



**GL Hearn**

Part of Capita Real Estate

# Defining the HMA and FEMA

**Greater Brighton and Coastal  
West Sussex Strategic  
Planning Board**

February 2017

## **Prepared by**

GL Hearn

280 High Holborn  
London WC1V 7EE

T +44 (0)20 7851 4900  
[glhearn.com](http://glhearn.com)

## Contents

<b>Section</b>	<b>Page</b>
<b>1 INTRODUCTION</b>	<b>6</b>
<b>2 REVIEW OF PREVIOUS RESEARCH</b>	<b>16</b>
<b>3 DEFINING THE HOUSING MARKET AREAS</b>	<b>26</b>
<b>4 DEFINING FUNCTIONAL ECONOMIC MARKET AREAS</b>	<b>63</b>
<b>5 FUTURE DEVELOPMENT</b>	<b>78</b>
<b>6 CONCLUSIONS</b>	<b>82</b>
<b>APPENDIX SUMMARY PAGES</b>	<b>92</b>
<b>LIST OF FIGURES</b>	
<b>FIGURE 1: STUDY AREA</b>	<b>6</b>
<b>FIGURE 2: CURDS-DEFINED LOCAL HOUSING MARKET AREAS</b>	<b>17</b>
<b>FIGURE 3: CURDS-DEFINED STRATEGIC HOUSING MARKET AREAS- GOLD STANDARD</b>	<b>19</b>
<b>FIGURE 4: CURDS-DEFINED STRATEGIC HOUSING MARKET AREAS-SILVER STANDARD</b>	<b>20</b>
<b>FIGURE 5: HOUSING MARKET AREAS IN SOUTH EAST</b>	<b>21</b>
<b>FIGURE 6: DEFINED HOUSING MARKET AREAS AND AREAS OF OVERLAP</b>	<b>23</b>
<b>FIGURE 7: BROAD RENTAL MARKET AREAS</b>	<b>24</b>
<b>FIGURE 8: UNDERSTANDING HOUSING DEMAND DRIVERS</b>	<b>26</b>
<b>FIGURE 9: MEDIAN HOUSE PRICES BY DWELLING TYPE, 2016</b>	<b>28</b>
<b>FIGURE 10: LOWER QUARTILE PROPERTY PRICES BY TYPE</b>	<b>29</b>
<b>FIGURE 11: LOWER QUARTILE PRICES DISTRIBUTION, 2016</b>	<b>30</b>
<b>FIGURE 12: MEDIAN PRICES OF ALL PROPERTIES, 2016</b>	<b>31</b>
<b>FIGURE 13: DETACHED HOUSE PRICES, 2016</b>	<b>32</b>

<b>FIGURE 14:</b>	<b>SEMI-DETACHED HOUSE PRICES, 2016</b>	<b>33</b>
<b>FIGURE 15:</b>	<b>TERRACED HOUSE PRICES, 2016</b>	<b>34</b>
<b>FIGURE 16:</b>	<b>FLAT PRICES, 2016</b>	<b>35</b>
<b>FIGURE 17:</b>	<b>LOCAL AUTHORITY LEVEL MIGRATION FLOWS, 2011</b>	<b>40</b>
<b>FIGURE 18:</b>	<b>LOCAL MIGRATION FLOWS (2011)</b>	<b>41</b>
<b>FIGURE 19:</b>	<b>TRAVEL TO WORK AREAS (2011)</b>	<b>45</b>
<b>FIGURE 20:</b>	<b>ARUN MOST POPULAR PLACE WORKPLACES FOR RESIDENTS (2011)</b>	<b>48</b>
<b>FIGURE 21:</b>	<b>WORTHING AND ADUR MOST POPULAR WORKPLACE</b>	<b>49</b>
<b>FIGURE 22:</b>	<b>LEWES MOST POPULAR WORKPLACES</b>	<b>51</b>
<b>FIGURE 23:</b>	<b>HORSHAM AND MID SUSSEX MOST POPULAR WORKPLACES</b>	<b>52</b>
<b>FIGURE 24:</b>	<b>CHICHESTER MOST POPULAR WORKPLACES</b>	<b>53</b>
<b>FIGURE 25:</b>	<b>COASTAL WEST SUSSEX AND GREATER BRIGHTON HMA BOUNDARIES, 2016</b>	<b>61</b>
<b>FIGURE 26:</b>	<b>LOCAL ENTERPRISE PARTNERSHIP (LEP) AREAS</b>	<b>64</b>
<b>FIGURE 27:</b>	<b>RETAIL CENTRES IN COASTAL WEST SUSSEX AND GREATER BRIGHTON (EXPENDITURE IN £MILLIONS)</b>	<b>66</b>
<b>FIGURE 28:</b>	<b>NO. OF EMPLOYEES IN DISTRIBUTION SECTOR BY MSOA (2015)</b>	<b>67</b>
<b>FIGURE 29:</b>	<b>NO. OF EMPLOYEES IN MANUFACTURING SECTOR BY MSOA (2015)</b>	<b>68</b>
<b>FIGURE 30:</b>	<b>NO. OF EMPLOYEES IN OFFICE RELATED INDUSTRIES BY MSOA (2015)</b>	<b>69</b>
<b>FIGURE 31:</b>	<b>OFFICE FLOORSPACE IN 1000S M<sup>2</sup> (2000-2012)</b>	<b>69</b>
<b>FIGURE 32:</b>	<b>NO. OF EMPLOYEES IN RETAIL SECTOR BY MSOA (2015)</b>	<b>70</b>
<b>FIGURE 33:</b>	<b>LEISURE FACILITIES</b>	<b>71</b>
<b>FIGURE 34:</b>	<b>SOUTHERN RAILWAY NETWORK MAP</b>	<b>72</b>
<b>FIGURE 35:</b>	<b>COASTAL WEST SUSSEX AND GREATER BRIGHTON TRANSPORT NETWORK</b>	<b>73</b>
<b>FIGURE 36:</b>	<b>FEMA BOUNDARIES</b>	<b>77</b>
<b>FIGURE 37:</b>	<b>COASTAL WEST SUSSEX AND GREATER BRIGHTON HMA BOUNDARIES, 201685</b>	
<b>FIGURE 38:</b>	<b>FEMA BOUNDARIES</b>	<b>87</b>

## LIST OF TABLES

<b>TABLE 1:</b>	<b>SELF-CONTAINMENT RATES BY LOCAL AUTHORITY, 2011</b>	<b>36</b>
<b>TABLE 2:</b>	<b>SIGNIFICANT MIGRATION FLOWS, 2011-2014</b>	<b>37</b>
<b>TABLE 3:</b>	<b>ANALYSIS OF KEY MIGRATION FLOWS TO STUDY AREA OF OVER 250 PERSONS, 2011</b>	<b>38</b>
<b>TABLE 4:</b>	<b>AVERAGE GROSS MIGRATION FLOWS PER ANNUM (OVER 2.0 PER 1,000) (2011)</b>	<b>39</b>
<b>TABLE 5:</b>	<b>SELF-CONTAINMENT RATES, 2011</b>	<b>42</b>
<b>TABLE 6:</b>	<b>COMMUTING SELF-CONTAINMENT (2011)</b>	<b>43</b>
<b>TABLE 7:</b>	<b>WORKPLACE POPULATION OF LOCAL AUTHORITIES, 2011</b>	<b>46</b>
<b>TABLE 8:</b>	<b>COMMUTING FLOWS TO BRIGHTON &amp; HOVE , 2011</b>	<b>47</b>
<b>TABLE 9:</b>	<b>INTERNAL COMMUTING MOVEMENTS BY MODE OF TRANSPORT (2011)</b>	<b>54</b>
<b>TABLE 10:</b>	<b>COMMUTING IN TO ADUR BY MODE OF TRANSPORT (2011)</b>	<b>55</b>
<b>TABLE 11:</b>	<b>COMMUTING IN TO ARUN BY MODE OF TRANSPORT (2011)</b>	<b>56</b>
<b>TABLE 12:</b>	<b>COMMUTING IN TO BRIGHTON AND HOVE BY MODE OF TRANSPORT (2011)</b>	<b>56</b>
<b>TABLE 13:</b>	<b>COMMUTING IN TO CHICHESTER BY MODE OF TRANSPORT (2011)</b>	<b>57</b>
<b>TABLE 14:</b>	<b>COMMUTING IN TO CRAWLEY BY MODE OF TRANSPORT (2011)</b>	<b>57</b>
<b>TABLE 15:</b>	<b>COMMUTING IN TO HORSHAM BY MODE OF TRANSPORT (2011)</b>	<b>58</b>
<b>TABLE 16:</b>	<b>COMMUTING IN TO LEWES BY MODE OF TRANSPORT (2011)</b>	<b>59</b>
<b>TABLE 17:</b>	<b>COMMUTING IN TO MID SUSSEX BY MODE OF TRANSPORT (2011)</b>	<b>59</b>
<b>TABLE 18:</b>	<b>COMMUTING IN TO WORTHING BY MODE OF TRANSPORT (2011)</b>	<b>60</b>
<b>TABLE 19:</b>	<b>HMA SELF-CONTAINMENT RATES EXCLUDING LONG DISTANCES</b>	<b>62</b>
<b>TABLE 20:</b>	<b>GVA BY NUTS 3 REGION (2013)</b>	<b>65</b>
<b>TABLE 21:</b>	<b>BEST FIT OF LOCAL AUTHORITIES TO FUNCTIONAL GEOGRAPHIES</b>	<b>88</b>
<b>TABLE 22:</b>	<b>LIVERPOOL CITY REGION GOVERNANCE ARRANGEMENTS</b>	<b>90</b>

## 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 is has been signed by the Originators and approved by a Business or Associate Director.

DATE

February 2017

ORIGINATORS

Yordanka Yordanova  
Graduate Planner

APPROVED

Paul McColgan  
Associate Director



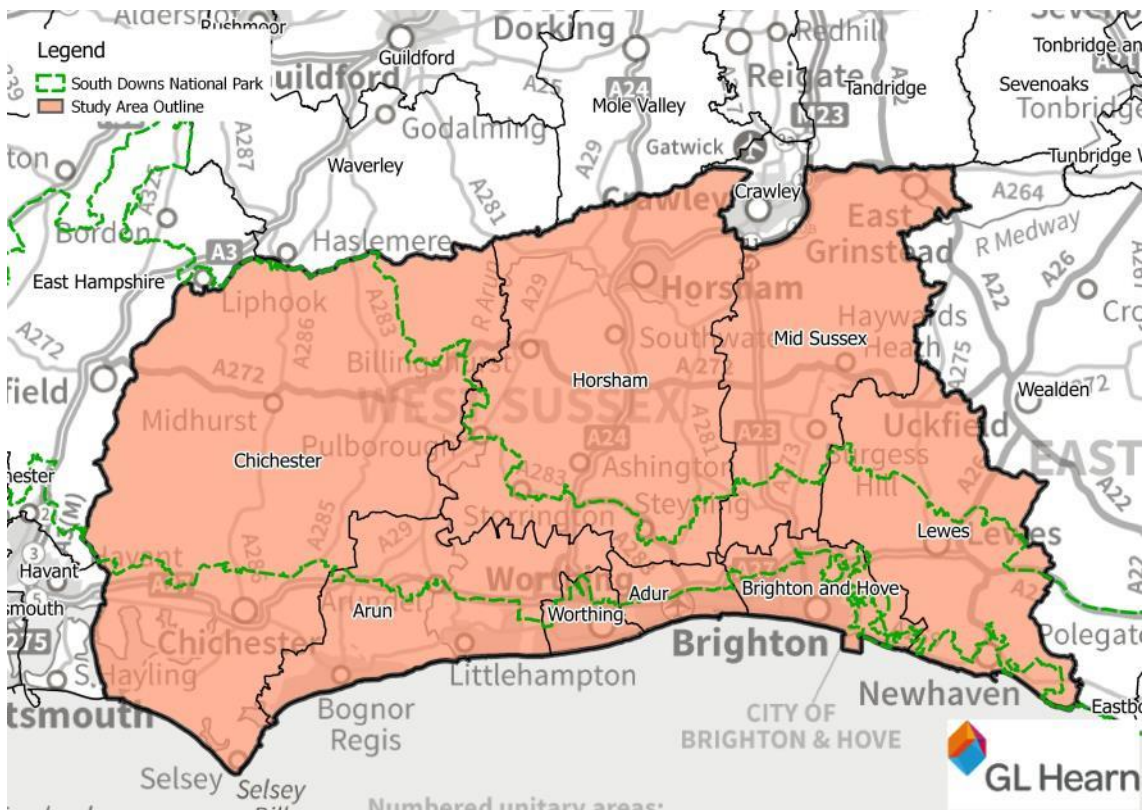
### Limitations

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.

## 1 INTRODUCTION

- 1.1 GL Hearn has been instructed by the Coastal West Sussex and Greater Brighton (CWS & GB) Strategic Planning Board (SPB) to undertake a study which defines the housing market area(s) and functional economic market area(s) across the Coastal West Sussex and Greater Brighton area.
- 1.2 The Coastal West Sussex and Greater Brighton (CWS & GB) Strategic Planning Board (SPB) which comprises lead councillors from Adur, Arun, Chichester, Worthing, Brighton and Hove, Lewes, Mid Sussex, Horsham, West Sussex County Council and the South Downs National Park.

**Figure 1: Study Area**



- 1.3 The analysis of the functional geography of the area will enable a clearer definition of the boundaries of the area that should be covered by the Local Strategic Statement update. The study is also intended to provide the authorities with a sound basis for undertaking future housing and economic need assessments.
- 1.4 The South Downs National Park covers a wide area across three counties as shown as Figure 1 above. It is the local planning authority for areas within the Park boundary. However, for the purposes of this study we have only sought to define the HMA and FEMA boundaries for the parts of the SDNP within West Sussex, Brighton and Hove and Lewes.

## National Policy and Guidance

### National Planning Policy Framework

- 1.5 The National Planning Policy Framework (NPPF) sets out that local planning authorities (LPAs) should have a clear understanding of housing needs in their area, and that they should prepare a Strategic Housing Market Assessment to assess their full housing needs, working with neighbouring authorities where housing market areas cross administrative boundaries<sup>1</sup>.
- 1.6 In Paragraph 47 the NPPF outlines that to significantly boost the supply of housing, local planning authorities should use their evidence base to ensure that their local plan meets the full, objectively-assessed need for market and affordable housing in the housing market area, as far is consistent with the policies set out in the Framework.
- 1.7 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.
- 1.8 The NPPF sets out the Government's ambition to ensure that the planning system does everything it can to support sustainable economic growth<sup>2</sup>. It requires local authorities in their plans to set out a clear economic vision and strategy which positively and proactively encourages sustainable economic growth; identifies strategic sites; supports existing business sectors and emerging sectors likely to locate in an area; plans for the location, promotion and expansion of clusters or networks of knowledge-driven, creative or high-tech industries; and supports economic regeneration<sup>3</sup>.

### Planning Practice Guidance

- 1.9 Planning Practice Guidance (PPG) on Housing and Economic Development Needs Assessments deals with how geographies might be defined. This provides a definition of a Housing Market Area (HMA) and Functional Economic Market Area (FEMA) and provides guidance on how these should be defined. The PPG 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 cooperate".*

---

<sup>1</sup> CLG (2012) National Planning Policy Framework, Paragraph 159

<sup>2</sup> CLG (2012) National Planning Policy Framework, Paragraph 19

<sup>3</sup> CLG (2012) National Planning Policy Framework, Paragraph 21

1.10 In addition, the PPG sets out that housing market areas can broadly be defined using three different sources of information:

- House prices and rates of change in house prices - providing a market-based definition based on areas with similar house price characteristics;
- Household migration and search patterns - considering the extent to which people move house within an area, with a housing market area considered to be that in which typically 70% or more of local moves are contained within (excluding long-distance moves);
- Contextual data- such as travel to work areas, retail and school catchments – with travel to work areas providing information regarding commuting.

1.11 The three strands of information look at different aspects of household behaviour, and there is no right or wrong answer regarding what weight should be applied to different factors. What the PPG says is 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.*”

1.12 The FEMA is considered to reflect the geography of commercial property markets, the PPG outlining that:

*The geography of commercial property markets should be thought of in terms of the requirements of the market in terms of the location of premises, and the spatial factors used in analysing demand and supply – often referred to as the functional economic market area. Since patterns of economic activity vary from place to place, there is no standard approach to defining a functional economic market area.*

1.13 However the PPG goes on to list potential factors which should be considered in determining what the relevant FEMA is. These are:

- Extent of any Local Enterprise Partnership within the area;
- Travel To Work Areas;
- Housing Market Area;
- Flow of goods, services and information within the local economy;
- Service market for consumers;
- Administrative area;
- Catchment areas of facilities providing cultural and social well-being; and
- Transport network.

1.14 The PPG outlines that in some cases housing market areas and functional economic market areas may well be the same.



## Practical Issues

### Housing Market Areas

- 1.15 The PPG largely reiterates previous advice on defining HMAs set out within the CLG's 2007 Advice Note 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 or FEMA should be defined and that the approach should, in effect, reflect local market characteristics and circumstances.
- 1.16 There are some further practical issues which are dealt with in the Planning Advisory Service (PAS) Technical Advice Note on *Objectively Assessed Need and Housing Targets*.<sup>4</sup> This outlines that in practice, the main indicators used to define HMAs are migration and commuting flows, but 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. This of course would produce nearly as many HMAs as local authorities, with huge overlaps.”*
- 1.17 The PAS Advice 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 research led by the Centre for Urban and Regional Development Studies (CURDS) at Newcastle University. The research was published by Government in November 2010<sup>5</sup> and defined a consistent set of HMAs across England based on migration and commuting data from the 2001 Census.
- 1.18 PAS 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 – concluding that more recent data ‘should always trump’ the national research. GL Hearn agrees with PAS’ conclusions in this respect.
- 1.19 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. The PPG is clear that the starting point is the official population and household projections.
- 1.20 These are published at a national level and for local authorities. They are not published below local authority level, nor is the data available (regarding migration and trends in household formation

---

<sup>4</sup> Peter Brett Associates (PBA) for PAS (July 2015) *Objectively Assessed Need and Housing Targets*

<sup>5</sup> C Jones, M Coombe and C Wong for CLG (Nov 2010) *Geography of Housing Markets, Final Report*

which are key drivers within the projections) below local authority level. On this basis we consider that Housing Market Areas should ideally be based on the 'best fit' to local authority boundaries however housing market areas do in reality overlap and have cross-boundary influences and interactions.

1.21 The PAS Guidance 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. There may also be 'cliff edge' effects at the HMA boundary, for example development allowed on one side of a road but not the other."*

1.22 This is not always possible and it may be the case that some areas, particularly those covering an expansive area fall into more than one HMA. In such circumstance the PAS Advice note provides an "untidy" solution, suggesting that the whole of a district can be included in housing needs assessments for more than one HMA and later when setting targets to bear in mind that both HMAs competing claims on the district's land supply.

### **Functional Economic Market Areas**

1.23 The CLG's 2010 publication *Functional Economic Market Areas – An Economic Note* outlines that a FEMA is the area within which the local economy and its key markets operate, suggesting that this is likely to correspond to sub-regions or City regions.

1.24 The note outlined that the most widely accepted approach to identifying FEMAs is by reference to Travel to Work Areas (TTWAs), the most commonly used definition for which is areas where at least 75% of the economically active population live and work. The Note outlines that TTWAs are often treated as the default definition of FEMAs. It also emphasises migration data, ultimately concluding that:

*"There is an argument for analysing Census commuting or migration data, as the most complete and reliable flow data, and supplementing this with data from other key economic markets."*

1.25 A primacy is therefore in effect given to this indicator. This in part reflects data quality issues, with the Note outlining that supply chains are difficult to map; and whilst this can be partly addressed through identification of sector clusters, 'it is questionable whether the information has much value, since it is not based on data about real links.'

1.26 It emphasises that in respect of service markets for consumers, travel patterns to higher order service centres which have a wider catchment area are of most relevance. In respect of transport networks, the Note identifies that in practice, the role of transport links is reflected in commuting flows and TTWA definitions.

- 1.27 The PAS Technical Advice Note outlines that it is helpful if housing market and functional economic market areas are coterminous, suggesting that both are heavily influenced by commuting patterns and as such a high level of overlap should be expected; and that there are benefits in terms of convenience for policy making in doing so.

### Neighbouring Authorities

- 1.28 This section of the report sets out the housing and economic market assessments that have recently been undertaken in neighbouring areas surrounding the study area. This can be used to illustrate where there may be pressure from surrounding authorities to accommodate additional housing. As set out below a number of neighbouring authorities are likely to struggle to meet their own housing needs.

#### **Northern West Sussex**

- 1.29 Although only partially part of the study area for this work, Horsham and Mid Sussex have historically undertaken housing evidence based work with Crawley as part of the Northern West Sussex HMA. This reflected the previous definition set out in the GVA work of 2009.
- 1.30 This work was last revisited in 2014 in the lead up to the adoption of Crawley Local Plan although that update focused on affordable housing need, with previous housing figures from 2012. The Crawley Local Plan (adopted in December 2015) sets out that there will be an unmet need of around 5,000 dwellings. The identified solution to this unmet need is to work with neighbouring authorities as well as consideration of potential urban extension to Crawley extending outside the Borough boundary in Horsham and Mid Sussex.

#### **South Hampshire**

- 1.31 The Partnership for Urban South Hampshire (PUSH) is a long standing working arrangement of the ten local authorities located in South Hampshire. It was recently expanded to include the Isle of Wight. The South Hampshire SHMA (January 2014) identified two Housing Market Areas within the wider PUSH area; Southampton and Portsmouth (with the Isle of Wight subsequently identified as a separate housing market).
- 1.32 For the purposes of the study area only the Portsmouth HMA is relevant. This was defined as including Portsmouth, Gosport, and parts of Fareham and Winchester, together with Havant and the southern parts of East Hampshire outside of the South Downs National Park (SDNP). The remaining parts of East Hampshire were identified as forming part of the Central Hampshire HMA which also included parts of Winchester, Test Valley and Basingstoke and Deane.
- 1.33 In June 2016, PUSH published a Spatial Position Statement, which sets out the overall need for and distribution of economic and housing development in South Hampshire over the period to 2034.

The Position Statement establishes and distributes OAN figures across the different local authority areas based on the evidence from the SHMA and the Local Enterprise Partnership (LEP)'s Solent Economic Plan and economic forecasts.

- 1.34 In response to the updated OAN figures, Havant BC has started work on a Local Plan review which is intended to provide an updated strategy and allocations covering the period to 2036. As the first stage of this work, the Council has undertaken consultation on a Local Plan Housing Statement. This was adopted informally by the Council in December 2016, and will feed into further work on the Local Plan review. The Housing Statement identifies potential to accommodate 381 dpa against Havant's identified OAN requirement of 450 dpa (although several potential additional sites are to be assessed further through the Local Plan review). This leaves a potential housing shortfall of 1,733 dwellings, which the Housing Statement indicates will need to be addressed by working with other PUSH local authorities in the HMA, together with Chichester District Council.
- 1.35 The SNDP authority is however seeking to meet affordable housing need for the National Park area. The remainder of the OAN may have to be accommodated within those parts of the identified HMA outside of the National Park included parts of this study area.

#### **West Surrey SHMA**

- 1.36 Guildford, Waverley and Woking local authorities have worked together on strategic housing matters since early 2014 when they agreed to undertake a joint SHMA. This report was published in December 2015 although there have been targeted updates since. The SHMA report identified a housing need of around 1,730 dpa. All three local authorities have been planning to meet this need through various Local Plans.
- 1.37 Guildford and Waverley are in the process of developing their respective local plans with the intention of meeting their part of the need in full. However there is an unmet need from Woking. Given Woking's distance from the study area coupled with the fact that the nearest parts to the study area to Woking are mainly within the National Park it is unlikely that Woking will seek to deliver their unmet need in West Sussex.

#### **Reigate and Banstead**

- 1.38 The 2008 East Surrey SHMA identified a HMA covering Reigate and Banstead, Tandridge, Epsom, Elmbridge and Mole Valley. However in subsequent studies this partnership has broken up into different studies.
- 1.39 Mole Valley, Elmbridge and Epsom and Ewell have joined with the Royal Borough of Kingston on Thames. While Tandridge and Reigate and Banstead have undertaken their own HMA assessment.

- 1.40 Reigate and Banstead's most recent housing needs assessment was undertaken by David Couttie Associates in February 2012, making it the oldest evidence based of any of the neighbouring authorities. This document identified a need for 850 dpa based on demographics alone. However the adopted Core Strategy is seeking to deliver 460 dpa, reflecting the South East Plan.
- 1.41 The Council are currently planning Stage 2 of their Local Plan, however it is unlikely that the Borough would meet any NPPF compliant assessment of need based on their adopted figure. Therefore some issues of unmet need may arise. As Reigate and Banstead is part of the Gatwick Diamond area along with Horsham and Mid Sussex, this may impact upon the study area.

#### **North Surrey and Kingston SHMA**

- 1.42 Mole Valley, Elmbridge and Epsom and Ewell have subsequently published a separate SHMA undertaken by Cobweb Consulting which covers their districts as well as the Royal Borough of Kingston on Thames.
- 1.43 The SHMA was published in 2016 and identified an overall annual need across the HMA for 2,000 dpa with Mole Valley accounting for 391 dpa of the total. This figure will form the basis for preparation of the new Mole Valley Local Plan. The Council however have stressed that "this housing need is not a target to be transposed into the Local Plan. Rather, it shows how many new homes would be needed if there were no planning restrictions on development in Mole Valley. It is the starting point for the debate about the number of new homes the Local Plan indicates should be built in Mole Valley over the next fifteen years, taking account of the Green Belt, Area of Outstanding Natural Beauty and other policies and infrastructure which constrain new development within the District."
- 1.44 Mole Valley's adopted Core Strategy sets out a housing target for 3,760 dwellings for the 2006 to 2026 period. This equates to 188 dpa. Therefore the most recent evidence indicates a housing requirement over double the previous Local Plan target.

#### **Tandridge**

- 1.45 Although it had previously been included in the East Surrey SHMA Turley Associates produced a paper in 2015 reviewing the HMA linkages for Tandridge. The evidence concluded that Tandridge had important housing market relationships with Croydon, Reigate and Banstead and Mid Sussex in particular. Although weaker relationships also existed elsewhere.
- 1.46 However, it recommended that Tandridge required its own SHMA as neighbouring authorities were at different stages of production and the timeframes required to produce a SHMA meant it was necessary for "Tandridge District Council to carry out a stand-alone SHMA which draws on evidence from those authorities with the greatest functional relationships."

1.47 The Tandridge Strategic Housing Market Assessment 2015: Tandridge's Objectively Assessed Housing Need Technical Paper produced by NMSS identified an OAN of 470 dpa for the district. The Council are currently undertaking a Local Plan revision but the emerging housing strategies have not yet been published.

1.48 However the housing needs evidence does result in an OAN significantly higher than the current adopted Core Strategy provision of 125 dpa which is based on the South East Plan target for the district. This threefold increase may well result in unmet need within the Borough being sought elsewhere.

### **Wealden**

1.49 GVA produced a draft SHMA for Wealden in late 2015. The study concluded that Wealden's "strongest and most consistent" relationships and thus the wider housing market covered the areas of:

- Wealden;
- Eastbourne;
- Tunbridge Wells;
- Rother;
- Lewes; and
- Mid Sussex.

1.50 The adopted Core Strategy Local Plan for Wealden identified an annual housing requirement for around 450 dpa. The Draft GVA study identified a need for up to 735 dwellings per annum therefore there is likely to be some unmet need if capacity cannot be found.

1.51 Although it should be noted that the findings of the GVA SHMA study are not yet ratified and could change. However there remains some potential that some unmet need from Wealden may need to be delivered outside of the district including potentially within Lewes and Mid Sussex.

### **South Downs National Park**

1.52 The majority of the South Downs National Park (SDNP) falls within the study area, but the Park also extends outside the area to the west into Hampshire and east further into East Sussex. The South Downs National Park SHMA published in September 2015 identified four separate HMAs covering parts of the Park. Of these, the Coastal Sussex and Northern West Sussex HMAs included the parts of the SDNP within the study area, with the Central Hampshire HMA to the west and the Eastbourne HMA to the east of the study area. National planning policy recognises that the statutory purposes of national parks may restrict development, where appropriate if it fails to conserve landscape and scenic beauty. Thus there is not an expectation that the SDNPA will seek to meet its OAN in full, although national policy does place emphasis on meeting affordable housing

needs within national parks. However, since OAN requirements are based on data published for local authority areas, unmet housing and economic needs within the National Park are not identified as a separate figure, but will form part of the needs figures for each of the constituent local authorities.

## Report Structure

- 1.53 The remainder of the report presents our analysis and findings regarding the HMA and FEMA geographies operating across the Coastal West Sussex and Greater Brighton Area.
- 1.54 The remainder of the report is structured as follows:
- Review of previous research;
  - Analysing house price data;
  - Analysing migration patterns;
  - Analysing commuting flows;
  - Defining the Functional Economic Market Area;
  - Conclusions.

## 2 REVIEW OF PREVIOUS RESEARCH

2.1 This section of the report reviews existing research which has sought to consider the definition of HMAs and FEMAs in the Coastal West Sussex and Greater Brighton Area and beyond.

### Administrative Geographies & Coastal West Sussex and Greater Brighton

2.2 Since the Strategic Planning Board (SPB) was established in October 2012, the geographical definition of the Coastal West Sussex & Greater Brighton area has evolved. Initially the SPB are included the local authorities of Chichester, Arun, Worthing, Adur, Brighton and Hove, Lewes and the South Downs National Park which is the planning authority for the National Park area.

2.3 Since then, both Mid Sussex and Horsham Councils have become members of the SPB and this wider geography is now reflected in the updated Local Strategic Statement (LSS) Published in January 2016.

### CLG/CURDS Study (2009/10)

2.4 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. The PAS Technical Advice Note recommends that this is used as a 'starting point' for considering the HMA geography.

2.5 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 is brought together to define a 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.

2.6 The two-tier structure (strategic/local) in the CLG research is useful at disaggregating strategic housing market areas which are generally for modelling of issues such as housing need; whilst the more local housing market areas are of greater relevance in considering issues relating to local market dynamics and supply-demand balance. However, the practicalities of using each must be considered depending on location, particularly in more urban areas.

2.7 The CLG research defines the market areas in two further ways. The first is a 'gold-standard' which is based on an aggregation of ward areas and therefore is more detailed than the second definition the 'silver-standard'. The 'silver-standard' definitions are comprised of local authority areas. For plan making purposes the silver-standard is perhaps a more practical basis for defining a housing

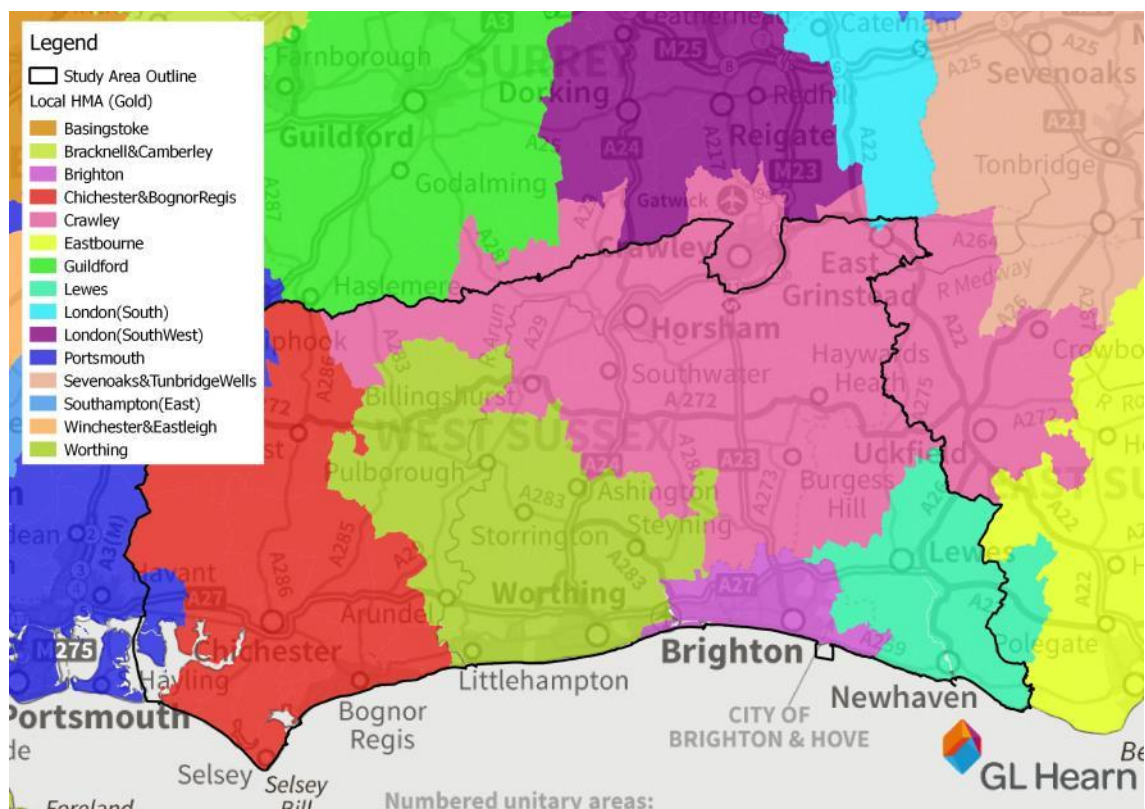


market area, as both the local and the gold standard HMAs result in HMAs boundaries that straddle local authority areas. Such a boundary is impractical, given that planning policy is mostly made at the local authority level, and that many of the key datasets are unavailable for smaller areas.

### CURDS Local HMA

2.8 As illustrated in Figure 2 below, there are six local housing market areas embedded within the Coastal West Sussex and Greater Brighton area. These range from fairly small but populous areas in Brighton LHMA to expansive largely rural Crawley LHMA.

**Figure 2: CURDS-Defined Local Housing Market Areas**



Source: CLG/CURDS, 2010

2.9 The local housing market areas include:

- Lewes- which covers the southern part of Lewes local authority (including areas up to Cooksbridge and Spithurst), some eastern parts of Wealden ( including the areas surrounding Ripe, Chalvington, Selmeaton and Alciston) and Woodingdean from Brighton and Hove authority.
- Crawley- covering the local authority of Mid Sussex, majority northern Horsham, the northern parts of Lewes local authority (including Plumpton and Newick), the western parts of Wealden (extending to Frant, Rotherfield, Crowborough and Uckfield)
- Brighton- covering Brighton and Hove local authority and a small part of the eastern coastal area of Adur)

- Worthing- covering the local authority of Worthing, the western part of Adur up to the River Adur, the eastern parts of Arun up to the River Arun, areas around Tortington, Arundel and Houghton as well as a large part of Arundel Park, the southern parts of Horsham up to Bines Green, Warminhurst, and North Heath, and the north-eastern parts of Chichester local authority up to Graffham, River Common, Ebernoe and Newpound)
- Chichester and Bognor Regis- covering the eastern part of Arun (including Bognor Regis, Ford, Madehurst) and the majority of Chichester Local Authority area.
- Portsmouth- small part of Chichester District (including Southbourne, Westbourne and areas around Rogate and Milland are included within the Portsmouth Local Housing Market Area

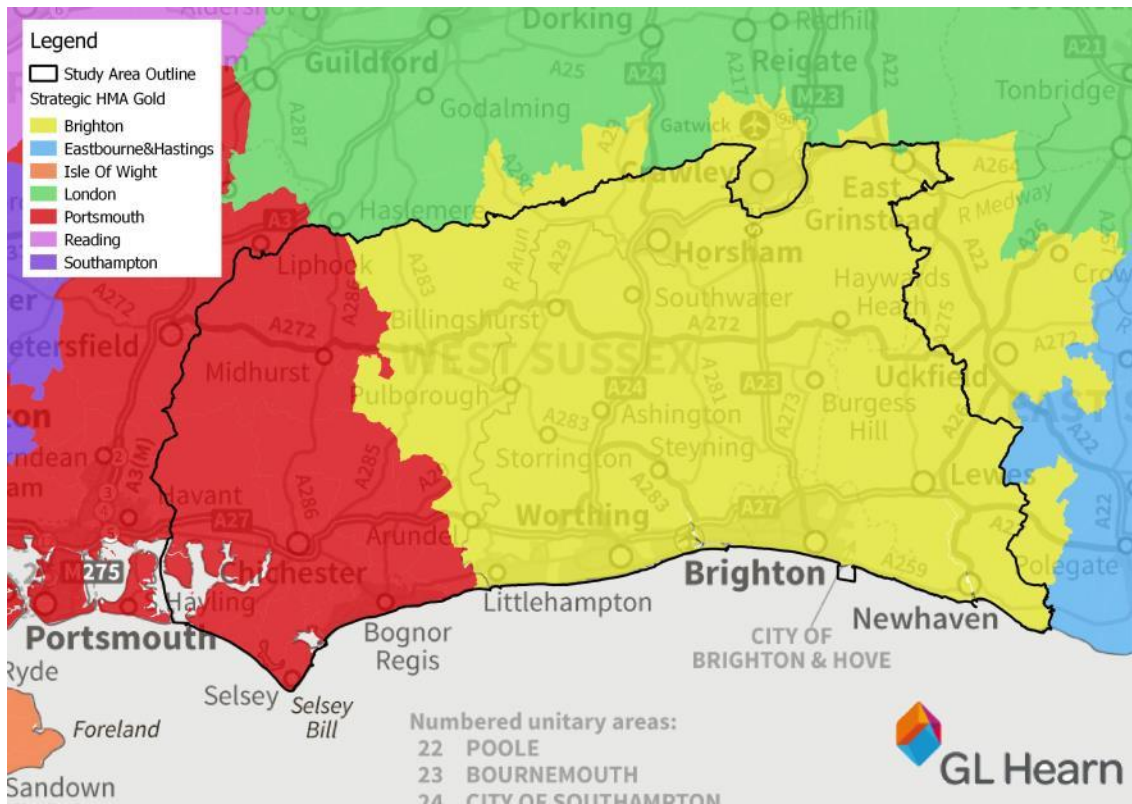
2.10 While these boundaries provide interesting reading they do not provide the typical self-containment rate expected of a HMA.

### **CURDS Strategic HMA**

2.11 As shown in Figure 3, the CURDS study defines two 'gold standard' Strategic HMAs covering the study area:

- Brighton HMA- which covers the local authorities of Lewes, Mid Sussex, Brighton and Hove, Horsham, Adur, Worthing, and also extends into the eastern parts of Chichester (including Petworth) and a large area of the eastern parts of Arun, including Littlehampton and Arundel). The Brighton HMA also includes parts of Wealden, Crawley and Waverley.
- Portsmouth HMA - which covers the western parts of Arun (including Bognor Regis) and Chichester (including Midhurst, Upwaltham, Tangmere, Chichester and Selsey). It also extends into a large part of East Hampshire, the southern part of Winchester, Havant, Fareham, Portsmouth local authorities.

**Figure 3: CURDS-Defined Strategic Housing Market Areas- Gold Standard**



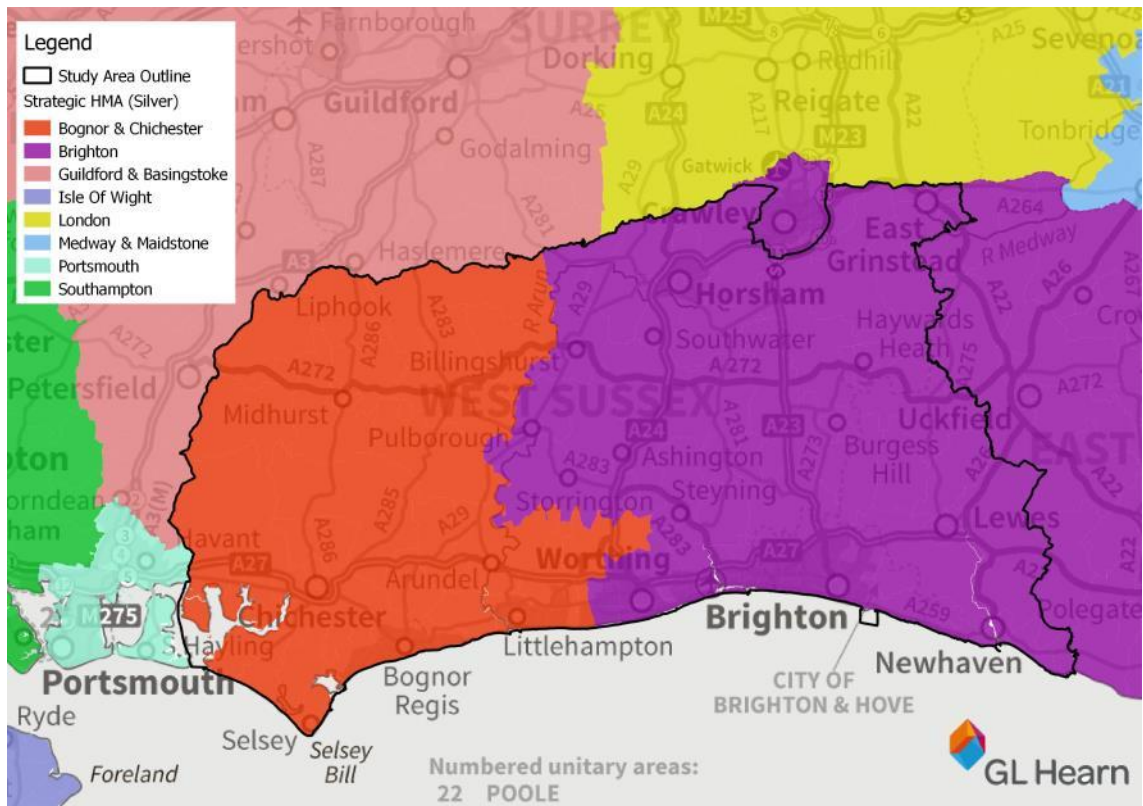
Source: CLG/CURDS, 2010

2.12 The 'silver-standard' Strategic HMAs (based on local authority boundaries) is shown in Figure 4. Again, the study area is covered by two Defined HMAs:

- Bognor and Chichester HMA- covering the local authorities of Chichester and Arun
- Brighton HMA - covering the local authorities of Horsham, Worthing, Adur, Mid Sussex, Brighton and Hove, Lewes in the study area and including Crawley, Eastbourne and Wealden outside the study area.

2.13 The Planning Advisory Service (PAS) technical advice note on Objectively Assessed Need and Housing Targets states a preference for 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.

**Figure 4: CURDS-Defined Strategic Housing Market Areas-Silver Standard**

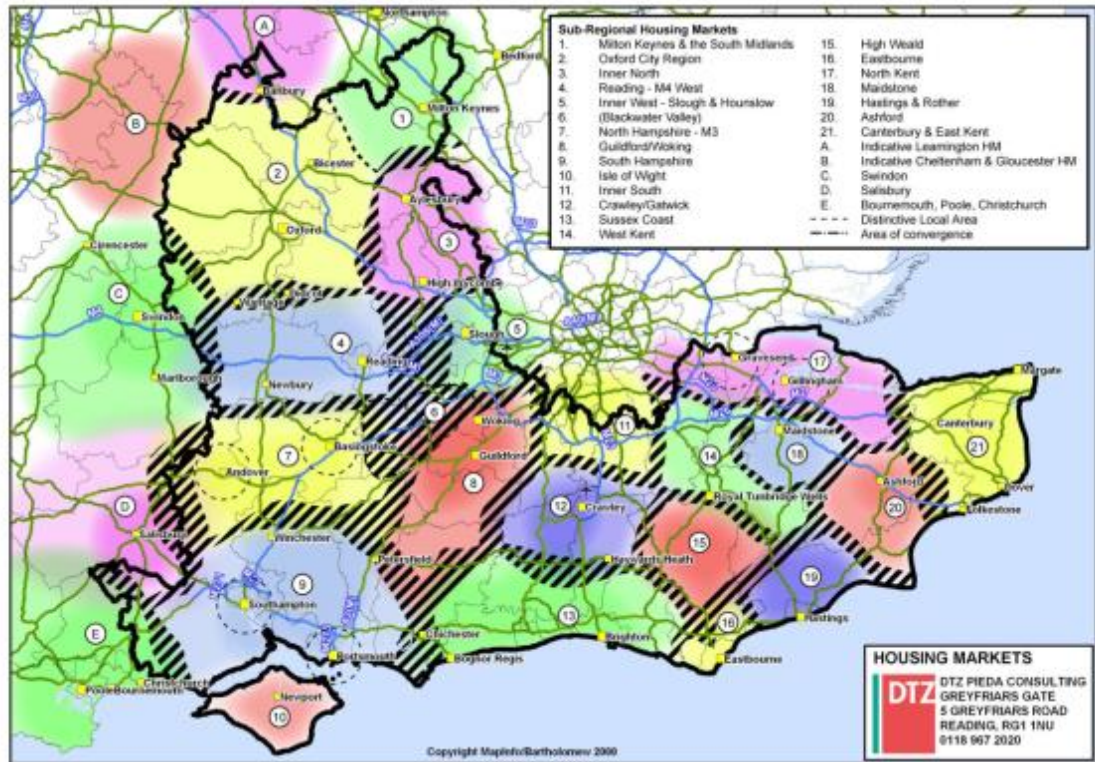


Source: CLG/CURDS, 2010

### 2004 Identifying the Local Housing Markets of South East England (DTZ Pidea)

- 2.14 The 2004 report prepared by DTZ Pidea identified 21 housing market areas across the South East Region. The Coastal West Sussex and Greater Brighton area was largely covered by the Sussex Coast Housing Market Area, with some parts, e.g. west and north Chichester being covered by South Hampshire and Guildford/Woking Housing Market Areas respectively, and the northern parts of Horsham and Mid Sussex being covered by the Crawley/Gatwick Housing Market Area.

**Figure 5: Housing Market Areas in South East**



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

### 2009 West Sussex Strategic Housing Market Assessment

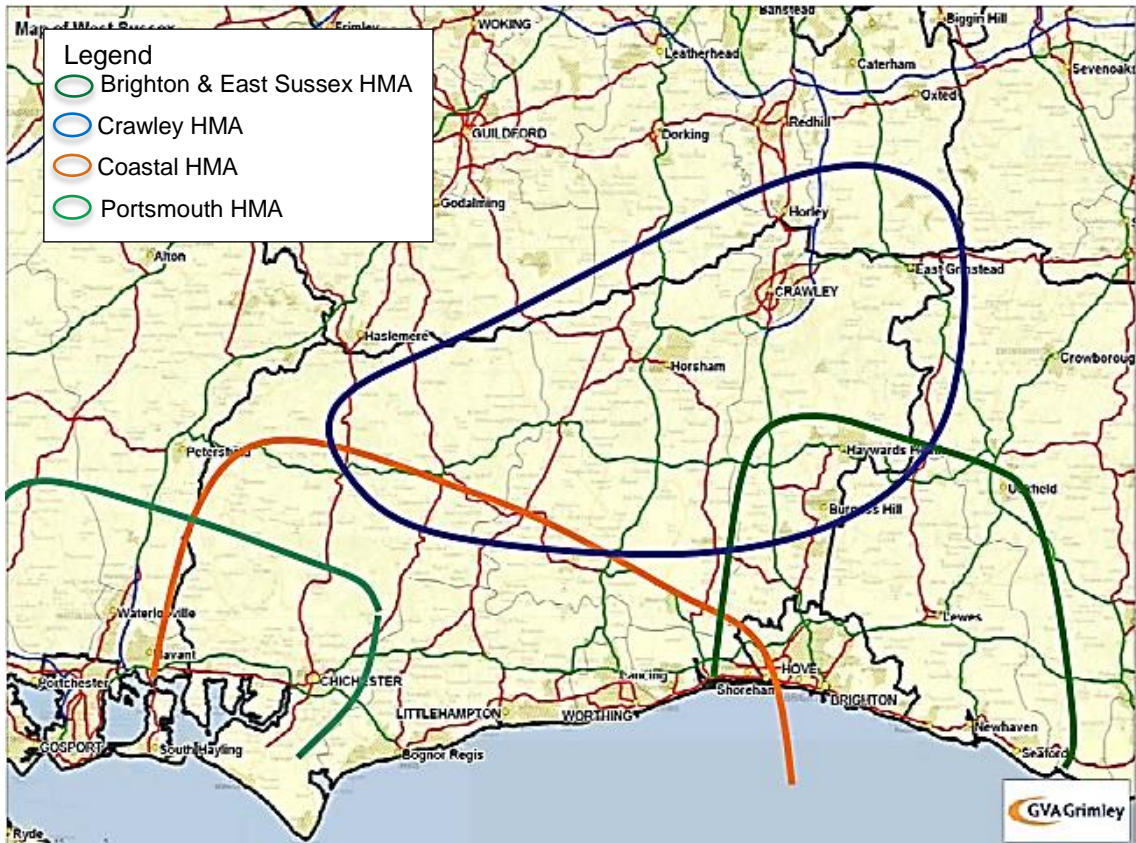
- 2.15 The report produced by GVA Grimley in 2009 was commissioned by all the West Sussex local authorities and covered the whole of West Sussex as the first stage of the work. This eventually led to the definition of two separate HMA boundaries covering Northern West Sussex and Coastal West Sussex, which then formed the basis for two separate SHMA reports.
- 2.16 The approach adopted had firstly included a review of the regional level research undertaken by GVA previously to define sub-regional housing market areas in South East England. Further levels of analysis were then undertaken to confirm the housing market areas; considering patterns of relocation (migration) and travel to work; house price dynamics; retail catchment areas; and key socio-economic indicators.
- 2.17 Drawing these strands of work together, the study defined three functional but overlapping housing market areas, which demonstrated high levels of “functional integrity” or shared characteristics. These were:

- Northern West Sussex- covering Crawley, Horsham and Mid Sussex, south to Haywards Heath and Burgess Hill, to East Grinstead, Horley and west/ south-west to Billingshurst, Petworth and Pulborough.
- Brighton and East Sussex-covering Brighton and Hove, Lewes and some southern parts of Mid Sussex
- Coastal West Sussex- covering Chichester, Adur, Arun, Worthing, southern parts of Horsham and western parts of Brighton and Hove.

- 2.18 The assessment drew particularly on using data from the NHS Central Health Register on patient re-registrations between 1999 and 2006 and also the 2001 Census. The study showed the strongest relationships are between the authorities along the South Coast/A27 corridor and between Crawley, Horsham and Mid Sussex. The analysis also identified significant flows between Mid Sussex and Lewes, Wealden (and to a lesser extent Tandridge); and between Crawley with Reigate and Banstead.
- 2.19 In terms of self-containment, none of the studied local authorities showed self-containment rate over 70%, (ranging from 51% for Chichester to 61% for Crawley). There were two main patterns of migration flows between the districts: between Adur and Worthing, Arun and Worthing and Chichester; and between Crawley, Mid Sussex and Horsham.
- 2.20 The study also used the data on Travel to Work Areas defined by the Centre for Urban and Regional Studies (CURS) at Newcastle University, based on 2001 Census, to assess main commuting flows within the study area. The TTWAs are based upon at least 75% self-containment of travel to work trips.
- 2.21 GVA also assessed commuting patterns from some of the smaller settlements. However, individual patterns at ward level were considered too complex to be meaningful, hence the study defined the major economic centres and analysed thresholds of people travelling to the centres from wards. For this, GVA used 5% and 10% travel to work thresholds to assess the primary and secondary 'areas of influence' of these key centres. These represent the locations where more than 10% or more than 5% of the working population are drawn to a particular centre. The 5% travel to work threshold provides a sensible means of defining the functional travel to work area associated with the centre.
- 2.22 The analysis indicated that Brighton and East Sussex's catchment area extended to Seaford, Lewes, Burgess Hill and Shoreham; The Coastal HMA covered the whole area from Havant to Hove and north to Midhurst. Crawley's catchment area includes East Grinstead, Haywards Heath, Horsham, Billingshurst and Horley.
- 2.23 The study recognised there are zones of overlap between the identified housing market areas (in particular south-western parts of Chichester with the Portsmouth HMA). Figure 6 illustrates the

outcomes of the assessment by demonstrating the overlapping boundaries of the three main housing market areas:

**Figure 6: Defined Housing Market Areas and Areas of Overlap**



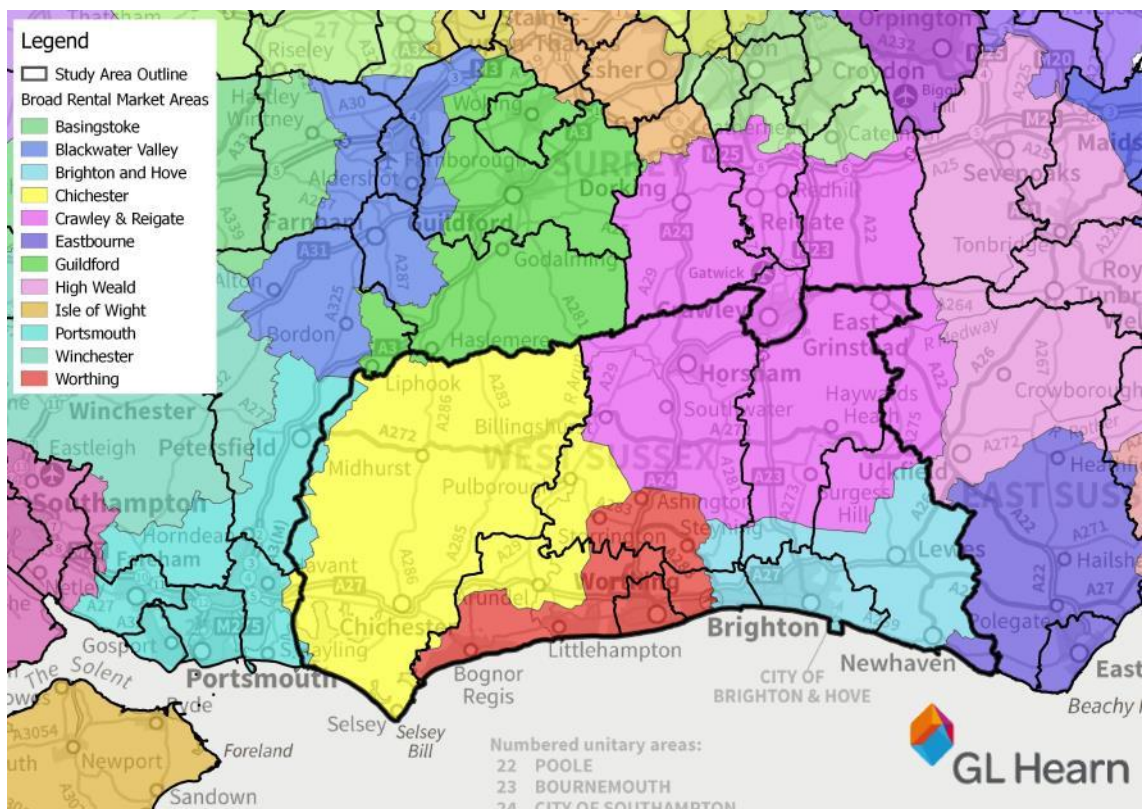
Source: GVA/GL Hearn Northern West Sussex Strategic Housing Market Assessment, 2009

### Broad Rental Market Areas

- 2.24 Although not part of the official guidance we have also considered the study area's Broad Rental Market Areas (BRMA) as produced by the Valuations Office Agency (VOA). A BRMA is an area where a person could reasonably be expected to live taking into account access to facilities and services for the purposes of health, education, recreation, personal banking and shopping (as defined by the Valuations Office).
- 2.25 The Broad Rental Market Area can in one sense be seen as a proxy for a housing market area although the VOA have not sought to review or exceed any sort of self-containment threshold. This therefore falls short of the PPG which seeks to identify HMA with a typical 70% self-containment.
- 2.26 The VOA identifies six BRMAs (four main and two minor) which cover the study area. The Chichester BRMA covers Chichester, the north western part of Arun (including Arundel) and the south western part of Horsham, including North Heath, Thackeham and Rackham.

- 2.27 The Worthing BRMA covers the coastal areas of Arun (including Bognor Regis), Worthing, the western part of Adur up to River Adur and some southern parts of Horsham, such as the areas surrounding Storrington, Ashington, Ashurst and Steyning.
- 2.28 The Crawley and Reigate BRMA covers Crawley local authority, large parts of Horsham (south to Woodmancote) and Mid Sussex, (south to Clayton) as well as the northern parts of Lewes (including areas around Plumpton and South Chailey).
- 2.29 The Brighton and Hove BRMA covers Brighton and Hove, the southern area of Mid Sussex (including areas around Pyecombe), the majority of Lewes including the town of Lewes, the eastern parts of Adur including Shoreham and a small part of Horsham (the area up to Small Dole).
- 2.30 To complete the picture small parts of the western boundary of Chichester are covered by the Portsmouth BRMA similarly a small part of Lewes falls within the Eastbourne BRMA. These areas are illustrated in Figure 7 below.

**Figure 7: Broad Rental Market Areas**



Source: VOA



## Summary

- 2.31 In line with the PAS advice note we have presented a top-down analysis of housing market areas. The CLG/CURDS Study Housing Market Areas for Coastal West Sussex and Greater Brighton identified relatively simple east west split in the study area, although where this split occurs varies.
- 2.32 We have also reviewed previous studies which have tried to define the Housing Market Area for the study area. According to a report produced by DTZ (2004) the area has a north-south split. The Coastal West Sussex and Greater Brighton area was largely covered by the Sussex Coast Housing Market Area, with some parts, e.g. west and north Chichester being covered by South Hampshire and Guildford/Woking Housing Market Areas respectively, and the northern parts of Horsham and Mid Sussex being covered by the Crawley/Gatwick Housing Market Area.
- 2.33 According to the report produced by GVA (2009) there are three functional housing market areas, which demonstrated high levels of “functional integrity” or shared characteristics within the Northern West Sussex study area. These were:
- Northern West Sussex- covering Crawley, Horsham and Mid Sussex, south to Haywards Heath and Burgess Hill, to East Grinstead, Horley and west/ south-west to Billingshurst, Petworth and Pulborough.
  - Brighton and East Sussex-covering Brighton and Hove, Lewes and some southern parts of Mid Sussex
  - Coastal West Sussex- covering Chichester, Adur, Arun, Worthing, southern parts of Horsham and western parts of Brighton and Hove.
- 2.34 Given the conflicting conclusions of the CURDS and DTZ work it is perhaps a more practical approach to recognise that the area is likely to be split in a number of directions as suggested by the GVA and VOA work.
- 2.35 With the exception of the VOA work these studies however draw on fairly historical datasets and this report seeks to supersede these definitions by ratifying or redrawing the boundaries using the most recently available evidence. The next section of the report undertakes that work.

### 3 DEFINING THE HOUSING MARKET AREAS

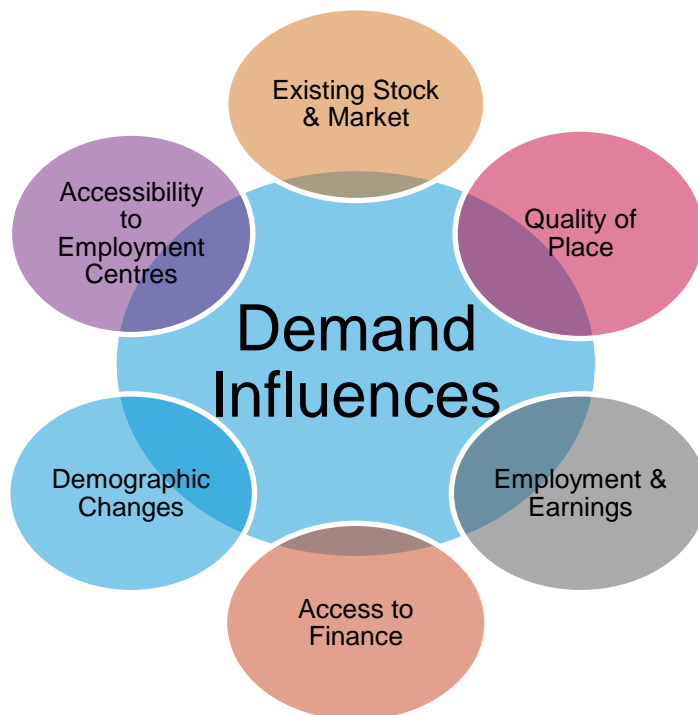
3.1 This chapter firstly analyses house price data, including prices by type. This analysis is illustrated through various heat maps, indicating the range of prices within the study area. The chapter looks at commuting and migration data in order to demonstrate the patterns of household movements within the study area. This also includes looking at Travel to work areas and self-containment rates.

#### Analysing house price data

3.2 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.

3.3 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 8: Understanding Housing Demand Drivers**



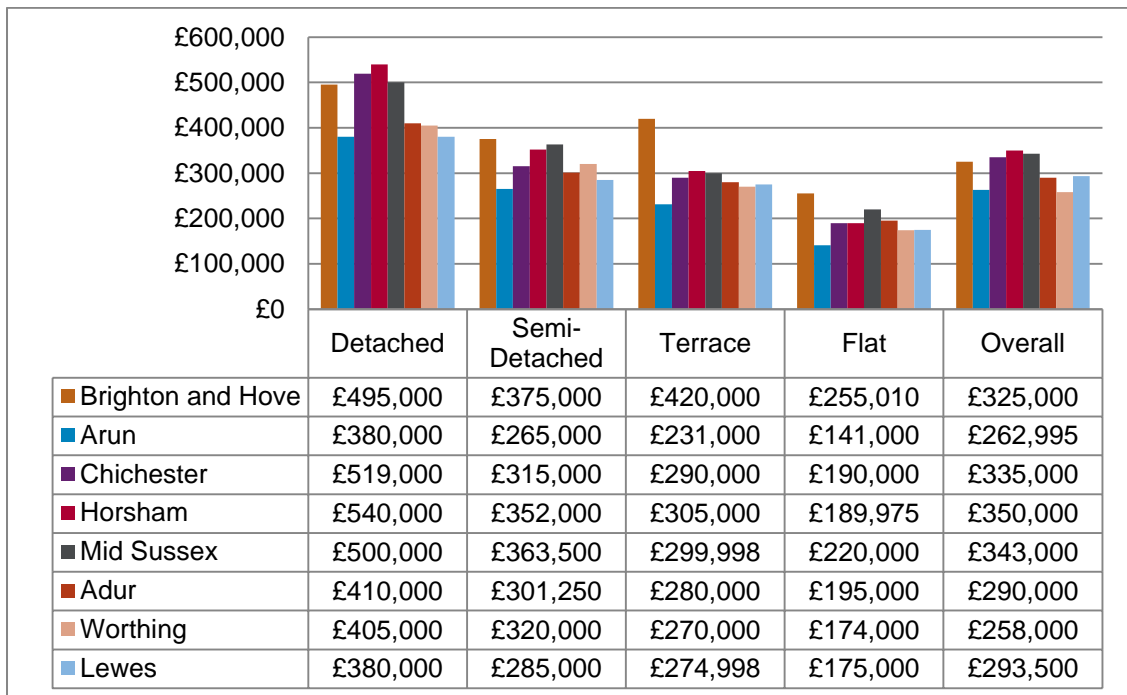
Source: GL Hearn

3.4 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). 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).

- 3.5 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.
- 3.6 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. The importance of these local factors is perhaps more pronounced in stable or healthy economic times, when mortgage availability and market liquidity are far less of a constraint on activity. 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.
- 3.7 These factors influence the demand profile and pricing within any given 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 consequently reinforces to some degree the existing stock profile.
- 3.8 Figure 9 shows the median house price in each local authority by dwelling type. This provides a like for like comparison between areas for different types of property. This shows that in the study area, for all house types, the median house prices are highest in Horsham, Mid Sussex, Chichester and Brighton and Hove, followed by Adur and Lewes, then Arun and Worthing.
- 3.9 For flats, the highest prices are identified in Brighton and Hove, with prices slightly lower in Mid Sussex and Adur, followed by Chichester, Horsham and Worthing, and lowest in Arun. Highest prices for detached and terraced houses are in Horsham. For semi-detached, prices are highest in Brighton and Hove.

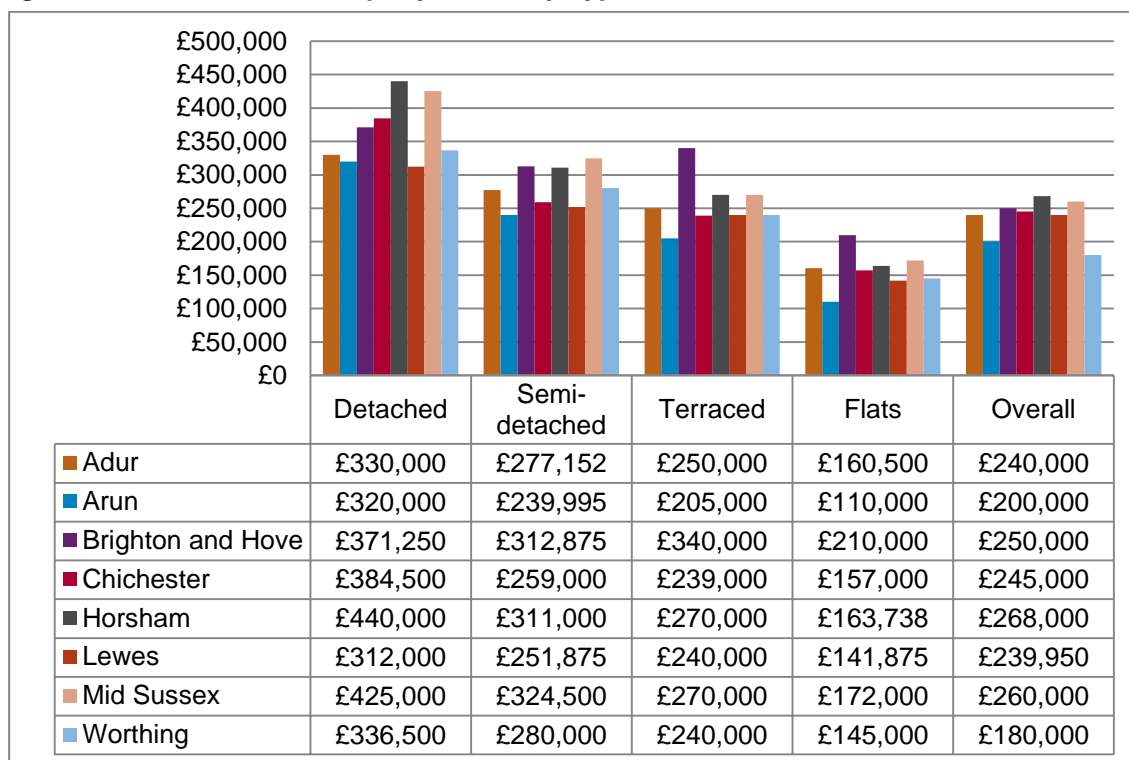
**Figure 9: Median House Prices By Dwelling Type, 2016**



Source: GLH Analysis of Land Registry's Price Paid Data

- 3.10 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. Some parts of the study area for instance are likely to command higher prices than others reflecting these factors.
- 3.11 There is also a price comparison between urban and rural areas in the authorities. For rural areas, house prices might be swayed by high individual property sales (e.g. more than £1 million sales prices), which would pull the average up. Therefore, lower quartile figures have also been considered as an additional reflective indicator.

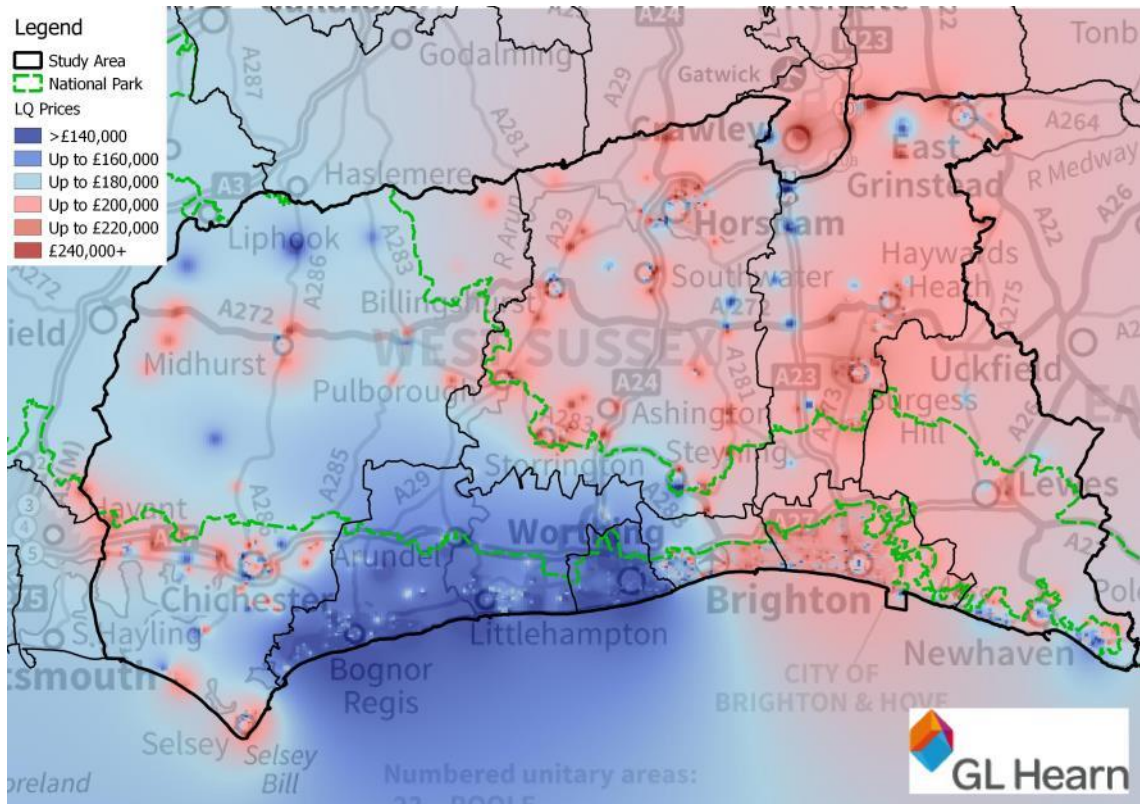
**Figure 10: Lower Quartile Property Prices By Type**



Source: GLH Analysis of Land Registry's Price Paid Data

- 3.12 As it can be seen in the table above, Lower Quartile Prices for 2016 show some similar trends, with Horsham having the highest prices overall, and detached properties specifically. It is followed by Mid Sussex and Brighton and Hove. Figure 11 below illustrates the geographical distribution of lower quartile prices in the study area.
- 3.13 A key factor to consider when comparing the highest house prices, in Horsham, is that there were 1,200 houses completed over the past year which is significantly higher than the level attained in previous years. The areas with new built dwellings coincide with the areas identified in the maps by dwelling type below where prices of properties are relatively lower; hence the average cost of dwellings might have been brought down by the high level of new build in the past year. It is therefore considered that prices in local authorities might fluctuate depending on the level of development which has taken place in the last year. It needs to be noted that such levels of development might not be attained in future years; hence prices might be different in the years to come.

**Figure 11: Lower Quartile Prices Distribution, 2016**



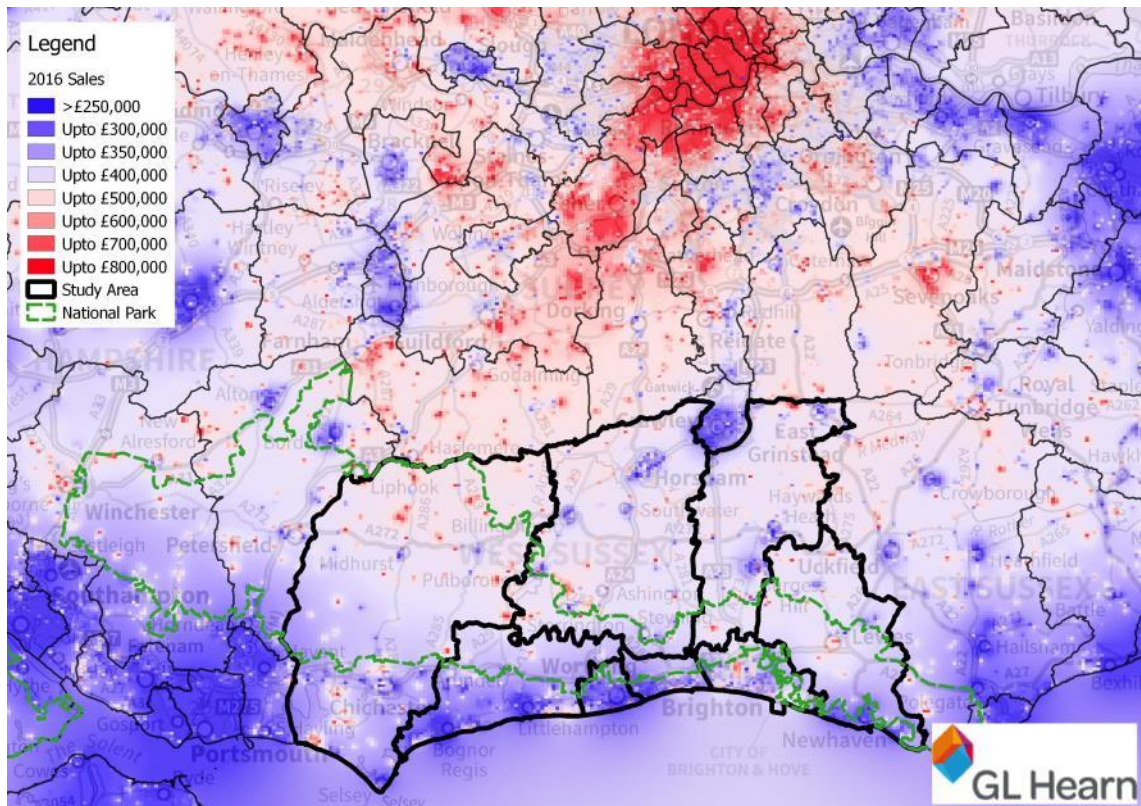
Source: GLH Analysis of Land Registry's Price Paid Data

3.14 Figure 12 illustrates median house prices across a wider area. The house price geography demonstrates:

- Significantly lower house prices in the coastal areas such as Adur, Arun and Worthing although prices increase in Brighton, and parts of Lewes and southern Chichester.
- Higher house prices in the northern area of Chichester and alongside the borders of the National Park in Horsham
- Substantially higher house prices in the area north of the study area boundary, including areas such as Waverley, Guildford and Mole Valley
- significantly lower prices in Crawley

3.15 The analysis hints at differences in the housing market within the northern and southern parts of both Chichester and Horsham. The northern area illustrates a concentration of notably more expensive properties. This however is likely to reflect the rural urban split in these area but otherwise is not particularly helpful in assessing the definition of HMAs.

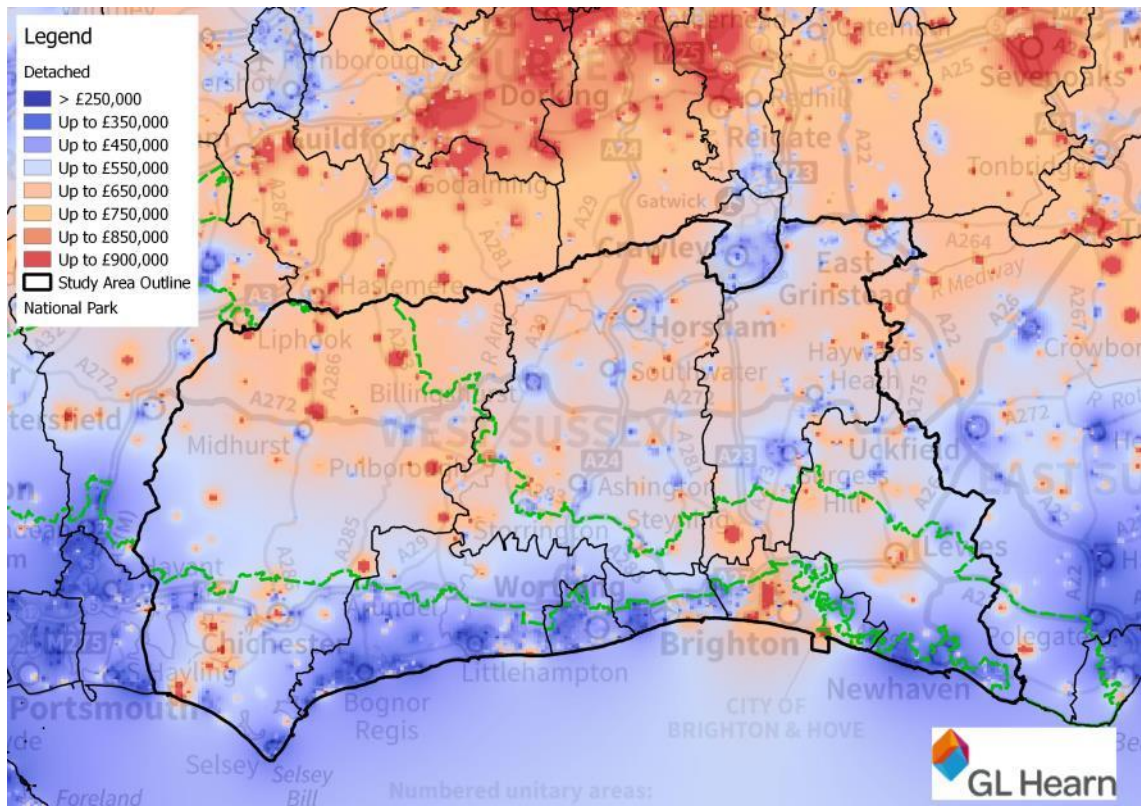
**Figure 12: Median Prices of All Properties, 2016**



*Source: GLH Analysis of Land Registry's Price Paid Data*

- 3.16 One must also recognise that average house prices such as those shown in Figure 12 above is likely to reflect the stock and the stock being sold. In order to establish a more detailed image of the house prices within the study area, we have provided maps of prices by type. This avoids identifying areas of higher cost housing resulting from the housing mix i.e. higher prices where there are more detached homes and lower prices where there are more flats.
- 3.17 Figure 13 demonstrates the house prices of detached properties in the study area. There is a concentration of detached properties with prices above £750,000 in the northern and north-eastern parts of Chichester and around Chichester Harbour, Brighton and Hove and southern Mid Sussex around Poyning.
- 3.18 There are also noticeably lower prices being demonstrated in the coastal authorities of Arun, Worthing, Adur, and Lewes and also to the north in Crawley. Burgess Hill, Haywards Heath and East Grinstead and Horsham also demonstrate lower house prices more akin to those in Crawley than those in Brighton.

**Figure 13: Detached House Prices, 2016**

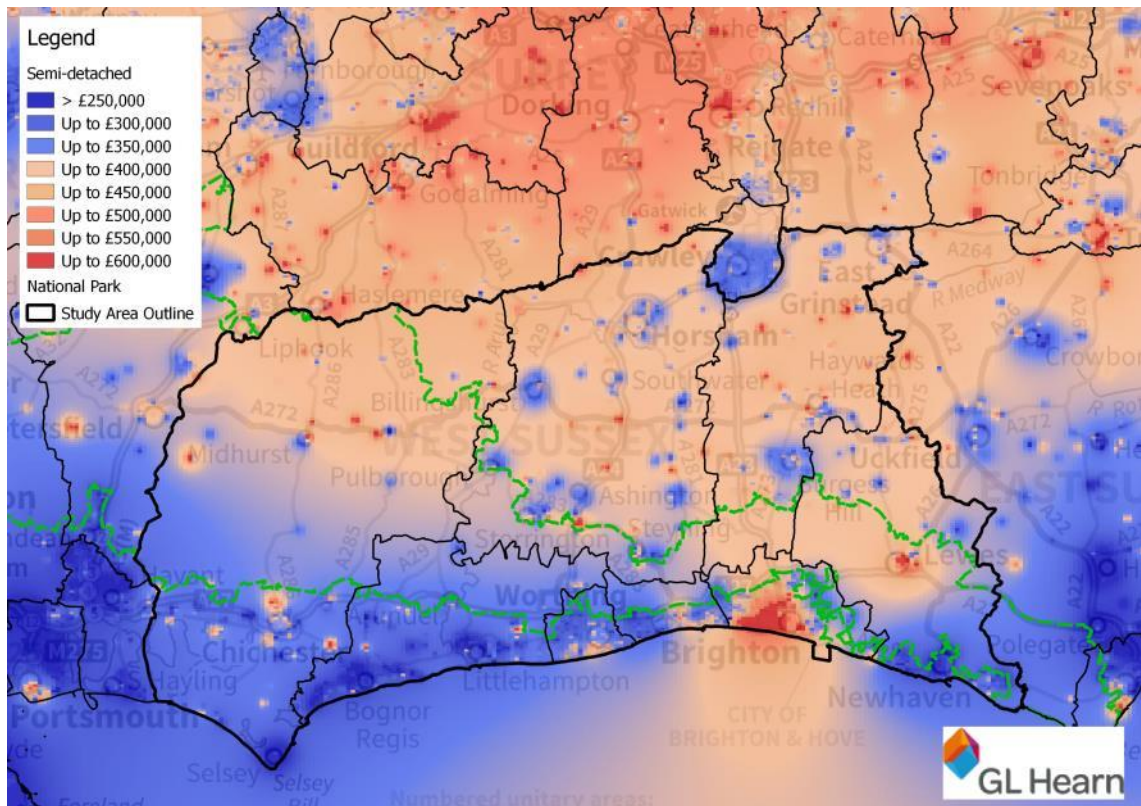


Source: GLH Analysis of Land Registry's Price Paid Data

- 3.19 Figure 14 shows the cost of semi-detached properties in Coastal West Sussex and Greater Brighton. There is a significant concentration of properties with prices up to and over £600,000 in Brighton and Hove.
- 3.20 Prices in the ranges between £400,000 and £550,000 can be noted in large parts of Horsham and Mid Sussex districts, as well as the northern parts of Chichester. Some high values can also be identified in the south of Chichester District (Chichester City and around Chichester Harbour), the coastal areas of Worthing and also in the town of Lewes.
- 3.21 Lower prices (less than £350,000) can again be observed around the coastal areas of Chichester, Arun, Adur and Lewes (around Newhaven). There is a concentration of lower cost housing around Crawley compared to surrounding areas. This can also be seen in the urbanised parts of mid Sussex and Horsham, albeit at a lesser extent.



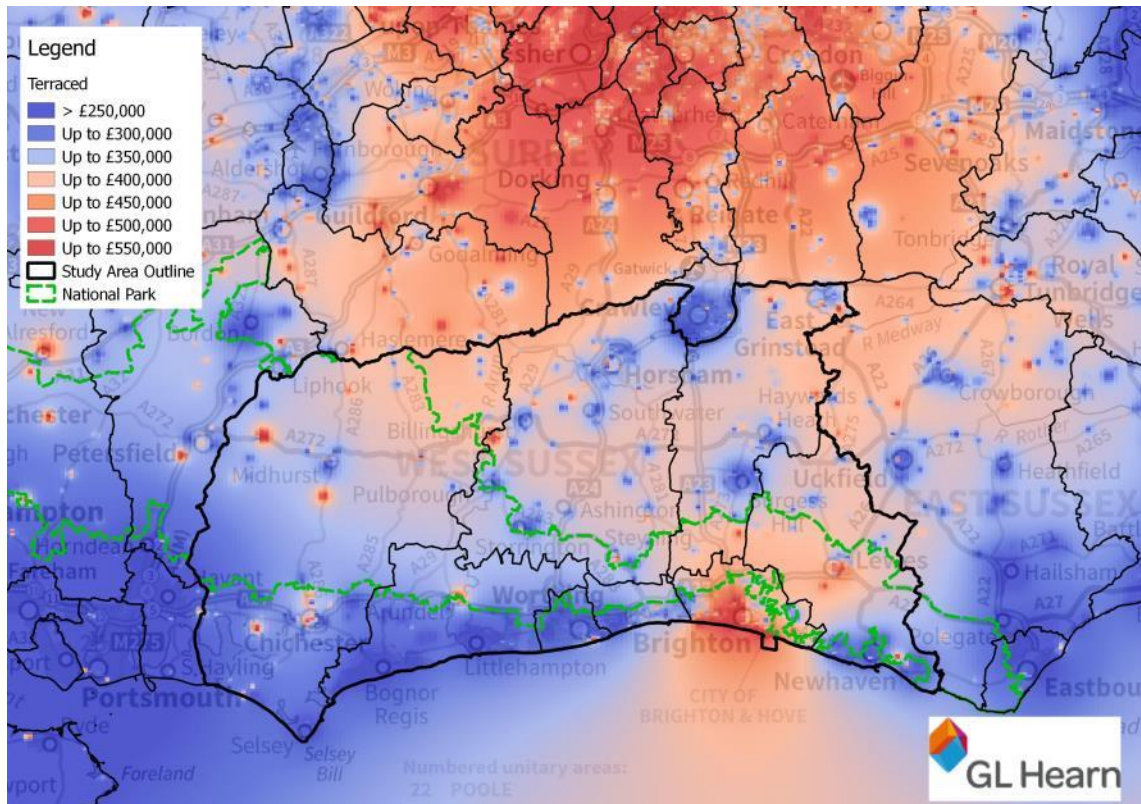
**Figure 14: Semi-detached House Prices, 2016**



Source: GLH Analysis of Land Registry's Price Paid Data

- 3.22 Figure 15 illustrates the range of terraced house prices in the study area. Again it can be seen that there is a concentration of high cost terraced houses (with prices in the range of £450,000 to £550,000) in Brighton and Hove, as well as some parts of Chichester (around Midhurst) and Lewes Town.
- 3.23 A sharp contrast can be observed in the price ranges between the neighbouring Surrey local authorities and to a lesser extent the northern parts of Sussex, compared to the coastal areas of Chichester, Arun, Worthing and Adur. Similarly a concentration of lower prices terraced houses can be noticed in Crawley compared to its surrounding areas.
- 3.24 Lower house prices in the southern part of Horsham district draw comparisons to the Coastal area it abuts. The larger settlements in Horsham and Mid Sussex also show distinctly lower prices than the rural parts of these districts.

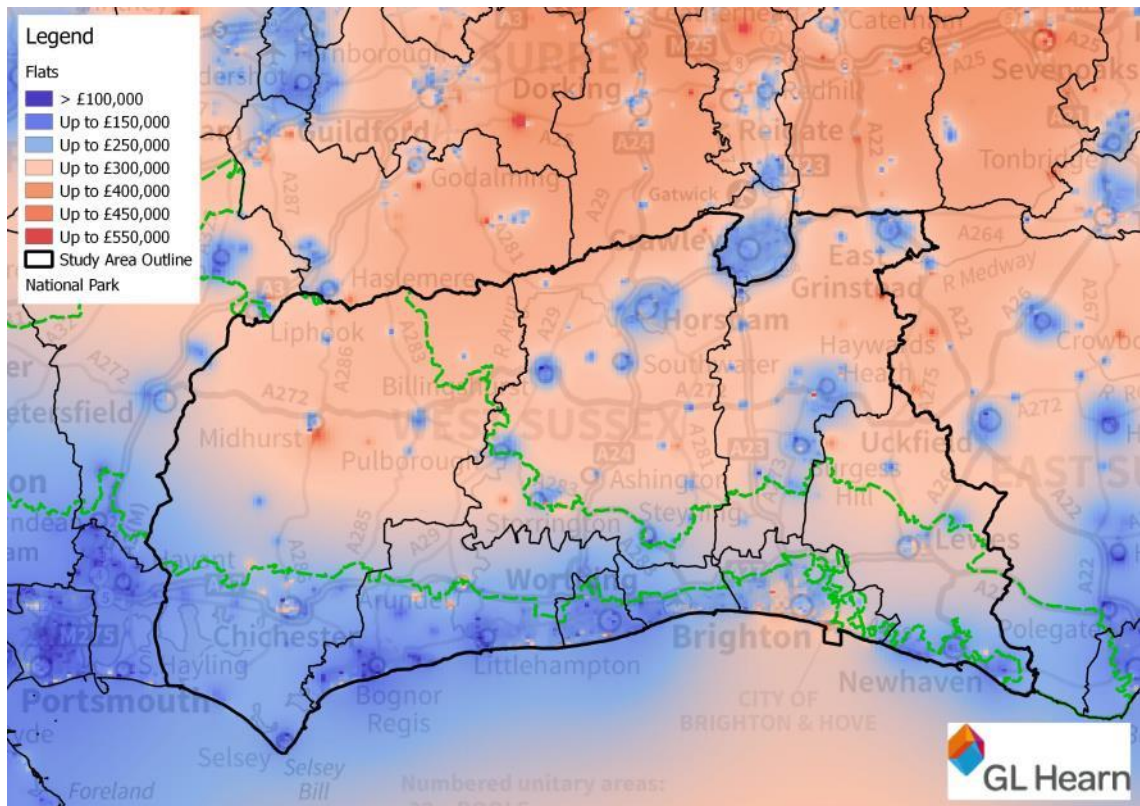
**Figure 15: Terraced House Prices, 2016**



Source: GLH Analysis of Land Registry's Price Paid Data

- 3.25 Finally, in Figure 16, illustrates the distribution of flat prices across the study area. The map shows that higher cost flats (between £300,000 and £450,000) are concentrated in the rural parts of Horsham, Mid Sussex and the northern parts of Chichester district. There is a small concentration of premium flats (up to £550,000) in Midhurst as well as Central Brighton and Lewes.
- 3.26 Lower prices can be observed in the coastal parts of Chichester, Arun, and Worthing and particularly in the authority of Crawley. There are notably lower areas within the urban coastal towns of Littlehampton and Bognor Regis being particularly low value.

**Figure 16: Flat Prices, 2016**



*Source: GLH Analysis of Land Registry's Price Paid Data*

- 3.27 Although these maps provide an interesting picture of variation across the study area, there are inevitably areas of higher and lower house prices even within a single local authority. For example Mid Sussex, Horsham and Chichester show a wide range of costs, hence no absolute conclusions about the market area can be concluded from these results.
- 3.28 Based solely on the housing price analysis, it can be concluded there is a clear separation in terms of prices in the study area. The coastal authorities indicate significantly lower house prices, with the exception of Brighton and Hove and to a lesser extent Chichester, whilst properties' prices towards the northern areas begin to increase around the boundary of the South Downs National Park.
- 3.29 The urban and rural areas also show distinct characteristics regardless of the type of property analyses. This is particularly noticeable in Horsham, Mid Sussex and Chichester where there is diversity within each area.

### **Analysing Migration Flows and Patterns**

- 3.30 Migration flows reflect household movement between areas, and thus is a key factor in considering the geography of housing markets. To understand migration inter-relationships across local authority boundaries, Census data on internal migration flows has been analysed.

3.31 However, we start with looking at self-containment rate of movements to and from each of the local authorities in the study area, as well as internal movements within the Coastal West Sussex and Greater Brighton Area.

### Migration Self-Containment

3.32 The guidance suggests that a HMA would typically, although not always, have a self-containment rate of 70% when long distance moves are excluded. Although the term 'long distance' is not defined in the guidance we have defined this as 30km from the study area.

3.33 For each local authority, we have calculated outward self-containment- the percentage of those already living in the authority that moved elsewhere within that authority and inward self-containment- the percentage of those who moved to the authority who were already residents.

**Table 1: Self-Containment Rates by Local Authority, 2011**

	% of those moving from the Local Authority	% of those moving to the Local Authority	% of those moving from the Local Authority	% of those moving to the Local Authority
	(Outward)	(Inward)	(Outward)	(Inward)
	Including Long Distance		Excluding Long Distance	
Adur	45%	45%	49%	51%
Arun	59%	63%	68%	<b>73%</b>
Brighton & Hove	63%	66%	<b>81%</b>	<b>79%</b>
Chichester	48%	50%	60%	62%
Horsham	54%	53%	64%	66%
Lewes	49%	50%	58%	59%
Mid Sussex	53%	53%	63%	65%
Worthing	57%	61%	64%	69%

Source: Census, 2011

3.34 Excluding long distance moves, it is only Brighton & Hove that shows self-containment rates above 70% for both inward and outward migration. There is a 73% self-containment rate excluding long distance for inward migration in Arun.

3.35 The majority of the local authorities show self-containment rates excluding long distance moves of between 50% and 69%. We have therefore considered it appropriate for local authorities to be grouped in order to exceed this rate. These groupings are based on the strongest flows but there are a number of ways to view this.

### Statistically Significant Flows

- 3.36 ONS identifies what it considers to be the statistically significant migration flows to and from each area. These are based on analysis of Census data using a method adapted from Holmes and Haggett<sup>6</sup> (1977) which reviews the distribution of values in any given area.
- 3.37 Table 2 shows the significant migration flows into and out from each local authority area over the period from the year ending June 2011 to year ending June 2014. This shows that Brighton & Hove has significant inward migration flows with each local authority within the study area, and also with various London Boroughs, which indicates the strong migration relationship Brighton & Hove has with London.
- 3.38 There are close relationships between London and Brighton as households move to London due to work opportunities and access to them whilst Brighton & Hove offers lower house prices than London and also is within reasonable commuting distance. The most significant outward links for Brighton & Hove are with Lewes, Mid Sussex, Adur and Worthing.

**Table 2: Significant Migration Flows, 2011-2014**

Significant Migration Flows	Inward migration	Outward migration
<b>Adur</b>	Brighton & Hove	Brighton & Hove, Worthing
<b>Arun</b>	Worthing, Chichester	Worthing, Chichester
<b>Brighton &amp; Hove</b>	Eastbourne, Wealden, Horsham, Adur, Worthing, Arun, Chichester, Cornwall, Bristol, Bromley, Croydon, Ealing, Kingston upon Thames, Lambeth, Lewisham, Wandsworth, Greenwich, Tower Hamlets, Camden, Barnet, Islington, Haringey, Hackney, Lewes, Worthing,	Lewes, Mid Sussex, Adur, Worthing
<b>Chichester</b>	Arun, Horsham, Waverley, East Hampshire, Havant, Portsmouth	Arun, East Hampshire, Havant
<b>Horsham</b>	Brighton & Hove, Adur, Arun, Worthing, Chichester, Waverley, Mole Valley, Reigate and Banstead, Crawley, Mid Sussex	Crawley, Mid Sussex, Brighton & Hove, Adur, Arun, Worthing, Chichester
<b>Lewes</b>	Brighton & Hove	Mid Sussex, Brighton & Hove, Eastbourne, Wealden
<b>Mid Sussex</b>	Brighton & Hove, Lewes, Wealden, Tandridge, Crawley, Horsham	Brighton & Hove, Lewes, Wealden, Tandridge, Crawley, Horsham
<b>Worthing</b>	Arun, Adur, Brighton & Hove	Arun, Adur, Brighton & Hove

Source: ONS

<sup>6</sup> Graph Theory Interpretation of Flow Matrices: A Note on Maximization Procedures for Identifying Significant Links (JH Holmes and P Haggett Geographical Analysis Volume 9, Issue 4, pages 388–399, October 1977)

- 3.39 Adur has a strong outward link with Worthing, while Arun shows both strong inward and outward relationships with Worthing and Chichester. Worthing shows significant inward and outward flows with Arun, Adur and Brighton & Hove. Chichester has both significant inward and outward migration flows with Arun, East Hampshire and Havant. Additionally, it has significant inward flows with Horsham, Waverley and Portsmouth.
- 3.40 Horsham shows significant inward and outward migration flows with Brighton & Hove, Crawley, Mid Sussex, Worthing, Chichester, Adur, Arun. Additionally, it shows significant inward flows with Waverley, Mole Valley, and Reigate and Banstead. Mid Sussex have both inward and outward flows with Brighton & Hove, Lewes, Wealden, Tandridge, Crawley and Horsham.
- 3.41 Lewes shows significant outward flows with Mid Sussex, Brighton & Hove, Eastbourne and Wealden.

**Migration Flows between Local Authorities**

- 3.42 Brighton and Hove is the primary destination of out-migrants from Adur, Lewes, Mid Sussex and Horsham; and flows with these authorities also represent the four of the top five flows for those migrating out of the City. Brighton is also the top outflow destination of migrants from Worthing.
- 3.43 Flows towards Arun are split, with the strongest flows from both Worthing in the east and Chichester in the west. Horsham is one of the main destinations in terms of migration flows from Brighton & Hove (in the South), but also Crawley (in the north). Mid Sussex is the main destination for people migrating from Brighton & Hove (south), Crawley (north) and Lewes (south).

**Table 3: Analysis of Key Migration Flows to study area of over 250 Persons, 2011**

Destination	Origin					
	1st	2nd	3rd	4th	5th	6th
<b>Adur</b>	Brighton & Hove (1,391)	Worthing (422)				
<b>Arun</b>	Worthing (993)	Chichester (912)	Horsham (298)	Brighton & Hove (255)		
<b>Brighton &amp; Hove*</b>	Lewes(970)	Adur (666)	Mid Sussex (557)	Worthing (479)		
<b>Chichester</b>	Arun (912)	Waverley (373)	Havant(351)	E. Hampshire (307)	Horsham (267)	
<b>Horsham</b>	Brighton & Hove (383)	Crawley (381)	Mid Sussex (367)	Worthing (252)		
<b>Lewes</b>	Brighton & Hove (1,482)	Wealden (359)	Mid Sussex (342)			
<b>Mid Sussex</b>	Brighton & Hove (842)	Crawley (498)	Lewes (352)	Wealden (346)	Horsham (315)	Tandridge (305)
<b>Worthing</b>	Adur (874)	Brighton & Hove (792)	Arun (738)	Horsham (317)		

Source: 2011 Census (\*Brighton & Hove over 350)

- 3.44 Table 3 only illustrates a single direction flow when arguable a gross flow is more illustrative of a relationship. Table 4 sets out gross migration flows and gross flows expressed per 1,000 head of combined population. This calculation is made to ensure that an area of larger population size is given the same importance as a less populous area as we would generally expect larger flows from larger areas. Gross migration flows represent a total flow of migrants across an administrative boundary (in both directions) and it is calculated by using the sum of the total number of in-migration and out-migration flows for a given authority.
- 3.45 For this, the 2011 census data has been used. While this is not the most recent dataset available it is the most comprehensive. Whilst GP registrations can be used to provide more recent information on migration patterns the data tends to be more unreliable as it depends on the households moving registering with a local GP, which doesn't always happen.
- 3.46 As it can be witnessed from the table below, there are some strong connections in the Coastal areas of Adur, Worthing, Brighton & Hove and Lewes. Arun has strong links with both Chichester and Worthing.

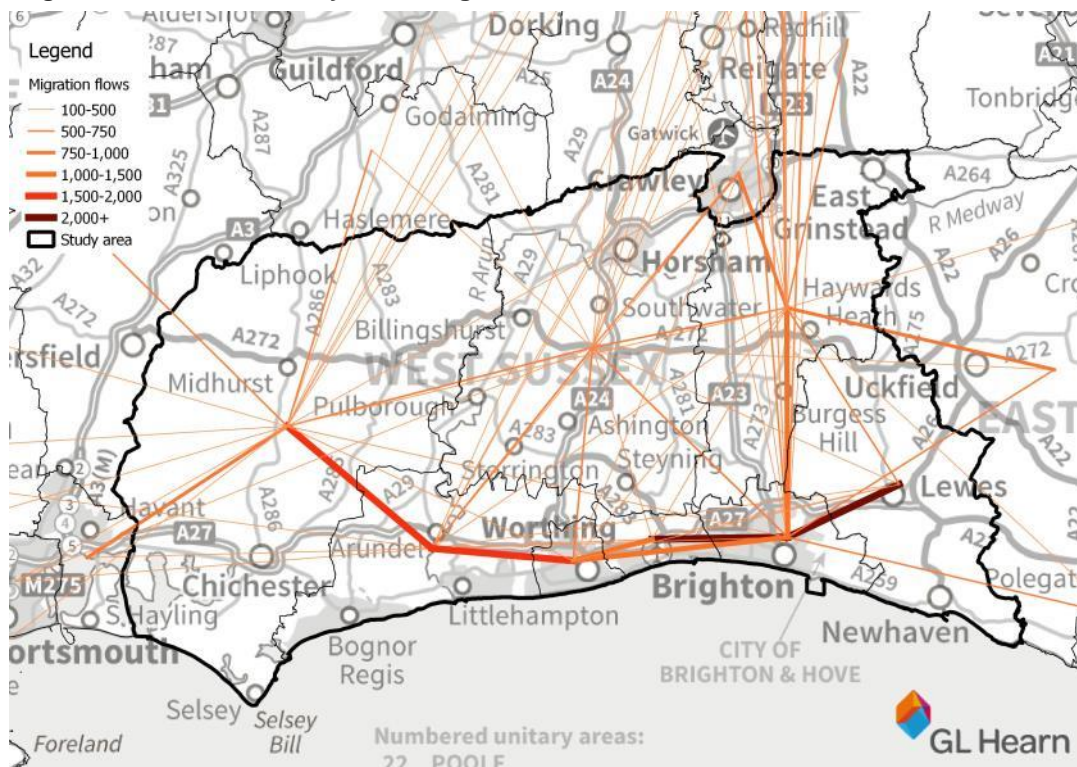
**Table 4: Average Gross Migration Flows Per Annum (Over 2.0 per 1,000) (2011)**

Location 1	Location 2	Gross Flow	Combined Pop	Gross Per '000
Adur	Worthing	1,296	165,822	7.82
Chichester	Arun	1,824	263,312	6.93
Arun	Worthing	1,731	254,158	6.81
Lewes	Brighton & Hove	2,452	370,871	6.61
Brighton & Hove	Adur	2,057	334,551	6.15
Mid Sussex	Crawley	968	246,457	3.93
Lewes	Wealden	943	246,417	3.83
Mid Sussex	Brighton & Hove	1,399	413,229	3.39
Worthing	Brighton & Hove	1,271	378,009	3.36
Chichester	Havant	778	234,478	3.32
Horsham	Crawley	749	237,898	3.15
Lewes	Eastbourne	581	196,914	2.95
Mid Sussex	Lewes	694	237,362	2.92
Mid Sussex	Wealden	826	288,775	2.86
Chichester	East Hampshire	647	229,402	2.82
Chichester	Waverley	610	235,366	2.59
Mid Sussex	Horsham	682	271,161	2.52
Worthing	Horsham	569	235,941	2.41
Mid Sussex	Tandridge	509	222,858	2.28
Horsham	Chichester	509	245,095	2.08

Source: Census, 2011

- 3.47 Mid Sussex indicates a strong migration link with Crawley and Brighton & Hove, however when considering the combined population, stronger links are showed with Crawley in terms of gross flows per 1,000 head of population.
- 3.48 Figure 17 illustrates the data from Table 5 above. From the analysis, it can clearly be identified there is a strong migration link between the neighbouring coastal district authorities. Brighton & Hove, Lewes and Adur demonstrate especially strong migration flows of over 2,000 people. Chichester and Arun also show strong migration flows of over 1,500 people which demonstrate the strength of the relationship between these authorities.

**Figure 17: Local Authority Level Migration Flows, 2011**



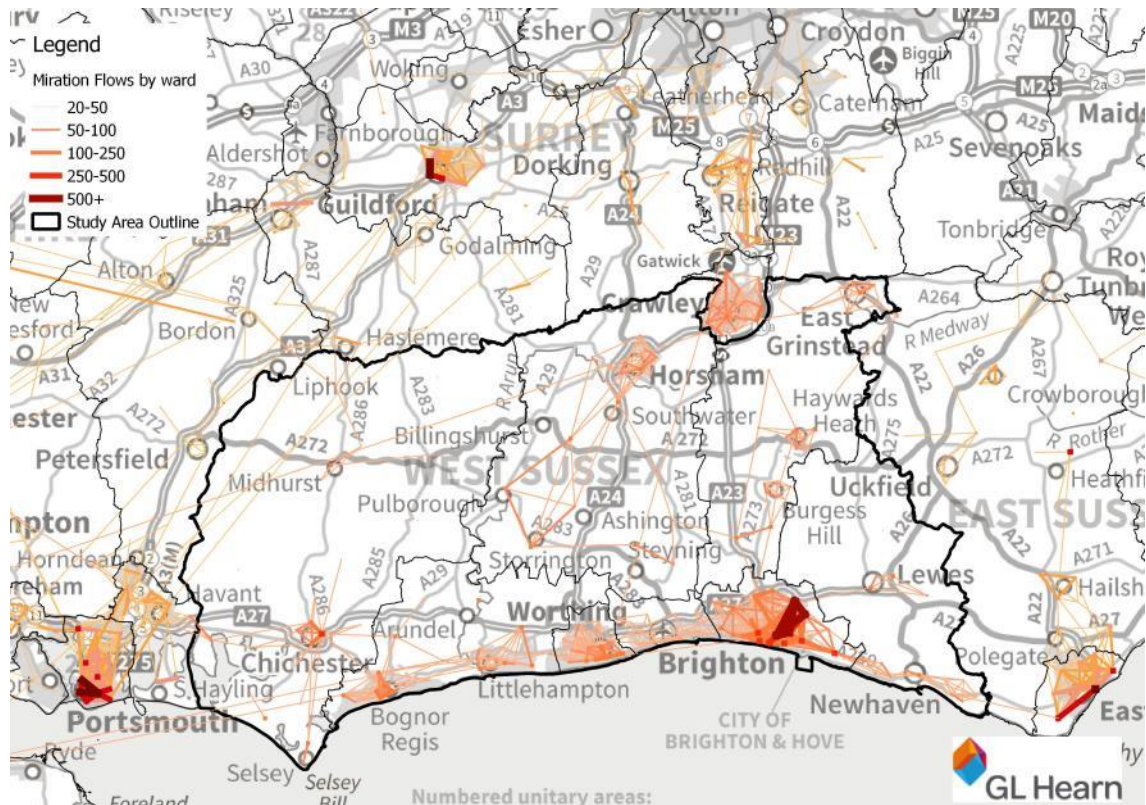
Source: ONS, 2011.

- 3.49 It is also worth considering whether these links are localised cross-boundary flows or consistent flows between all parts of the local authorities. We have therefore mapped flows between wards and this is illustrated in Figure 18 overleaf. This highlights the geographical linkages across the study area and beyond. The map clearly shows the strongest ward level migration flows tend to be localised within the main urban areas.
- 3.50 However, it can also be seen that there is a distinctive relationship between the coastal authorities including Worthing, Adur, Brighton & Hove, and Lewes, particularly coastal Lewes.



3.51 Within Mid Sussex, there are some southern areas up to Burgess Hill which show strong migration links with Brighton & Hove; however the majority of Mid Sussex connects to other parts of Mid Sussex in terms of migration of people. There are also minor moves to/from East Grinstead and Crawley.

**Figure 18: Local Migration Flows (2011)**



3.52 Similar trends can be noticed in Horsham, where some southern areas of the district are more related to Worthing and Adur, however the majority of the authority seems to show stronger self-containment and migratory links with Crawley.

3.53 Similar connections can be noted between Bognor Regis and Chichester. There is also a notable link between Bognor Regis and Littlehampton. Links between Littlehampton and Worthing appear less than those between Littlehampton and Bognor Regis.

3.54 The next step is to group the local authorities to understand what the self-containment rates would be for the combined areas. This is particularly important to understand migration linkages for authorities which have demonstrated a self-containment rate below the 70% threshold. However, it is also important to consider the linkages between the other authorities as well to develop an understanding of flows across the study area and beyond.

### Combined Self-Containment Rate

- 3.55 GL Hearn has grouped the authorities to test the combined self-containment. This process involves grouping the authorities which have demonstrated some form of link then recalculating the self-containment rate for the combined authorities.
- 3.56 We have firstly tested the groups of authorities based on previous definitions as set out in earlier chapters. This historic work (inconsistently) identified north/south and east/west splits within the study area and Crawley. Although there are notable overlaps all of these areas demonstrate a self-containment rate which exceeds 70%.

**Table 5: Self-containment rates, 2011**

Sub Areas	% of those moving from the area (Outward)	% of those moving to the area (Inward)
Western - Arun, Adur, Worthing, Chichester	76%	81%
Eastern - Brighton & Hove, Lewes, Mid Sussex, Horsham	82%	82%
Northern - Mid Sussex, Horsham, Crawley	74%	76%
Southern - Adur, Arun, Brighton & Hove, Chichester, Lewes & Worthing	85%	86%
<b>Strongest Flows</b>		
Adur and Worthing	65%	70%
Chichester and Arun	72%	76%
Arun and Worthing	74%	79%
Brighton and Lewes	82%	81%
Brighton & Adur	76%	76%
Mid Sussex and Crawley	68%	70%

Source: ONS

- 3.57 Considering the strongest migration flows across the study area, as set out in Table 5, suggests that further agglomeration and testing of the new self-containment rate is appropriate. We have combined the authorities with the strongest flows and in most cases these exceed the 70% threshold.
- 3.58 Additionally, further testing was included for all the local authorities' self-containment rates. This indicated an 85% self-containment rate for outward and 86% for inward migration.

3.59 These results tend to indicate a different definition of HMAs to those identified in the previous studies. It is particularly notable that, although there are strong linkages to/from Brighton across the coastal authorities, Chichester appears to be separate although it does have strong links with Arun. Horsham and Mid Sussex are also slightly detached although both demonstrate a strong relationship with Crawley which when combined exceeds the typical HMA self-containment rate threshold.

3.60 However, further testing is required to clarify the specific boundaries, as some of the authorities represent large geographical areas. This can be aided through examination of where people work and live.

### Commuting flows

3.61 In considering commuting patterns, we have firstly sought to identify the commuting self-containment rates on the study areas local authorities. The data in Table 6 shows that commuting self-containment rates are relatively low.

3.62 The highest resident based self-containment rate is in Brighton & Hove where 66% of residents also work in the area. Brighton & Hove's workplace based commuting self-containment rate is higher (69%), meaning a large number of people who work in the area also live there. The resident based self-containment rates for most other authorities are considerably lower.

**Table 6: Commuting Self-Containment (2011)**

	Live in the Area	Work in the Area	Live and work in the area	Resident based Self-containment	Workplace based Self-containment
<b>Adur</b>	23,437	16,327	6,972	30%	43%
<b>Arun</b>	52,678	34,427	25,454	48%	74%
<b>Brighton &amp; Hove</b>	109,641	104,563	72,648	66%	69%
<b>Chichester</b>	39,635	47,796	23,500	59%	49%
<b>Horsham</b>	51,101	41,141	24,413	48%	59%
<b>Lewes</b>	34,973	29,574	15,157	43%	51%
<b>Mid Sussex</b>	57,145	45,810	25,400	44%	55%
<b>Worthing</b>	41,018	39,979	23,236	57%	58%

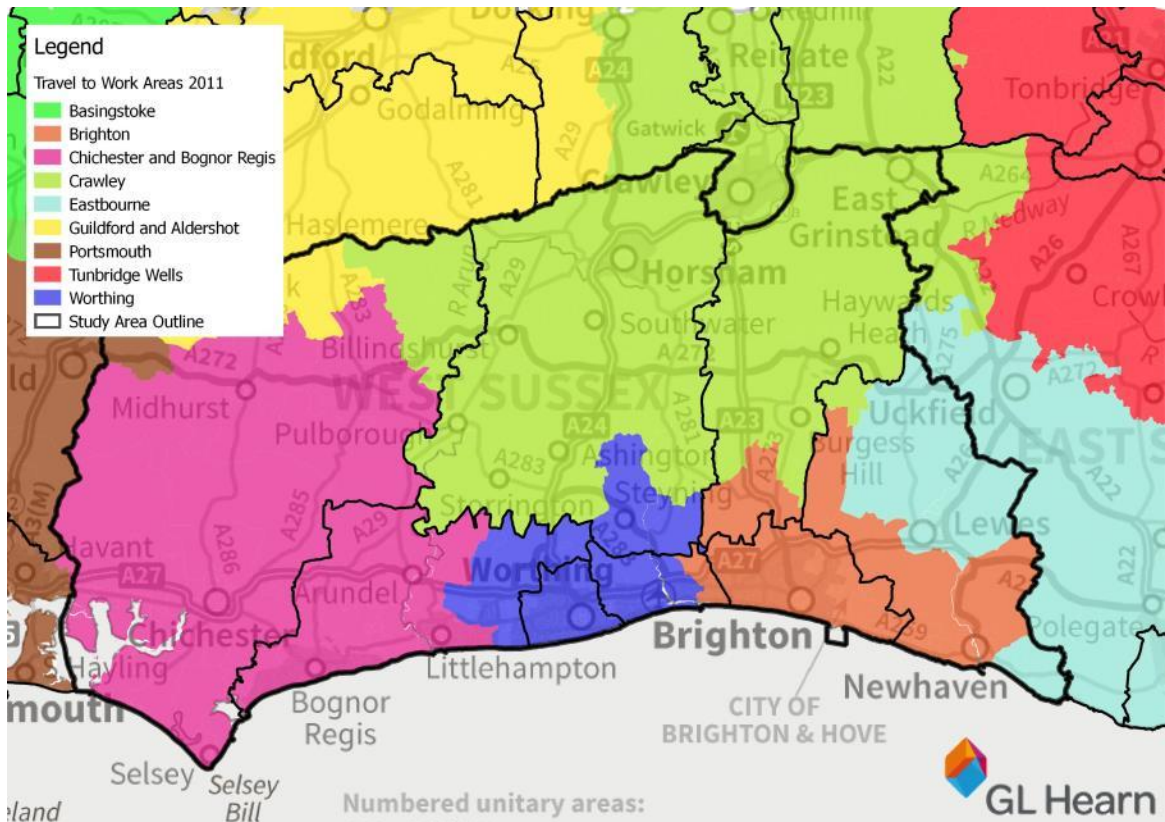
Source: 2011 Census

3.63 Worthing has resident and workplace based self-containment rates of 57% and 58% respectively. Arun shows the highest workplace self-containment rate of 74%, meaning that a high proportion of those working in the area also live there. This once again illustrates that Brighton & Hove is likely to be central to any Housing Market Area identified.

### **ONS Travel to Work Area**

- 3.64 We have also drawn from the ONS Travel to Work Areas (TTWA) produced in late 2015, which themselves draw on 2011 census data. These are the only official and nationally consistent definition of Travel to Work Areas.
- 3.65 The ONS TTWAs were an attempt to identify self-contained labour market areas in which the majority of 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.
- 3.66 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 analysis. The areas were produced by analysing ward level journey to work data from the 2011 Census.
- 3.67 As illustrated in Figure 19, there are four ONS TTWA covering the Coastal West Sussex and Greater Brighton area:
- Eastbourne TTWA – covering some parts of Lewes (Seaford, Plumpton and Lewes) and Wealden, and the entirety of Eastbourne;
  - Brighton TTWA – covering the entirety of Brighton & Hove, some parts of Lewes (extending to Streat, Cooksbridge, and Bishopstone), Mid Sussex (south of Burgess Hill) and Adur (Southwick);
  - Worthing TTWA – covering the entirety of Worthing, the western parts of Adur (including Shoreham), Arun (East of Littlehampton) and a southern part of Horsham (up to Ashington);
  - Chichester and Bognor Regis TTWA – covering southern Chichester and Arun (up to Littlehampton);
  - Crawley TTWA – covering some parts of Chichester (areas around Wisborough Green), and the majority of Horsham and Mid Sussex;
- 3.68 Some small rural parts of Chichester also fall within Guildford and Aldershot and Portsmouth TTWA.
- 3.69 This analysis provides a good illustration of commuting dynamics in Sussex and beyond. Again it is clear that these areas are pulled in a number of directions. Crawley clearly has a pull on Mid Sussex and Horsham, similarly Chichester and Bognor Regis are interlinked.

**Figure 19: Travel to Work Areas (2011)**



Source: 2011 Census

- 3.70 Brighton’s influence doesn’t extend as far as perhaps anticipated. Given the proximity to as well as the excellent transport links with Shoreham and Lewes it is perhaps surprising that these are included in the Worthing and Eastbourne TTWA.
- 3.71 Although it should be noted that this analysis is not seeking the required 70% level of migration self-containment within a HMA. It does however have a notional self-containment rate target for a Travel to Work Area in that at least 75% of the area’s workforce work in the area and at least 75% of the people who work in the area also live in the area in most instances. The area must also have had a working population of at least 3,500. However, for areas where the working population in excess of 25,000, self-containment rates as low as 66.66% were accepted.
- 3.72 We can therefore assume that all these areas could be considered as a HMA on TTWA patterns but not necessarily by migration standards. It does however provide a good start to analyse more precise local flows. This is carried out below.

### Census Commuting Analysis

- 3.73 Table 7 ranks the workplace population in each local authority by size. This identifies secondary employment centres within the study area and surrounding areas. A number of these authorities have multiple employment centres.
- 3.74 Within the Study area, it can be witnessed that Brighton & Hove is the main employment centre (with workplace population of 104,563), followed Chichester (47,796) and Mid Sussex (45,810). Outside the study area, neighbouring main employment centres are Portsmouth (94,044), Crawley and Guildford (63,309).

**Table 7: Workplace Population of Local Authorities, 2011**

Workplace population	
Brighton & Hove	104,563
Portsmouth	94,044
Crawley	72,060
Guildford	63,309
Chichester	47,796
Mid Sussex	45,810
Horsham	41,141
Worthing	39,979
Eastbourne	35,761
Arun	34,427
Lewes	29,574
Adur	<b>16,327</b>

Source: 2011 Census

- 3.75 In looking at the major external flows only 2.4% of Portsmouth's workplace population come from the study area with the Chichester residents contributing around 1,500 per day. Guildford receives marginally less in absolute terms from the study area although in proportional terms 3.6% of the districts workforce comes from the study area.
- 3.76 In contrast almost 21,000 people commute to Crawley daily from the study area accounting for 29% of the Borough's workforce. The largest numbers coming from Mid Sussex, (7,100), Horsham (6,100) and Brighton & Hove (3,700).
- 3.77 We must also be mindful that the study area also has a strong flow to London. Almost exactly 30,000 people commute to London each day with Central London and Croydon being the most popular destinations. Although such is the scale of employment in these locations the study areas commuters only comprises only a very small percentage of jobs in the capital. The Greater London Authority has also identified its Boroughs as constituting a HMA in their own right.

### Flows to Brighton

- 3.78 Within the study area, Brighton & Hove is the key employment centre and can be expected to have a significant catchment area. It has a workplace population of 104,563 people more than double that of the next largest, Chichester (47,800).
- 3.79 Table 8 analyses where Brighton & Hove's workforce is drawn from. This shows that 69.5% is drawn from the city itself (self-containment), with the strongest inflows coming from the neighbouring authorities of Lewes (8.1% of the workforce) and Adur (6.3% of the workforce).
- 3.80 These authorities above each have a flow of 6,000- 8,000 persons per day commuting to Brighton & Hove. There are smaller scale flows from Mid Sussex and Worthing (around 3,500) and from Horsham, Wealden, Eastbourne and Arun (1,000-1,700).

**Table 8: Commuting Flows to Brighton & Hove , 2011**

Origin	Number	% of Brighton & Hove Workforce	Cumulative
Brighton & Hove	72,648	69%	69%
Lewes	8,478	8%	78%
Adur	6,615	6%	84%
Mid Sussex	3,492	3%	87%
Worthing	3,315	3%	90%
Horsham	1,720	2%	92%
Wealden	1,517	1%	94%
Eastbourne	1,361	1%	95%
Arun	1,065	1%	96%
Crawley	484	0%	96%
Other	3,868	4%	100%

Source: 2011 Census

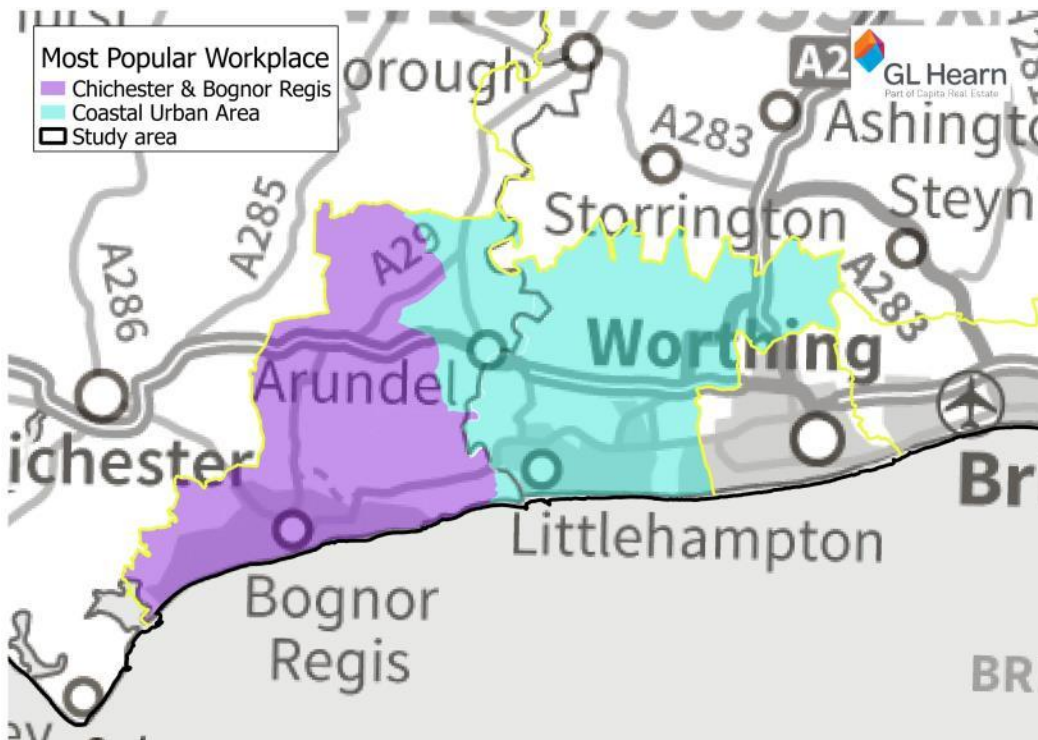
- 3.81 Interestingly there are less than 200 people commuting from Chichester to Brighton each day. This shows a clear detachment between the two. This might be linked to capacity on the A27 and the relatively slow train link. Clearly however Chichester has a much stronger relationship with Portsmouth than it does with Brighton.

### Commuting in Arun

- 3.82 We have produced additional detailed analysis of commuting patterns to and from the main urban areas/employment centres. This includes areas which are included within one or more Travel to Work areas and need more clarification in terms of what the most popular workplace is for a specific part of the district.

- 3.83 From initial analysis, Arun shows signs of strong migration and commuting links with Chichester, Worthing and Brighton which are both east and west of the district. As such further analysis was undertaken to clarify the relationships, using commuting data on a ward level.
- 3.84 Figure 20 demonstrates that Littlehampton and land east of the River Arun along with Arundel all have stronger commuting ratios with Worthing and Brighton than with Chichester and Bognor Regis.
- 3.85 However the localised migration analysis shows stronger inter-relationships between Littlehampton and Bognor Regis, than Littlehampton and Worthing. Ultimately in housing market terms, Littlehampton, East Preston and Angmering may fall within an area of overlap between the housing markets.

**Figure 20: Arun most Popular Place Workplaces for residents (2011)**



Source: 2011 Census

- 3.86 Conversely, Bognor Regis and wards west of the River Arun have either a much higher level of self-containment rate or have significant commuting links to Chichester.

#### **Commuting in Adur and Worthing**

- 3.87 Analysis was also included for Worthing and Adur in order to test where is the most popular place to work: Brighton/Shoreham or Littlehampton Urban Areas. This further testing helped determine



whether these areas can form a separate HMA or they need to be included within a wider Coastal HMA.

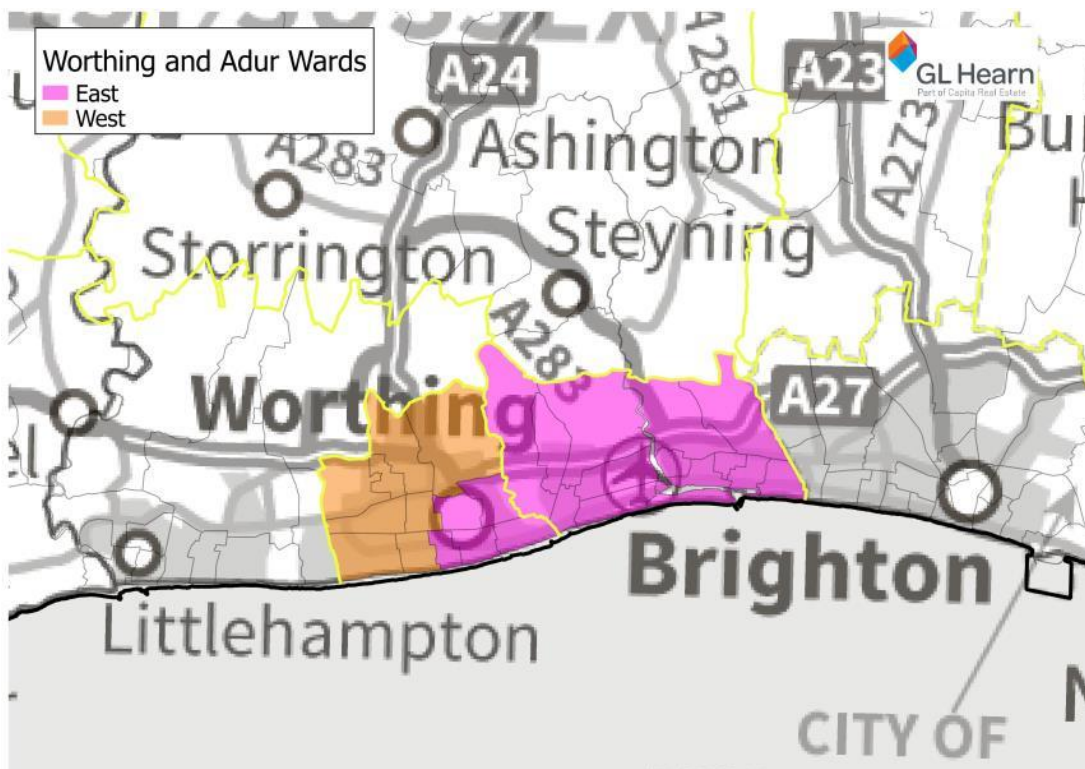
3.88 Neither Adur nor Worthing has a self-containment rate which exceeds that expected for a HMA. We have also tested above the influence of the Coastal Urban area in Arun which extends to Littlehampton. Similarly parts of Adur are clearly linked to Brighton and form part of the urban area of the City.

3.89 To identify the extent of this area of influence we have sought to identify the where the balance of commuting occurs in these districts i.e. where would a Littlehampton and Worthing HMA or a Brighton HMA extend to if either existed.

3.90 The majority of wards in Adur and Worthing have the highest number of employees commuting to somewhere else in the two local authorities. However three Adur wards, Eastbrook, Hillside and Southwick Green all have stronger level of commuting to Brighton and Lewes than to somewhere Adur or Worthing.

3.91 Leading on from this we have also analysed whether those in Worthing and Adur travel in greater numbers to the Littlehampton, Bognor Regis and Chichester urban areas or the Brighton and Lewes Urban Area. This in effect excludes external moves within Worthing and Adur.

**Figure 21: Worthing and Adur Most Popular Workplace**



Source: 2011 Census

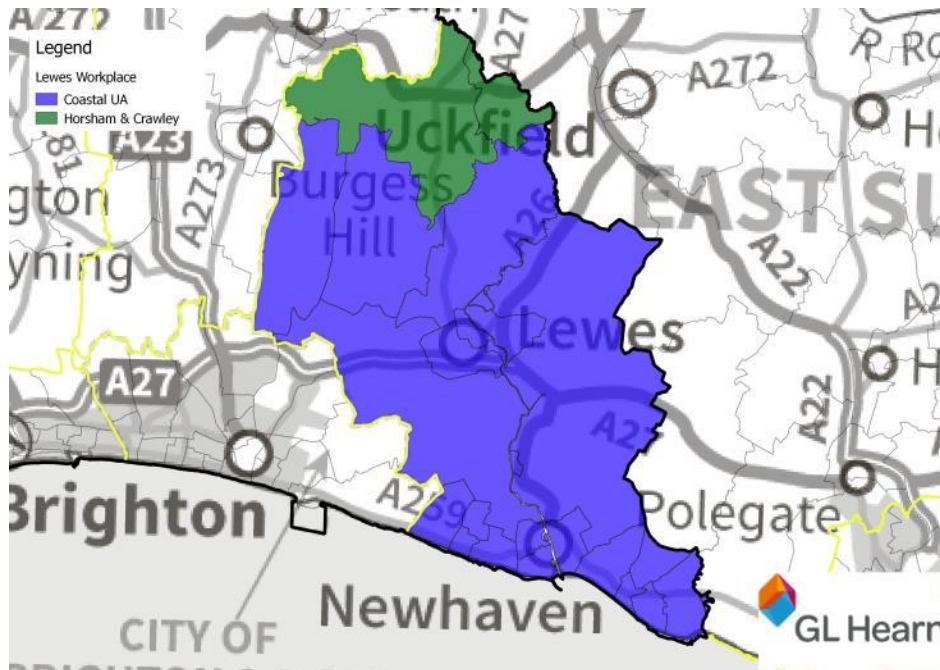
As shown in Figure 21 for all of Adur, the most popular workplace (for those commuting outside the District) is Brighton to the east. The western wards of Worthing all have stronger commuting to either Arun or Chichester. However Brighton is also the most popular workplace for the Worthing wards of Broadwater, Gaisford, Selden, Heene and Central for those commuting outside Worthing to work. This illustrates the extent of influence from Brighton and Hove on these areas.

- 3.92 In Arun, commuting flows were split with Arundel and Littlehampton showing closer links in commuting terms to Worthing; with Bognor Regis more strongly linked to Chichester in the west. However the localised migration analysis shows stronger inter-relationships between Littlehampton and Bognor Regis, than Littlehampton and Worthing. Ultimately in housing market terms, Littlehampton, East Preston and Angmering fall within an area of overlap between the housing markets in a similar way to Burgess Hill.
- 3.93 To test the possibility of a Worthing and Littlehampton HMA we calculated the self-containment rate of the combined western area (orange) area in Figure 21 with the eastern parts of Arun as identified in turquoise in Figure 20.
- 3.94 As the combined travel to work self-containment rate of the area does not exceed 70% (at maximum 63% excluding long distance moves), we concluded that the Worthing and Littlehampton area is not sufficiently self-contained to merit being defined as a separate HMA. Rather the evidence suggests that the urban area from Littlehampton to Brighton operates as a single interconnected area in commuting terms.

### **Commuting in Lewes**

- 3.95 The next district considered is Lewes, which from initial analysis showed strong links with Brighton & Hove, Mid Sussex and Crawley. Despite relative proximity to the town commuting to Eastbourne has been fairly minor by comparison. Further testing was completed in order to clarify where the most popular workplaces are for residents in different parts of Lewes.

**Figure 22: Lewes Most Popular Workplaces**



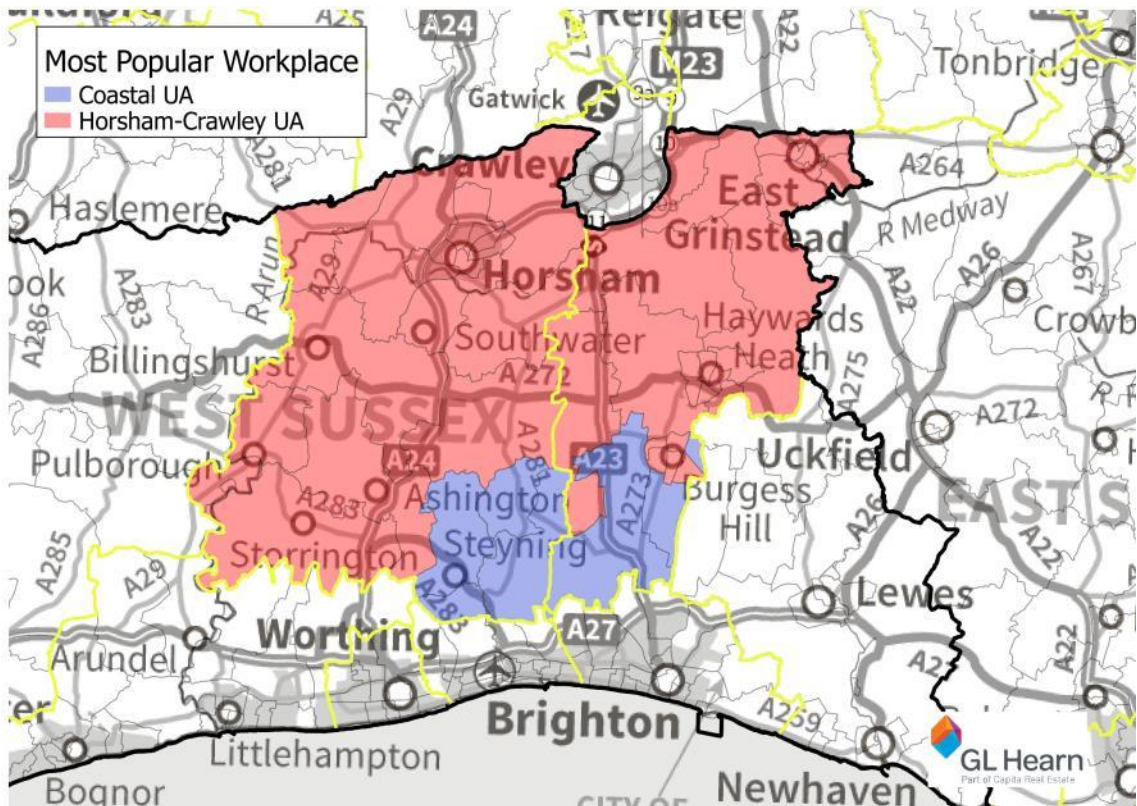
Source: 2011 Census

3.96 We have grouped the Horsham, Crawley and Coastal urban area as one potential destination. Figure 22 shows that the majority of Lewes wards have more residents commuting to, Lewes, Brighton and Worthing Urban Area than they do to Crawley and Horsham. With the exception being Newick and Chailey and Wivelsfield wards which are more closely linked with Horsham and Crawley.

#### **Commuting in Horsham and Mid Sussex**

3.97 Horsham and Mid Sussex were also tested further in order to determine for each ward where the largest number of residents commute to. Again we have tested whether this is the coastal area or the Crawley-Horsham area.

**Figure 23: Horsham and Mid Sussex Most Popular Workplaces**



Source: 2011 Census

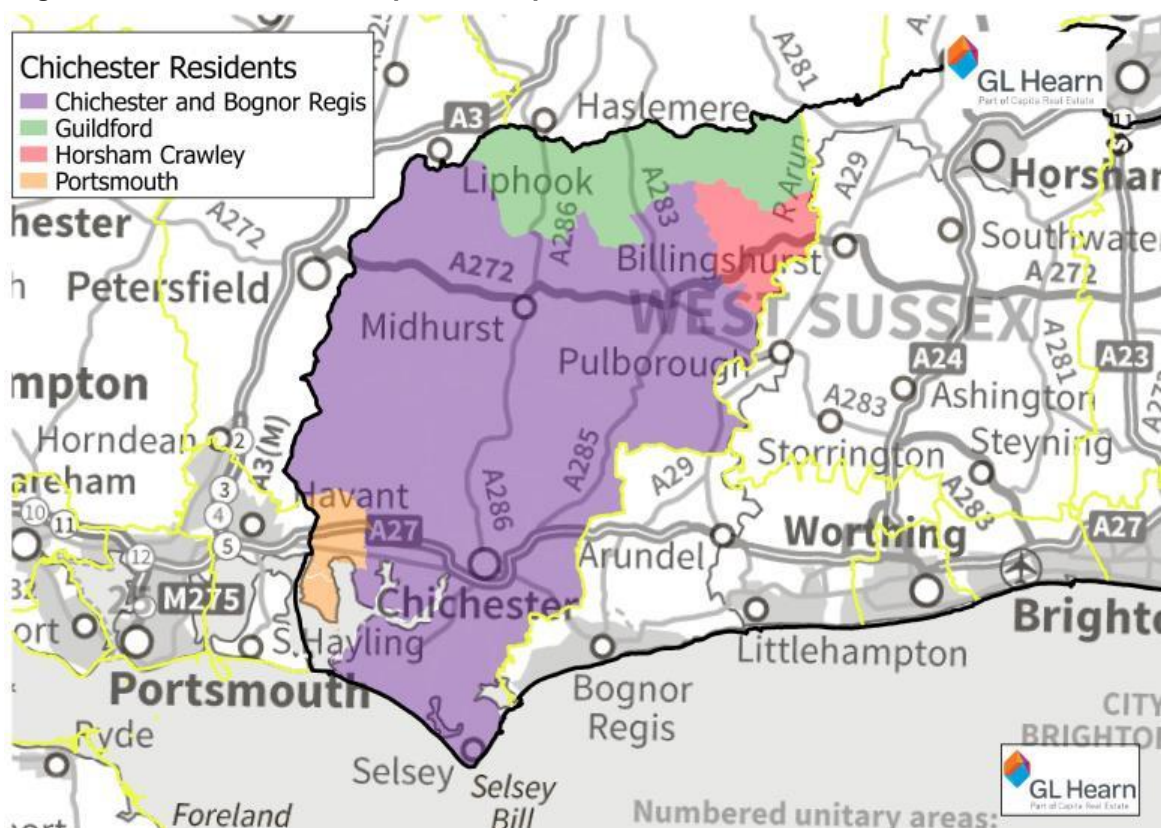
- 3.98 This analysis, shown in Figure 23 identified a clear north-south split. In the south of Horsham, wards such as Steyning, Henfield, Bramber, Upper Beeding and Woodmancote have more residents travelling south to the coastal urban areas with the rest of the district focussed on commuting to Horsham and Crawley.
- 3.99 For Mid Sussex, the Hurstpierpoint and Downs, Hassocks, and Burgess Hill St Andrews wards all have greater commuting southwards than northwards. It should however be noted that some of the commuting patterns particularly in Burgess Hill are split fairly evenly. In fact for a number of wards the difference is in single figures. As this is also based on 2011 data it should be viewed with some uncertainty. It is therefore sensible to conclude that Burgess Hill falls into more than one HMA.
- 3.100 Of the Burgess Hill wards, St Andrews ward has marginally stronger links to the coastal urban area than Horsham and Crawley. The ward has within its confines Wivelsfield trains station, which has less frequent service compared to Burgess Hill station. However Wivelsfield has a stronger link with the east-coast serving Lewes and Eastbourne. It is thought therefore that those using this station do so as it has connections to Lewes. However as with the other wards the margins are quite small and the areas should for pragmatic purposes be seen as falling within more than one HMA.

3.101 Figure 23 indicates that one of Mid-Sussex’s southern wards (Bolney) falls within the Horsham-Crawley area despite the southern part of the ward being surrounded by two wards (Hurstpierpoint & Down) which fall within the Coastal HMA. There are a number of reasons for this apparent anomaly. Firstly, the Bolney ward extends across a 10 mile linear area which includes Slaugham in the north to Albourne in the south with Bolney in the middle. Secondly the two nearest junctions on the A23 – Albourne & Hurstpierpoint and Henfield provide northbound access only to the A23 hence the majority of residents are likely to commute northwards. However, it is likely that sub-ward area analysis would reveal that the southern parts of the ward, including the Albourne parish, would fall in to the Coastal HMA, as more local residents commute to that area.

**Commuting in Chichester**

3.102 Additionally, we have also tested the commuting patterns within Chichester in order to estimate the strength of the relationship it has with its surrounding districts and in particular, if specific wards showcase stronger links with areas outside Chichester District.

**Figure 24: Chichester Most Popular Workplaces**



Source: 2011 Census

3.103 Figure 24 illustrates the Chichester wards which have stronger relationship with neighbouring Districts. For example, the wards of Fernhurst and Plaistow have demonstrated a stronger link with

the Guildford, while Wisborough Green shows a better connection with Horsham and Crawley. To the south, Westbourne and Southbourne are better connected in terms of commuting with Portsmouth HMA.

- 3.104 All of the wards have been analysed and there are a number which have movements in a number of directions. For example the Roegate and Harting Wards have a strong commuting relationship with both Chichester and Bognor Regis and the Portsmouth HMA. However, the slim majority of residents in each of these are commuting to Chichester or Bognor Regis.

### Mode of Transport - HMA

- 3.105 We have also examined the method which commuters around the study area use to travel to and from work. While this information does not impact on the HMA/FEMA boundaries (numbers rather than mode are most relevant) it can help inform future infrastructure decisions and where these would support changes to the definition.
- 3.106 Initially we have reviewed the mode of transport used by commuters within each of the local authorities within the study area (as well as Crawley). This reveals that the major urban centres of Crawley and Brighton and Hove are the most sustainable with notably higher levels of public transport usage, particularly by bus. Brighton and Hove also has notably higher levels of walking to work than the other local authorities.
- 3.107 Lewes has the highest percentage of residents travelling to work by train although Mid Sussex, Brighton and Hove, Adur and Crawley have similar proportions.

**Table 9: Internal Commuting Movements by mode of transport (2011)**

	Adur	Arun	B&H	Chichester	Crawley	Horsham	Lewes	Mid Sussex	Worthing
Train	2.5%	1.6%	2.4%	0.9%	2.0%	1.1%	2.9%	2.7%	1.4%
Bus	3.4%	2.9%	20.8%	3.2%	16.3%	3.1%	5.4%	2.0%	4.2%
Private Vehicle*	60.7%	68.1%	34.7%	64.7%	63.0%	70.4%	62.1%	66.8%	58.6%
Bicycle	7.0%	7.4%	7.7%	7.7%	4.1%	3.6%	3.3%	2.7%	8.4%
On foot	26.1%	19.8%	34.1%	23.1%	14.2%	21.6%	26.1%	25.5%	27.1%
Other	0.3%	0.2%	0.3%	0.3%	0.2%	0.2%	0.1%	0.2%	0.2%

Source: ONS, Census 2011. \*Includes Taxis (Green/Red shading refer to highest/lowest respectively for each method of transport)

- 3.108 Worthing has the highest percentage of residents travelling to work by bike. Perhaps unsurprisingly the larger rural districts of Mid Sussex, Horsham and Lewes have the lowest level of bicycle usage. In contrast Chichester, which also has a large rural hinterland, has the second highest level of

bicycle usage. This is likely to reflect high levels of bicycle movements within the City including student movements.

3.109 Similarly Horsham and Mid Sussex have high levels of private vehicle usage (which includes motorcycles and taxis). Again given the rural nature of these districts, this is perhaps unsurprising. However, Arun has the second highest use of private vehicle usage despite being a relatively urbanised area. This perhaps reflects the poor train provision between Bognor Regis and Chichester which as we have established have high levels of commuter interaction.

3.110 To understand this in more detail we have also examined commuting in to each local authority from the others in the study area. This is also taken from the same dataset as before (Census 2011) and examines the flows to the given local authority from each of the other authorities. The numbers will not tally with earlier commuting patterns as the tables set out below do not include movements from outside of the study area.

#### Adur

3.111 Adur's strongest relationships are with Brighton and Hove and Worthing. In both cases the vast majority of movements are by car. Despite having four train stations in the district very few in-commuters travel by that method.

**Table 10: Commuting in to Adur by Mode of Transport (2011)**

Adur	Arun	Brighton and Hove	Chichester	Crawley	Horsham	Lewes	Mid Sussex	Worthing
Train	49	182	10	8	4	17	12	182
Bus	25	358	1	1	28	6	3	150
Private Vehicle	799	2,208	89	92	782	317	317	2,329
Bicycle	9	172	1	-	18	4	1	203
On foot	19	142	6	1	2	1	1	70
Other	1	15	-	-	2	-	-	9

Source: ONS, Census 2011.

3.112 The same numbers of commuters travel by train from both Worthing and Brighton. Although use of buses is far higher from those in Brighton and Hove. The 12% of commuters that use the bus from Brighton and Hove is notably higher than the average. Similar numbers of commuters drive to Adur from Arun and Horsham

#### Arun

3.113 For all modes of in-commuting the highest number of people travelling to Arun is from Worthing. The next highest number are those driving from Chichester. In comparison to the local authorities average Arun has a relatively high reliance on commuters coming in by car.

**Table 11: Commuting in to Arun by Mode of Transport (2011)**

Arun	Adur	Brighton and Hove	Chichester	Crawley	Horsham	Lewes	Mid Sussex	Worthing
Train	39	88	69	1	20	3	7	153
Bus	16	23	66	3	3	1	-	105
Private Vehicle	474	396	2,058	43	596	35	128	2,679
Bicycle	9	2	42	-	2	-	-	130
On foot	20	39	24	2	7	1	2	101
Other	1	3	4	-	-	-	-	11

Source: ONS, Census 2011.

- 3.114 Of those travelling to Arun from Brighton 16% use the train which in percentage terms is one of the highest usage of this mode. Although this is still less than 100 people in total.

### Brighton and Hove

- 3.115 The largest number of commuters into Brighton and Hove travel from Lewes and Adur. In absolute terms the largest numbers of commuters by private vehicles are from Lewes although in percentage terms those coming from Adur are more reliant on this method.
- 3.116 Worthing also has a high number of commuters into Brighton and Hove particularly by train. Indeed of all people travelling by train to Brighton the highest number are from Worthing.

**Table 12: Commuting in to Brighton and Hove by Mode of Transport (2011)**

Brighton and Hove	Adur	Arun	Chichester	Crawley	Horsham	Lewes	Mid Sussex	Worthing
Train	725	242	69	129	66	566	822	899
Bus	815	30	1	15	92	2,118	148	171
Private Vehicle	4,579	740	105	334	1,541	5,502	2,456	2,116
Bicycle	294	22	-	1	11	160	34	70
On foot	192	23	4	2	8	119	27	56
Other	10	8	1	3	2	13	5	3

Source: ONS, Census 2011.

- 3.117 The data also reiterates the relative lack of commuting from Arun, Crawley and (especially) Chichester into Brighton and Hove. Those that do commute from these areas have a much higher tendency to use public transport than those areas with higher commuting numbers.
- 3.118 Brighton has the lowest percentage of in commuters by car although in absolute terms its numbers are second only to Crawley. Conversely it has the highest percentage of in-commuting via public transport.



### Chichester

3.119 Arun provides the most commuters into Chichester by all modes. This reiterates the link between the two local authorities. Horsham also sends a notable number of commuters to Chichester. Despite the existence of the Arun Valley rail line, only a very small number of Horsham to Chichester commuters travel by train. .

**Table 13: Commuting in to Chichester by Mode of Transport (2011)**

Chichester	Adur	Arun	Brighton and Hove	Crawley	Horsham	Lewes	Mid Sussex	Worthing
Train	36	563	173	11	35	10	11	156
Bus	7	488	14	20	10	-	3	10
Private Vehicle	197	9,197	246	140	1,014	37	109	689
Bicycle	2	190	2	3	4	-	4	8
On foot	6	89	7	24	17	1	12	19
Other	-	24	1	1	1	-	1	-

Source: ONS, Census 2011.

3.120 Of those travelling to Chichester from Brighton 39% use the train which in percentage terms is the highest reliance on this mode within the study area (although a relatively small number of commuters in absolute terms).

### Crawley

3.121 In comparison to the local authority average Crawley has a relatively high reliance on commuters coming in by car. Indeed in absolute terms it has the highest number of in-commutes by this method.

3.122 In public transport terms the largest number of people commuting into Crawley are from Brighton and Hove. Despite being closer and on the same line the number of people from Burgess Hill and Haywards Heath using the train to commuting to Crawley is still lower. Although the Gatwick Express does not stop within Mid Sussex.

**Table 14: Commuting in to Crawley by Mode of Transport (2011)**

Crawley	Adur	Arun	Brighton and Hove	Chichester	Horsham	Lewes	Mid Sussex	Worthing
Train	53	83	602	38	458	113	484	96
Bus	7	5	205	22	78	12	160	4
Private Vehicle	638	729	2,850	321	5,517	801	6,383	942
Bicycle	4	2	6	7	52	2	56	2
On foot	7	2	44	22	45	6	31	11
Other	-	2	8	2	9	-	5	2

Source: ONS, Census 2011.

- 3.123 Overall there are still higher numbers commuting into Crawley from Mid Sussex and Horsham than from Brighton. This highlights the importance of the A23 and A264 on commuting despite the good train links.
- 3.124 Despite the existence of the Arun Valley train line commuting between Chichester and Crawley, and Arun and Crawley is largely confined private vehicles.

### Horsham

- 3.125 The largest number of commuters in to Horsham by all modes, except by bike, is from Crawley. There are however still considerable movements, principally by car from Mid Sussex, Brighton, Worthing and Arun.
- 3.126 Worthing provides the greatest number of commuters into Horsham by bicycle, although the numbers are still relatively low.

**Table 15: Commuting in to Horsham by Mode of Transport (2011)**

Horsham	Adur	Arun	Brighton and Hove	Chichester	Crawley	Lewes	Mid Sussex	Worthing
Train	12	60	74	35	203	7	54	34
Bus	16	8	60	14	101	4	15	28
Private Vehicle	959	1,791	1,693	1,002	2,054	301	1,672	1,940
Bicycle	3	9	14	10	15	-	12	18
On foot	2	13	17	19	56	2	50	18
Other	3	6	4	4	9	-	2	2

Source: ONS, Census 2011.

- 3.127 At almost 92% Horsham has one of the highest percentages of in-commuting via car in the study area. Conversely it has relatively low levels of public transport usage by in-commuters.
- 3.128 As with Crawley despite the existence of the Arun Valley train line, commuting between Chichester to Horsham is largely confined to private vehicles.
- 3.129 Commuters between Adur and Horsham and Worthing and Horsham are almost entirely reliant on private vehicles (96% and 95% respectively). This may change should the proposed Arundel Chord be built , but given the relatively low rail use between Chichester and Horsham this may be unlikely.

### Lewes

- 3.130 By all modes the largest number of commuters into Lewes is from Brighton and Hove. The vast majority travel in by car although there are also notable numbers using public transport.

3.131 A notable number of commuters also come from Mid Sussex, again this is mostly by private vehicle.

**Table 16: Commuting in to Lewes by Mode of Transport (2011)**

Lewes	Adur	Arun	Brighton and Hove	Chichester	Crawley	Horsham	Mid Sussex	Worthing
Train	19	8	405	6	8	5	73	22
Bus	14	3	664	-	4	-	71	1
Private Vehicle	444	205	3,149	50	135	296	1,605	328
Bicycle	9	7	109	1	3	3	25	7
On foot	1	2	76	5	1	2	26	3
Other	-	-	4	-	-	-	3	-

Source: ONS, Census 2011.

3.132 To support the separation of the housing markets, it is notable that there are less than 75 people travelling from Chichester to Lewes each day and only around 150 from Crawley.

3.133 Although only a relatively small absolute number, the percentage of commuters from Horsham to Lewes using private vehicles (97%) is the highest within the study area.

#### Mid Sussex

3.134 The largest numbers of commuters in to Mid Sussex originate in Brighton and Hove, a large percentage of which arrive by train. Although the actual number is quite small Crawley provides the largest number of commuters via bicycle or on foot. The latter is likely to reflect shorter movements to locations such as Pease Pottage.

3.135 Horsham and Lewes also supply a notable number of commuters into Mid Sussex, again mostly by private vehicle.

**Table 17: Commuting in to Mid Sussex by Mode of Transport (2011)**

Mid Sussex	Adur	Arun	Brighton and Hove	Chichester	Crawley	Horsham	Lewes	Worthing
Train	81	16	746	10	132	35	107	73
Bus	3	-	147	-	160	16	39	1
Private Vehicle	690	302	3,028	103	2,225	1,914	1,932	604
Bicycle	-	2	19	3	40	12	17	-
On foot	5	5	60	10	84	27	29	8
Other	-	1	8	-	10	7	7	2

Source: ONS, Census 2011.

3.136 For both car and train travel Mid Sussex has relatively high percentage of in commuters. Conversely there is a relatively low level of bus usage (in percentage terms) compared to the other local authorities in the study area.

## Worthing

- 3.137 Depending on the mode examined commuting into Worthing is greatest from three different local authorities. By far the largest numbers of people drive in from Arun. In contrast Adur provides the highest number of commuters travelling by bus, foot or on a bicycle. Worthing has the highest number of commuters using bikes in the study area.

**Table 18: Commuting in to Worthing by Mode of Transport (2011)**

Worthing	Adur	Arun	Brighton and Hove	Chichester	Crawley	Horsham	Lewes	Mid Sussex
Train	289	310	549	50	15	16	17	36
Bus	400	190	157	1	4	23	7	1
Private Vehicle	3,261	5,008	1,980	348	143	1,244	260	310
Bicycle	202	146	71	4	-	10	-	2
On foot	78	74	40	10	2	9	-	2
Other	7	5	6	-	-	1	1	-

Source: ONS, Census 2011.

- 3.138 The largest percentage of residents using public transport (and in particular rail) commuting into Worthing are from Brighton and Hove. Although in absolute terms the numbers are still lower than those choosing to drive.

## Summary

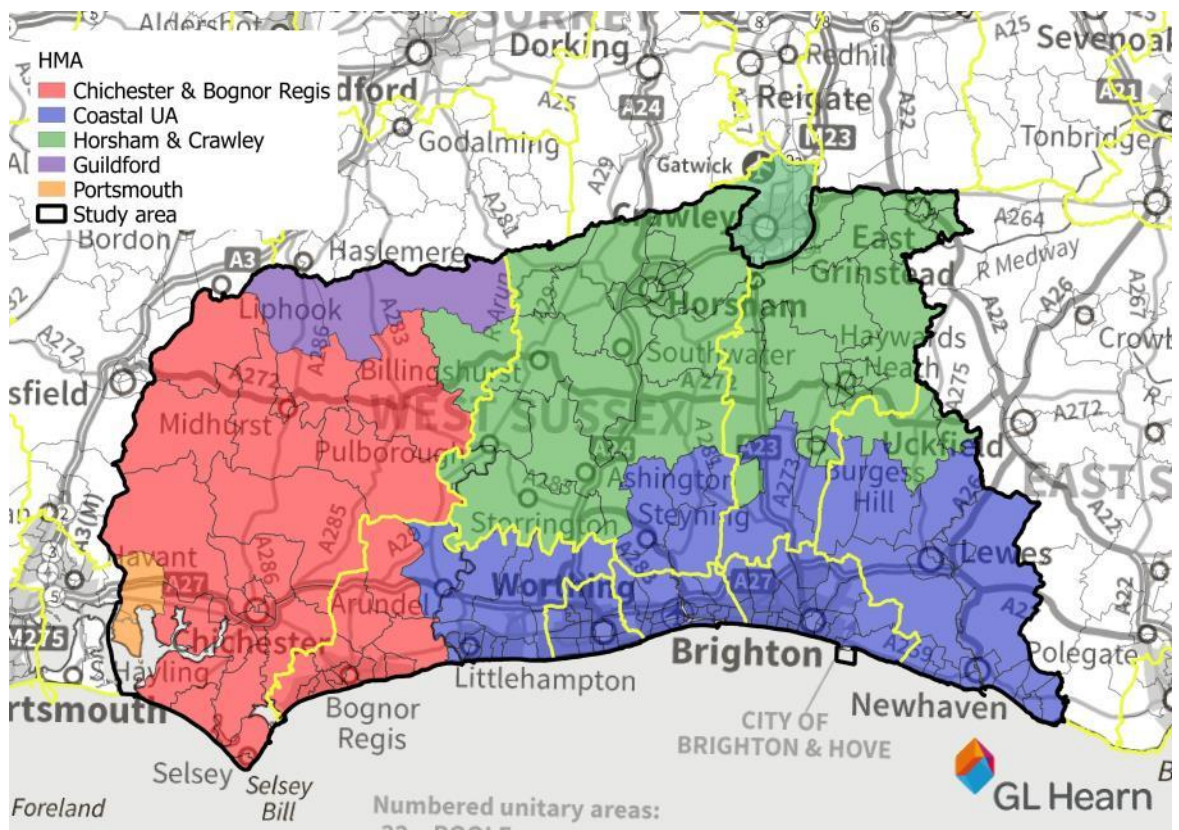
- 3.139 This section analysed several indicators in order to establish the boundaries of the Housing Market Areas for the Coastal West Sussex and Greater Brighton area. Analysing current median house prices demonstrates generally similar trends regardless of the type of housing.
- 3.140 There are several hot spots of higher prices notably Brighton & Hove and certain areas in Chichester, Horsham and Mid Sussex. There are also significantly lower prices around the coastal line and just outside the study area boundary in Crawley, although some of the larger towns in Horsham and Mid Sussex demonstrate similar prices.
- 3.141 Examination of migration and commuting data, which indicated some strong relationships in the study area. In particular, the analysis clearly indicated a strong link between Chichester and Arun, which was a factor to consider when defining the boundaries of potential HMAs. However, some areas within Arun, particularly east of the River Arun, show strong migration and commuting links with Worthing which is also a consideration to take when defining potential HMA boundaries.
- 3.142 Additionally, strong relationships were identified between Horsham with Crawley and Mid Sussex, although this is not a consistent picture across the whole of these districts. This outcome is confirmed by looking at the commuting analysis, which shows that in areas up to Ashington (Horsham) and Burgess Hill (Mid Sussex) more residents seek employment within a coastal area,

and areas, while the rest of the two authorities commute northwards. This was also a factor to consider for the formation of potential HMAs.

3.143 Further detailed testing was conducted for Arun, Chichester, Lewes, Horsham, Mid Sussex, Adur and Worthing in order to determine what the most popular workplaces are within each ward in those authorities. Whilst there was some evidence of division between the Worthing-Littlehampton area and the Greater Brighton area, the residual area did not have a sufficient level of self-containment to merit being defined as a separate HMA.

3.144 Therefore, based on the findings set out above, three HMAs have been identified across the study area. Those being Chichester and Bognor Regis HMA, Coastal Urban Area HMA and Horsham and Crawley HMA which includes much of Mid Sussex. Figure 25 illustrates the defined boundaries including Crawley.

**Figure 25: Coastal West Sussex and Greater Brighton HMA boundaries, 2016**



Source: GL Hearn using 2011 Census

3.145 Figure 25 identifies three core Housing market areas:

- A Chichester and Bognor Regis HMA, which extends north to Midhurst;

- A Coastal Urban Area HMA, which extends from Littlehampton and Newhaven and across the Downs to Steyning and Hassocks;
- A Horsham and Crawley HMA, which includes East Grinstead, Haywards Heath, Burgess Hill, Billingshurst, Pullborough and Storrington.

3.146 However there are area of overlap between housing market areas include around Burgess Hill, southern wards in Horsham District and northern wards in Lewes District. There are also overlaps around Littlehampton, Rustington, Angmering and East Preston which relate both to the Chichester and Bognor Regis and Coastal Urban Area HMAs.

3.147 For the Core HMAs, we have also tested their self-containment rates. As shown in the table below the self-containment rate for each exceeds the typical 70% required by the guidance.

**Table 19: HMA Self-containment rates excluding long distances**

	% of those moving from the HMA	% of those moving to the HMA
	(Outward)	(Inward)
Coastal HMA	86%	85%
Chichester and Bognor Regis HMA	74%	71%
Horsham and Crawley HMA	74%	73%

Source: GL Hearn using 2011 Census

## 4 DEFINING FUNCTIONAL ECONOMIC MARKET AREAS

4.1 The purpose of this section is to assess the relevant Functional Economic Market Area(s) (FEMA) within the Coastal West Sussex and Greater Brighton area.

4.2 Planning Practice Guidance (PPG) on *Housing and Economic Development Needs Assessments* sets out what functional economic market areas are and provides guidance on how these should be defined.

4.3 The PPG indicates that the Functional Economic Market Area should be considered in the following way:

*The geography of commercial property markets should be thought of in terms of the requirements of the market in terms of the location of premises, and the spatial factors used in analysing demand and supply – often referred to as the functional economic market area. Factors for consideration in defining an area's FEMA include:*

- Extent of any Local Enterprise Partnership (LEP) within the area;
- Travel to work areas;
- Housing market area;
- Service market for consumers;
- Flow of goods, services and information within the local economy;
- Administrative area;
- Catchment areas of facilities providing cultural and social well-being;
- Transport network'.

4.4 There is no standard approach or data source which can be used to define a FEMA. The approach intended is to look at and consider these issues, and assess what could be considered locally appropriate.

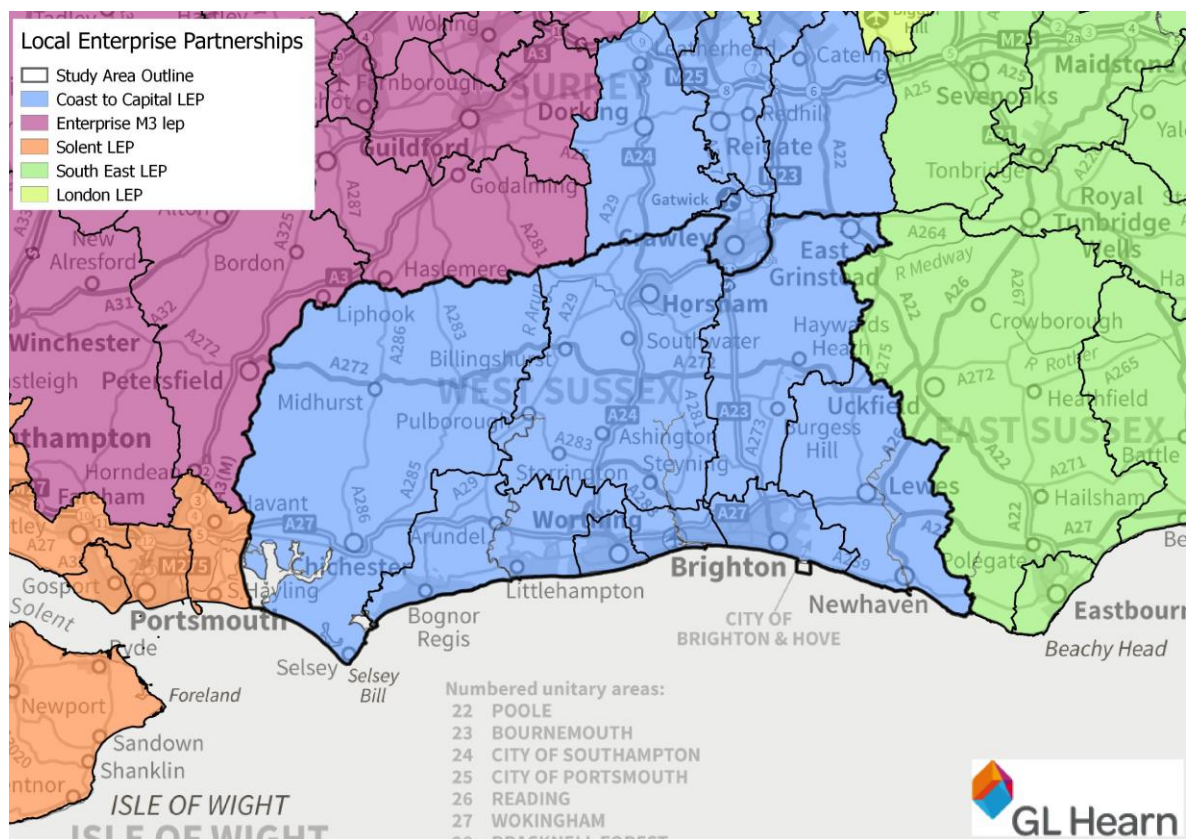
4.5 Importantly, a key component in defining the FEMA is the evidence and findings which define the Housing Market Area (HMA), particularly with regard to commuting dynamics. A considerable amount of the evidence for defining the FEMA has therefore been considered in the proceeding sectors of this report, including Travel to work areas, Housing market areas and administrative areas.

4.6 The remaining factors are considered in this section. In relation to identifying the FEMA, it should be noted not all of the key indicators are readily available and for some indicators there is no appropriate source of data (nor is it a requirement to review each and every factor). For example, the flow of goods and services is difficult to specifically quantify on a robust basis, given available datasets. For that reason we have not included a wide ranging review of this factor within our FEMA review.

## Local Enterprise Partnership Areas

- 4.7 Figure 26 shows the extent of the LEP administrative geographies. The Coast to Capital LEP covers the entire study area, along with Crawley, Epsom and Ewell, Tandridge, Reigate and Banstead, Mole Valley and Croydon local authority areas.
- 4.8 Clearly this is a substantial area and also crosses regional boundaries. However, local consultation suggests there are limited links between Chichester and Crawley let alone Croydon. There is also a limited economic market overlap between Croydon and Brighton markets.

**Figure 26: Local Enterprise Partnership (LEP) Areas**



Source: ONS

- 4.9 Neighbouring LEPs include the South East LEP, which covers the majority of county of East Sussex, the entirety of the counties Kent and Essex. The Enterprise M3 LEP covers the local authorities of most of the northern Hampshire and New Forest and the Surrey authorities of Waverley, Guildford, Woking, Elmbridge, Runnymede, Surrey Heath, Havant and Spelthorne. The Solent LEP covers the south Hampshire authorities and the Isle of Wight.



- 4.10 As set out in the previous section the main economic drivers in terms of employment are Crawley and Brighton and Hove. To this Croydon can be added (88,000 employees) making it the second largest economic centre in the LEP after Brighton and Hove.
- 4.11 We have also examined the value of the Economy in terms of workplace GVA and GVA per head. This information is only available at a NUTS 3 region and therefore has not been broken down by population.

**Table 20: GVA by NUTS 3 Region (2013)**

	GVA (£Millions)		GVA Per Head	
Outer London - South	£	22,675	£	18,045
Brighton and Hove	£	6,389	£	22,972
East Sussex CC	£	8,392	£	15,703
Surrey	£	35,266	£	30,610
West Sussex	£	19,848	£	24,165

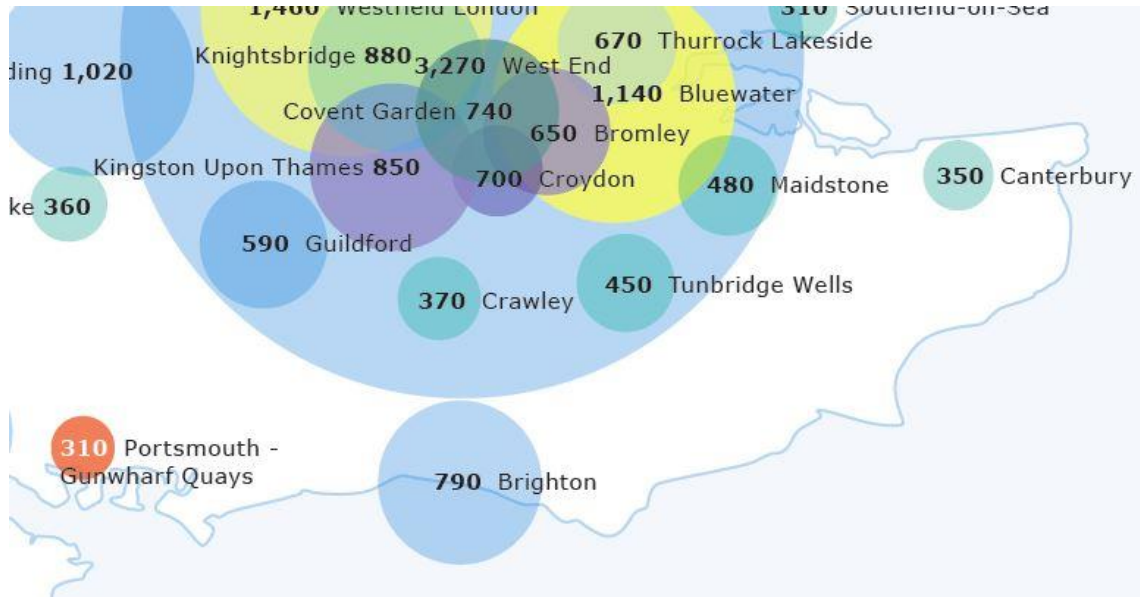
Source: ONS, 2014

As shown in Table 20 the value of the Surrey economy is far higher in an overall and per head measure. There is some alignment between Brighton and Hove and West Sussex in terms of GVA per head. This then drops off when analysing the Outer London–South area and East Sussex.

### Service Market for Consumers

- 4.12 Figure 27 shows the retail destinations in Coastal West Sussex and Greater Brighton and the wider area by expenditure (£millions). This shows that the primary retail destination in the study area is Brighton, where retail expenditure was £790 million (2011 prices).
- 4.13 Other retail destinations influencing the area include Tunbridge Wells (£450 millions), Crawley (£370 millions) and Portsmouth Gunwharf Quays (£310 millions). In terms of retail expenditure, it should also be highlighted there is a significant amount of influence from the Greater London area that potentially extends to the study area.
- 4.14 Additionally, analysis of retail studies from each local authority has been used to identify key retail destinations. In Chichester, the main convenience shopping destination most of the District is Chichester City Centre. For the norther parts of the District, convenience shopping is directed towards Midhurst and centres outside the District. In Arun, the main convenience shopping centres are Bognor Regis, Littlehampton and Rustington. In terms of comparison goods, Chichester's catchment extends to the north of the district (competing mainly with Guildford) and also covers the western half of Arun (including Bognor Regis). Smaller towns such as Petworth and Arundel provide some specialist retail, restaurants and leisure facilities linked to their role as visitor destinations.

**Figure 27: Retail Centres in Coastal West Sussex and Greater Brighton (Expenditure in £millions)**



Source: CACI Retail Footprint (2011)

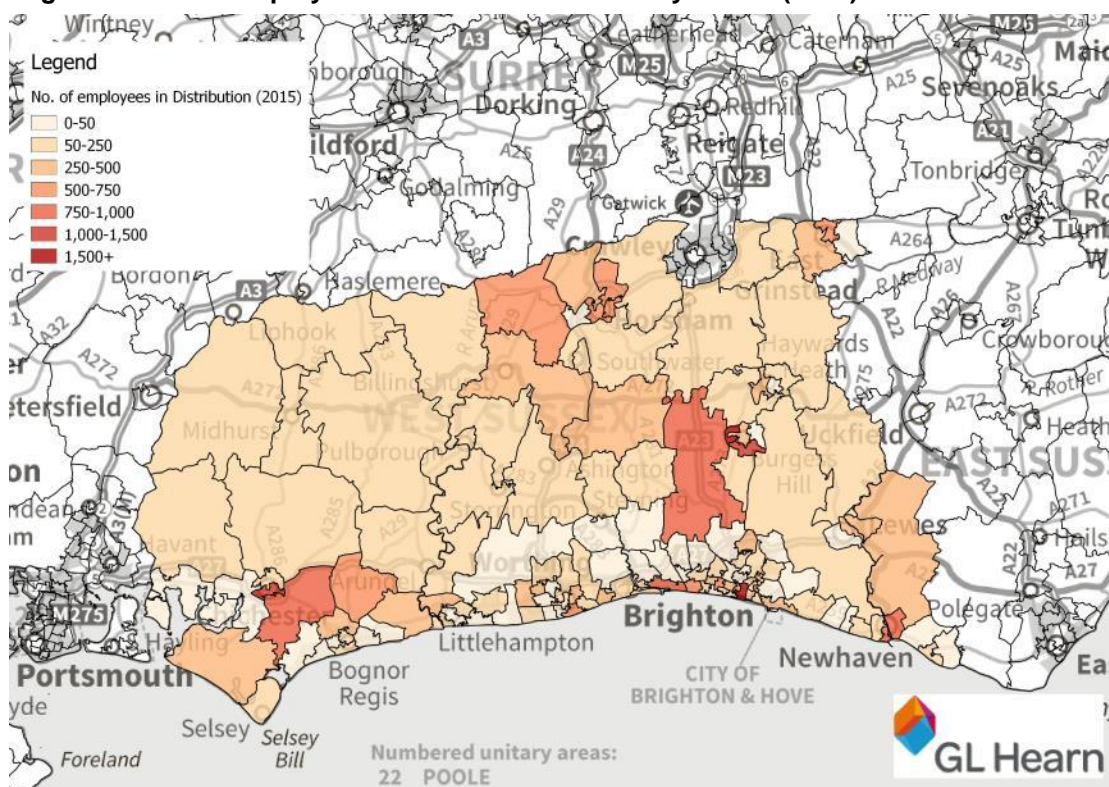
- 4.15 For Worthing the main retail destination for both convenience and comparison goods is Worthing Town Centre. The catchment area includes Worthing and the eastern part of Arun. For Horsham, the main comparison shopping destinations are Horsham, Crawley and Guildford. For convenience goods, this also includes Billingshurst, Pulborough and Storrington.
- 4.16 In Mid Sussex, the main destinations for both convenience and comparison goods are Haywards Heath, Burgess Hill and East Grinstead. Although the south of the District is influenced by Brighton and the north of the District by Crawley. For Adur, the main convenience shopping is directed at Shoreham, Lancing and Southwick. Comparison goods' shopping is directed to Brighton & Hove and to a lesser extent Worthing.
- 4.17 Convenience shopping in Brighton & Hove is mainly directed at Brighton Regional Centre i.e. the City Centre and Hove, while for comparison shopping this also includes Hollingbury Industrial Estate, Pavilion Retail Park, Old Shoreham and Davigdor Road in Hove.
- 4.18 This again indicates that Brighton is central to retail of the study area with its influence extending into surrounding local authorities.

**Flow of goods, services and information within the local economy;**

- 4.19 GL Hearn has included analysis on the geographical distribution of key employment sectors in the study area in order to better understand service centres for different market segments and typologies.

- 4.20 Figure 28 demonstrates the concentration of employment in the Distribution Sector, which includes wholesale, and transport & storage sectors. As shown, there is a concentration of employment in distribution in Mid Sussex particularly around Burgess Hill on the A23 corridor. Perhaps surprisingly there is not a concentration in the northern parts of Horsham and Mid Sussex closest to Gatwick Airport. Although these may well be concentrated in Crawley and Horley which are neared the airport.
- 4.21 There is also some significant concentration in Chichester and along the coast of Brighton & Hove. This might be due to the concentration of horticulture industry in the South of Chichester (Chichester Food Park). However, when compared in total numbers, distribution in Mid Sussex is considerably more in terms of number of total employees – 6,540, while in Chichester the number is 3,395. In Brighton & Hove, the total number of employees in Distribution is 6,535.
- 4.22 However there is likely to be some differentiation for the central Brighton employment between distribution and storage and wholesale with the latter two more likely. Indeed the Central Brighton area also includes significant Royal Mail employment.

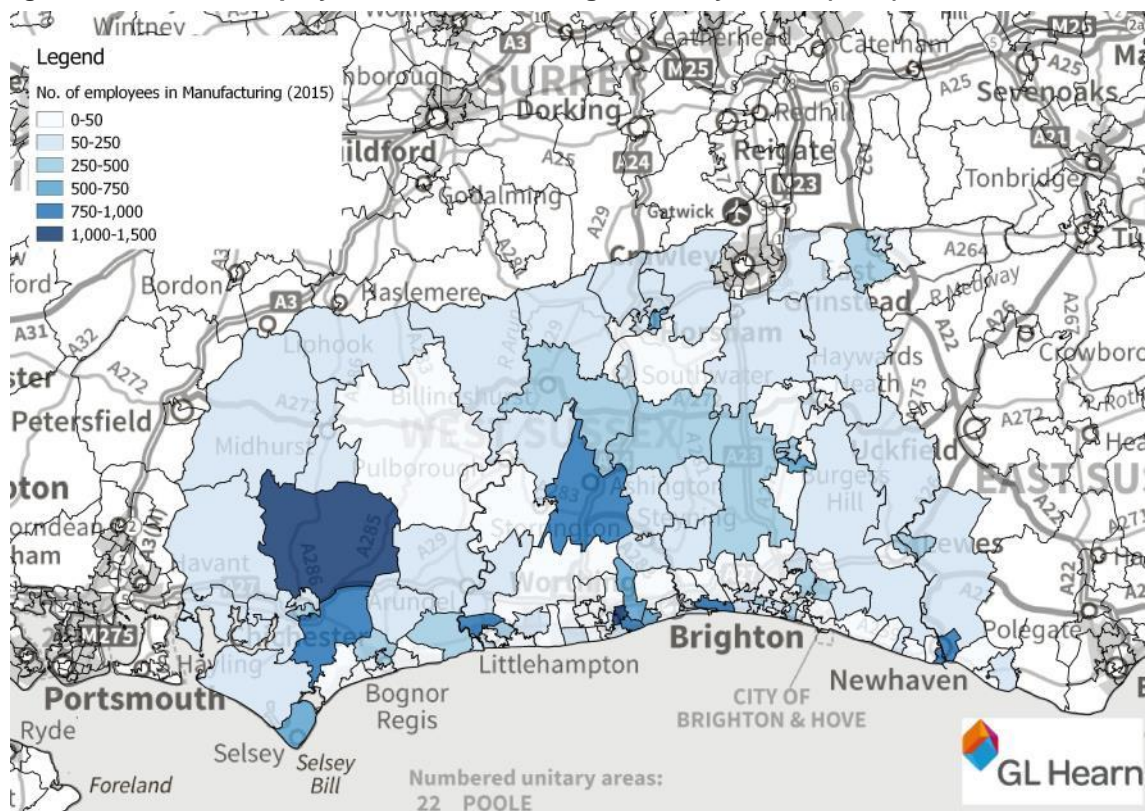
**Figure 28: No. of employees in Distribution Sector by MSOA (2015)**



Source: BRES (2015)

- 4.23 Generally manufacturing in the study area is below the UK average although the same can also be said for the wider South East. As shown in Figure 29, manufacturing employment within the study area is concentrated in Chichester (due to the location of Rolls Royce headquarters near Goodwood), Coastal Worthing, Adur, and Adur, and to a lesser degree in Horsham.
- 4.24 In total, manufacturing employment in Chichester is around 4,975 and 3,785 in Horsham, 3,500 in Adur and 3,000 in Brighton and Hove. While in Worthing, Arun and Lewes manufacturing employment is around 1000-2500.

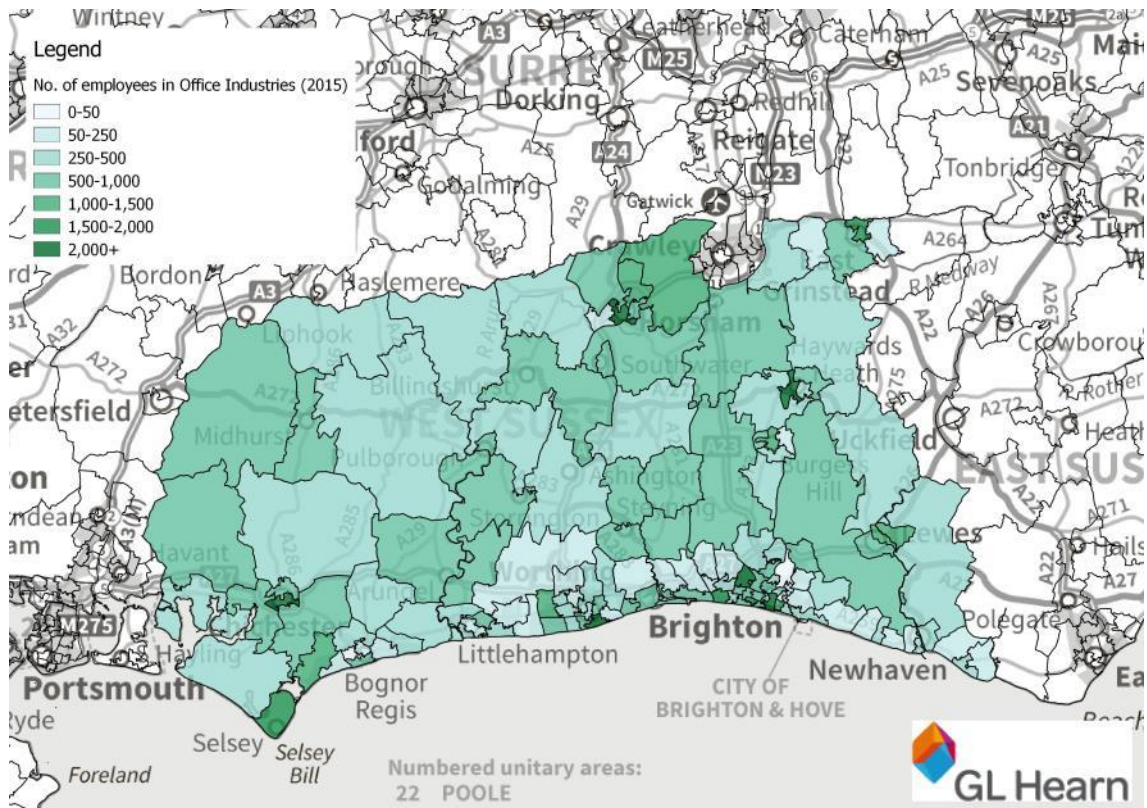
**Figure 29: No. of employees in Manufacturing Sector by MSOA (2015)**



Source: BRES (2015)

- 4.25 In terms of Office related industries, including Information & communications, Financial & Insurance, Professional, scientific & technical and Business administration and support, the highest concentration of employment is in Brighton & Hove, a total of 34,805 employees. This again points to the City as being a key employment location for office based services.
- 4.26 Figure 30 shows the distribution of office employment across the study area. There are also some significant concentrations of 2,000+ office employees in Chichester, Worthing, Horsham and Haywards Heath. There is a comparatively small office market in the other main towns of Lewes, Shoreham, Littlehampton and Bognor Regis.

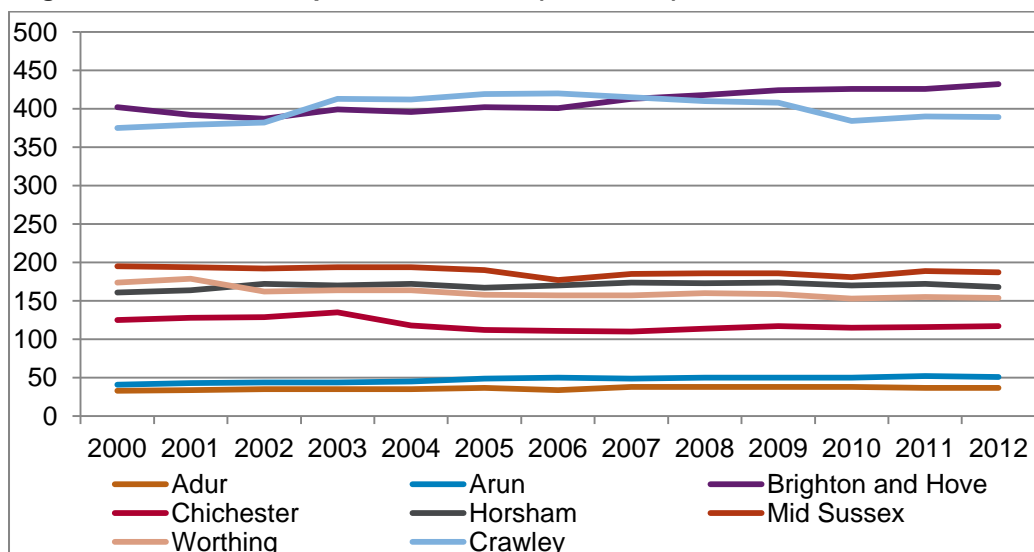
**Figure 30: No. of employees in Office related Industries by MSOA (2015)**



Source: BRES (2015)

4.27 Additional analysis has included looking at the rates of growth in office floorspace within the study area. The data provided by the Valuations Office Agency looks at the trends between 2000 and 2012.

**Figure 31: Office Floorspace in 1000s m<sup>2</sup> (2000-2012)**

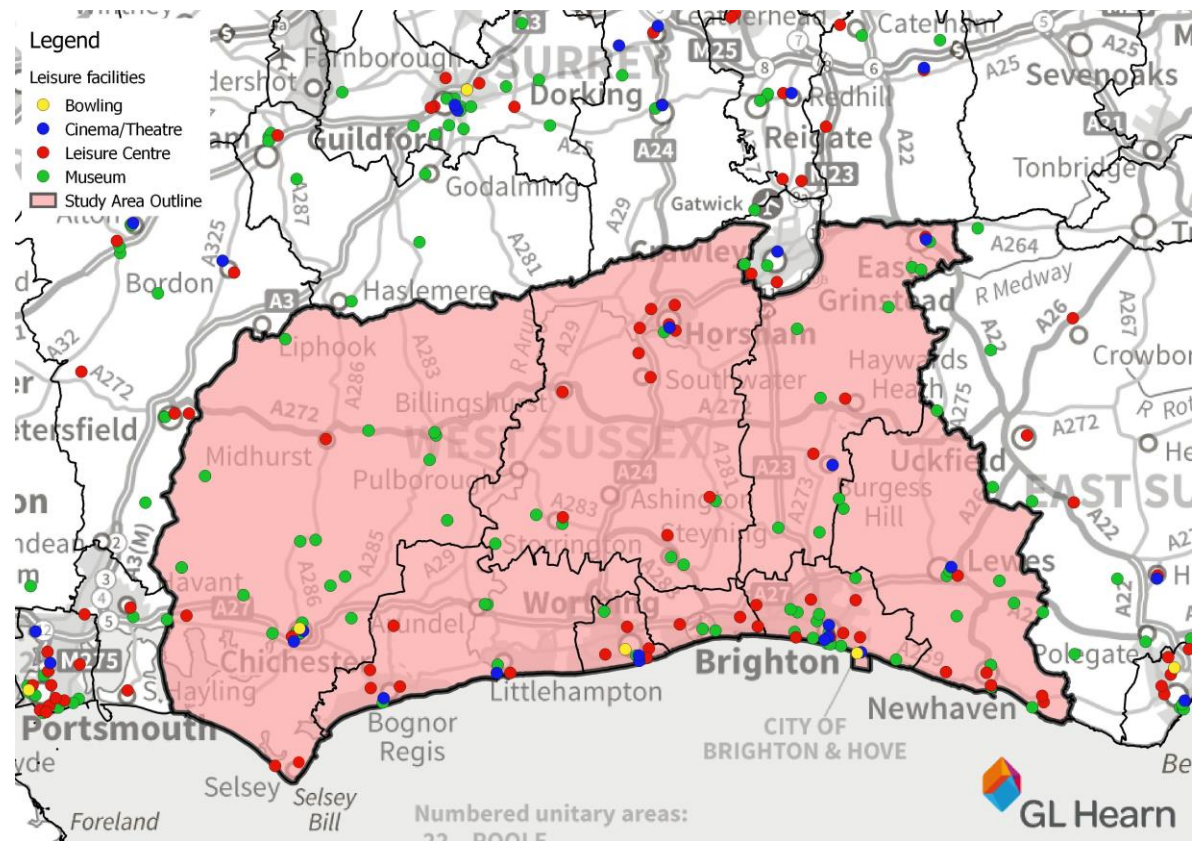


Source: VOA, 2012



- 4.31 There is a small concentration of leisure facilities in Horsham and Chichester with a relatively even distribution of facilities across the remainder of the study area. Perhaps surprisingly there are fewer facilities in Lewes and the settlements in Mid Sussex.

**Figure 33: Leisure Facilities**



Source: GL Hearn (2016)

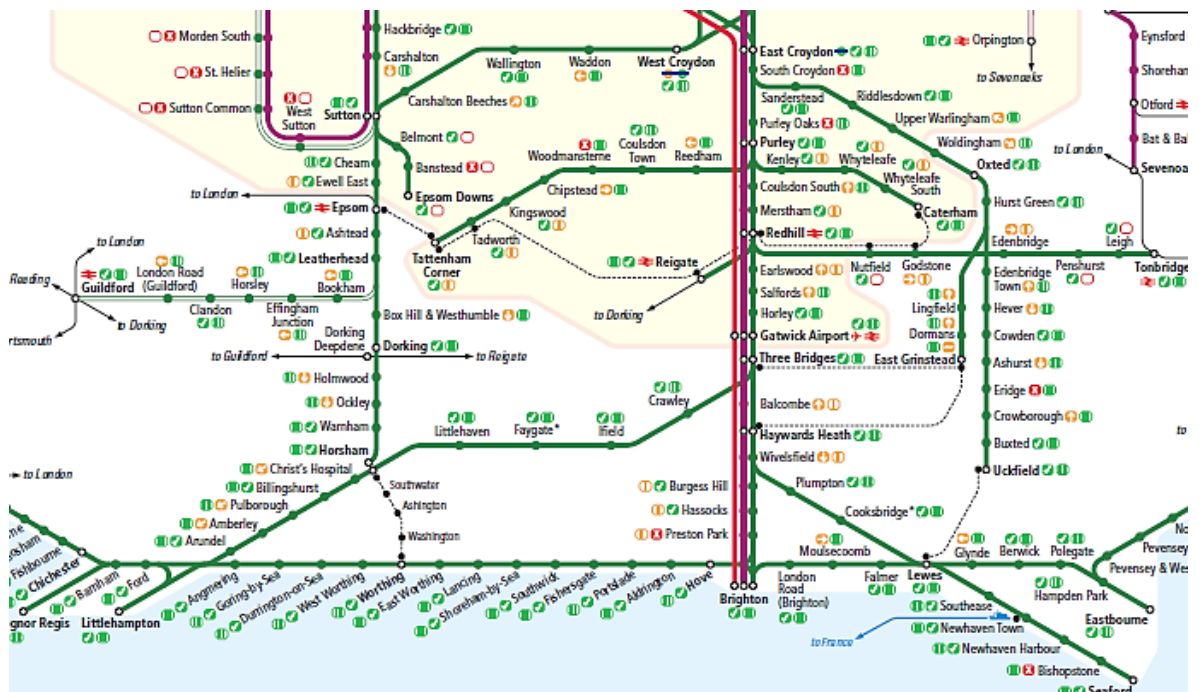
### School Catchment Areas

- 4.32 School Catchment Areas have been analysed for primary and secondary schools. No significant inter-relationships have been noticed within the study area with most secondary schools servicing their local area.
- 4.33 There is a strong relationship between the northern parts of Horsham and Mid Sussex with the local authorities of Crawley and Tandridge in terms of secondary school catchment areas. These include Ifield Community College, Millais School, Imberhorne School, and Sackville School. In terms of primary schools, these include Handcross Primary School, Waterfield Primary and The Bewish Academy whose catchment spans these areas. Additionally, there are some overlaps in terms of secondary school catchment areas between Lewes and Wealden, including Chailey Secondary School, Seaford Head and Ringmer Community College.

## Transport Network

- 4.34 There are two main operating railway companies which service Coastal West Sussex and Greater Brighton and the wider area: Thameslink Trains and Southern Railway. The Gatwick Express also operates the London to Brighton Route. There is a limited Great Western Service from Brighton to Bristol (2 trains per day).
- 4.35 Figure 34 demonstrates the Southern Railway network. The network extends to Portsmouth and Southampton to the west, along Coastal Sussex to Ashford in the east, through Gatwick Airport to London Victoria and Milton Keynes to the north.

**Figure 34: Southern Railway Network Map**



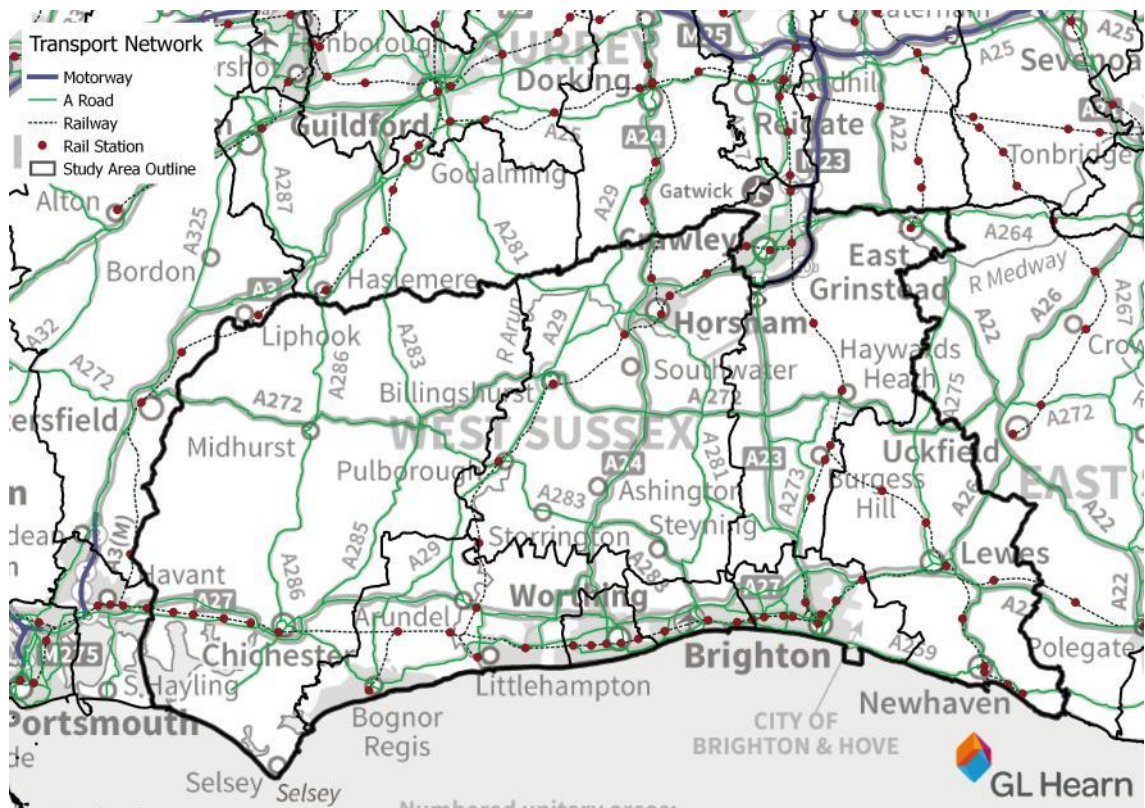
Source: Southern Railway

- 4.36 The core route however is the Brighton to London Mainline which operates a fast and frequent service through Gatwick and East Croydon but also services Haywards Heath and Burgess Hill. This demonstrates strong transport linkages between the Gatwick and Crawley area with both London and Brighton.
- 4.37 In terms of the Primary Road network the Coastal West Sussex and Greater Brighton is serviced mainly by the A23, A27, and A24 road (Figure 35). The M23 extends to Crawley, which provides a good connection towards Gatwick Airport and the Greater London Area. The M27 is to the west of the study area and provides connection to other neighbouring local authorities in urban South Hampshire.



4.38 Within the study area, there is a small airport at Shoreham (Brighton City Airport) but this does not currently offer regular scheduled passenger services. The main airport for passenger and business flights is Gatwick Airport, located just outside the study area in Crawley Borough, which provides excellent connections within the UK and abroad. It is the second busiest airport in the UK after London Heathrow and the ninth busiest in Europe. There are good coach and rail services from the airport to various locations within the UK. As such the area has excellent access to destinations in the UK, Europe and beyond.

**Figure 35: Coastal West Sussex and Greater Brighton Transport Network**



Source: GL Hearn, 2015

### Agent Consultation

4.39 As well as the quantitative evidence set out above we have also engaged with local commercial agents operating in the study area. These include:

- Henry Adams Chichester
- Fox and Sons, Burgess Hill
- Stiles, Harold Wilson, Crawley
- Flude Commercial Ltd, Brighton
- Graves Jenkins, Brighton
- Marshall Clark, Worthing

- Clifford Dann, Lewes
- Michael Jones, Worthing
- Parson, Son and Baseley, Brighton
- Graves, Son and Pilcher, Brighton

- 4.40 Set out below are the key findings from the consultation with local commercial agents. The agents were asked to identify the FEMA or alternatively where they thought were areas of search for businesses looking to locate in or relocate from different parts of the study area.
- 4.41 Note that the agents provide conflicting views at times and there was no consensus view as to the extent of the functional economic market areas. There was a general agreement that different occupiers had different locational and geographical requirements. For example, larger office occupiers are likely to move to a wider range of locations albeit only towns, whereas smaller distribution occupiers are likely to only look at areas with excellent strategic links.
- 4.42 Most agents agreed that there are three distinct markets centring on Crawley, Brighton and a Chichester. While a minority suggested that there was a fourth Worthing market. In terms of scale the Chichester and Worthing markets were seen as smaller/secondary markets.

### **Rents**

- 4.43 While Crawley sits outside of the study area it was seen as having a direct influence on Horsham and the northern towns in Mid Sussex. The distinctiveness of this market could be demonstrated in the rents being achieved which were thought likely to reflect access to the London market as well as Gatwick.
- 4.44 Similarly Brighton and Chichester had much higher rental values than surrounding areas. As such many smaller retail companies seek locations in Burgess Hill, Bognor Regis and Arundel. Although rental values in Burgess Hill and Arundel are also likely to be high.

### **Extent of Brighton Market**

- 4.45 Most agents saw Brighton as primarily a coastal market which did not extend very far northwards. Burgess Hill was seen as falling within the Brighton Market. Although others suggested that some companies moving out of Crawley also seek to relocate to Burgess Hill.
- 4.46 The Brighton market was seen to extend to Lewes and Newhaven in the East although its western extent was a little more contentious. Some agents believed it extends as far as Worthing (particularly East Worthing) while others seeing it only as far as Lancing (particularly linking this to the airport) with most companies moving to the area due to shortage of stock and higher prices in Brighton.

- 4.47 Most agents saw Worthing as being either too small to merit being a market in its own right but they did note links with both Brighton and Chichester. There are also more localised links with Adur and in particular Lancing.
- 4.48 One agent supported the view of a separate Worthing market as it offers a large supply of cheap properties, hence attracting people and businesses. In terms of retail Worthing was seen as having a reasonably strong offer indicative of a FEMA in its own right.
- 4.49 The Lewes retail market was seen as reasonably buoyant but that there was not a lot of industrial or office stock. It was seen as predominantly occupied by local businesses. There was little debate as to it being more closely linked to Brighton than Eastbourne. Similarly Newhaven was also closely linked to Brighton. However, if Lewes did not offer what occupiers looked for, it is considered they would consider areas up to Burgess Hill and potentially Haywards Heath.

#### **Extent of Chichester Market**

- 4.50 Chichester was again linked to Bognor Regis although most agents considered that its market doesn't extend very far northwards into the National Park, although they also suggested that there is very little market activity in this area. One agent who is involved in the build out of a site in Chichester said that the site only attracted localised demand from the Littlehampton to Havant area.
- 4.51 Havant and Waterlooville were seen as a separate market as they had better links along the A3 corridor. Although the western parts of Chichester District are closely linked with these areas. This was highlighted in the HMA section.
- 4.52 Companies from Chichester would more often search for property in Ford, Littlehampton and Rustington, than in Worthing. Thus suggesting a separation from the Worthing market/ sub-market.

#### **Extent of Crawley/Gatwick Market**

- 4.53 Both Burgess Hill and Haywards Heath were primarily seen as being in the Crawley market, although some agents suggested them as possible relocation venue for Brighton based companies. Given the commuting dynamics for each it would appear this is an area of overlap.
- 4.54 Horsham and East Grinstead were consistently seen as falling within the Crawley/Gatwick market which also extended northwards into Horley and potentially as far as Reigate and Redhill, although the further north you go this then becomes part of the London market.
- 4.55 Although Gatwick was the main driver of the local economy in Horsham and Crawley, not every business is airport related. The area was also seen as benefitting from its location as a strategic mid-point between the London and Brighton markets.

### **Other Considerations**

- 4.56 One common theme was that there was limited commercial stock in a number of the major centres and this was causing some fluidity in occupiers' area of search. For example Brighton had a lack of industrial properties so occupiers were looking further along the coast. Similarly Worthing was also seen as quite constrained and some occupiers are considering moves along the A27 to Littlehampton and Chichester.
- 4.57 Industrial occupiers in Horsham are also limited by the stock with occupiers going anywhere in the district they can be located. Office occupiers tended to only want to be located in the town centre. The rural areas in Horsham and Chichester were not seen as being particularly attractive with any occupiers likely to be local businesses rather than mainstream commercial occupiers.

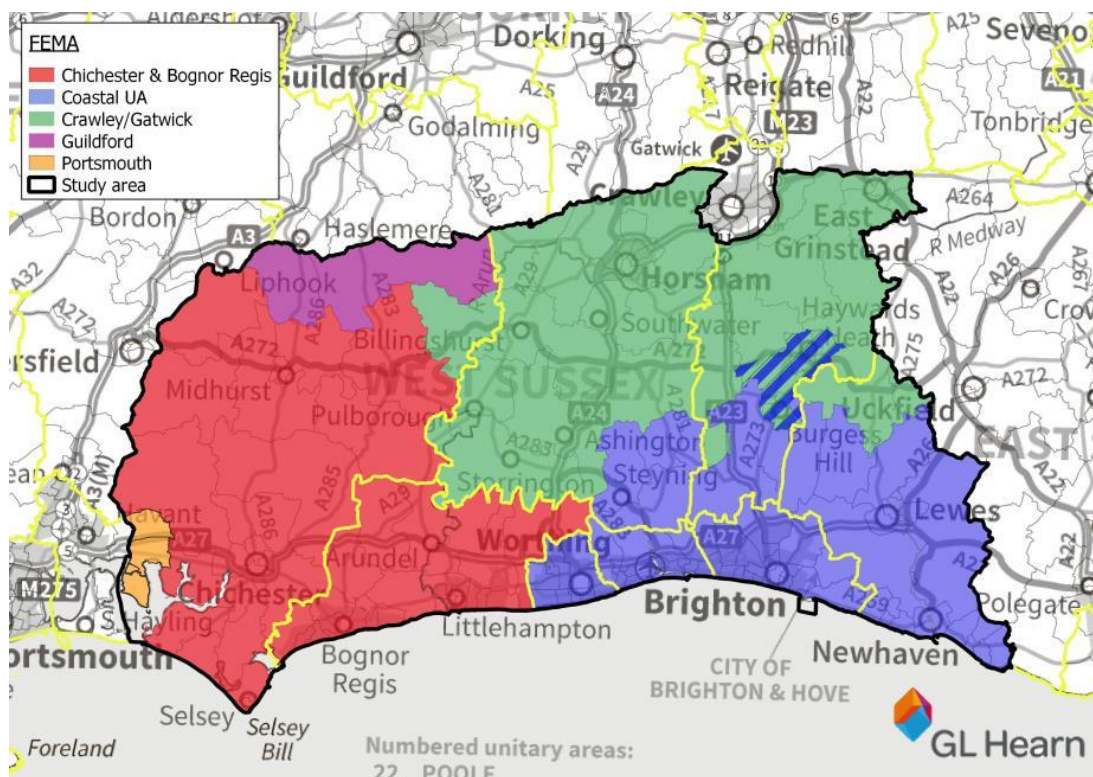
### **Summary**

- 4.58 This section has analysed various quantitative and qualitative indicators in order to define the boundary of a Functional Economic Market Area within Coastal West Sussex and Greater Brighton. This included consideration of many factors. The evidence in this section clearly demonstrated reliance on Brighton & Hove as a main economic centre for the study area.
- 4.59 However, there was also a clear influence from Crawley in the north and a distinct lack of connection between Brighton and Chichester. This suggested that there are three separate market areas around these towns.
- 4.60 While some agents saw Worthing as a market in its own right, we conclude that the area is more likely to be a sub market area of the Brighton market rather than a separate market area. This conclusion is based on consideration of a number of factors – Worthing lacks critical mass for certain services and does not have such a range of retail and cultural facilities, there is evidence of significant commuting and expenditure flows to neighbouring areas, particularly Brighton.
- 4.61 As identified Burgess Hill and to a lesser extent Hayward's Heath are seen as an area of overlap between the Brighton and Crawley commercial markets with occupiers attracted to its relatively low rents. Burgess Hill was seen as a much cheaper alternative to Brighton and to a lesser extent Horsham and Crawley.
- 4.62 These areas could be seen as meeting the needs for more than one HMA and FEMA. However, each local authority may wish to identify which housing/employment land developments are contributing to what need.
- 4.63 Since there is no tangible threshold in the guidance to test these boundaries (equivalent to the HMA testing where a 70% threshold is assumed for self-containment), it is assumed that the three

identified economic markets coincide in general terms with the three areas defined in the HMA geographies. One option would be to use the same boundary for each reflecting the fact that the commuting patterns are key drivers of both HMA and FEMAs.

4.64 However, it is likely that the FEMAs overlap more with Burgess Hill and Haywards Heath being more closely linked to Brighton in an economic than in a housing market sense. Similarly the economic influence of Chichester is likely to extend further east to at least Littlehampton. Hence the following FEMA boundaries have been identified as shown in Figure 36.

**Figure 36: FEMA boundaries**



4.65 The figure above demonstrates three core Functional Economic Market Areas within the Study Area. These are:

- Coastal Urban Area FEMA – Which is focused on Brighton but extends from Worthing to Newhaven and inland to Burgess Hill and Lewes;
- Crawley and Horsham FEMA – extending over a similar geography to the HMA, and including Storrington, Pulborough, Billingshurst, East Grinstead, Haywards Heath and Burgess Hill;
- Chichester and Bognor Regis FEMA – extending from Littlehampton to Nutborne and north to Midhurst.

4.66 Littlehampton and Worthing as well as Burgess Hill and Haywards Heath sit effectively in areas of overlap, with economic influences and relationships in two directions.

## 5 FUTURE DEVELOPMENT

5.1 The definition of a housing market area and functional economic market areas are porous in the sense that they cannot be exactly defined and there will also be some overlap. They also reflect a point in time and are therefore subject to change.

5.2 The likely drivers of change for these definitions are likely to be infrastructure particularly transport. Other changes would also include capacity issues within any given market forcing a wider consideration of location or the delivery of significant housing or employment growth shifting dynamics and scale.

5.3 This section of the report considers three major proposed infrastructure improvements which might have an impact on the future of the HMA and FEMA boundaries within the study area.

### A23/M23 Upgrade

5.4 As part of an £1.5 billion pound Government investment to build ten “smart motorways”, Highways England appointed Carillion and Kier to redevelop 10-mile section of the M23 between Junction 8 (M25) and Junction 10 (Crawley) and turn it into a “smart motorway”. They are expected to start work in 2017/2018 with the section of the motorway expected to be operational by 2019/20.

5.5 This section of the M23 will have its hard shoulder converted into a traffic lane, with emergency refuge areas at regular intervals. This will have the impact of increasing capacity on the road. Although this part of the motorway falls outside of the study area these improvements will potentially improve road access to London.

5.6 In addition, there have been recent improvements to the A23 road between Handcross and Warninglid. The improvement involved the widening of the dual two-lane road to dual three-lane standard along with improvements in junctions and local access.

5.7 The improvement works were completed in October 2014, and have resulted in improved traffic flow and reduced congestion. As the upgrade happened after the 2011 Census, it will not have been reflected in the commuting data in this report. Improved connectivity between the Coastal urban areas and Crawley, Gatwick Airport and Greater London may influence commuting patterns (e.g. by increasing the flows between these areas).

### Gatwick Expansion

5.8 Expansion at Gatwick is not possible until at least 2019 under a 1979 agreement between BAA, the then owner of Gatwick Airport, and West Sussex County Council. The agreement was made in return for permission to upgrade the taxiway running parallel to the airport’s existing runway.

Subsequent agreements have confirmed that the 1979 agreement remains in force and the airport continues to operate with a single runway.

- 5.9 In December 2013 the Airports Commission's interim report shortlisted three options for expansion at Heathrow and Gatwick. These were a new runway south of the existing runway at Gatwick, a new runway northwest of the existing airport at Heathrow and extension of the existing northern runway to the west at Heathrow. In July 2015 the Airports Commission produced its final report and concluded that extra capacity was needed at airports in the South East, with one additional runway needed by 2030 and another by 2050. The Commission concluded that a new third runway to the north west of the current Heathrow site was the best of the three shortlisted options. Although all three options were found to be viable and the decision for Heathrow is subject to challenge.
- 5.10 However, for commercial reasons as well as capacity reasons the second runway and Gatwick might still be a necessity. Gatwick's Chief Executive Stewart Wingate announced that a second runway at Gatwick Airport is still a "credible" option, based on the final annual throughput number that the airport achieved- 43 million passengers- the highest for any single runway airport in the world in 2016. This, according to the Chief Executive, puts Gatwick 14 years ahead of industry predictions.
- 5.11 The proposed scheme was for a new full length runway to the south of and running parallel to the existing runway. The capacity of the new terminal building would be 50 million passengers per annum (mppa), higher than the current combined capacity than the two existing terminal buildings- 45 mppa. According to the report, the direct economic benefits of Gatwick expansion would be £10.2 billion pounds, with around £6 billion pounds worth of exports for the wider economy. In terms of jobs, the jobs expected by 2050 are amounting to around 32,000. Considering all the costs and benefits of expansion, including things such as social and environmental impacts, the total net present value was estimated at £10.8 billion, while the social benefit was estimated at £16.8 billion.
- 5.12 The development of a second runway at Gatwick Airport would undoubtedly lead to a range of impacts in the local area. However with increased passenger traffic and improved connectivity the airport will become an even greater employment centre. As such it would potentially draw employment from an even greater area. Coupled with improvements to the A23 this would undoubtedly impact on the study area.
- 5.13 While Brighton will remain a key employment hub within the study area, it is currently constrained by a relative lack of housing and employment land opportunities (although work by the Greater Brighton Economic Board is seeking to address this). In contrast the influence of Gatwick as it grows may increase and strengthen links towards Brighton and the Coastal urban area.

## A27 Upgrade

- 5.14 The A27 is the only east west strategic road to the south of the M25. It links cities and towns along the south coast which have a combined population of over three quarters of a million people, including Portsmouth, Havant, Chichester, Arundel, Worthing, Brighton and Hove, Lewes and Eastbourne. Over 60% of the 67 miles length of road is dual carriageway. The road also enables access to Bognor Regis and the ports of Portsmouth, Shoreham and Newhaven, and provides businesses and residents in this corridor with access to the rest of the strategic road network.
- 5.15 However, the A27 is one of the most unreliable trunk roads in England. This unreliability affects the local economies along the route as it causes delays for businesses, residents and visitors. Key bottlenecks include the Chichester Bypass, Arundel, Worthing, Lancing and east of Lewes.
- 5.16 In its June 2013 Spending Review, the government announced intentions to upgrade the 6 junctions of the A27 Chichester Bypass and to complete an A27 Corridor Study (including identifying solutions to address congestion at Worthing and Arundel). In the 2014 Autumn Statement, the Government also announced commitments to provide funding for the A27 improvements at Arundel and Worthing.
- 5.17 Highways England undertook public consultation on options for the Chichester Bypass Improvement in Summer 2016. An announcement on a preferred scheme is awaited from the Secretary of State, with the construction start date currently programmed for March 2020. Highways England is also undertaking survey and assessment work for the Arundel Bypass and Worthing and Lancing Improvement schemes and is hoping to consult on options for these during Summer 2017.
- 5.18 The improvements to A27 are expected to achieve better connectivity east-west within West Sussex, helping with ease of movement and reduced travel time between the Coastal urban areas. This could potentially result in increased commuting flows and movement between the Coastal authorities, which would in turn influence and support the wider economy.
- 5.19 While the impact of the A27 improvements is uncertain, reduced travel times and increased reliability would improve connectivity along the coast. While this is unlikely to result in a complete merger of the Chichester & Bognor Regis and Coastal UA market areas, the HMA and FEMA boundaries around Worthing and Littlehampton may become more blurred.

## Rail Improvement Schemes

- 5.20 The £6 billion Thameslink Programme is expected to complete in 2018 which will improve capacity and allow new direct journey opportunities between destinations north and south of the Thames, including between Brighton, Gatwick Airport, Horsham, East Grinstead and Littlehampton (via Worthing) through the Thameslink Core (London Bridge, London Blackfriars, City Thameslink,



Farringdon and London St Pancras International), to Stansted Airport, Bedford, Cambridge and Peterborough. Whilst this significant investment will provide additional and longer trains along this route, Network Rail forecast capacity to remain a key problem on Brighton Main Line routes to and from London.

- 5.21 Additional committed improvements include longer-trains on congested routes and additional and longer platforms (for example an additional platform at Redhill). However, significant investment in infrastructure will continue to be required to meet future demand forecasts for rail travel to and from London and the Sussex Coast and to address infrastructure related reliability concerns, particularly on the constrained sections of the Brighton Main Line between Gatwick Airport, Croydon and London.
- 5.22 Whilst the focus of rail industry investment is on the Brighton Main Line, stakeholders have also identified improvements for routes away from London in relation to the capacity and quality of rolling stock (for example on the Coastway routes), to connectivity, and to journey times (for example on the West Coastway route between Brighton and Southampton) in order to support development and provide for economic growth.
- 5.23 One such proposal is the Arundel Chord scheme, which is a proposal for a diversion route onto the Arun Valley whenever the Brighton mainline is temporarily closed. The scheme would provide a direct link between Horsham and Worthing on the southbound Arun Valley line if the Brighton mainline was closed, hence enabling services to run from Brighton to London in the event of problems. The route with the chord would offer better diversionary journey times than reversing at Littlehampton or Ford. Journey times from Brighton would still be significantly extended but less so for the Worthing market. However, this proposal requires further assessment in terms of impact and funding, as recognised by a study produced by Network Rail.

The improvements listed above are mainly focused on improving rail capacity and services between Brighton and the Sussex Coast, and the Greater London area. Such improvements will potentially encourage rail commuting and assist economic linkages, thereby increasing London's influence on the housing markets and economic geography of the study area as a whole. However, they are considered unlikely to have a significant impact on the HMA and FEMA boundaries at a more local level.

## 6 CONCLUSIONS

6.1 This paper has sought to consider the geography of the Housing Market Areas (HMAs) and Functional Economic Market Areas (FEMAs) affecting the Coastal West Sussex and Greater Brighton area. The Study area includes the local authorities across West Sussex, together with Brighton and Hove and Lewes District.

### Previous Research & Geographies

6.2 Previous studies considering housing market geographies have identified different housing market areas which cover parts of study area.

6.3 A DTZ Study published in 2004 to identify housing market areas across the region suggested separate housing market areas focused on the Sussex Coast, South Hampshire, Crawley/Gatwick and Guildford/Woking. The main housing market areas affecting the Study area were a Sussex Coast HMA and Crawley/Gatwick HMA, with the influence of Guildford/Woking affecting the north of Chichester District; and South Hampshire affecting the south-western part of it.

6.4 In 2009, GVA identified a number of overlapping housing market areas: a Northern West Sussex HMA which included the main towns in Crawley, Horsham and Mid Sussex local authorities; a Coastal West Sussex HMA extending from Shoreham to Havant; a Portsmouth HMA which overlapped with this extending to Chichester; and a Brighton-focused HMA which included much of Lewes District and included Burgess Hill and Haywards Heath (in an area of overlap with the Northern West Sussex market) and Uckfield.

6.5 National research undertaken by CURDS, and published in 2010, has suggested a slightly different HMA geography, in which there are two main Strategic Housing Market Areas - a Brighton-focused HMA, covering the majority of the eastern half of the study area; and Bognor and Chichester covering the western half.

6.6 GL Hearn has taken account of the above, but sought to review the HMA and FEMA definitions taking account principally of new evidence only made available since the publication of these studies - particularly from datasets drawing from the 2011 Census.

### Defining the HMA

6.7 The PPG sets out that housing market areas can be defined based on analysis of house prices geographies, migration patterns and contextual data such as travel to work areas, retail and school catchments. Retail and school catchments are of greater relevance in identifying localised markets than those for strategic planning purposes. The PPG provides guidance that a HMA would typically see 70% migration self-containment.

### **House Prices**

- 6.8 The analysis of house price data does not point to a clear delineation of housing market areas, but highlights a clear urban /rural split; and at a regional level highlights the influence of London on housing market dynamics with areas closer to (or particularly accessible from) London commanding higher housing costs. Although the urban areas tended to have generally lower prices, Brighton and Hove and Chichester have higher house prices than the other urban areas. More broadly the northern parts of Sussex (and particularly parts of Chichester, Horsham and Mid Sussex District which are nearer to London) typically command higher house prices than the coastal areas. We would however expect some differences in house prices within an HMA, reflecting local differences in the housing offer and quality of place in different areas.

### **Internal Migration Flows**

- 6.9 Analysis of migration and commuting patterns, drawing on 2011 Census data, is more useful in drawing conclusions on housing market geographies. At a local authority level, migration self-containment levels of individual authorities with the exception of Brighton & Hove and Arun are below the 'typical' 70% as set out in the guidance.
- 6.10 A more detailed, localised analysis of migration patterns indicates that the coastal parts of Lewes District - including Seaford, Newhaven and Peacehaven - have a strong link to Brighton and Hove. There are also strong migration flows between Brighton and Hove, Adur and Worthing, reflecting the relatively continuous urban geography along the Coast. There are more localised flows between Worthing and Littlehampton.
- 6.10 In the northern part of the Study Area, the Census evidence points to migratory links between the towns of Horsham, East Grinstead and Crawley.
- 6.10 There are also large migration flows between Arun and Chichester districts, and in particular between Bognor Regis and Chichester. These point to some separation of this market from the rest of the Study Area.

### **Commuting Patterns**

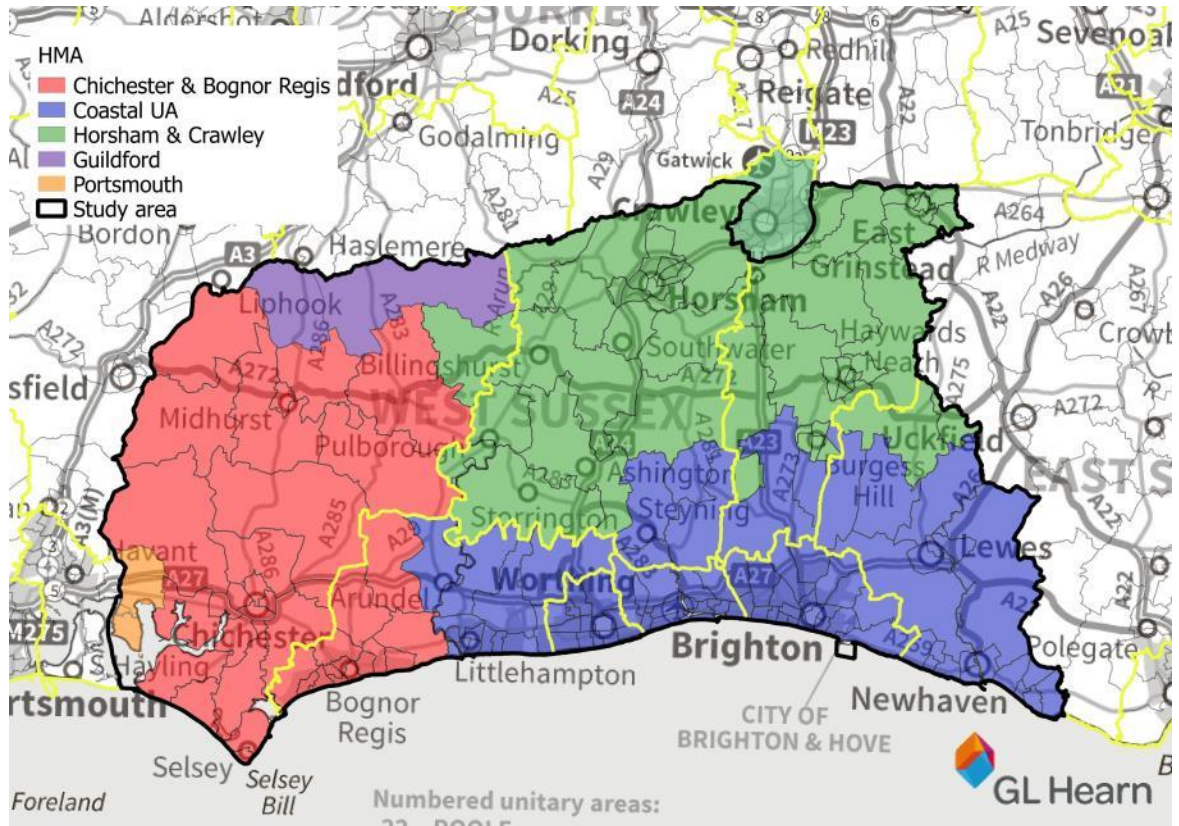
- 6.10 ONS has identified four Travel to Work Areas (TTWAs), using 2011 Census data, which cover almost all of the Study Area. The Brighton TTWA includes Shoreham; the southern parts of Lewes District (including Newhaven) and Mid Sussex District (including Hassocks and Hurstpierpoint). A Worthing-based TTWA extends to include Lancing and Steyning. A wider Chichester and Bognor Regis TTWA is defined which stretches to include Littlehampton and Midhurst. A small part of Lewes District falls within the Eastbourne TTWA including Lewes town, and small rural parts of Chichester District fall within the Guildford & Aldershot and Portsmouth TTWAs.

- 6.10 GL Hearn has through this report sought to interrogate further commuting dynamics. This has showed the larger towns in Mid Sussex and Horsham typically show stronger relationships northwards, and with Crawley, than they do with the Coastal urban area; but that the southern wards in these local authorities do relate more strongly towards the coast. With Burgess Hill in particular, there are very similar levels of commuting with Crawley/ Horsham as with the Coastal Urban Area suggesting that Burgess Hill sits effectively within an area of overlap between different housing market areas, with relationships in both directions.
- 6.10 Within Lewes District, many areas saw stronger commuting links with the coastal urban area (and particularly Brighton and Hove) although the very northern part of the District, around Wivelsfield, has stronger commuting flows going to Crawley and Gatwick than to Lewes and Brighton.
- 6.11 In Arun, commuting flows were split with Arundel and Littlehampton showing closer links in commuting terms to Worthing; with Bognor Regis more strongly linked to Chichester in the west. However the localised migration analysis shows stronger inter-relationships between Littlehampton and Bognor Regis, than Littlehampton and Worthing. Ultimately in housing market terms, Littlehampton, East Preston and Angmering fall within an area of overlap between the housing markets in a similar way to Burgess Hill.
- 6.12 Given the low level of commuting self-containment in Worthing and Adur these areas were tested to see whether they saw stronger commuting to Brighton or Littlehampton/Chichester/Bognor Regis. Although West Worthing has stronger links to Arun, for those commuting outside of Worthing Borough, the strongest out-commuting flows from Worthing and Adur were with Brighton and Hove.
- 6.13 Chichester District sees commuting a number of directions from different parts of the area, including to Portsmouth, Guildford and Horsham/Crawley. However the majority of the wards had a greater number of commuters going to somewhere else within the District; or Bognor Regis.

#### **Drawing the Evidence Together**

- 6.14 Drawing this together, we identified three main housing market areas (HMAs):
- A Chichester and Bognor Regis HMA, which extends north to Midhurst;
  - A Coastal Urban Area HMA, which extends from Littlehampton and Newhaven and across the Downs to Steyning and Hassocks;
  - A Horsham and Crawley HMA, which includes East Grinstead, Haywards Heath, Burgess Hill, Billingshurst, Pullborough and Storrington.
- 6.15 These areas are shown on Figure 37 below. Areas within overlaps between housing market areas include around Burgess Hill, southern wards in Horsham District and northern wards in Lewes District. There are also overlaps around Littlehampton, Rustington, Angmering and East Preston which relate both to the Chichester and Bognor Regis and Coastal Urban Area HMAs.

**Figure 37: Coastal West Sussex and Greater Brighton HMA boundaries, 2016**



6.16 The level of migration self-containment rate for each of these HMA geographies exceeds the 70% threshold set out in the PPG.

### Defining the FEMA

6.17 In addition to the data considered in defining the HMA, we have considered further information in drawing conclusions on Functional Economic Market Area (FEMA) geographies. This includes the LEP area, retail, leisure and school catchment areas, key employment sectors, office floorspace and transportation links. Unlike the HMA there is no defined threshold for what can be considered as a FEMA.

6.18 The LEP area covers a wide area including the Study Area but extending beyond this northwards up to an including Croydon in South London. Although this can be seen as a proxy for an economic area, and reflects inter-relationships to Crawley/ Gatwick – its scales renders it unwieldy but also masks significant differences within the area (for instance in terms of commercial indicators, economic structure and commuting).

6.19 There is only one major retail centre in the Study Area, that being Brighton City Centre. However there are external influences including Crawley, Guildford, Portsmouth (Gunwharf Quays) and

Tunbridge Wells. The influence of London as a shopping destination is also notable, particularly at within the northern part of the study area where transport links are quicker. Similarly Brighton is the only major cultural centre in the Study Area; although there are smaller concentrations of cultural facilities in Chichester and other settlements.

- 6.20 Both rail and road transport are focused along two corridors - the first being the north/south M23/A23 corridor which also mirrors the London-Brighton rail line. The second key corridor runs east/west along the A27/ Coast, and is serviced by the Coastway train line. This is borne out in the pattern of migration and commuting relationships, which are influenced by these transport corridors, and physical/ landscape barriers such as the South Downs. Analysis of different market dynamics shows concentrations of commercial activity along these corridors.
- 6.21 However the most significant dataset feeding into the FEMA definition is the commuting flow analysis. As such, there is a natural correlation with the HMA boundaries.
- 6.22 The draft HMA boundaries were however tested with local commercial agents. Although there was no general agreement on the exact boundaries, there was broad agreement that - as with the HMA geographies - there were three separate commercial markets focused on Chichester, Crawley and Brighton with a sub market within Worthing.
- 6.23 Less clear however was the extent of these areas, with the evidence and discussion with local agents suggesting that FEMA boundaries overlap. In particular it would appear that Burgess Hill (and to a lesser extent Haywards Heath) is closely linked economically with both Brighton and Crawley. Similarly Littlehampton and Worthing show some links with both Chichester and Brighton & Hove respectively. A key consideration was around which FEMA Worthing should fall into with or if it constituted an FEMA in its own right as suggested by the Census TTWA. However in speaking to commercial agents, it would appear not to have the critical mass in terms of employment and cultural facilities to be seen as an FEMA on its own; and sees notable commuting inter-relationships with surrounding areas. Thus whilst Worthing it has been identified as a part of the Coastal FEMA, it is likely to be a distinct sub market of this.



advisory body with lead councillor representation from each of the above authorities together with West Sussex County Council. It typically agrees a work programme and projects on an annual basis.

6.27 The Strategic Planning Board sits alongside other cross-boundary partnerships, including the Coast to Capital Local Enterprise Partnership (the geography of which extends further northwards to include Crawley, authorities in East Surrey and the London Borough of Croydon); and the Gatwick Diamond (stretching north and south from the airport broadly along the M23/A23). Historically strategic planning, including work on evidence, has also been coordinated across Northern West Sussex (comprising the local authorities of Crawley, Horsham and Mid Sussex).

6.28 A key role of this piece of work has been to consider how local authorities might work together to update the Local Strategic Statement (LSS3) and the appropriate groupings over which to do so. LSS2 sought to address four key areas:

- Sustainable economic growth
- Meeting housing need
- Investing in infrastructure
- Managing environmental assets and natural resources.

6.29 A sensible starting point is that groupings for strategic planning purposes should align to the functional geographies identified. This is consistent with national planning policy, and is common practice across the country. The evidence presented in this report on housing market and economic boundaries however identifies that these do not neatly fit to local authority geographies. There are also infrastructure/ transport corridors which cut across these functional boundaries. There are also implications between the scale at which coordination is defined, and how effectively it can deal with more localised issues.

6.30 On this basis, GL Hearn considers that there are a number of potential options.

6.31 For the purposes of joint work to develop evidence (such as on housing or economic development needs, or land availability), one option would be to do this on the basis of a 'best fit' of local authorities to the HMA/ FEMA. This would result in the following groupings:

**Table 21: Best Fit of Local Authorities to Functional Geographies**

Functional Geography	Best Fit Local Authorities
Chichester & Bognor Regis HMA/ FEMA	Arun; Chichester
Sussex Coast HMA/ FEMA	Adur; Arun; Brighton & Hove;; Horsham; Lewes; Mid Sussex; Worthing
Northern West Sussex HMA/ FEMA	Crawley; Horsham; Mid Sussex



- 6.32 There would still be some requirement for the local authorities in these groupings to consult with neighbouring authorities.
- 6.33 This approach however results in a number of complexities in particular with some authorities – notably Arun and Mid Sussex – potentially needing to be involved in multiple studies. Only three of the local authorities: Worthing, Adur and Brighton and Hove fall within a single HMA and FEMA area as defined in this study. The remaining authorities cross at least two FEMA or HMA boundaries.
- 6.34 GL Hearn consider also that it is important that in collating evidence and progressing strategic planning activities, there is coordination between the coastal authorities and those in the northern part of Sussex, not least given strategic development and infrastructure constraints along the Coast.
- 6.35 A better approach, subject to agreement between local authorities, would be to invite Crawley Borough to join the Strategic Planning Board.
- 6.36 Crawley is currently a member of the Gatwick Diamond partnership which also includes Horsham and Mid Sussex, as well as Tandridge, Reigate & Banstead, Mole Valley and Epsom & Ewell. The Gatwick Diamond authorities have prepared a joint Local Strategic Statement which sets out the broad strategic direction for the Gatwick Diamond.
- 6.37 There now appears to be a greater need to integrate planning and evidence based work between the Coastal West Sussex and Greater Brighton and Gatwick Diamond areas within West Sussex - such as Horsham, Mid Sussex and Crawley. This will provide a stronger and more effective basis to coordinate strategic planning issues relating to housing, economic development and infrastructure which cut across local authority boundaries.
- 6.38 The evidence base clearly demonstrates that there are inter-relationships across local authority boundaries, and there is a clear potential that Government may strengthen national policy/guidance to emphasise that issues of unmet development needs will need to be considered both within (and where there are strategic development constraints) across the boundaries of defined HMAs/ FEMAs.
- 6.39 To reflect the expanded geography, the authorities should consider renaming the strategic planning area as the 'West Sussex & Greater Brighton area'.

## Governance Issues

6.40 There are some potentially difficult long-term strategic decisions which may have to be made as part of the LSS3 process. To support this it will be important that there are strong governance arrangements in place, which:

- Build on a history of joint working;
- Are based on mutual respect and trust between partners;
- Enable decisions to be made based on strategic rather than local considerations;
- Are capable of making difficult decisions.

6.41 It may well be that some capacity building is required, particularly at a member/ political level, to support this.

6.42 There are a number of different models which could be considered. One example would be the Liverpool City Region Combined Authority. This was established in April 2014 and covers six local authorities with statutory functions relating to transport, economic development and regeneration. It has the following powers, as secured through a Devolution Deal with Government in November 2015:

- Responsibility for a devolved and consolidated local transport budget, with multi-year settlement;
- Responsibility for transport including franchised bus services, and delivery of smart and integrated ticketing;
- Powers over strategic planning, including creating a Single Statutory City Region Framework, a Mayoral Development Corporation and a Land Commission and Joint Asset Board;
- Coordination of a range of economic development and regeneration activities, including a City-region wide Single Investment fund; reviewing 16+ skills provision; co-designing employment support programmes; work with UKTI on boosting trade an investment; and undertaking a Science and Innovation audit.

6.43 In March 2016, Government devolved further powers including piloting 100% business rate retention; a commitment to working together to examine ow national policies and funds could be used to promote housing supply and home ownership; and further traffic and highways powers.

6.44 In governance terms, the Combined Authority is to discharge its functions through a series of boards, as follows:

**Table 22: Liverpool City Region Governance Arrangements**

Function	Arrangements
<b>Strategic Economic Development</b>	Liverpool City Region Local Enterprise Partnership Board
<b>Strategic Transport</b>	Merseytravel Committee
<b>Strategic Housing and Land Based Assets</b>	Liverpool City Region Strategic Board
<b>Strategic Employment and Skills</b>	Liverpool City Region Employment and Skills Board

- 6.45 The Combined Authority has a formal constitution, and includes a nominated member from each of the local authorities together with the LEP (and a deputy). Decisions are made on a majority vote basis. It is to directly elect a Mayor in 2017. It may invite other authorities to become associate members.
- 6.46 This approach provides a strong, formally established process for joint decision making; and moving forward envisages preparation of a joint statutory city region framework dealing with strategic planning issues.
- 6.47 An alternative example would be the Partnership for Urban South Hampshire (PUSH). PUSH is a sub-regional partnership which now includes 12 local authorities (including Hampshire County Council) in the Solent area and the Isle of Wight. Former in 2003 with a focus on promoting economic development, PUSH has evolved to provide a means of coordinating sub-regional activities relating to development and infrastructure; energy and the environment; quality of place; housing and spatial planning. PUSH's role has evolved since the creation of the Solent LEP, which covers the same geographical area, and now leads on economic development, employment, skills and inward investment; albeit that there is some overlap between the two.
- 6.48 PUSH is a well-developed partnership which is managed through a Joint Committee, which is PUSH's decision-making body. The Joint Committee includes the leaders (or their nominated representative) of the 12 councils, supported by their Chief Executives and PUSH staff. It is chaired by the Leader of Fareham BC. The Solent LEP, Environment Agency and Homes and Communities Agency are represented on the Joint Committee as observers. Its current working arrangements seek agreement of all partners in decision-making.
- 6.49 GL Hearn has worked with PUSH to prepare a Spatial Position Statement which has agreed a distribution of development between the local authorities, key broad development locations and examined associated infrastructure requirements. The process of preparing this however highlighted some tensions between partners, including the need for an open and transparent process of testing capacity within the urban areas; however the strong history of joint working and governance arrangements supported the agreement of a joint development strategy. The Spatial Position Statement is similar to the Local Strategic Statement.
- 6.50 GL Hearn would recommend that careful consideration is given not just to the membership of the Strategic Planning Board, but also to its governance arrangements and remit – including those areas in which it will operate, and degree to which it may (or may not) pursue devolution of responsibilities from Government.

## APPENDIX SUMMARY PAGES

### ADUR

#### Self-Containment Rates

	% of those moving from the LA	% of those moving to the LA	% of those moving from the LA	% of those moving to the LA
	(Outward)	(Inward)	(Outward)	(Inward)
	Including Long Distance		Excluding Long Distance	
Adur	45%	45%	49%	51%
Adur and Brighton & Hove	65%	68%	82%	81%
Adur and Worthing	60%	63%	68%	72%
Adur, Worthing and Brighton & Hove	68%	71%	83%	83%

#### Average Gross Migration Flows- Gross Per '000 Head

Location 1	Location 2	Gross Migration Flow	Combined Population	Gross Per '000 Head
Adur	Worthing	1,296	165,822	7.82
Adur	Brighton & Hove	2,057	334,551	6.15
Adur	Horsham	348	192,483	1.81
Adur	Arun	272	210,700	1.29
Adur	Lewes	125	158,684	0.79

#### Analysis of Key Migration Flows to Destinations Listed

Destination	Origin	
	1st	2nd
Adur	Brighton & Hove (1,391)	Worthing (422)

#### Statistically Significant Flows

Significant Migration Flows	Inward migration	Outward migration
Adur	Brighton & Hove	Brighton & Hove, Worthing

#### 2011 ONS TTWA

- Adur is covered mainly by the Brighton & Hove and Worthing Travel to Work Areas

## ARUN Self-Containment Rates

	% of those moving from the LA	% of those moving to the LA	% of those moving from the LA	% of those moving to the LA
	(Outward)	(Inward)	(Outward)	(Inward)
	Including Long Distance		Excluding Long Distance	
Arun	59%	63%	68%	<b>73%</b>
Arun and Chichester	60%	64%	72%	76%
Arun and Worthing	64%	69%	74%	79%
Arun, Worthing and Chichester	64%	68%	75%	80%

## Average Gross Migration Flows- Gross Per '000 Head

Location 1	Location 2	Gross Migration Flow	Combined Population	Gross Per '000 Head
Arun	Chichester	1,824	263,312	6.93
Arun	Worthing	1,731	254,158	6.81
Arun	Horsham	512	280,819	1.82
Arun	Adur	272	210,700	1.29
Arun	Brighton & Hove	464	422,887	1.10
Arun	Portsmouth	219	354,574	0.62
Arun	Crawley	132	256,115	0.52

## Analysis of Key Migration Flows to Destinations Listed

Destination	Origin			
	1st	2nd	3rd	4th
Arun	Worthing (993)	Chichester (912)	Horsham (298)	Brighton & Hove (255)

## Statistically Significant Flows

Significant Migration Flows	Inward migration	Outward migration
Arun	Worthing, Chichester	Worthing, Chichester

## 2011 ONS TTWA

- The majority of Arun is covered by the Chichester and Bognor Regis TTWA, although some areas around Crossbush and Angmering are covered by the Worthing TTWA

## BRIGHTON & HOVE

### Self-Containment Rates

	% of those moving from the LA	% of those moving to the LA	% of those moving from the LA	% of those moving to the LA
	(Outward)	(Inward)	(Outward)	(Inward)
	Including Long Distance		Excluding Long Distance	
Brighton & Hove	63%	66%	<b>81%</b>	<b>79%</b>
Brighton & Hove and Lewes	65%	68%	82%	81%
Brighton & Hove and Mid Sussex	63%	66%	80%	79%

### Average Gross Migration Flows- Gross Per '000 Head

Location 1	Location 2	Gross Migration Flow	Combined Population	Gross Per '000 Head
Brighton & Hove	Lewes	2,452	370,871	6.61
Brighton & Hove	Adur	2,057	334,551	6.15
Brighton & Hove	Mid Sussex	1,399	413,229	3.39
Brighton & Hove	Worthing	1,271	378,009	3.36
Brighton & Hove	Horsham	741	404,670	1.83
Brighton & Hove	Wealden	661	422,284	1.57
Brighton & Hove	Eastbourne	564	372,781	1.51

### Analysis of Key Migration Flows to Destinations Listed

Destination	Origin						
	1st	2nd	3rd	4th	5th	6th	7th
Brighton & Hove	Lewes(970)	Adur (666)	Mid Sussex (557)	Worthing (479)	Horsham (358)	Wealden (329)	Lambeth (323)

### Statistically Significant Flows

Significant Migration Flows	Inward migration	Outward migration
Brighton & Hove	Eastbourne, Wealden, Horsham, Adur, Worthing, Arun, Chichester, Cornwall, Bristol, Lewes, Worthing and a number of London Boroughs	Lewes, Mid Sussex, Adur, Worthing

### 2011 ONS TTWA

- Brighton & Hove is covered entirely by the Brighton & Hove Travel to Work Area

## CHICHESTER

### Self-Containment Rates

	% of those moving from the LA (Outward)	% of those moving to the LA (Inward)	% of those moving from the LA (Outward)	% of those moving to the LA (Inward)
	Including Long Distance		Excluding Long Distance	
Chichester	48%	50%	60%	62%
Chichester and Arun	60%	64%	72%	76%
Chichester and Horsham	53%	54%	64%	67%
Chichester, Arun, Worthing	64%	68%	75%	80%

### Average Gross Migration Flows- Gross Per '000 Head

Location 1	Location 2	Gross Migration Flow	Combined Population	Gross Per '000 Head
Chichester	Arun	1,824	263,312	6.93
Chichester	Havant	778	234,478	3.32
Chichester	East Hampshire	647	229,402	2.82
Chichester	Waverley	610	235,366	2.59
Chichester	Horsham	509	245,095	2.08
Chichester	Portsmouth	462	318,850	1.45
Chichester	Guildford	237	250,977	0.94

### Analysis of Key Migration Flows to Destinations Listed

Destination	Origin				
	1st	2nd	3rd	4th	5th
Chichester	Arun (912)	Waverley (373)	Havant (351)	East Hampshire (307)	Horsham (267)

### Statistically Significant Flows

	Inward migration	Outward migration
Chichester	Arun, Horsham, Waverley, East Hampshire, Havant, Portsmouth	Arun, East Hampshire, Havant

### 2011 ONS TTWA

- The majority of Chichester is covered by the Chichester and Bognor Regis TTWA, although areas around Northchapel and Fernhurst are covered by Guildford and Aldershot TTWA and some areas around Plaistow, Kirdford and Wisborough Green are covered by Crawley TTWA.

## HORSHAM

### Self-Containment Rates

	% of those moving from the LA	% of those moving to the LA	% of those moving from the LA	% of those moving to the LA
	(Outward)	(Inward)	(Outward)	(Inward)
	Including Long Distance		Excluding Long Distance	
Horsham	54%	53%	64%	66%
Horsham and Crawley	62%	62%	72%	74%
Horsham and Worthing	58%	59%	67%	71%
Horsham and Chichester	53%	54%	64%	67%

### Average Gross Migration Flows- Gross Per '000 Head

Location 1	Location 2	Gross Migration Flow	Combined Population	Gross Per '000 Head
Horsham	Crawley	749	237,898	3.15
Horsham	Mid Sussex	682	271,161	2.52
Horsham	Worthing	569	235,941	2.41
Horsham	Chichester	509	245,095	2.08
Horsham	Brighton & Hove	741	404,670	1.83
Horsham	Arun	512	280,819	1.82

### Analysis of Key Migration Flows to Destinations Listed

Destination	Origin			
	1st	2nd	3rd	4th
Horsham	Brighton & Hove (383)	Crawley (381)	Mid Sussex (367)	Worthing (252)

### Statistically Significant Flows

Significant Migration Flows	Inward migration	Outward migration
Horsham	Brighton & Hove, Adur, Arun, Worthing, Chichester, Waverley, Mole Valley, Reigate and Banstead, Crawley, Mid Sussex	Crawley, Mid Sussex, Brighton & Hove, Adur, Arun, Worthing, Chichester

### 2011 ONS TTWA

- The majority of Horsham is covered by the Crawley TTWA, although areas up to Henfield are covered by Worthing TTWA



## LEWES

### Self-Containment rates

	% of those moving from the LA	% of those moving to the LA	% of those moving from the LA	% of those moving to the LA
	(Outward)	(Inward)	(Outward)	(Inward)
	Including Long Distance		Excluding Long Distance	
Lewes	49%	50%	58%	59%
Lewes & Crawley	58%	58%	67%	68%
Lewes & Brighton	65%	68%	82%	81%
Lewes and Mid Sussex	55%	55%	64%	66%

### Average Gross Migration Flows- Gross Per '000 Head

Location 1	Location 2	Gross Migration Flow	Combined Population	Gross Per '000 Head
Lewes	Brighton & Hove	2,452	370,871	6.61
Lewes	Wealden	943	246,417	3.83
Lewes	Eastbourne	581	196,914	2.95
Lewes	Mid Sussex	694	237,362	2.92

### Analysis of Key Migration Flows to Destinations Listed

Destination	Origin		
	1st	2nd	3rd
Lewes	Brighton & Hove (1,482)	Wealden (359)	Mid Sussex (342)

### Statistically Significant Flows

Significant Migration Flows	Inward migration	Outward migration
Lewes	Brighton & Hove	Mid Sussex, Brighton & Hove, Eastbourne, Wealden

### 2011 ONS TTWA

- Lewes is mainly covered by the Eastbourne and Brighton & Hove Travel to Work Areas

## MID SUSSEX Self-Containment Rates

	% of those moving from the LA	% of those moving to the LA	% of those moving from the LA	% of those moving to the LA
	(Outward)	(Inward)	(Outward)	(Inward)
	Including Long Distance		Excluding Long Distance	
Mid Sussex	53%	53%	63%	65%
MS & Crawley	62%	62%	72%	74%
MS & Brighton	63%	66%	80%	79%

## Average Gross Migration Flows- Gross Per '000 Head

Location 1	Location 2	Gross Migration Flow	Combined Population	Gross Per '000 Head
Mid Sussex	Crawley	968	246,457	3.93
Mid Sussex	Brighton & Hove	1,399	413,229	3.39
Mid Sussex	Lewes	694	237,362	2.92
Mid Sussex	Wealden	826	288,775	2.86
Mid Sussex	Horsham	682	271,161	2.52
Mid Sussex	Tandridge	509	222,858	2.28
Mid Sussex	Reigate and Banstead	311	277,695	1.12

## Analysis of Key Migration Flows to Destinations Listed

Destination	Origin					
	1st	2nd	3rd	4th	5th	6th
Mid Sussex	Brighton & Hove (842)	Crawley (498)	Lewes (352)	Wealden (346)	Horsham (315)	Tandridge (305)

## Statistically Significant Flows

Significant Migration Flows	Inward migration	Outward migration
Mid Sussex	Brighton & Hove, Lewes, Wealden, Tandridge, Crawley, Horsham	Brighton & Hove, Lewes, Wealden, Tandridge, Crawley, Horsham

## 2011 ONS TTWA

- The Majority of Mid Sussex falls within Crawley TTWA although Albourne and Hassocks are within the Brighton TTWA

## WORTHING

### Self-Containment Rates

	% of those moving from the LA	% of those moving to the LA	% of those moving from the LA	% of those moving to the LA
	(Outward)	(Inward)	(Outward)	(Inward)
	Including Long Distance		Excluding Long Distance	
Worthing	57%	61%	64%	69%
Worthing and Brighton & Hove	64%	68%	80%	80%
Worthing and Arun	64%	69%	74%	79%
Worthing and Adur	60%	63%	68%	72%
Worthing, Adur, Brighton & Hove	68%	71%	83%	83%
Worthing, Adur, Arun, Brighton & Hove	69%	73%	84%	85%

### Average Gross Migration Flows- Gross Per '000 Head

Location 1	Location 2	Gross Migration Flow	Combined Population	Gross Per '000 Head
Worthing	Adur	1296	165,822	7.82
Worthing	Arun	1731	254,158	6.81
Worthing	Brighton & Hove	1271	378,009	3.36
Worthing	Horsham	569	235,941	2.41
Worthing	Chichester	169	218,434	0.77

### Analysis of Key Migration Flows to Destinations Listed

Destination	Origin			
	1st	2nd	3rd	4th
Worthing	Adur (874)	Brighton & Hove (792)	Arun (738)	Horsham (317)

### Statistically Significant Flows

Significant Migration Flows	Inward migration	Outward migration
Worthing	Arun, Adur, Brighton & Hove	Arun, Adur, Brighton & Hove

### 2011 ONS TTWA

- Worthing is covered entirely by the Worthing Travel to Work Area