable housing delivery would be an increase in younger households' ability to form, and associated reduction in young people in shared accommodation or living with parents.
- 37 To consider what scale of adjustment should be made, we have sought to use the demographic analysis to assess the degree to which household formation levels have been constrained for younger age groups, and what scale of adjustment to housing provision would be necessary for these to improve.
- 38 The uplift is a two-step process with the first improvement made to reverse the expected decrease in future household formation rates built into the 2012-based household projections. The next step is to quantify the resultant housing need if (for the same population) household formation rates improved to the levels seen in each local authority in 2011. The result is an additional 350 households forming which require an additional 364 dwellings across the Study Area (see Table below).

Uplifts to Improve Affordability

	Reversing Suppressed Household Formation	Improving Affordability
West Berkshire	32	47
Reading	0	57
Wokingham	0	72
Bracknell Forest	32	44
Western Berkshire HMA	64	220
RBWM	0	55
Slough	0	52
South Bucks	0	37
Eastern Berks & South Bucks HMA	0	144
Study Area	64	364

- 39 The uplift to the OAN on the basis of market signals effectively takes into account the historic (pre-2013) unmet need in each local authority. As this is a response to an historic supply and demand imbalance any further uplift to address historic under delivery would in effect be double counting. This approach aligns to the high court decision in the Zurich Assurance V Winchester case¹.

¹ <http://www.winchester.gov.uk/news/2014/mar/high-court-rejects-zurich-assurance/>

Conclusions regarding Objectively-Assessed Housing Need

- 40 The NPPF sets out that local authorities should seek to meet housing need within their areas where it is sustainable to do so and consistent with policies within the Framework. The Framework however affords significant protection to Green Belt and other designations including SSSI, SAC, SPA, RAMSAR etc. Although, Green Belt is protected this does not stop a review process if there is a clear long-term need.
- 41 Taking account of the demographic projections, adjustments to migration from London, the need of the local economies, adjustments to take into account future reductions in Household Formation Rates (HFR) and adjustments to improve affordability, the SHMA draws the following conclusions on the overall full objectively assessed need for housing over the 2013-36 period:
- Western Berkshire HMA – 2,855 homes per annum
 - Eastern Berks and South Bucks HMA – 2,015 homes per annum
- 42 The origins of the conclusions on housing need are displayed in the table below. These figures would include the provision of affordable homes as part of the overall housing delivery.

Conclusions on Full Objectively Assessed Housing Need by Local Authority and HMA, 2013-36

	2012-based Household Projection	London Uplift	Economic Uplift	Reversing Suppressed Household Formation	Improving Affordability	OAN
West Berkshire	537	14	35	32	47	665
Reading	541	68	33		57	699
Wokingham	680	18	86		72	856
Bracknell Forest	535	24	0	32	44	635
Western Berkshire HMA	2,293	124	154	64	220	2,855
RBWM	657		0		55	712
Slough	875		0		52	927
South Bucks	339		0		37	376
Eastern Berks & South Bucks HMA	1,871		0	0	144	2,015
Study Area	4,164	124	154	64	364	4,870

- 43 The assessment of housing need above does not include any provision from meeting unmet needs of adjoining areas. The NPPF outlines that local plans should seek “to meet objectively assessed development and infrastructure requirements, including unmet requirements from neighbouring authorities where it is reasonable to do so”.
- 44 The assessment of housing need herein is undertaken on a “policy off” basis. In translating this into policy targets for housing provision, a range of wider considerations need to be brought together through the plan-making process – bringing evidence of housing need together with consideration of land availability, infrastructure capacity and development needs, and development constraints. It is for the plan itself to consider what level of housing provision can be sustainably accommodated within the District. Input from a range of stakeholders through consultation on the plan will be an important input to this.

- 45 In moving forward with plan preparation, should “policy on” strategies for economic growth deviate from the projections considered herein, it may be necessary to adjust housing provision to achieve a balance between housing and economic growth.

Housing Mix

- 46 There are a range of factors which will influence demand for different sizes of homes, including demographic changes; future growth in real earnings and households’ ability to save; economic performance and housing affordability. The SHMA concludes that the following represents an appropriate mix of affordable and market homes across the study area for the 2013-36 period:

Recommended Housing Mix – Western Berkshire HMA

	1-bed	2-bed	3-bed	4+ bed
Market	5-10%	25-30%	40-45%	20-25%
Affordable	30-35%	30-35%	25-30%	5-10%
All dwellings	15%	30%	35%	20%

Recommended Housing Mix – Eastern Berks and South Bucks HMA

	1-bed	2-bed	3-bed	4+ bed
Market	5-10%	25-30%	40-45%	20-25%
Affordable	35-40%	25-30%	25-30%	5-10%
All dwellings	15%	30%	35%	20%

- 47 Our conclusions for affordable housing mix recognise the role which the delivery of larger properties can play in releasing the supply of smaller properties for other households; together with the limited flexibility which one-bed properties offer to changing household circumstances which feed through into higher turnover and management issues. Based on the evidence, we would expect the focus of new market housing provision to be on two and three-bed properties. The mix identified for both market and affordable housing takes account of changes in the population structure, including potential for some older households to downsize to take account of their changing needs.
- 48 At a local authority level, the Councils should bring together evidence from the detailed modelling for their areas with the HMA-wide conclusions, alongside issues regarding management of the affordable housing stock within their area in setting policies for the future mix of housing.
- 49 In applying policies on housing mix to individual development sites regard should be had to the nature of the development site and character of the area, and to up-to-date evidence of need as well as the existing mix and turnover of properties at the local level.
- 50 In respect of the need for different types of affordable housing, the SHMA has considered what households can afford; together with the supply through re-lets of existing housing stock. The evidence suggests that a quarter of the affordable housing need could be met through intermediate housing products. The need for intermediate housing has been calculated on the basis of the proportion of households in need of affordable housing who can afford more than 80% of market rent levels.

Needs for Specific Groups

- 51 The SHMA indicates that the population of persons aged over 65 accounted for 15% of the population in the study area in 2013. The number of residents aged over 65 is expected to grow by 74% between 2013-36, with 70% growth in those aged between 75-84 and 170% growth in those aged over 85 expected – principally because of improving health and life expectancy.
- 52 As a result of a growing older population and increasing life expectancy, the SHMA projects an increase of 10,100 people with dementia and 24,200 people with mobility problems over the 2013-36 period. Some of these households will require adaptations to properties to meet their changing needs; whilst others may require more specialist accommodation or support.
- 53 There are currently about 8,300 units of specialist housing for older persons in the two HMAs. Based principally on the expected growth in population of older persons, the SHMA estimates a need for an additional 10,900 specialist dwellings for older persons over the 2013-36 period.
- 54 The modelling is based on an increase in local prevalence rates (i.e. the number of specialist dwellings per head of population) towards national averages. An indicative split of specialist housing provision for older persons of 13% affordable, 87% market housing is recommended.
- 55 The SHMA indicates a net need for 3,462 bedspaces for older persons in registered care provision across the study area over the 2013-36 period, equivalent to 151 per annum.

1 INTRODUCTION

1.1 GL Hearn (GLH), Justin Gardner Consulting (JGC) and Wessex Economics have been commissioned by the Berkshire unitary authorities to develop a Strategic Housing Market Assessment (SHMA) for the relevant housing market areas, which include the Berkshire unitary authorities. The purpose of the SHMA is to develop a robust understanding of housing market dynamics, to provide an assessment of future needs for both market and affordable housing and the housing needs of different groups within the population over the 2013-2036 period.

1.2 The remainder of this SHMA report is structured as follows:

- Chapter 2 – Sets out our rationale and definition of the Berkshire Housing Market Areas;
- Chapter 3 – Provides a socio-demographic profile of the Housing Market Area;
- Chapter 4 – Calculates the demographic starting point for the objective assessment of need (OAN);
- Chapter 5 – Reviews the economic prospects of the area and translates this into housing need
- Chapter 6 – Calculates the affordable housing need in the study area and for each local authority;
- Chapter 7 – Examines the local housing market signals across the study area and whether there is a need to move away from economic and demographic estimations of need;
- Chapter 8 – Disaggregates the need by tenure and size of dwellings;
- Chapter 9 – Reviews the needs of the population;
- Chapter 10 – Provides a summary to the report and conclusions relating to the overall housing need.

1.3 It should be noted at the outset that the SHMA does not set any housing requirements for individual local authorities. It provides an objective assessment of the need for housing, making no judgements regarding future policy decisions that the local authorities may take. Housing requirements for individual local authorities will be set through the local plan process. These will need to be informed by the SHMA but will also take into account a range of other evidence, including those relating to land supply, green belt, other development constraints (such as flooding, AONB, SSSI etc.) and infrastructure including decisions relating to Heathrow and the longer term impact of Crossrail.

1.4 This SHMA responds to and is compliant with the requirements of both the National Planning Policy Framework (the NPPF)² and the Planning Practice Guidance (PPG) first launched in March 2014³ and subject to on-going updates. This study reflects the content of the PPG as it stood in February 2015. It provides an assessment of the future need for housing, with the intention that this will inform future development of planning policies. According to the PPG paragraph 3 (ID: 2a-003-20140306), housing need:

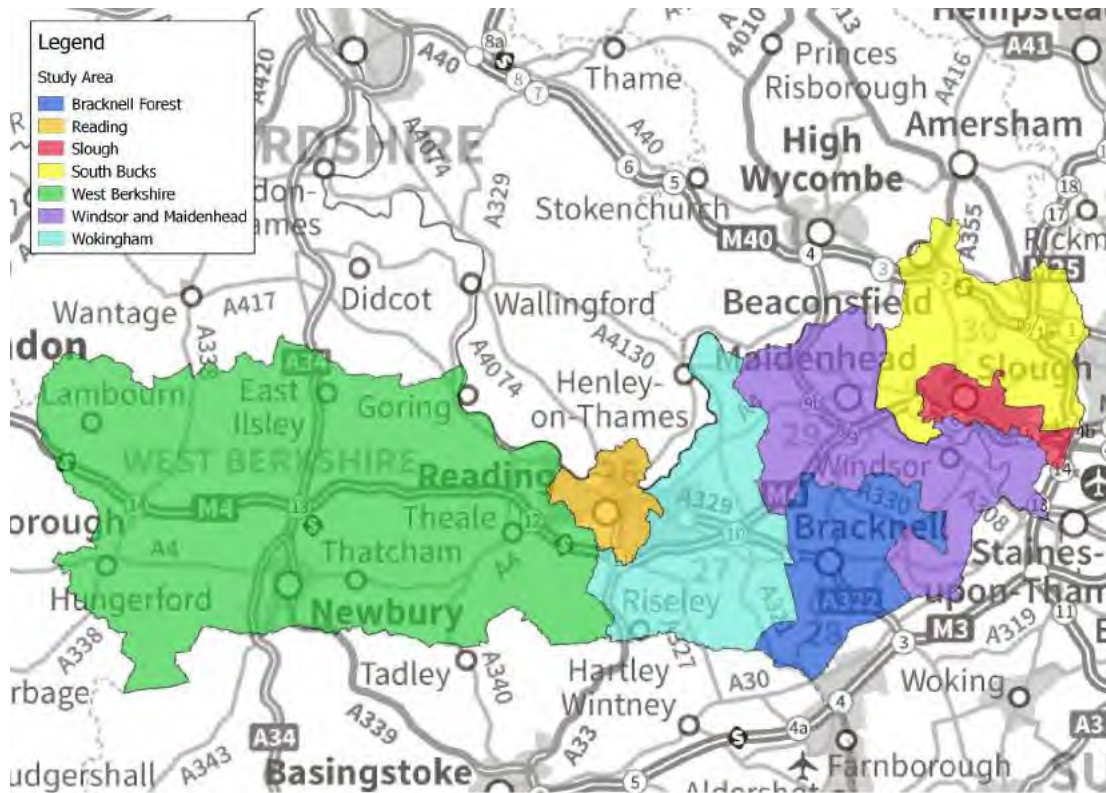
² CLG (March 2012) *National Planning Policy Framework*

³ CLG (March 2014) *Planning Practice Guidance – Assessment of Housing and Economic Development Needs*

“refers to the scale and mix of housing and the range of tenures that is likely to be needed in the housing market area over the plan period – and should cater for the housing demand of the area and identify the scale of housing supply necessary to meet that demand.”

1.5 The SHMA covers the unitary authorities that fall within Berkshire⁴ who commissioned its preparation. It also deals with housing need in South Buckinghamshire District Council (South Bucks) which is identified as falling within the Eastern Berkshire Housing Market Area (HMA). This SHMA provides updated analysis to that contained in the previous 2007 Berkshire SHMA and the 2014 RBWM SHMA. It takes account of more recent information, most notably the 2012 Sub-National Population Projections (SNPP) published by the Office for National Statistics (ONS) in May 2014 and 2012-based Household Projections, published by Communities and Local Government in February 2015. For the avoidance of doubt, South Bucks District was not part of the commission group for this study. Since the draft version of the Berkshire SHMA was produced, South Bucks District Council agreed to produce a joint local plan with Chiltern District Council. This decision does not change the functional HMAs identified in the Bucks SHMA (i.e. South Bucks falling into a Berkshire Wide HMA) but provides a pragmatic arrangement for a joint plan area for South Bucks and Chiltern.

Figure 1: Berkshire Local Authorities and South Bucks



Source: GL Hearn, © Crown copyright and database rights 2015 Ordnance Survey 100019153

⁴ Berkshire is comprised of the following unitary authorities: West Berkshire, Reading, Wokingham, Bracknell Forest, RBWM and Slough.

Policy Background

- 1.6 National policies for plan-making are set out within the NPPF. This sets out key policies against which development plans will be assessed at examination and with which they must comply.

National Planning Policy Framework (NPPF)

- 1.7 The NPPF was published in March 2012. Paragraph 14 of the Framework sets a presumption in favour of sustainable development whereby Local Plans should meet objectively assessed development needs, with sufficient flexibility to respond to rapid change, unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits when assessed against the framework as a whole or specific policies within the Framework indicate that development should be restricted.
- 1.8 Paragraph 159 of the NPPF highlights the SHMA as a key piece of evidence in determining housing needs. The paragraph sets out that local planning authorities should *“prepare a Strategic Housing Market Assessment to assess their full housing needs, working with neighbouring authorities where housing market areas cross administrative boundaries. The Strategic Housing Market Assessment should identify the scale and mix of housing and the range of tenures that the local population is likely to need over the plan period which:*
- *Meets household and population projections, taking account of migration and demographic change;*
 - *Addresses the need for all types of housing, including affordable housing and the needs of different groups in the community; and*
 - *Caters for housing demand and the scale of housing supply necessary to meet this demand.”*
- 1.9 This is reaffirmed in the NPPF in Paragraph 50. The SHMA is intended to be prepared for the housing market area, and include work and dialogue with neighbouring authorities where the Housing Market Area (HMA) crosses administrative boundaries.
- 1.10 Paragraph 178 sets out that “public bodies have a duty to cooperate on planning issues that cross administrative boundaries, particularly those which relate to the strategic priorities set out in paragraph 156 (which includes homes). The Government expects joint working on areas of common interest to be diligently undertaken for the mutual benefit of neighbouring authorities.”
- 1.11 Paragraph 181 sets out that Local Planning Authorities (LPAs) will be expected to demonstrate evidence of having effectively cooperated to plan for issues with cross-boundary impacts when their Local Plans are submitted for examination. This highlights the importance of collaborative working and engaging constructively with neighbouring authorities, as required by Section 33A of the 2004 Planning and Compulsory Purchase Act. Housing provision is an important cross-boundary issue.

- 1.12 Paragraph 158 of the NPPF emphasises the integration of the housing, economic and other uses evidence base and policy within individual local plans. Paragraph 17 (bullet point 3) in the NPPF which sets out the Core Planning Principles reaffirms this, and outlines that planning should also take account of market signals, such as land prices and housing affordability. However, it also makes clear that plans must be deliverable.
- 1.13 In regard to housing mix, the NPPF sets out that local authorities should plan for a mix of housing based on current and future demographic trends, market trends and the needs of different groups in the community. Planning authorities should identify the size, type, tenure and range of housing that is required in particular locations reflecting local demand.
- 1.14 In setting affordable housing targets, Paragraph 50 of the NPPF states that to ensure a plan is deliverable, the sites and the scale of development identified in the plan should not be subject to a scale of obligations and policy burdens such that their ability to be developed is threatened; they should support development throughout the economic cycle. The costs of requirements likely to be applied to development, including affordable housing requirements, contributions to infrastructure and other policies in the Plan, should not compromise the viability of development schemes. To address this, affordable housing policies need to be considered alongside other factors including infrastructure contributions – a ‘whole plan’ approach to viability. Paragraph 175 of the NPPF states that where possible local authorities should prepare Community Infrastructure Levy (CIL) charges alongside the local plan.
- 1.15 Paragraph 159 sets out that local authorities should prepare Strategic Housing Land Availability Assessments (SHLAAs) to “establish realistic assumptions about the availability, suitability and the likely economic viability of land” to meet the OAN for the plan period. To boost housing supply, Paragraph 47 of the NPPF sets out that local authorities should be required to maintain a 5-year supply of specific deliverable sites, and to bring forward an allowance of 5% to ensure choice and competition in the market for land (unless there is a persistent track record of under-delivery in which case a 20% buffer is to be included). These 5% and 20% buffers should be brought forward from the future housing supply rather than being added on top of them.

Planning Practice Guidance

- 1.16 Planning Practice Guidance (PPG) was issued by Government in March 2014 and contains guidance on ‘*Housing and Economic Development Needs Assessments*’. This is relevant to this SHMA in that it provides clarity on how key elements of the NPPF should be interpreted, including the approach to deriving an objective assessment housing need. The approach in this report takes account of the PPG.

- 1.17 The PPG Paragraph 3 (in ID ref 2a-003) defines “need” as referring to *‘the scale and mix of housing and the range of tenures that is likely to be needed in the housing market area over the plan period – and should cater for the housing demand of the area and identify the scale of housing supply necessary to meet this need.’*
- 1.18 It sets out that the assessment of need should be realistic in taking account of the particular nature of that area (for example geographical constraints and the nature of the market area), and should be based on future scenarios that could be reasonably expected to occur. It should not take account of supply-side factors or development constraints. Specifically, the PPG paragraph 4 (ID: 2a-004-20140306) sets out that:
- “plan makers should not apply constraints to the overall assessment of need, such as limitations imposed by the supply of land for new development, historical under performance, infrastructure or environmental constraints. However, these considerations will need to be addressed when bringing evidence bases together to identify specific policies within development plans.”*
- 1.19 The PPG (ID-2a-014) outlines that estimating future need is not an exact science and that there is no one methodological approach or dataset which will provide a definitive assessment of need. However, the starting point for establishing the need for housing should be the latest household projections published by the Department for Communities and Local Government (CLG). At the time of preparation of this report the latest projections were the 2012-based Household Projections⁵. It also outlines that the latest Mid-Year Population Estimates (MYEs) should be considered. These are Office for National Statistics (ONS) 2013 MYEs.
- 1.20 It sets out that there may be instances where these national projections require adjustment to take account of factors affecting local demography or household formation rates, including where there is evidence that household formation rates are or have been constrained by supply. It suggests that proportional adjustments should be made where the market signals point to supply being constrained relative to long-term trends or to other areas in order to improve affordability.
- 1.21 Evidence of affordable housing needs is also relevant, with the PPG paragraph 29 (ID: 2a-029-20140306) suggesting that the total affordable housing need should be considered in the context of its likely delivery as a proportion of mixed market and affordable housing. In some instances, it suggests this may provide a case for increasing the level of overall housing provision.
- 1.22 In regard to employment trends, the PPG paragraph 19 (ID: 2a-019-20140306) indicates that job growth trends and/or economic forecasts should be considered having regard to the growth in working-age population in the housing market area. It sets out that: *“where the supply of working age population that is economically active (labour force supply) is less than the projected job growth,*

⁵ 2012- Based Household Projections, CLG, February 2015

this could result in unsustainable commuting patterns (depending on public transport accessibility and other sustainable options such as walking and cycling) and could reduce the resilience of local businesses. In such circumstances, plan makers will need to consider how the location of new housing and infrastructure development could help to address these problems.”

- 1.23 The PPG (ID: 2a-019- -20140306) also states that “The housing need number suggested by household projections (the starting point) should be adjusted to reflect appropriate market signals”. Market signals include land prices, house prices, rents, affordability, rate of development and overcrowding. Paragraph 20 (ID:2a-020 -20140306) sets out that a worsening trend (against appropriate comparisons) in any of these indicators will require upward adjustment to planned housing numbers compared to ones based solely on household projections.
- 1.24 The PPG paragraph 21 (ID: 2a-021-20150326) indicates that the assessment should consider the need for different types of housing and the needs of different groups, including family housing, housing for older people, and households with specific needs and those looking to build their own home. At paragraph 21 (ID:2a-021- 20150326) the PPG sets out that the need for older persons’ housing should be broken down by tenure and type, and should include an assessment of need for residential institutions.

Gallagher Homes vs Solihull Council

- 1.25 This SHMA provides an assessment of overall housing need. In interpreting the findings, it is important to recognise the distinction between housing need and housing targets. Mr Justice Hickinbottom makes clear this distinction in the case of Gallagher Homes Limited & Lioncourt Homes Limited vs Solihull Metropolitan Borough Council⁶. In this he makes a distinction between household projections, the full objective assessment of need for housing and a housing requirement as follows:
- i. *Household projections: These are demographic, trend-based projections indicating the likely number and type of future households if the underlying trends and demographic assumptions are realised.*
 - ii. *Full Objective Assessment of Need for Housing: This is the objectively assessed need for housing in an area, leaving aside policy considerations. It is therefore closely linked to the relevant household projection; but is not necessarily the same. An objective assessment of housing need may result in a different figure from that based on purely demographics if, for example, the assessor considers that the household projection fails properly to take into account the effects of a major downturn (or upturn) in the economy that will affect future housing needs in an area. Nevertheless, where there are no such factors, objective assessment of need may be – and sometimes is – taken as being the same as the relevant household projection.*
 - iii. *Housing Requirement: This is the figure which reflects, not only the assessed need for housing, but also any policy considerations that might require that figure to be manipulated to determine the actual housing target for an area. For example, built development in an area might be*

⁶ http://www.solihull.gov.uk/Portals/0/Planning/CIL/SD18_High_Court_Legal_Challenge_Order_and_Schedule_15052014.pdf

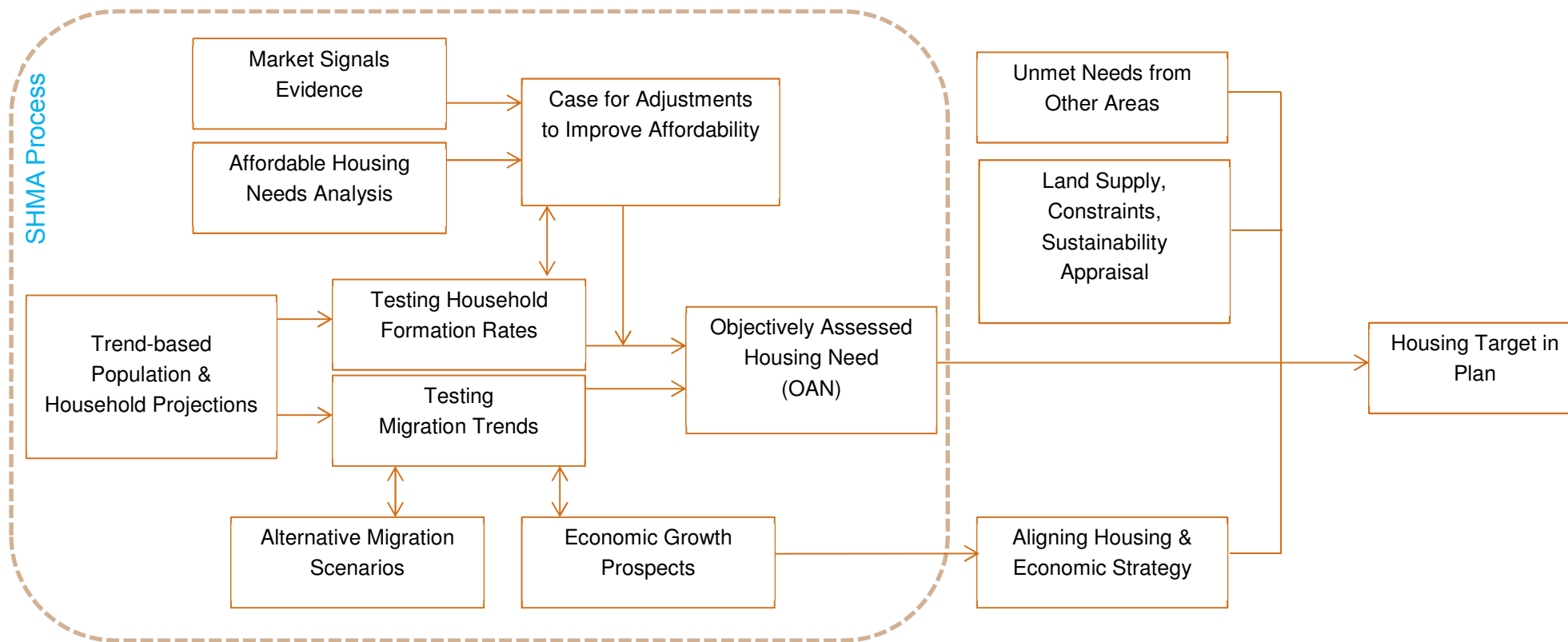
constrained by the extent of land which is the subject of policy protection, such as Green Belt or Areas of Outstanding Natural Beauty. Or it might be decided, as a matter of policy, to encourage or discourage particular migration reflected in demographic trends. Once these policy considerations have been applied to the figure for full objectively assessed need for housing in an area, the result is a “policy on” figure for housing requirement. Subject to it being determined by a proper process, the housing requirement figure will be the target against which housing supply will normally be measured.

- 1.26 The High Court judgement in the Gallagher Homes Limited & Lioncourt Homes Limited vs Solihull Metropolitan Borough Council case is clear that figures for Objectively Assessed Need (OAN) for housing should “leave aside policy considerations.” This is also set out in Paragraph 4 of the PPG (ID: 2a-004-20140306). It is clear that such policy considerations include policy factors or designations which may restrict development, including green belt, as well as land availability and infrastructure provision.

Overview of the Approach to Deriving OAN

- 1.27 Based on the above, the diagram below summarises the approach we have used to deriving conclusions regarding the Objectively-Assessed Need (OAN) for Housing. This summarises the approach used in this report.

Figure 2: Overview of Approach



2 DEFINING THE HOUSING MARKET AREAS

- 2.1 Paragraph 47 of the *National Planning Policy Framework* (NPPF) states that local planning authorities should “use their evidence base to ensure that their Local Plan meets the full, objectively assessed needs for market and affordable housing in the housing market area (HMA), as far as is consistent with the policies set out in this Framework”
- 2.2 The NPPF emphasises that housing need is expected to be assessed for the Housing Market Area, and that development constraints should not be applied to the assessment of need, although these are relevant considerations in bringing together evidence to set policy targets in plans.
- 2.3 Paragraph 10 of the *Planning Practice Guidance* (PPG) relating to Housing and Economic Development Needs Assessments (ID: 2a-010-20140306) outlines what a housing market area is, setting out:

“A housing market area is a geographical area defined by household demand and preferences for all types of housing, reflecting the key functional linkages between places where people live and work. It might be the case that housing market areas overlap.

The extent of the housing market areas identified will vary, and many will in practice cut across various local planning authority administrative boundaries. Local planning authorities should work with all the other constituent authorities under the duty to cooperate⁷.”

- 2.4 Paragraph 159 of the NPPF makes clear that local planning authorities should “prepare a Strategic Housing Market Assessment to assess their full housing needs, working with neighbouring authorities where housing market areas cross administrative boundaries”.

Approach to Defining Housing Market Areas

- 2.5 Planning Practice Guidance (PPG) on *Housing and Economic Development Needs Assessments* was issued by Government in March 2014 (and subsequently revised, with the latest version - dated March 2015 - used to inform analysis herein). The PPG provides a definition of a Housing Market Area (HMA)⁸ and guidance on how this should be defined.

⁷ ID: 2a-011-20140306

⁸ This is not to be confused with SHMA which refers to the Strategic Housing Market Assessment (SHMA) i.e. reports such as this.

2.6 Paragraph 9 of the PPG (ID: 2a-009-20140306) indicates that local planning authorities can use a combination of approaches to identify relevant housing market areas, recognising that there is no single comprehensive source of information. Paragraph 11 of the PPG (ID: 2a-011-20140306) indicates three primary information sources:

- Patterns of house prices and rates of change in house prices, which provide a 'market based' reflection of housing market boundaries;
- Population and household migration flows, which reflect the preferences and the trade-offs made when choosing housing with different characteristics; and
- Contextual data, such as travel to work areas, which reflect the spatial structure of the labour market and the functional relationships between places where people work and live.

2.7 There is no right or wrong answer regarding what weight should be applied to these different factors. Paragraph 009 of the PPG (ID: 2a-009-20140306) says that:

“No single source of information on needs will be comprehensive in identifying the appropriate assessment area; careful consideration should be given to the appropriateness of each source of information and how they relate to one another. For example, for housing, where there are issues of affordability or low demand, house price or rental level analyses will be particularly important in identifying the assessment area. Where there are relatively high or volatile rates of household movement, migration data will be particularly important. Plan makers will need to consider the usefulness of each source of information and approach for their purposes.”

2.8 There are some further practical issues which are dealt with in the recent Planning Advisory Service (PAS) Technical Advice Note on Objectively Assessed Need and Housing Targets⁹. This report, written by Peter Brett Associates (PBA), outlines that in practice, the main indicators used to define HMAs are migration and commuting flows. In Paragraphs 5.5 and 5.6, the report goes on to point out that:

“One problem in drawing boundaries is that any individual authority is usually most tightly linked to adjacent authorities and other physically close neighbours. But each of these close neighbours in turn is most tightly linked to its own closest neighbours, and the chain continues indefinitely.

Therefore, if individual authorities worked independently to define HMAs, almost each authority would likely draw a different map, centred on its own area.”

2.9 Paragraph 5.6 of the PAS Note argues that to address this issue, it is useful to start with a “top down analysis” which looks at the whole country. This is provided by a research study led by the Centre for Urban and Regional Development Studies (CURDS) at Newcastle University to define HMAs across England, which was published by Government in

⁹ *Objectively Assessed Need and Housing Targets: Technical Advice Note, Prepared for the Planning Advisory Service by Peter Brett Associates (July 2015)*

November 2010¹⁰. This has defined a consistent set of HMAs across England based on migration and commuting data from the 2001 Census.

- 2.10 In paragraph 5.10 PBA emphasise that this should be considered only a 'starting point' and should be 'sense-checked' against local knowledge and more recent data, especially on migration and commuting. PBA conclude that more recent data 'should always trump' the national research. GL Hearn agrees with PBA's conclusions in this respect.
- 2.11 Our approach is structured to consider the CURDS geographies, other recent work which has considered housing market geographies in Berkshire and surrounding areas; and to analyse key indicators set out in the PPG.
- 2.12 We have not reviewed retail and school catchment data when defining Housing Market Areas as in our experience these tend to be relatively localised, and whilst they may inform the definition of sub-markets, are less likely to be of use in considering sub-regional housing market geographies. We recognise that retail and school catchments may cut across local authority boundaries¹¹.

Practical Issues

- 2.13 The PPG largely reiterates previous guidance on defining HMAs set out within the CLG's 2007 Advice Note¹² on *Identifying Sub-Regional Housing Market Areas*. There has been effectively no change in guidance, which continues to emphasise that there is no right or wrong answer as to how an HMA should be defined; and confirms that the approach should, in effect, reflect local market characteristics and circumstances.
- 2.14 There is a range of previous work which has been undertaken to define HMAs over the last decade, at national, regional and local levels. It is now however appropriate to review this, not least given that a significant proportion of the past work is informed by 2001 Census data regarding commuting and migration patterns. 2011 Census flow data was issued between July 2014 and December 2014.
- 2.15 A further practical issue regards the geographical building blocks that housing market areas are built up from. A key purpose of a SHMA is to define the Objectively Assessed Need (OAN) for housing. Paragraphs 15 - 17 of the PPG relating to *Housing and Economic Development Needs Assessments* are clear that the starting points for doing so are the latest official population and household projections. These are published at a national level and for local authorities, and provide the most up to date official estimates of household growth. They are based on statistically robust and nationally consistent assumptions, as the PPG sets out.

¹⁰ Jones, C. Coombes, M. and Wong, C. (2010) *Geography of Housing Market Areas in England: Summary Report*

¹¹ For example the school catchment of Edgbarrow in Bracknell Forest draws from across the Borough boundary at Crowthorne in Wokingham Borough.

¹² DCLG (March 2007) *Identifying Sub-Regional Housing Market Area: Advice Note*

2.16 Official population and household projections are not published below local authority level, nor is the data available (regarding migration and trends in household formation which are key drivers within the projections) to allow projections to be robustly developed for areas below local authority level.

2.17 On this basis we consider that HMAs should be defined based on the ‘best fit’ to local authority boundaries; albeit that SHMAs can (and should) recognise cross-boundary influences and interactions. Paragraph 5.21 of the PAS Technical Advice Note¹³ supports this, concluding that:

“it is best if HMAs, as defined for the purpose of needs assessments, do not straddle local authority boundaries. For areas smaller than local authorities data availability is poor and analysis becomes impossibly complex.”

2.18 This approach is widely accepted and is a practical and pragmatic response to data availability and one we would wish to adopt. In practical terms, we are of the view that towards the edges of most housing markets there are likely to be influences in two directions with some overlap between HMAs.

Existing Evidence Base

2.19 This section of this report reviews existing research which has sought to consider the definition of the HMAs.

DCLG/CURDS Study (2009/10)

2.20 National research undertaken for Government by a consortium of academics led by the Centre for Urban and Regional Development Studies (CURDS) at Newcastle University has sought to define housing markets across England.¹⁴

2.21 The CURDS Study for CLG considers commuting and migration dynamics (based on 2001 Census data) and house prices (standardised to account for differences in housing mix and neighbourhood characteristics). This information was brought together by CURDS to define a three tiered structure of housing markets, as follows:

- Strategic (Framework) Housing Markets– based on 77.5% commuting self-containment;
- Local Housing Market Areas – based on 50% migration self-containment; and
- Sub-Markets – which would be defined based on neighbourhood factors and house types.

2.22 The Framework and Local HMAs are mapped across England, with the Local HMAs embedded within the wider Strategic HMAs. Both are defined based on wards at a “gold standard” and based on local authorities for the “silver standard” geography.

¹³ *Objectively Assessed Need and Housing Targets: Technical Advice Note, Prepared for the Planning Advisory Service by Peter Brett Associates (July 2015)*

¹⁴ <http://www.ncl.ac.uk/curds/research/defining/NHPAU.htm>

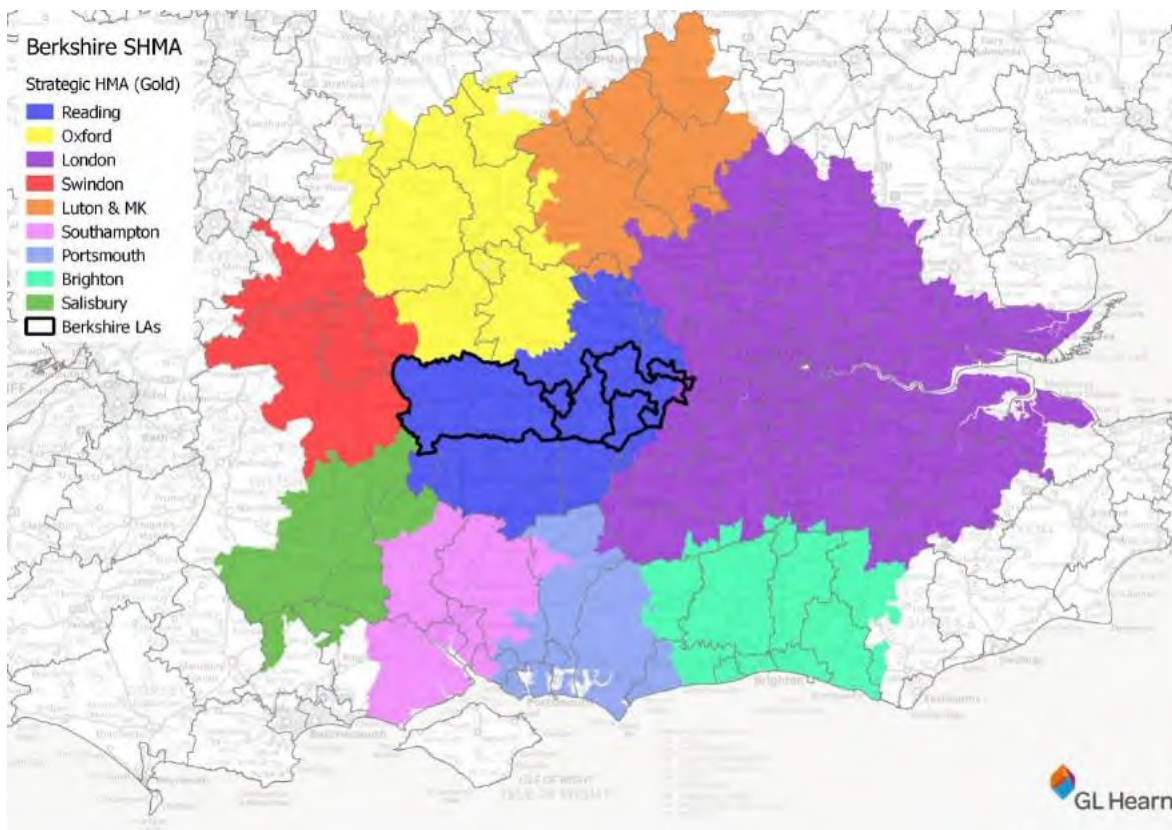
Framework Housing Market Areas

2.23 The majority of Berkshire (and a number of surrounding areas) are defined by the CURDS Study as falling within a Reading Framework HMA. This contrasts with many areas within the Home Counties which adjoin London, which are defined as within the London Framework HMA (see Figure 3).

2.24 A best fit of the CURDS-defined Reading Framework HMA to local authority boundaries would comprise:

- Bracknell Forest;
- West Berkshire;
- Reading;
- Slough;
- RBWM;
- Wokingham;
- South Bucks;
- Wycombe;
- Basingstoke and Deane;
- Hart; and
- Surrey Heath.

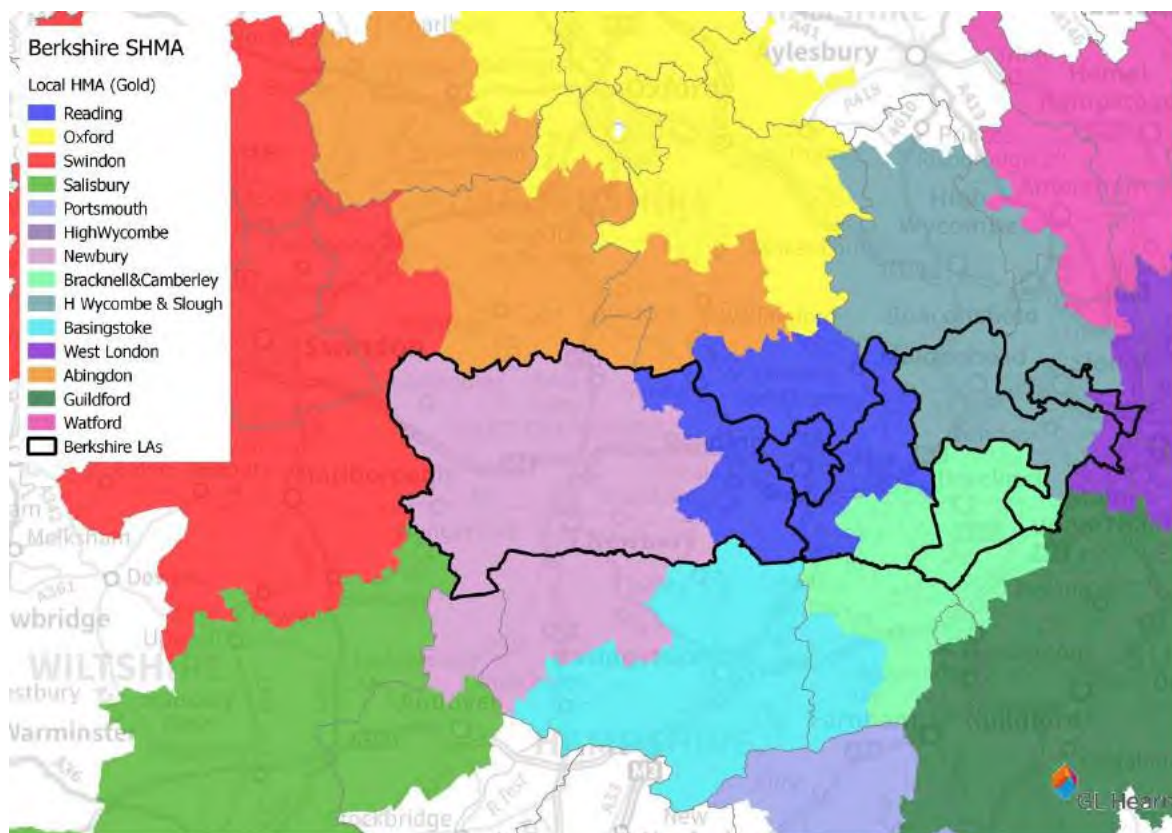
Figure 3: Framework Housing Market Areas covering Berkshire and Surrounding Areas



Source: CURDS 2009/10 and © Crown copyright and database rights 2015 Ordnance Survey 100019153

- 2.25 The CURDS Study defined Local Housing Market Areas (LHMAs) which are embedded within the Framework HMAs, based on areas with 50% self-containment of migration flows (using 2001 Census data). Relevant Local HMAs defined comprise (see Figure 4):
- Newbury;
 - Reading;
 - Bracknell and Camberley;
 - High Wycombe and Slough; and
 - West London.
- 2.26 The Newbury LHMA was defined as including the main settlements in West Berkshire with the exception of Theale which related to Reading. It extends south along the A34, and includes some rural parts of Test Valley and Basingstoke and Deane.
- 2.27 The Reading LHMA includes Reading Borough, together with the eastern part of West Berkshire (including Theale), southern part of South Oxfordshire (including Henley-on-Thames) and north and western parts of Wokingham (including Earley, Winnersh and Shinfield as well as Twyford and Wargrave).
- 2.28 To the south-east, the Bracknell and Camberley LHMA includes the whole of Bracknell Forest Borough, and extends to include Wokingham; as well as Hartley Wintney in Hart District. It also includes the southern parts of RBWM as well as parts of Rushmoor and Surrey Heath.
- 2.29 Most of the rest of RBWM and Slough fall within a High Wycombe and Slough LHMA which extends to cover the majority of Wycombe and South Bucks districts, and into South Oxfordshire and Chiltern District along the M40 corridor.
- 2.30 As Figure 4 shows, a small proportion of Berkshire is defined as within a West London LHMA (and the London Framework HMA). This principally comprises Wraysbury (in RBWM) and parts of Langleigh (in Slough).

Figure 4: CURDS – Defined Local Housing Market Areas

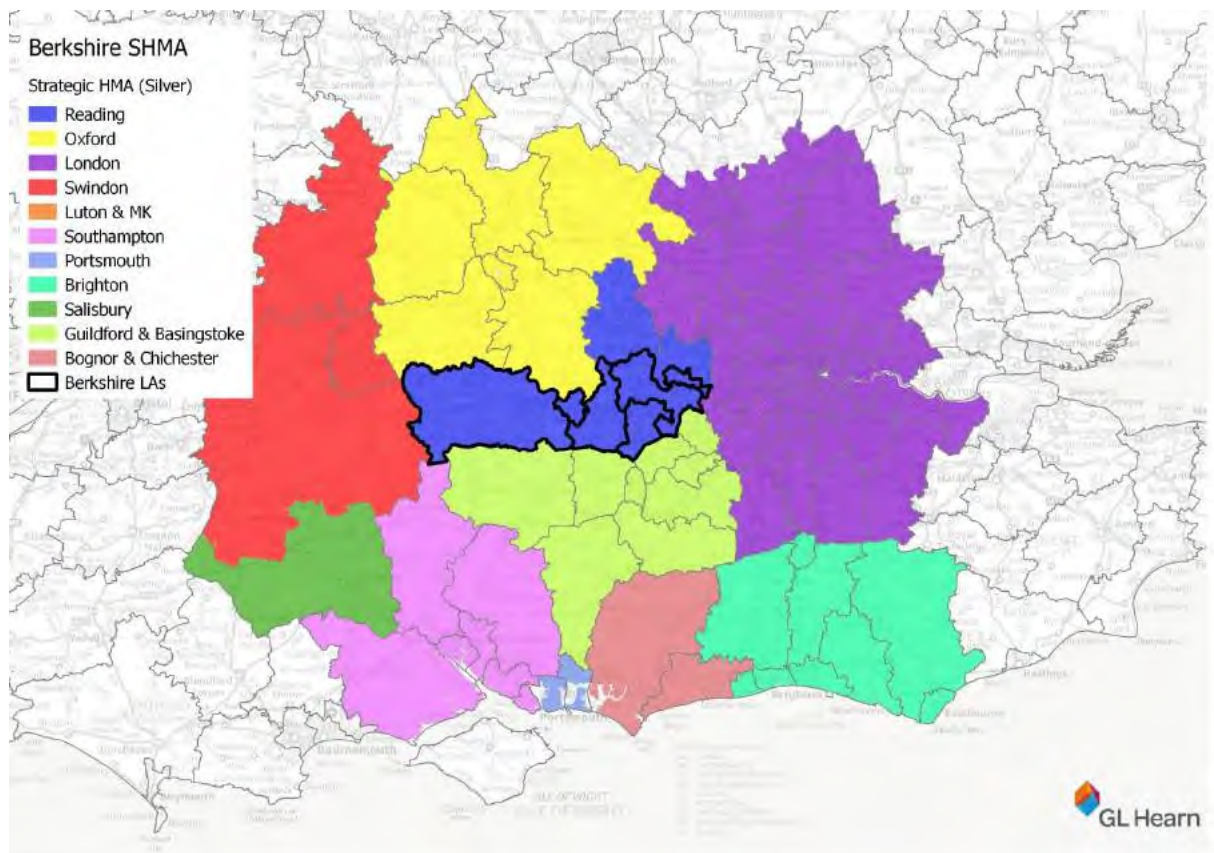


Source: CURDS, 2009/10 © Crown copyright and database rights 2015 Ordnance Survey 100019153

- 2.31 The CURDS work defined HMAs by grouping wards together. However, as population and household projections are only published at a local authority basis, it is accepted standard practice to group local authorities as the “best fit” to an HMA.
- 2.32 Figure 5 shows the Single Tier Silver Standard geography. This shows that the Berkshire Authorities as well as South Bucks and Wycombe comprise a Reading HMA. In Paragraph 5.9 of the PAS Technical Advice Note, Peter Brett Associates comment on this geography stating:

“We prefer the single-tier level because strategic HMAs are often too large to be manageable; we prefer the ‘silver standard’ because HMAs boundaries that straddle local authority areas are usually impractical, given that planning policy is mostly made at the local authority level, and many kinds of data are unavailable for smaller areas. But for some areas, including many close to London, the single-tier silver standard geography looks unconvincing; in that plan-makers should look for guidance to other levels in the NHPAU analysis.”

Figure 5: CURDS – Defined Single-Tier Housing Market Areas



Source: CURDS, 2009/10, © Crown copyright and database rights 2015 Ordnance Survey 100019153

2.33 It must however be borne in mind that the CURDS work is based on 2001 data, which is now 14 years old. 2011 Census commuting and migration flow data was released in 2014 which provides a basis for reconsidering housing market geographies using more recent information. This is considered later in this section.

2.34 We next turn to research undertaken at a regional and local level to consider housing market geographies.

London SHMA (2013)

2.35 The Greater London Authority's (GLA) 2013 SHMA¹⁵ looks at the Greater London area, but recognises (paragraph 2.6) links beyond this, setting out that its 'urban area extends beyond this boundary and encompasses a substantial hinterland.' However, it outlines in paragraph 2.7 that there is no universally accepted way of measuring this, noting that boundaries based on analysis of commuting and migration "are highly sensitive to the specific level of containment used" based on reference to the CURDS Study.

¹⁵ The 2013 London Strategic Housing Market Assessment, Greater London Authority (January 2014)
GL Hearn

2.36 The Examination in Public of Further Alterations to the London Plan took place in September 2014. This included consideration of whether London can be described as a single HMA.

2.37 The report from the Planning Inspector, Anthony Thickett, following the Examination in Public was published in December 2014. In paragraph 22 the Inspector did not challenge the GLA's contention that London represents a single HMA, commenting that:

"The Mayor points to the acceptance by previous EiP Panels that London constitutes a single housing market area with sub markets which span Borough boundaries. The Mayor also points to the findings of the High Court, following a challenge to the Revised Early Minor Alterations to the London Plan, within which in his (undisputed) opinion, the Court accepted that although local variations exist, this did not compromise the view that London constitutes a single housing market area."

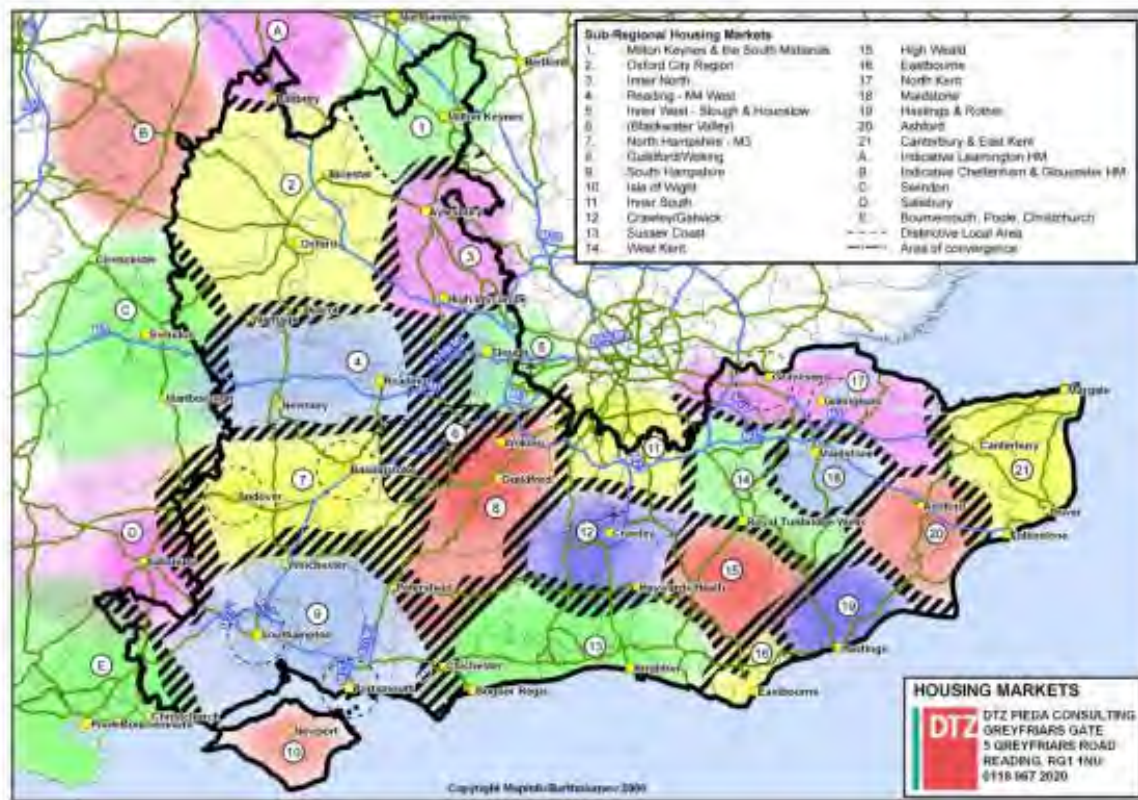
2.38 This is of relevance to this Berkshire SHMA as parts of Berkshire demonstrate strong functional linkages with parts of West London. The final version of the London Plan was published on 10th March 2015.

South East Plan

2.39 Sub-regional housing markets within the South East of England were defined in the South East Plan based on a regional study undertaken by DTZ for the South East Regional Assembly and Homes and Communities Agency in 2004¹⁶ to define HMAs across the South East. DTZ identified 21 housing market areas across the region, as shown in Figure 6.

¹⁶ DTZ (2004) *Identifying the Local Housing Markets of the South East*

Figure 6: Housing Market Areas in the South East



Source: DTZ (2004) Identifying the Local Housing Markets of the South East

2.40 This Study defined a “Reading M4 West” HMA; and an “Inner West – Slough & Hounslow” HMA. This was based on analysis of migration and travel to work patterns (at local authority level) and wider data; and a programme of stakeholder engagement to agree the definitions of housing markets across the region.

2.41 The majority of West Berkshire, all of Reading and the western parts of Wokingham fell within the Reading M4 West HMA. Slough and parts of South Bucks and RBWM, as well as a small area of Bracknell Forest, fell within an Inner West – Slough & Hounslow HMA.

2.42 Notable areas of overlap between housing markets were identified, with the majority of Bracknell Forest, parts of RBWM (notably the town of Maidenhead) and parts of Wokingham all falling within the area of overlap between HMAs.

Other SHMA Studies

2.43 Housing market geographies have been considered through a number of Strategic Housing Market Assessments (SHMAs) and related reports. Some of these studies however are quite dated and rely on data from as far back as 2001. As such, the weight placed on more recent studies (using

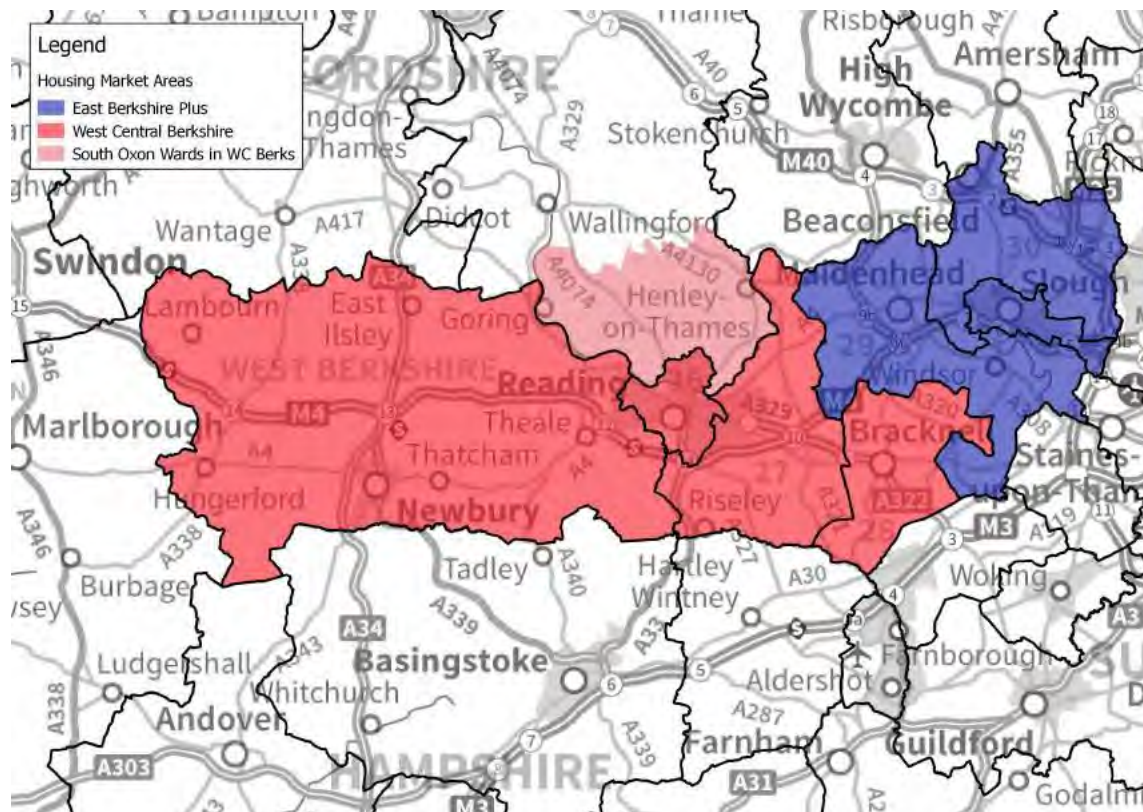
2011 data) should be greater. We have sought to summarise the findings of these below:

Berkshire Housing Market Assessment (2007)

- 2.44 The 2007 Berkshire Housing Market Assessment¹⁷ sought to reassess HMA definitions based on more detailed spatial analysis at a sub-local authority level. This analysed household movement and commuting patterns between urban areas (built up from wards) using 2001 Census data.
- 2.45 The SHMA defined a strong set of functional relationships between West Berkshire, Reading and Wokingham Unitary Authorities, and identified these together with Bracknell Forest and part of South Oxfordshire as forming a West Central Berkshire HMA. This reflected migration flows between Reading and Newbury and Thatcham; Wokingham and Bracknell; and relatively weak flows to Wycombe and Basingstoke. 53% of those moving into this area had previously been resident in West Central Berkshire. A limited relationship with Swindon was identified.
- 2.46 Close labour market linkages were identified between Reading, Newbury and Thatcham, Wokingham and Bracknell. Overall a 74% commuting self-containment level was achieved in this HMA. 6% of employed residents commuted to London.
- 2.47 The 2007 SHMA also identified an East Berkshire Plus HMA which included Slough and RBWM together with South Bucks. This reflected a fairly high volume of migration between these three authorities; but the Study concluded that the linkage to the Wycombe urban area was not particularly strong. Migration self-containment within this market was identified as lower (43%).
- 2.48 The East Berkshire Plus HMA was identified as having a stronger relationship to London, with 17% of employed residents working in London. Influenced by this, a lower 56% commuting self-containment was achieved. The Study found that Spelthorne and Runnymede (in Surrey) had only a limited functional relationship with the East Berkshire sub-region and should not form part of the HMA (see Figure 7).

¹⁷ Berkshire Housing Market Assessment (DTZ, 2007) <http://info.westberks.gov.uk/CHttpHandler.ashx?id=35731&p=0>
GL Hearn

Figure 7: DTZ Berkshire HMAs



Source: DTZ

- 2.49 The data also revealed that Bracknell Forest has a more significant relationship to the West Central Berkshire area than previously anticipated. Bracknell Forest exhibited higher levels of connectivity (in both household movement and travel to work terms) to Wokingham and Reading than to the local authorities in the East Berkshire area, such as RBWM and Slough. On the basis of the available evidence, DTZ concluded that it was more appropriate for Bracknell Forest to be grouped within the West Central Berkshire authorities than in the East Berkshire authorities. Consequently, for the purposes of the analysis in the sub-region, Bracknell Forest was identified as forming part of the West Central Berkshire HMA.
- 2.50 DTZ also concluded that “there is also a level of dislocation of South Bucks from the East Berkshire area, which has led to the designation of two different definitions of the East Berkshire area, one of which includes South Bucks (East Berkshire Plus) and one of which does not (East Berkshire)”.
- 2.51 The report also identifies that the Bracknell urban area is subject to influences from a number of urban centres, including those in the Blackwater Valley such as Camberley, Aldershot and Farnborough.

RBWM SHMA (2014)

- 2.52 The RBWM SHMA¹⁸ (January 2014) identified the housing market of RBWM, and was produced as a local update to the 2007 Berkshire SHMA as the other Berkshire local authorities were at a different stage of production of their local plans.
- 2.53 The final report for the RBWM SHMA, by consultants GVA, defines an HMA which includes all of the Borough's adjoining local authorities and some others where strategic links were identified, these being Reading, Wokingham, Wycombe, South Bucks, Slough, Bracknell Forest, Surrey Heath, Runnymede and Spelthorne. This HMA reflects the local authorities which have any notable relationship with the Royal Borough, rather than just those with a key relationship.

Buckinghamshire Housing Market Areas and Functional Economic Market Areas (March 2015)

- 2.54 A report was prepared by ORS and Atkins¹⁹ (Jan 2015) which considered Housing Market Areas and Functional Economic Market Areas in Buckinghamshire and the surrounding areas. This was commissioned jointly by the Buckinghamshire authorities (excluding Milton Keynes).
- 2.55 The report reviewed the range of indicators identified in the PPG as well as the CURDS research. This includes migration and commuting flows, house prices, and considers a range of wider factors including administrative geographies, retail catchments and the transport network. In drawing conclusions, it seemingly places greatest weight on the analysis of commuting flows. Various levels of self-containment are considered, and how this might relate spatially to the definition of areas.
- 2.56 The approach to commuting analysis uses 'seed' areas based on urban and employment areas identified by DEFRA. ORS then associate all Mid Super Output Areas (MSOAs) with the seed displaying the strongest links to it. These areas are then progressively joined, on the basis of the area of weakest self-containment joining to the seed with which it has the strongest links, until all seed points/clusters have acceptable levels of self-containment (67%). This commuting analysis is undertaken including, but also excluding, commuting flows with London.

18 RBWM SHMA (GVA, 2014), consult.rbwm.gov.uk/file/2801235

19 Buckinghamshire Housing Market Areas and Functional Economic Market Areas (ORS and Atkins Jan 2015)

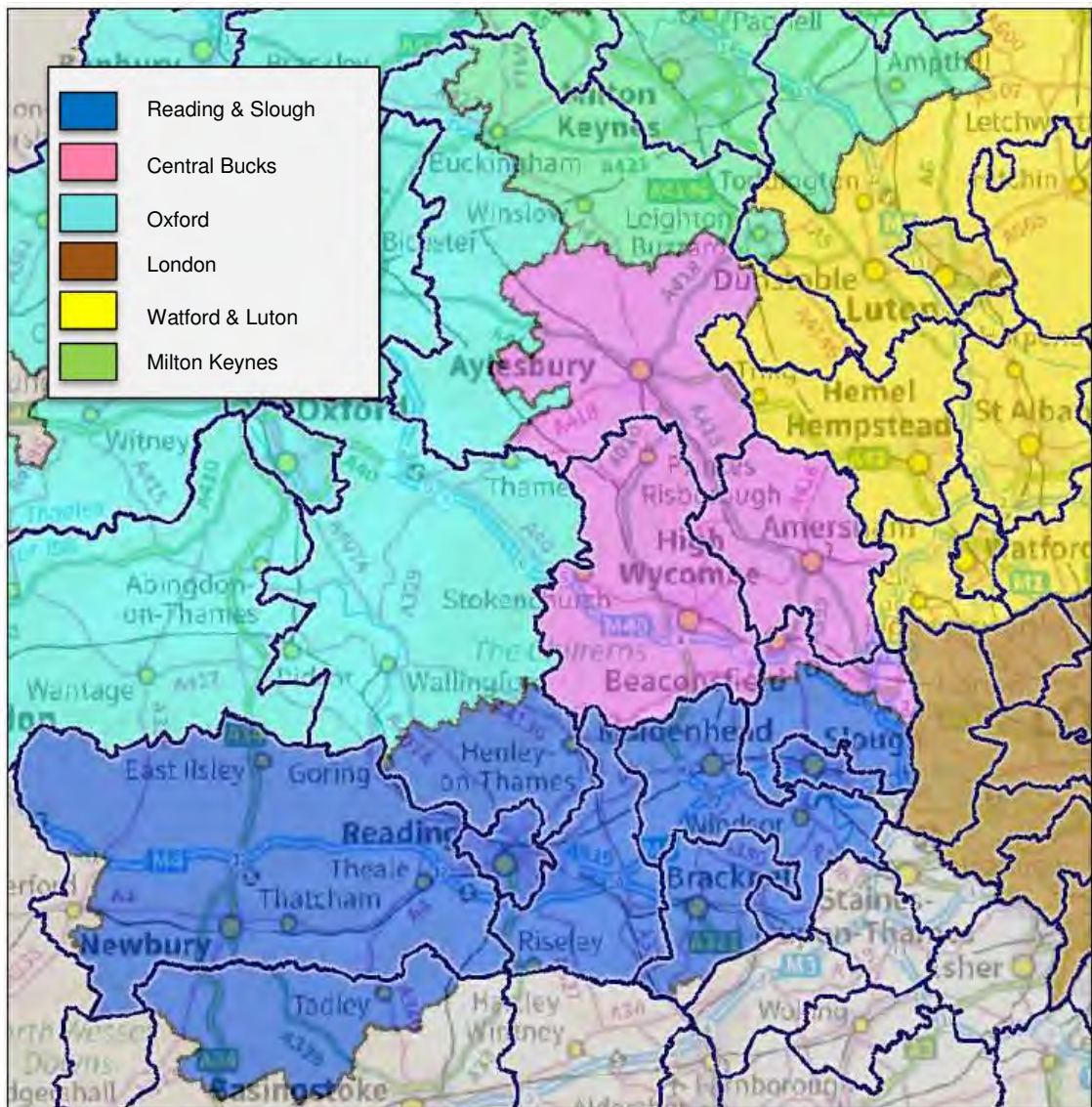
<http://www.aylesburyvaledc.gov.uk/GetAsset.aspx?id=fAAxADYANAAyADEAfAB8AFQAcgB1AGUAfAB8ADAAfAA1>

- 2.57 The Buckinghamshire report concluded that a Central Buckinghamshire HMA and FEMA²⁰ can be identified as shown in pink in Figure 8. The definition of this area is supported by the following statistics:
- 74.8% of the workplace population live in the area;
 - 67.9% of residents work within the area;
 - 70.5% of residents who had moved in 2010-11 stayed in the area; and
 - 72.1% of those that used to live in the area in 2010-11 moved within it.
- 2.58 South Bucks was identified in the ORS/Atkins Study as relating more strongly towards London and Slough/Windsor than other parts of Bucks. The links from South Bucks to West London and the City were stronger than any others. Excluding flows with London, there were stronger commuting flows between the north of the district and other parts of Buckinghamshire; while residents in the southern part of the district are more likely to commute to Slough and RBWM.
- 2.59 This Study suggested that South Bucks has relationships with London, with Berkshire Authorities, as well as other parts of Buckinghamshire; concluding that:
- “whilst accepting that South Bucks district is divided and that the final conclusion is inevitably based on a judgement, it is possible to determine a hierarchy for the best fit – with the first preference being London, the second being Berkshire and the third being with the rest of Buckinghamshire. This conclusion is supported by the data on both commuting and migration flows.”*
- 2.60 It goes on to outline that the most appropriate alternative “best fit” for South Bucks would be for the district to be considered as part of the Reading and Slough HMA, given the stronger relationships in terms of both commuting and migration with Berkshire authorities than other parts of Buckinghamshire; and given that the largest proportion of South Bucks’ population was defined as falling within the Reading and Slough HMA.
- 2.61 The analysis in the report clearly shows that commuting self-containment levels in areas covering the Berkshire Authorities vary, depending on whether flows with London are included or excluded; and depending on the self-containment level sought. The ORS/Atkins Study conclusions were based on excluding London flows, and seeking commuting self-containment of over 70%.
- 2.62 We would note that in assessing migration flows, the ORS/ Atkins report used data from the 2001 Census (paragraph 7.6). This report considers recently-released data on migration flows and self-containment using 2011 Census data.
- 2.63 Although the report identified a ward based set of HMAs (Figure 8), it recommended (on the basis of evidence) that the most pragmatically appropriate “best fit” for the Central Buckinghamshire HMA

²⁰ This approach restricted the growth of London at the regional administrative boundary. Then separately consider the commuting flows outside the region.

comprises Aylesbury Vale, Chiltern and Wycombe districts (Purple Area); and that South Bucks district should be considered within the “best fit” for Reading and Slough HMA (Blue area).

Figure 8: Functional Housing Market Areas defined through ORS Buckinghamshire Research based on MSOA boundaries, with Local Authority Boundaries



Source: ORS

2.64 The ORS/ Atkins Report thus defined a single HMA (using a best fit to local authority boundaries) covering all of the Berkshire authorities together with South Bucks.

2.65 The report stated that these “best fit” groupings do not change the actual geography of the functional housing market areas that have been identified – 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.

- 2.66 It adds that “*whilst we believe that the proposed groupings for Central Buckinghamshire and Reading and Slough HMAs provide the overall “best fit” for joint working on the basis of the available evidence*”, it does go on (in Para 7.33) to outline that “*they are not the only arrangements possible given the complexities of the functional housing market areas in the region.*”
- 2.67 The report also goes on at this point to say that “*regardless of the final groupings, the more important issue will be the need for Chiltern and Wycombe to maintain dialogue with Reading, Slough and RBWM; and for South Bucks to maintain dialogue with the other Buckinghamshire districts. Furthermore, all four districts will need to maintain dialogue with the boroughs to the West of London as well as the Mayor of London through the Greater London Authority*”.
- 2.68 In respect of the geography of housing markets in Berkshire, the appendices²¹ to the ORS/ Atkins report outline that the consultants’ view was that it is to some degree a matter of judgement as to whether there was one HMA or two within Berkshire, with reference made to this SHMA report in looking at these issues further. ORS outlined that the outcome of work on a Berkshire SHMA might result in a different view regarding HMA geographies, with the lead ORS consultant explaining that:
- “In terms of whether the area covering Slough, RBWM and the south of South Bucks should be separate from the area focussed on Reading, (the commuting statistics) show that this area has proportions that are not dissimilar to Aylesbury town prior to it being merged as part of Central Bucks – though it is a judgement call as to what containment level is high enough. Regardless of this, the South Bucks relationship will still be important even if the Berkshire assessment concludes that there should be more than one HMA.”*
- 2.69 With this in mind we can see from the ORS initial commuting analysis that RBWM and Slough are included within a London-focused HMA, as is South Bucks. This does not extend to Reading and West Berkshire.
- 2.70 When flows with Greater London are excluded, a 72% self-containment rate is achieved for Slough Commuting Area/Eastern Berkshire (including the western parts of Slough and the Northern parts of RBWM and the southern parts of South Bucks). Self-containment increases marginally to 74% when Reading and the other parts of Berkshire are included within a single zone.
- 2.71 The evidence in the ORS/ Atkins Study clearly suggests that the self-containment level in Eastern Berkshire is influenced by the strong relationship in economic terms to London.
- 2.72 Overall the resident self-containment for the Berkshire (Reading and Slough) commuting zone is 76.4% including Greater London rising to 84.7% when excluding Greater London. However, this included parts of Hampshire and Oxfordshire and not all of Western Berkshire, Bracknell Forest, Slough or South Bucks.

²¹ Appendix I: Notes of Meeting with council officers from RBWM and Slough, Jan 2015

- 2.73 Appendix J of the ORS work also includes further commentary from the report's author which states that the conclusion of the previous Berkshire SHMA (2007) of two separate HMAs (South Bucks, Slough and RBWM as an area called "East Berkshire Plus"; whilst Bracknell Forest and the remaining Berkshire authorities, together with part of South Oxfordshire, formed an area called "West Central Berkshire") is consistent with their own findings where they identify these two separate areas (albeit two slightly different areas) at 72% containment, although the final areas are based on higher levels of self-containment which leads to a single HMA covering the whole of Berkshire together with South Bucks south of the M40.
- 2.74 The ORS/ Atkins analysis highlights that geographies based on commuting analysis are highly sensitive to the self-containment threshold used, particularly if the influence of London on commuting patterns (which in some areas near to the capital is very significant) is left aside. The report in effect recognises that whether there are one or two HMAs covering the Berkshire authorities is a matter of judgement; and outlined that this issue would be one which the Berkshire SHMA needed to investigate further.
- 2.75 Since the draft version of the Berkshire SHMA was produced, South Bucks District Council has agreed to produce a joint local plan with Chiltern District Council. Preliminary work on a Bucks HEDNA has concluded that South Bucks would now form part of a "best fit" for Central Bucks HMA together with Aylesbury Vale and Wycombe.
- 2.76 This decision does not change the functional HMAs identified in the Bucks SHMA (i.e. South Bucks falling into a Berkshire-wide HMA) but provides a pragmatic arrangement for South Bucks in establishing the evidence and developing local policies.

Oxfordshire SHMA (2014)

- 2.77 The Oxfordshire SHMA²² was prepared by GL Hearn. This considered the CURDS Study, house prices, migration and commuting flows (from 2001). It identified an Oxford-focused sub-regional housing market extending across much of Oxfordshire, reflecting the economic influence of the City. It concluded that the county remained the most appropriate geography for analysis of housing markets in terms of the 'best fit' of local authority boundaries to a functional housing market area.
- 2.78 The SHMA however recognised that there are links, in housing market and economic terms, between parts of Oxfordshire and surrounding areas, including major employment centres close to the county's boundaries, including Reading (the influence of which extends into South Oxfordshire including Henley-on-Thames).

²² Oxfordshire SHMA (GL Hearn, March 2014) - <http://www.southoxon.gov.uk/services-and-advice/planning-and-building/planning-policy/evidence-studies/strategic-housing-market>
GL Hearn

Wiltshire SHMA (December 2011)

- 2.79 The Wiltshire SHMA²³ (prepared by Fordham Research / RS Drummond Hay) identifies a number of Housing Market Areas across the County. The Eastern Wiltshire HMA, which relates most closely to Berkshire, was defined as the area to the east of Devizes and Calne. It identified that this part of the County 'looks' towards the prosperous towns of Reading and Newbury and even further away to Oxford and London; and was strongly influenced by Swindon.
- 2.80 The report does not identify any overlap between the Wiltshire HMAs and the Berkshire Authorities and indeed the HMAs defined did not extend beyond the County boundaries. We understand Wiltshire Council is in the process of commissioning an updated SHMA.

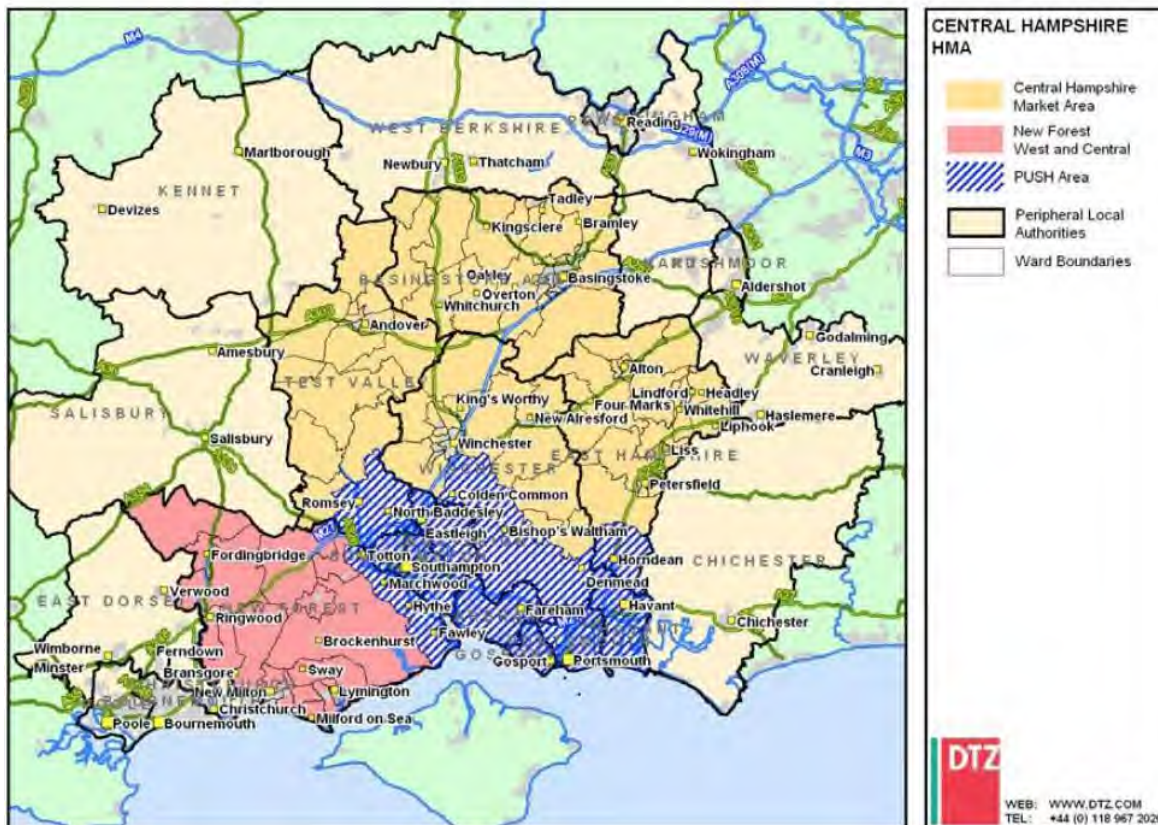
Central Hampshire SHMA (October 2007)

- 2.81 Central Hampshire and New Forest SHMA of October 2007 (prepared by DTZ)²⁴ outlined the HMAs within Central Hampshire and the New Forest. This excludes parts of local authorities which had been previously identified as within Urban South Hampshire Sub-Region (principally the Portsmouth and Southampton HMAs).
- 2.82 Using a combination of analysis of migration and commuting patterns, this SHMA defines a Central Hampshire HMA as comprising the northern parts of Test Valley, Winchester, and East Hampshire as well as Basingstoke and Deane Borough (see Figure 9). It differs from the CURDS research in including Basingstoke and Deane as within a different HMA to Reading.
- 2.83 The report does recognise that there are some links between Basingstoke and Deane (particularly around the North West of the Borough) and Newbury and Thatcham in West Berkshire.

²³ *Wiltshire SHMA (Fordham, December 2011)* - <http://www.wiltshire.gov.uk/planning-policy-wiltshire-shma.pdf>

²⁴ *Central Hampshire and New Forest Strategic Housing Market Assessment (DTZ, October 2007)* - www.basingstoke.gov.uk/content/doclib/545.pdf

Figure 9: Sub-Regional Housing Market Areas in Central Hampshire



Source: DTZ (2004) Identifying the Local Housing Markets of the South East

Hart, Rushmoor and Surrey Heath (December 2014)

- 2.84 A SHMA for Hart, Rushmoor and Surrey Heath²⁵ was prepared by Wessex Economics. The Study drew on the previous DTZ and CURDS research. It concluded that these three authorities within the ‘Blackwater Valley’ were strongly related to one another in regard to migration flows. Commuting patterns reinforced the strong relationships between the three authorities, but flows to Guildford, Basingstoke & Deane and Bracknell Forest were also recognised.
- 2.85 The Study concluded that taken together, previous research on housing markets and up-to-date analysis of migration and commuting patterns supported the importance of the three authorities working together as they comprise a single housing market area. The authorities included the majority of the population of the Farnborough/ Aldershot Built-Up Area. It however recognised the continued need to work with other neighbouring authorities in adjacent housing market areas given the close links and complexity of relationships across the sub-region.

²⁵ Hart, Rushmoor and Surrey Heath SHMA, (Wessex Economics, December 2014), [http://www.hart.gov.uk/sites/default/files/4 The Council/Policies and published documents/Planning policy/HRSH%20SHMA%20Final%20Report%20141219.pdf](http://www.hart.gov.uk/sites/default/files/4%20The%20Council/Policies%20and%20published%20documents/Planning%20policy/HRSH%20SHMA%20Final%20Report%20141219.pdf)

Runnymede and Spelthorne SHMA (Draft 2015)

- 2.86 A draft SHMA for these authorities has been prepared by GL Hearn. This identifies a strong relationship between these two areas and London, which is borne out in house prices, migration and commuting analysis.
- 2.87 The analysis identifies that whilst it is important to recognise the influence of London, and to take this into account in planning for housing, it is not however practical to develop a SHMA covering London and a significant proportion of the Home Counties. On this basis, GL Hearn considered that a SHMA should be prepared for the relevant local HMAs.
- 2.88 Within a London Fringe area, a number of 'quadrants' are identified (which are linked to those identified by the GLA in London and major employment centres in Outer London). This analysis indicates that local markets/ quadrants within West London and South West London exist.
- 2.89 Within the London Fringe area, GL Hearn indicatively suggested the existence of an HMA which includes RBWM, Slough and South Bucks²⁶. This reflects Slough's scale as a major employment centre, and employment along the M4. The extent to which this stretches further towards Reading was not considered in this report.
- 2.90 Looking more specifically at Surrey, GL Hearn identified potential groupings of authorities in Surrey to HMAs, defining a North West Surrey HMA which included Spelthorne and Runnymede; and a number of others including a West Surrey HMA which comprised Guildford, Woking and Waverley.
- 2.91 The report noted interactions between these localised housing market areas across Surrey and in surrounding areas. It outlined that housing need in such areas close to London will be influenced by supply/demand dynamics within London and adjoining housing market areas. The report explained that what this means is that the analysis of HMAs should not be used to seek to close down cross-boundary discussions regarding future housing provision and unmet housing needs. The boundaries provide a starting point for seeking to consider these issues.

²⁶ This took account of initial analytical work on this Berkshire SHMA.

Implications

- A review of previous research (although many studies have drawn on historic data) suggests that there may be one or two separate HMAs covering the Berkshire Authorities. The outcome of previous research needs to be tested taking account of up-to-date evidence.
- The evidence points to an influence from London on the economy and housing market in Eastern Berkshire, but the Greater London Authority has defined a London HMA which is coterminous with the Greater London Boundary.
- Reports relating to authorities around Berkshire define those authorities as being within separate HMAs, with the exception of the ORS Report relating to South Bucks which indicates a hierarchy for best fit with the first option being with London; the second option being to include S Bucks as part of a wider Berkshire HMA; and the third (in order of preference) being for it to be included with other Buckinghamshire authorities.

Reviewing Housing Market Area Geographies

- 2.92 This section of the report moves on to review HMA geographies taking account of the latest available data on house prices, migration and commuting flows. These are the key indicators identified in paragraph 11 of the PPG (ID: 2a-011-20140306).
- 2.93 As the historic definitions and previous work identified South Bucks as part of a Berkshire or Eastern Berkshire HMA (Including South Bucks' own work) we have provided analysis where possible for the District within the remainder of this section in order to determine whether it forms part of the Berkshire HMA(s).

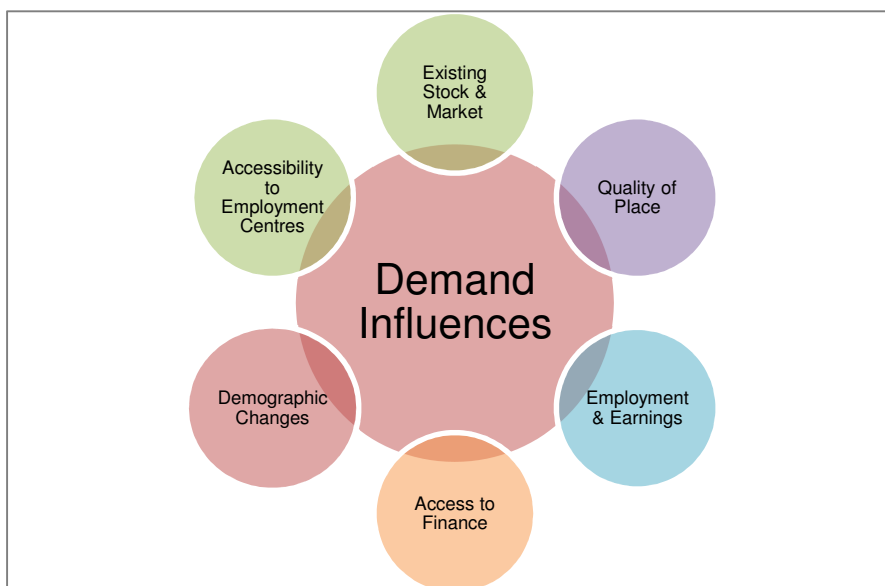
House Prices

- 2.94 Paragraph 011 of the PPG (ID: 2a-011-20140306) relating to housing and economic development needs assessments states that house prices can be used to provide a 'market based' definition of HMA boundaries, based on considering areas which (as the PPG describes) have clearly different price levels compared to surrounding areas.

Conceptual Framework

- 2.95 It is important to understand that the housing market is influenced by macro-economic factors, as well as the housing market conditions at a regional and local level. There are a number of key influences on housing demand, which are set out in the diagram below:

Figure 10: Understanding Housing Demand Drivers



Source: GL Hearn

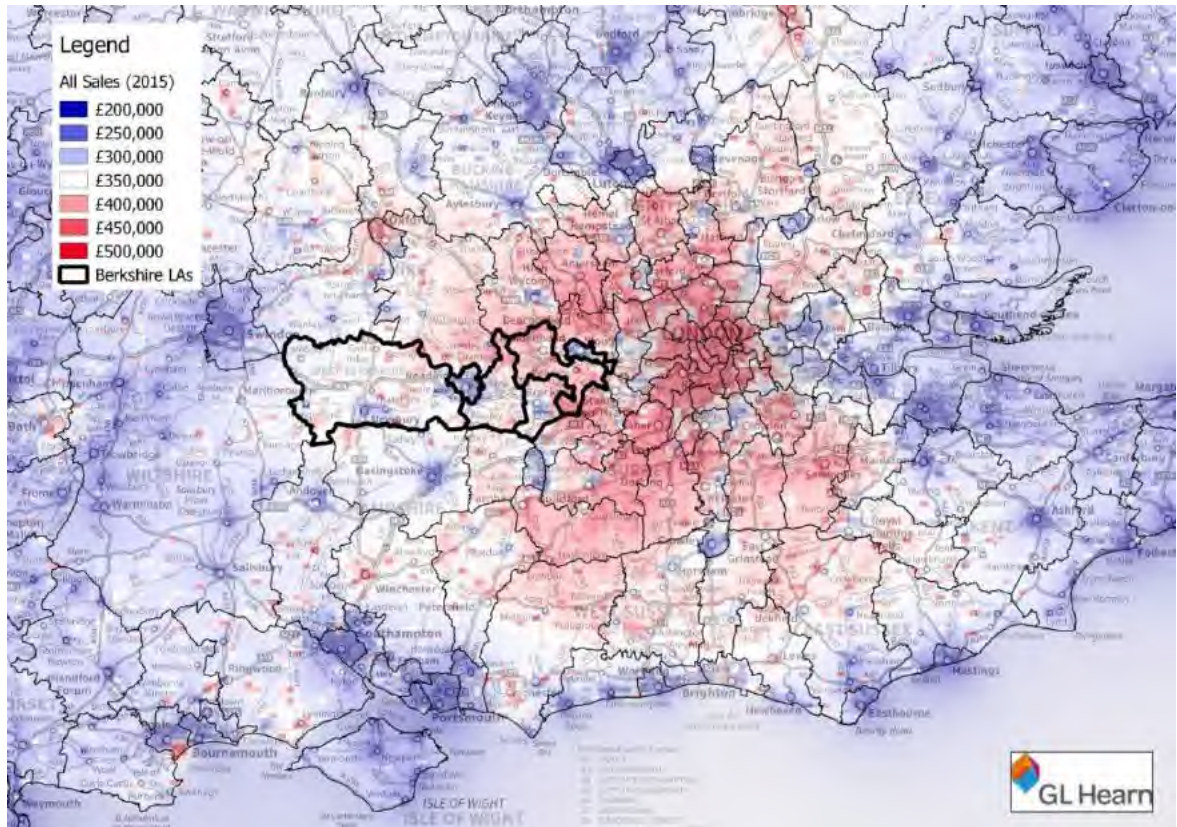
- 2.96 At the macro-level, the market is particularly influenced by interest rates and mortgage availability, as well as market sentiment (which is influenced by economic performance and prospects at the macro-level).
- 2.97 The market is also influenced by the economy at both regional and local levels, recognising that economic employment trends will influence migration patterns (as people move to and from areas to access jobs) and that the nature of employment growth and labour demand will influence changes in earnings and wealth (which influences affordability).
- 2.98 Housing demand over the longer-term is particularly influenced by population and economic trends: changes in the size and structure of the population directly influence housing need and demand, and the nature of demand for different housing products.
- 2.99 There are then a number of factors which play out at a more local level, within a functional housing market and influence demand in different locations. Local factors include:
- quality of place and neighbourhood character;
 - school performance and the catchments of good schools;
 - the accessibility of areas including to employment centres (with transport links being an important component of this); and
 - the existing housing market and local market conditions.
- 2.100 These factors influence the demand profile and pricing within the market. At a local level, this often means that the housing market (in terms of the profile of buyers) tends to be influenced by and to some degree reinforces the existing stock profile.

- 2.101 Local housing markets or sub-markets are also influenced by dynamics in surrounding areas, in regard to the relative balance between supply and demand in different markets and the relative pricing of housing within them. Understanding relative pricing and price trends is thus important.
- 2.102 The important thing to recognise here is that we are likely to see localised variations in housing costs, which reflect differences in the housing offer, quality of place and accessibility of different areas. We would also expect urban areas to have lower house prices than neighbouring suburban or rural areas. This reflects differences in the size/ mix of properties being sold and the influence of quality of place on housing costs. Some settlements, or parts of an area, are likely to command higher prices than others reflecting these factors; and indeed we would expect areas with varying house prices within any HMA reflecting these issues. These factors are most relevant in considering housing sub-markets (the third tier of market using the CURDS definition).
- 2.103 What this section is focused upon is considering market geographies at a higher spatial level. Consideration of price differentials at a sub-region level is therefore of most relevance.

Broad House Price Geography

- 2.104 Figure 11 sets out how overall house prices vary across the wider South East. The highest prices are seen in Central London extending North in to Hertfordshire and South in to Surrey. There are also smaller expansions of high house prices westward into RBWM and Southern Buckinghamshire.
- 2.105 Corridors of higher house prices are also evident in the corridors to Cambridge and Oxford. There are also small pockets of higher house prices in the rural parts of Berkshire, Essex, Kent and Sussex. This is likely to reflect areas with higher numbers of detached and semi-detached sales, i.e. the overall house price will be partly influenced by the mix of properties sold.

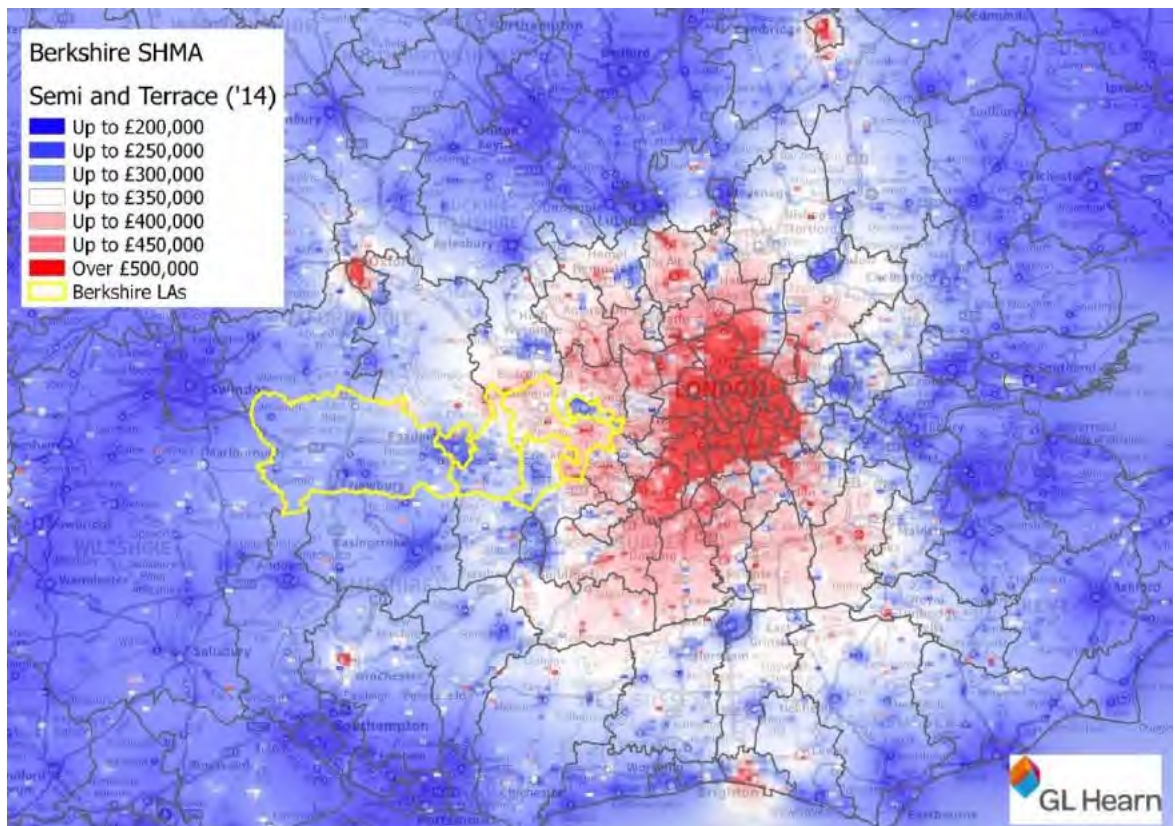
Figure 11: Prices of All Homes Sold, 2014



Source: GL Hearn based on Land Registry data, (2015), © Crown copyright and database rights 2015
Ordnance Survey 100019153

- 2.106 To address this issue, we have sought to consider house prices for mid-market semi-detached and terraced houses sold in 2014 looking across the wider area. Semi-detached and terraced prices are considered initially with a view to considering spatial price differences without price differentials being unduly influenced by local differences in housing mix.
- 2.107 The analysis in Figure 12 shows an area of higher house prices which extends beyond London into a number of the Home Counties, including parts of Kent, Sussex, Surrey, Berkshire, Buckinghamshire, Hertfordshire and Essex. The area with notably higher house prices for the semi-detached and terraced sales (Figure 12) does not extent as far outside the capital as the equivalent area identified in the all houses map (Figure 11).
- 2.108 Prices drop quite notably further north into Luton and Bedfordshire and also in South Essex and Western Berkshire. We see corridors of higher prices extending towards Oxford and Cambridge (influenced by economic strength), as well as down towards the Sussex Coast.

Figure 12: Prices of Semi-Detached and Terraced Homes Sold, 2014



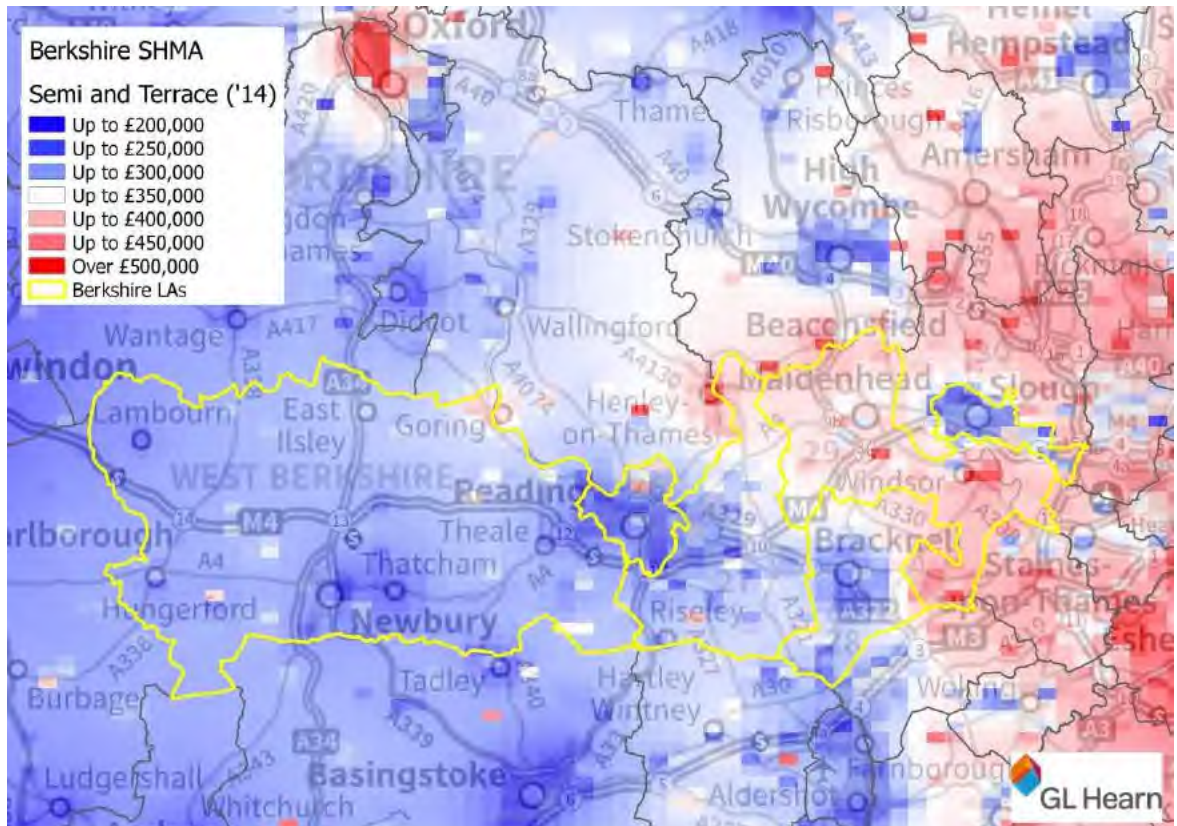
Source: Data produced by Land Registry © Crown copyright 2015.
© Crown copyright and database rights 2015 Ordnance Survey 100019153

- 2.109 The analysis suggests an east/ west distinction in housing costs within Berkshire, with areas in RBWM commanding higher prices, in common with other areas in the inner Home Counties close to London; with lower prices evident in parts of Bracknell Forest and Wokingham; as well as Reading and West Berkshire.
- 2.110 Within Berkshire, the higher prices are evident within RBWM together with the Winkfield area in Bracknell Forest and Wargrave area in Wokingham Borough. Slough sees notably lower house prices than other areas within the eastern part of the County, particularly in the western parts of the Borough.

Localised Price Distinctions

- 2.111 As described above, we would fully expect more localised distinctions in house prices to emerge through a finer grain (more localised) analysis of house price differentials. These reflect differences in the housing offer, quality of place and accessibility of different areas to employment centres. Figure 13 again looks at semi-detached and terraced sales.

Figure 13: Semi-Detached and Terraced Homes Sold – Berkshire, 2014



Source: Data produced by Land Registry. © Crown copyright and database rights 2015 Ordnance Survey 100019153

- 2.112 The map highlights higher house prices in RBWM and surrounding areas as discussed above compared to the rest of the County. It shows similar prices here to parts of Outer London, the Southern reaches of Buckinghamshire and parts of Oxfordshire (such as Henley-on-Thames) again influenced the quality of place and ease of access to London.
- 2.113 Higher housing costs of over £500,000 can be identified in some settlements, including Windsor, Eton and Bray; whilst lower prices are evident in the larger urban areas, including Reading, Newbury and Bracknell; Slough, Wycombe and the Blackwater Valley settlements.

House Price by Type

- 2.114 As well as analysing mid-market housing we have reviewed house prices by each of the typologies using local authority-level data. The reason we have shifted away from more localised data is to aid drawing HMA boundaries based on Local Authorities.
- 2.115 Table 1 sets out the median house price by type for each local authority in Berkshire, Buckinghamshire, Hampshire, Oxfordshire and Surrey. Each type is coloured to indicate relative house prices with dark red being the most expensive and dark blue the least expensive. The table is

sorted by the overall median house price with those in the study area highlighted in bold.

Table 1: Average House Prices by Type (2014)

Local Authority	Detached	Semi	Terrace	Flat	Median	Mean
South Bucks	£830,000	£406,281	£341,750	£282,500	£482,250	£641,398
Elmbridge	£1,000,000	£499,950	£410,000	£250,000	£460,000	£677,613
Chiltern	£660,000	£391,500	£308,000	£195,000	£425,000	£517,803
Mole Valley	£675,000	£414,875	£325,000	£222,500	£400,000	£469,537
RBWM	£635,000	£390,500	£370,000	£272,000	£387,000	£492,198
Waverley	£632,500	£370,000	£288,725	£205,000	£371,000	£481,135
Epsom and Ewell	£641,500	£433,000	£350,000	£250,000	£368,250	£414,587
Guildford	£640,000	£340,000	£292,950	£220,000	£345,000	£450,119
Tandridge	£578,500	£330,000	£300,000	£200,000	£340,000	£428,010
Hart	£485,000	£319,975	£250,000	£186,500	£330,000	£374,293
Reigate & Banstead	£600,000	£350,000	£305,000	£200,000	£325,000	£400,256
Winchester	£495,000	£303,610	£275,000	£188,875	£325,000	£399,246
Wokingham	£460,000	£325,000	£259,975	£197,750	£325,000	£363,905
Runnymede	£555,000	£350,000	£292,500	£205,000	£320,000	£416,651
Surrey Heath	£520,000	£315,000	£256,000	£185,000	£315,000	£381,089
Oxford City	£620,000	£330,000	£325,000	£242,250	£313,000	£423,099
South Oxfordshire	£490,000	£290,000	£250,000	£190,000	£302,000	£390,142
Woking	£632,750	£350,000	£280,000	£212,000	£300,000	£386,850
East Hampshire	£440,000	£284,000	£245,000	£162,000	£295,000	£354,606
Wycombe	£485,000	£297,000	£250,000	£170,000	£292,000	£359,751
Spelthorne	£468,500	£340,000	£285,000	£218,000	£287,000	£322,491
Vale of White Horse	£407,000	£278,000	£236,000	£175,000	£275,000	£324,597
Bracknell Forest	£420,000	£301,000	£249,950	£168,000	£265,000	£303,351
West Oxfordshire	£400,000	£262,000	£240,000	£158,500	£260,103	£320,629
West Berkshire	£435,000	£266,000	£225,000	£171,000	£260,000	£321,714
New Forest	£350,000	£243,000	£197,500	£160,000	£258,000	£315,793
Aylesbury Vale	£395,000	£250,000	£207,935	£134,000	£249,995	£291,757
Cherwell	£354,000	£245,000	£212,000	£140,000	£244,950	£279,316
Test Valley	£375,000	£232,500	£199,995	£136,250	£242,500	£294,255
Basingstoke & Deane	£370,000	£250,000	£205,000	£150,000	£237,500	£273,210
Fareham	£330,000	£225,000	£191,000	£125,000	£228,000	£254,129
Reading	£440,000	£280,001	£227,725	£173,000	£227,975	£254,757
Rushmoor	£360,000	£265,000	£228,500	£160,500	£227,950	£233,783
Slough	£408,000	£291,000	£244,950	£170,000	£225,000	£238,965
Eastleigh	£335,000	£231,000	£195,000	£148,000	£222,500	£244,903
Havant	£310,000	£225,000	£170,000	£123,500	£215,000	£238,377
Milton Keynes	£325,250	£210,000	£177,500	£135,000	£205,000	£230,332
Southampton	£245,000	£195,000	£169,950	£129,476	£169,950	£184,094
Portsmouth	£337,000	£219,995	£165,000	£125,000	£162,500	£184,799
Gosport	£305,000	£180,000	£150,000	£115,000	£158,000	£179,628

Source: Land Registry, 2015

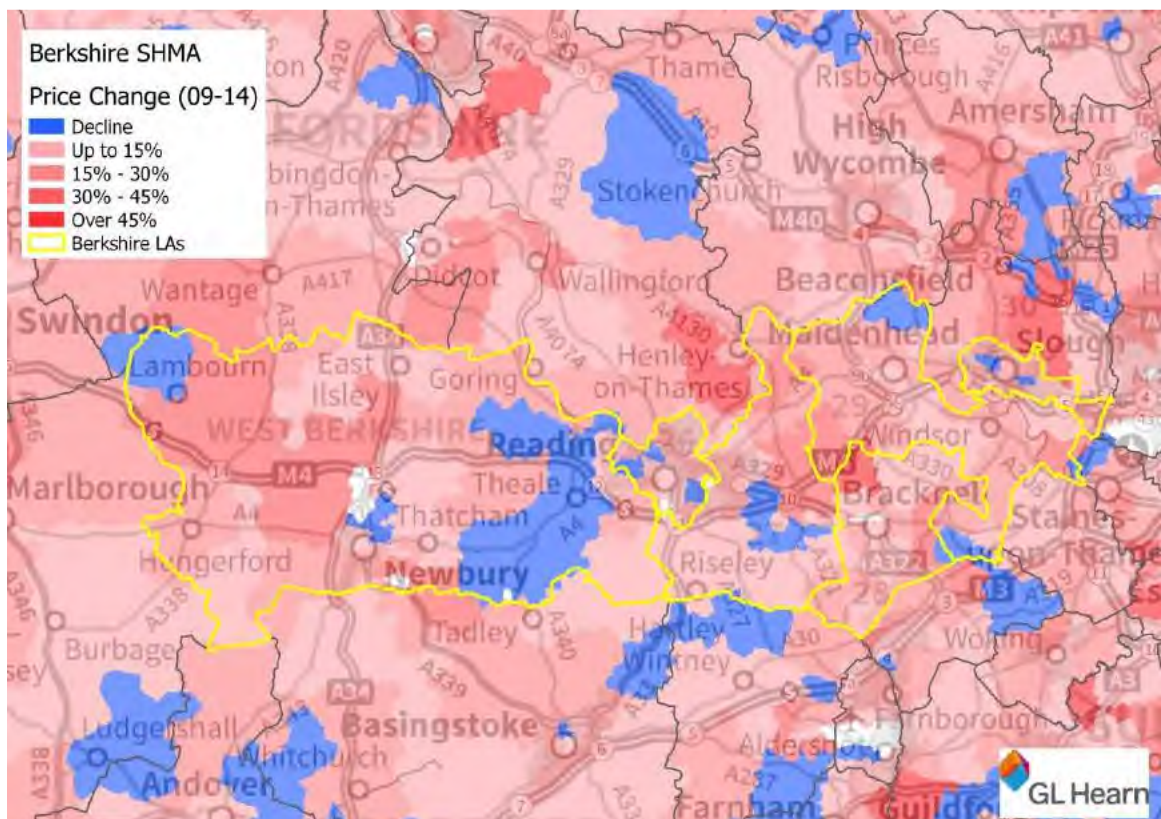
2.116 The analysis clearly shows a correlation between prices in RBWM and South Bucks; there is a particular correlation with smaller flatted and terraced stock. The data set out in the Table 1 also shows that for each house type and overall Bracknell Forest is more closely aligned with Wokingham than it is with RBWM.

2.117 Slough Borough again stands out as having lower comparative house prices than its immediate neighbours overall although for smaller properties (of which it has a higher percentage of stock) it has higher prices than some comparators in Berkshire e.g. the median flatted price is more expensive than Bracknell Forest. We do note however that this is an island of lower house prices in a generally expensive area. We consider that this is principally a reflection of local character / quality of place differentials.

House Price Changes

2.118 Figure 14 analyses how house prices have changed over the last five years (2009-14). It shows a picture which is quite varied at a local level. Because of the local variation, and generally short time period, the data displayed on the map is not particularly useful in considering housing market geographies.

Figure 14: Change in House Prices (All Properties), 2009-14

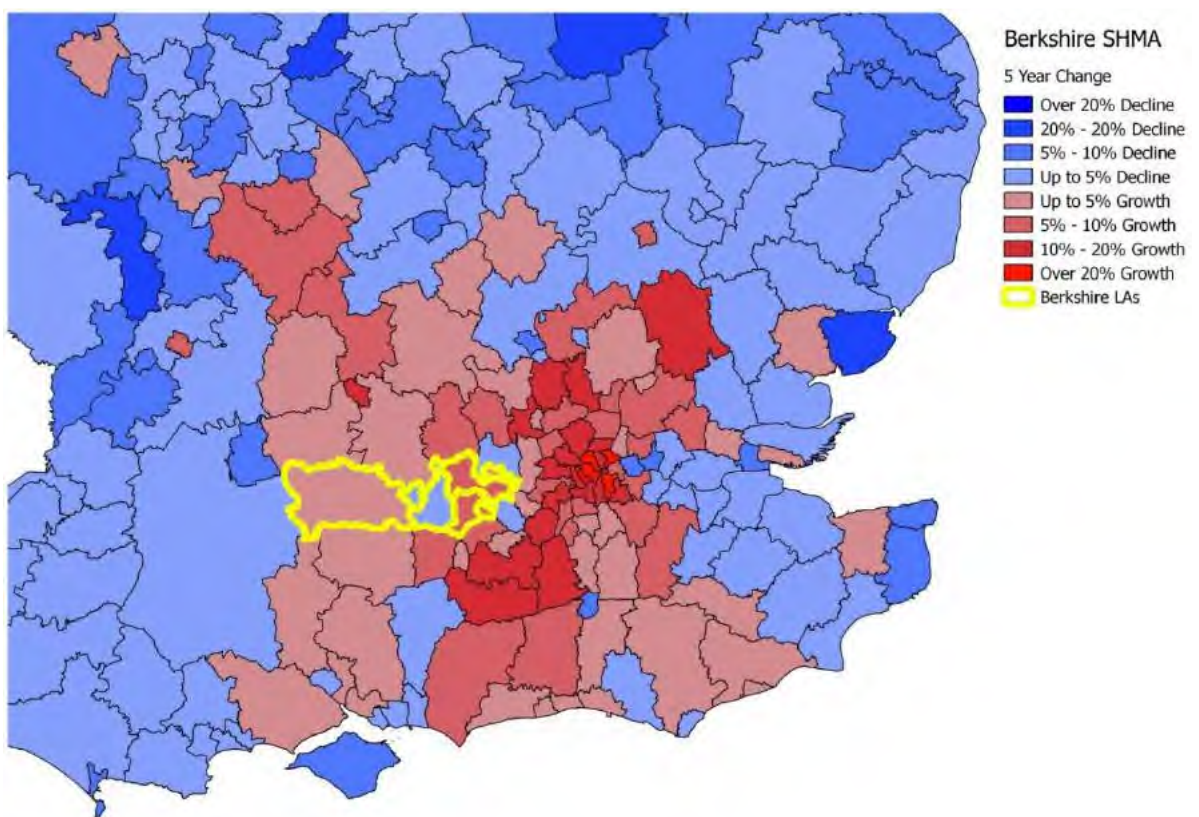


Source: Data produced by Land Registry © Crown copyright 2015. © Crown copyright and database rights 2015 Ordnance Survey 100019153

2.119 We have therefore used CLG data at a local authority level over a five and fifteen-year period to 2012. Figure 15 shows that house prices in 2012 had not recovered to 2007 levels in Reading, Wokingham, Runnymede, South Bucks, Wiltshire and parts of Hampshire. Of the Berkshire authorities, house price growth had been strongest between 2007-12 in RBWM and Wokingham.

2.120 We can also see that the highest level of growth over the last five years was in Inner London. There is also a broad but clear distinction between growth in London and the South East than the wider country.

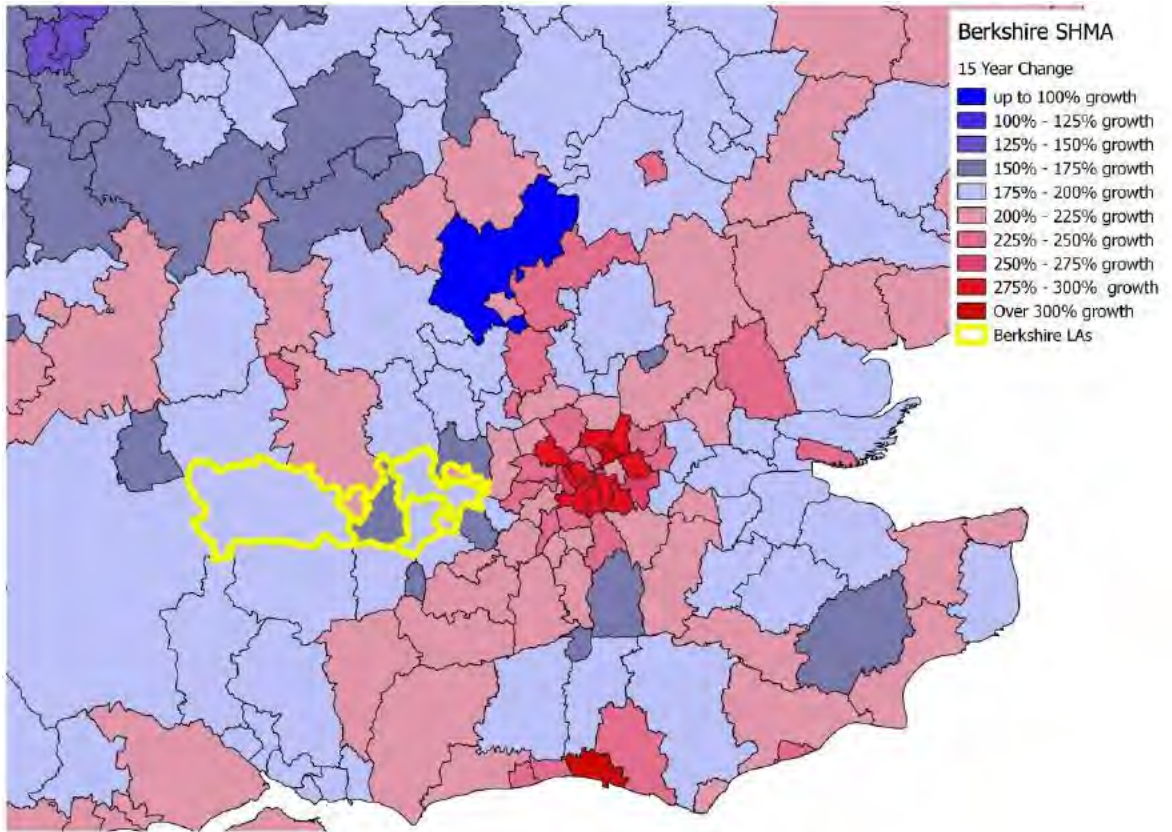
Figure 15: Change in House Prices (All Properties), 2007-12



Source: CLG, 2015, © Crown copyright and database rights 2015 Ordnance Survey 100019153

2.121 Figure 16 shows house price growth over a longer time period from 1997 to 2012. It was once again strongest in Inner London. The lowest level of growth was in Wokingham although the highest level of growth was in Reading and Slough. This is likely to reflect growth from a lower base.

Figure 16: Change in House Prices (All Properties), 1997-12



Source: CLG, 2015, © Crown copyright and database rights 2015 Ordnance Survey 100019153

Rental Costs

- 2.122 As well as market prices we have also reviewed rental costs for each local authority in Berkshire, Buckinghamshire, Hampshire, Oxfordshire and Surrey. As illustrated in Table 2, median rents were highest in RBWM where median rents were the same as those in South Bucks.
- 2.123 The median rental costs in Reading have a relatively higher position in comparison to the sales costs. This perhaps explained by the student market driving up rental costs. Similar patterns can be seen in Guildford and Oxford.

Table 2: Monthly Median Rents (2014)

Local Authority	1 Bed	2 Bed	3 Bed	4 Bed	Median
Elmbridge	£850	£1,195	£1,450	£3,080	£1,250
South Bucks	£750	£1,000	£1,300	£2,300	£1,150
RBWM	£825	£1,150	£1,350	£2,350	£1,150
Epsom and Ewell	£850	£1,125	£1,500	£1,995	£1,150
Guildford	£840	£1,100	£1,375	£1,900	£1,100
Oxford	£875	£1,050	£1,300	£1,950	£1,035
Mole Valley	£790	£1,100	£1,413	£2,500	£995
Tandridge	£750	£995	£1,300	£2,000	£995
Runnymede	£825	£1,138	£1,350	£1,900	£995
Woking	£825	£1,100	£1,275	£2,279	£995
Spelthorne	£825	£1,095	£1,250	£1,798	£995
Chiltern	£750	£950	£1,350	£1,800	£985
Reigate & Banstead	£748	£975	£1,250	£1,895	£950
Wokingham	£750	£975	£1,250	£1,795	£950
Surrey Heath	£750	£895	£1,150	£2,250	£950
Hart	£700	£875	£1,200	£1,695	£900
Bracknell Forest	£725	£900	£1,100	£1,600	£900
Waverley	£725	£975	£1,250	£1,850	£895
Winchester	£700	£850	£1,050	£1,600	£895
Wycombe	£695	£893	£1,198	£1,695	£850
Vale of White Horse	£710	£850	£995	£1,525	£850
West Oxfordshire	£665	£825	£1,050	£1,450	£845
South Oxfordshire	£700	£850	£1,150	£1,775	£825
Reading	£750	£895	£1,050	£1,725	£825
Basingstoke & Deane	£650	£800	£925	£1,350	£800
West Berkshire	£625	£795	£950	£1,400	£795
Test Valley	£595	£725	£875	£1,450	£795
Cherwell	£650	£775	£950	£1,400	£775
Slough	£700	£875	£1,100	£1,450	£775
New Forest	£575	£750	£895	£1,350	£760
Eastleigh	£595	£750	£895	£1,195	£760
East Hampshire	£595	£775	£950	£1,463	£750
Fareham	£576	£725	£850	£1,300	£750
Rushmoor	£675	£800	£1,000	£1,373	£750
Milton Keynes	£595	£750	£850	£1,250	£750
Aylesbury Vale	£595	£725	£925	£1,400	£725
Havant	£575	£695	£845	£1,200	£725
Southampton	£550	£725	£850	£1,213	£695
Portsmouth	£550	£675	£795	£1,280	£650
Gosport	£525	£650	£780	£1,041	£650

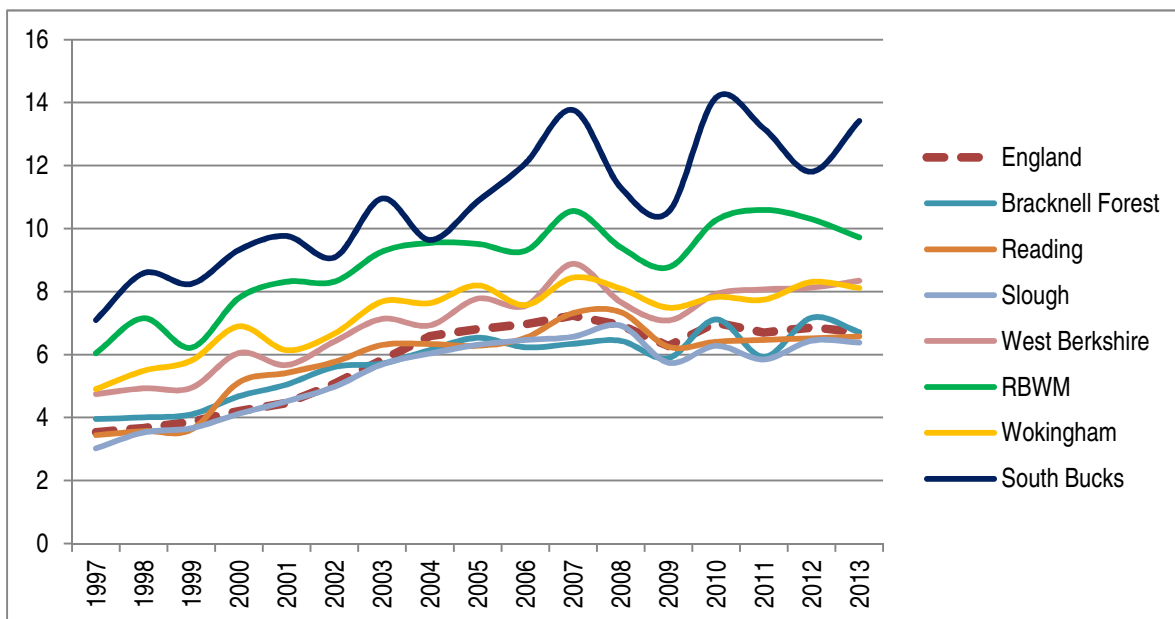
Source: VOA, 2015, (Overall median values also include room and studio costs)

2.124 The lowest rental costs were in West Berkshire and Slough, although as with house prices, the analysis points to an east/west distinction with higher comparative rental costs closer to London.

Change in Affordability

2.125 Finally, we have analysed how affordability has changed over the longer period. This information is taken from CLG data which covers the period 1997 to 2013. Figure 17 illustrates the changing ratio of median income to median house prices.

Figure 17: Median Affordability Ratio (1997 – 2013)



Source: CLG, 2015

2.126 As Figure 17 illustrates, the greatest affordability issues are in South Bucks and RBWM. As shown the median house prices are around 10 to 14 times median earnings in these local authorities. This again reflects the house prices in these areas.

2.127 In the other authorities in Berkshire, the median house prices vary between 6.4 – 8.1, with the highest prices in West Berkshire and Wokingham (which have a higher prevalence of rural areas), and the lowest in Slough and Reading (which are more urban in nature). In relative terms, differences in the ratios reflect differences in pricing between urban and rural areas.

2.128 Overall, the house price and affordability analysis point towards an east-west distinction in housing markets in Berkshire, but with lower prices within the eastern area in Slough reflecting localised differences in housing offer and quality of place.

Migration Patterns

2.129 Migration flows reflect housing market relationships – they reflect movement of people between homes. They are thus an important factor in considering the definition of an HMA. Paragraph 011 of

the PPG (ID: 2a-011-20140306) sets out that

“Migration flows and housing search patterns reflect preferences and the trade-offs made when choosing housing with different characteristics. Analysis of migration flow patterns can help to identify these relationships and the extent to which people move house within an area. The findings can identify the areas within which a relatively high proportion of household moves (typically 70 per cent) are contained. This excludes long distance moves (e.g. those due to a change of lifestyle or retirement), reflecting the fact that most people move relatively short distances due to connections to families, friends, jobs, and schools.”

- 2.130 Migration data from the 2011 Census has only been publically published at a local authority level. The Census records migration, asking people where they lived one year prior to Census day and on Census day itself. The use of Census data is preferable to other data (such as from NHS Central Health Register) as it records movement within individual local authorities, as well as between them, allowing self-containment analysis to be undertaken. The 2011 Census data may however reflect the particular economic recovery period.

Self-Containment within Individual Local Authorities

- 2.131 Table 3 shows self-containment levels within individual authorities. These can be measured either in terms of those who moved who were living in the local authority in 2010; or the base being those living in the authority in 2011.

Table 3: Self-Containment of Migration Flows within Individual Authorities, 2010-11

	% Self-Containment of those moving who lived in area in 2010	% Self-Containment of those moving who lived in area in 2011
Reading	56%	54%
West Berkshire	51%	51%
Wokingham	41%	44%
Bracknell Forest	49%	47%
RBWM	45%	50%
Slough	61%	62%
South Bucks	18%	18%

Source: 2011 Census

- 2.132 The self-containment levels vary from 18% in South Bucks through to 61% in Slough. The analysis however shows that **none of Berkshire Authorities have a sufficient self-containment level, based on the 2011 Census data, to be considered to represent a HMA in their own right solely on migration analysis.** This is an important finding. We would note that this Census data was not available at this scale when some previous studies were undertaken.

Migration by Age

- 2.133 Using 2011 Census data we have also reviewed migration into Berkshire and South Bucks by age group. This includes movements between the local authorities but not internal movements within the local authorities. Table 4 illustrates some distinct patterns across the study area. Reading (reflecting the University) has a particularly high percentage (63%) of those moving to the town being young adults (18-29 year olds).

Table 4: In Migration by Age (2011)

	Pre-School (under 5)	School Age (5-17)	Young Adults (18 - 29)	Home-makers (30 - 44)	Older Workers (45-65)	Retirement Age (+65)
Bracknell Forest	6%	13%	38%	27%	12%	4%
Reading	3%	5%	63%	21%	7%	2%
Slough	8%	10%	37%	35%	8%	2%
South Bucks	8%	10%	26%	32%	16%	8%
West Berkshire	5%	13%	31%	29%	16%	6%
RBWM	6%	12%	33%	32%	12%	5%
Wokingham	6%	10%	40%	29%	11%	5%
Total	6%	10%	41%	28%	11%	4%

Source: ONS, Census 2011

- 2.134 South Bucks and West Berkshire also have a notably high percentage of those moving to their local authority aged 45-65 and those over 65. Slough also has a comparatively high percentage of in migrants in the 30-44 year age group.

Migration Flows between Local Authorities

- 2.135 We have next sought to assess migration flows between local authorities. We have reviewed both net and gross flows over the year leading up to the 2011 Census. The first identifies the direction of movement; with the latter highlighting the strength of connections between two local authorities – and in effect showing more about the functional links between places.

Gross Flows Analysis

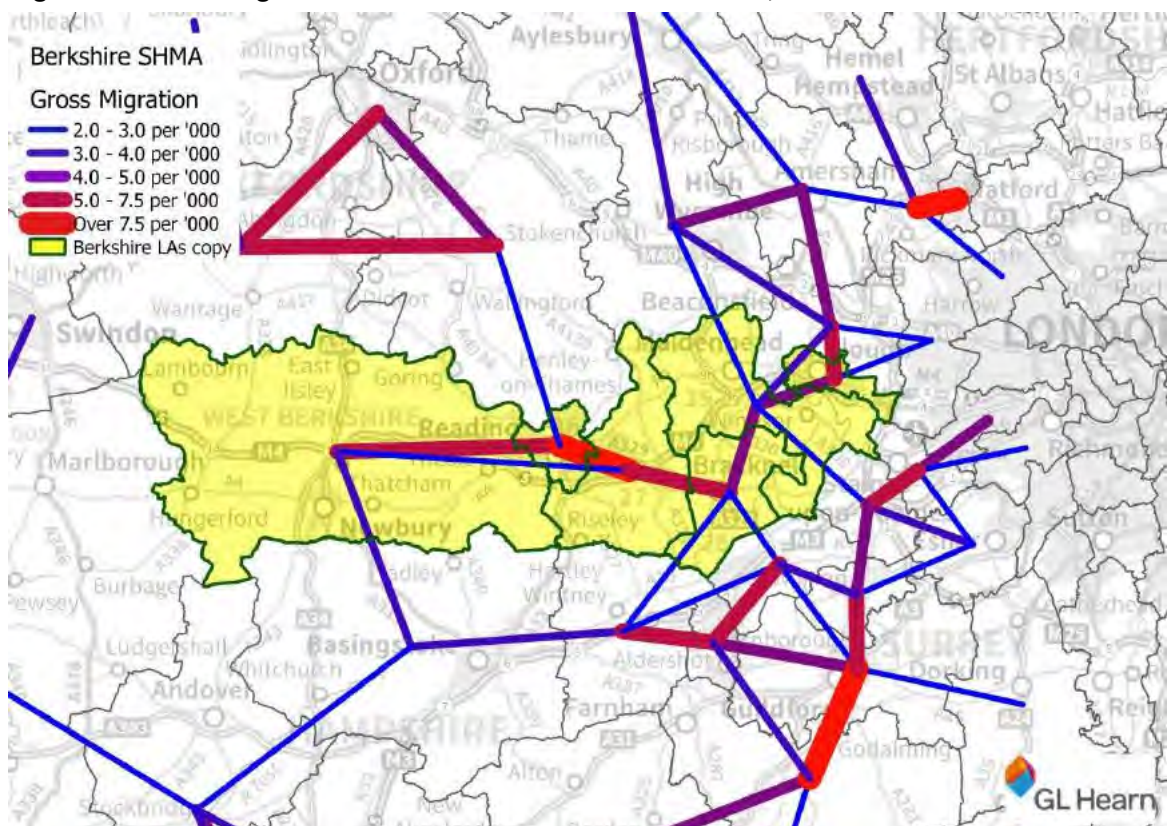
- 2.136 Typically, we would expect a larger migration flow between two authorities with larger populations. To provide a comparative assessment of the strength of migration flows, we have therefore benchmarked flows based on the combined population of two authorities. Figures are expressed per 1,000 joint population.

2.137 The analysis, illustrated in Figure 18, clearly indicates the following:

- Very strong migration flows of over 7.5 persons per 1,000 population between:
 - Reading and Wokingham
- Strong migration flows of between 5.0 and 7.5 persons per 1,000 population between:
 - West Berkshire and Reading
 - Wokingham and Bracknell Forest
 - Slough and South Bucks
- Medium-strength flows of between 3.0 and 5.0 persons or more per 1,000 population between:
 - Chiltern and South Bucks
 - Bracknell Forest and RBWM
 - RBWM and Slough
 - West Berkshire and Basingstoke and Deane
 - South Bucks and Wycombe
 - RBWM and South Bucks

2.138 The strong flows between Reading and Wokingham; and between Reading and West Berkshire are likely to be influenced in part by the geography of Reading's urban area, which extends beyond the Reading Borough boundary into these areas.

Figure 18: Gross Migration Flows between Local Authorities, 2010-11



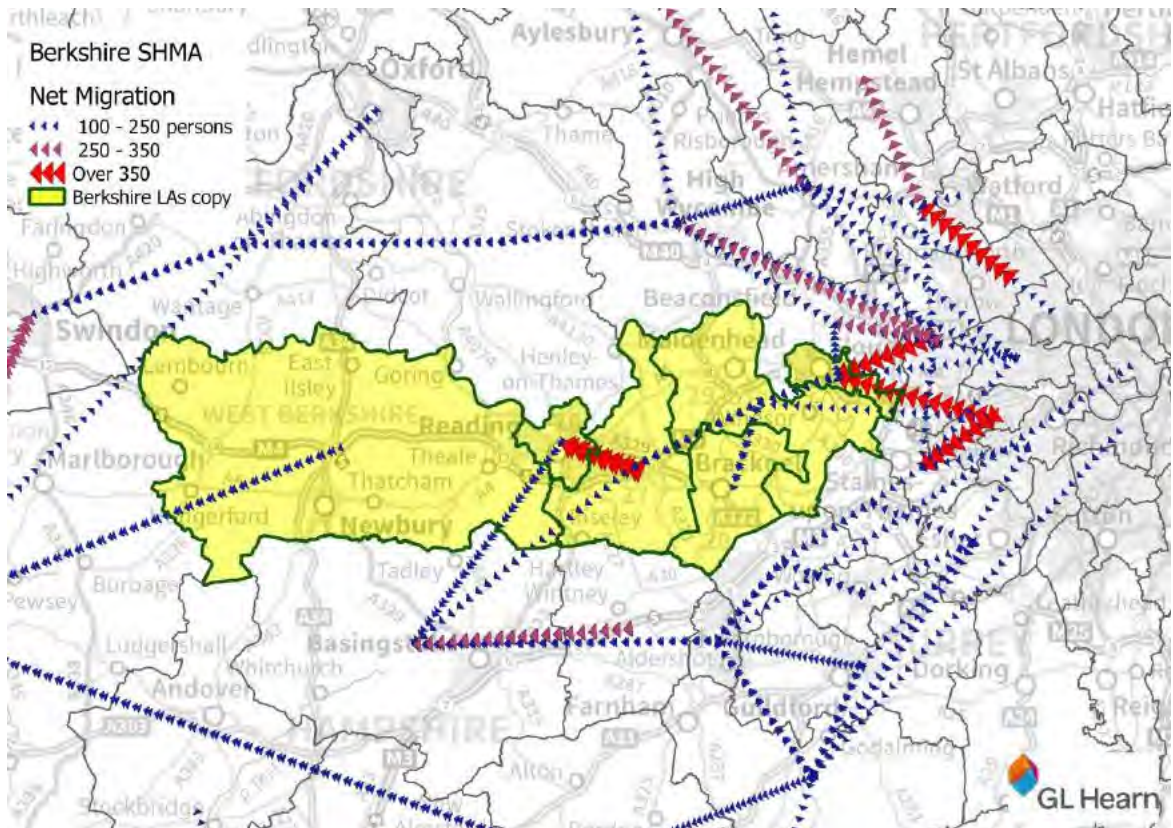
Source: 2011 Census, © Crown copyright and database rights 2015 Ordnance Survey 100019153

- 2.139 The analysis does point towards a degree of separation of the Berkshire area from both Wiltshire and Oxfordshire. Whilst there are migration flows with these areas, they are not particularly strong.
- 2.140 Bracknell Forest has notable links to RBWM and Wokingham with the latter being the stronger of the two.
- 2.141 The analysis points to a strong set of migration flows which cut across local authority boundaries in Berkshire; shows a strong link to South Bucks; but does not suggest as strong migration links southwards with Surrey and Hampshire. Nor does the analysis point to particularly strong flows between West Berkshire in the west and Slough / RBWM in the east although given the distance this is not unexpected.

Net Migration

- 2.142 An analysis of net flows shows a similar picture to that which we find in most areas around Greater London (and other core cities across the UK). Cities tend to attract in migrants from across the country and internationally, but then see over time a net out-migration to surrounding areas. The cities tend to have a younger population structure. Net out-migration to surrounding areas partly reflects a lifestyle model, with middle aged households from cities moving to more suburban and rural environments. Movement is influenced by a range of factors including house prices, quality of place, housing offer and schools.
- 2.143 As Figure 19 shows in Berkshire the analysis however also finds a notable net flow from Wokingham into Reading. We consider that this flow is likely to be influenced by student flows and the location of University of Reading Halls of Residence.

Figure 19: Net Migration Flows between Local Authorities, 2010-11



Source: 2011 Census, © Crown copyright and database rights 2015 Ordnance Survey 100019153

- 2.144 We do not consider the net flows analysis to be particularly useful in defining HMA boundaries (in this or other areas as it typically shows the largest flows to be from cities to surrounding areas). Closer two way relationships are therefore more meaningful.
- 2.145 Nevertheless, we have also looked at net migration data by age group again using the Census 2011 data. As shown in Table 5 there is net in-migration of students and those in their 20s to Reading; and of those in their 30s and early 40s with children to other parts of Berkshire. There was net out-migration of those over 45 in many of the local authorities considered.

Table 5: Net Migration by Age (2011)

Persons Per Annum	Pre-School (under 4)	School Age (5-17)	Young Adults (18 - 29)	Home-makers (30 - 44)	Older Workers (45-65)	Retirement Age (+65)
Bracknell Forest	79	252	-67	167	-49	-37
Reading	-181	-150	1,692	-527	-140	-93
Slough	27	111	-175	153	-220	-85
South Bucks	121	-21	-613	234	11	50
West Berkshire	-11	191	-1,045	72	-122	-19
RBWM	44	273	-887	304	-207	41
Wokingham	141	180	-1,885	321	-261	34
Total	220	836	-2,980	724	-988	-109

Source: ONS, Census 2011

- 2.146 South Bucks sees a net in-migration of older age groups. RBWM and Wokingham also see net in migration of those aged over 65.

Key Migration Flows

- 2.147 We have sought to strip back the data on migration to focus on the key flows to/from each of the Berkshire authorities. As outlined in Table 6, there is a particularly strong migration flow between Wokingham and Reading (relative to population size) which is likely to be influenced by the geography of Reading's urban area and student flows within the town.
- 2.148 The strongest relationships from West Berkshire are also with Reading; Bracknell Forest with Wokingham followed by RBWM; RBWM with Bracknell Forest and Slough; and between Slough and South Bucks.

Table 6: Major Migration Flows (2011)

	Bracknell Forest		Reading		Slough	
Migration	Local Authority	Gross Flow per '000	Local Authority	Gross Flow per '000	Local Authority	Gross Flow per '000
Self-Containment	Bracknell Forest	25.37	Reading	44.33	Slough	34.91
1st External	Wokingham	5.62	Wokingham	13.53	South Bucks	5.20
2nd External	RBWM	4.33	West Berkshire	6.81	RBWM	4.05
	West Berkshire		RBWM		Wokingham	
Migration	Local Authority	Gross Flow per '000	Local Authority	Gross Flow per '000	Local Authority	Gross Flow per '000
Self-Containment	West Berkshire	24.69	RBWM	24.40	Wokingham	21.72
1st External	Reading	6.81	Bracknell Forest	4.33	Reading	13.53
2nd External	Basingstoke and Deane	3.80	Slough	4.05	Bracknell Forest	5.62

Source: 2011 Census

2.149 We have then examined whether the external relationships (beyond the commissioning authorities) are as a result of a strong two-way flow or whether they represent a marginal flow to/from the external authority taking account of flows to other areas. As shown in Table 6, the Slough and South Bucks flow is notable for both local authorities and is stronger than the flow between South Bucks and Chiltern.

2.150 Similarly, Basingstoke and Deane has the most notable relationship with West Berkshire albeit that this is of a much smaller scale than the South Bucks-Slough relationship and other links considered – suggesting it reflects localised cross-boundary moves (see Table 7).

Table 7: Major Migration Flows (2011)

South Bucks		Basingstoke and Deane	
Local Authority	Gross Flow per '000	Local Authority	Gross Flow per '000
South Bucks	12.36	Basingstoke and Deane	30.45
Slough	5.20	West Berkshire	3.80
Chiltern	4.46	Hart	3.01

Source: 2011 Census

2.151 As a further analysis we have also reviewed the ONS definition of statistically significant flows involving the Berkshire authorities and South Bucks. These are based on analysis of Census data using a method adapted from Holmes and Haggart²⁷ (1977) which reviews the distribution of values in any given area. Table 8 sets out the statistically significant relationship of each local authority. Those in red reflect a net out-migration with those in green reflecting net in-migration.

Table 8: Statistically Significant Net Relationships between Local Authorities (2011 - 2014)

West Berkshire	Reading	Wokingham	Bracknell Forest	RBWM	Slough	South Bucks
Wiltshire	West Berkshire	Reading	Wokingham	Wycombe	Bracknell Forest	Hillingdon
Reading	Wokingham		Hart	South Oxfordshire	RBWM	Ealing
			Basingstoke & Deane	Bracknell Forest	South Bucks	Slough
			Slough	Hillingdon	Hillingdon	
			RBWM	Ealing	Hounslow	
			Hounslow	Wandsworth	Ealing	
			Hillingdon	Hounslow		
			Runnymede	Slough		
			Spelthorne			

Source: ONS, Internal Migration Estimates (those in bold are the commissioning authorities)

2.152 Reading has a statistically significant relationship with West Berkshire and Wokingham. Bracknell Forest has a significant relationship with both Wokingham to the west and RBWM and Slough to the east. Those local authorities to the East of the County (including Bracknell Forest) have a significant relationship with some west London Boroughs.

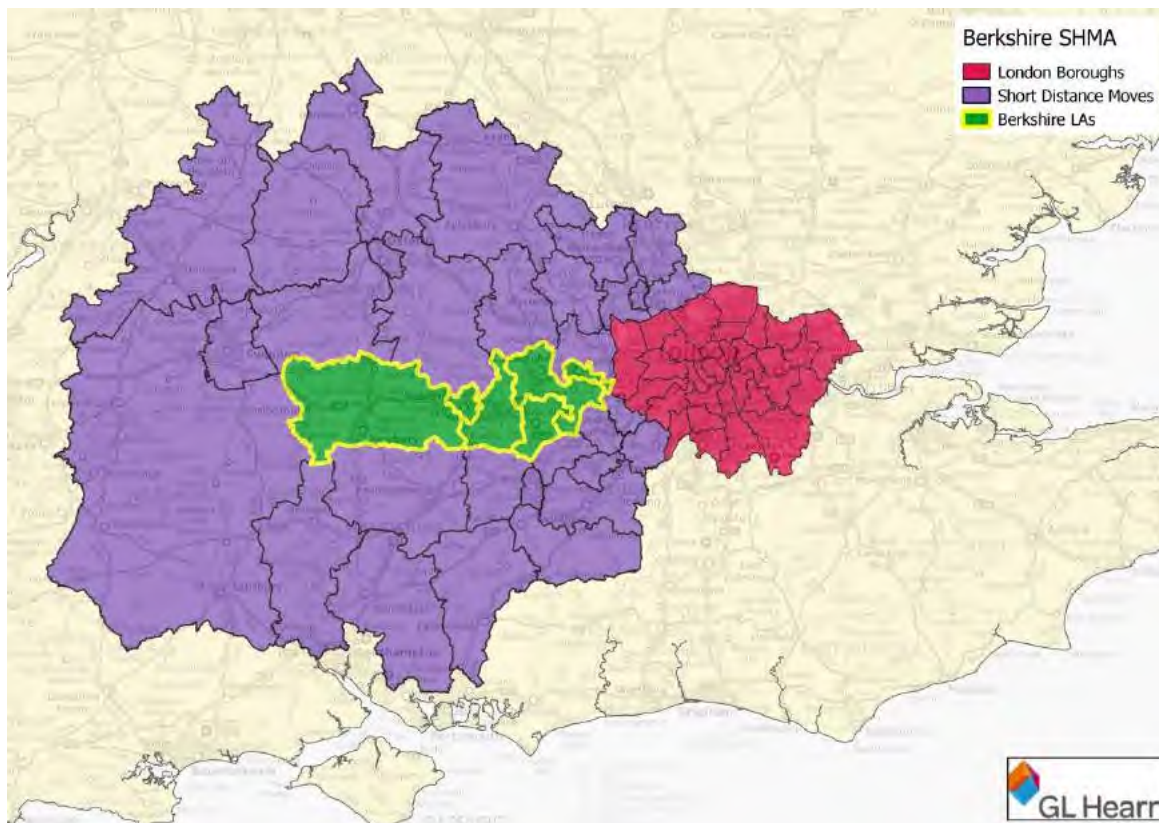
2.153 South Bucks only has a statistically significant relationship with Slough within Berkshire. The RBWM relationships extend to both Wycombe and South Oxfordshire in the north as well as a number of London Boroughs. Bracknell Forest is the only local authority with a significant relationship with the Surrey Authorities.

Migration Self-Containment

2.154 Paragraph 11 of the PPG (ID: 2a-011-20140306) sets out that an HMA would typically be an area in which 70% of moves are contained within (excluding long distance moves). We have therefore excluded long distance flow from the analysis and analysed migration self-containment levels for different potential geographies. Long distance moves are classified as those moves to/from outside the purple area illustrated in Figure 20. Initially flows to the London Boroughs are included.

27 Graph Theory Interpretation of Flow Matrices: A Note on Maximization Procedures for Identifying Significant Links (JH Holmes and P Haggart Geographical Analysis Volume 9, Issue 4, pages 388–399, October 1977)

Figure 20: Short Distance Moves Definition



Source: GL Hearn, 2015 © Crown copyright and database rights 2015 Ordnance Survey 100019153

- 2.155 Table 9 shows that around 78.6% of people moving from Berkshire do so to another location within the Berkshire authorities (64.55% when all other moves are included). Similarly 77.6% of those moving to Berkshire do so from another location within Berkshire. This is consistent with the migration flows analysis which indicated strong flows between the Berkshire authorities, but also a notable relationship with South Bucks.
- 2.156 When South Bucks is included the self-containment rate actually falls. This reflects the high number of people who have moved into South Bucks District from Greater London.
- 2.157 To this point the evidence has begun to suggest that there are two housing market areas across Berkshire and South Bucks - one covering West Berkshire, Reading, Wokingham and Bracknell Forest; and the other covering RBWM, and Slough with links to South Bucks. Bracknell Forest sits somewhat across the two although it appears that its strongest relationship is with Wokingham to the west and has therefore been placed in the Western Berkshire HMA.
- 2.158 We have therefore sought to test these two emerging areas to consider self-containment levels; and compare this against an approach that looks at a larger single market area (incorporating both).

Table 9 shows the initial analysis considering the self-containment of all migration flows.

- 2.159 The Western Berkshire grouping sees a higher self-containment level than the Eastern area even when Bracknell Forest is included, principally reflecting flows to/from Greater London from the Eastern area.

Table 9: Migration Self-Containment Levels, 2010-11

	% people making moves in the specified area	% of people moving into the specified area
All Berkshire Authorities	64.5%	65.4%
All Berkshire Authorities & South Bucks	64.2%	65.1%
West Berks, Reading, Wokingham & Bracknell Forest	63.5%	63.2%
West Berks, Reading and Wokingham	64.7%	64.8%
RBWM & Slough	56.9%	60.0%
RBWM, Slough, and South Bucks	56.5%	59.3%
RBWM, Slough, South Bucks and Bracknell Forest	57.8%	59.4%

Source: 2011 Census

- 2.160 Excluding long distance moves we see significant improvement to the self-containment rates in each of the potential geographies considered. In particular, the grouping of Western Berkshire Authorities achieves 76% - 77% self-containment of migration flows. This is above the 70% threshold in the PPG.
- 2.161 The Eastern Berkshire Authorities together with South Bucks shows around 69% self-containment of migration flows, once the longer-distance flows are excluded. This decreases with the inclusion of Bracknell Forest (see Table 10). This higher figure is very close to the “typically 70%” level referred to in the PPG.

Table 10: Migration Self-Containment Levels (excluding Long Distance), 2010-11

	% people making moves in the specified area	% of people moving into the specified area
All Berkshire Authorities	78.6%	77.6%
All Berkshire Authorities & South Bucks	76.0%	77.2%
West Berks, Reading, Wokingham & Bracknell Forest	77.7%	75.5%
West Berks, Reading and Wokingham	79.2%	77.4%
RBWM & Slough	68.5%	70.1%
RBWM, Slough, and South Bucks	68.8%	69.3%
RBWM, Slough, South Bucks and Bracknell Forest	64.4%	66.8%

Source: 2011 Census

- 2.162 The Western Berkshire authorities – West Berkshire, Reading, Wokingham and Bracknell Forest – see 75.5% self-containment, notably above the 70% threshold referred to in the PPG.
- 2.163 Although the figures for the Eastern Berks and South Bucks HMA are below the “typical” threshold set out by the PPG we do not consider it appropriate to seek to bolt the area onto the Western Berkshire HMA (which already exceeds 70% in its own right) just to achieve this. While combining both HMAs would also achieve the typical 70% threshold, by doing so would also lose local differentiations. The lower self-containment level in the Eastern Berks and South Bucks HMA is particularly a reflection of the noticeable links with London to the eastern parts of Berkshire and South Bucks and how this influences self-containment rates.
- 2.164 For analytical purposes we have therefore also sought to assess self-containment levels excluding the London flows. This is shown in Table 11. Once migration to/from London is set aside, self-containment levels are again notably higher. A strong relationship with South Bucks is evident²⁸.

Table 11: Migration Self-Containment Levels – Excluding Long Distance Moves and Greater London, 2010-11

	% People living in the area	% People moving in to the area
All Berkshire Authorities	85.6%	86.6%
All Berkshire Authorities & South Bucks	83.0%	87.2%
West Berks, Reading, Wokingham & Bracknell Forest	83.7%	81.3%
West Berks, Reading and Wokingham	85.4%	83.0%
RBWM & Slough	76.6%	84.9%
RBWM, Slough & South Bucks	78.0%	86.0%
RBWM, Slough, South Bucks and Bracknell Forest	70.6%	75.9%

Source: Census 2011

- 2.165 We can see that with the influence of Greater London excluded, the containment rate of those moving into all areas exceeds 70%. Also noticeable is the percentage of people moving into the area grows further still with the inclusion of South Bucks to the Berkshire and the Eastern Berkshire Authorities.
- 2.166 We can also see that by placing Bracknell Forest as part of the Eastern Authorities does not improve self-containment. This gives further justification of the grouping of Bracknell Forest with Reading, Wokingham and West Berkshire. Table 11 also broadly suggests that self-containment levels are higher for the larger geographical area.
- 2.167 We see evidence of short-distance moves across local authority boundaries between the Eastern and Western Berkshire areas. The migration analysis does not show flows from one end of the area

²⁸ South Bucks has a particularly strong relationship with London

to the other. For example the data shows that just 5 people moved from West Berkshire to South Bucks and only 22 in the opposite direction in the year leading up to the census. Indeed less than 100 people moved to any of the individual Western authorities from South Bucks although this is perhaps as expected given the distances involved.

- 2.168 As stated earlier in this chapter Bracknell Forest has a significant relationship with both Wokingham (753 people per annum out and 751 people per annum in) and RBWM (473 people per annum out and 642 people per annum in). In gross terms Bracknell Forest's relationship is however stronger with Wokingham than with RBWM. All movements within the study area and South Bucks are set out in Table 12.

Table 12: Movements between Berkshire and South Bucks Authorities (2011)

From	To	Flow
Reading	Reading	13,803
Slough	Slough	9,789
West Berkshire	West Berkshire	7,596
RBWM	RBWM	7,055
Wokingham	Wokingham	6,707
Bracknell Forest	Bracknell Forest	5,744
Wokingham	Reading	2,293
Reading	Wokingham	1,903
South Bucks	South Bucks	1,653
Reading	West Berkshire	1,083
West Berkshire	Reading	1,025
Bracknell Forest	Wokingham	753
Wokingham	Bracknell Forest	751
Slough	RBWM	661
Slough	South Bucks	648
RBWM	Bracknell Forest	642
RBWM	Slough	491
Bracknell Forest	RBWM	473
South Bucks	Slough	429
South Bucks	RBWM	359
RBWM	Wokingham	355
Wokingham	West Berkshire	325
West Berkshire	Wokingham	315
RBWM	South Bucks	298
Wokingham	RBWM	230
Bracknell Forest	Reading	208
Reading	Bracknell Forest	207
Slough	Bracknell Forest	196
RBWM	Reading	165

Reading	RBWM	162
Slough	Wokingham	155
Reading	Slough	154
Slough	Reading	139
Bracknell Forest	Slough	134
West Berkshire	Bracknell Forest	102
Bracknell Forest	West Berkshire	98
RBWM	West Berkshire	97
South Bucks	Bracknell Forest	84
West Berkshire	RBWM	78
Wokingham	Slough	77
South Bucks	Wokingham	59
South Bucks	Reading	41
West Berkshire	Slough	39
Wokingham	South Bucks	38
Bracknell Forest	South Bucks	34
Slough	West Berkshire	25
South Bucks	West Berkshire	22
Reading	South Bucks	15
West Berkshire	South Bucks	5

Source: ONS, Census 2011

- 2.169 Summing the information in Table 12 indicated that a total 1,439 people moved from the Western to Eastern Berks and South Bucks HMA with 1,980 moving in the opposite direction in 2010-11. By comparison 3,909 moved from the Western Berkshire HMA to London and 4,049 in the opposite direction.
- 2.170 The numbers are even more significant when the movement between Eastern Berks and South Bucks HMA and London is examined. Between 2010 and 2011 3,660 people moved to London with 6,006 people moving out of London to the three Eastern authorities. **The migration relationship between Eastern Berkshire plus South Bucks and London is 2.8 times greater than that with the Western Berkshire authorities.**
- 2.171 The strongest relationship between the Eastern and Western Berkshire HMA Authorities is that between RBWM and Bracknell Forest. The next strongest relationship is between RBWM and Wokingham (230 and 355) although this is at a level of almost half of that between RBWM and Bracknell Forest.
- 2.172 There is thus an interaction between the two potential HMA areas, evidenced through the migration flows analysis, as we might expect for any two adjoining HMAs; however, this particularly reflects

quite localised interactions across the HMA boundaries and is for instance weaker than flows within each HMA or with Greater London.

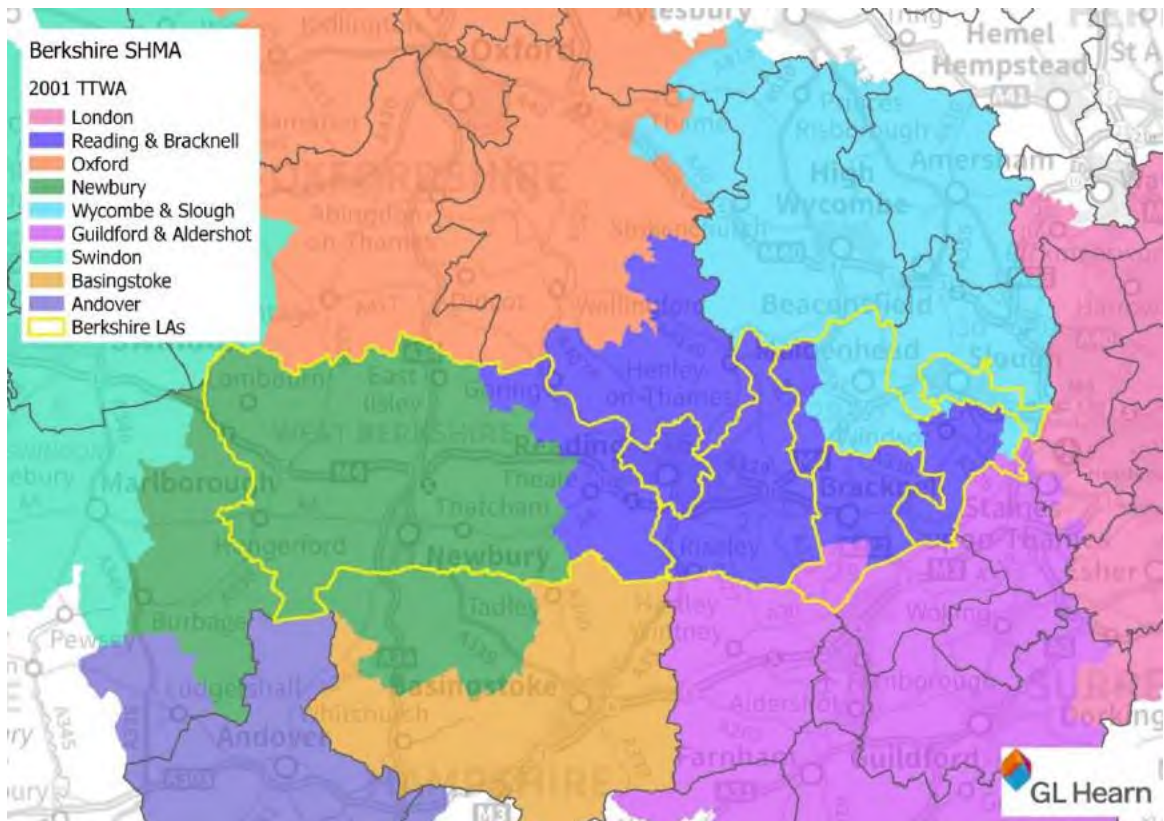
Contextual Data

Commuting Flows

- 2.173 The analysis of commuting flows in this section has been used to consider further the housing market geography. Our starting point for considering commuting patterns were the 2001 Travel to Work Areas (TTWAs) which were produced by the ONS and Newcastle University in 2007. These are the only official and nationally defined Travel to Work Areas.
- 2.174 The TTWAs were an attempt to identify self-contained labour market areas in which all commuting occurs within the boundary of the area. It should however be recognised that in practice, it is not possible to divide the UK into entirely separate labour market areas as commuting patterns are too diffuse.
- 2.175 The TTWAs were developed as approximations to self-contained labour markets, i.e. areas where most people both live and work. As such they are based on a statistical geography (Lower Level Super Output Areas (LSOA)) rather than administrative boundaries. The areas were produced by analysing commuting flows from the 2001 Census.
- 2.176 The ONS' "Introduction to Travel to Work Areas"²⁹ (October 2007) sets out the criteria for defining TTWAs.
- "that at least 75% of the area's resident workforce work in the area and at least 75% of the people who work in the area also live in the area. The area must also have a working population of at least 3,500. However, for areas with a working population in excess of 25,000, self-containment rates as low as 66.66% are accepted."*
- 2.177 As illustrated in Figure 21, the majority of West Berkshire (in both population and land mass) falls within the Newbury TTWA. The Reading TTWA extended to the eastern parts of West Berkshire as well as Wokingham, southern South Oxfordshire, the majority of Bracknell Forest, and the western and southern parts of RBWM (including Windsor). Maidenhead and Slough fell within the Wycombe and Slough TTWA. To complete the picture, a small part of RBWM and Bracknell Forest were defined as within the Guildford and Aldershot TTWA.

²⁹ "Introduction to Travel to Work Areas" (ONS October 2007) - <http://www.ons.gov.uk/ons/guide-method/geography/beginner-s-guide/other/travel-to-work-areas/index.html>

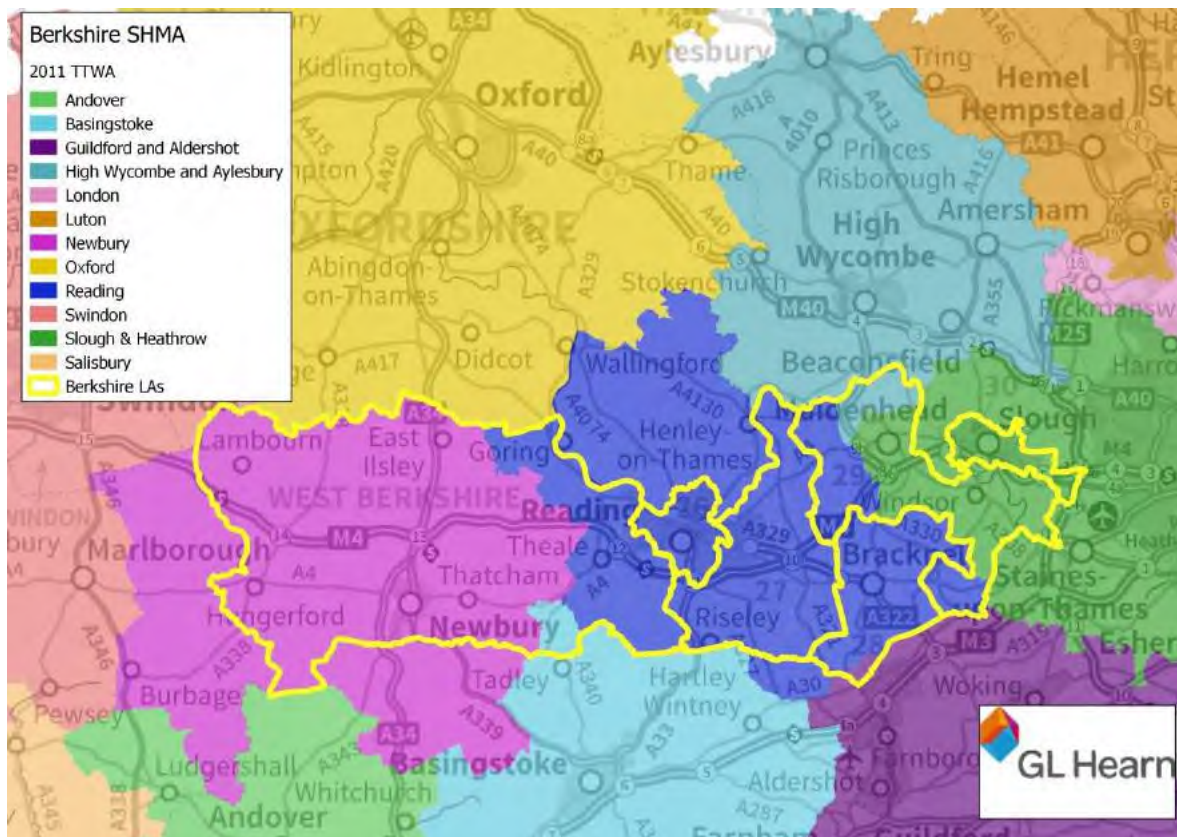
Figure 21: 2001 ONS Travel to Work Areas



Source: ONS, 2007, © Crown copyright and database rights 2015 Ordnance Survey 100019153

- 2.178 Subsequent to our initial analysis, the official TTWAs based on the 2011 Census data were published by ONS in August 2015. This provides a slightly more complex picture than the previous travel to work area as rather than four TTWA covering Berkshire there are now six TTWA, albeit three of these are quite peripheral.
- 2.179 As Figure 22 illustrates the majority of the county is covered by three Travel to Work Areas. The Newbury TTWA covers the western part of West Berkshire and extends into Wiltshire and Hampshire.
- 2.180 The Reading TTWA covers all of Reading and Wokingham local authorities, the eastern part of West Berkshire (including Theale) and most of Bracknell Forest. The parts of RBWM west of Maidenhead town and the southern part around Ascot and Sunningdale also fall within the Reading TTWA. It also extends into South Oxfordshire.

Figure 22: 2011 ONS Travel to Work Areas



Source: ONS, 2015, © Crown copyright and database rights 2015 Ordnance Survey 100019153

- 2.181 The Slough and Heathrow TTWA includes most of West London, Slough as well as Maidenhead town and Windsor town. The southern part of South Bucks is also included in the Heathrow and Slough TTWA.
- 2.182 A simple best fit of the above 2011-based TTWAs to local authorities would include Reading, Wokingham and Bracknell Forest within a Reading-based TTWA. RBWM, Slough, South Bucks and a number of West and South-West London Boroughs would fall in the Heathrow and Sough TTWA. West Berkshire would fall within a separate TTWA.
- 2.183 A limited number of areas within Berkshire fall within other TTWAs, including Basingstoke TTWA (around Aldermaston in West Berkshire), the Guildford TTWA (around Sandhurst in RBWM) and the Wycombe TTWA (around Cookham in RBWM).

Commuting Self- Containment Rates

- 2.184 We have next sought to consider commuting self-containment, based on aggregating data at local authority levels. We have initially calculated resident and job self-containment for different geographies. We have also looked at the level of self-containment when commuting from and to

Greater London are excluded. Table 13 sets out that that none of the individual local authorities had a self-containment rate which met the 66.6% criteria for defining a TTWA. The largest self-containment rates are found within West Berkshire where 52% of jobs are taken up by local residents and 56% of residents in employment also work in the Borough. When those commuting to and from London are excluded these increases to 54% and 59% respectively.

2.185 For the Berkshire Authorities as a whole the resident commuting self-containment level is 70.1%. This decreases very slightly with the inclusion of South Bucks. However, this includes significant commuting to London particularly from the eastern authorities. When commuting to London is removed resident self-containment increases to 79.8% for Berkshire and 81.1% for Berkshire and South Bucks.

Table 13: Commuting Self Containment Rates by Local Authority (2011)

	Including Greater London Moves		Excluding Greater London Moves	
	Job Self-Containment	Resident Self-Containment	Job Self-Containment	Resident Self-Containment
RBWM	38%	40%	42%	50%
Slough	38%	43%	46%	56%
South Bucks	19%	19%	21%	30%
Bracknell Forest	40%	42%	42%	47%
Reading	45%	51%	46%	55%
Wokingham	41%	33%	43%	35%
West Berkshire	52%	56%	54%	59%

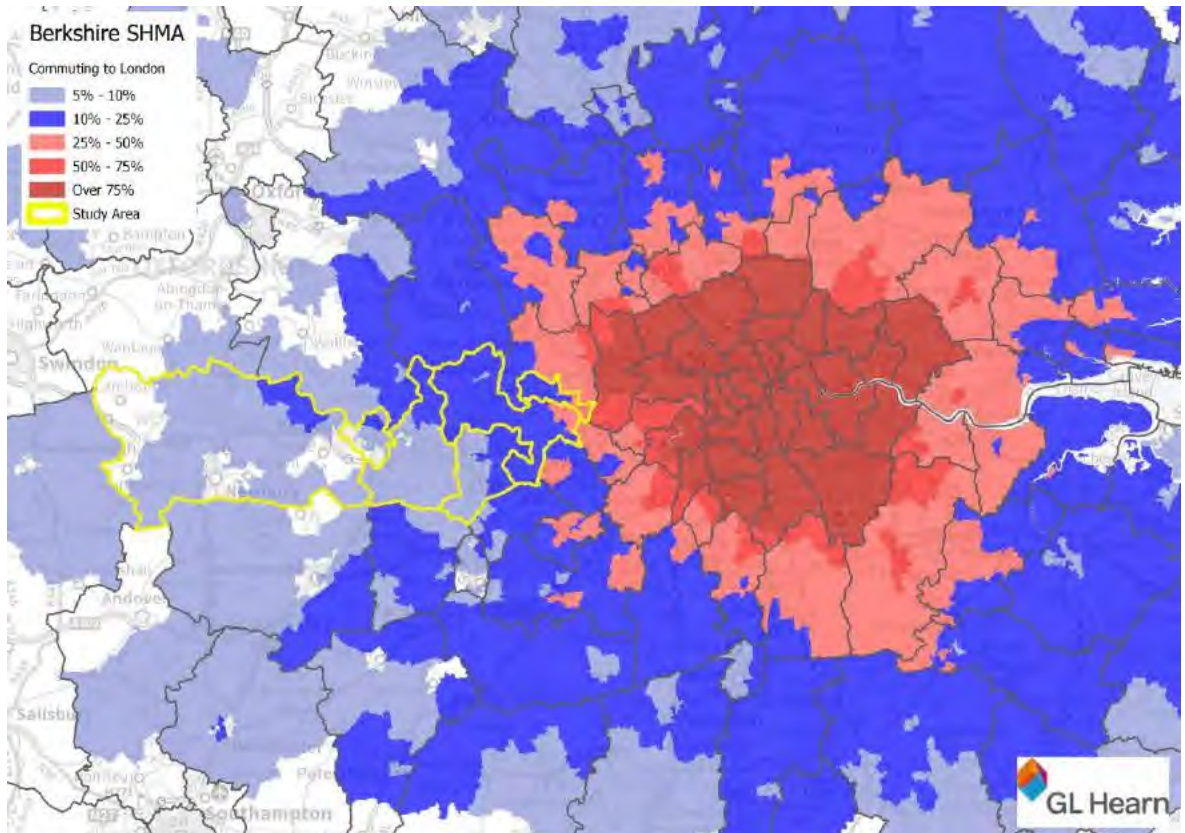
Source: ONS, Census 2011

2.186 We see a strong level of commuting from authorities in Eastern Berkshire (and in South Bucks) with London.

2.187 Figure 23 illustrates that the influence of Greater London as an employment destination is significant. The map shows that some MSOAs³⁰ as far as Winchester in the south and Stevenage to the north from which people commute to London and (outside the mapped area) it also extends to Brighton and Suffolk. It highlights the extensive influence of London on commuting from areas within the South East and East of England.

³⁰ These are statistical Zone used by the ONS for Census statistics. They comprise an area with between 5,000 and 10,000 residents.

Figure 23: Commuting to London (% of those in Employment in given MSOA) (2011)



Source: ONS, Census 2011, © Crown copyright and database rights 2015 Ordnance Survey 100019153

- 2.188 More importantly, the analysis shows that from all of RBWM and Slough at least 10% of employed residents commute to London. The areas with the highest percentage of residents commuting to London from Berkshire are Langley, Colnbrook and Wraybury.
- 2.189 Large parts of Bracknell Forest (in the east of the district), parts of Wokingham (north of Twyford) and small areas within Reading (north of the River Thames) and West Berkshire (Pangbourne, Upper Basildon and Streatley) also have 10% of their employed residents commuting to Greater London.
- 2.190 The stronger economic relationship with Greater London in the east of the county supports the case for considering the definition of two HMAs in Berkshire. **It is clear that there is a much stronger economic relationship with Greater London from the eastern part of Berkshire than the west.** This is likely to be influenced by commuting journey times and cost.

Major Commuting Flows

- 2.191 We have also analysed the major commuting flows from the commissioning authorities. Table 14 in combination with the self-containment data shows the economic influence of Reading in the west

and Slough in the east; and that it is notable that RBWM particularly draws workers from Slough – followed by London local authorities.

Table 14: Major Commuting Flows from the Commissioning Authorities (2011)

West Berkshire Residents			Reading Residents		
	Workers	% of Working Residents		Workers	% of Working Residents
Reading	9,199	14.3%	Wokingham	7,778	11.7%
Basingstoke and Deane	2,744	4.3%	West Berkshire	6,255	9.4%
Wokingham	2,498	3.9%	South Oxon	2,615	3.9%
Westminster and City	1,263	2.0%	Bracknell Forest	2,247	3.4%
Wokingham Residents			Bracknell Forest Residents		
	Workers	% of Working Residents		Workers	% of Working Residents
Reading	12,616	19.5%	RBWM	4,910	9.8%
Bracknell Forest	6,371	9.9%	Wokingham	4,620	9.2%
RBWM	3,124	4.8%	Surrey Heath	2,803	5.6%
West Berkshire	2,659	4.1%	Reading	1,936	3.9%
RBWM Residents			Slough Residents		
	Workers	% of Working Residents		Workers	% of Working Residents
Slough	5,865	10.2%	RBWM	6,380	11.4%
Hillingdon	2,868	5.0%	Hillingdon	5,458	9.8%
Westminster and City	2,857	5.0%	South Bucks	3,486	6.2%
Wycombe	2,810	4.9%	Hounslow	2,148	3.8%

Source: ONS, Census 2011

- 2.192 Looking beyond the Berkshire local authorities around 14% of South Bucks residents commute to Slough and a further 7.5% to RBWM. There is a strong commuting flow from South Bucks to Slough (see Table 15).

Table 15: Major Commuting Flows from South Bucks (2011)

South Bucks Residents		
	Workers	% of Working Residents
South Bucks	4,819	19.1%
Slough	3,618	14.3%
Hillingdon	3,478	13.8%
RBWM	1,868	7.4%

Source: ONS, Census 2011

- 2.193 From outside Berkshire, Reading as an employment centre also draws over 2,000 people from each of South Oxfordshire and Basingstoke and Deane. Similarly, RBWM draws over 2,000 from Wycombe. Slough also receives similar numbers from South Bucks, Wycombe, Hillingdon and Hounslow.

Statistically Significant Flows

- 2.194 The ONS have also defined statistically significant commuting flows involving the Berkshire and South Bucks Authorities. Again these are based on analysis using a method adapted from Holmes and Haggart³¹ (1977) which reviews the distribution of values in any given area.
- 2.195 Table 16 sets out the statistically significant commuting relationship of each local authority. Again there is a clear link between West Berkshire and Wokingham with Reading. Both Bracknell Forest and RBWM have significant easterly and westerly commuting flows.
- 2.196 Slough draws its significant workforce from a large area including from Wokingham, Bracknell Forest and a number of the London Boroughs. The outflow for Slough residents however is much more contained with significant commuting flows only to RBWM, South Bucks and Hillingdon.

31 Graph Theory Interpretation of Flow Matrices: A Note on Maximization Procedures for Identifying Significant Links (JH Holmes and P Haggart (Geographical Analysis Volume 9, Issue 4, pages 388–399, October 1977)

Table 16: Statistically Significant Commuting Relationships (2011)

Inflows						
West Berkshire	Reading	Wokingham	Bracknell Forest	RBWM	Slough	South Bucks
Reading	West Berkshire	Bracknell Forest	Wokingham	Slough	RBWM	RBWM
Basingstoke and Deane	Wokingham	Reading		Wokingham	South Bucks	Slough
				Bracknell Forest	Wycombe	Hillingdon
				Wycombe	Wokingham	Wycombe
					Bracknell Forest	Chiltern
					Runnymede	
					Hounslow	
					Ealing	
					Hillingdon	
Outflows						
West Berkshire	Reading	Wokingham	Bracknell Forest	RBWM	Slough	South Bucks
Reading	West Berkshire	Bracknell Forest	Reading	Slough	RBWM	RBWM
	Wokingham	Reading	Wokingham	South Bucks	South Bucks	Slough
			RBWM	Wycombe	Hillingdon	Wycombe
			Slough	Reading		Hillingdon
			Surrey Heath	Wokingham		Westminster & City of London
				Runnymede		
				Hillingdon		
				Hounslow		
				Westminster & City of London		

Source: ONS, Census 2011

2.197 South Bucks has localised flows with RBWM and Slough as well as the Buckinghamshire authorities of Chiltern and Wycombe. There is also a significant outflow to Hillingdon and Westminster. It is noticeable that there is only a significant commuting flow to and from London with those authorities in the Eastern part of Berkshire (including South Bucks).

Further Analysis of Self-Containment Rates

- 2.198 GL Hearn has also developed further analysis on self-containment rates by grouping logical sets of local authorities. Across Berkshire the resident self-containment is 71%. This rises to 81% when moves to London are excluded. When South Bucks is included the equivalent figures are 71% and 82%.
- 2.199 One should be mindful that the wider an area becomes the higher the self-containment rate is likely to be. Of those areas examined the highest level of self-containment is that for a combined Berkshire and South Bucks area; When London moves are excluded the Western Berkshire HMA (including Bracknell Forest) also exceeds 75% (see Table 17).

Table 17: Commuting Self Containment Rates by Different Groupings of Local Authorities (2011)

	Including London Moves		Excluding London Moves	
	Job Self-Containment	Resident Self-Containment	Job Self-Containment	Resident Self-Containment
Slough, RBWM and South Bucks	50%	54%	57%	71%
Slough, RBWM, South Bucks and Bracknell Forest	53%	56%	60%	71%
West Berkshire, Reading, Wokingham and Bracknell Forest	69%	70%	71%	76%
West Berkshire, Reading and Wokingham	67%	68%	69%	73%
Berkshire	68%	71%	73%	81%
Berkshire and South Bucks	68%	71%	73%	82%

Source: ONS, Census 2011

- 2.200 Due to the reasonably low self-containment rates and the high levels of commuting to Greater London (particularly from the eastern parts of the County see Figure 23), we have sought to develop the analysis to provide more practical local boundaries to work with.
- 2.201 Finally, we are mindful that the opening of Crossrail will significantly improve commuter links to and from Central / West London and Berkshire, but in particular Slough, RBWM and Reading, where the service starts/terminates. Once further information can be provided relating to the level of commuters using this service then the TTWAs should be reviewed.

Movement between the Eastern and Western Berkshire Geographies

- 2.202 We have also quantified the commuting patterns between the Eastern Authorities (including South Bucks) and the Western Authorities. This analysis shows that 8,892 people commute from collectively Slough, RBWM and South Bucks to Bracknell Forest, Wokingham, Reading or West Berkshire each day, with 16,119 people going in the opposite direction.
- 2.203 However, our analysis shows that collectively the Slough, RBWM and South Bucks area has almost 33,200 people commute to Greater London each day. 18,856 people also make the reverse journey each day.
- 2.204 By comparison the Western Berkshire Authorities receive 8,258 commuters from Greater London and send around 18,500 to Greater London each day. In commuting terms, the economic relationship from Slough and RBWM and South Bucks is therefore considerably stronger with Greater London, than with the Western Berkshire Authorities.
- 2.205 The strongest commuting links between the eastern and western parts of Berkshire are between RBWM and Bracknell Forest. This shows 2,135 people commuted from RBWM to Bracknell Forest; with 4,910 commuting from Bracknell Forest to RBWM.
- 2.206 However, there are 4,620 commuters from Bracknell Forest to Wokingham each day with 6,371 commuting in the opposite direction. This highlights Bracknell Forest's stronger alignment with the Western Berkshire HMA when gross flows are considered although recognising there is a commuting flow with RBWM.

Further 2011 Commuter Analysis

- 2.207 Finally we have sought to identify commuter catchment areas building on data from the Census looking at commuter catchments of the major employment centres in Berkshire and the wider area (see Figure 24). This "wider area" is broadly defined as the commissioning authorities, South Bucks and both their neighbouring authorities and their neighbouring authorities again. Because of the draw of Greater London and its significant influence in terms of commuting in the wide South East Region, we have chosen to exclude those travelling to or from the Capital for work.

Figure 24: Berkshire and Wider Area



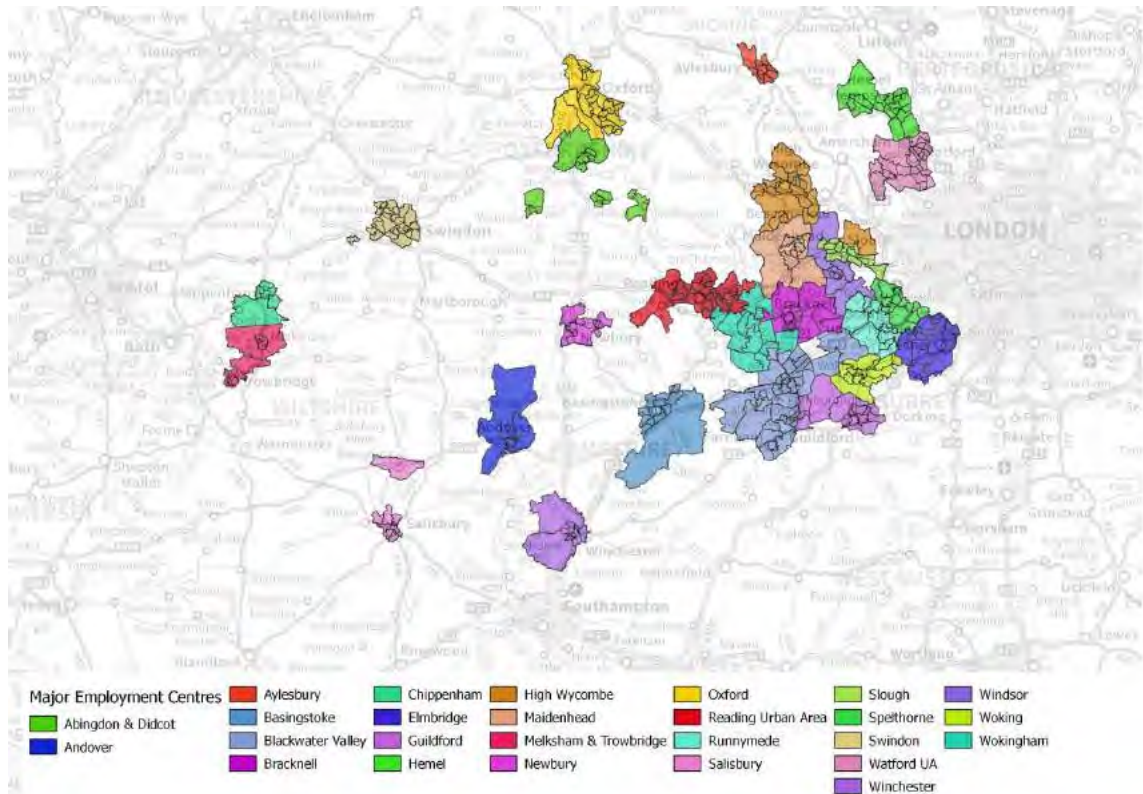
Source: GL Hearn 2015, © Crown copyright and database rights 2015 Ordnance Survey 100019153

- 2.208 The first step in the analysis has been to identify the major employment locations within the study area. To do so we firstly used those MSOAs identified as “urban areas” by the official Rural-Urban Classification which was defined by Sheffield and Nottingham Universities for the Department of Communities and Local Government (DCLG), the Department of Environment, Food and Rural Affairs (DEFRA), the Office of National Statistics (ONS) and the Welsh Government (WG)³². We also identified those MSOAs which had a commuting ratio of less than one (i.e. those MSOAs which have more people employed in them than have leaving them for employment).
- 2.209 This provided us with a list of MSOAs which can be seen as being centres of employment. We then grouped those into specific employment locations based on their proximity to major urban settlements.
- 2.210 The results ranged from whole boroughs comprised of smaller settlements (such as Spelthorne); to larger employment areas such as the Blackwater Valley or Reading Urban Areas which span more than one local authority; to places such as Thame which was comprised of just two MSOA.
- 2.211 We then calculated the level of employment in each of these employment centres using the Census 2011 data. The areas with the most employees were the Reading Urban Area, the Blackwater Valley and the Oxford Urban Area, all of which had employment of over 100,000 people.

³² ONS <http://www.ons.gov.uk/ons/guide-method/geography/products/area-classifications/2011-rural-urban/index.htm>

The employment centres with the fewest employees were the Westbury and Aldermaston areas, both of which had less than 2,000 employees. We excluded those areas with less than 15,000 employees from further consideration, as they were too small an employment centre to be their own travel to work area. The remaining 26 major employment centres are illustrated in Figure 25.

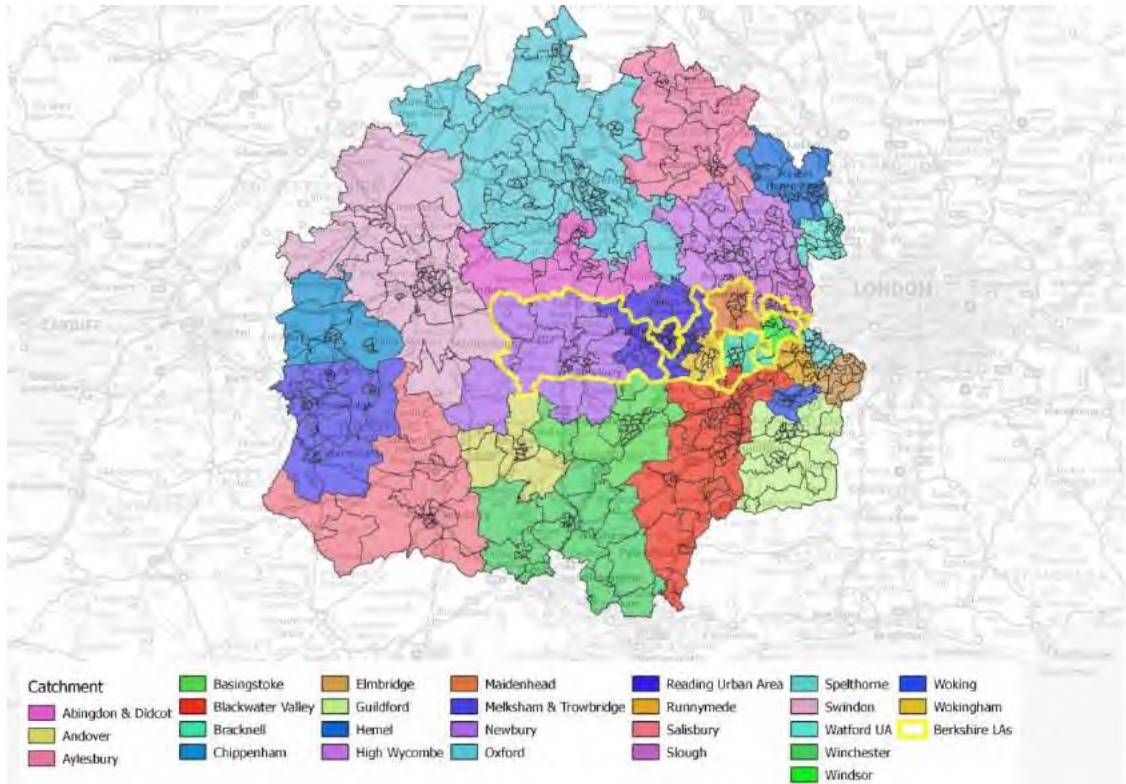
Figure 25: Major Employment Centres (2011)



Source: ONS, Census 2011, © Crown copyright and database rights 2015 Ordnance Survey 100019153

2.212 Once these major employment centres were identified we calculated the level of commuting to each of them from the MSOAs in the wider area. This is to ensure that the catchments are contained to a reasonable area (around 600 MSOA). We then identified which was the most popular centre of employment in each MSOA and attributed that MSOA to that employment centre's catchment unless the flows were less than 25. This analysis considered the top 8,000 flows when sorted by size and ensured that the entire wider area was attributed to one of the centres (see Figure 26).

Figure 26: Catchment of Major Employment Centres



Source: ONS, Census 2011, © Crown copyright and database rights 2015 Ordnance Survey 100019153

2.213 Across Berkshire and South Bucks there are nine different commuting catchment areas defined from the initial analysis. These are:

- Newbury;
- Reading;
- Wokingham;
- Blackwater Valley;
- Bracknell;
- Windsor;
- Maidenhead;
- Slough; and
- High Wycombe.

2.214 Two of these catchment areas, Blackwater Valley and High Wycombe, are largely outside of Berkshire or South Bucks. The Newbury catchment extends in to Wiltshire and Basingstoke. The Reading Urban Area catchment includes parts of South Oxfordshire. The remainder are all contained within Berkshire and South Bucks.

2.215 The next stage was to calculate the self-containment rates for each of these catchments with an aim to reach or exceed a 67% commuting self-containment threshold. This aligns with the ONS definition of Travel to Work Area. We have calculated this on the basis of the percentage of employed residents who live and work within the catchment. We have also excluded any long distance moves (outside the wider area) and moves to and from Greater London. The self-containment rates are set out in Table 18.

Table 18: Self-Containment Rates of Commuter Catchment Areas

Travel to Work Area	Self-Containment
Newbury	65.0%
Reading	70.1%
Wokingham	34.4%
Blackwater Valley	65.3%
Bracknell	49.1%
Windsor	43.2%
Maidenhead	49.1%
Slough	64.2%
High Wycombe	66.1%

Source: ONS, Census 2011,

2.216 This shows that the lowest self-containment rate within the relevant commuter catchment area were for the Wokingham catchment area. We have therefore sought to merge this with the next most relevant commuter catchment area based on where these MSOA sends the next most commuters to. In this case it is the Reading Commuter Catchment Area.

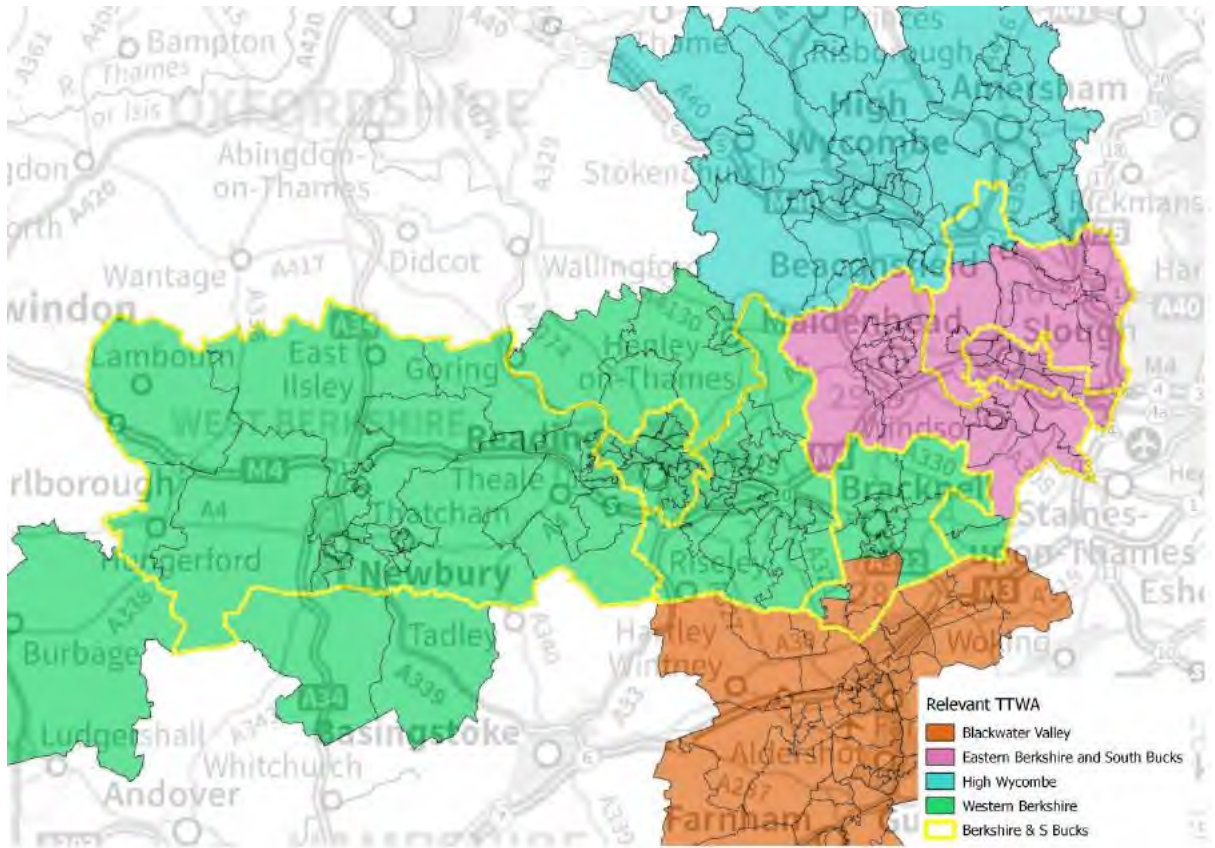
2.217 The self-containment rate of a combined Reading and Wokingham Commuter Catchment Area is then calculated at 71.6%. We then seek to merge the next lowest, Windsor, with its most closely linked neighbour Slough by number of commuters. We repeat these steps until a self-containment rate of 67% is reached in all Commuter Catchment Area. We have summarised the merges below, with the resultant self-containment rate in brackets:

- Wokingham with Reading (71.6%);
- Windsor with Slough (70.6%);
- Bracknell with Reading and Wokingham (75.8%);
- Maidenhead with Slough and Windsor (76.3%);
- Newbury with Bracknell and Reading and Wokingham (78.8%);

2.218 This in effect results in two Commuter Catchment Areas being identified within Berkshire and South Bucks; with peripheral parts of the Blackwater Valley and Wycombe Commuter Catchment Areas also featuring. In labour market terms, the Newbury-focused catchment is also relatively self-contained.

2.219 The analysis supports the identification of two housing market areas operating across Eastern Berkshire and South Bucks and Western Berkshire (see Figure 27).

Figure 27: Berkshire and South Bucks TTWA (2011)



Source: ONS, Census 2011, © Crown copyright and database rights 2015 Ordnance Survey 100019153

2.220 We do note that the commuter catchment areas do not fully align with the local authority boundaries with the Reading, Newbury, Bracknell and Wokingham Commuter Catchment Area also including the areas of RBWM around Ascot and Sunningdale.

2.221 Overall, the commuting analysis shows a clear east/ west distinction within Berkshire. It supports a strong set of links between the Eastern Berkshire authorities and South Bucks. In Western Berkshire, in order to achieve a self-containment rate of over 75% the Newbury TTWA should be merged with wider Reading-focused TTWA. If these are not merged however both TTWA have self-containment rates of at least 65%.

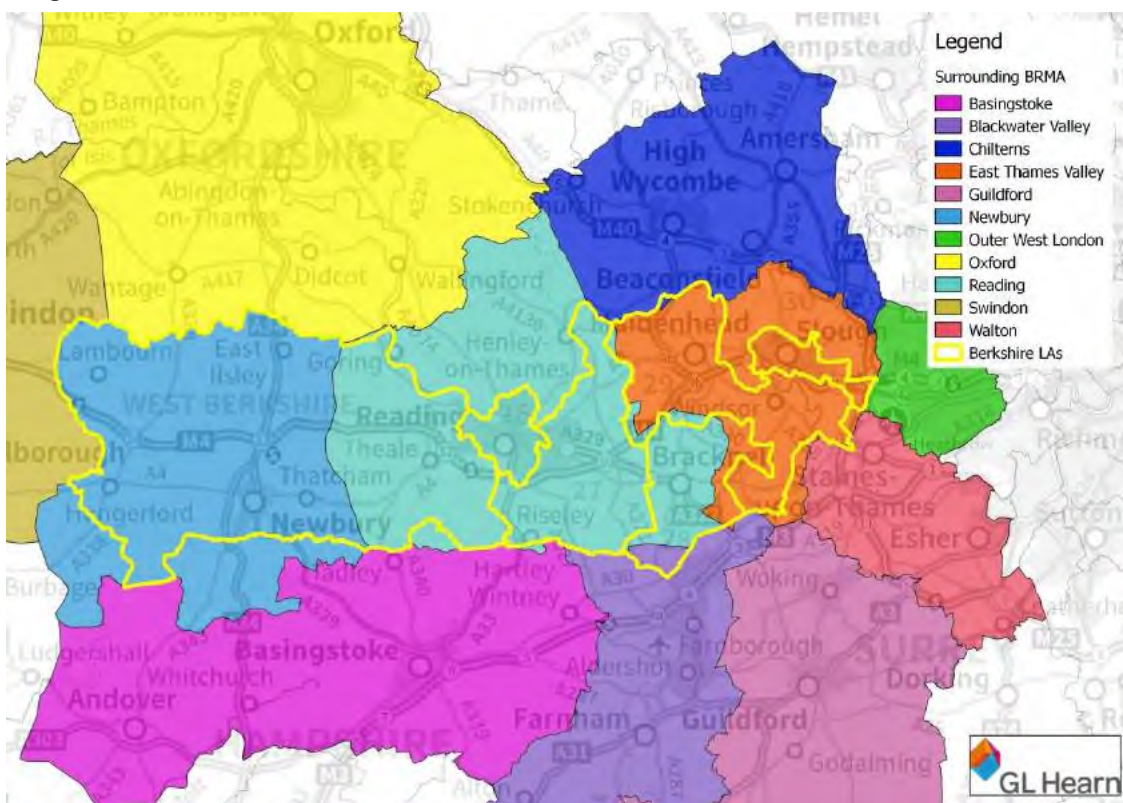
Other Contextual Indicators

Broad Rental Market Areas

2.222 The Broad Rental Market Area (BRMA) is an area defined by the Valuation Office Agency and is the area within which a Local Housing Allowance claimant could reasonably be expected to live taking into account access to facilities and services. It is also the area to which local housing allowance is benchmarked. As illustrated in Figure 28 there are four Broad Rental Markets which operate across Berkshire. There is also a fifth which operates in South Bucks.

2.223 The Newbury BRMA covers much of the western parts of West Berkshire and includes parts of Wiltshire and Basingstoke and Deane. The Reading BRMA covers the remaining parts of West Berkshire along with small parts of RBWM, Basingstoke and Deane, parts of South Oxfordshire (including Henley-on-Thames), the majority of Bracknell Forest and all of Reading and Wokingham.

Figure 28: Broad Rental Market Areas



Source: VOA, 2014, © Crown copyright and database rights 2015 Ordnance Survey 100019153

2.224 The remaining parts of Bracknell Forest fall within the Blackwater Valley BRMA (which covers Aldershot, Farnborough and Farnham) and the East Thames Valley BRMA.

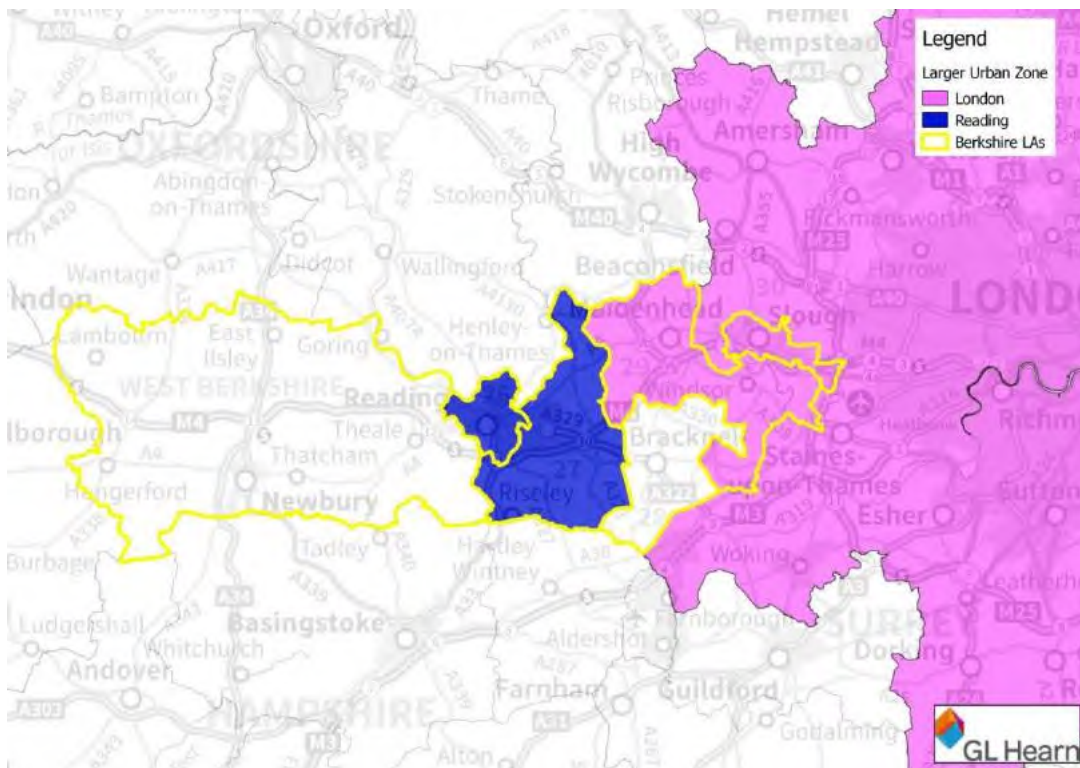
2.225 The East Thames Valley BRMA covers the vast majority of RBWM, all of Slough and the southern parts of South Bucks.

- 2.226 Whilst the southern part of South Bucks falls within the East Thames Valley BRMA, the northern part falls within the Chiltern BRMA. This also includes parts of Chiltern and Wycombe District.
- 2.227 The BRMA geographies again illustrate that the eastern parts of Berkshire are closely aligned with South Bucks and that Reading's influence extends to Bracknell and Wokingham and the eastern parts of West Berkshire.

Larger Urban Zones

- 2.228 The Larger Urban Zone (LUZ) is an urban definition introduced in 2004 by Eurostat³³, which is the statistical agency of the European Union, in agreement with the national statistics offices in each of the member states. These were created to represent the wider functional economic area surrounding the core city or greater city based on its commuting zone. This allows for cities to be compared against their functional area rather than their administrative area which can vary from nation to nation e.g. London is a NUTS level 1 whereas Paris is Nuts Level 3³⁴.
- 2.229 As Figure 29 illustrates, there are two LUZ within Berkshire. The London LUZ covers Slough and RBWM local authorities as well as all of Greater London and a number of other surrounding local authorities including South Bucks. The map clearly shows London LUZ has a significant influence in economic terms on Eastern Berkshire.

Figure 29: Larger Urban Zones



Source: Eurostat, 2015, © Crown copyright and database rights 2015 Ordnance Survey 100019153

33 Regional and Urban Statistics Reference Guide 2010 (Eurostat, 2010) - <http://ec.europa.eu/eurostat/documents/3859598/5911205/KS-RA-10-008-EN.PDF/f22f0e52-7677-4d2d-ad94-fa3950e8dc0c?version=1.0>

34 NUTS being the Nomenclature of Territorial Units for Statistics which are an agreed standard for referencing the subdivisions of countries for statistical purposes.

- 2.230 There is a noticeable more local influence of Reading on Wokingham using these geographies.

Stakeholder Engagement

- 2.231 Draft findings regarding the geography of housing markets were tested through a Stakeholder Event held on 19th May 2015. The event included a presentation of emerging findings by GL Hearn, followed by a Question and Answer Session. Two sessions were held – one with Duty to Cooperate Partners; and a second including wider stakeholders, including local agents, house builders (and their agents), registered providers and other interest groups.
- 2.232 Stakeholders were asked at the event if they agreed with the findings. Some stakeholders raised specific questions, including in relation to self-containment levels and house price differentials across a range of property types.
- 2.233 Through consultation with local estate and letting agents we tested the emerging definitions of HMAs and the boundaries were broadly ratified. When asked about the differences between the two HMAs there was clear and consistent responses relating to the influence of Greater London on the Eastern Berks and South Bucks HMA.
- 2.234 A number of the respondents indicated that Slough was potentially a distinct HMA in its own right given the difference in house prices to the surrounding authorities.
- 2.235 Within the Appendix D we have set out the stakeholder engagement process and the concerns relating to the HMA geographies. While most of the local authorities agreed with the proposed geography South Bucks is of the belief that there is a single Berkshire HMA which also includes South Bucks rather than Eastern Berkshire and South Bucks HMA and a Western Berkshire HMA.

Conclusions on HMA Geography

- 2.236 This chapter has focused on defining HMAs which include the Berkshire Authorities. The PPG sets out that:

“A housing market area is a geographical area defined by household demand and preferences for all types of housing, reflecting the key functional linkages between places where people live and work. It might be the case that housing market areas overlap.

The extent of the housing market areas identified will vary, and many will in practice cut across various local planning authority administrative boundaries. Local planning authorities should work with all the other constituent authorities under the duty to cooperate³⁵.”

- 2.237 The PPG outlines that the HMA can be broadly defined using three sources of information – house prices and rates of change; migration patterns; and contextual information including TTWA data. In practice, migration and commuting data are often the key inputs to defining HMAs (in both this and other areas). This is recognised in the PAS Technical Advice Note.

2.238 The PAS Note (paragraph 5.21) states “it is best if HMAs, as defined for the purpose of needs assessments, do not straddle local authority boundaries. For areas smaller than local authorities data availability is poor and analysis becomes impossibly complex”. GL Hearn supports this approach – particularly given that a key purpose of a SHMA is to identify housing need; and that demographic projections which form an important input to this are not published below local authority level.

CURDS Research & Other Previous Research

2.239 The PAS Advice Note (paragraph 5.6) outlines that it is useful to start with a “*top down analysis*” which looks at the whole country – in particular to avoid defining HMAs based on the area which is identified as the starting point (which has been an issue with a number of existing studies which have considered these issues at a more local level). The top down analysis is provided by a research study led by the CURDS at Newcastle University to define HMAs across England, which was published by Government in November 2010³⁶.

2.240 Peter Brett Associates’ view in the PAS Report was that the most useful definition in the CURDS research is the Single Tier “Silver Standard” which comprises the Berkshire local authorities as well as South Bucks and Wycombe. However, it cautions that this is less useful close to major cities, including London. It does not take account of the significant impact of commuting to London from parts of Berkshire and other areas in the Home Counties. The CURDS report recognises this.

2.241 The CURDS work is based on 2001 data and is now 14 years old. This has been reviewed through this report using 2011 Census commuting and migration flow data which was released in stages across the latter part of 2014. The analysis has informed the conclusions in this report.

2.242 A review of CURDS work and previous research undertaken at a local/ sub-regional level highlights a number of issues relevant to defining the HMA. These include:

- Differences in the scale at which HMA boundaries have been drawn;
- The influence of London on the economy and housing markets in eastern Berkshire but a need to recognise the GLA’s definition that Greater London comprises its own HMA;
- Evidence that authorities around Berkshire define themselves as within separate HMAs, with the exception of South Bucks which sees itself as part of a wider Berkshire HMA; and
- A question as to whether the single tier CURDS HMA still holds true given more recent data.

2.243 Key issues which emerge are of the scale at which a HMA is defined; and a need to recognise that towards the boundaries of any HMA there are likely to be relationships in several directions.

House and Rental Prices

2.244 Our analysis has sought to compare house prices spatially. This highlights the extent of London’s housing market influence and points to an east-west distinction within Berkshire, whereby RBWM and

³⁶ C Jones, M Coombe and C Wong for CLG (Nov 2010) *Geography of Housing Markets, Final Report*
GL Hearn

South Bucks in particular have higher house prices and show a stronger relationship with London's housing market than other parts of Berkshire.

- 2.245 The market based definition arising from house price analysis would suggest an HMA covering Bracknell Forest, Wokingham, Reading and West Berkshire – consistent with that identified in the previous 2007 Berkshire HMA. Slough has notably lower prices than the surrounding areas, however we would consider this to be a reflection of more localised housing-quality of place dynamics.

Migration

- 2.246 Analysis of migration indicates that none of the Berkshire local authorities have a sufficient self-containment level, based on the 2011 Census data, to be considered to represent a HMA in their own right on this single dataset.
- 2.247 A Western Berkshire HMA grouping comprising West Berks, Reading, Wokingham and Bracknell Forest sees 75%-78% self-containment of migration flows (excluding long distance moves). If the influence of Greater London is excluded, this increases further to 81-84%.
- 2.248 The Eastern Berks and South Bucks HMA grouping comprising Slough, RBWM and South Bucks sees 69% self-containment of migration flows (excluding long distance moves). If the influence of Greater London is excluded, this increases dramatically to 78-86% - highlighting that the slightly below 70% self-containment threshold is a function of the relationship with Greater London in particular.
- 2.249 The evidence indicates that the migration relationship with Greater London from the Eastern Berkshire and South Bucks grouping is 2.8 times stronger than that with the Western Berkshire grouping.
- 2.250 The migration evidence does not suggest particularly strong links with areas outside of Berkshire, besides London and South Bucks. This points to wider authorities falling within different HMAs than those of the Berkshire Authorities, albeit that there are localised cross-boundary links in a number of areas.

Contextual Data

Commuting Patterns

- 2.251 The final element of the analysis considered commuting patterns. This again shows that Bracknell Forest is linked to both Wokingham and Reading in the west and RBWM and Slough in the east. There is also a clearer influence of Greater London within the eastern parts of Berkshire and South Bucks. A greater degree of self-containment is seen in West Berkshire around Newbury, with the 2011 Travel to Work Areas defining a separate Newbury TTWA.
- 2.252 Analysis of commuting self-containment rates (when Greater London is excluded) reach the threshold of 75% in the Western Berkshire HMA on its own (69% - 70% when Greater London is included). The commuting resident self-containment rates (when Greater London is excluded) reach 71% in the Eastern Berks and South Bucks HMA although the job self-containment is around 57% reflecting the in

commuting to Slough.

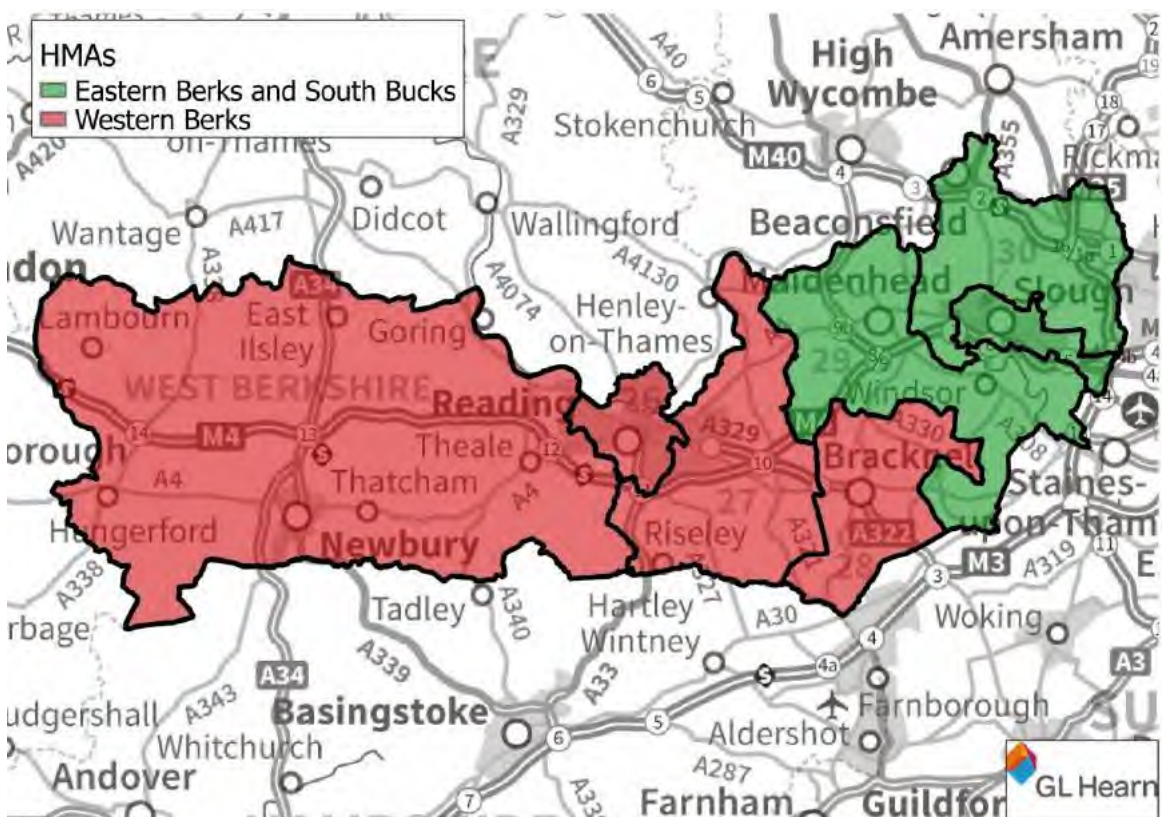
Other Contextual Data

- 2.253 Other contextual data also suggests that there are clearly different influences in the east and west of Berkshire. The VOA defines four Broad Rental Market Areas in Berkshire with a further BRMA in the northern part of South Bucks. The southern part of South Bucks shares a BRMA with Slough identifying a link between the two.
- 2.254 Both the LUZ definitions and the consultation with local developers and agents highlight the influence of Greater London on the Eastern Berks and South Bucks HMA.

Bringing the Analysis Together

- 2.255 Using a best fit to local authority boundaries approach, there is strong evidence to support the definition of two separate HMAs containing the Berkshire Authorities – a Western Berkshire HMA covering Bracknell Forest, Wokingham, Reading and West Berkshire; and an Eastern Berks and South Bucks HMA comprising Slough, RBWM and South Bucks (see Figure 30).

Figure 30: Housing Market Areas (2015)



Source: GL Hearn © Crown copyright and database rights 2015 Ordnance Survey 100019153

- 2.256 We see differences in these areas in respect of the strength of migration and commuting flows with Greater London, and in respect of house prices – with notably higher house prices in the Eastern Berks and South Bucks HMA.

- 2.257 The Western Berkshire HMA sees notable containment of migration flows (75-78%), with slightly lower containment in the Eastern plus South Bucks HMA (68-69%) reflecting the functional relationship in both migration and commuting terms with London. When the influence of Greater London is excluded it is clear that the self-containment rates in each HMA exceed the typical 70% threshold.
- 2.258 Near the boundaries of any HMA there are relationships to adjoining areas, and the Berkshire area is no exception. The evidence in particular shows links from Bracknell Forest to Hart/ Surrey Heath; from West Berkshire into Basingstoke and Deane and Wiltshire; from Reading into South Oxfordshire; South Bucks with Central Buckinghamshire; as well as an influence from Greater London. It is important to recognise these relationships in Duty to Cooperate terms but that they are not strong enough to merit sharing HMAs.
- 2.259 There is also evidence of interactions between the two HMAs, particularly between RBWM and Bracknell Forest. Bracknell Forest's links with Wokingham are however stronger.
- 2.260 However, for the purposes of considering future housing provision, the local authorities identified in the two HMAs should work initially to consider how housing need can be met within each HMA as defined.
- 2.261 However, the evidence does show functional links between the two areas and to some extent with other adjoining HMAs. Should there be a shortfall in housing provision in one HMA, this could clearly have implications for adjoining areas beyond each HMA boundary as defined. It will be important that local authorities continue to engage with each other through the Duty to Cooperate, both within each HMA and (should there be an unmet need) between the two HMAs and those that other adjoining authorities fall within.

3 CHARACTERISTICS OF THE HOUSING MARKET AREAS

3.1 In this section we consider the characteristics of Berkshire and South Bucks' population and housing stock. We have provided data at a local authority area as well as aggregating this up to the Western and Eastern Berks and South Bucks³⁷ HMAs and where possible also drawing out the Berkshire figures.

Population

3.2 In mid-2013, the population of Berkshire totalled 878,400 persons with a further 67,900 persons in South Bucks³⁸. Combined these comprised around 10.8% of the total regional population. Of this the Western Berkshire HMA had a population of 589,100 persons with the Eastern Berks and South Bucks HMA comprising 357,200 persons (see Table 19).

Table 19: Mid-Year Population Estimate, 2013

Area	Population
Bracknell Forest	116,600
Reading	159,200
Slough	143,000
South Bucks	67,900
West Berkshire	155,400
RBWM	146,300
Wokingham	157,900
Western Berkshire HMA	589,100
Eastern Berks and South Bucks HMA	357,200
Berkshire	878,400
South East	8,792,600
England and Wales	56,948,200

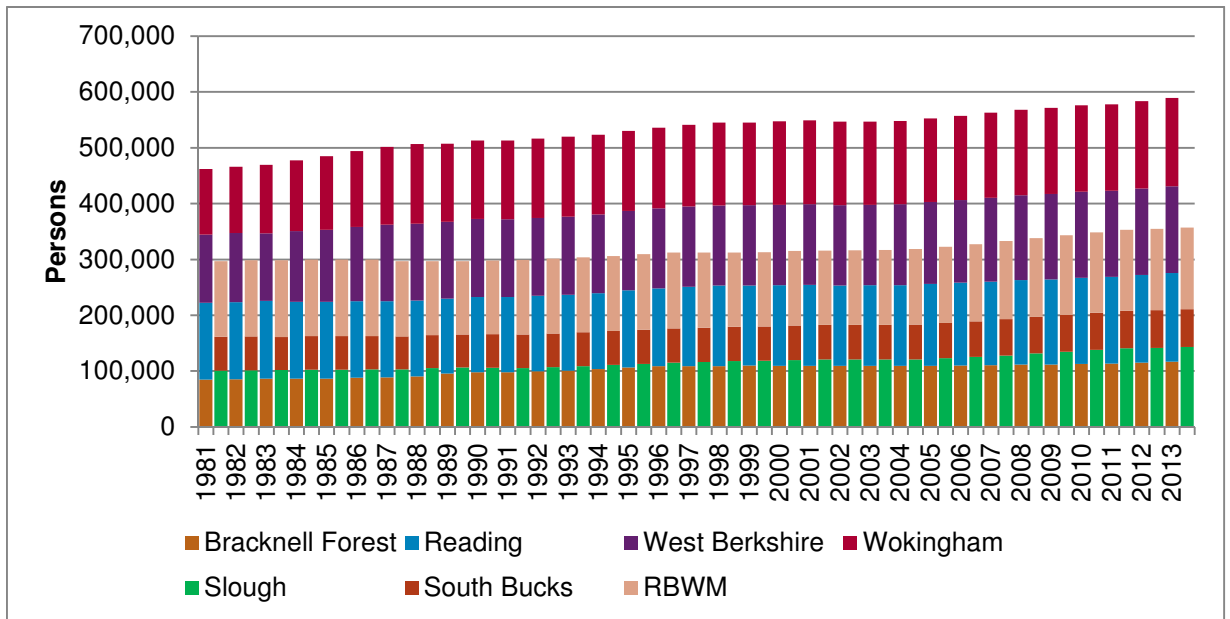
Source: ONS Mid-Year Population Estimates 2013

3.3 Since 2001 the Eastern Berks and South Bucks HMA's population has grown steadily by around 13.0% whereas the Western Berkshire HMA grew by 7.2% over the same period. Figure 31 illustrates the growth in the HMAs' population over the longer period. There is a particularly notable growth in the early 80s and from 2005 onwards in the Western Berkshire HMA and since 2005 in the Eastern Berks and South Bucks HMA.

³⁷ In some figures the Eastern Berkshire & South Bucks HMA is referred to as the East Berks and South Bucks HMA. These areas are interchangeable and the reduced name is for presentational purposes only.

³⁸ ONS 2013 Mid-Year Population Estimates

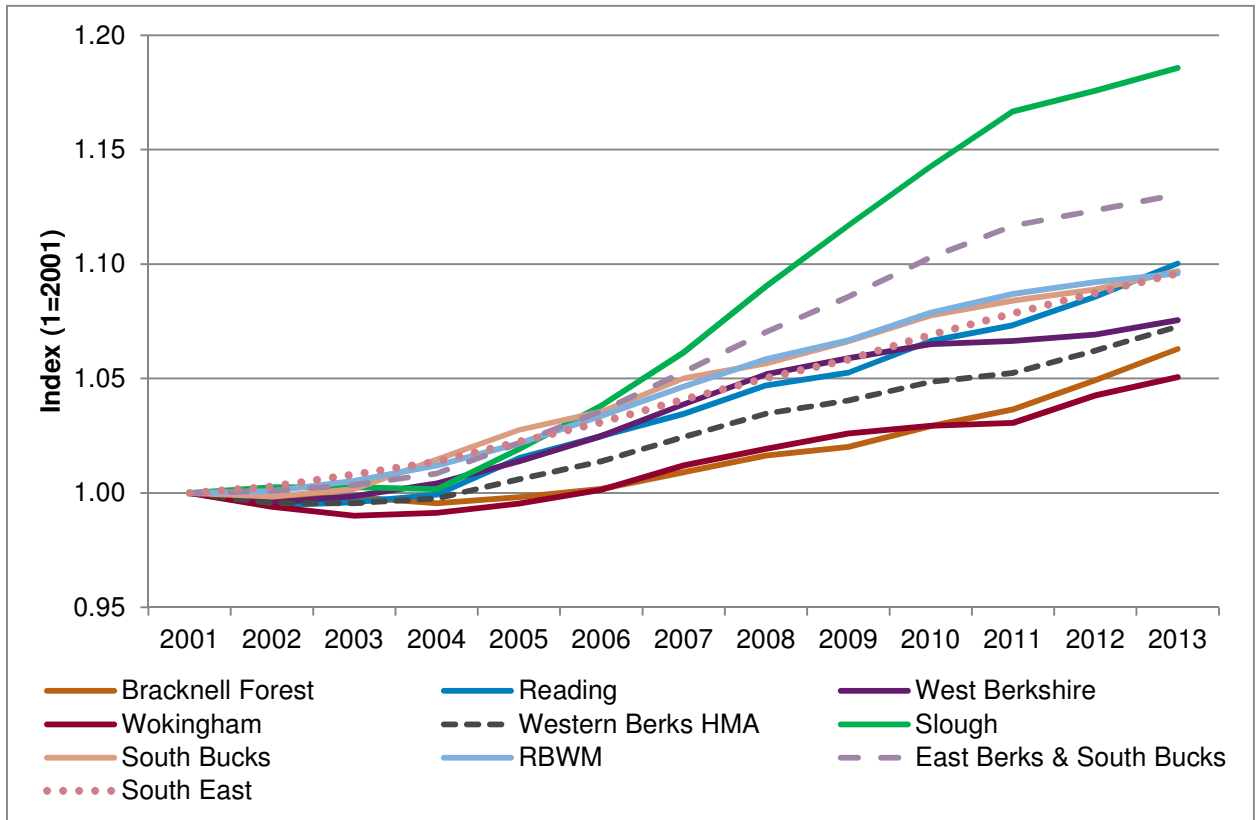
Figure 31: Population Growth by HMAs, 1981-2013



Source: ONS Mid-Year Population Estimates

- 3.4 Figure 32 shows the population growth over the 2001-2013 period. It is indexed relative to the population of each area in 2003. This shows that the population of Slough has grown by just over 18% over this 10-year period, which is significantly higher than growth in any of the other local authorities. Growth in Slough has been the main driver of growth in the Eastern Berks and South Bucks HMA (13%).
- 3.5 Growth in the Western Berkshire HMA is slightly lower at 8%. By comparison growth in the South East is around 10%. It is the recent five year trends (based on 2006/7-2012) which are projected forward in the 2012 –based SNPP.

Figure 32: Benchmarking Population Growth, 2003-13



Source: ONS Mid-Year Population Estimates

Life Stage

3.6 Population growth and housing need are influenced not just by the growth of the population, but by the population structure. Table 20 summarises the population profile into five different stages of life. This shows the difference of the population structure within the HMAs and in the local authorities³⁹.

³⁹ This section refers to the 2013 Mid-Year Estimates which at the time of preparation were the latest available dataset. See Chapter 4 for 2014 MYE commentary

Table 20: Summary of Population by Stage of Life (2013)

	Pre-school (0-4)	School Age (5-19)	Young Adults (20- 39)	Older Working Age Adults (40-65)	Retirement Age (65 plus)
Bracknell Forest	7.0%	18.6%	26.8%	34.0%	13.4%
Reading	7.8%	17.2%	35.7%	27.4%	11.8%
Slough	9.2%	20.3%	33.0%	28.1%	9.3%
South Bucks	6.0%	17.7%	20.3%	35.5%	20.6%
West Berkshire	6.4%	18.7%	22.3%	35.7%	16.9%
RBWM	6.4%	18.2%	24.0%	33.8%	17.7%
Wokingham	6.5%	18.9%	22.8%	35.1%	16.7%
Eastern Berks and South Bucks	7.4%	25.0%	26.9%	31.9%	14.9%
Western Berks HMA	6.9%	23.9%	27.0%	33.0%	14.8%
Berkshire	7.2%	18.6%	27.4%	32.3%	14.4%
South East	6.2%	22.8%	24.7%	33.1%	18.3%
England and Wales	6.3%	22.5%	26.5%	32.3%	17.4%

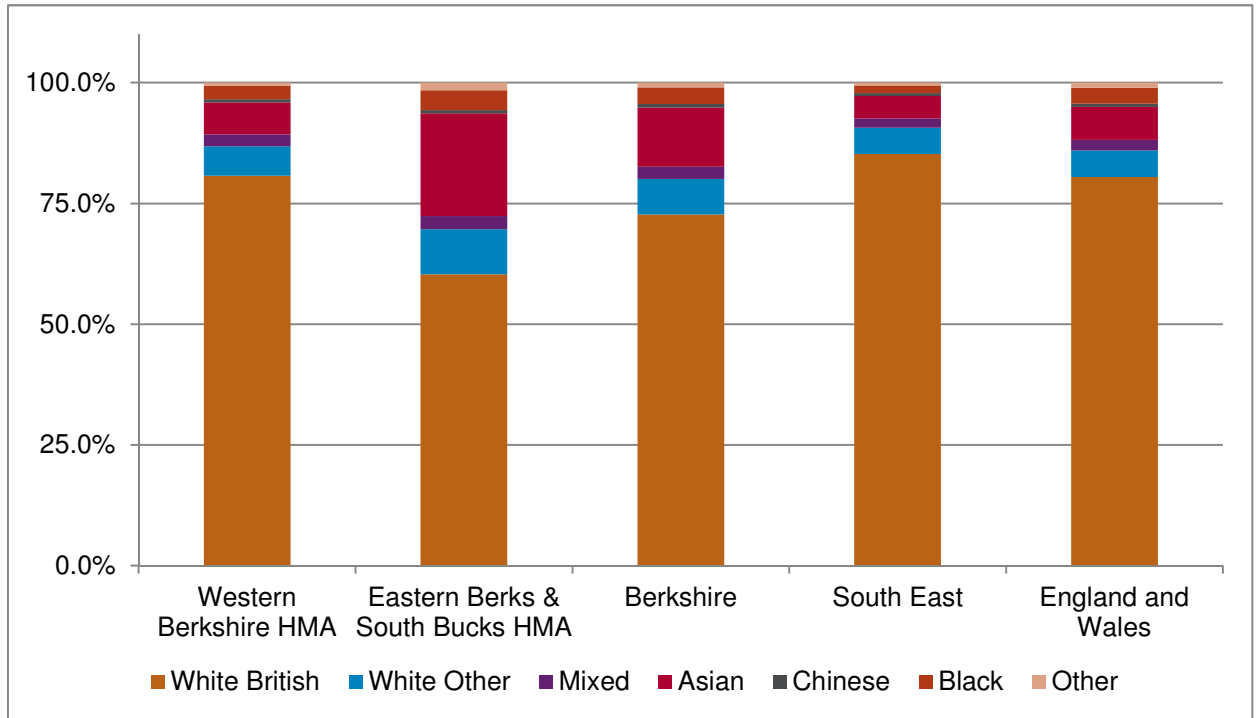
Source: ONS 2013 Mid-Year Population Estimates

- 3.7 The significant population growth in Slough has resulted in a particularly young population with both the Pre-School and School Age population in the local authority being significantly higher than any of the other Berkshire or South Bucks authorities. Typically those who are most mobile in terms of migration are those in early adulthood. This group also results in a relatively high birth rate.
- 3.8 Conversely South Bucks has the largest percentage of retirement age population at 20.6% of the total population, which is significantly higher than any of the unitary authorities in Berkshire.

Ethnicity

- 3.9 At the time of the last Census the ethnic composition of the Western Berkshire HMA's population is similar to that seen across the South East and England and Wales. However as illustrated by Figure 33 the Eastern Berks and South Bucks HMA is far more diverse with only around 60% of the population defining themselves as 'White British'. This compares to 85% across the South East and 80% across England and Wales.

Figure 33: Ethnicity, 2011



Source: 2011 Census

- 3.10 The diversity of the population in the Eastern Berks and South Bucks HMA is driven by a particularly diverse population in Slough. Only around one third of the population in Slough Borough define themselves as 'White British'. By contrast 39% of the population of Slough Borough define themselves as Asian with 11% as White Other (including Irish) and 8.6% Black (see Table 21).
- 3.11 Reading also has a relatively diverse population with over a third of the total population self-identifying as not being 'White British'. At 12.6% the Asian population is the largest Black or Minority Ethnic (BME) group in the Borough.

Table 21: Summary of Population by Ethnicity (2011)

	White British	White Other	Mixed	Asian	Chinese	Black	Other
Bracknell Forest	84.9%	5.7%	2.0%	4.5%	0.5%	1.9%	0.4%
Reading	65.3%	9.4%	4.0%	12.6%	1.0%	6.7%	1.0%
Slough	34.5%	11.2%	3.4%	39.2%	0.6%	8.6%	2.6%
South Bucks	77.1%	7.2%	2.4%	10.5%	0.8%	1.1%	1.0%
West Berkshire	90.4%	4.4%	1.6%	2.0%	0.4%	0.9%	0.2%
RBWM	77.5%	8.6%	2.3%	8.8%	0.7%	1.2%	0.8%
Wokingham	83.6%	4.8%	2.1%	6.6%	0.8%	1.4%	0.7%

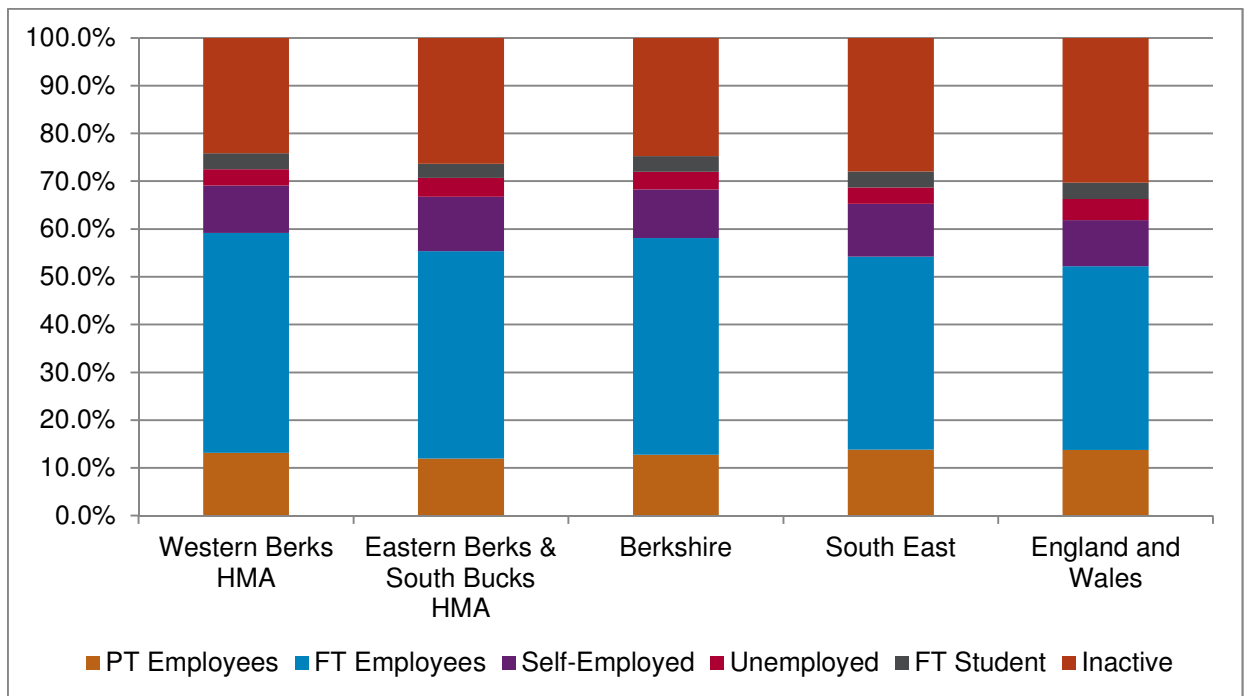
Source: 2011 Census

- 3.12 The least diverse of the local authorities is West Berkshire where the BME population comprises less than 10% of the overall population.

Labour Market Characteristics

- 3.13 In Section 5 we consider the inter-relationship between the economy and housing market, drawing primarily from Census data. This is influenced in part by labour market characteristics, including the proportion of people in work and how the population structure is expected to change over time. This section of the report sets the baseline for that analysis.
- 3.14 The 2011 Census calculated that 73.7% of the population (aged 16 to 74) of the Eastern Berks and South Bucks HMA are economically active, that is, those of working age who are either in employment or not in employment but seeking work. This figure increases to 75.8% in the Western Berkshire HMA. Both figures are higher than the region (72.1%) and England and Wales as a whole (69.7%).
- 3.15 Compared to the wider South East both HMAs had a high percentage of full-time employees at the time of the last Census (see Figure 34). Unemployment is highest in the Eastern Berks and South Bucks HMA at 4.0% with only 3.4% unemployed in the Western Berkshire HMA. This latter figure is in line with the regional figure, by comparison the England and Wales figure is 4.4%.

Figure 34: Economic Activity, 2011



Source: 2011 Census

- 3.16 At a local authority level unemployment was highest in Slough (5.4% of those aged 16-74) and lowest in Wokingham (2.6%). As set out in table 22, economic activity is highest in Bracknell Forest (78.4% of those aged 16-74) and is lowest in South Bucks (72.3%); this is likely to be a result of an older population. Perhaps unsurprisingly the highest percentage of students can be found in Reading (5%).

Table 22: Economic Activity by Local Authority, 2011

	PT Employees	FT Employees	Self-Employed	Unemployed	FT Student	Inactive
Bracknell Forest	13.3%	49.0%	9.8%	3.4%	2.8%	21.6%
Reading	11.9%	44.6%	7.9%	4.6%	5.0%	26.1%
Slough	11.8%	43.4%	8.9%	5.4%	3.9%	26.5%
South Bucks	11.8%	41.1%	14.3%	2.7%	2.4%	27.7%
West Berkshire	13.9%	45.6%	11.3%	2.9%	2.5%	23.8%
RBWM	12.2%	44.4%	12.4%	3.2%	2.3%	25.5%
Wokingham	13.6%	45.7%	10.8%	2.6%	3.0%	24.4%

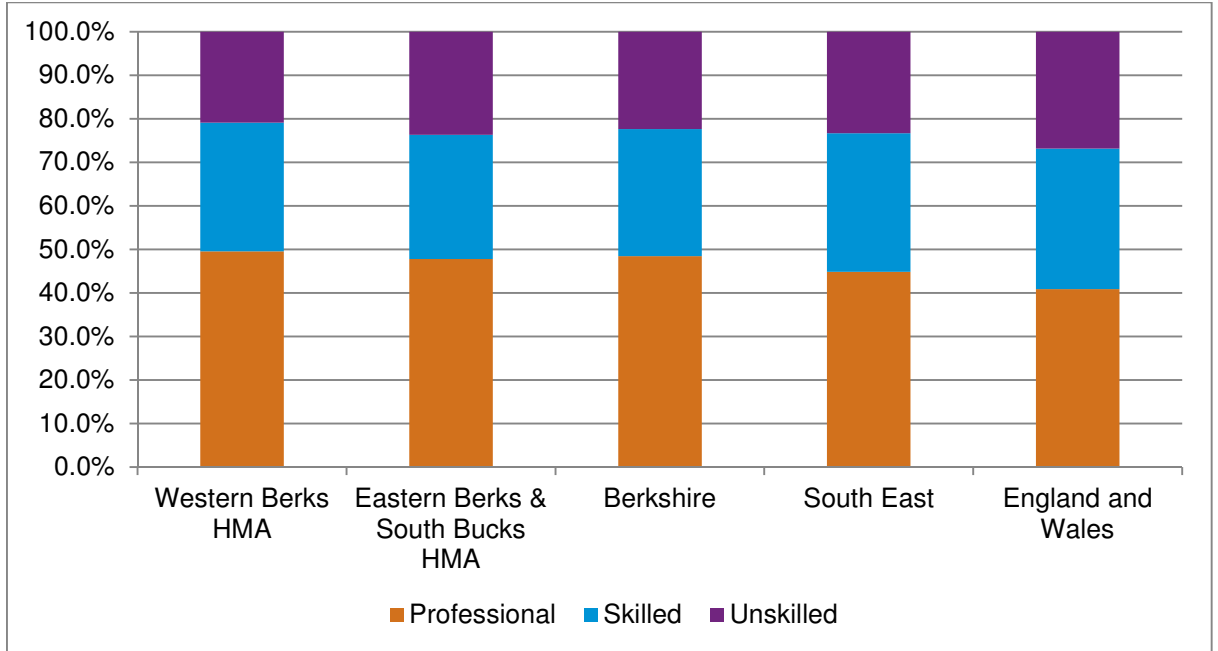
Source: 2011 Census

- 3.17 Figure 35 shows the occupational profile of the HMAs and the wider comparators as a percentage of the working age population currently employed in each of the 3 major occupation groups. The Western Berkshire HMA's occupational profile is slightly more skewed towards the professional occupations⁴⁰ (49.6%) than the Eastern Berks and South Bucks HMA (47.8%) and the South East (44.8%) in general. Conversely the Western Berkshire HMA has a lower percentage of unskilled workers⁴¹ (20.9%) than the Eastern Berks and South Bucks HMA (23.7%), the South East (23.3%) and of England and Wales as a whole (26.8%).

⁴⁰ This includes Managers and Senior officials, Professional Occupations and associate professional and technical occupations.

⁴¹ This includes Sales and Customer Service Occupations, Process Plant and Machine Operatives and Elementary occupations.

Figure 35: Occupational Profile (2011)



Source: 2011 Census

3.18 At a local level the highest percentage of professional workers reside in RBWM and Wokingham (both 56.2%). As Table 23 sets out Slough has by far the highest percentage of residents in unskilled occupations (35.0%) with the next highest Reading (25.5%) almost 10% lower.

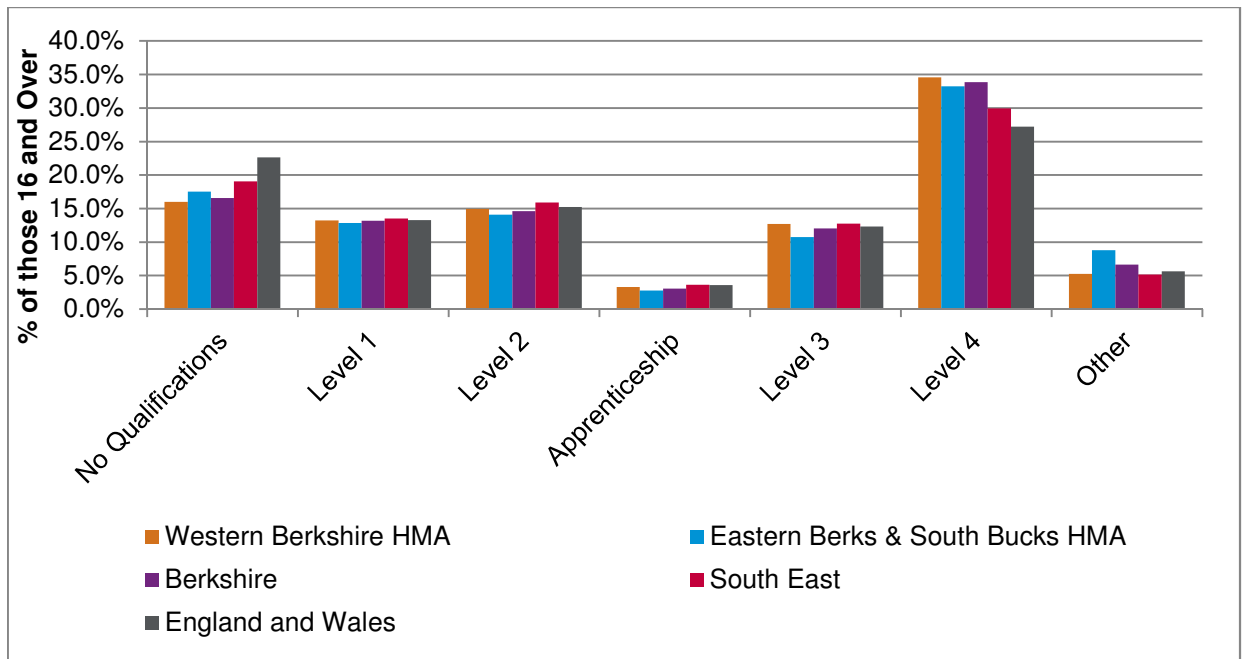
Table 23: Occupational Profile by Local Authority (2011)

	Professional	Skilled	Unskilled
Bracknell Forest	46.9%	32.1%	21.0%
Reading	47.0%	27.5%	25.5%
Slough	34.8%	30.3%	35.0%
South Bucks	55.5%	28.6%	15.9%
West Berkshire	47.5%	31.6%	20.9%
RBWM	56.2%	26.9%	17.0%
Wokingham	56.2%	27.5%	16.3%

Source: 2011 Census

3.19 As with occupational profile, the levels of qualifications of both HMAs' residents are above the regional and national average. The Western Berkshire HMA has a significantly larger proportion of the population with Level 4 qualifications (equivalent to degree level) and above (34.6% of those aged 16 and over) compared to the regional average (29.9%). By comparison the Eastern Berks and South Bucks HMA has 33.3% educated to level 4 and England and Wales has 27.2%. Figure 36 illustrates the proportion of the population in each area by the highest level of qualification achieved.

Figure 36: Qualifications, 2011



Source: 2011 Census

3.20 At a local authority level Wokingham has the highest qualified residents with 40% educated to level 4 and above (degree level). RBWM and South Bucks also have comparatively high percentages of Level 4 qualified residents at 38.4% and 36.9% respectively (See Table 24).

Table 24: Occupational Profile

	No Qualifications	Level 1	Level 2	Apprenticeship	Level 3	Level 4	Other
Bracknell Forest	16.3%	15.3%	16.9%	3.4%	12.7%	30.3%	5.1%
Reading	17.4%	12.2%	12.3%	2.5%	13.4%	34.8%	7.4%
Slough	20.1%	14.7%	13.4%	2.2%	10.1%	25.8%	13.7%
South Bucks	16.5%	11.8%	14.8%	3.4%	11.1%	36.9%	5.5%
West Berkshire	17.2%	14.2%	16.2%	3.9%	12.2%	32.1%	4.3%
RBWM	15.6%	11.6%	14.4%	3.0%	11.2%	38.4%	5.8%
Wokingham	13.2%	11.8%	15.1%	3.4%	12.4%	40.0%	4.2%

Source: 2011 Census

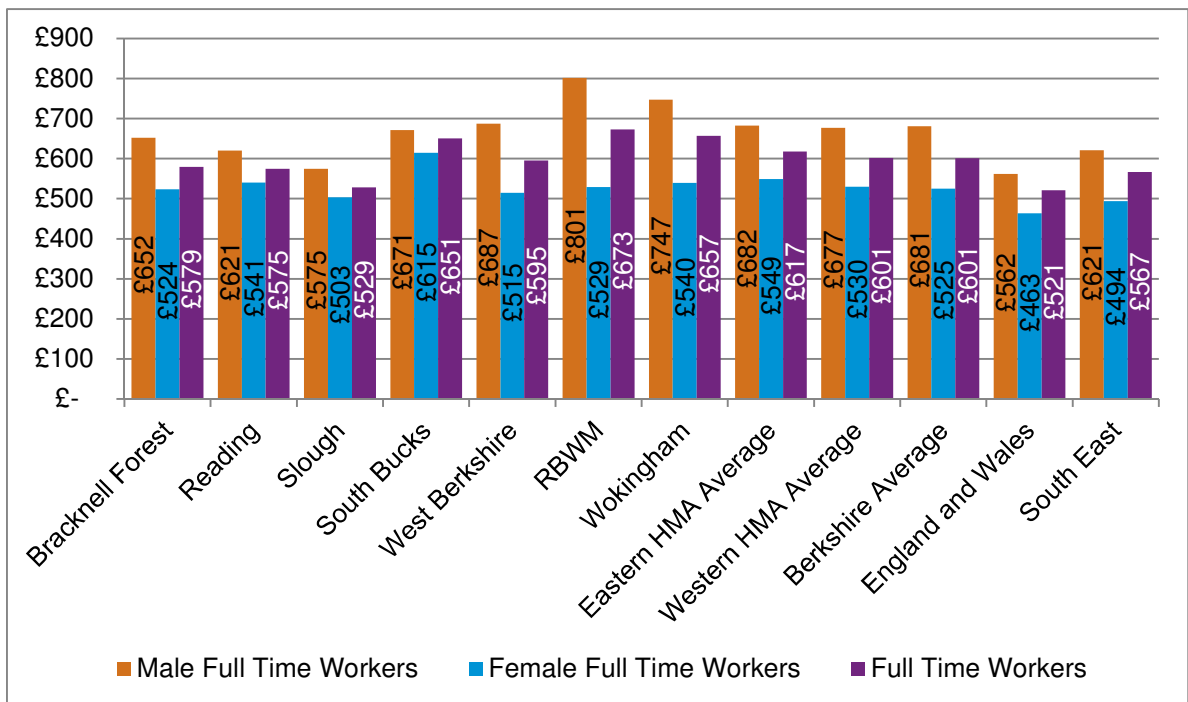
3.21 Slough has the highest percentage of residents with no qualifications (20.1%) and other qualifications⁴² (including foreign qualifications) (13.7%) which include foreign qualifications. West Berkshire has the highest percentage of residents qualified through apprenticeship schemes (3.9%).

Earnings

3.22 Both qualifications and occupational profile are reflected in the earnings data. This in turn affects the affordability of housing. The average residents' earnings of the local authorities in the Western Berkshire HMA is £601 per week⁴³ (Full-time employees only) whereas in the Eastern Berks and South Bucks HMA the equivalent figure rises to £617 per week (see Figure 37).

3.23 This higher figure in the Eastern Berks and South Bucks HMA is driven by RBWM (£673 pw) and South Bucks residents (£651 pw) although is slightly tempered by Slough residents' earnings (£529 pw) which are the lowest across the two housing market areas.

Figure 37: Earnings by Residents in Full Time Employment, 2013



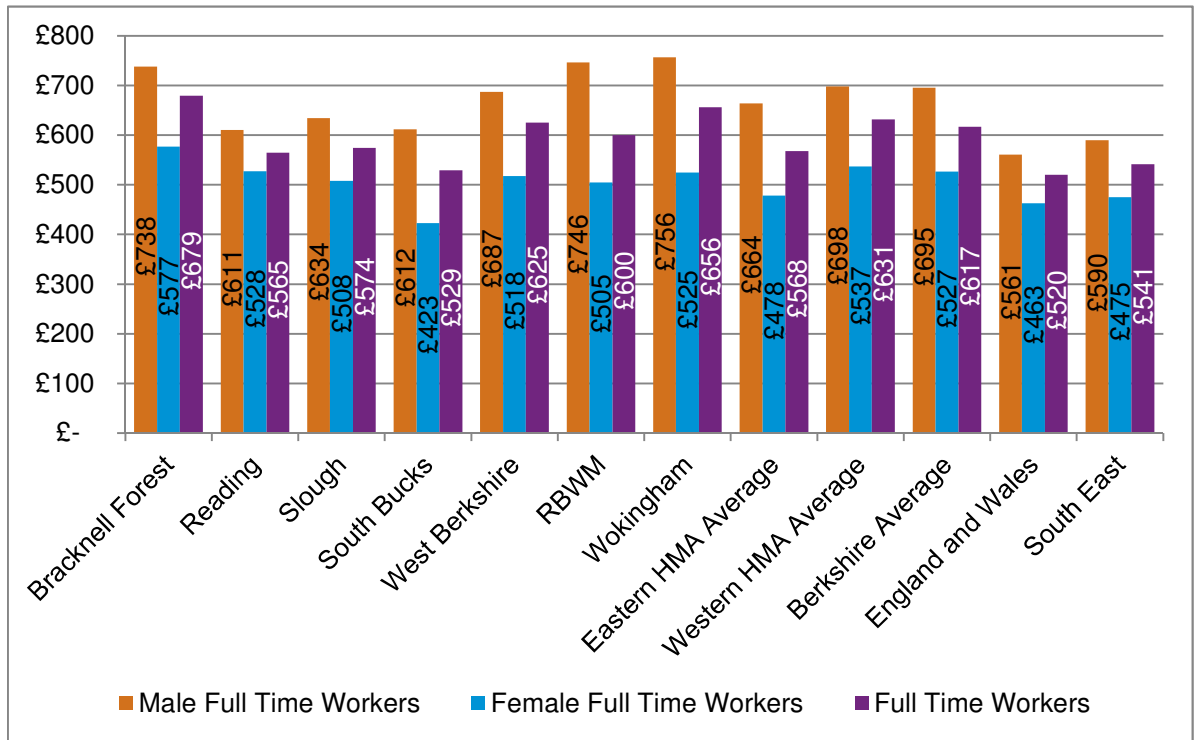
Source: Annual Survey of Hours and Earnings (2014)

⁴² during 2011 Census testing, of those who had foreign qualifications and ticked 'Other' qualifications, 30% had a degree level or higher qualification.
<http://www.ons.gov.uk/ons/guide-method/census/analysis/labour-market--housing-and-qualifications/qualifications.pdf>

⁴³ Gross weekly earnings for full-time workers.

3.24 As shown in Figure 38 a radically different picture emerges when we review workplace earnings. This shows that on average those working on a full time basis in the Western Berkshire HMA's local authorities earn £631 per week compared to £568 per week by those working in the local authorities comprising the Eastern Berks and South Bucks HMA.

Figure 38: Earnings by Workplace, 2013



Source: Annual Survey of Hours and Earnings (2014)

3.25 At a local level the highest wages are available in Bracknell Forest (£679 pw) and Wokingham (£656 pw). The lowest wages are found in South Bucks (£529). This latter figure reflects the areas function of being a commuting area with limited high earning employment within the district.

3.26 The difference between the residents and workplace earnings in South Bucks is £121 per week. The only other local authority where the difference is over £100 per week is Bracknell Forest. By contrast there is only a 30p difference between workplace and residents' earnings in Wokingham

Households

3.27 At the Census date in 2011, there were approximately 367,000 households across the two Housing Market Areas (231,500 Western Berkshire HMA and 135,500 Eastern Berks and South Bucks HMA), housed in 380,000 dwellings (240,000 Western Berkshire HMA and 140,000 Eastern Berks and South Bucks HMA). This comprised around 10% of the households in the South East region and 1.5% of all households in England and Wales.

- 3.28 The local authorities with the greatest number of household spaces were Reading (62,869) and West Berkshire (62,340). South Bucks has the lowest (26,514) of the local authorities, followed by Bracknell Forest (45,878) (see Table 25).

Table 25: Count of Dwellings and Households (2011)

	Dwellings	Households Spaces	household spaces in shared dwellings	Dwelling Stock by Council Tax Band Mar 2011
Bracknell Forest	47,039	45,878	1,161	46,613
Reading	65,925	62,869	3,056	66,445
Slough	51,980	50,766	1,214	50,489
South Bucks	27,721	26,514	1,207	27,641
West Berkshire	64,657	62,340	2,317	64,747
RBWM	60,943	58,349	2,594	61,232
Wokingham	62,490	60,332	2,158	62,318
Western Berkshire HMA	240,111	231,419	8,692	240,123
Eastern Berks & South Bucks HMA	140,644	135,629	5,015	139,362
Berkshire	353,034	340,534	12,500	351,844
Study Area	380,755	367,048	13,707	379,485
South East	3,704,173	3,555,463	148,710	3,682,754
England and Wales	24,429,618	23,366,044	1,063,574	24,323,092

Source: 2011 Census and VOA Data.

- 3.29 The VOA use a slightly different definition of dwelling compared to the ONS/ Census. The VOA data aligns more closely with the ONS definition of household spaces. We have thus tried to draw conclusions on the number of homes required to avoid confusion between the two.
- 3.30 Looking at household size we can see that the Eastern Berks and South Bucks HMA has a higher percentage of households that have five or more residents than the Western Berkshire HMA. This is largely driven by Slough where the percentage of five or more person households is over six percentage (14.9%) points higher than the next nearest South Bucks (8.3%).
- 3.31 Conversely Reading has the highest percentage of single Person Households although Slough has the second highest percentage of single person households out of all the local authorities (see Table 26).

Table 26: Household Size (2011)

	1 Person in Household	2 People in Household	3 People in Household	4 People in Household	5+ People in Household
West Berkshire	25.9%	36.3%	16.3%	15.2%	6.3%
Reading	30.6%	32.5%	15.8%	12.8%	8.3%
Wokingham	23.3%	35.6%	16.7%	17.2%	7.1%
Bracknell Forest	27.7%	33.8%	16.7%	15.7%	6.1%
Western Berkshire HMA	26.9%	34.6%	16.4%	15.2%	7.0%
RBWM	28.4%	33.8%	15.8%	14.9%	7.1%
Slough	28.5%	24.4%	16.9%	15.4%	14.9%
South Bucks	26.9%	33.8%	15.8%	15.2%	8.3%
Eastern Berks and South Bucks HMA	28.1%	30.3%	16.2%	15.1%	10.3%
Berkshire	27.3%	33.0%	16.3%	15.2%	8.2%
Study Area	27.3%	33.1%	16.3%	15.2%	8.2%
England and Wales	30.2%	34.2%	15.6%	13.0%	7.0%
South East	28.8%	35.1%	15.5%	13.9%	6.7%

Source: 2011 Census

- 3.32 Figure 39 shows the proportion of selected types of households in 2011 with Table 27 setting out the absolute numbers. Around 43.5% of households in Eastern Berks and South Bucks HMA have children. The equivalent figure in the Western Berkshire HMA is 40.7% of households. This compares to 29.4% in the South East and 38.5% in England and Wales. This is also reflected in the higher percentage of younger aged groups in each HMA.
- 3.33 At a local level Slough (49.1%) has the highest percentage of households with dependent children. Conversely only 37.9% of households in Reading have dependent children. Bracknell Forest (41.8%) and Wokingham (43.0%) also have a notably high percentage of households with dependent children.
- 3.34 Around 17.3% of Eastern Berks and South Bucks HMA households are single person households with 16.8% in the Western Berkshire HMA, both these figures are between the equivalent figures for South East (16.1%) and England and Wales (17.9%). At a local level Reading (21.1%) has the highest percentage of single person households. Conversely only 12.9% of households in South Bucks and 13.1% Wokingham have single person households.

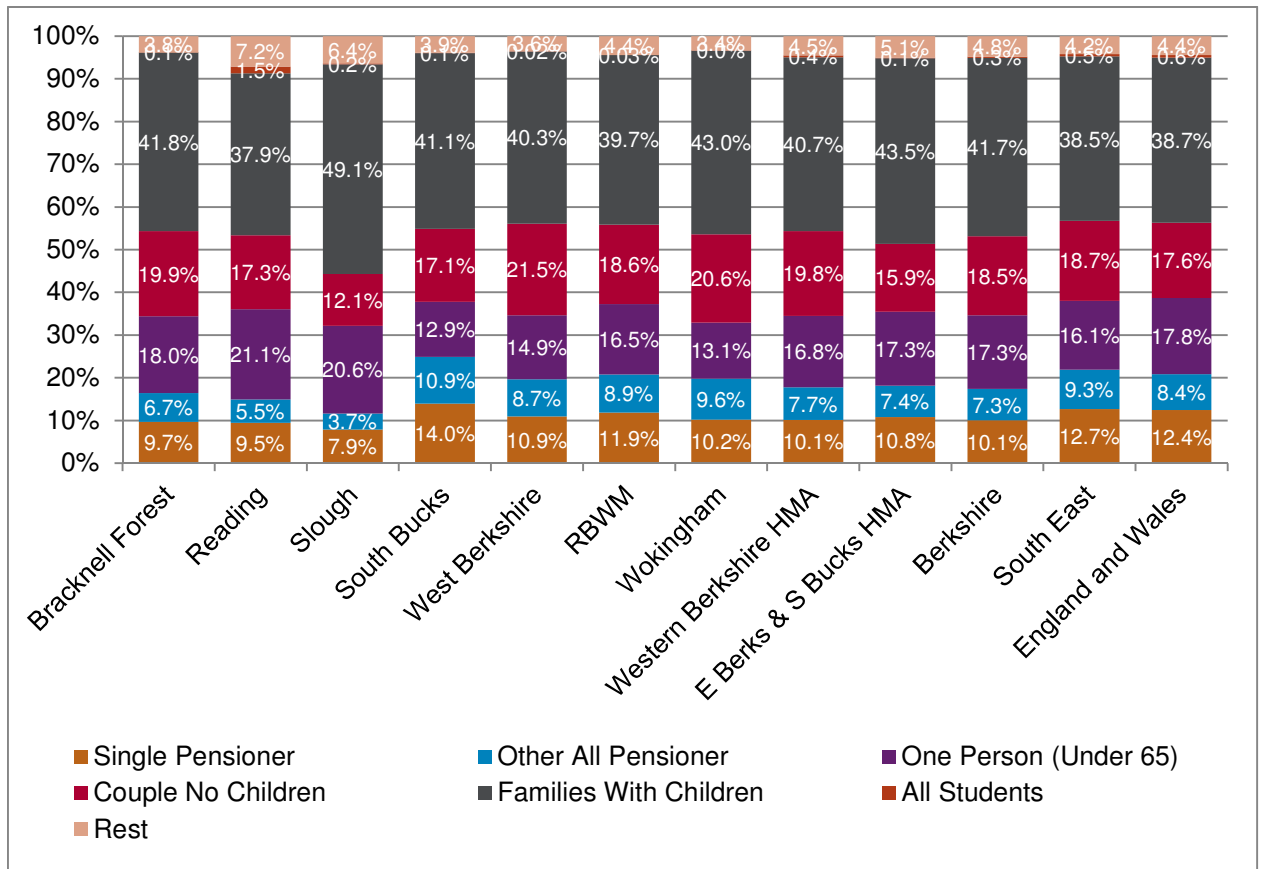
Table 27: Households by Type (2011)

	Single Pensioner	Other All Pensioner	One Person (Under 65)	Couple No Children	Families with Children	All Students	Rest
Bracknell Forest	4,448	3,083	8,259	9,140	19,170	24	1,754
Reading	5,954	3,432	13,283	10,906	23,831	951	4,512
Slough	4,013	1,899	10,434	6,150	24,914	105	3,251
South Bucks	3,708	2,887	3,428	4,534	10,888	26	1,043
West Berkshire	6,820	5,448	9,303	13,387	25,136	15	2,231
RBWM	6,926	5,187	9,628	10,864	23,142	16	2,586
Wokingham	6,164	5,779	7,920	12,451	25,957	30	2,031
Western Berkshire HMA	23,386	17,742	38,765	45,884	94,094	1,020	10,528
Eastern Berks & South Bucks HMA	14,647	9,973	23,490	21,548	58,944	147	6,880
Berkshire	34,325	24,828	58,827	62,898	142,150	1,141	16,365
South East	449,969	329,263	573,185	666,163	1,367,478	18,758	150,647
England and Wales	2,903,930	1,971,560	4,163,331	4,116,716	9,039,162	132,352	1,038,993

Source: Census 2011

- 3.35 The percentage of all pensioner households in either HMA (Eastern 18.2%, Western 17.8%) is significantly lower than the regional (21.9%) and national (20.9%) averages. This could be driven by students in Reading for the Western Berkshire HMA and a high level of international migrants in the Eastern Berks and South Bucks HMA (particularly Slough) who are typically younger.
- 3.36 As Figure 39 shows only South Bucks (24.9%) has a level of all pensioner households above the national and regional figures. By contrast Slough (11.6%) has almost half the percentage of all pensioner households seen in the other areas.

Figure 39: Household types as a percentage of all households, 2011



Source: Census 2011

3.37 Reading, as the only local authority in either HMA with a major higher education facility, has the highest percentage of all student households (1.5%). This figure is around three times higher than the regional (0.5%) and national (0.6%) equivalents.

3.38 Between 2001 and 2011 the mix of households in the Eastern Berks and South Bucks HMA changed significantly. The largest changes were seen in the following household types:

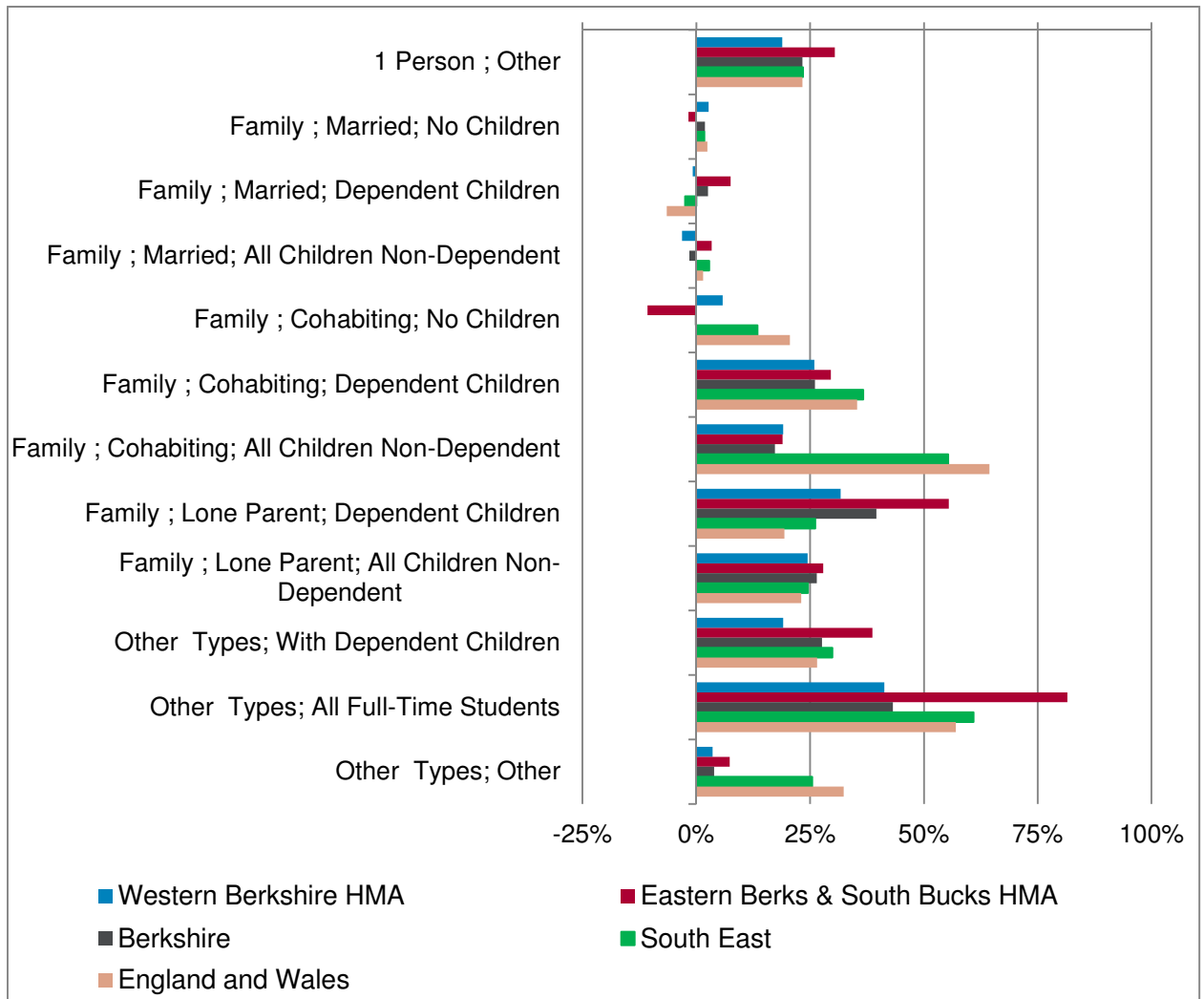
- All Full-Time Students (+81%, +66 households);
- Lone Parent with Dependent Children (+55%, +3068 households); and
- Other Types; With Dependent Children (+39%, +1610 households);

3.39 The Western Berkshire HMA also saw a number of significant changes over the same period:

- All Full-Time Students (+41%, +298 households);
- Lone Parent with Dependent Children (+32%, +3,321 households);
- Cohabiting with Dependent Children (+26%, +1,752 households); and
- Lone Parent Non-Dependent Children (+24%, +1,359 households);

- 3.40 As illustrated in Figure 40 Berkshire and the South East have also seen significant increases in the number of all student households although lower than in the Eastern Berks and South Bucks HMA. Between each Census the number of students at Reading University declined while the number of all student households increased. This would suggest that there has been a shift in preference away from communal establishments. The South East and England and Wales have both seen significant changes in cohabiting couples with all children non-dependent and with dependent children. This shows a shift away from married households across the country in general.
- 3.41 The increase in households with non-dependent children also illustrates the inability of some non-dependent children to form their own household. Instead they are staying with their parents for longer. Other commentators have suggested that this is also due to factors such as university fees, growth of part time work and zero hours contracts, societal changes resulting in delayed child-bearing and older formation of couples, and ethnic cultural preferences for multi-generational households.
- 3.42 No robust data can be drawn upon for changes in all elderly/pensioner households as there was a change in the ONS definition between the 2001 and 2011 Census. However, nationally there has been a decrease in other all pensioner households. This reflects the trend for older people to remain in-situ with adaptations rather than moving to specialist care accommodation which is not classed as a dwelling but as institutional accommodation. These findings could also be due to people living longer and therefore living together longer. Furthermore additional extra care housing can now accommodate more older households in household spaces (as per the Census definition) with additional facilities being made available within the development to enable households to live semi-independently for longer thus delaying the move to communal care homes.

Figure 40: Change in Households by Type, 2001-2011



Source: Census 2001 & 2011

3.43 The wider region and country have also seen significant growth in “other other” households. These include HMOs, unrelated adults living as a household (house shares), multi-family households, and families with lodgers. This typically happens in locations with high immigration and where households have been constrained due to increasing house prices and restrictions to mortgages.

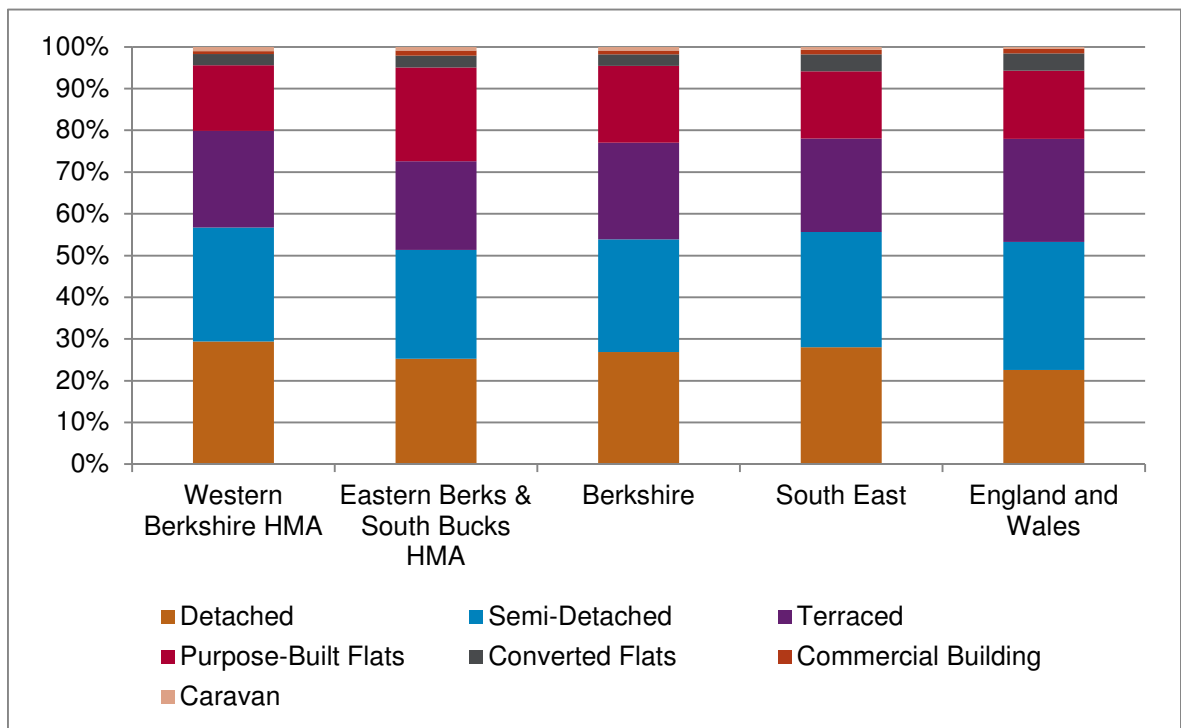
3.44 Across England and Wales there was a significant growth (70%) in concealed households between 2001 and 2011. There was a particularly large growth in Slough (5.6% of all households) which now has the third highest percentage of concealed households anywhere in England and Wales. This is investigated more in Section 7 of the report.

Housing Type

3.45 We have also considered the mix of housing across the two HMAs and the wider comparators. In the Western Berkshire HMA 29% of homes are detached, 19% are flats; semi-detached houses comprise 27% of the dwelling stock, whilst terraced houses make up 23%. In the Eastern Berks and South Bucks HMA 25% of homes are detached, 27% are flats; semi-detached houses comprise 26% of the dwelling stock, whilst terraced houses make up 21%.

3.46 As Figure 41 illustrates, in comparison to the region both HMAs have a low percentage of semi-detached properties. The Eastern Berks and South Bucks HMA also has a significantly higher percentage of flatted properties. In comparison to England there is a high percentage of detached properties and conversely a low percentage of semi-detached and terraced households.

Figure 41: Housing Types, % of Dwellings, 2011



Source: 2011 Census

3.47 Table 28 illustrates the types of homes in each of the local authorities. South Bucks and Wokingham both have substantial percentages of detached houses (over 40%). Reading and Slough have the highest percentage of flatted properties (both over 30%).

3.48 The highest percentage of semi-detached properties is found in West Berkshire (33%). Bracknell Forest and Reading have the highest percentage of terraced properties (both over 30%). Both Bracknell Forest and South Bucks have over 2% of households living in caravans (which also include mobile homes and other temporary accommodation).

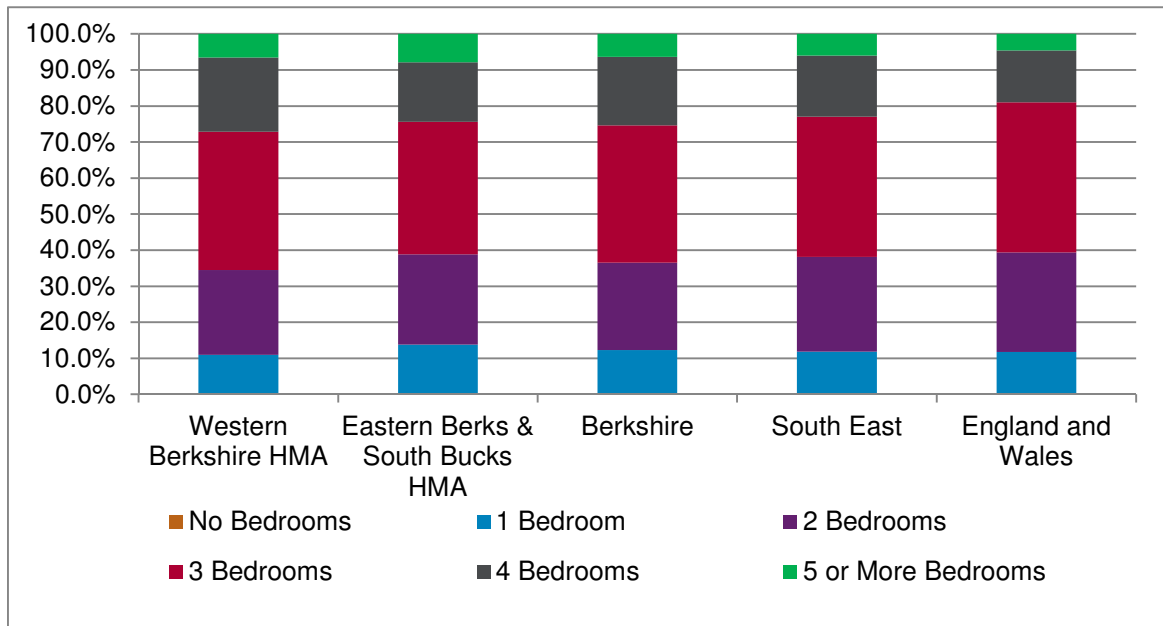
Table 28: Housing Types, % of Dwellings by Local Authority, 2011

	Detached	Semi-Detached	Terraced	Flat	Caravan
Bracknell Forest	27%	21%	32%	19%	2%
Reading	12%	25%	30%	32%	0%
Slough	10%	28%	28%	34%	0%
South Bucks	41%	24%	14%	19%	2%
West Berkshire	34%	33%	18%	14%	1%
RBWM	31%	25%	19%	24%	1%
Wokingham	45%	29%	15%	11%	1%

Source: 2011 Census

3.49 Figure 42 illustrates the size of homes in terms of bedrooms in the existing stock. There seems to be some correlation between size and type of property with more detached properties generally resulting in more 4+ bedroom properties. The Western Berkshire HMA has a larger dwellings profile with 27.1% of dwellings containing over 4 bedrooms compared to 24.4% in the Eastern Berks and South Bucks HMA. Both figures are higher than the regional (23%) and national average (19%).

Figure 42: Dwelling Size by Number of Bedrooms, 2011



Source: 2011 Census

3.50 As the locations with the most detached properties South Bucks and Wokingham also have over a third of their dwellings with over 4 bedrooms (see Table 29). Reflecting the high percentage of flats Reading and Slough also have a high percentage of one bedroom properties.

Table 29: Dwelling Size by Number of Bedrooms, 2011

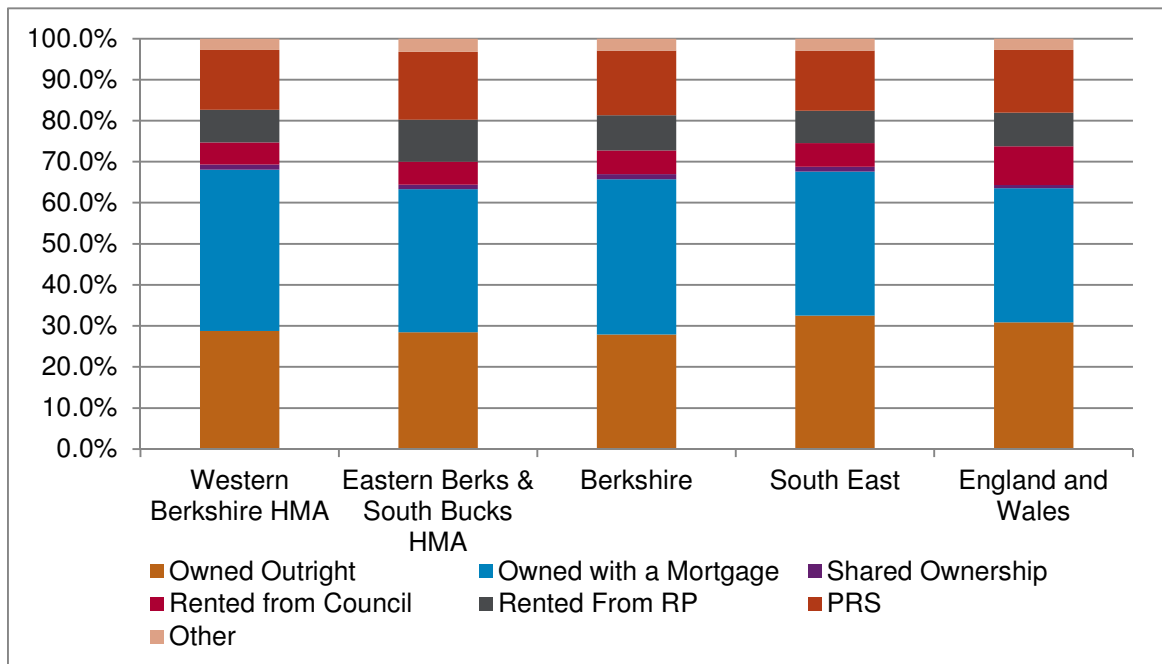
	No Bedrooms	1 Bedroom	2 Bedrooms	3 Bedrooms	4 Bedrooms	5 or More Bedrooms
Bracknell Forest	0.3%	11.3%	23.9%	38.4%	21.1%	5.0%
Reading	0.3%	15.8%	29.1%	38.3%	11.7%	4.8%
Slough	0.3%	19.5%	27.9%	39.0%	10.1%	3.2%
South Bucks	0.2%	8.1%	21.6%	34.6%	20.2%	15.3%
West Berkshire	0.2%	9.1%	22.4%	39.6%	21.4%	7.4%
RBWM	0.2%	10.8%	24.1%	35.8%	20.4%	8.6%
Wokingham	0.2%	6.6%	18.7%	37.3%	28.8%	8.4%

Source: 2011 Census

Housing Tenure

- 3.51 Census data can be used to provide a detailed breakdown of the housing stock by tenure. Owner occupation is the most common tenure across the country and both HMAs are no different.
- 3.52 Figure 43 shows that in the Eastern Berks and South Bucks HMA both owner occupation tenures account for 64.4% of households in 2011 with the equivalent figure for the Western Berkshire HMA 69.3%. In both cases the ‘owned with a mortgage’ tenure makes up the largest percentage (Western 39.3%, Eastern 34.9%) with the ‘owned outright’ tenure comprising 28.8% in the Western Berkshire HMA, and 28.5% in the Eastern Berks and South Bucks HMA. The remaining owner occupation households comprise those on shared ownership schemes.

Figure 43: Tenure Profile, 2011



Source: 2011 Census

- 3.53 In the Western Berkshire HMA the Private Rental Sector (PRS) accounts for 14.6% of households, and social rented 13.3%. In the Eastern Berks and South Bucks HMA the PRS accounts for 16.6% of households, and social rented 15.8%. By comparison, across England 64.3% of households are owner occupied, the PRS accounts for 15.3%, and the social rented sector 17.6%. This indicates alignment with the broader trends in the two HMAs.
- 3.54 At a local authority level there are some significant variations in the tenure trends. Both South Bucks and West Berkshire have over 70% owner occupations (including shared ownership). South Bucks however is driven by those who own their homes outright, whereas there is a higher percentage of those who own their homes with a mortgage in West Berkshire. Higher outright home ownership can indicate an affluent population and/or an ageing population. Around 44% of households in Bracknell Forest and Wokingham are occupied by those owned with a mortgage.
- 3.55 As set out in Table 30 Slough has the highest percentage of dwellings that are socially rented (20.6%) and the second highest percentage in the PRS (23.1%). The highest concentration of PRS homes is found in Reading (24.7%). The percentage of socially rented properties in Wokingham (7%) is the lowest of the local authorities under consideration with South Bucks at 12% being the next lowest.

Table 30: Dwellings by Tenure Type, 2013

	Owned Outright	Owned with a Mortgage	Shared Ownership	Rented from Council	Rented from RP	PRS	Other
Bracknell Forest	24.9%	43.6%	1.1%	5.7%	11.1%	10.6%	3.0%
Reading	22.6%	32.2%	1.8%	10.1%	6.2%	24.7%	2.4%
Slough	18.7%	34.0%	1.4%	13.1%	7.5%	23.1%	2.2%
South Bucks	38.1%	35.3%	1.5%	1.0%	11.3%	10.0%	2.8%
West Berkshire	31.2%	38.5%	1.1%	0.9%	12.9%	12.0%	3.4%
RBWM	32.6%	35.4%	0.6%	1.2%	12.1%	13.9%	4.2%
Wokingham	35.6%	44.2%	1.1%	4.7%	2.3%	9.9%	2.2%

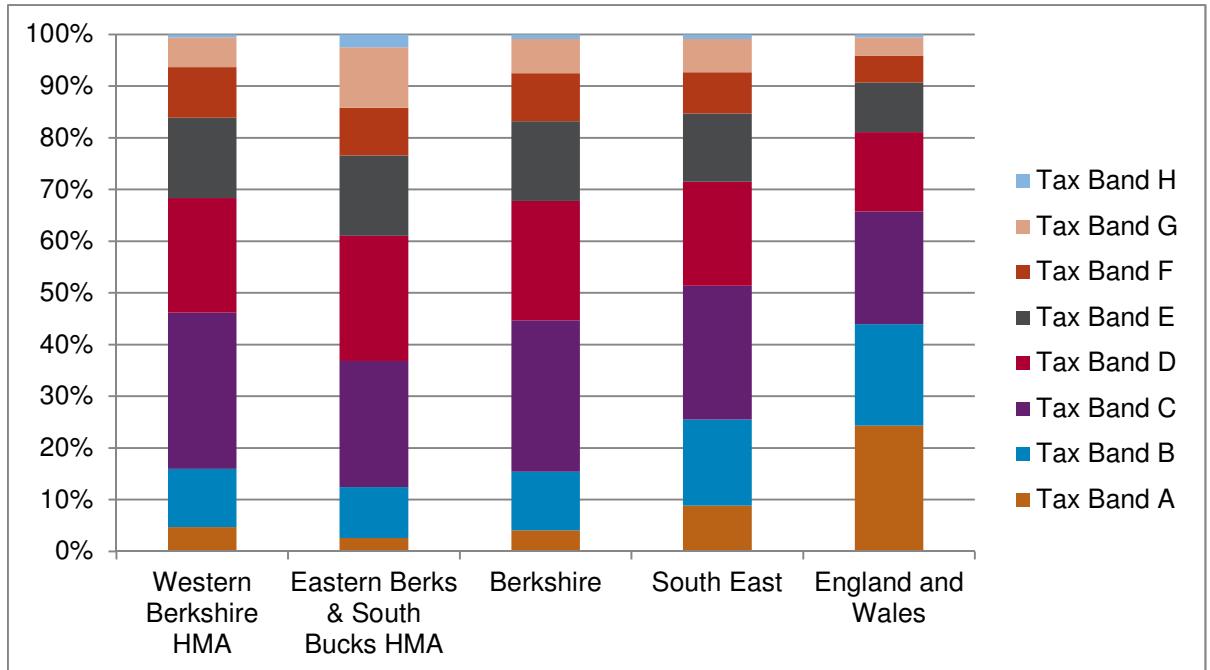
Source: ONS, Census 2011

- 3.56 The high percentage of households in “other” tenures (which includes rent free and tied accommodation) is in RBWM. This can be linked to a high percentage of dwellings being provided for those living and working on the Crown Estate.
- 3.57 A review of changes in tenure can be found in the market signals chapter of this report.

Council Tax

3.58 Finally, we have also considered the profile of homes in different Council Tax bands using Census Data. As shown in Figure 44 overall, Eastern Berks and South Bucks (23.4%) have a higher proportion of properties in the more expensive Bands F to H than Western Berkshire (16.1%). As illustrated in Figure 44 the level in both HMAs is higher than the regional (15.3%) and national figures (9.3%).

Figure 44: Dwelling % by Council Tax Band, 2011



Source: VOA/ ONS 2011

3.59 Reflecting the small number of 1 and 2 bed properties and conversely the large percentage of detached stock in South Bucks over 40% of dwellings fall into the highest tax bands (Bands F to H). Conversely Reading and Slough have a high percentage of smaller, flatted properties. Consequently, the majority of properties (69.3% in Reading and 63.7% in Slough) are in the three lowest council tax bands (Bands A-C). RBWM and Wokingham also have a low percentage of properties in the lowest council tax bands (see Table 31).

Table 31: Dwelling % by Council Tax Band, 2011

	Tax Band A	Tax Band B	Tax Band C	Tax Band D	Tax Band E	Tax Band F	Tax Band G	Tax Band H
Bracknell Forest	3.5%	9.1%	37.5%	18.8%	16.4%	9.7%	4.5%	0.5%
Reading	8.4%	20.0%	40.9%	15.2%	7.9%	4.8%	2.7%	0.1%
Slough	2.4%	18.5%	42.7%	24.6%	8.0%	3.1%	0.6%	0.0%
South Bucks	2.2%	3.1%	12.3%	20.5%	18.0%	12.3%	24.8%	6.8%
West Berkshire	3.6%	9.4%	28.5%	25.8%	15.5%	9.8%	6.4%	1.0%
RBWM	2.9%	5.7%	14.7%	25.6%	20.7%	12.8%	15.0%	2.6%
Wokingham	2.8%	5.4%	15.2%	28.3%	23.2%	15.1%	9.3%	0.7%

Source: VOA/ ONS 2011

3.60 Drawing the demographic analysis together, the following characteristics are seen across the Local Authorities:

West Berkshire:

- 2nd Largest number of households
- Least ethnically diverse
- Lowest % of All Student households
- Highest % of PT employees
- Highest % of couples with no children
- Highest % of semi-detached and 3 bedroom properties

Reading:

- Largest population and number of households
- 2nd Most ethnically diverse
- 2nd Lowest % of households with children
- Highest % of All Student households
- Highest % of single person households
- 2nd Highest % of unemployed and unskilled residents
- 2nd Highest % of terraced properties
- 2nd Highest % of flats and 1 bedroom homes
- Highest % of PRS

Wokingham:

- 2nd Largest population
- 2nd Highest % of households with children
- Highest qualified population
- 2nd Highest % of professional residents
- 2nd Highest % of FT employees
- Highest % of detached and homes with more than 4 bedrooms
- 2nd Highest % of semi-detached
- Highest % of owner occupation
- Lowest % social rented properties

Bracknell Forest:

- 2nd Smallest population and number of households
- 2nd least ethnically diverse
- Lowest % of large households (+5 persons)
- Highest % of FT employees
- Highest % of terraced properties
- 2nd Highest % of social rented properties

RBWM:

- Highest earning residents
- 2nd Highest % of single pensioner households
- Lowest % of households with children
- 2nd Lowest % of all student households
- 2nd Highest qualified population
- Highest % of professional residents
- 2nd Highest % of self-employed residents

Slough:

- Most diverse population
- Youngest population
- Smallest % of single pensioner households
- Highest % of households with children
- 2nd Highest % of all student households
- Lowest qualified population (no qualifications)
- Highest % of large households (+5 persons)
- 2nd Highest % of single person households
- Highest % of unemployed and unskilled residents
- Highest % of flats and 1 bedroom homes
- 2nd Highest % of PRS
- Highest % of social rented properties

S Bucks:

- Smallest population and number of households
- Oldest population
- Highest % of single pensioner households
- 2nd Highest % of large households (+5 persons)
- Highest % of self-employed residents
- 2nd Highest % of detached and homes with more than 4 bedrooms
- 2nd Highest % of owner occupied properties

4 DEMOGRAPHIC-LED HOUSING NEED

Introduction

4.1 The analysis carried out follows the requirements of the National Planning Policy Framework and the more recent (March 2014) CLG advice about assessing housing and economic development needs. The PPG effectively describes a process whereby the latest population and household projections are a starting point; and a number of “tests” then need to be considered to examine whether it is appropriate to consider an upward adjustment to housing provision. These are:

- Is there evidence that household formation rates in the projections have been constrained? Do market signals point to a need to increase housing supply?
- How do the demographic projections ‘sit’ with the affordable housing needs evidence, and should an increase in housing supply be considered to meet affordable needs?
- What do economic forecasts say about job growth? Is there evidence that there will be a labour force shortage in the area and how might this impact on the need for housing?

4.2 In this section consideration is given to demographic evidence of housing need. The analysis begins by considering the most recent population and household projections published by ONS/CLG. The analysis then considers a range of ‘sensitivities’ to the projections including an understanding of the migratory links with London and how these have changed since 2008 (the onset of recession).

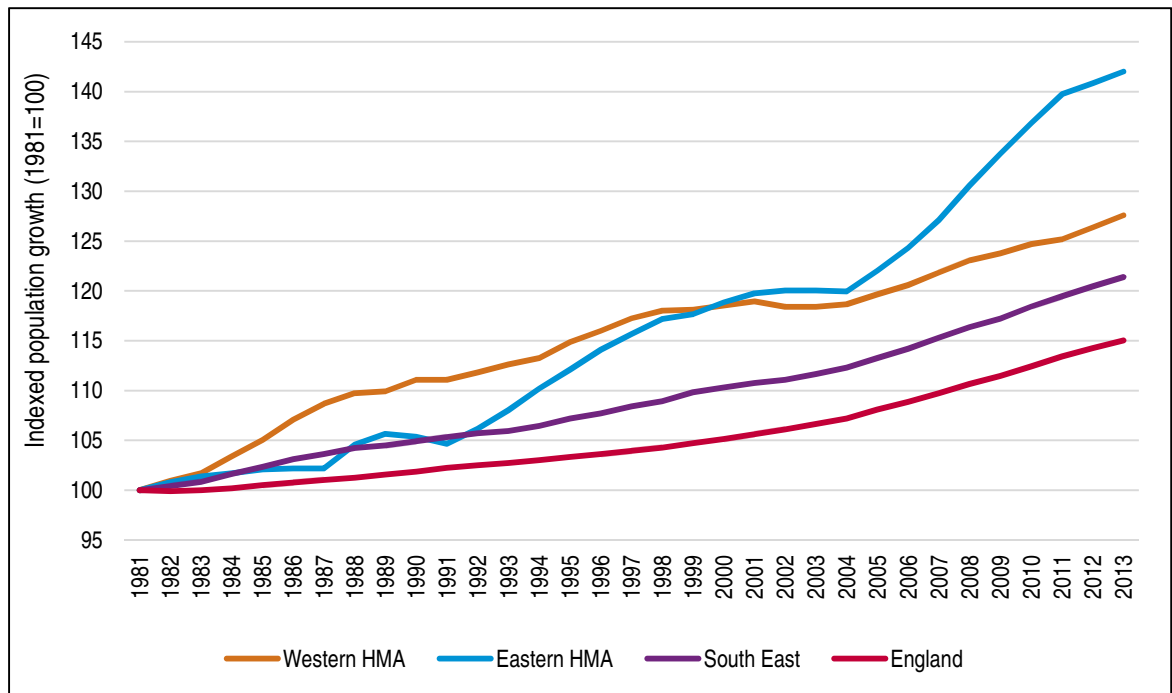
4.3 The core projections in this section look at housing needs in the period from 2013 to 2036. The starting point reflects a base position for which a reasonable amount of data is available (the ONS mid-2013 population estimates). Since the report was drafted, ONS has published a new set of mid-year population estimates (for 2014) which are briefly discussed at the end of the section.

Demographic profile of the two HMAs

4.4 The population of the two HMAs in 2013 is estimated to be 946,300, this is an increase of 81,100 people since 2001 – a 9.4% increase over the 12-year period. This level of population growth is below that seen across the South East region (9.6%) but above the average for England as a whole (8.9%). Over the period from 2001, population growth was particularly strong in Slough (18.6% increase) and notably weaker in Wokingham (5.1%) and to a lesser extent Bracknell Forest (6.3%).

4.5 We can also consider longer-term trends in population growth with data being available back to 1981. Figure 45 shows that population growth in the two HMAs has historically been quite strong with a 28% increase since 1981 in the Western Berkshire HMA and a 42% increase in the Eastern Berks & South Bucks HMA. These figures are some way above the growth levels seen in the South East (21%) and England (15%). Over the past decade or so, population growth in the Eastern Berks & South Bucks HMA has been particularly strong when compared with other areas (see Figure 45).

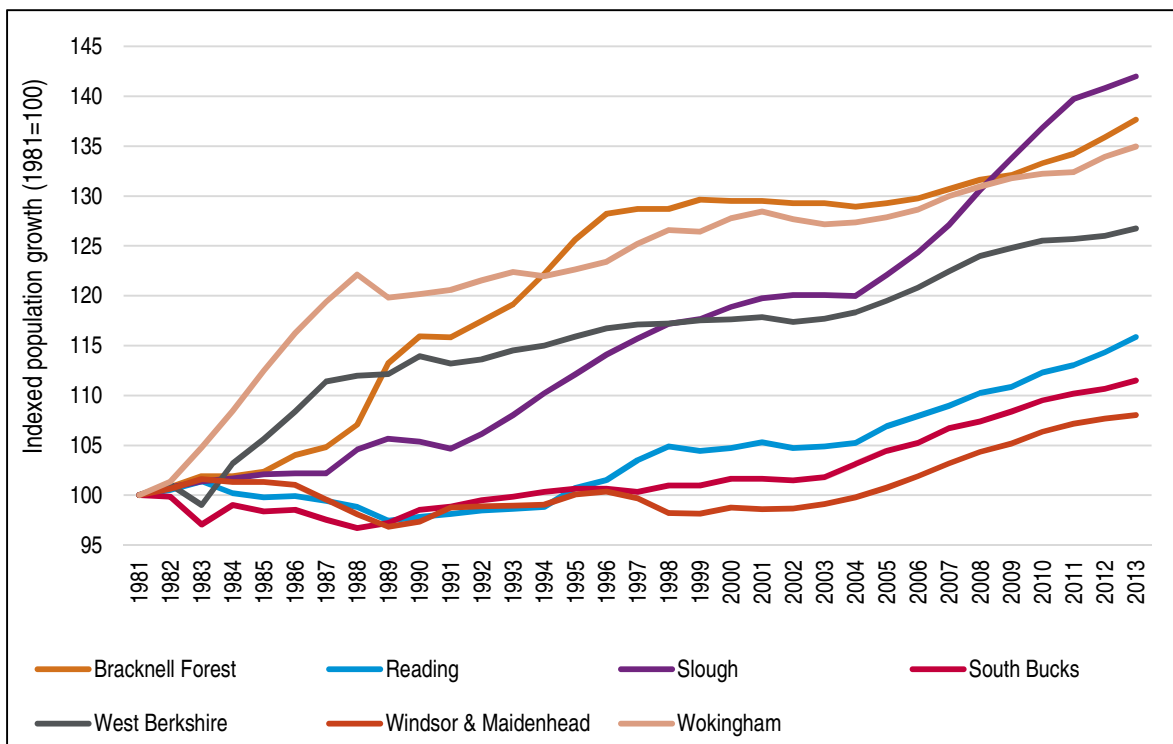
Figure 45: Indexed population growth (1981-2013)



Source: ONS mid-year population estimates, 2014

4.6 Figure 46 shows the same information for individual local authority areas. The data shows significant variations over time. In the early part of the period studied, both Reading and RBWM saw population decline and in RBWM it has only been over the past decade that there has been any notable population growth. The population of Bracknell Forest grew very strongly until the mid-1990s and has grown more moderately since. Slough has seen a sharp increase in population growth since about 2004. Both West Berkshire and Wokingham saw strong growth in the first few years from 1981 but more moderate levels since.

Figure 46: Indexed population growth (1981-2013) – by local authority



Source: ONS mid-year population estimates, 2014

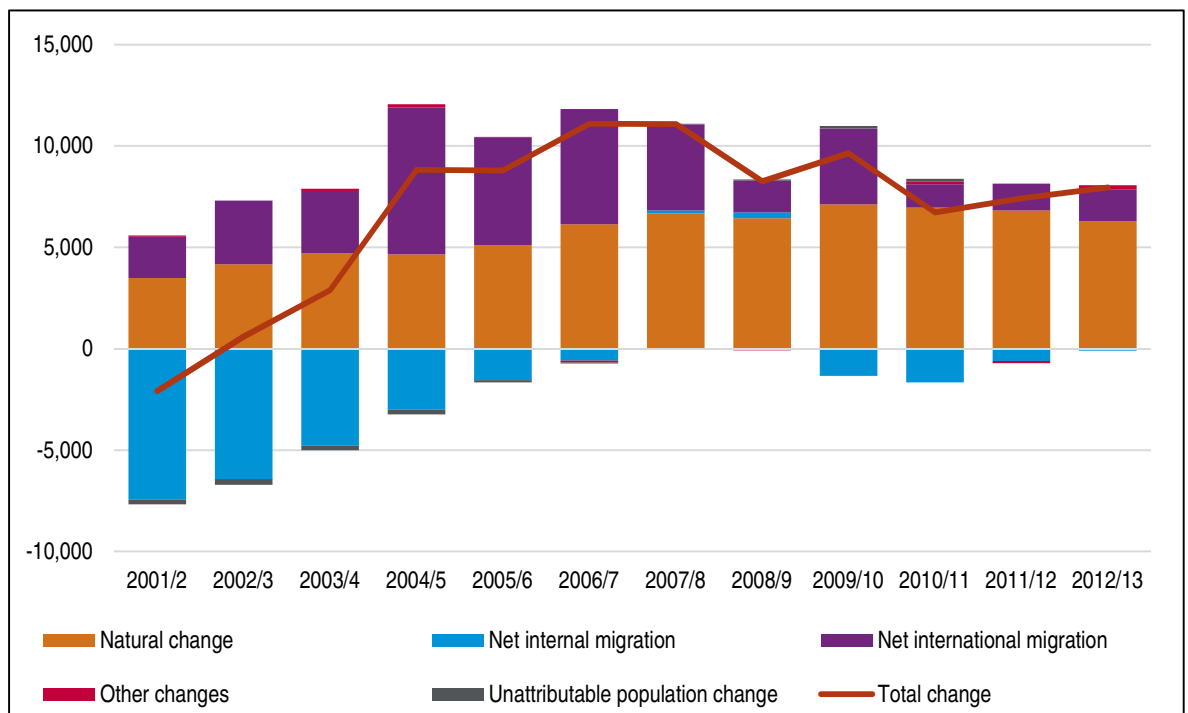
4.7 Figure 47 and Table 32 consider the drivers of population change in the sub-region. Population change is largely driven by natural change (births minus deaths) and migration although within ONS data there is also a small other changes category (mainly related to armed forces and prison populations) and an Unattributable Population Change (UPC). UPC is an adjustment made by ONS to mid-year population estimates where Census data suggests that population growth had either been over- or under-estimated in the inter-Census years. Because UPC links back to Census data a figure is only provided for 2001 to 2011.

4.8 The figure and table show that natural change is the key driver of population change. The number of births has typically exceeded the number of deaths by around 5,700 per annum over the period from 2001. The level of natural change has generally been increasing over time although the more recent evidence suggests that this may now be levelling off or even decreasing slightly (natural change makes up 84% of all population growth seen in the 2001-13 period). The data also shows that migration is a key component of change and in particular international migration – this has averaged 3,300 per annum (net in-migration) over the period studied. International net migration was particularly strong in the 2004-10 period. Internal migration (i.e. moves from one part of the country to another) is generally negative (i.e. net out-migration) and averages 2,300 people leaving

the study area each year. The level of net internal out-migration has however decreased over time and has only averaged 550 people per annum over the past seven years.

4.9 Other changes and UPC are quite small although in the case of UPC there are some significant variations by local authority. The implications of UPC for housing need is discussed later in this section.

Figure 47: Components of population change, mid-2001 to mid-2013 – Study area



Source: ONS, 2014

Table 32: Components of population change (2001-13) – Study Area

Year	Natural change	Net internal migration	Net international migration	Other changes	Other (UPC)	Total change
2001/2	3,485	-7,438	2,032	64	-235	-2,092
2002/3	4,163	-6,423	3,148	-9	-279	600
2003/4	4,698	-4,785	3,078	111	-223	2,879
2004/5	4,660	-3,009	7,247	149	-227	8,820
2005/6	5,106	-1,548	5,320	28	-116	8,790
2006/7	6,139	-586	5,679	-90	-47	11,095
2007/8	6,676	141	4,244	-15	30	11,076
2008/9	6,444	280	1,570	-87	52	8,259
2009/10	7,124	-1,329	3,742	-7	115	9,645
2010/11	6,959	-1,662	1,150	152	123	6,722
2011/12	6,821	-607	1,316	-113	0	7,417
2012/13	6,296	-104	1,553	213	0	7,958

Source: ONS, 2014

- 4.10 Tables 33 and 34 below show the same information for the two HMAs with data for the seven local authorities to be found in Appendix C. Of particular note is the trend for international migrants to flow into Reading and Slough, and internal migrants to flow out of these areas. The other local authorities tend to see a net gain of internal migrants.

Table 33: Components of population change (2001-13) – Western Berkshire HMA

Year	Natural change	Net internal migration	Net international migration	Other changes	Other (UPC)	Total change
2001/2	2,275	-4,112	140	25	-727	-2,399
2002/3	2,717	-2,949	887	-20	-762	-127
2003/4	3,009	-1,962	830	142	-721	1,298
2004/5	3,072	-945	3,079	138	-761	4,583
2005/6	3,247	-503	2,316	17	-722	4,355
2006/7	3,754	466	2,246	-46	-712	5,708
2007/8	4,120	341	1,730	-9	-632	5,550
2008/9	4,019	-284	257	-53	-623	3,316
2009/10	4,215	-1,522	2,206	11	-574	4,336
2010/11	4,221	-1,881	368	103	-467	2,344
2011/12	4,094	50	1,089	-40	0	5,193
2012/13	3,787	863	980	123	0	5,753

Source: ONS, 2014

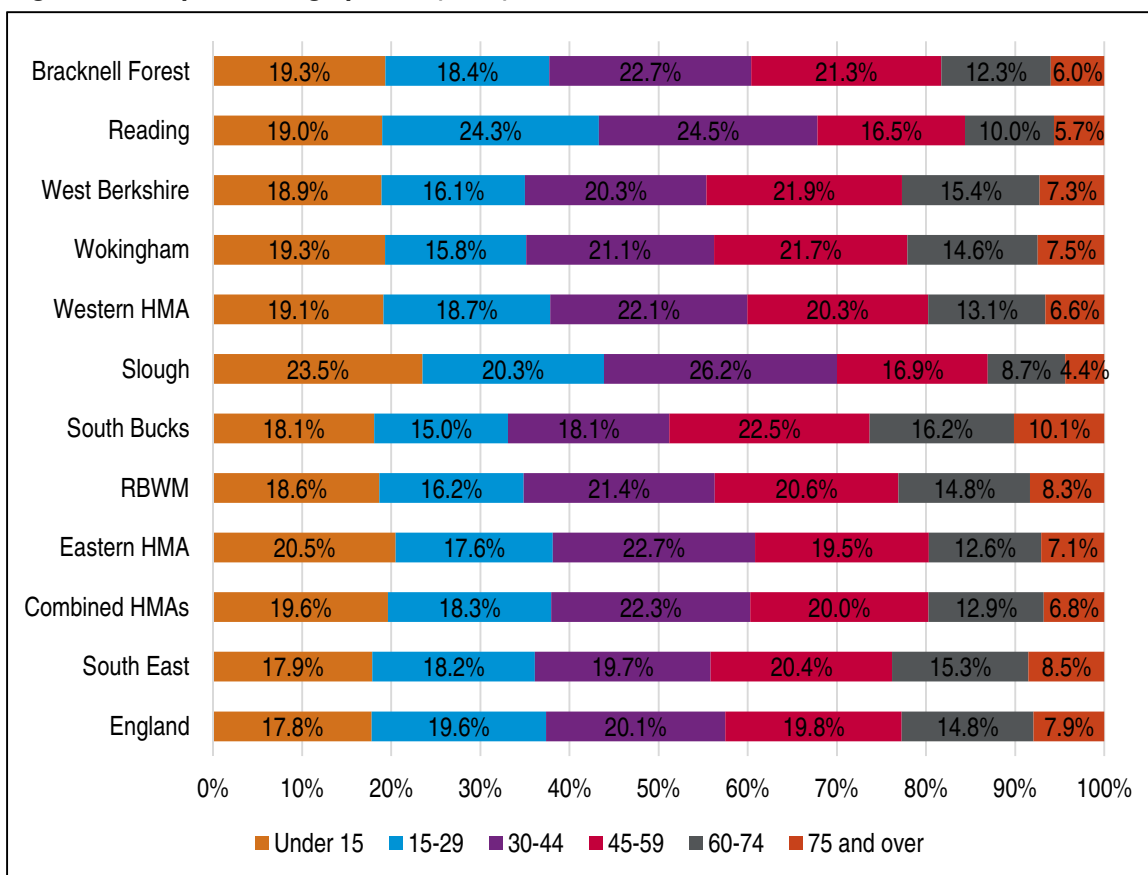
Table 34: Components of population change (2001-13) – Eastern Berks & South Bucks HMA

Year	Natural change	Net internal migration	Net international migration	Other changes	Other (UPC)	Total change
2001/2	1,210	-3,326	1,892	39	492	307
2002/3	1,446	-3,474	2,261	11	483	727
2003/4	1,689	-2,823	2,248	-31	498	1,581
2004/5	1,588	-2,064	4,168	11	534	4,237
2005/6	1,859	-1,045	3,004	11	606	4,435
2006/7	2,385	-1,052	3,433	-44	665	5,387
2007/8	2,556	-200	2,514	-6	662	5,526
2008/9	2,425	564	1,313	-34	675	4,943
2009/10	2,909	193	1,536	-18	689	5,309
2010/11	2,738	219	782	49	590	4,378
2011/12	2,727	-657	227	-73	0	2,224
2012/13	2,509	-967	573	90	0	2,205

Source: ONS, 2014

- 4.11 The profile of the population of the study area is generally slightly younger than seen across the region or nationally with fewer people aged 60 and over. As shown in Figure 48, some 20% of the population is aged 60 and over, compared to 24% regionally and 23% for the whole of England.
- 4.12 For individual local authority areas there are however some notable differences. The key ones are the relatively older age structure of the population of South Bucks (and to a lesser extent RBWM) and notably younger populations in Slough and Reading – in Slough only 13% of the population are aged 60 or over (see Figure 48).

Figure 48: Population age profile (2013)



Source: ONS 2013 Mid-Year Population Estimates (2014)

4.13 Table 35 shows how the age structure of the population has changed over the 2001 to 2013 period. The data shows the most significant growth to have been in the 45-59 and 60-74 age groups, although the 75+ group also shows a notable proportionate increase. The analysis also indicates a small decline in the population aged 15-29 and 30-44. The number of children (people aged under 15) has increased by about 11%.

Table 35: Change in age structure 2001 to 2013 – Study areas

Age group	2001	2013	Change	% change
Under 15	167,500	185,800	18,300	10.9%
15-29	173,600	173,100	-500	-0.3%
30-44	212,000	211,400	-600	-0.3%
45-59	162,500	189,200	26,700	16.4%
60-74	98,300	122,300	24,000	24.4%
75 and over	51,600	64,500	12,900	25.0%
Total	865,200	946,300	81,100	9.4%

Source: ONS, 2013 mid-year population estimates (2014)

- 4.14 Tables 36 and 37 show the same information for the two HMAs. There are some notable differences between the areas with the Western Berkshire HMA seeing a greater ageing of the population and the Eastern Berks & South Bucks HMA seeing stronger growth in some of the younger age groups (and more modest growth in age groups from 60 and above).

Table 36: Change in age structure 2001 to 2013 – Western Berkshire HMA

Age group	2001	2013	Change	% change
Under 15	106,200	112,600	6,400	6.0%
15-29	113,000	110,100	-2,900	-2.6%
30-44	136,700	130,300	-6,400	-4.7%
45-59	103,400	119,500	16,100	15.6%
60-74	59,600	77,300	17,700	29.7%
75 and over	30,700	39,100	8,400	27.4%
Total	549,200	589,100	39,900	7.3%

Source: ONS, 2013 mid-year population estimates (2014)

Table 37: Change in age structure 2001 to 2013 – Eastern Berks & South Bucks HMA

Age group	2001	2013	Change	% change
Under 15	61,300	73,200	11,900	19.4%
15-29	60,600	63,000	2,400	4.0%
30-44	75,300	81,100	5,800	7.7%
45-59	59,100	69,700	10,600	17.9%
60-74	38,700	45,000	6,300	16.3%
75 and over	20,900	25,400	4,500	21.5%
Total	316,000	357,200	41,200	13.0%

Source: ONS, 2013 mid-year population estimates (2014)

What is the Starting Point to establish the need for housing?

- 4.15 The PPG paragraph 15 (ID: 2a-015-20140306) states that ‘household projections published by the Department for Communities and Local Government should provide the starting point estimate of overall housing need. The household projections are produced by applying projected household representative rates to the population projections published by the Office for National Statistics. Projected household representative rates are based on trends observed in Census and Labour Force Survey data’.
- 4.16 The most up-to-date projections are the 2012-based CLG household projections published in February 2015. These projections were underpinned by ONS (2012-based) subnational population projections (SNPP) – published in May 2014. Our analysis therefore initially considers the validity of

the population projections and their consistency with past trends. Sensitivity testing has also been undertaken in line with the PPG (ID: 2a-017-20140306).

- 4.17 Table 38 shows the levels of household growth expected in the 2012-based CLG household projections for the 2013-36 period (consistent with the analysis to follow) – this is compared with data for the South East and England. The data shows that the number of households in the study area is expected to increase by around 25%; this is slightly higher than the projected level of growth in the South East (24%) and also higher than the figure nationally (22%). Within this data the analysis shows a particularly strong growth projected in the Eastern Berks & South Bucks HMA and this can be seen to be driven by household increases in Slough (where a 38% increase is projected).

Table 38: Household growth projected by CLG (2013-36)

	Households 2013	Households 2036	Change in households	% change
Bracknell Forest	47,404	59,377	11,973	25.3%
Reading	63,604	75,007	11,403	17.9%
West Berkshire	63,301	75,139	11,838	18.7%
Wokingham	61,914	77,142	15,228	24.6%
Western Berkshire HMA	236,223	286,665	50,442	21.4%
Slough	52,472	72,442	19,970	38.1%
South Bucks	27,095	34,550	7,455	27.5%
RBWM	59,605	74,099	14,494	24.3%
Eastern Berks & South Bucks HMA	139,172	181,091	41,919	30.1%
Study areas	375,395	467,756	92,361	24.6%
South East	3,631,482	4,490,835	859,353	23.7%
England	22,499,536	27,363,402	4,863,866	21.6%

Source: CLG 2012-based household projections (2015)

2012-based subnational population projections

- 4.18 The latest set of subnational population projections (SNPP) were published by ONS on the 29th May 2014. They replace the 2010- and 2011-based projections. Subnational population projections provide estimates of the future population of local authorities, assuming a continuation of recent local trends in fertility, mortality and migration which are constrained to the assumptions made for the 2012-based national population projections. The new SNPP are largely based on trends in the 2007-12 period (2006-12 for international migration trends). The SNPP are only population projections and do not contain headship rates (which are needed to convert into household estimates).

4.19 They are not forecasts and do not attempt to predict the impact that future government or local policies, changing economic circumstances or other factors might have on demographic behaviour. The primary purpose of the subnational projections is to provide an estimate of the future size and age structure of the population of local authorities in England. These are used as a common framework for informing local-level policy and planning in a number of different fields as they are produced in a consistent way.

Overall population growth

4.20 Table 39 shows projected population growth from 2013 to 2036 in each local authority and other areas. The data shows that the population of the study area is expected to grow by around 160,800 people; this is a 17% increase – virtually the same as expected across the South East and above the figure for England as a whole (15%). Population growth is expected to be particularly strong in Slough and weaker in Reading and West Berkshire.

4.21 It should be noted that due to inclusion within the modelling of mid-2013 population estimates for each of the local authorities the figures do not exactly match those in the SNPP. Figures for comparator areas are however taken directly from the SNPP.

Table 39: Projected population growth (2013-2036)

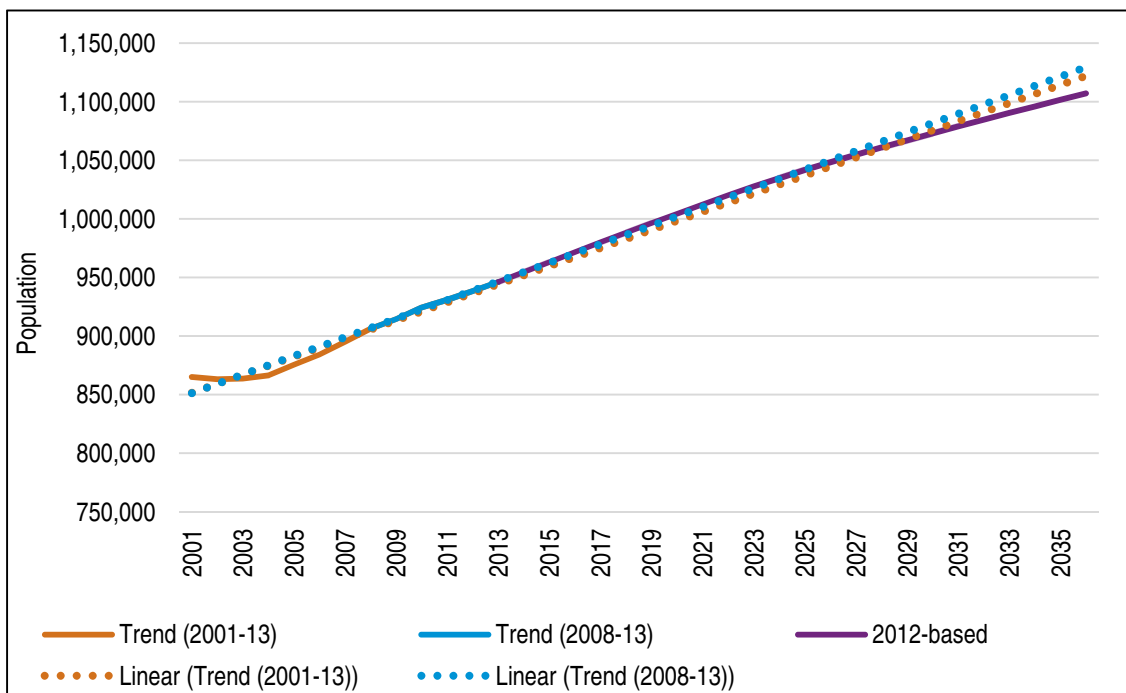
	Population 2013	Population 2036	Change in population	% change
Bracknell Forest	116,567	138,559	21,992	18.9%
Reading	159,247	177,367	18,120	11.4%
West Berkshire	155,392	174,676	19,284	12.4%
Wokingham	157,866	184,858	26,992	17.1%
Western Berkshire HMA	589,072	675,459	86,387	14.7%
Slough	143,024	177,553	34,529	24.1%
South Bucks	67,941	82,483	14,542	21.4%
RBWM	146,335	171,660	25,325	17.3%
Eastern Berks & South Bucks HMA	357,300	431,696	74,396	20.8%
Study areas	946,372	1,107,155	160,783	17.0%
Berkshire	878,431	1,024,672	146,241	16.6%
South East	8,784,800	10,254,600	1,469,800	16.7%
England	53,843,600	61,886,100	8,042,500	14.9%

Source: ONS, SNPP (2014)

4.22 Figure 49 shows past and projected population growth in the period 2001 to 2036. The data also plots a linear trend line for the last five years for which data is available (2008-13) and also a longer-term period from 2001 to 2013 – this being the longest period for which reasonable data about the components of population change (e.g. migration) is available. The data shows that the

population is expected to grow at a rate which is very much in-line with past trends (over either the short- or long-term).

Figure 49: Past and projected population growth – Study area



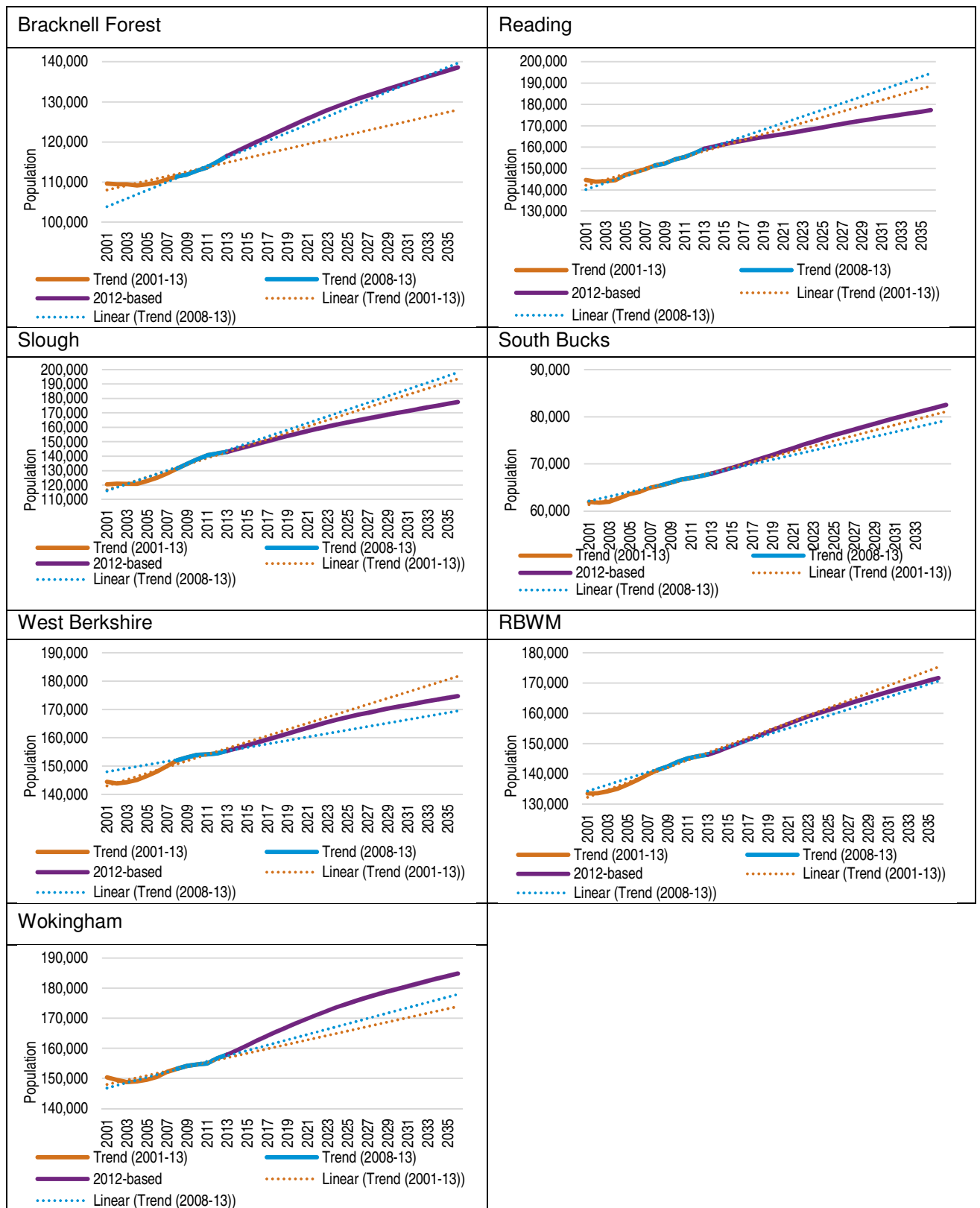
Source: ONS, 2014

4.23 Figure 50 shows the same data for individual local authorities. In Bracknell Forest the data suggests that future growth is expected to be broadly in-line with short-term (5-year) trends but somewhat stronger than the trend seen back to 2001. In both Reading and Slough, the future projection is somewhat below past trends (regardless of the period studied). In West Berkshire and RBWM the projection is broadly in-line with past trends over both a short- and longer-term. Finally, the population growth in Wokingham as set out in the SNPP is expected to be somewhat above both short- and long-term trends.

4.24 There are a number of reasons for differences between past trends and the projections. Part of this is due to the way the SNPP is constructed. For example, internal migration is not just based on past levels of migration but takes account of population age structure and age/sex prevalence rates for migration (for example if a particular age group in an area is expected to decline then over time levels of out-migration from this group will also decline). Age structure changes impact on both in- and out-migration separately, and are also influenced by changes to the age structure in areas from which migrants might be expected to move from. Generally, this manifests itself in a reduction in net migration in areas with a younger population and increases in locations with an older population profile (although individual areas may not exactly follow this trend depending on their own specific characteristics).

- 4.25 Additionally, it should be noted for international migration that the projections are not directly based on past trends. For this component of population change, the level of net migration for local authorities must sum to the level shown in national projections – the 2012-based national projections were informed by a long-term time series for international migration (believed to date back to 1994). As a result, the projected level of international migration is lower than had been observed over the previous 6-years (which is the period used for international migration in the SNPP). This means that areas where international migration is particularly strong tend to see lower levels within the projection than recent past trends – this can be seen in the data below for both Reading and Slough.
- 4.26 In other areas it is also likely that UPC has an impact on the difference between past trends and the future projection. ONS do not include any allowance for UPC in their projections because a) they do not know if it can be attributed to a mis-recording of migration or due to errors in Census data (particularly from 2001) and b) given improvements to the collection of migration data, it is likely that any errors are in the early part of the 2001-11 decade (generally before 2006). Despite this latter point, ONS in making a correction for UPC have broadly modelled this to be consistent in each year from 2001 to 2011. Taking the example of Wokingham, UPC was very high and negative – this has meant that the ONS estimates of past population growth (2001-11) have been moderated in a downward direction. Moving forward however, the exclusion of UPC does see population growth at a level which is somewhat higher than the ONS trends are showing. As noted however, it is not clear if at least part of the population growth trend is influenced by a mis-recording of population in the Census.

Figure 50: Past and projected population growth – by Local Authority



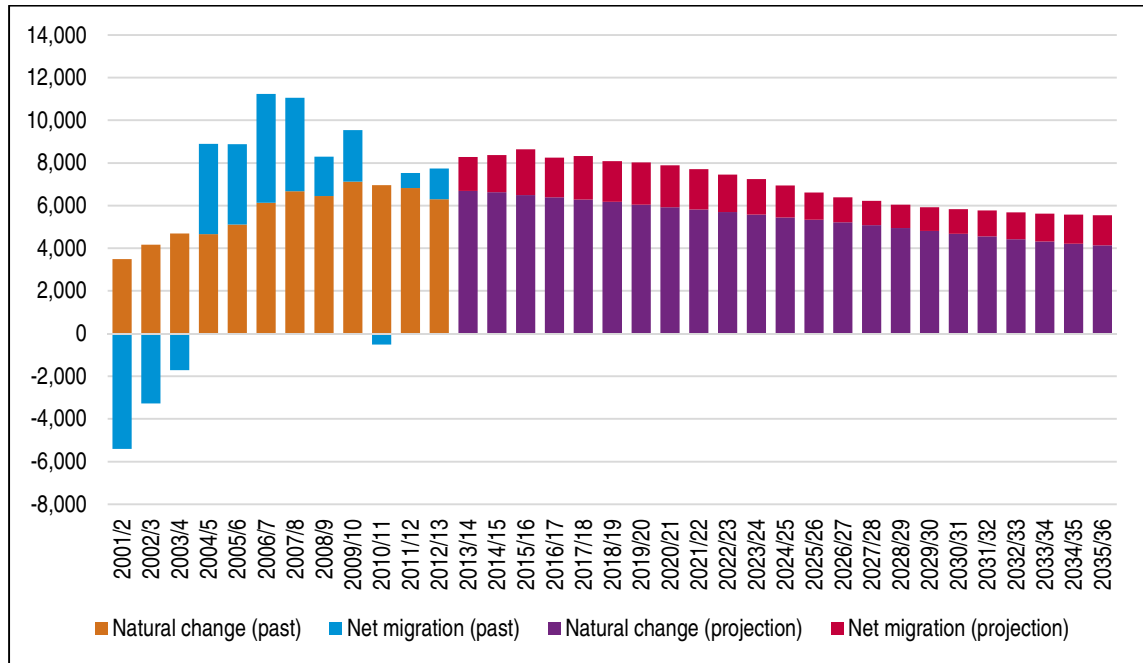
Source: ONS,2014

- 4.27 Overall, at the HMA level, we would conclude that the SNPP is a reasonable projection to take forward into household growth modelling. Potentially some adjustments could be made (in an upward direction for Reading and Slough and downwards in Wokingham). However, (as noted above), it does need to be borne in mind that the ONS projections are not a simple roll forward of past population growth. The projections take account of the current age structure and how this will change over time. The age structure changes then feed into estimates of how migration patterns might change. Given that Reading and Slough have a relatively young population and Wokingham shows an older age structure, there may well be some logic for the future projections showing the patterns they do. Additionally, it should be noted that all local authority projections sum to the total shown in national population projections; to some extent the national projections move away from being directly related to trends – for example, international migration levels are set based on both past trend data and also the views of an expert panel about how migration levels will change in the future.
- 4.28 On balance therefore, we would also consider that the local authority level projections are broadly reasonable.

Components of population change

- 4.29 Figure 51 brings together data about migration (both past trends and the future projection) along with information about natural change for the study area. This shows that natural change is expected to decrease over time from about 6,700 more births than deaths at the start of the projection down to around 4,100 by 2036. Expected levels of migration show a small increase over the first few years of the projection and then begin decreasing over time – the short-term increase will in part be due to assumptions by ONS about military personnel returning from abroad. When compared with the past trends, the migration figures look to be reasonable given their general consistency with past trend data. For the whole of the projection period (2013-36) the average level of migration is expected to be around 1,500 people (net) per annum across the study area – this figure is higher than the level seen in past trends, regardless of the period studied (1,100 per annum on average from 2001 to 2013 and 1,200 per annum for the past five years).

Figure 51: Components of population change, mid-2001 to mid-2036 – Study Area



Source: ONS mid-year population estimates and SNPP (2014)

Age structure changes

4.30 With growth in the population will also come age structure changes. Table 40 summarises the findings for key (15-year) age groups under the 2012-based SNPP for the study area. Table 40 shows that the largest growth will be in people aged 60 and over; it is estimated that there will be 302,500 people aged 60 and over in 2036 – this is an increase of 115,800 from 2013, representing a growth of 62%. The population aged 75 and over is projected to increase by an even greater proportion, 99%. Looking at the other end of the age spectrum the data shows that there are projected to be around 6% more people aged under 15, 13% more in the 15-29 age group and 8% more people aged 45-59. The 30-44 age group is expected to see a small level of population decline (-2%).

Table 40: Population change 2013 to 2036 by fifteen-year age bands (2012-based SNPP) – Study area

Age group	Population 2013	Population 2036	Change in population	% change from 2013
Under 15	186,082	197,674	11,592	6.2%
15-29	173,072	195,136	22,064	12.7%
30-44	211,556	207,022	-4,534	-2.1%
45-59	189,025	204,860	15,835	8.4%
60-74	122,257	174,217	51,960	42.5%
75+	64,380	128,247	63,867	99.2%
Total	946,372	1,107,155	160,783	17.0%

Source: ONS, SNPP (2014)

Household growth

- 4.31 Having studied the population size and the age/sex profile of the population, the next step in the process is to convert this information into estimates of the number of households in the area. To do this the concept of headship rates is used. Headship rates can be described in their most simple terms as the number of people who are counted as heads of households (or in this case the more widely used Household Reference Person (HRP)).
- 4.32 With the publication of new 2012-based CLG household projections a new set of headship rates is now available (although at present these are based on a ‘Stage 1’ analysis and don’t fully take account of 2011 Census data). These rates are considered to be more positive than the previous set (2011-based) and typically suggest higher rates of household growth for a given population (although population growth and changes to population age structure remain the key drivers of household growth). At a national level (in the 2012-21 period considered by CLG) the new projections show 10% higher growth in households, for Berkshire the figure is slightly higher (at 11%) – both of these figures are based on the same population projection (2012-based) to allow for a direct comparison of the impact of the new headship rates.
- 4.33 Table 41 shows expected household growth in the 2012-based projections from 2013 to 2036 for the study area and a range of other areas. The figures for the Berkshire authorities do not exactly match the CLG projections as we have included population data for 2013, all other areas show the data as published. The data suggests an increase in households of about 85,000 over the 23-year period – this is a 24% increase; very slightly higher than expected across the South East and also above the national average.

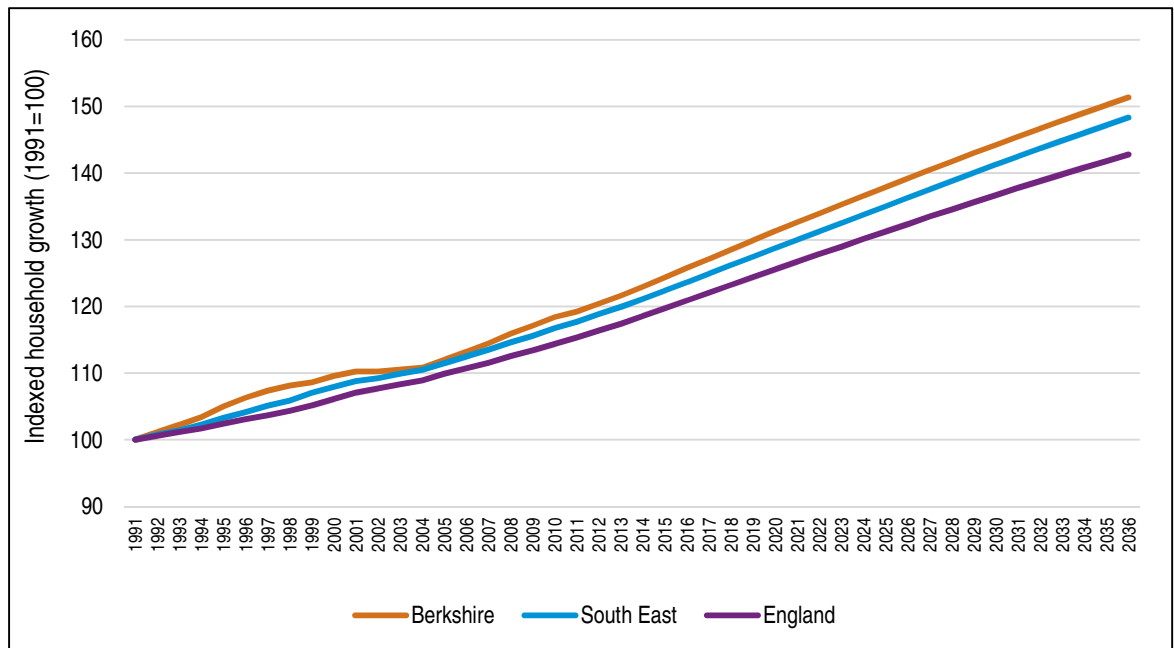
Table 41: Projected household growth (2013-2036)

	Households 2013	Households 2036	Change in households	% change from 2013
Bracknell Forest	47,481	59,476	11,995	25.3%
Reading	64,045	75,920	11,875	18.5%
West Berkshire	63,219	75,129	11,910	18.8%
Wokingham	61,701	76,796	15,095	24.5%
Western Berkshire HMA	236,445	287,321	50,875	21.5%
Slough	52,300	71,961	19,662	37.6%
South Bucks	27,015	34,465	7,450	27.6%
RBWM	59,434	73,908	14,474	24.4%
Eastern Berks & South Bucks HMA	138,748	180,334	41,586	30.0%
Study area	375,194	467,655	92,461	24.6%
Berkshire	348,179	433,190	85,011	24.4%
South East	3,631,482	4,490,835	859,353	23.7%
England	22,499,536	27,363,402	4,863,866	21.6%

Source: ONS, 2015

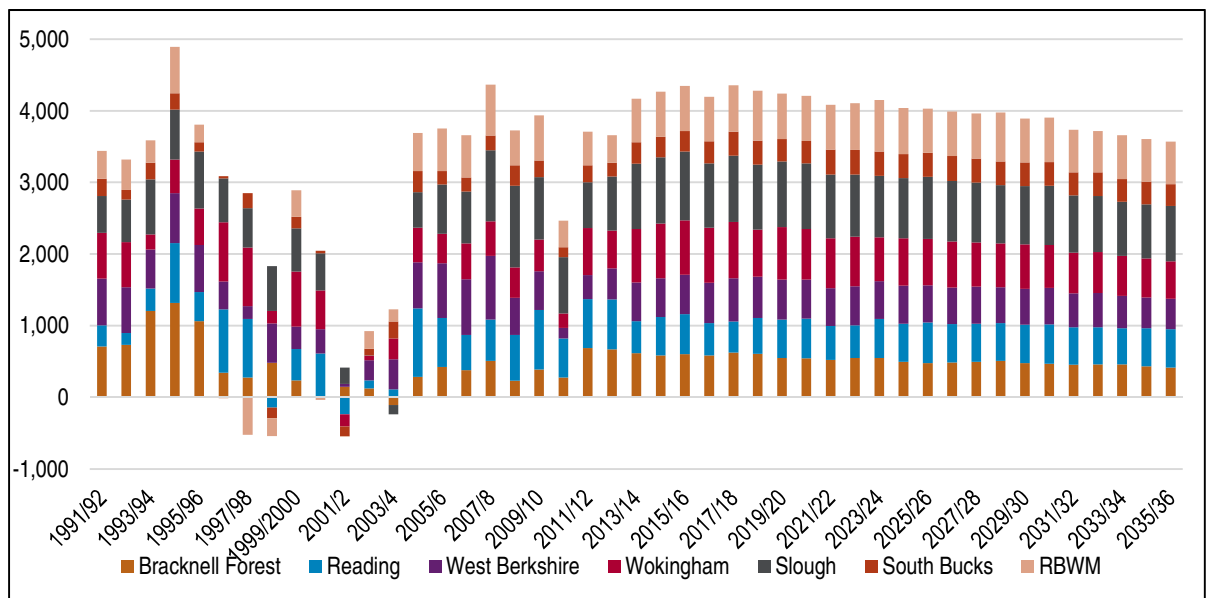
- 4.34 Figure 52 shows household growth back to 1991 and projected forward to 2036. The analysis shows that growth in the study area has generally been very slightly stronger than seen across the South East and England. In all areas there is some evidence of a slight acceleration in growth rates from about 2012 onwards – this is consistent with the view that the new projections are taking a more positive view about household formation rates. Rates of household growth do however start to decline from about 2016 (see Figure 53). The higher growth to 2016 looks to be driven by higher levels of population change (linked to both higher migration and natural change in the early part of the projection period). In the longer-term both natural change and net migration are projected to decrease slightly; the reduction in natural change is largely driven by increased mortality, which in turn is linked to an ageing population (i.e. more older people, who have higher death rates than other cohorts of the population). Changes to projected household growth are therefore strongly driven by population projections rather than changes to household formation rates.

Figure 52: Indexed household growth (1991-2036) – Study area



Source: CLG, 2015

Figure 53: Annual change in household growth (1991-2036)

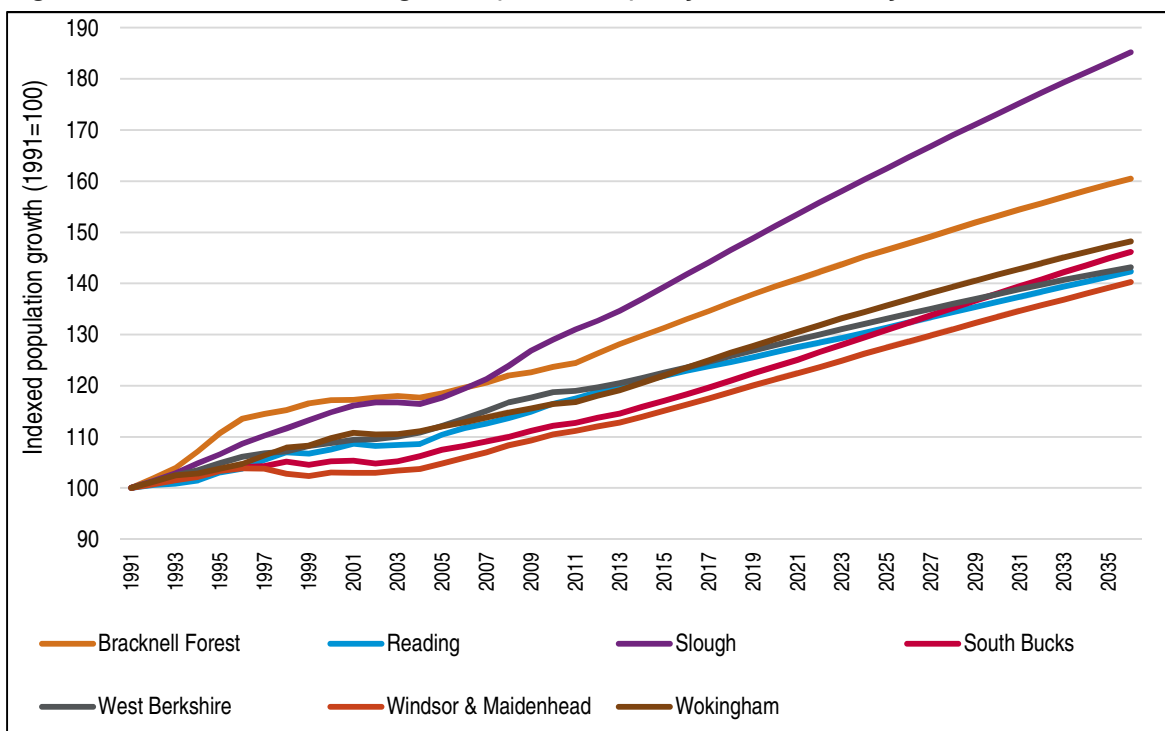


Source: CLG, 2015

4.35 Figure 54 shows the same information for individual local authority areas. The data shows fairly moderate growth in all locations up until about 2007. From this date Slough shows a notable increase in households with the other areas broadly continuing on their long-term trends. From about 2012 all areas (with the exception of Slough) show a slight upturn in expected household growth – this as noted above is likely to be due to the more positive position with regards to

household formation for most groups being assumed in the 2012-based CLG household projections. In Slough, there is also strong household growth post 2012, however this is in-line with estimates of the growth from about 2007 to 2011/12. The higher level of household growth in Slough is predominantly driven by high levels of projected population growth in the area.

Figure 54: Indexed household growth (1991-2036) – by Local Authority

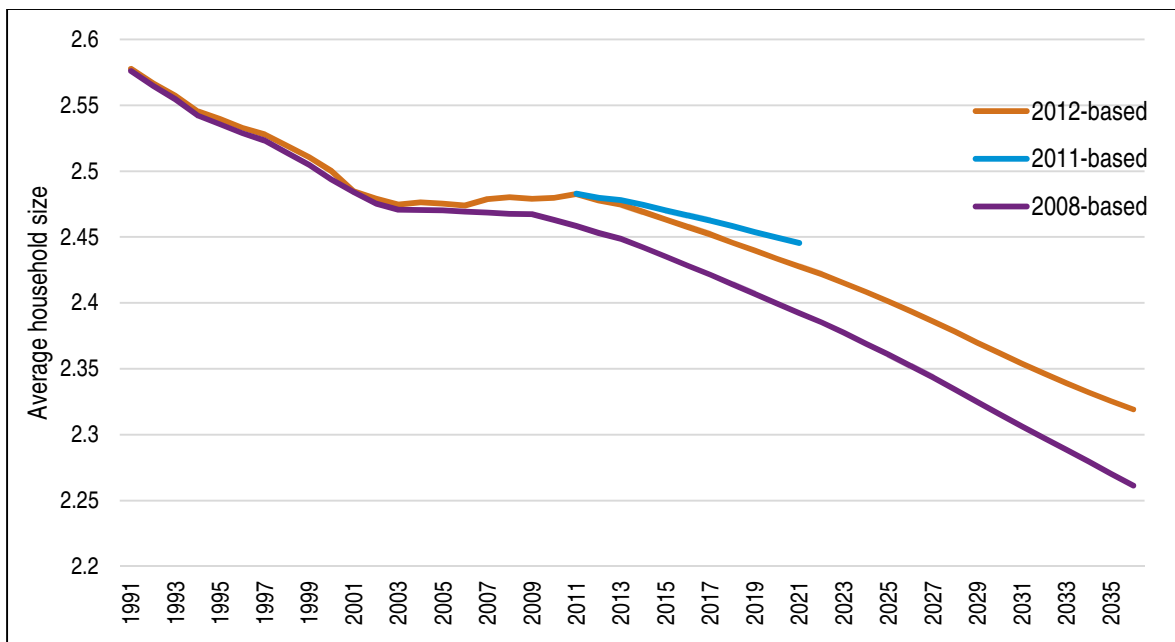


Source: ONS, 2015

- 4.36 To look at the impact of the 2012-based household projections we can make a comparison of average household sizes. Figure 55 shows this based on each of 2012-, 2011- and 2008-based CLG household projection data. The data shows the 2012-based figures being somewhat more positive than the 2011-based version (see Figure 55). This can be seen by the newer projections expecting a greater decrease in average household size over time.
- 4.37 The data also shows a slight increase in household size from 2001 to 2011 – this is a period when it is considered that there was some suppression in the housing market and this increase suggests that there is evidence of such suppression in the study area (it should however be noted that changes to household size are not just influenced by suppressed household formation and will also be impacted by population structure changes such as international migration and growth in BME communities – recognising that such groups tend to be younger and more likely to be part of larger households). Moving forwards, average household size is expected to fall at a rate which is slightly faster than past trends might suggest – if for example we look at the 1991-2011 period which includes both a period of relative buoyancy in the housing market and a period of constraint.

4.38 Data from the 2008-based projections has also been included. This shows that average household sizes are above what might have been expected from this earlier release of data. However, looking at the period from 2012 the data suggests that the future trajectory in the 2012-based version is not much different. Hence at face value it does look as if the new projections are returning rates of change similar to those experienced in the longer-term.

Figure 55: Past and projected trends in Average Household Size – Study area

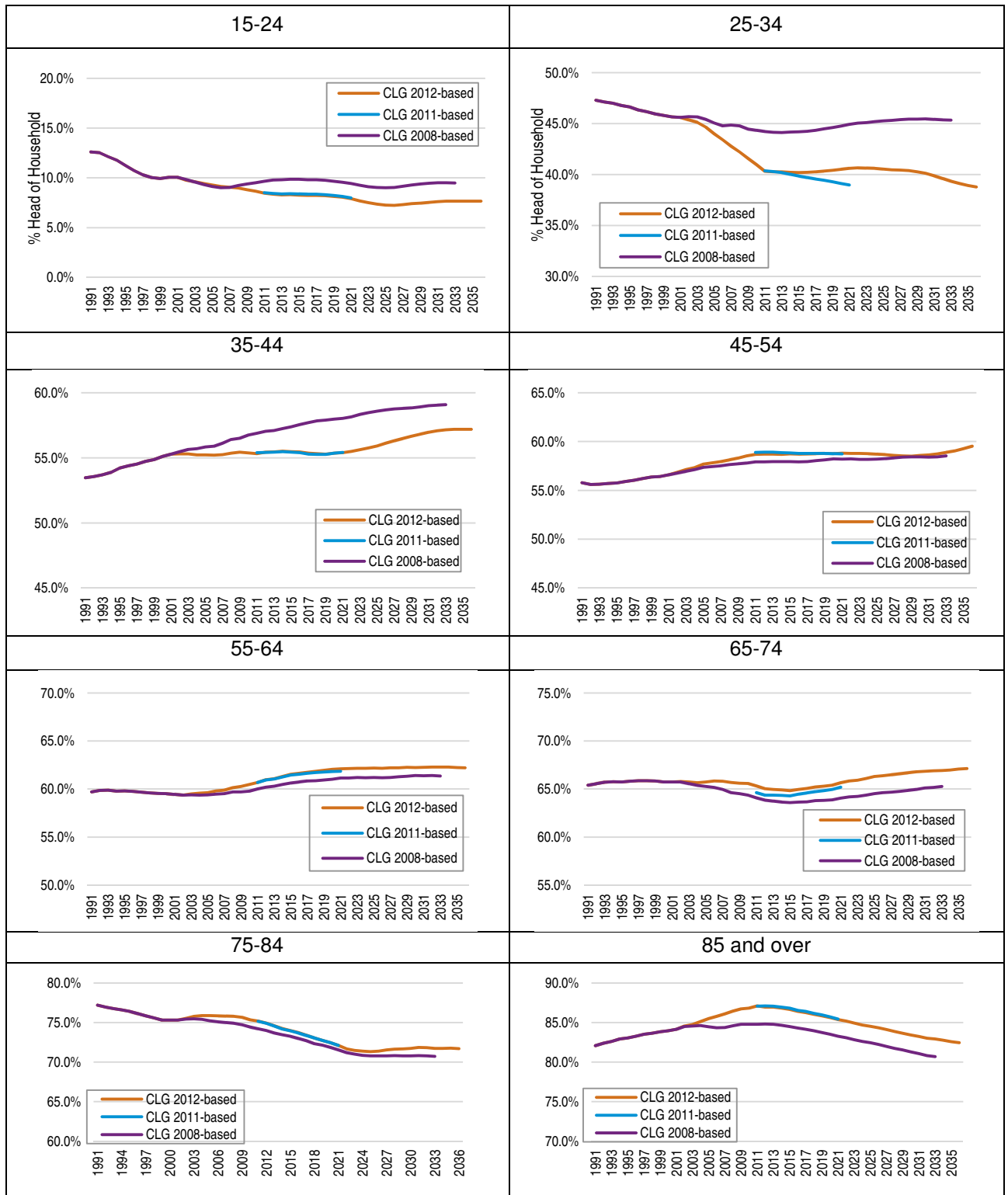


Source: Derived from ONS and CLG data (2015)

4.39 It is also useful to understand how the different CLG projections impact on assumptions for different age groups. Figure 56 shows the headship rates used in each of the projections (the data measures the proportion of the household population who are also a household reference person (head of household) for each age group).

4.40 Overall the 2012-based projections look fairly sound with levels and rates of change being similar to those in the earlier (pre-recession) 2008-based projections. The main age group of note is people aged 25-34 where the latest projections show quite a movement away from the figures in the 2008-based projections (this age group may have been particularly affected by changes in student finance, mortgage availability and job security). Particularly in the 2001-11 period the 2012-based projections do appear to be indicating a downward trend in household formation – whilst the downward trend is not projected forward post-2012 it still leaves the rate some way below figures in the older projections. The issue of household formation in the 25-34 age group is considered in more detail later in this section.

Figure 56: Projected household formation rates by age of head of household –Study area



Source: Derived from CLG data (2015)

4.41 Table 42 brings together outputs in terms of household growth and housing need using the 2012-based headship rates and our core projection linked to the 2012-based SNPP. To convert

households into homes the data includes an uplift to take account of vacant homes. Analysis of 2011 Census data about unoccupied household spaces provides the following vacancy rate figures which have been used in the analysis (the figures are based on an uplift from occupied household spaces and not calculated as the proportion of household spaces that are unoccupied – e.g. in Bracknell Forest there were 45,878 occupied household spaces in 2011 and 1,161 unoccupied; the vacancy allowance is therefore $1,161/45,878 = 2.5\%$):

- Bracknell Forest – 2.5%;
- Reading – 4.9%;
- Slough – 2.4%;
- South Bucks – 4.6%;
- West Berkshire – 3.7%;
- RBWM – 4.4%; and
- Wokingham – 3.6%

4.42 It is assumed that such a level of vacant homes will allow for movement within the housing stock and allow for second homes (although the allowance for second homes is not specifically identified, this is due to the information not being available from the Census source used).

4.43 The analysis in the report works on the basis of there being one household per home and therefore the terms homes and household spaces can be considered to be interchangeable (i.e. they are considered to be the same). In reality there are a greater number of household spaces than homes in the study area; however, Census data suggests that the difference between the two is fairly minor. According to the Census, there were (in 2011) some 379,956 homes in the study area, and these contained 380,755 household spaces – this is only a 0.2% difference and would for example mean that if the prevalence rate remained the same then a need for 1,000 household spaces would only need 998 homes. Because it is so minor this difference would not have any significant impact on the conclusions of the study.

4.44 The analysis shows an overall housing need for some 4,164 homes per annum across the Study area. This figure would be considered as the starting point in terms of the PPG (paragraph 15, ID: 2a-015-20140306) – it takes account of the most recent population and household projections (see Table 42).

Table 42: Projected household growth 2013-36 – 2012-based SNPP (adjusted) and 2012-based headship rates

	Households 2013	Households 2036	Change in households	Household change (per annum)	Homes (per annum)
Bracknell Forest	47,481	59,476	11,995	522	535
Reading	64,045	75,920	11,875	516	541
West Berkshire	63,219	75,129	11,910	518	537
Wokingham	61,701	76,796	15,095	656	680
Western Berkshire HMA	236,445	287,321	50,875	2,212	2,293
Slough	52,300	71,961	19,662	855	875
South Bucks	27,015	34,465	7,450	324	339
RBWM	59,434	73,908	14,474	629	657
Eastern Berks & South Bucks HMA	138,748	180,334	41,586	1,808	1,871
Study area	375,193	467,655	92,461	4,020	4,164
Berkshire	348,179	433,190	85,011	3,696	3,826

Source: Derived from ONS (2014) and CLG data (2015)

- 4.45 Had the above population projection been run using the previous (2011-based) CLG household projections headship rates (suitably indexed beyond 2021 – which was the full length of the projections) then the estimated housing need would be for 3,753 homes per annum (across the Study area). The 2012-based projections are therefore suggesting a housing need which is 11% higher than the older projections. The older (2011-based) projections are considered to be projecting forward a recessionary trend (by focusing on trends in the 2001-11 period). The findings of a higher need using 2012-based data suggest that the new projections are indeed taking a more positive view about household formation. This more positive position is likely in part to be due to the 2012-based household projections using a time-series of data back to 1971, and therefore including a substantial period of time where market conditions were more buoyant. The 2012-population projections which feed into the household projections are only based the most recent 5 year trends.

Alternative demographic scenarios

- 4.46 Although we consider the 2012-based SNPP to be a reasonable demographic projection when taking account of past trends in population growth we have also developed three alternative projections. These can be summarised as:
- 10-year migration trends – this projection looks at the level of population and household/housing growth we might expect if migration levels in the future are the same as seen over the period from 2003 to 2013. A consideration of longer-term trends is suggested as an alternative scenario in PAS guidance although we would recognise that the approach is unlikely to be as robust as the SNPP as it won't take account of changes to the

age structure over time and the impact this

might have on migration levels (although the age profile of migration will change in line with assumptions in the SNPP).

- 12-year migration trends – this projection looks at the level of population and household/housing growth we might expect if migration levels in the future are the same as seen over the period from 2001 to 2013.
- UPC adjustment – as noted earlier, Unattributable Population Change (UPC) does not have a significant impact on past population growth. However, for individual authorities, some of the figures are significant. In Wokingham and Bracknell Forest UPC is negative, this suggests that the components of change feeding into the SNPP may slightly over-estimate migration and population growth (a small negative was also shown in West Berkshire and RBWM). In Reading and Slough, UPC is positive – suggesting that the components of population change may under- estimate population growth. This projection therefore makes an adjustment to migration based on the average level of UPC recorded by ONS in the 2001-11 period. Whilst this is a useful scenario to look at (again it is one suggested in the PAS guidance) we do not consider it to be a robust alternative to the SNPP. The main reasons for this are that it is unclear if UPC is related to migration, and, more importantly, due to changes in the methods used by ONS to measure migration it is most probable that any errors are focused on earlier periods (notably 2001-6) and therefore a UPC adjustment for more recent data would not be appropriate. Looking at the locations where UPC is positive and negative there may also be a bias in the recording due to the nature of different areas (e.g. noting that Reading and Slough are entirely urban local authority areas).

4.47 Tables 43 to 45 show the outputs of the three alternative demographic projections developed. The analysis of the 10-year migration trends suggests a higher level of need than when using the 2012-based SNPP (for 4,586 homes rather than 4,164). In the case of 12-year migration trends the analysis suggests a lower level of need than when using the 2012-based SNPP (for 4,079 homes rather than 4,164). This difference is driven by large levels of net out-migration recorded in the 2001-3 period (over 4,300 per annum average). With an adjustment for UPC the need increases to 4,202 homes per annum.

4.48 For individual authorities the data shows that there are only minor differences when comparing the 2012-based SNPP with a long-term (12-year) migration trend (the biggest change being a decrease in 'need' in Reading of 116 per annum). With a UPC adjustment there are some more significant differences, the most notable being an increase of 593 homes per annum in Reading and a decrease of 515 per annum for Wokingham.

4.49 The ONS has set out that UPC is unlikely to be seen in sub-national population trends, taking account of improvements to how migration is recorded (meaning that more recent statistics are more likely to be accurate), concluding that⁴⁴:

“UPC is unlikely to be seen in continuing sub-national trends as:

- It is unclear what proportion of the UPC is due to sampling error in the 2001 Census, adjustments made to MYEs post the 2001 Census, sampling error in the 2011 Census and/or error in the intercensal components (mainly migration).*
- If it is due to either 2001 Census or 2011 Census, then the components of population change will be unaffected*
- If it is due to international migration, it is likely that the biggest impacts will be seen earlier in the decade and will have less of an impact in the later years, because of improvements introduced to migration estimates in the majority of these years.*

4.50 Given that we consider these alternative projections to be less robust (see above) than the SNPP it is not proposed to take any forward. It does however provide us with some comfort that at an HMA level the alternatives do show both an up and downside to the figures derived from the SNPP. This would suggest that the SNPP is a sound demographic projection for the two HMAs.

Table 43: Projected household growth 2013-36 – 10-year migration trends and 2012-based headship rates

	Households 2013	Households 2036	Change in households	Change in households Per annum	Homes (per annum)
Bracknell Forest	47,481	60,471	12,990	565	579
Reading	64,045	76,124	12,079	525	551
West Berkshire	63,219	75,695	12,476	542	563
Wokingham	61,701	79,875	18,173	790	818
Western Berkshire HMA	236,445	292,164	55,718	2,423	2,511
Slough	52,300	75,195	22,895	995	1,019
South Bucks	27,015	34,550	7,535	328	343
RBWM	59,434	75,138	15,705	683	713
Eastern Berks & South Bucks HMA	138,748	184,883	46,134	2,006	2,075
Study areas	375,194	477,046	101,853	4,428	4,586
Berkshire	348,179	442,497	94,318	4,101	4,243

Source: Derived from ONS (2014) and CLG data (2015)

⁴⁴ ONS (Jan 2014) *2012-based Sub-National Population Projections for England – Report on Unattributable Population Change*

Table 44: Projected household growth 2013-36 – 12-year migration trends and 2012-based headship rates

	Households 2013	Households 2036	Change in households	Change in households Per annum	Homes (per annum)
Bracknell Forest	47,481	59,739	12,258	533	546
Reading	64,045	73,364	9,320	405	425
West Berks	63,219	74,155	10,936	475	493
Wokingham	61,701	77,856	16,155	702	727
Western Berkshire HMA	236,445	285,113	48,668	2,116	2,192
Slough	52,300	72,694	20,394	887	908
South Bucks	27,015	33,864	6,849	298	311
RBWM	59,434	74,149	14,715	640	668
Eastern Berks & South Bucks HMA	138,748	180,706	41,958	1,824	1,887
Study areas	375,193	465,819	90,626	3,940	4,079
Berkshire	348,179	431,956	83,777	3,642	3,768

Source: Derived from ONS (2014) and CLG data (2015)

Table 45: Projected household growth 2013-36 – 2012-based SNPP with UPC adjustment and 2012-based headship rates

	Households 2013	Households 2036	Change in households	Change in households Per annum	Homes (per annum)
Bracknell Forest	47,481	54,067	6,586	286	294
Reading	64,045	86,363	22,319	970	1,018
West Berkshire	63,219	74,920	11,701	509	528
Wokingham	61,701	66,406	4,705	205	212
Western Berkshire HMA	236,445	281,757	45,311	1,970	2,051
Slough	52,300	79,234	26,934	1,171	1,199
South Bucks	27,015	34,035	7,020	305	319
RBWM	59,434	73,373	13,940	606	633
Eastern Berks & South Bucks HMA	138,748	186,642	47,893	2,082	2,151
Study areas	375,193	468,399	93,204	4,052	4,202
Berkshire	348,179	434,364	86,185	3,747	3,883

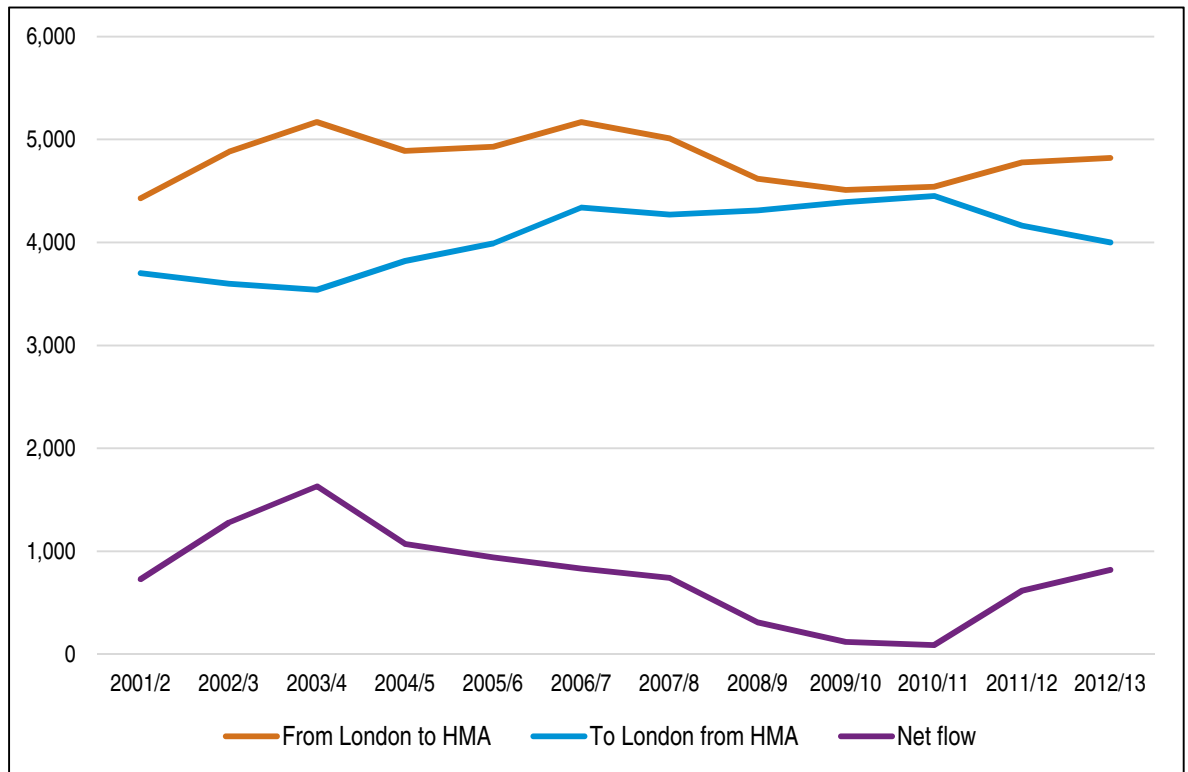
Source: Derived from ONS (2014) and CLG data (2015)

Sensitivity Analysis – Examining the Interaction with London

- 4.51 There is an important interaction with London in the demographic projections, recognising a significant level of migration between each of the two HMAs (and individual local authorities) to/from London. We have sought to examine this in this section.
- 4.52 The Greater London Authority (GLA) identified as part of their 2013-based projections feeding into the Further Alterations to the London Plan (FALP) that there had been a marked change in internal migration dynamics to and from London since the beginning of the recession (2007/8) and indeed back to 2003/4. Overall, the GLA identified that out-migration from London to other parts of the UK had dropped by about 10% along with a 6% increase in in-migration⁴⁵. This was considered to relate to the impact of the recession/ housing market downturn among other factors (e.g. more couples staying in London to start a family, increasing preference for an urban lifestyle, schools improving, decreasing job stability therefore increased demand for areas with maximum job potential).
- 4.53 As a result of this, the GLA developed a series of population and household projections with different assumptions about migration. The Central scenario (which underpins the FALP) made the assumption that after 2017, migration levels would revert back towards pre-recession levels. The GLA in effect took a midpoint between pre- and post-recession migration statistics and assumed a 5% uplift in out-migration and a 3% decrease in in-migration.
- 4.54 Whilst the figures above relate to dynamics to/ from London and other parts of the country, it will be the case that different areas will have seen different levels of change in migration to/ from London in the pre- and post- recession periods. Below we have studied how migration patterns have changed in the Berkshire and South Bucks study area.
- 4.55 Figure 57 shows migration patterns to and from the Western Berkshire HMA. The analysis shows generally over the period studied, that net migration from London has fallen (although it has increased since 2010/11) – this is largely due to an increase in the number of people moving to the Capital although there is also some evidence of a reduction in people moving from London to the Western Berkshire HMA. Migration from London in net terms was on average 656 persons per annum higher in the pre-2008 period studied relative to over the five-year period which has fed into the 2012- based SNPP (2007-12).

⁴⁵ See GLA Intelligence (Feb 2014) GLA 2013 round of trend-based population projections – Methodology, <http://data.london.gov.uk/dataset/2013-round-population-projections>

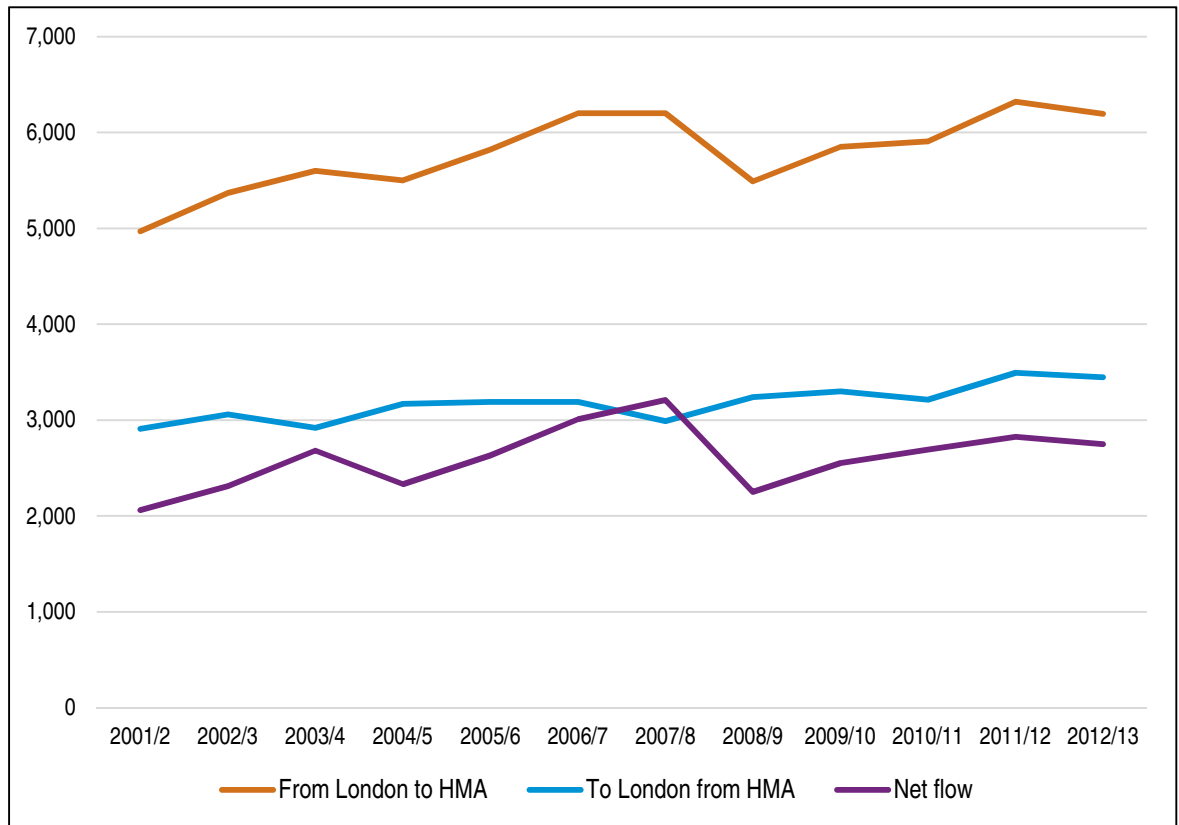
Figure 57: Interrogating Migration flows between London and the Western Berkshire HMA



Source: GLA / GL Hearn (2015)

4.56 Figure 58 shows the same information for the Eastern Berks and South Bucks HMA. This shows a somewhat different pattern, with a general increase in migration from London and no strong trend in terms of the number of people moving to the Capital. Migration from London in net terms was on average 101 persons per annum lower in the period 2001 to 2008 relative to over the five-year period which has fed into the 2012-based SNPP (2007-12).

Figure 58: Interrogating Migration flows between London and the Eastern Berks and South Bucks HMA



Source: GLA / GL Hearn (2015)

4.57 Overall, the changes (in net terms) have particularly impacted on Reading and to a lesser extent the other local authorities in the Western Berkshire HMA. Both Slough and South Bucks appear to have seen a decrease in net migration to London (with only a very modest difference being observed in RBWM). Table 46 outlines the differences between migration in the pre-2008 period, and that over the 2007-12 period which has fed into the 2012-based SNPP. Generally, the reduction in net out-migration during the recession was less notable to local authorities closer to London (in fact increasing slightly).

Table 46: Migration to- and from- London and Berkshire/South Bucks Local Authorities (persons per annum)

	Pre-2008 average			SNPP average (2007-12)			Difference		
	From London to LA	To London from LA	Net flow	From London to LA	To London from LA	Net flow	From London to LA	To London from LA	Net flow
Bracknell Forest	970	537	433	864	561	302	106	-24	131
Reading	1,730	1,846	-116	1,714	2,172	-458	16	-326	342
West Berkshire	921	617	304	891	665	226	30	-48	78
Wokingham	1,304	894	410	1,223	918	305	81	-24	105
Western Berkshire HMA	4,926	3,894	1,031	4,692	4,316	375	234	-422	656
Slough	2,261	1,300	961	2,406	1,391	1,015	-144	-91	-53
South Bucks	1,459	600	859	1,557	648	908	-98	-48	-50
RBWM	1,946	1,161	784	1,991	1,208	783	-45	-47	2
Eastern Berks and South Bucks HMA	5,666	3,061	2,604	5,953	3,247	2,706	-287	-186	-101
Study area	10,591	6,956	3,636	10,645	7,564	3,081	-53	-608	555
Berkshire	9,133	6,356	2,777	9,088	6,916	2,173	45	-560	605

Source: GLA (2014)

- 4.58 On the basis of the information above, we have developed an alternative population projection to provide a sensitivity analysis to the SNPP. This projection uses a similar assumption to the GLA modelling; i.e. for an adjustment to be made to migration levels post-2017 at a level which is half of the difference seen between pre-recession trends and the trends feeding into the SNPP. This projection is therefore broadly consistent to the approach adopted by GLA in the Central Variant in its 2013 Demographic Projections (which form the basis for the current London Plan). It should be noted however that the GLA is in the process of reviewing the London Plan and that the evidence underpinning this, including projections, is likely to change over time.
- 4.59 We have next applied the household formation rates from the 2012-based Household Projections to these population projections and applied consistent assumptions on vacant and second homes, to derive figures for growth in households and homes. These are presented in Table 47.
- 4.60 The identified housing need rises by about 5% in the Western Berkshire HMA (when compared with the SNPP analysis) and falls by 1% in the Eastern Berks and South Bucks HMA. For both Berkshire and the study area as a whole there is an increase in housing need of 3%. For individual local authorities, the biggest increase is in Reading (up 13%) with Slough and South Bucks both seeing a modest decrease.

4.61 These findings are interesting given that it would arguably be expected that the Eastern HMA has a stronger link with London than the Western HMA. However, the data is clear that migration has changed more notably in the Western HMA; whilst the reasons for the differences between the HMAs are unknown it does serve to show that London has an influence on demographic trends in a wide range of areas, and not just locations immediately adjacent to the capital.

Table 47: Projected Household Growth 2013-36 – London Migration Sensitivity Analysis and 2012-based Headship Rates

	Households 2013	Households 2036	Change in households	Per annum	Homes (per annum)
Bracknell Forest	47,481	60,018	12,538	545	559
Reading	64,045	77,408	13,364	581	609
West Berkshire	63,219	75,433	12,215	531	551
Wokingham	61,701	77,194	15,493	674	698
Western Berkshire HMA	236,445	290,054	53,609	2,331	2,417
Slough	52,300	71,736	19,436	845	865
South Bucks	27,015	34,275	7,260	316	330
RBWM	59,434	73,913	14,479	630	658
Eastern Berks and South Bucks HMA	138,748	179,924	41,176	1,790	1,853
Study areas	375,194	469,979	94,785	4,121	4,270
Berkshire	348,179	435,703	87,525	3,805	3,939

Source: GLA (2014) and CLG (2015)

4.62 This analysis regarding migration from London should be treated as a sensitivity analysis. It takes account of the current evidence and policy position in the London Plan, however in both cases this could change over time. It is based on the information available at the time of preparing the SHMA. There is however clearly a degree of uncertainty regarding future migration dynamics to/from London, and indeed it could be that changes in housing market circumstances have implications on out-migration from each of the authorities to other parts of the study area. As part of the plan-making process, we would advise each of the local authorities to take a view on these issues taking account of more recent data and evidence as the plan-making process continues.

2014 Mid-year population estimates

4.63 In June 2015, ONS published a new set of mid-year population estimates (MYE). These were based on observed changes in natural change and net migration (plus any other changes such as armed forces) between 2013 and 2014. The publication came too late to be included within the SHMA given that the report had largely been drafted and core analysis completed.

- 4.64 It is however worth briefly reflecting on what the MYE are saying about population growth in the two HMAs when compared with the assumptions in the SHMA (which were driven by the 2012-based SNPP). Table 48 shows levels of population growth in each area from these two sources.
- 4.65 Overall the SHMA approach has calculated a higher level of household growth than if the 2014-MYE had been taken into account. More locally for the Western Berkshire HMA an analysis that draws on both sources reveals a very similar level of population growth (a difference of just 82 people – less than 2%). There are however some differences by location with a higher level of growth seen in Bracknell Forest and Reading and lower levels in West Berkshire and Wokingham.
- 4.66 In the Eastern Berks & South Bucks HMA the difference between sources is still modest but more notable – a difference in population growth of 434 people (about 12% lower than the figure in the SHMA analysis). In this HMA, all areas see a lower level of population growth with the figures for Slough being particularly notable).

Table 48: Comparing population growth in the 2013-14 period in the 2014 mid-year population estimates and the SNPP (as used in the SHMA)

	SHMA	MYE	Difference
Bracknell Forest	1,174	1,458	284
Reading	1,032	1,578	546
West Berkshire	937	338	-599
Wokingham	1,544	1,231	-313
Western Berkshire HMA	4,687	4,605	-82
Slough	1,866	1,551	-315
South Bucks	607	571	-36
RBWM	1,148	1,065	-83
Eastern Berks & South Bucks HMA	3,621	3,187	-434
Study areas	8,308	7,792	-516

Source: Derived from ONS data (2015)

- 4.67 Looking at this data from the MYE it is considered that overall this provides good support for the SHMA analysis. Whilst population growth has generally been slightly lower, the differences are not particularly significant. Additionally, it needs to be noted that this is just one year of data and will not have a substantial impact given that the projections in the report run to 2036. If anything, the analysis suggests that the SHMA shows stronger household growth than would be the case if MYE data were used (at least in the 2013-14 period).
- 4.68 It is also worth reflecting whether or not the migration data within the new MYE would suggest that any amendments need to be made to the projections moving forward. In looking at this it needs to be remembered that the SNPP looks at migration over the past 5-years for internal migration and

6-years for international migration and so one extra year of data would not be expected to significantly change the figures.

4.69 By way of a simple comparison, Table 49 shows the levels of net migration within the SHMA analysis and the MYE. This shows that across the Study area, the net migration is exactly the same. There are however some differences for the HMAs and individual local authorities although overall, it does again seem that the MYE provide some support for the SHMA analysis.

Table 49: Comparing net migration in the 2013-14 period in the 2014 mid-year population estimates and the SNPP (as used in the SHMA)

	SHMA	MYE	Difference
Bracknell Forest	317	615	298
Reading	-590	90	680
West Berkshire	170	-341	-511
Wokingham	714	549	-165
Western Berkshire HMA	611	913	302
Slough	-32	-329	-297
South Bucks	488	489	1
RBWM	514	507	-7
Eastern Berks & South Bucks HMA	969	667	-302
Study areas	1,580	1,580	0

Source: Derived from ONS data (2015)

Comparing Scenarios Developed

4.70 Table 50 and Figures 59 and 60 summarise the range of scenarios developed in this section. In total, five scenarios have been considered, all of which are underpinned by household formation/headship rates within the 2012-based CLG household projections. The five scenarios are:

- 2012-based SNPP – uses the population assumptions underpinning the 2012-based subnational population projections. The base data has been updated to take account of mid-2013 population estimates although this doesn't impact on assessed levels of need (as the future assumptions are not affected)
- 10-year migration trends – sets the level of migration within the modelling to be equal to the level seen over the 2003-13 period
- 12-year migration trends – sets the level of migration within the modelling to be equal to the level seen over the 2001-13 period (the longest period for which reasonable data is available)
- UPC adjustment – uses the 2012-based SNPP and makes an adjustment for Unattributable Population Change
- London adjustment – uses the 2012-based SNPP and makes an adjustment to reflect pre- recession migration patterns to- and from-London.

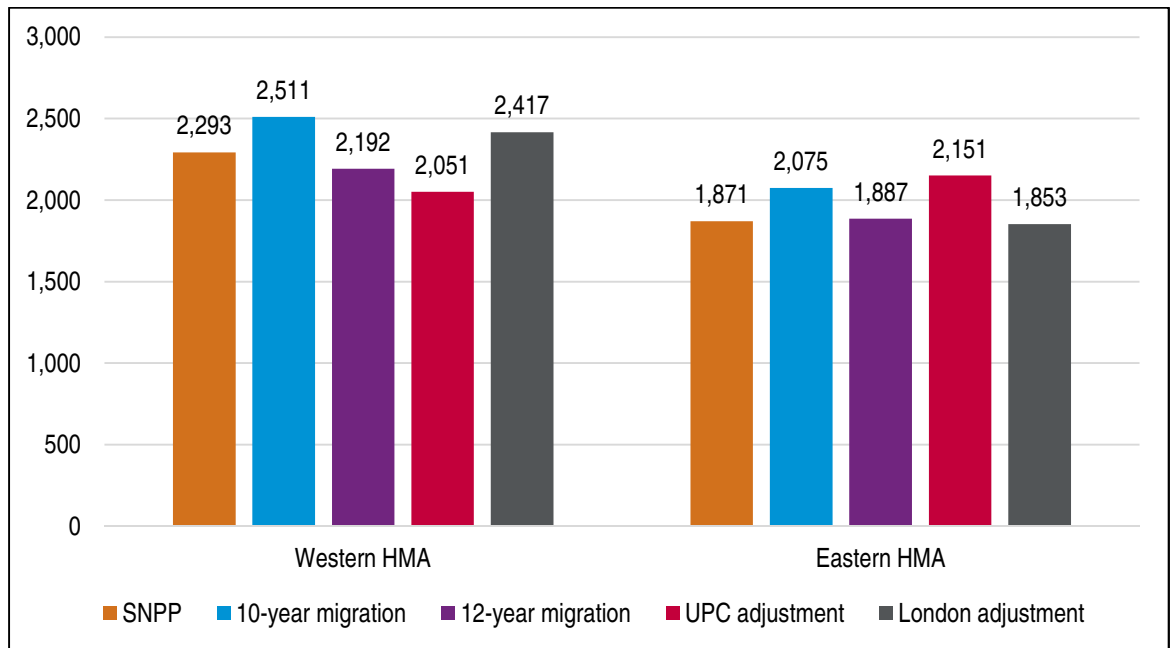
- 4.71 As can be seen, generally the figures are quite consistent across the different scenarios (both at a district and HMA level). The main differences can be seen when considering a UPC adjusted projection and also projections with 10-year migration trends. The UPC adjustment particularly impacts on local level data with HMA figures not being significantly different.

Table 50: Housing need per annum (2013-36) – demographic scenarios developed

	2012-based SNPP	10-year migration trends	12-year migration trends	UPC adjustment	London adjustment
Bracknell Forest	535	579	546	294	559
Reading	541	551	425	1,018	609
West Berkshire	537	563	493	528	551
Wokingham	680	818	727	212	698
Western Berkshire HMA	2,293	2,511	2,192	2,051	2,417
Slough	875	1,019	908	1,199	865
South Bucks	339	343	311	319	330
RBWM	657	713	668	633	658
Eastern Berkshire & South Bucks HMA	1,871	2,075	1,887	2,151	1,853
Study areas	4,164	4,586	4,079	4,202	4,270
Berkshire	3,826	4,243	3,768	3,883	3,939

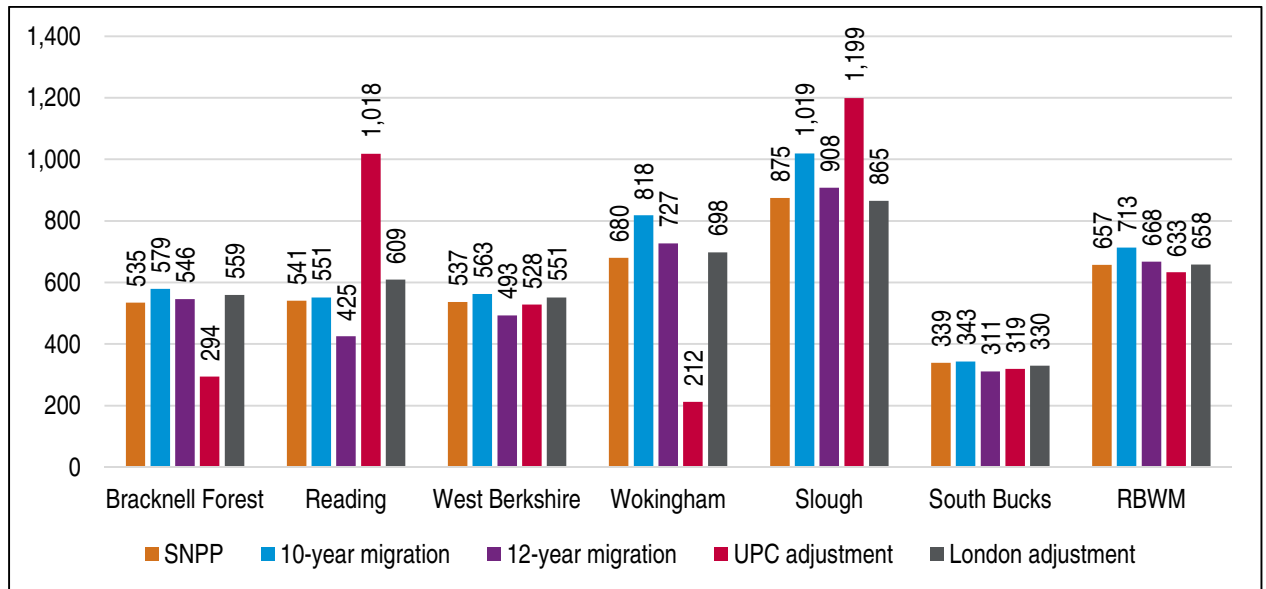
Source: Derived from ONS and CLG data (2015)

Figure 59: Housing need per annum (2013-36) – demographic scenarios developed – HMAs



Source: Derived from ONS and CLG data (2015)

Figure 60: Housing need per annum (2013-36) – demographic scenarios developed – local authorities



Source: Derived from ONS and CLG data (2015)

4.72 Modelling a partial return to pre-recession migration patterns (an approach consistent with the FALP) would potentially add 124 homes to the housing need in the Western Berkshire HMA. To reflect this we have therefore included an adjustment to our calculations of OAN on the following basis:

- Bracknell Forest (24 homes per annum);
- Reading (68 homes per annum);
- West Berkshire (14 homes per annum); and
- Wokingham (18 homes per annum).

4.73 To conclude, for the local authorities in the Eastern Berks and South Bucks HMA we have taken forward the SNPP figure adjusted to take account of the 2013-MYE as the OAN. For the local authorities in the Western Berkshire HMA we have used the same approach but added a further adjustment to reflect a partial return to pre-recession migration patterns (see Figure 60).

Demographic-led housing need: Implications

- The 2012-based subnational population projections (SNPP) look to be a sound demographic projection. Population growth sits in-line with both long- and short-term trends. Future levels of migration are slightly above past trends (based on both long- and short-term trends).
- Alternative projections using longer-term migration levels and a UPC adjustment show population growth (and hence housing need) which is either above or below the SNPP – reinforcing the SNPP as being broadly reasonable
- The 2012-based CLG household projections also look to be reasonably sound when considering age specific household formation rates although there does appear to be some degree of suppression (both in the past and when projected forward) for some younger cohorts of the population (particularly those aged 25-34).
- The 2012-based population and household projections suggest a need for about 4,164 dwellings per annum to be provided across the study area, including 3,826 for the Berkshire authorities. This takes account of 2013 midyear population data.
- Analysis also indicates that there has been some change since the recession in migration patterns to and from London. This particularly influences the Western HMA where a return to pre-recession levels.

5 ECONOMIC-LED HOUSING NEEDS

5.1 In this section consideration is given to the housing need required to meet the needs of the local economy. The key question is whether the assumed demographic growth is constraining the economic growth.

Introduction

5.2 In accordance with the PPG it is important to examine the prospects for employment growth in Berkshire and South Buckinghamshire. The purpose of this element of the SHMA is to determine whether there is a need to increase the planned provision of housing in order to ensure that economic growth is not constrained by labour shortages.

5.3 The assessment of demographic change is the first step in the process of establishing Objectively Assessed Need as set out in National Planning Policy Guidance. The next step is to assess if there is a need to plan for a higher level of population growth to ensure adequate labour supply in order to accommodate anticipated economic development.

5.4 The PPG states that: *'Plan makers should make an assessment of the likely growth in job numbers based on past trends and/or economic forecasts as appropriate and also having regard to the growth of the working age population in the housing market area'*⁴⁶

5.5 The PPG goes on to state *'Where the supply of working age population that is economically active (labour force supply) is less than the projected job growth, this could result in unsustainable commuting patterns and could reduce the resilience of local businesses. In such circumstances, plan makers will need to consider how the location of new housing or infrastructure development could help address these problems'*. It should, however, be recognised that economic growth can be achieved through improving productivity as well as increases in the working population. Growth in productivity is regarded as an important objective in national economic terms and important in terms of international competitiveness.

5.6 Investment and skills development are the key factors in boosting productivity. Capital investment can often be stimulated by the rising cost and constraints on the availability of labour. At the national, regional and sub-regional level competitiveness is maintained through the effective combination of capital investment and skilled labour.

5.7 By implication, labour shortages are not necessarily a constraint on growth, but can be a spur to investment, which in turn can be expected to increase productivity and result in higher wages and

46 PPG ID 2a-017-20140306

salaries. In a modern economy such as the UK, skills shortages are often a greater constraint on economic growth than absolute labour shortages.

Approach and Data Sources

- 5.8 To present the fullest assessment of the possible need to boost housing supply above the level implied by anticipated demographic growth, the approach taken by GL Hearn and Wessex Economics has been to examine both past trends and forecasts of employment growth in Berkshire and South Buckinghamshire.
- 5.9 Data provided⁴⁷ by Cambridge Econometrics (CE) has been used to assess both past employment trends and forecasts of future employment growth. This data has been used by GL Hearn and Wessex Economics because it also underpins the Thames Valley Berkshire Local Enterprise Partnership's (LEP) Strategic Economic Plan. It is important that Local Plans are aligned with the LEP's Strategic Economic Plan.
- 5.10 As part of this study, CE were asked to extend their September 2013 forecasts used in preparing the Strategic Economic Plan to 2036 and to provide equivalent forecasts for South Buckinghamshire District.
- 5.11 We do note however that these projections are now around two years old and will not take into account the most recent trends nor would they include 2012 and 2013 Business Register and Employment Survey (BRES) data and the most recent Annual Population Survey (APS) data.
- 5.12 The CE Forecasts use a highly disaggregated database of employment data by industry (12 broad sectors or a more detailed 45 sectors) from 1981 for all unitary authorities and local authority districts in Great Britain.
- 5.13 CE's projections are baseline economic projections based on historical growth in each of the local authorities relative to the South East region or UK (depending on which area it has the strongest relationship with), on an industry-by-industry basis. The projections assume that those relationships continue into the future. Thus, if an industry in the local authority outperformed the industry in the region (or UK) as a whole in the past, then it will be assumed to do so in the future. Similarly, if it underperformed the region (or UK) in the past then it will be assumed to underperform the region (or UK) in the future.
- 5.14 The forecasts further assume that economic growth in the local authority is not constrained by supply-side factors, such as population and the supply of labour. Therefore, no explicit assumptions for population, activity rates and unemployment rates are made in the projections. They assume

⁴⁷ *Cambridge Econometrics Employment by Industry Forecasts (September 2013 forecast version 10918)*

that there will be enough labour (either locally or through commuting) with the right skills to fill the jobs. If, in reality, the labour supply is not there to meet projected growth in employment, growth could be slower.

- 5.15 The measure of employment is workplace based jobs, which include full-time, part-time and self-employed. The data on employees in employment by industry, which distinguish full-time and part-time as well as gender for the local authority, are taken from the Business Register and Employment Survey (BRES) and the earlier Annual Business Inquiry (ABI).
- 5.16 Estimates of self-employment are generated under the assumption that the ratios of self-employed to employees at a local authority, by industry and gender, are the same as those at the corresponding regional level. The figures were made consistent with more contemporary estimates of jobs at a regional level (quarterly workforce jobs) published by ONS, which include people in the armed forces but do not include people on government training schemes.
- 5.17 GL Hearn along with Wessex Economics have used CE data on employment from 1981 to 2013 to analyse historic trends in employment. There is considerable merit in using data from a reputable forecasting house for trend analysis, since there is a patchwork of different official sources of data on employment which cover different time periods, and capture different elements of employment data based on a variety of methodologies.
- 5.18 Thus, were one to use official data to develop a time-series of total employment for the area covered by this SHMA since 1981, one would need to draw upon the data for employees in employment from the Employment Census (1981-91), the Annual Employment Survey (1991-98), the Annual Business Inquiry (1998-2008) and the Business Register and Employment Survey (2008-13), each of which differ in terms of methods and scope of data collection.
- 5.19 With the exception of the BRES, none of the data sources on employment capture data on the number of self-employed people, which is now a significant proportion of employment. Even the BRES has limited data on the number of self-employed people, being limited to those self-employed people and working owners who pay VAT.
- 5.20 Data on the numbers of self-employed people has to be derived from the Census of Population (only available every 10 years) or the Annual Population Survey which is a sample based study, providing only indicative figures at local authority level. Both of these data sets capture data on self-employed people based on where they live, not where they work.
- 5.21 CE combine data on employment since 1991 to 2013 from all the relevant data sets to produce a series that is consistent over time and captures all employment – employees, working owners and

the self-employed. In common with all the datasets on which it relies, the historic pattern of employment growth becomes less reliable as it is disaggregated to smaller geographical areas.

- 5.22 Thus, the approach taken in this study is to focus to a greater extent on trends for the two housing market areas that cover Berkshire and South Buckinghamshire. The data is also presented at the level of the individual authorities, but it is less robust at this level – which in turn reflects the fact the data in the sources used by CE in preparing their historic data is less reliable at the local level.
- 5.23 It is important to bear in mind, throughout this section that the historic data on employment is less accurate than population data; and also that forecasting the future path of the economy, and associated employment, is a fundamentally different sort of exercise to demographic projection.
- 5.24 Demographic change is inherently more predictable than employment change, because trends in birth rates and death rates are relatively stable. It is only the migration element of demographic projections that has been a major source of error in the past demographic projections at national level; though migration trends have had a significant impact on birth rates over the last decade.
- 5.25 In contrast the economic performance of the UK economy is influenced by world events that are inherently unpredictable, and often unknowable. This has its impact on total employment, though the labour force and its geographic distribution is more predictable since, given the way the UK housing market works, large scale migration from one area to another in the UK is unlikely. However, as with demographic data, international migration trends are a major source of uncertainty affecting labour supply.

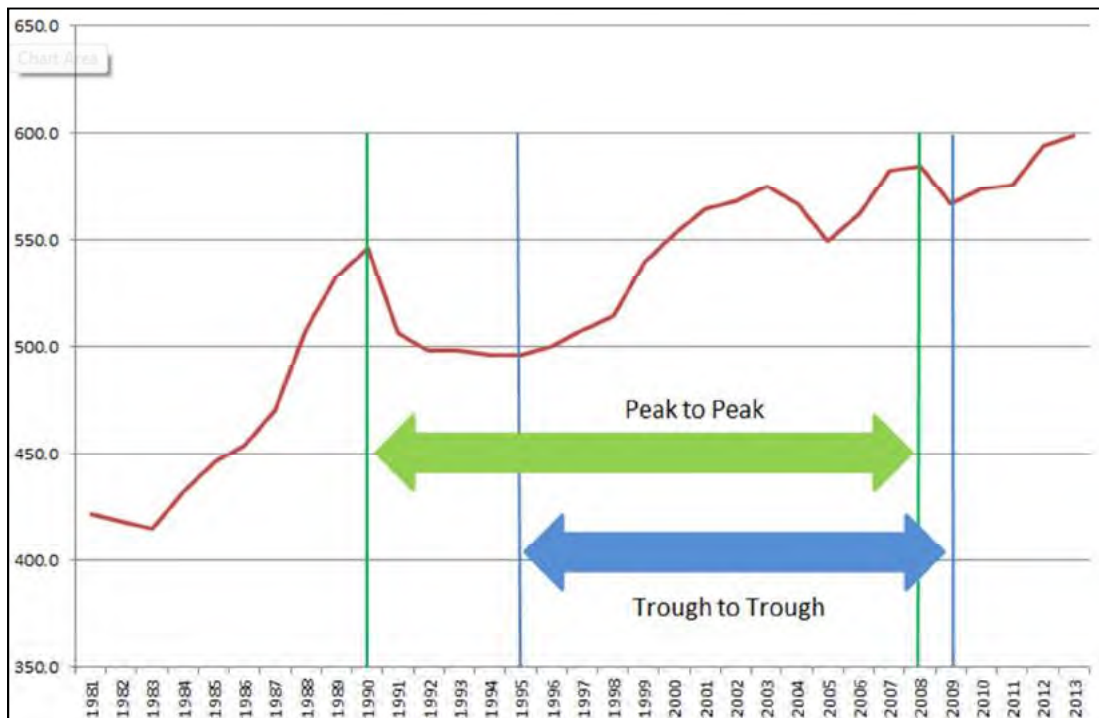
Historic Trends in Total Employment

- 5.26 It is reasonable to assume that historic trends in employment growth reflect the competitive position of a local economy within its region and nationally. If the competitive position of a locality has not changed and is not expected to change, then these historic trends may provide a reasonably good guide to the likely future pattern of employment growth, unless there are changes in the performance of the national economy, or regional patterns of growth.
- 5.27 However, the selection of different start and finish dates for the analysis of trends can have a very substantial impact on the indicative trend when expressed as an average annual job growth over time. Thus the selection of start and end dates for trend analysis is a matter of considerable importance.
- 5.28 Guidance is not prescriptive on the most appropriate period of time to analyse trend rates of employment growth. Often in economic development studies a 10-year period is deemed appropriate in that it captures all of the recent past and should reflect the current competitive

position of the local economy. However within any given period there could be periods of particular growth or decline with the latter being the case in the past 10 years. Such trends therefore may not be reflective of longer term trends.

- 5.29 As an alternative we have examined trend growth over the course of a business cycle. The business cycle is the term used to describe the tendency observed nationally for economies to swing from expansion through to boom, into recession, and then a recovery phase.
- 5.30 The UK economy has followed this pattern since 1945 with periods of expansion and contraction triggered by a variety of different events, with each cycle having a duration of between 5 and 18 years. The most recent business cycle measured peak to peak lasted from 1990 to 2007 being one of the longest periods of uninterrupted growth in the period since 1945.
- 5.31 Figure 61 shows total employment (all jobs both full and part time, including self-employment) in Berkshire and South Buckinghamshire over the period 1981 to 2013. The data series starts in 1981 when the UK was experiencing a significant recession. Employment in the Study Area grew by around 30% between 1981 and 1999 (+124,400 jobs); then fell by 9% in the recession of 1991-92.
- 5.32 Job growth only restarted in 1996 but accelerated at the end of the 1990s decade and into the early part of the 2000s. In employment terms the Berkshire economy experienced a downturn in 2003-2005, but rapidly recovered in between 2005 and 2007. In Berkshire and South Buckinghamshire the downturn experienced in 2008 to 2009, associated with the financial crisis was less severe than the 2003-2005 downturn in employment. The latter was a result of the dotcom bubble bursting which was particularly strong in Berkshire and thus had a more powerful impact in the local economy.

Figure 61: Total Employment in '000 in Berkshire and South Bucks 1981-2013



Source: Wessex Economics, Cambridge Econometrics

- 5.33 If one wants to establish the long run trend rate of employment growth, there is a strong case for examining the trend rate of growth over the course of the business cycle. In adopting this approach one can either examine the trend over the period from peak to peak or from trough to trough.
- 5.34 It is easy to identify the peak to peak period to be analysed from Figure 61, since there is a clear peak in employment in the Study Area in 1990, and employment plateaued in 2007 -2008 before falling in 2009. Taking 2008 as the actual peak, then employment in the period 1990 to 2008 increased by 29,750 jobs, an average increase of around 1,650 jobs per annum over the 18-year period. Table 51 presents the data for the 1990 to 2008 business cycle in terms of employment by HMA and local authority.

Table 51: Total Employment Growth 1990-2008 in '000 by HMA and Local Authority

	Employment in '000			No. of Years	Job Change pa
	1990	2008	Change 1990-2008		
Eastern Berks & South Bucks HMA	200.7	219.5	18.8	18	1,045
Slough	92.0	93.2	1.2	18	67
RBWM	78.2	89.4	11.2	18	623
South Bucks	30.5	36.9	6.4	18	355
Western Berks HMA	345.5	356.4	10.9	18	608
Bracknell Forest	85.4	71.2	-14.2	18	-791
Reading	118.4	115.0	-3.4	18	-188
West Berkshire	88.8	99.9	11.2	18	620
Wokingham	52.9	79.4	26.5	18	1,470
Study Area	546.2	575.9	29.7	18	1,652

Source: Wessex Economics, Cambridge Econometrics

- 5.35 This data shows starkly differing rates of growth for each local authority with Bracknell Forest in particular showing a declining level of employment over this period with significant growth seen in Wokingham. The growth in Wokingham and West Berkshire could be associated with growth in out of town business parks linked to Reading which are located in the neighbouring districts but still within the Reading urban area.
- 5.36 The job growth in Slough was also fairly low across the whole period, although this masks some notable fluctuation during this time. Employment in the Borough peaked in 2001 (94,400 jobs) and was as low as 81,400 jobs in 1993. The Borough has also experienced a notable economic shift away from manufacturing towards finance and information and communications. These changes have effectively offset each other hence the limited growth in the Borough over the shown period.
- 5.37 Across the two housing market areas the largest growth was in the Eastern Berks & South Bucks HMA which experienced growth of around 1,050 jobs per annum compared to only 600 jobs per annum in the Western Berkshire HMA.
- 5.38 It is less easy to identify the most appropriate time frame to use for an analysis of a trough to trough business cycle. It is clear that 2009 was the low point in terms of employment in Berkshire and South Buckinghamshire during the last business cycle. However, Figure 61 shows that both the loss of jobs in the 2008-9 recession was less severe than that following the 1990 peak, but also that the recovery has been less strong in terms of job growth than in the 1980s recovery and the 1990s recovery phase.

5.39 In terms of the bottom of the 1990s recession, 1995 is the year in which employment in Berkshire and South Buckinghamshire reached its very lowest level following the 1990 peak, but the decline in employment in the Study Area had bottomed out by 1992 and then stagnated for three years before job growth started again in 1996. The issue of which start date to use for trend analysis – either 1992 or 1995 has a material analysis on the annualised rate of employment growth from trough to trough. Because this is so, data for both time periods is presented, the first covering 1992-2009 and the other for 1995 to 2009.

5.40 Table 52 shows that over the 17-year period (1992 to 2009) there was average annual employment growth of 4,055 jobs pa in Berkshire and South Buckinghamshire. This is split between an average annual job growth of 1,469 in the Eastern Berks and South Bucks HMA and 2,585 in the Western Berks HMA.

Table 52: Total Employment Growth 1992-2009 by HMA and Local Authority

	Employment in '000			Years	Job Change (per annum)
	1992	2009	Change 1995-2009		
Eastern Berks & South Bucks HMA	189.2	214.2	24.98	17	1,469
Slough	84.2	90	5.86	17	345
RBWM	76.7	87.2	10.58	17	622
South Bucks	28.4	36.9	8.54	17	502
Western Berks HMA	308.8	352.7	43.95	17	2,585
Bracknell Forest	60.7	64.7	4	17	235
Reading	113.8	107.7	-6.12	17	-360
West Berkshire	78.9	102	23.11	17	1,360
Wokingham	55.3	78.3	22.96	17	1,351
Study Area	498	566.9	68.9	17	4,055

Source: Wessex Economics, Cambridge Econometrics

5.41 Table 53 shows the change in total employment over the period 1995 to 2009, this covers the period between the lowest point (trough) following peak employment in 1990, and the trough following the recent post 2007 boom. In this time period average employment growth was in excess of 5,000 jobs pa across the two HMAs. In the Eastern Berks and South Bucks HMA the average annual growth was 1,980 jobs and in the Western Berks HMA the average annual growth 3,090 jobs. The job growth in Wokingham and RBWM was particularly high in this period, driven by growth in the construction (RBWM), financial services and telecoms in the private sector.

Table 53: Total Employment Growth 1995-2009 by HMA and Local Authority

	Employment in '000			Years	Job Change (per annum)
	1995	2009	Change 1995-2009		
Eastern Berks & South Bucks HMA	186.5	214.2	27.7	14	1,977
Slough	92.2	90	-1.9	14	-138
RBWM	62.2	87.2	25.1	14	1,790
South Bucks	32.4	36.9	4.5	14	325
Western Berks HMA	309.5	352.9	43.3	14	3091
Bracknell Forest	60.2	64.7	4.5	14	322
Reading	104.7	107.7	3.1	14	218
West Berkshire	87.1	102.2	14.9	14	1,066
Wokingham	57.5	78.3	20.8	14	1,485
Study Area	496	566.9	70.9	14	5,068

Source: Wessex Economics, Cambridge Econometrics

- 5.42 This analysis indicates the sensitivity of trend based analysis to the choice of start and finish dates. There is an intellectual rationale for analysing data over the course of the business cycle, but as this analysis illustrates there are major differences in average annual employment growth rates depending on whether the measurement period is treated as running from peak to peak or trough to trough; and even the precise dates used to define the start and end of the peak and trough can have a material impact on average annual employment growth calculations.
- 5.43 Although both periods include the period coinciding with the dotcom boom from 1997 to 2000 the longer term trough to trough (1992-2009) is diluted by the lower growth preceding this period.

Cambridge Econometrics Forecasts

- 5.44 It is important to compare the analysis of historic trends in employment growth with those produced by forecasters. Table 54 shows the pattern of employment growth as forecast by Cambridge Econometrics from 2013 to 2036 using the same format as previous tables used to present the analysis of trend growth.
- 5.45 The CE forecasts would indicate anticipated employment growth of around 3,450 jobs pa across the study area in the period 2013-36, broken down into 1,290 jobs per annum over the period 2013-36 in the Eastern Berks and South Bucks HMA and 2,150 jobs in the Western Berks HMA. This level of employment growth is significantly above the peak to peak trend analysis 1990-2008, but significantly below the trough to trough scenarios for the period 1995-2009.

Table 54: CE Forecast Employment Growth 2013-36 by HMA and Local Authority

	Employment in '000			Years	Job Change (per annum)
	2013	2036	Change 2013-2036		
Eastern Berks & South Bucks HMA	222	251.6	29.59	23	1,287
Slough	92.9	107.6	14.68	23	638
RBWM	90.5	103	12.43	23	541
South Bucks	38.6	41.1	2.48	23	108
Western Berks HMA	376.5	425.9	49.41	23	2,148
Bracknell Forest	70.5	85.9	15.39	23	669
Reading	114.8	125.2	10.34	23	450
West Berkshire	108	120	11.97	23	520
Wokingham	83.2	94.9	11.7	23	509
Study Area	598.6	677.6	79	23	3,435

Source: LEFM Cambridge Econometrics – September 2013

- 5.46 While the forecasts most closely align with the trough to trough scenario for the 1992-2009 period there is still circa 600 jobs per annum difference between the two across the study area. This difference is distributed fairly evenly between the two HMA. Furthermore there are noticeable differences at a local authority level.
- 5.47 However, it is only to be expected that CE forecasts will differ from the historic trends, since the forecasting process is based on much more than simple projection of past trends at the local level. The forecasts embody a view on the future pattern of growth in the UK economy and of different regions, but more importantly take into account the sectoral mix of the local economy.
- 5.48 It is also recognised that the CE forecasts are generally at the cautious end of the forecasting spectrum, compared to Oxford Economics and Experian forecasts. This is discussed in the Thames Valley Berkshire Strategic Economic Plan 2015/16 to 2020/21⁴⁸. This does not of course mean they are wrong; rather it reflects a different modelling approach to the other forecasters, and the high level of uncertainty associated with long term employment forecasts.
- 5.49 The sectoral mix of the economy has a material impact on the anticipated rate of future employment growth since employment in different sectors grow at a different rate, and the CE forecast takes into account both the national and regional pattern of expected employment growth in the future, as well as the past performance of each sector in the locality for which forecasts are being prepared.
- 5.50 However, the CE forecasts do not take into account specific future developments that might change the competitive position of Berkshire and South Buckinghamshire, in terms, for example of specific

48 http://thamesvalleyberkshire.co.uk/Strategic_Economic_Plan#ourplan

infrastructure investment, which might have both positive or negative impacts on inward investment and business growth; for example, the introduction of services on Crossrail, or the provision of a western rail access to Heathrow (see later in this section for more details).

The Recent Performance of the Berkshire Economy

- 5.51 The analysis of employment trends suggests that since around 2002 the economy of both the Western Berks and Eastern Berks & South Bucks HMAs has slowed down in terms of employment creation. A full assessment of the performance of the Berkshire economy as a whole is set out in Thames Valley Berkshire Local Enterprise Partnership's Strategic Economic Plan and the supporting evidence base.
- 5.52 The Strategic Economic Plan identifies three inter-related features of the Berkshire economy that make the Berkshire economy distinctive from other sub-regional economies and which have underpinned the historic performance of the economy; but the Strategic Economic Plan states that, in relation to distinctive features of the local economy, changes are underway. The Strategic Economic Plan states that these changes give rise to both significant threats to, and significant opportunities for, the Berkshire economy.
- 5.53 The three distinctive and inter-related dimensions of the Berkshire economy are:
- The importance of technology-based activity
 - The significance of internationalisation
 - The role of corporates
- 5.54 These three aspects of its economy distinguish the Thames Valley Berkshire area from other LEP areas. The Strategic Economic Plan states that the Thames Valley Berkshire economy is the most strongly internationally-orientated and competitive economy outside London, and that the LEP area therefore has substantial potential for growth. The area has a strong relationship with London – and what happens in London in future will influence the pattern of growth in Berkshire.
- 5.55 The Strategic Economic Plan also states that the Thames Valley Berkshire economy is the 'strongest tech-based economy' in the UK, with its particular strength lying in the IT sector, both hardware and software. However, there is evidence that employment in the sector has significant numbers of people in non-technological occupations such as sales and management. The number of people working in pure research is relatively low.
- 5.56 While the Thames Valley Berkshire economy performs strongly in relation to technology-based industry, particularly related to information and communications technologies, the relative absence of research-based activities is a potential weakness. The Strategic Economic Plan also identifies the absence of strong knowledge sharing networks in Berkshire as a risk to the future performance

of the local economy. These are factors that could constrain growth in the Thames Valley Berkshire area – with nearby areas – London in particular – probably advancing faster.

- 5.57 The Strategic Economic Plan also states that the Thames Valley Berkshire area ‘is an intrinsically – and distinctively – international economy’. The Thames Valley Berkshire area has the strongest representation of international businesses of any LEP area (though London must be more significant in terms of absolute employment by international businesses); and continues to secure a significant share of the UK’s international inward investment projects, being second only to London in securing foreign direct investment projects in 2012/13.
- 5.58 Proximity to Heathrow is a key asset and a key reason why Berkshire has such a strong track record in attracting inward investment. Around 18,000 Berkshire residents work at the airport. Foreign owned businesses account for a quarter of all employment and approaching half of Berkshire’s overall turnover.
- 5.59 The Strategic Economic Plan compares the performance of Berkshire with other ‘edge of hub airport’ non-metropolitan areas, specifically Schipol (Amsterdam), Charles de Gaulle (Paris) and Frankfurt. The Thames Valley Berkshire area grew faster before the 2008/9 downturn than the equivalent non-metropolitan areas associated with each of these European airports, but the impact of the recession appears to have hit the Thames Valley Berkshire area harder than these comparator areas.
- 5.60 The role of large corporations is the third very distinctive element of the economic make up of Berkshire. There are over 200 European or global HQ operations in the Thames Valley Berkshire area. Many of these have been located in Berkshire for a long time, and are major employers in strategically important sectors such as pharmaceuticals, petrochemicals, energy, food, and IT. They are well represented on the major business parks in Berkshire.

Implications for Future Employment Growth

- 5.61 The analysis of historic trends in employment, the CE forecasts, and the analysis presented in the Strategic Economic Plan all point to the Berkshire and South Buckinghamshire economy being a high value added, advanced economy; but an economy which has matured after rapid growth in both the 1980s and 1990s.
- 5.62 In a mature economy it is harder to achieve the same percentage rates of growth in employment and output as achieved in the growth phase; unless there is significant new investment (public or private) that provides a new boost to the international competitiveness of the sub-region.

5.63 The Strategic Economic Plan identifies the connectivity of the Thames Valley Berkshire area as key to the success of the local economy. The Strategic Economic Plan states that ‘the growth of our economy has been – and continues to be – fundamentally shaped by our connectivity’; and goes on to state:

- ‘our international links via Heathrow Airport are the principal reason why inward investors choose to locate in Thames Valley Berkshire and they are a crucial underpinning of ongoing re-investment
- the importance of our links with London cannot be overstated – particularly through the M4 motorway, the Great Western Mainline and the Reading to Waterloo Mainline
- within Thames Valley Berkshire, our economic geography is polycentric with a number of different towns each playing an important role; connections between our towns are therefore critical at a local level
- our digital connectivity is of paramount importance to our business community writ large: our tech-based businesses depend on it, and more broadly, it is a critical infrastructure for our small business community in our rural and urban areas alike’.

Committed Infrastructure Investment

5.64 In view of the importance attributed by the LEP to transport infrastructure as a factor determining the competitiveness of Berkshire and South Buckinghamshire it is relevant to assess planned and possible infrastructure investments and how they will impact the competitiveness of the Study Area; and to consider if they are simply a requirement to achieve the baseline level of growth or if they might enable an uplift in the growth of the area.

5.65 One important element of the Thames Valley Berkshire Strategy for communications is now complete; the £850 million investment in Reading Station has addressed the persistent problem of delays to services on their arrival outside Reading Station which was the result of capacity constraints. These capacity constraints have now been resolved and the station can now handle the additional services and improvements that are in the pipeline, as set out below.

5.66 There are four key committed transport infrastructure investments in the Thames Valley Berkshire area and a fifth at an advanced stage of development. Listed in order of long-term significance to the Thames Valley Berkshire economy these are:

- Crossrail: services to stations in the Thames Valley Berkshire area are currently scheduled to start in December 2019;
- Heathrow Western Rail Access;
- Electrification and associated new trains on the West of England lines, with reported completion of the links from London to Reading, Bristol, Oxford and Newbury scheduled for 2016 and to Cardiff by 2017; and
- The M4 Smart Motorway Scheme from Junction 3 to Junction 12 (Reading West) to commence in 2016.

5.67 In addition, the decision about a third runway at Heathrow will also have a significant impact on employment within the Study area whether it is given the go ahead or not.

Crossrail

5.68 Crossrail will deliver a step change in accessibility primarily between the Eastern Berkshire and South Bucks area and London, in terms of the range of destinations in London that can be accessed without changing onto London Underground services; reduced journey times; quality of service; and capacity. The stations in Berkshire and South Buckinghamshire to be served by Crossrail are Iver, Langley, Slough, Burnham, Taplow, Maidenhead, Tyxford and Reading. As Reading already has a very regular and direct service to Paddington, Crossrail is unlikely to improve journey times but could improve accessibility, albeit to a lesser extent than elsewhere in the study area.

5.69 The whole purpose of Crossrail is to improve central London connectivity, as evidenced by the constant re-iteration of the key statistic that Crossrail will increase 'central London rail capacity by 10%'; and that Crossrail will bring an 'extra 1.5 million people (from a current level of 5 million) to within 45 minutes of central London and will link London's key employment, leisure and business districts – Heathrow, West End, the City, Docklands – enabling further economic development.'

5.70 No substantive research has been undertaken on the likely impacts of Crossrail on the Berkshire and South Buckinghamshire economy. Work has been undertaken by consultants SQW for Thames Valley Berkshire LEP's and the Crossrail Development Pipeline Study by GVA⁴⁹ identifies the impacts that Crossrail is already having on development around Crossrail stations.

5.71 The GVA study reports one observable effect, and a second predicted impact:

- There is some evidence, based on monitoring of planning applications in towns and centres served by Crossrail, that Crossrail is providing the impetus to revitalising the town centres of Maidenhead and Slough. However, in general impacts in the western section of Crossrail are reported to be low compared to the impacts of the scheme on development in the central and eastern section of the route. This probably reflects the relative absence of development opportunities in the towns served by Crossrail's western section compared to these other areas.
- GVA also incorporate in their report residential house prices forecasts prepared by Jones Lang LaSalle for the Crossrail route. These forecasts indicate the expectation that house prices will increase by 48% in Maidenhead and 45% in Slough between 2014 and 2020, compared to the all of London forecast of 36%. The forecasts put Maidenhead and Slough in the top third of locations served by Crossrail in terms of anticipated house price growth. All house price forecasts are speculative but it is reasonable to expect that Crossrail will stimulate the demand for housing in towns served by Crossrail.

5.72 While there is an absence of research into the impacts of Crossrail on Berkshire and South Buckinghamshire, Wessex Economics has experience of undertaking rail impact studies in other

49 <http://www.crossrail.co.uk/benefits/changing-spaces-building-communities/development-pipeline-study-2014>

areas. On the basis of this experience the most likely impacts, listed in descending order of significance, are identified as follows:

- Net commuting flows from the stations east of Reading are likely to change as existing residents are more likely to commute given faster journey times to a wider range of destinations in London.
- Net commuting flows from the stations east of Reading are also likely to change as households containing people who are already working in London, and very probably living in London, move home to areas served by the Crossrail stations.
- House price increases generated by in-migrants from London and elsewhere with substantial housing equity or ability to fund a mortgage will tend to encourage those who do not work in London or who are in lower paid jobs to move further westwards in search of cheaper/better value housing.
- There is the potential that London residents living in West London in areas served by Crossrail, will start to travel to work in the larger Berkshire towns served by Crossrail, namely Slough, Maidenhead and Reading, even though job availability is high in London.
- The main potential benefit to Reading might be enhanced ease of commuting from West London and Eastern Berkshire and South Bucks into Central Reading, giving Reading based employers, particular those in the town centre, the ability to tap a larger pool of skilled labour.
- There is the possibility that the larger employment centres may gain in terms of attracting inward investment. Slough and Maidenhead have a much larger improvement in accessibility than Reading; but Reading is starting to create a critical mass in its town centre that may give it an advantage in appealing to larger occupiers.

5.73 Assessments of wider economic benefits in official studies are focused on additional job creation in central London in particular and the associated agglomeration benefits. Wessex Economics is not aware of any studies of the operational economic impact of Crossrail on locations outside of London. The expectation is that growth in central London will be supported by extending the effective labour catchment area.

5.74 Although Reading will be served by two Crossrail trains an hour, the town is likely to gain less than the other stations on the western section of Crossrail because it already has high frequency, high capacity rail services into London, and will benefit from the introduction of new electric trains in the near future (see below). It is not expected therefore that Reading will experience the same step change in journey times and service quality from Crossrail that stations further east will experience.

5.75 The London Plan (January 2014) anticipates that the population of London will grow by 1.9 million people and that there will be an additional 861,000 jobs in London, with 20% growth in public transport trips. Evidence shows that high levels of over-crowding on public transport deters employment growth.

- 5.76 Estimates of the impact of the transport constraint on central London employment in the absence of Crossrail vary, as follows:
- 33,000 to 40,000 fewer jobs in West End, City and Isle of Dogs by 2027 (Volterra)
 - 23,000 fewer jobs in the central area of London by 2027 (Oxford Economics)
 - An estimate of 63,000 additional jobs in the City and Isle of Dogs by 2023, a further 85,000 jobs in Thames Gateway and 33,000 elsewhere in London (CEBR)
- 5.77 Overall Crossrail can be expected to have a significant impact on the economy of Berkshire and South Buckinghamshire. Wessex Economics however believe London is more likely to be a larger beneficiary from Crossrail than Berkshire and South Buckinghamshire
- 5.78 Crossrail may well unlock sites around the station for development and the larger centres in the Eastern and South Bucks HMA, namely Slough and Maidenhead could see increased inward investment. It could also work to the disadvantage of the economy of Berkshire and South Buckinghamshire increasing competition for skilled labour. Such a situation is likely to result in increased out-commuting from areas close to Crossrail stations other than Reading.
- 5.79 Further scenarios could be developed with the assistance of transport consultants tasked with specifically looking at changing commuting patterns. But until that work is undertaken it cannot be reasonably factored into the SHMA work.
- 5.80 There is therefore some uncertainty around changing commuting patterns (and a lack of evidence) resulting from Crossrail. The wider impacts these changes will have and the knock on impact on housing need is required to be agreed at a strategic level.
- 5.81 Although we recognise the potential for change to commuting ratios as a result of Crossrail this report assumes that commuting ratios will not change albeit these will be based on higher absolute numbers.
- 5.82 We believe this is a reasonable assumption (and guidance compliant) and impacts will be moderated by further changes in working practices; and enhanced public transport capacity linked to increase in town centre employment.

Heathrow

- 5.83 The Airports Commission has now reported on its assessment and recommended to Government that a third runway be built at Heathrow. The Airports Commission has identified 2030 as the required target date for provision of additional runway capacity in the South East of England, but it was not part of the Commission's work to set out a detailed implementation timetable; and there are

substantial legal and logistical challenges to delivery of a new runway at Heathrow and all associated infrastructure required for its operation by 2030.

- 5.84 The Government has not yet committed itself to accepting the recommendation of the Airports Commission. The Government's Productivity Plan published in July 2015 stated that a decision will be made on airport capacity in South East England by the end of 2015. However, by December 2015 David Cameron announced that the final decision would be delayed until at least Summer 2016. The delay was reported due to environmental concerns.
- 5.85 There is also no information on the timescale for delivery of additional airport capacity if agreed upon. However if we assume that the decision is made in favour of expanding Heathrow, the operational impacts of the airport on employment (as distinct from construction impacts), will only start to be experienced post 2030 (the date assumed by the Airports Commission as the earliest possible date for opening of the additional runway) and probably some years after than e.g. 2033-35. Therefore the direct impacts (particularly the operational phase) are likely to only be relevant to housing demand assessments towards the end of the SHMA timeframe.
- 5.86 Section 7 of the Airports Commission main report contains the summary of the Economic Impacts Assessment. These focus on increases in productivity through gains in trade and agglomeration effects. The report recognises the impact that enhanced international linkages can have on inward investment, and highlights the cluster of global companies along the M4 corridor, which it assumes are located in Berkshire because of proximity to Heathrow (among other reasons). These benefits are assessed at the national level.
- 5.87 However, paras 7.32 to 7.43 specifically examine local impacts. The Commission calculates that the preferred Northern Runway scheme would create up to 78,000 jobs by 2050. But the Commission points to the fact that labour supply will come from throughout London, made much easier by the new transport links (Crossrail, the Southern Access to Heathrow, and the Western Access).
- 5.88 The main report states (at para 7.40) that Heathrow expansion 'takes place in a rapidly growing region and a local area with comparatively high rates of unemployment (8.5% across the 5 local authorities closest to the airport); therefore, it is expected that any additional pressure will be limited.
- 5.89 The economically active population in the five local authority areas closest to the airport (including Slough) is forecast to grow by 100,000 in the period to 2030 and in a wider group of 14 authorities in the surrounding region by 160,000, more than twice the number of jobs forecast to be generated by expansion. So a high proportion of jobs may be expected to be taken up by people already living

in the area and the additional capacity is not expected to result in an insurmountable requirement for additional housing.

- 5.90 To summarise, given that the Government has not yet announced a decision on expansion at Heathrow; and that delivery is unlikely to be until the end of the current assessment period, the impact of Heathrow expansion will be experienced outside the timescale for the current SHMA
- 5.91 On the other hand, the impact of continued growth of passenger numbers at Heathrow over the next 20 years is reflected in current employment forecasts. No further adjustment to housing numbers on the basis of Heathrow expansion could be justified at this stage.
- 5.92 Equally a failure to progress the proposals for Heathrow, with or without a decision on an alternative proposition, could, over time, have an adverse effect on Berkshire and South Buckinghamshire in terms of its ability to secure international inward investment in competition with other UK and European locations.

Other Infrastructure Considerations

- 5.93 The other significant transport infrastructure proposal in terms of the long-term impact on the Berkshire and South Buckinghamshire economy is the Heathrow Western Rail Access Scheme. This involves provision of a new rail tunnel leaving the Great Western main line between Langley and Iwer connecting into Heathrow Terminal 5.
- 5.94 The proposal would allow four trains per hour to run direct from Reading to Heathrow Terminal 5 with two of these trains calling at Twyford and Slough; and two calling at Maidenhead and Slough.
- 5.95 Network Rail have developed the scheme proposal and consulted on the proposed development in early 2015, with a view to submitting an application in early 2016. The timetable currently publicly available would entail works starting in 2017 and commencement of services by the end of 2021/start of 2022.
- 5.96 This scheme would significantly enhance access to Heathrow Airport from Berkshire's principal towns and in particular reinforce the attraction of Reading, Maidenhead and Slough to internationally-orientated employers for whom easy access to Heathrow is important. The scheme would also contribute to reducing congestion on the M4, M25 and M3 motorways. The scheme will help to maintain Berkshire's competitive position vis a vis London in terms of access to Heathrow.
- 5.97 The West of England electrification will deliver a modest level of additional capacity on the existing rail routes, but is largely a replication of existing services with modern rolling stock. It does not therefore deliver a major uplift in competitiveness for the Thames Valley Berkshire area; it is more about ensuring the Thames Valley Berkshire area does not fall behind other areas.

- 5.98 The M4 Smart Motorway Scheme can be viewed as a response to current congestion and essential to the level of baseline growth indicated by the CE projections.
- 5.99 With the exception of Crossrail, Wessex Economics' assessment would be that these investments help maintain Berkshire and South Buckinghamshire current competitive position rather than representing a step change enhancement to the area's competitive position.
- 5.100 There are other strategic developments in West London that could have a material impact on the Berkshire and South Buckinghamshire economy such as the Mayor of London's proposals for Park Royal and Old Oak Common. The proposals envisage development of 24,000 homes in Park Royal and commercial development that will accommodate 55,000 jobs.
- 5.101 The proposals entail the development of a new transport interchange at Old Oak, served by Crossrail, High Speed 2 and Great Western Mainline rail services into Paddington. The Mayor's proposals are for a station designed to accommodate 250,000 passengers a day, making it comparable in passenger numbers to Waterloo.
- 5.102 The phasing of development set out in the Consultation Draft Planning Framework (February 2015) indicates that some 8,600 homes and 7,400 jobs could be delivered before 2026, the proposed opening date of the new Old Oak Transport Hub. The Framework identifies capacity to accommodate an additional 15,500 homes and 47,000 jobs post 2026.
- 5.103 Placed in the context of just under 600,000 jobs in Berkshire and South Buckinghamshire, the development proposals are of sufficient scale to have some effect on commuting patterns, labour availability and the market for commercial space in Berkshire, given the ease of access to the site using Crossrail and Great Western mainline services; and the potential appeal of a good quality business location close to Heathrow and with rail connectivity to Birmingham once HS2 is built.
- 5.104 Other infrastructure investments being pursued by Thames Valley Berkshire include a southern rail access to Heathrow Airport, a third Thames Crossing in Reading, improvements to services on the North Downs line to Guildford, Gatwick and Brighton; and the Reading to Waterloo rail service; and improvements to the A3290-A329M, A322 corridor linking Reading, Wokingham and Bracknell.
- 5.105 At this moment in time these projects and their impacts are not considered appropriate considerations for an objective assessment of housing need given that they have not been fully approved or funded.

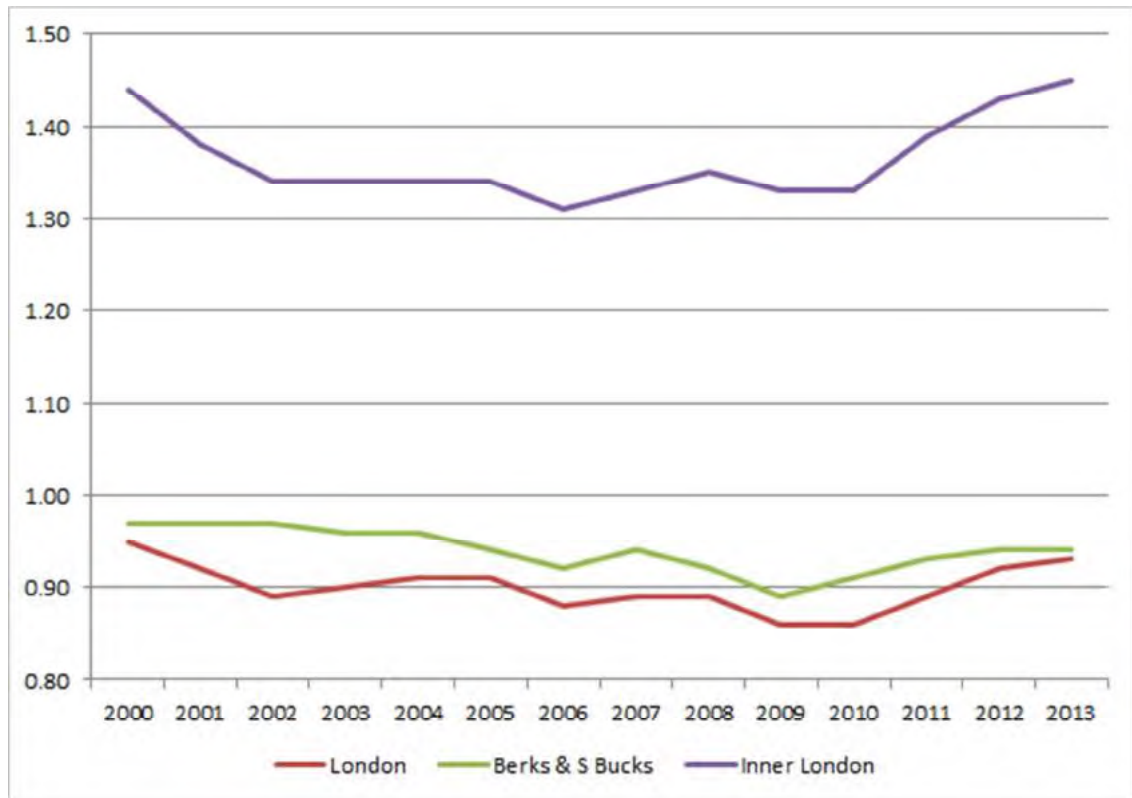
Business Perceptions of the Challenges to Growth

- 5.106 The Thames Valley Berkshire LEP's Strategic Economic Plan also identifies other challenges to economic growth (with the focus being on GVA growth). Discussions with major corporations highlight three issues in particular regarding labour supply:
- For many of Thames Valley Berkshire's large businesses recruitment is proving very challenging, particularly in relation to staff with an in-depth knowledge of science, technology, engineering and mathematics; in this domain, the challenge of competing internationally was flagged, particularly given the volume of high quality science graduates emerging from the likes of South Korea, China and India.
 - Retention of staff can also be extremely difficult, especially in relation to younger workers for whom the appeal of London (in the form of both higher salaries and the buzz and excitement of the metropolis) seems impossible to resist.
 - In response, some corporates are turning to international labour markets and whilst the quality of potential recruits is viewed in positive terms, the frustration of lengthy negotiations over visas and work permits is palpable. This is clearly an issue which only national government can address.
- 5.107 The Strategic Economic Plan states that these three factors are having a material influence on the future plans of Thames Valley Berkshire's larger employers, which will have an impact of growth. The Strategic Economic Plan states that 'for some, the solution will be to focus future growth abroad, particularly in relation to more routine technical functions, representing a straightforward loss to the UK economy. For others, because of the importance of recruiting and retaining bright young people, and exploiting the disruptive technologies that they can develop, the decision is to expand operations in central London, despite the cost implications'.
- 5.108 These comments highlight a possible explanation for the observed pattern of slower employment growth observed since 2001, compared with the two previous decades. The Strategic Economic Plan identifies the threat that while Berkshire and South Buckinghamshire remain the centre for large scale employment in IT and telecoms, London now has a distinct edge in terms of technology development, by virtue of its ability to attract younger workers with advanced technical and business skills.
- 5.109 The Strategic Economic Plan also draws attention to the fact that the corporates are changing, stating that 'the rigidities and formalities of the past are giving way to new patterns and styles of working, enabled by the possibilities of digital connectivity and the desire/pressure to minimise overhead costs, including those linked to property. There is – across the board – an increasing opacity in the boundaries between 'home' and 'work', and this in turn is challenging locational preferences'.
- 5.110 Linked to this change in locational preferences of the large employers, the Strategic Economic Plan also notes that 'the economic footprint of the corporates in Thames Valley Berkshire is linked 'to a

post-war pattern of spatial development; it is structured around edge- (or out-) of-town business parks and is typically highly car-dependent. Elsewhere, as boundaries dissolve, the spatial disconnect between business parks and lively urban environments are becoming difficult to reconcile.' City and town centres with high levels of connectivity are once again in favour as business locations.

- 5.111 The economy of Berkshire and South Buckinghamshire faces a number of challenges, and these explain the slowdown in employment growth since 2001. In particular apart from international competitors, the London economy is a powerful competitor for the types of business that were the source of much of Berkshire's growth in the 1980s, and 1990s.
- 5.112 Illustrative of this threat is the decision in 2011 of Vodafone to move its international headquarters from Newbury into London – though this only entailed 200 jobs out of the 3,000 jobs in Newbury; and Google's decision to locate a major new facility near St Pancras Station in central London.
- 5.113 The pattern of change in job density between Central London and Berkshire and South Buckinghamshire is of interest in discussing the issue of the relative competitiveness of Berkshire and London. Figure 62 compares job density (the number of jobs per residents aged 16-64) for Inner London and Berkshire. As would be expected Inner London has significantly higher job densities since it has a concentration of jobs, while much of the workforce lives outside Inner London.
- 5.114 However, since 2010 as employment has grown, job densities in Inner London have grown rapidly and now exceed their 2000 level; while job densities in Berkshire and South Buckinghamshire have increased since 2009, they are still below their 2000 level. This would indicate that the central London economy is adding jobs at a more rapid rate than the Berkshire and South Buckinghamshire economy, relative to the size of resident workforce.
- 5.115 The Strategic Economic Plan summarises the challenge as flagged up by Thames Valley Berkshire's large corporate employers: 'the overwhelming risk for Thames Valley Berkshire is one of 'tiredness': of buildings from, essentially, a bygone era; of a workforce which is, in many cases, ageing "structurally" (as the retention of young people is so difficult); and of a business model that must adapt to survive with challenging implications.

Figure 62: Job Densities of Berkshire-South Buckinghamshire, Inner London and London 2000-2013 (Number of Jobs per Resident Aged 16-64)



Source: Wessex Economics, ONS Job Densities

- 5.116 However, the Strategic Economic Plan states that *'this narrative must not be taken too far'*. The Strategic Economic Plan states *'there is no immediate 'crisis' and on all the key metrics, our economy continues to function well. Equally, particularly through some major town centre investments, Thames Valley Berkshire is starting to re-invent itself. But there are, evidently, risks. Read alongside the interrelated risks associated with our tech-based sector and the changing pressures and imperatives linked to internationalisation, the importance of our overall Strategic Economic Plan – both for us and for the UK as a whole – is obvious.'*

Comparing Trend Employment and Forecast Employment Growth

- 5.117 The review above of the past performance and future prospects of the Berkshire and South Buckinghamshire economy is of value in helping to understand the divergence between trend based analysis of employment growth and that forecast by Cambridge Econometrics.

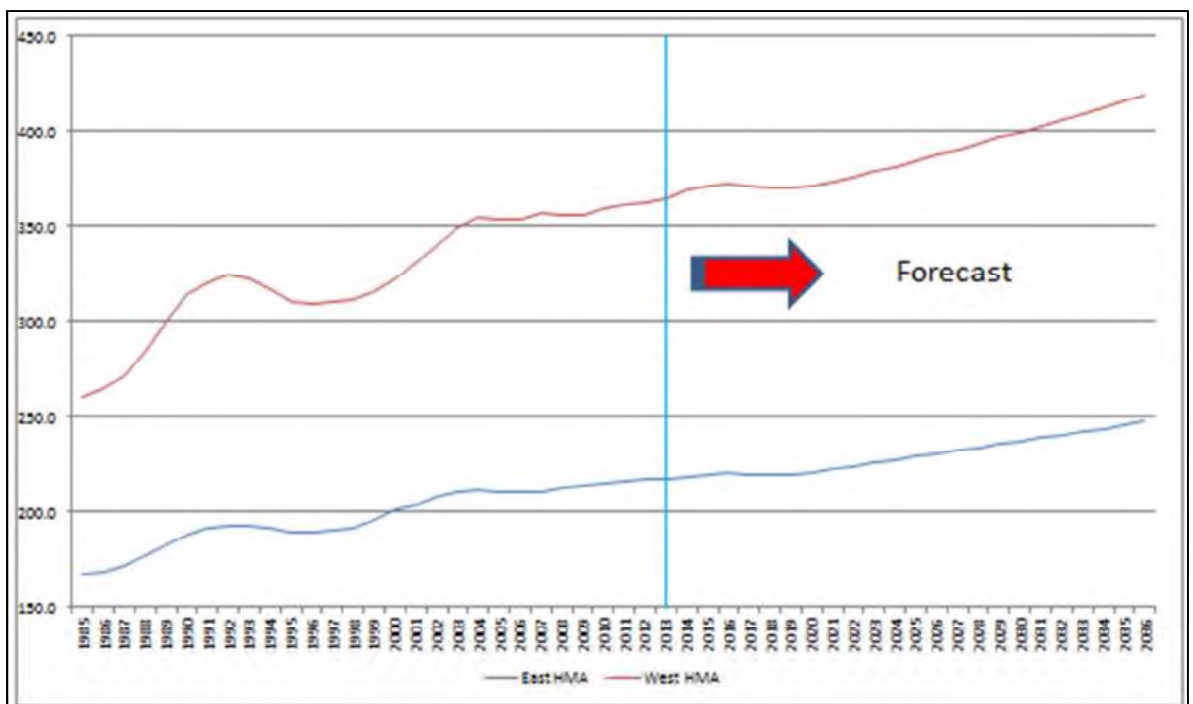
5.118 The trend analysis focuses on two time frames 1992-2009 and 1995-2009 which generate figures for average annual employment growth as follows:

- 1992-2009: 1,470 jobs pa in the period 1991-2009 in the Eastern Berks and South Bucks HMA and 2,590 jobs pa in the Western Berks HMA
- 1995-2009: 1,980 jobs pa in the period 1995-2009 in the Eastern Berks and South Bucks HMA and 3,090 jobs pa in the Western Berks HMA
- The CE forecasts for 2013-36 are for job growth of 1,290 jobs pa in the Eastern Berks and South Bucks HMA and 2,150 jobs in the Western Berks HMA

5.119 One way to discern the relationship between past trends and forecasts is to present data on the basis of a moving average covering a number of years. This technique smooths out peaks and troughs associated with the business cycle and provides a clearer picture of trends over time in employment growth.

5.120 Figure 63 presents the historic and forecast employment data for the two HMAs on the basis of a 5 year moving average; the first data record, identified for 1985 is actually the average annual employment for the period 1981-85 (a 5-year period).

Figure 63: Rolling 5 Year Average Employment Trend and Forecast for HMAs



Source: Wessex Economics, Cambridge Econometrics

5.121 Figure 63 highlights the particularly rapid growth in employment in in the West HMA (red line) in the 1980s, the significant fall in employment in the early 1990s and rapid recovery in the latter part of the 1990s to the year 2000s; and the pattern of much slower growth of employment from 2001 onwards.

- 5.122 This pattern is likely to reflect in part the collapse of the dot.com bubble in 2000, and the knock on effect on technology, media and telecoms businesses in the Thames Valley; and the growing preference of many technology, media and telecoms businesses for a London location in more recent years.
- 5.123 The Eastern Berks & South Bucks HMA (blue line) displays a similar pattern of change to the Western Berkshire HMA over the period to 2013, but with the upswings and downturns in employment being much more muted. However the pace of employment growth since 2004 is lower than achieved over the prior period starting in 1981.
- 5.124 In common with most forecasting, the CE forecasts appear to give greater weight to recent trends than to trends from before the year 2000. This reflects the view that employment growth in the most recent past best reflects the current competitive positioning of the local economy under consideration.

Alternative Scenarios for Employment Growth

- 5.125 In the light of the above review of past employment trends which suggests considerable variation on the trends as well as scenario unlikely to be repeated (very large growth in the tech sector and shift from manufacturing) and the CE forecasts (which are based on these trends) and the underlying drivers of economic and employment growth in Berkshire and South Buckinghamshire, it is appropriate to examine three different employment scenarios for the period to 2036 as part of the SHMA process.
- 5.126 The purpose of this scenario analysis is to explore under each scenario whether there is a need to increase planned housing supply above the level indicated by demographic projections to ensure that the local economy is not constrained by labour shortages.
- 5.127 It should be borne in mind, however, that part of the reason for the economic success of the Berkshire and South Buckinghamshire economy is because higher value added activities and high skill activities have over time displaced lower value, lower paid employment.
- 5.128 This is part of the normal pattern of economic development. Along with investment in technology and skills development, this is what drives economic growth, particularly in high employment economies.

5.129 The four scenarios are as follows:

- **Scenario A: Baseline Scenario:** this scenario is based on the CE forecasts for 2011-36. Broadly this scenario reflects the performance of Berkshire and South Buckinghamshire over the period from 2002, a period when the employment has grown but not at the pace of the previous decade. This is a period in which the national economy was growing, followed by the downturn in 2009, and an unexpectedly speedy recovery in employment nationally. It could be described as the business-as-usual scenario.
- **Scenario B: Growth Scenario 1:** this scenario is based on a return to the trend rate of employment growth achieved by the Berkshire and South Buckinghamshire economy in the last business cycle, measured in terms of trough to trough change using the time period 1992 to 2009. This is a period which incorporates rapid and sustained growth in employment in the study area economy in the late 1990s, following a substantial drop in employment associated with the downturn in the early 1990s. The study area has not had a period of such sustained growth in employment since the late 1990s, indicative probably of a changed competitive environment.
- **Scenario C: Growth Scenario 2:** this scenario is essentially the same as Scenario B in that it is based on the trend rate of employment growth in the Berkshire and South Buckinghamshire economy in the last business cycle, measured in terms of trough to trough change. However this scenario is based on the shorter time frame 1995 to 2009, which produces a significantly higher average annual growth than Scenario B, not because of any substantive difference in the additional jobs created in the period compared to Scenario B, but because of the shortened appraisal period (14 years rather than the 17 years used in Scenario B).
- **Scenario D: Loss of Competitive Positioning Scenario:** this scenario is based on the peak to peak trend rate of employment growth in the last full business cycle, identified as the 18 year period 1990 to 2008 where employment growth averaged only 1,650 jobs per annum, well below the Cambridge Econometrics forecasts for the period of job growth of 3,435 jobs pa. Looking to the future, this scenario would most likely be associated with Berkshire and South Buckinghamshire experiencing a loss of competitive advantage as an international and HQ location, most probably compared to London.

Table 55: Scenario A: Forecast Employment Growth 2013-36 by HMA and Local Authority

	Employment in '000			Years	Job Change (per annum)
	2013	2036	Change 2013-2036		
Eastern Berks & South Bucks HMA	222	251.6	29.59	23	1,287
Slough	92.9	107.6	14.68	23	638
RBWM	90.5	103	12.43	23	541
South Bucks	38.6	41.1	2.48	23	108
Western Berks HMA	376.5	425.9	49.41	23	2,148
Bracknell Forest	70.5	85.9	15.39	23	669
Reading	114.8	125.2	10.34	23	450
West Berkshire	108	120	11.97	23	520
Wokingham	83.2	94.9	11.7	23	509
Study Area	598.6	677.6	79	23	3,435

Source: LEFM Cambridge Econometrics – September 2013

Table 56: Scenario B: Total Employment Growth 1992-2009 by HMA and Local Authority

	Employment in '000			Years	Job Change (per annum)
	1992	2009	Change 1995-2009		
Eastern Berks & South Bucks HMA	189.2	214.2	24.98	17	1,469
Slough	84.2	90	5.86	17	345
RBWM	76.7	87.2	10.58	17	622
South Bucks	28.4	36.9	8.54	17	502
Western Berks HMA	308.8	352.7	43.95	17	2,585
Bracknell Forest	60.7	64.7	4	17	235
Reading	113.8	107.7	-6.12	17	-360
West Berkshire	78.9	102	23.11	17	1,360
Wokingham	55.3	78.3	22.96	17	1,351
Study Area	498	566.9	68.9	17	4,055

Source: Wessex Economics, Cambridge Econometrics

Table 57: Scenario C: Total Employment Growth 1995-2009 by HMA and Local Authority

	Employment in '000			Years	Job Change (per annum)
	1995	2009	Change 1995-2009		
Eastern Berks & South Bucks HMA	186.5	214.2	27.7	14	1,977
Slough	92.2	90	-1.9	14	-138
Windsor & Maidenhead	62.2	87.2	25.1	14	1,790
South Bucks	32.4	36.9	4.5	14	325
Western Berks HMA	309.4	352.7	43.3	14	3,091
Bracknell Forest	60.2	64.7	4.5	14	322
Reading	104.7	107.7	3.1	14	218
West Berkshire	87.1	102.2	14.9	14	1,066
Wokingham	57.5	78.3	20.8	14	1,485
Study Area	496	566.9	70.9	14	5,068

Source: Wessex Economics, Cambridge Econometrics

Table 58: Scenario D: Total Employment Growth Based on Peak to Peak Trend (1990-2008) by HMA and Local Authority

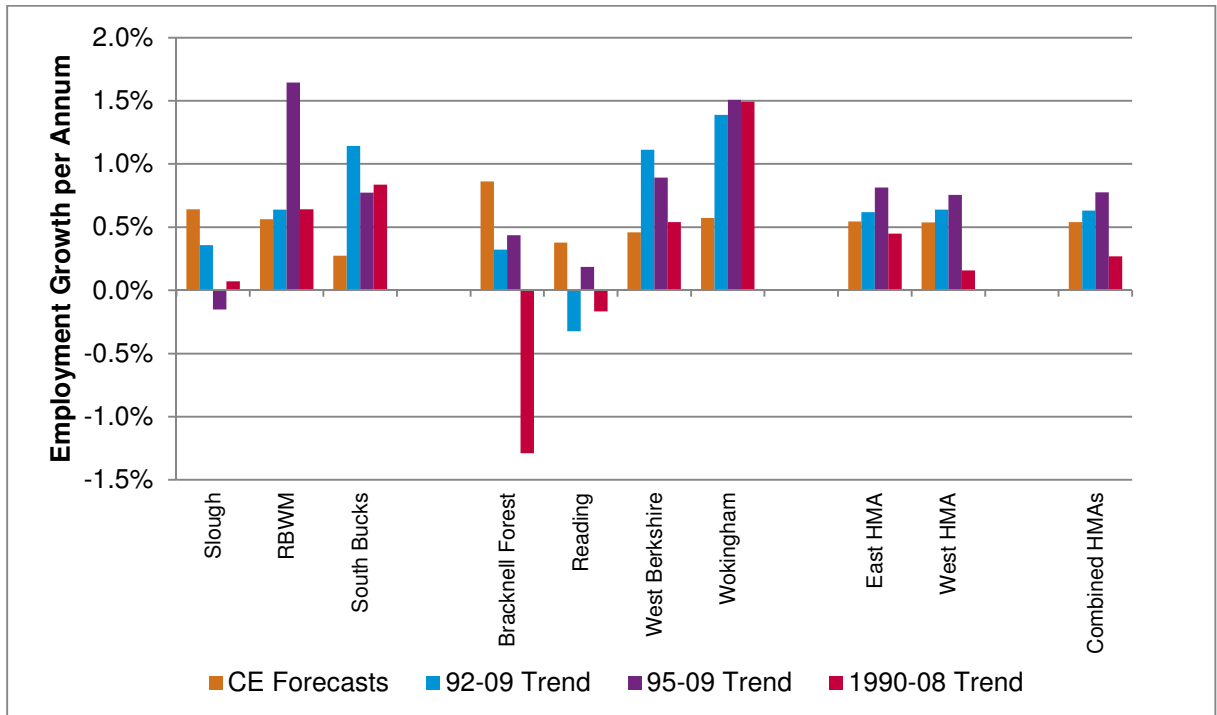
	Employment in '000			Years	Job Change (Per Annum)
	2013	2036	Change 2013-2036		
Eastern Berks & South Bucks HMA	222	246.0	24.0	23	1,045
Slough	92.9	94.4	1.5	23	67
RBWM	90.5	104.8	14.3	23	623
South Bucks	38.6	46.8	8.2	23	355
Western Berks HMA	376.5	390.5	14.0	23	608
Bracknell Forest	70.5	52.3	-18.2	23	-791
Reading	114.8	110.5	-4.3	23	-188
West Berkshire	108	122.3	14.3	23	620
Wokingham	83.2	117.0	33.8	23	1,470
Study Area	598.6	636.6	38.0	23	1,652

Source: GL Hearn/Wessex Economics, LEFM Cambridge Econometrics

Alternative Forecasts

5.130 The PPG advises that consideration should be given to employment growth trends and/or forecasts. Figure 64 highlights notable variations in the rate of employment growth seen over different time periods historically; and between these and the forecasts.

Figure 64: Comparative Assessment of Economic Growth Trends & Projections



Source: GL Hearn/Wessex Economics, LEFM Cambridge Econometrics

5.131 Because of the variation in trends it is necessary to determine what is a reasonable assessment of potential economic growth, leaving aside land availability issues. In drawing conclusions on what scale of employment growth is potentially reasonable, as a planning assumption, we have sought to take account of:

- Past trends, as shown above; together with the CE projections; and
- Wider understanding of factors which may affect future performance, in particular where these have not been present in the 'history.'

5.132 We have sought to draw conclusions regarding the overall rate of employment growth which can be expected (% pa). No detail regarding the sectoral breakdown of this has been derived, where the conclusions differ from the CE projections.

- 5.133 It is outside the scope of the SHMA to undertake a full analysis of the future distribution of employment in the Study Area, but it is possible to establish some key principles that can be used to make adjustments to the distribution of anticipated employment growth between the authorities in each of the East and West Housing Market Areas.

Eastern Berks and South Bucks Housing Market Area

- 5.134 It is reasonable to expect that future employment growth in Slough and RBWM will be more robust than in South Bucks, despite the fact that on past trends, South Bucks has in some time periods enjoyed more rapid growth than both Slough or RBWM.
- 5.135 Slough is a major employment centre, with a strong representation of international businesses, located only 10 km from Heathrow. Major investment is being made in a new commercial quarter in the heart of Slough. The estimated level of permanent employment created in connection with this development is quoted to be 4,800 jobs.
- 5.136 SEGRO, the owners of the Slough Trading Estate have also been working over recent years to regenerate the Trading Estate over a 20 year period. The aim is to establish the Trading Estate as a 21st Century business destination, with expectations of creating an additional 4,000 jobs. At the end of March 2014, SEGRO had a development pipeline of some 50,000 sq.m of business floorspace.
- 5.137 The appeal of Slough as a business location will be enhanced by the introduction of Crossrail, which will serve central Slough and Burnham on the Slough Trading Estate. The Western Rail Access to Heathrow will also boost Slough as a business location. We have therefore employed a level of growth in Slough slightly higher than that forecast and above historic trends. We have assumed a 0.7% pa growth in employment.
- 5.138 Maidenhead and Windsor are the major centres of employment in RBWM. Of the two, Maidenhead is more significant in employment terms. Maidenhead will benefit from the introduction of services on Crossrail and the Western Rail Access to Heathrow. However the main urban centres are more constrained than Slough in terms of opportunities for redevelopment for employment uses, but there is scope for dispersed job growth around the Borough.
- 5.139 It was also noted that some of the historic data relating to RBWM looked anomalous. Based on this we therefore believe that the CE forecasts represent a reasonable level of growth within the Royal Borough. Employment growth of 0.6% pa is expected.
- 5.140 In general, there is less scope for expansion of the employment base in South Buckinghamshire, but the Pinewood Studios proposals for development of an additional 100,000 sq.m of facilities, anticipated to be delivered over a 15-year period would be expected to create 3,100 additional jobs

– though not all of these would be expected to be accommodated on the site itself. Planning permission was secured at the end of 2014. We have employed a level of growth in South Bucks which is below historic trends but above that forecast by CE. Employment growth of 0.5% pa growth is expected.

Western Berkshire Housing Market Area

- 5.141 The allocation of employment growth in the Western Berkshire HMA is particularly difficult because of the way that the Reading functional urban area is divided between those parts that fall into the administrative areas of Reading Borough Council, Wokingham Borough Council and West Berkshire Council.
- 5.142 The CE forecast would indicate that Reading Borough will have the worst performance of the four authorities in the West HMA in terms of employment growth. It would seem likely that the forecasts under-estimate the prospects for employment growth in Reading, as occupiers increasingly seek out town centre locations.
- 5.143 A significant number of office developments are underway in central Reading in the zone within a 7.5-minute walk from Reading Station. It was reported in August 2015 that a yet to be completed 17,280 sqm office block, Number 1 the Forbury, has been let to the energy company SSE. It is reported that this will be the base for 1,900 SSE employees.
- 5.144 The level of office development and office refurbishment being undertaken in central Reading appears to indicate that the development industry believes that occupiers are now favouring central city locations with good accessibility over business parks. If this proves to be the case employment growth in the West HMA will tilt towards Reading Borough and can be expected to be less robust in Wokingham and West Berkshire.
- 5.145 There is also scope for considerable growth of employment uses at Green Park at Junction 11 of the M4, the majority of which is within Reading Borough and at other locations on the A33 corridor. We have therefore assumed a level of growth which is above both the forecasts and the historic trends. 0.6% pa growth is expected.
- 5.146 Historic employment growth in Wokingham UA is very likely to have been driven by the large scale business parks in the Wokingham Council area that are functionally part of the Reading Urban Area. These include Thames Valley Business Park at the end of the A329(M) which is now fully developed; and Winnersh Triangle on the A329 (M) which has some capacity for further development. Part of Green Park, the major business park at Junction 11 of the M4 is within Wokingham UA, but this part of Green Park is now fully developed.

- 5.147 The major new development that is in prospect within the Wokingham UA area that can be expected to generate significant additional jobs in future years is the proposed Reading University Science Park at Shinfield. Planning permission has been granted for the first phase of development of 18,500 sq.m. The proposed site is estimated to have a capacity to accommodate 55,000 sq.m of business and R&D floorspace, which it is suggested might be developed over a 20-year time frame. We have therefore assumed a level of job growth in Wokingham which is above the forecasts but below the historic trends. Employment growth of 0.8% pa growth is expected.
- 5.148 Bracknell Forest is forecast by CE to have a significantly higher rate of employment growth than the other authorities in the Western Berkshire HMA, though the trend analysis does not indicate that it has always enjoyed a higher rate of employment growth than the other authorities in the past. The CE forecast probably picks up on the strong current representation of knowledge businesses in the Borough, but this may reflect historic strengths rather than future strength.
- 5.149 The town of Bracknell is the major centre of employment, and it now lacks the critical mass of the Reading Urban Area. The town centre is undergoing a major programme of regeneration and this can be expected to contribute to business retention and employment growth. However it seems improbable to suggest that the employment growth of Bracknell Forest would in future be greater than Reading and Wokingham, which account for most of the major centres of employment in the Reading urban area with Reading likely to benefit from improved accessibility. Some of the trend data for Bracknell Forest also looks anomalous; however this only affects the pre-1990 trend. With the CE forecasts showing growth at a level significantly higher than Reading and Wokingham and in view of past trends within Bracknell Forest we have therefore resorted to using trend based data for the 1995-2009 period. Employment growth of 0.4% pa growth is expected.
- 5.150 The key employment centres in West Berkshire are those on the edge of Reading, notably the Arlington Business Park at Junction 11 of the M4, which is now fully developed; and then the employment centres of Newbury, Thatcham and Greenham Business Park. The Reading Urban Area seems more likely to be able to compete with other UK and overseas locations for new business investment, given its superior connectivity with London and critical mass.
- 5.151 With this in mind and the fact that the forecast level of growth was broadly in line with that in the 1990 -2008 period, we have therefore been comfortable using the CE forecasts. 0.5% pa growth is expected.
- 5.152 In the light of this high level assessment, the future pattern of employment growth in the West HMA seems likely to be weighted to the Reading urban area, with an increasing focus on city centre employment in Reading, which will take advantage of the enhanced rail connectivity of central

Reading. Therefore in terms of employment growth it would be appropriate to boost the forecast levels of employment growth in Reading above those forecast by CE.

- 5.153 Wokingham UA may not perform at the level of its recent past in terms of employment growth since most of the major business parks in Wokingham UA are nearing capacity, but the new University Science Park is a major new opportunity area. Bracknell Forest seems unlikely to achieve the scale of employment growth implied by the CE forecasts, though town centre redevelopment will help reposition the town. West Berkshire can expect to achieve good employment growth, but probably not on the scale of the Reading urban area.

Adjusted Employment Growth

- 5.154 Taking account of the above conclusions, we consider that the distribution of employment growth will be slightly different to that seen historically and in the CE projections. The level of job growth feeding into the housing need calculation is set out below.

Table 59: Expected Employment Growth Levels/ Distribution

Scenario	Employment in '000			CAGR
	2013	2036	Change 2013-2036	
Slough	92.9	109.1	16.2	0.7%
RBWM	90.5	103.0	12.5	0.6%
South Bucks	38.6	43.3	4.7	0.5%
Eastern Berks and South Bucks HMA	222.0	255.4	33.4	0.6%
Bracknell Forest	70.5	77.9	7.4	0.4%
Reading	114.8	131.7	16.9	0.6%
West Berkshire	108.0	120.0	12.0	0.5%
Wokingham	83.2	99.9	16.7	0.8%
Western Berkshire HMA	376.5	429.6	53.1	0.6%
Study area	598.5	684.9	86.4	0.6%

Source: GL Hearn/Wessex Economics, LEFM Cambridge Econometrics

- 5.155 0.6% pa growth is forecast in each of the two HMAs, which is slightly more positive than the baseline CE forecasts (0.5% pa in each). In terms of total numbers, total jobs growth anticipated (3,800 per annum) is slightly higher than the CE forecasts (3,400 pa).
- 5.156 It is this level of growth which has been taken forward as part of the assessment of economic-led housing need.

Linking Job Growth to B-Class Employment Land

- 5.157 We have also been asked by the Councils and the LEP to provide a high level review and commentary relating to the likely job growth as set out in context of B-class employment land in the study area.
- 5.158 As with the national trend industrial employment in Berkshire has been falling for the past three decades, while service sector employment has been growing. For all practical purposes all industrial employment will have been accommodated on B2 class land – while a large proportion of service employment is not accommodated on B class land.
- 5.159 With the development of internet shopping there has in recent years been a growing demand for B8 space for high spec warehousing. This format of development is space hungry, but has low employment densities, that is, you get fewer jobs per sq.m compared to office or factory floorspace. This is due in part to automated stock selection but also the nature of the warehouses themselves.
- 5.160 Similarly manufacturing employers are using technology to increase productivity which also reduces job density even if the footprint of a plant is unchanged.
- 5.161 In many areas of Berkshire and South Bucks significant employment growth is identified in sectors that make little demand for B class floorspace and hence employment land e.g. typically health, social work; education; retailing, arts, entertainment and recreation;
- 5.162 Substantial employment growth is also anticipated in professional service and financial and business services sector. These sectors use floorspace much more intensively than other employment uses for two reasons. Firstly because such activities are associated with higher employment densities (number of jobs per sq.m) than industrial or distribution activities and secondly because offices are built over multiple storeys so a much larger volume of floorspace can be built per ha of employment land.
- 5.163 Two recent trends have reinforced the efficiency in terms of site area at which office floorspace is used. Firstly new ways of working have meant that employment densities have been increasing over time (more jobs per sq.m). Furthermore there has been a shift from business park developments to town/city centre developments in locations accessible by public transport, so offices are built over multiple floors (e.g. 6 to 8 floors) rather than a business park density of 2 or 3 floors; and with reduced parking allocation (often in basements)
- 5.164 Lastly the proportion of the working population working at or from home has increased significantly. In Berkshire and South Bucks the number of home workers increased by 13,200 people between

2001 and 2011, which is an increase from 9.8% to 11.9% of the working residents of Berkshire and South Bucks.

- 5.165 The 2011 Census also identifies that 8% of working residents of Berkshire and South Bucks have 'no fixed place of work'. The proportion of people in this category has probably been increasing over time though Census data from 2001 is not available. Many of these people will not need to be accommodated close to their employer.

Commuting patterns

- 5.166 Table 60 shows summary data about commuting to and from the HMAs and individual local authorities from the 2011 Census. Overall the data shows that the study area generally sees a level of net in-commuting for work, although at a HMA level only the Eastern Berks and South Bucks HMA has a level of net in-commuting while the Western Berkshire HMA has a broad commuting balance.

- 5.167 At a local authority level out-commuting is particularly high in Wokingham with Reading and Slough seeing the highest proportion of net in-commuting, as expected in an urban area. The final column of the table (commuting ratio) is calculated as the number of people living in an area (and working) divided by the number of people working in the area (regardless of where they live).

Table 60: Commuting patterns in the study area and local authorities (2011)

	Live and work in LA	Home workers	No fixed work-place	Out-commute	In-commute	Total working in LA	Total living in LA (and working)	Commuting ratio
Bracknell Forest	19,001	6,931	5,093	31,159	28,560	59,585	62,184	1.04
Reading	33,960	7,080	6,199	32,960	42,309	89,548	80,199	0.90
West Berkshire	36,364	10,864	6,689	28,232	33,614	87,531	82,149	0.94
Wokingham	21,690	10,984	6,034	43,078	30,855	69,563	81,786	1.18
Western Berkshire HMA	111,015	35,859	24,015	135,429	135,338	306,227	306,318	1.00
Slough	24,062	5,017	6,560	31,918	39,326	74,965	67,557	0.90
South Bucks	4,819	5,354	2,747	20,522	20,619	33,539	33,442	1.00
RBWM	23,072	11,072	5,523	34,832	37,051	76,718	74,499	0.97
Eastern Berks & South Bucks HMA	51,953	21,443	14,830	87,272	96,996	185,222	175,498	0.95
Study areas	162,968	57,302	38,845	222,701	232,334	491,449	481,816	0.98
Berkshire	158,149	51,948	36,098	202,179	211,715	457,910	448,374	0.98

Source: 2011 Census

5.168 In translating the commuting pattern data into growth in the labour-force for the study area it is assumed that the commuting ratio remains at the same level as shown by the 2011 Census (i.e. assumes that 2% (net) of additional jobs will be taken up by in-commuters and 98% by the existing local population). This essentially means that there would be expected to be a lower increase in working residents for a given number of jobs across the study area. The figures have been applied on a local authority by local authority basis using data as shown in the table above. Any changes to the commuting ratio while possible would need to be agreed through sub-regional agreement and with the London authorities. Changing the commuting ratio would also require a sound evidence base which justifies the extent of any changes made.

Double jobbing

5.169 As well as commuting patterns we can also consider that a number of people may have more than one job (double jobbing). This can be calculated as the number of people working in each local authority divided by the number of jobs. Data from the Annual Population Survey (available on the NOMIS website) suggests that around 3.9% of workers have a second job (data averaged from data for the 2004-14 period to recognise relatively high error margins associated with data for individual years). This gives a double jobbing ratio of 0.961 (i.e. the number of jobs can be discounted by 3.9% to estimate the required change in the workforce). Again data has been used on an individual local authority basis with the double jobbing percentages for each area being:

- Bracknell Forest – 3.8%;
- Reading – 3.4%;
- Slough – 3.2%;
- South Bucks – 4.4%;
- West Berkshire – 4.3%;
- RBWM – 4.2%; and
- Wokingham – 3.9%

5.170 To work out the change in the resident workforce required to match the forecast number of jobs we can multiply the commuting ratio by the amount of double jobbing (adjustment factor) and in turn multiply this by the number of jobs– this is shown in Table 61. Overall, the GL Hearn and Wessex Economics forecast expects an increase of 86,400 jobs across the Study area; if commuting patterns and levels of double jobbing remain the same then this would require a slightly lower level of growth in the resident workforce (of about 77,615 people).

Table 61: Jobs growth and change in resident workforce (2013-36) – CE

	Change in jobs	Adjustment factor	Change in resident workforce
Bracknell Forest	7,400	1	7,400
Reading	16,900	0.87	14,703
West Berkshire	12,000	0.9	10,800
Wokingham	16,700	1.13	18,871
Western Berkshire HMA	53,000	0.98	51,940
Slough	16,200	0.87	14,094
South Bucks	4,700	0.95	4,465
RBWM	12,500	0.93	11,625
Eastern Berks & South Bucks HMA	33,400	0.9	30,060
Study area	86,400	0.95	82,080

Source: CE, NOMIS and 2011 Census

Changes to employment rates

- 5.171 As well as studying commuting levels and double jobbing the analysis needs to consider how economic participation and employment rates will change in the future. Although the past few years have seen an increase in unemployment there have generally been increases in the proportion of people who are economically active (particularly for females and people aged over 50). In the future we may see a continuation of these trends – particularly in relation to people working longer (partly linked to pensionable ages) and have modelled for there to be some increase in employment rates as we move through to 2036.
- 5.172 Table 62 shows the age/sex specific rates assumed in the analysis. These have been based on consideration of a range of different forecasting houses forecasts (Experian, Cambridge Econometrics and Oxford Economics) and also take account of the 2011 Census and changes over the period since 2001. It should be stressed that these figures reflect what we would consider to be a reasonable set of assumptions although there would be a case for alternatives (both in an upwards and downwards direction).

Table 62: Employment Rates by Age and Sex

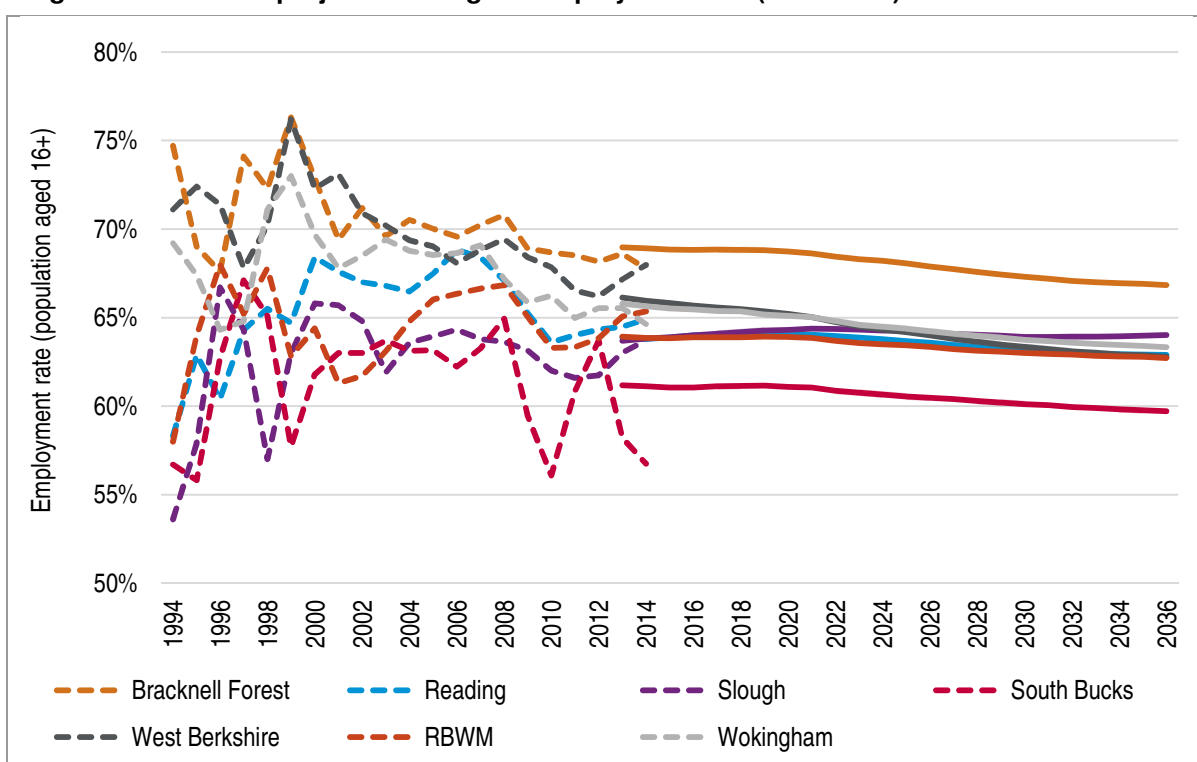
	Sex		Aged 16 to 24	Aged 25 to 34	Aged 35 to 49	Aged 50 to 64	Aged 65 and over
Bracknell Forest	Male	2013	63.9%	91.3%	92.4%	81.3%	18.0%
		2036	63.9%	91.4%	92.9%	86.1%	26.2%
	Female	2013	61.5%	81.1%	82.1%	70.4%	11.2%
		2036	61.5%	84.1%	85.1%	80.7%	17.9%
Reading	Male	2013	48.4%	87.7%	87.7%	75.3%	16.1%
		2036	48.4%	87.8%	88.3%	80.1%	24.6%
	Female	2013	50.1%	75.1%	76.3%	65.5%	10.0%
		2036	50.1%	78.2%	79.2%	75.7%	16.7%
Slough	Male	2013	48.5%	86.6%	86.7%	73.3%	15.6%
		2036	48.5%	86.7%	87.2%	78.2%	26.3%
	Female	2013	48.9%	67.1%	71.4%	61.6%	8.8%
		2036	48.9%	70.2%	74.3%	71.8%	17.1%
South Bucks	Male	2013	57.6%	90.2%	93.0%	81.6%	20.3%
		2036	57.6%	90.3%	93.6%	86.5%	26.9%
	Female	2013	56.1%	80.3%	77.0%	65.5%	10.5%
		2036	56.1%	83.3%	80.0%	75.7%	15.4%
West Berkshire	Male	2013	62.2%	92.7%	92.7%	81.9%	20.5%
		2036	62.2%	92.8%	93.2%	86.8%	26.4%
	Female	2013	62.5%	80.6%	81.3%	69.4%	11.6%
		2036	62.5%	83.6%	84.3%	79.6%	16.9%
RBWM	Male	2013	55.6%	91.5%	92.7%	80.2%	19.8%
		2036	55.6%	91.6%	93.2%	85.0%	26.4%
	Female	2013	57.2%	79.6%	78.6%	66.8%	11.4%
		2036	57.2%	82.7%	81.5%	77.0%	16.4%
Wokingham	Male	2013	62.0%	92.4%	93.8%	81.8%	17.6%
		2036	62.0%	92.5%	94.3%	86.7%	23.8%
	Female	2013	60.7%	80.6%	81.3%	68.7%	10.1%
		2036	60.7%	83.7%	84.3%	79.0%	15.1%

Source: GL Hearn

5.173 Figure 65 shows how the overall employment rate in each local authority is expected to change over time, a past trend analysis from the Annual Population Survey (APS) and Labour Force Survey (LFS) back to 1994 has also been shown although some caution should be used in comparing figures given that the sources are different. The employment rate is based on the number of people in employment divided by the population aged 16 and over. The rate is therefore affected by changes in age structure (including for instance a growing older population).

5.174 The analysis shows in most areas that there is expected to be a small decrease in this employment rate over time; this is due to the ageing population with more people expected to be in age bands where employment rates are lower. The main exception is Slough where the rate is not expected to change. The past trend analysis shows a picture of highly fluctuating rates with no particular trend (this will mainly be due to sampling issues and hence data accuracy). The rates shown in Figure 65 are derived from the projected population growth and age/sex structure changes in the 2012-based SNPP; it should be noted that these change very slightly with different assumptions about population growth.

Figure 65: Past and projected change in employment rate (1994-2036)



Source: Derived from Annual Population Survey, Labour Force Survey, Various Economic forecasts (Experian, Cambridge Econometrics and Oxford Economics) and demographic projections

5.175 To estimate what level of housing provision might be required to meet the economic forecasts, adjustments are made to levels of migration within the demographic model such that the growth in the resident workforce equals the change required to match the number of jobs (as shown in Table 61).

5.176 The housing need outputs from the GL Hearn and Wessex Economic projections are set out in Table 63 and show that for the resident workforce to increase in line with the forecast number of jobs would require around 4,166 homes per annum to be delivered across the study area. This figure is very slightly higher than that derived through demographic modelling linked to the 2012-

based SNPP (a need for 4,164 homes per annum). The outputs are again based on household formation rates linked to the 2012-based CLG household projections.

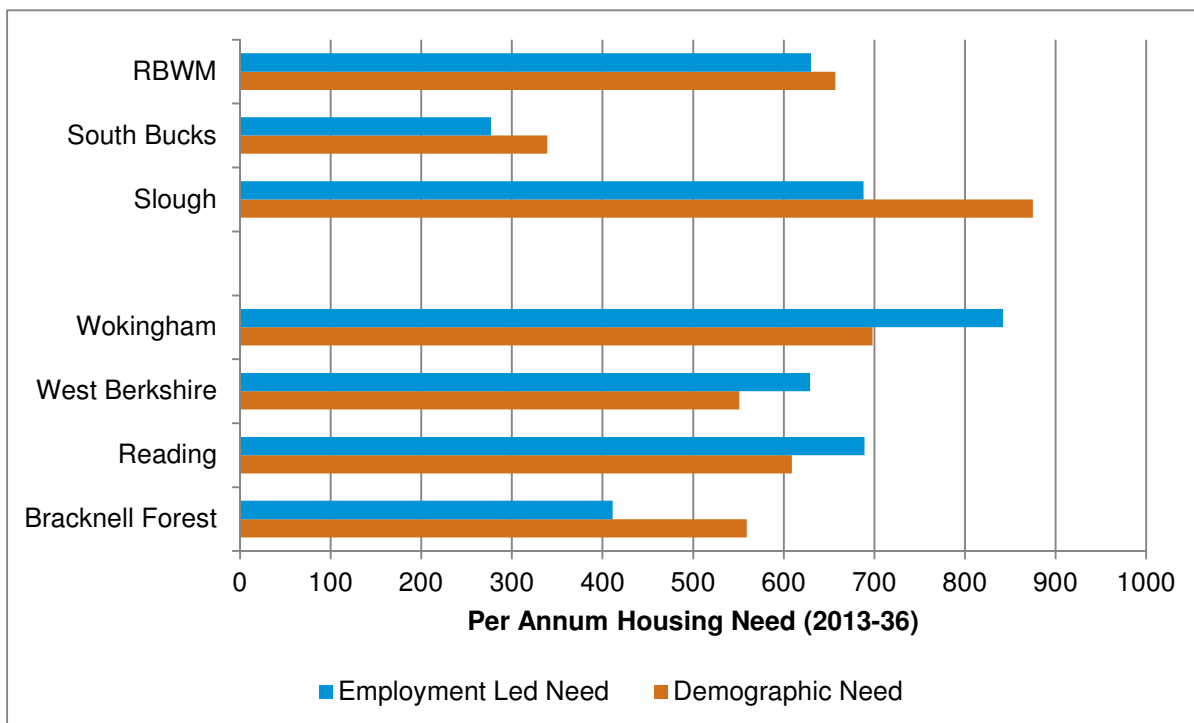
Table 63: Housing Need to meet job growth forecasts (with 2012-based CLG headship rates)

	Households 2013	Households 2036	Change in households	Households (per annum)	Homes (per annum)
Bracknell Forest	47,481	56,704	9,223	401	411
Reading	64,045	79,155	15,110	657	689
West Berkshire	63,219	77,172	13,953	607	629
Wokingham	61,701	80,408	18,707	813	842
Western Berkshire HMA	236,445	293,438	56,993	2,478	2,572
Slough	52,300	67,752	15,452	672	688
South Bucks	27,015	33,106	6,091	265	277
RBWM	59,434	73,307	13,873	603	630
Eastern Berks & South Bucks HMA	138,748	174,165	35,416	1,540	1,595
Study area	375,194	467,603	92,409	4,018	4,166

Source: Derived from GL Hearn, JGC and Wessex Economics Modelling, 2015 (numbers may not sum due to rounding)

- 5.177 As shown in Figure 66 the demographic need in the Eastern Berks & South Bucks HMA exceeds the economic-led need. There is therefore no requirement to uplift the overall need on this basis in this area.

Figure 66: Demographic Vs Economic-led Projections for Housing Need



Source: ONS (SNPP) Derived from GL Hearn, JGC and Wessex Economics Modelling, 2015

5.178 However, a different pattern occurs in the Western Berkshire HMA where all but Bracknell Forest have a higher economic led housing need than demographic led housing need. We have therefore taken a slightly different approach in the Western Berkshire HMA where the demographic growth is unlikely to fully meet the labour force requirements of the local economy. However, by using the demographic need in Bracknell Forest and the economic led need in the other local authorities this results in need across the HMA (2,719 homes per annum) which exceeds both the economic (2,571 homes per annum) and demographic need (2,417 homes per annum).

5.179 Paragraph 18 of the PPG (Ref: 2a-018-20140306) sets out that the balance between growth in jobs and labour supply be considered at a HMA level. In Western Berkshire the demographic need in Bracknell Forest is 148 homes per annum higher than the economic need. This oversupply can be offset against the economic led need in those areas where an uplift is required i.e. Reading, West Berkshire and Wokingham. The economic need in these areas is 2,160 homes per annum with 32% of the growth in Reading, 29% in West Berkshire and 39% of the need in Wokingham. It is on this distribution basis that the over-supply in Bracknell Forest can be offset. As a result, the OAN based on the economic housing need in these areas are revised to:

- Reading – 642 homes per annum (-47 homes per annum);
- West Berkshire – 586 homes per annum (-43 homes per annum); and
- Wokingham – 784 homes per annum (-58 homes per annum);

- 5.180 The re-balancing in these areas also reflects the close relationship Bracknell Forest has with Wokingham (largest reduction). In contrast West Berkshire, which is most detached from Bracknell Forest is reduced the least.
- 5.181 Through this re-distribution the overall housing need can be reduced to 2,571 homes per annum which will still meet the economic led and demographic need in the HMA.
- 5.182 To conclude we take forward to the OAN the adjusted economic need in the local authorities within the Western Berks HMA. For the Eastern Berks and South Bucks HMA the housing need from the SNPP (adjusted to reflect 2013 MYE) is taken forward. The OAN to this point is therefore:
- Bracknell Forest– 559 homes per annum;
 - Reading-642 homes per annum;
 - West Berkshire– 586 homes per annum;
 - Wokingham– 784 homes per annum;
 - Slough - 875 homes per annum;
 - South Bucks - 339 homes per annum; and
 - RBWM - 657 homes per annum.

Job-led Projections: Implications

- The GLH and Wessex Economic Forecasts indicate that employment in the study area can be expected to increase by c. 3,756 jobs per annum over the 2013-36 period. This is forecast growth of 0.6% per annum though there is some variation across the local authorities.
- The analysis herein indicates that if modelled on a policy-off basis, whereby the current commuting ratio is held constant, this would require provision of 4,166 homes per annum. This level of housing need is above that derived from the demographic-led projections across the study area (before the London adjustment is made).
- However on a HMA level the economic need is less than the demographic need in the Eastern Berks and South Bucks HMA. As such there is no justification for an uplift in that particular HMA
- The analysis indicates that there would be a need to adjust upwards the housing need (from the demographic-led projections) to take account of economic factors in the Western Berkshire HMA. To reflect this we have therefore adjusted above the demographic need in Reading, West Berkshire and Wokingham.