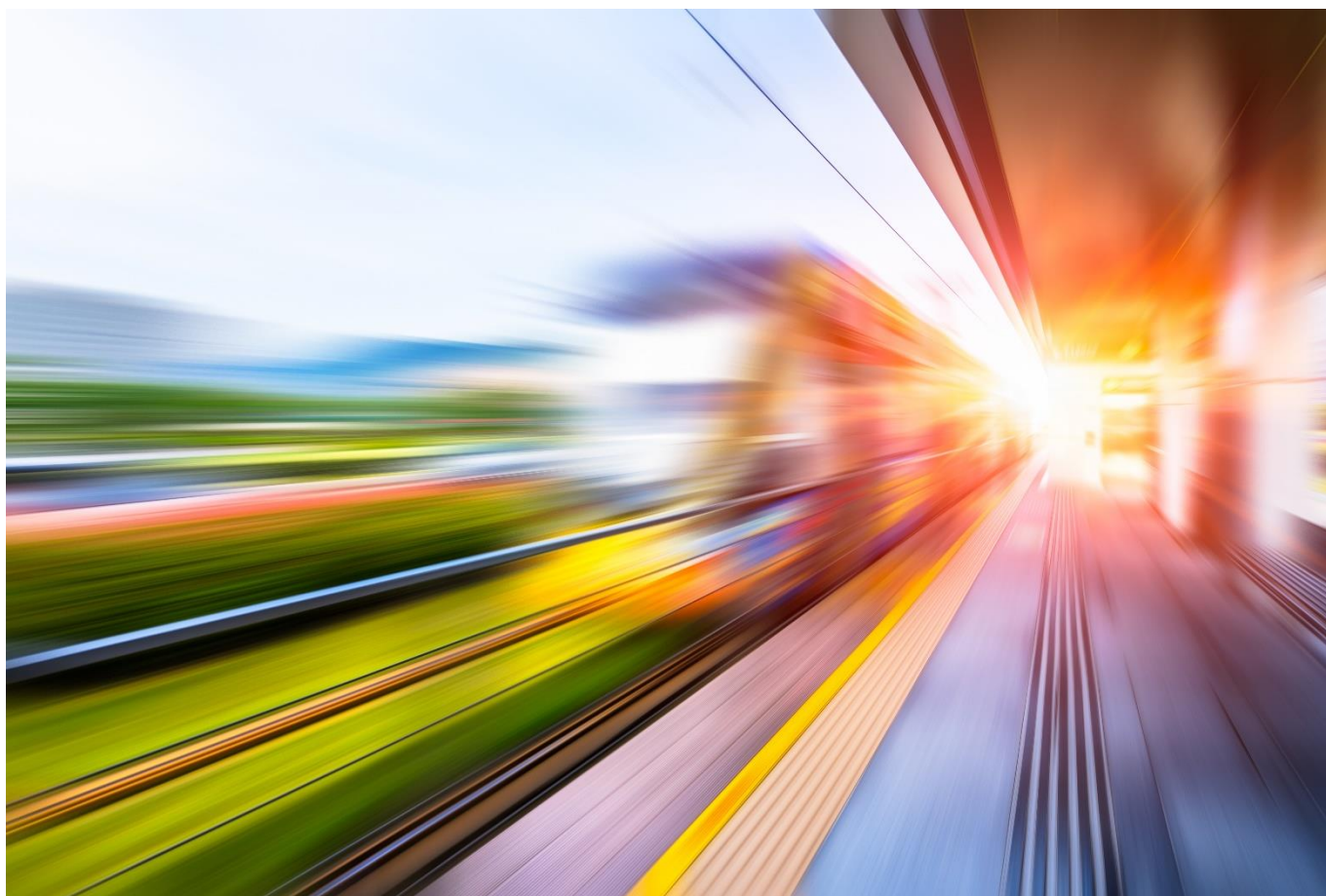


Transport Strategy for the South East: Review of Major Economic Hub Travel Patterns and Development



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1 Introduction

Purpose

- 1.1 This Technical Report provides supplementary evidence for the **Transport Strategy for the South East**, which has been developed by Transport for the South East – the emerging sub-national transport body for the South East area¹. It builds on research undertaken in support of the development of this Transport Strategy, which initially focussed on the South East’s strategic transport corridors. As this research progressed it became clear that transport to, from, and within the South East’s **‘Major Economic Hubs’** (focal points of economic activity and development) also needed to be considered, as well as the corridors that connect them together. These topics are explored in more detail in this Technical Report.
- 1.2 This Technical Report aims to support both the Transport Strategy as well as planned ‘Area Studies’, which will be commissioned later in 2019. These Area Studies will examine areas within the South East that feature specific corridors and economic hubs. They will identify and prioritise schemes and other initiatives to help deliver the transport strategy in each area.

Contents

- 1.3 This report is structured as follows:
- **Section 2: Characteristics of the Major Economic Hubs** defines the Major Economic Hubs, the priority industrial sectors they support, and their economic characteristics;
 - **Section 3: Journeys to Work** describes the characteristics of journeys to work between the Major Economic Hubs;
 - **Section 4: Proposals for future development** considers how planned development are likely to promote sustainable transport outcomes in the future;
 - **Section 5: Social inclusion and regeneration** describes how the existing transport system affects social inclusion and drives (or hinders) regeneration; and
 - **Section 6: Summary and conclusions** summarises the key insight from this Technical Report and the broad conclusions that can be drawn from the work underpinning it.
- 1.4 The data presented in this report has been collated at Local Authority District level or, where more detailed data is available, the wards or Output Areas for each Major Economic Hub.
- 1.5 This study focussed on the economic ties between the South East’s Major Economic Hubs rather than between them and other parts of the UK. This study is complemented by the Technical Report “The Relationship between the South East and London, which focusses on the economic ties between the South East’s Major Economic Hubs and London – and the Technical Report “Logistics and Gateways” review, with focusses on the role of the South East’s Major Economic Hubs that host nationally important international gateways.

¹ The Transport for the South East area includes the areas served by the six Berkshire Unitary Authorities, Brighton and Hove, East Sussex, Hampshire, Isle of Wight, Kent, Medway, Portsmouth, Southampton, Surrey and West Sussex Local Transport Authorities.

2 Characteristics of Major Economic Hubs

Introduction

- 2.1 This section summarises the economic characteristics of the South East. In particular, it:
- defines and locates the **Major Economic Hubs**;
 - describes the **priority industrial sectors** in the South East and lists the Major Economic Hubs that have particular strengths in these sectors;
 - presents the **workplace and residence earnings** for each Major Economic Hub (and highlights imbalances between these); and
 - highlights the difference in **skills** levels between the Major Economic Hubs.

Definition and location of the Major Economic Hubs

- 2.2 In 2018 Transport for the South East published its **Economic Connectivity Review**², which identified 34 Major Economic Hubs in the South East area. This Review defined Major Economic Hubs as **urban centres with the highest population and employment densities in the South East**. Many of these also have high development growth forecasts. Some of these areas encompass large built-up areas. For example, “South Hampshire” includes Southampton, Portsmouth, and surrounding urban areas. “Brighton and Hove” includes the built-up area on the Sussex coast including Brighton and Hove, Worthing, and Littlehampton.
- 2.3 A map showing the locations of each of the 34 Major Economic Hubs is provided in Figure 2.1. Maps showing the population and employment densities in the South East are provided in Figure 2.2 and Figure 2.3 respectively. Unsurprisingly (due to the way the Major Economic Hubs have been defined and selected), there is a strong correlation between these densities and the locations of the Major Economic Hubs shown in Figure 2.1.
- 2.4 These maps also show the key strategic transport corridors in the South East area that link the Major Economic Hubs to each-other, to international gateways in the South East area, and to other parts of the country. This highlights some gaps in the connections between some Major Economic Hubs, for example, between Gatwick/Crawley and Guildford and between Gatwick/Crawley and Tonbridge/Royal Tunbridge Wells.
- 2.5 Several Major Economic Hubs have been defined as contiguous built-up areas. Examples include Blackwater Valley, Brighton and Hove (including Worthing), Crawley/Gatwick (including East Grinstead), Medway, South Hampshire, and Thanet. These urban areas share key economic characteristics and, in many cases, function as a single economic entity. However, it is acknowledged there are some variations in economic and transport outcomes within these areas and a need to disaggregate them into their constituent places (e.g. Southampton and Portsmouth in South Hampshire) to enable analysis more granular level.

² Reference: [Economic Connectivity Review](#) (Transport for the South East, 2018)

Figure 2.1: Major Economic Hubs in the South East

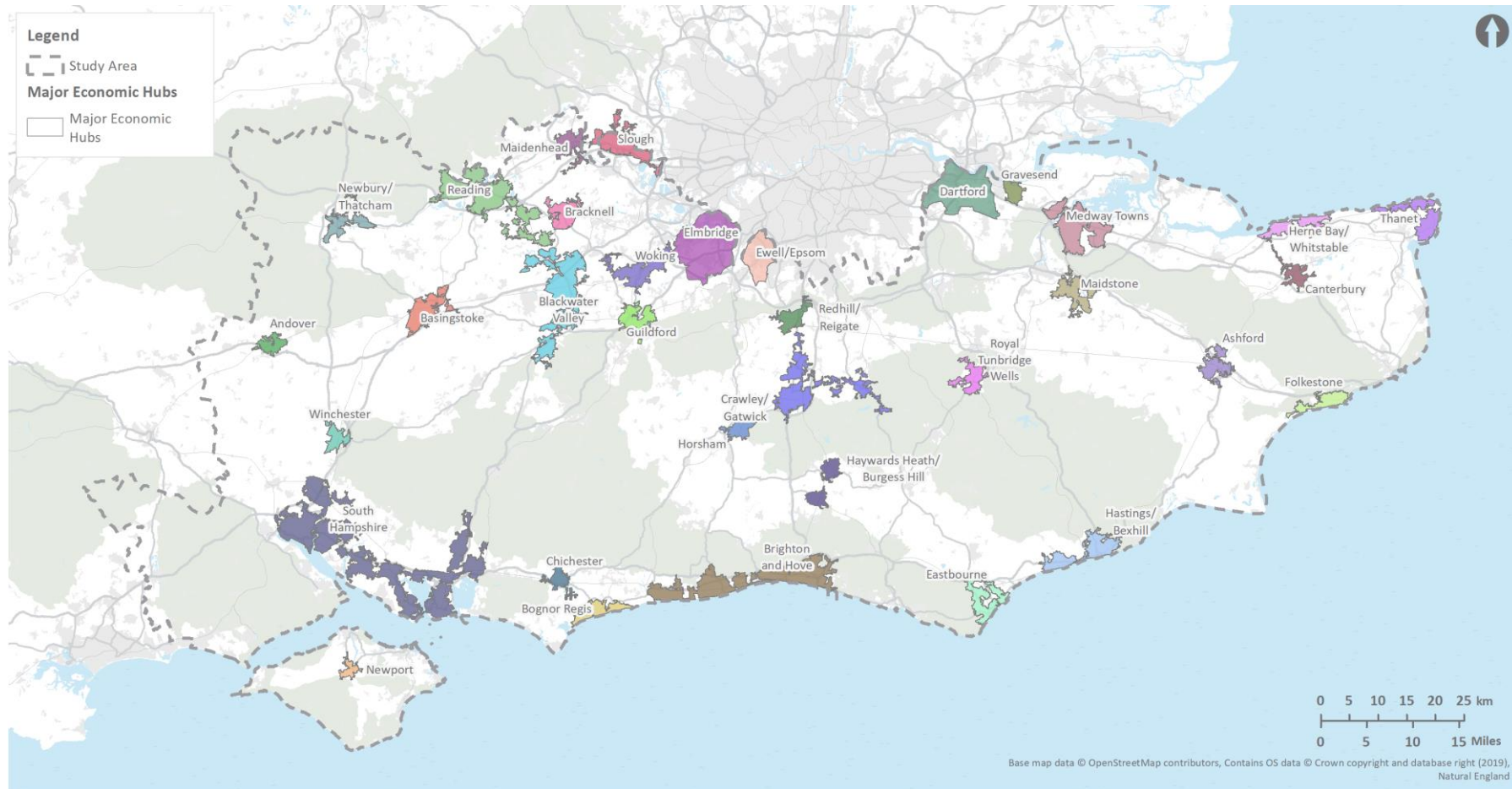


Figure 2.2: Resident population and major transport connections (Census 2011)



Figure 2.3: Workplace population and major transport connections (Census 2011)



Priority Industrial Sectors

- 2.6 The Economic Connectivity Review also identified several fast growing, priority industrial sectors. These are industrial sectors that give the South East, or parts of the South East, a national or international competitive advantage. They typically have the following characteristics:
- they have high concentrations of employment compared to the national average;
 - they are forecast to grow;
 - they are typically knowledge-intensive and higher value; and
 - they have identified relationships with education, research and innovation organisations.
- 2.7 The priority industrial sectors are summarised below (SIC codes are provided in **Appendix A**):
- **Finance and professional services:** including financial service activities; insurance, reinsurance and pension funding; auxiliary activities; architectural and engineering activities; technical testing and analysis; and civil engineering.
 - **Information Technology (IT):** including computer programming, consultancy and related activities; and information service.
 - **Advanced manufacturing:** including manufacture of chemicals and chemical products; manufacture of pharmaceutical products and pharmaceutical preparations; manufacture of computer, electronic and optical products; manufacture of electrical equipment; manufacture of machinery and equipment; manufacture of motor vehicles, trailers and semi-trailers; manufacture of other transport equipment; and repair/installation of machinery/equipment.
 - **Creative Industries:** including creative, arts and entertainment activities; and libraries, archives, museums and other cultural activities.
 - **Low carbon environmental:** including water collection, treatment and supply; sewerage; waste collection, treatment, disposal and remediation; materials recovery; electricity, gas, steam/air conditioning supply; environmental consulting; nuclear fuel processing;
 - **Transport and logistics:** including land transport and transport via pipelines; water transport; air transport; warehousing and support activities for transportation; and postal/courier.
 - **Tourism:** including accommodation; food and beverage service activities; and sports activities and amusement recreation activities.
 - **Marine, maritime and defence:** including water transport; shipbuilding; ship repair; defence.
- 2.8 A summary of the key economic characteristics of the Major Economic Hubs is provided in Table 2.1 (ordered by population size). This shows the largest population centres and largest clusters of economic activities are located in South Hampshire, Blackwater Valley, Crawley/Gatwick, Reading, and Brighton and Hove. A summary of the relative concentrations of the priority industrial sectors in the Major Economic Hubs is provided in Table 2.2. The most significant concentrations are:
- **Financial and Professional Services:** Andover, Brighton and Hove, Folkestone, Hastings/Bexhill, Haywards Heath/Burgess Hill, Redhill/Reigate, and Royal Tunbridge Wells;
 - **IT:** Blackwater Valley, Bracknell, Elmbridge, Guildford, Horsham, Maidenhead, Newbury/Thatcham, Reading, Slough, Winchester; and Woking;
 - **Advanced Engineering and Manufacturing:** Andover, Ashford, Chichester, Herne Bay/Whitstable, Newport, and Woking;
 - **Creative Industries:** Bracknell, Canterbury, Maidenhead, Newbury, Slough, and Winchester;
 - **Low Carbon Environmental:** Chichester, Newport, and Woking;
 - **Tourism:** Bognor Regis, Brighton/Hove, Canterbury, E'bourne, Epsom/Ewell, Hastings, Thanet
 - **Transport and Logistics:** Crawley/Gatwick, Dartford, Folkestone, Gravesend, and Slough; and
 - **Marine, Maritime and Defence:** South Hampshire.

Table 2.1: Key economic characteristics of Major Economic Hubs

Major Economic Hubs	GVA (£m)	Population	GVA per Head (£)	Highly Skilled Jobs	Priority Sector Jobs
South Hampshire	24,668	1,036,710	£23,795	114,575	21%
Blackwater Valley	22,076	665,698	£33,162	37,770	36%
Crawley/Gatwick	15,889	557,116	£28,520	49,105	30%
Reading	21,195	536,176	£39,530	61,095	22%
Brighton and Hove	10,852	456,441	£23,775	61,455	32%
Medway Towns	4,794	276,492	£17,339	24,025	25%
Woking	10,754	273,096	£39,378	16,975	17%
Eastbourne	4,701	258,966	£18,153	8,875	29%
Hastings/Bexhill	3,306	184,405	£17,928	10,970	27%
Basingstoke	5,169	173,856	£29,732	18,635	36%
Maidstone	3,763	164,499	£22,876	8,015	25%
Canterbury	3,050	159,965	£19,067	6,770	32%
Herne Bay/Whitstable	3,050	159,965	£19,067	4,775	26%
Newbury/Thatcham	7,136	156,020	£45,738	15,115	23%
Bognor Regis	2,489	155,732	£15,983	5,325	34%
Maidenhead	5,851	147,708	£39,612	8,375	26%
Guildford	5,283	146,080	£36,165	14,060	28%
Slough	6,528	145,734	£44,794	30,875	21%
Haywards Heath/Burgess Hill	3,544	145,651	£24,332	7,890	27%
Redhill/Reigate	4,754	144,100	£32,991	12,150	21%
Thanet	2,099	139,772	£15,017	8,135	19%
Newport	2,473	139,395	£17,741	4,125	23%
Horsham	3,496	135,868	£25,731	7,915	26%
Elmbridge	4,446	132,670	£33,512	17,495	29%
Ashford	2,879	124,250	£23,171	7,900	37%
Andover	3,297	120,712	£27,313	8,560	41%
Winchester	4,823	120,696	£39,960	8,910	18%
Bracknell	3,818	118,982	£32,089	17,775	33%
Chichester	3,080	116,976	£26,330	9,760	31%
Royal Tunbridge Wells	3,285	116,241	£28,260	9,420	21%
Folkestone	2,105	110,034	£19,130	7,175	28%
Gravesend	1,603	106,299	£15,080	3,190	28%
Dartford	3,064	103,892	£29,492	14,165	29%
Epsom/Ewell	2,035	78,950	£25,776	6,305	28%

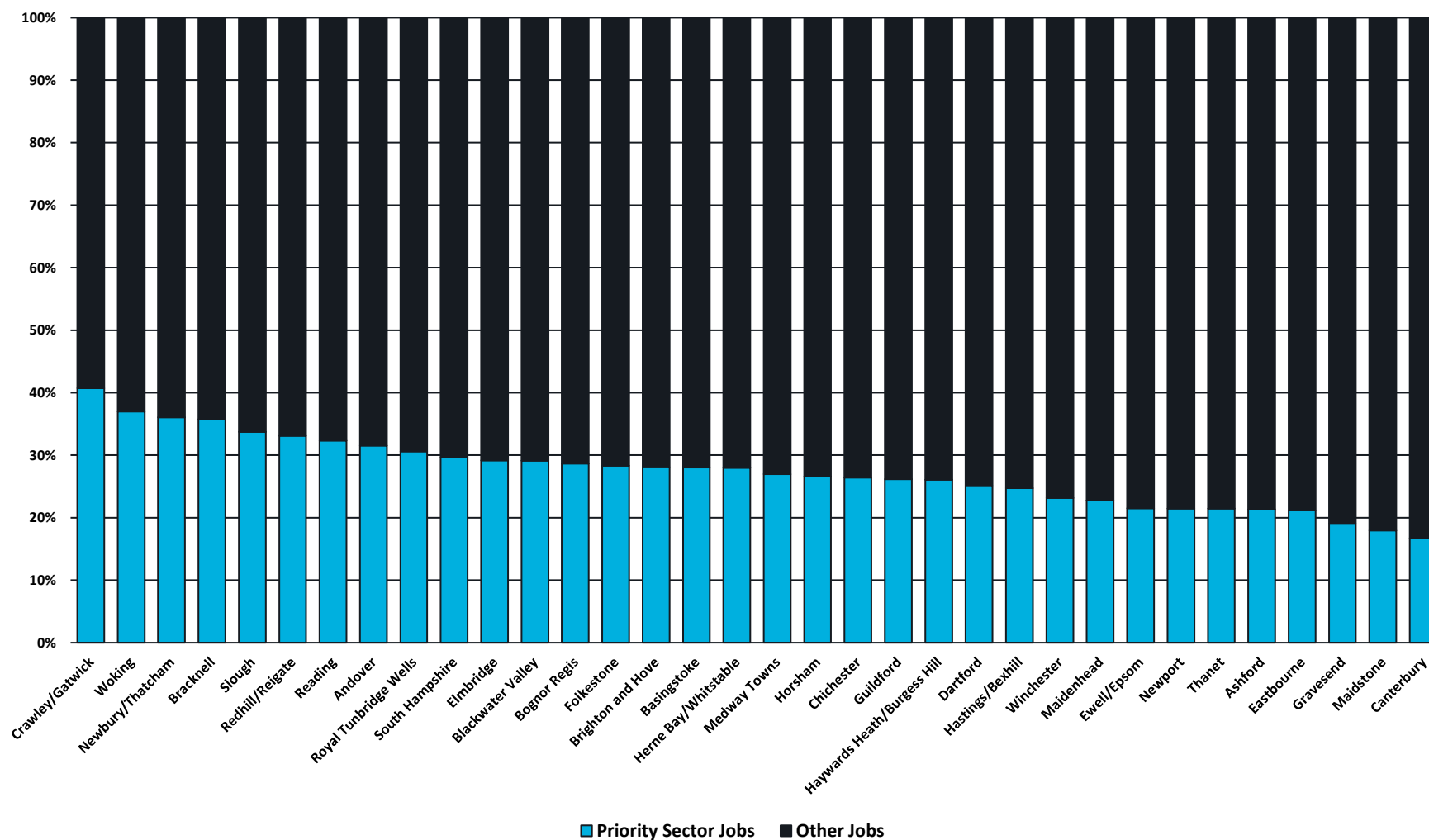
2.9 The percentage of jobs within the priority industrial sectors described above for each Major Economic Hub is shown in Table 2.2.

Table 2.2: Sectoral strengths by Major Economic Hub (Business Register Employment Survey, 2017)

Major Economic Hubs	IT	Creative	Low Carbon Environmental	Marine, Maritime and Defence	Transport & Logistics	Tourism	Advanced Engineering and Manufacturing	Finance and Professional
Andover	0.5	0.7	1.2	-	1.1	0.7	1.7	1.7
Ashford	0.4	0.6	0.8	0.5	1.8	0.9	1.8	0.3
Basingstoke	1.4	1.3	1.3	-	0.9	0.7	1.2	0.9
Blackwater Valley	2.2	0.9	1.0	0.1	0.4	1.1	1.1	0.7
Bognor Regis	0.3	0.6	0.6	0.3	0.6	2.0	0.9	0.2
Bracknell	4.7	1.5	0.3	-	0.5	0.5	0.5	0.5
Brighton and Hove	1.0	1.0	0.9	0.1	0.6	1.1	0.7	1.6
Canterbury	0.7	1.7	0.5	-	0.7	1.7	0.1	0.5
Chichester	0.4	1.4	2.1	-	0.5	1.1	1.5	0.4
Crawley/Gatwick	0.5	0.5	0.6	0.3	2.7	0.7	1.1	0.5
Dartford	0.7	0.7	0.9	0.5	2.0	1.0	1.0	0.3
Eastbourne	0.5	0.7	0.5	-	0.7	1.8	0.6	0.7
Elmbridge	1.8	1.0	0.5	0.2	0.5	1.3	0.9	0.7
Epsom/Ewell	1.4	0.6	1.0	-	0.7	1.5	0.0	0.8
Folkestone	0.3	0.5	0.2	1.3	1.5	1.1	0.5	1.9
Gravesend	0.4	0.4	0.2	1.2	2.0	1.4	0.2	0.7
Guildford	1.7	0.8	0.5	0.1	0.5	1.1	1.1	1.4
Hastings/Bexhill	0.4	0.5	0.5	-	0.7	1.2	1.2	1.9
Haywards Heath/Burgess Hill	0.8	0.3	0.7	-	0.5	0.8	1.4	2.7
Herne Bay/Whitstable	0.6	0.6	0.8	0.4	0.3	1.4	1.5	1.2
Horsham	1.7	1.1	0.8	-	0.7	1.0	0.5	1.2
Maidenhead	3.1	2.5	0.1	0.2	0.4	0.9	0.3	0.4
Maidstone	1.0	1.2	0.2	0.2	0.7	1.4	0.6	1.2
Medway Towns	0.6	0.7	1.1	0.5	1.2	0.9	1.3	1.1
Newbury/Thatcham	1.6	5.2	0.3	-	0.3	0.7	0.5	0.3
Newport	0.4	0.9	1.8	-	0.8	1.0	1.7	0.8
Reading	3.6	1.1	0.8	0.0	0.6	0.8	0.4	0.7
Redhill/Reigate	1.3	0.7	0.5	-	0.5	0.5	0.8	3.5
Royal Tunbridge Wells	0.9	1.3	0.4	-	0.3	0.9	0.2	3.1
Slough	1.6	1.5	1.3	0.2	1.9	0.5	0.9	0.2
South Hampshire	1.1	0.7	0.9	9.1	1.1	0.9	1.2	0.8
Thanet	0.3	0.7	0.3	-	1.0	1.8	1.0	0.3
Winchester	2.9	2.3	0.1	0.2	0.5	1.0	0.2	0.4
Woking	2.3	0.6	1.5	-	0.5	1.0	1.5	0.3

These figures indicate whether the proportion of jobs in the priority industrial sector for a given Major Economic Hub are higher or lower than the average for England and Wales. Numbers greater than 1 indicate that the proportion of jobs in the given sector is higher than the proportion in England and Wales, numbers smaller than 1 indicate that the proportion of jobs in the given sector are lower.

Figure 2.4: Percentage of full-time priority sector jobs by Major Economic Hub (Business Register Employment Survey 2017)

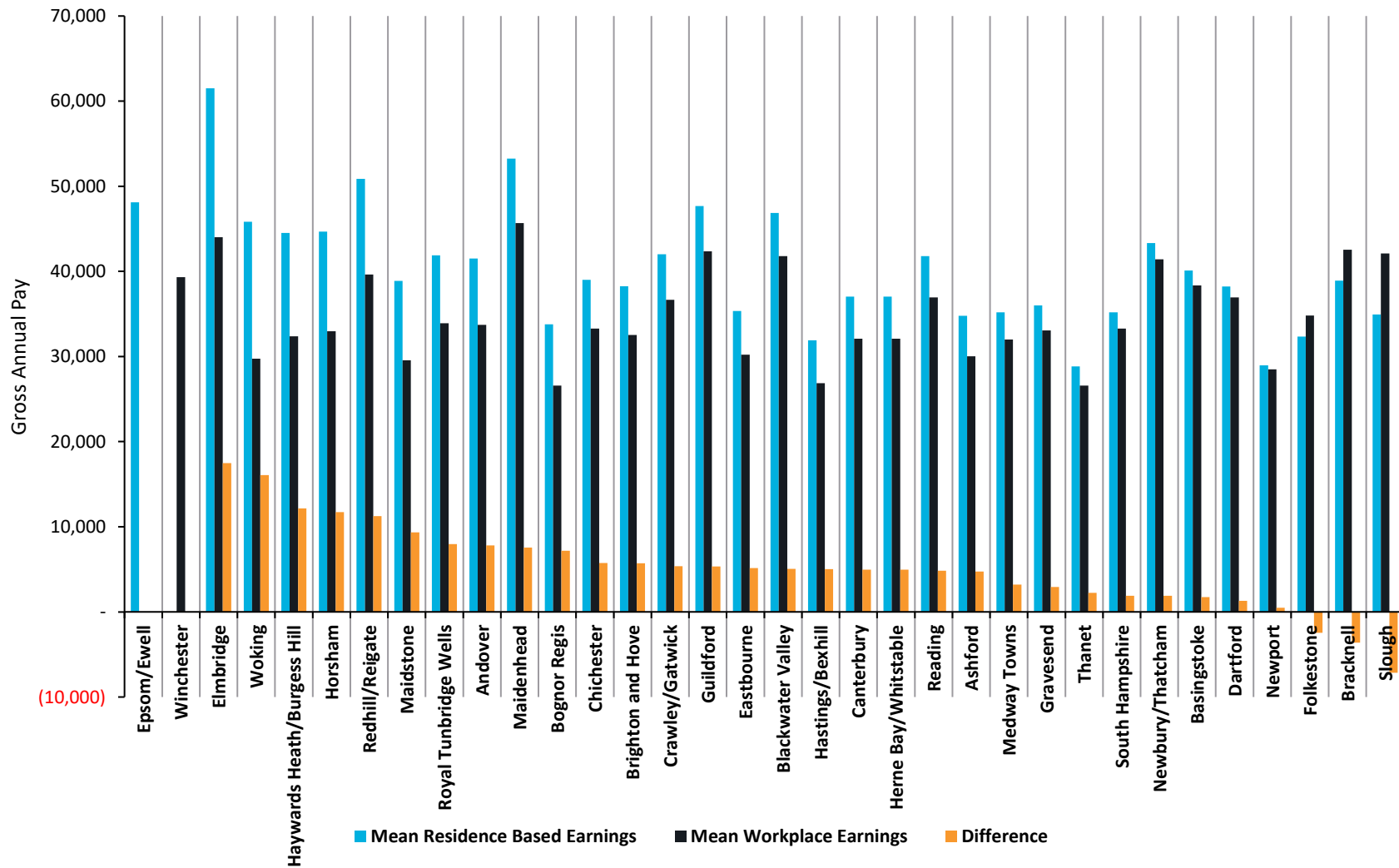


- 2.10 Table 2.2 shows that Crawley/Gatwick, Woking and Newbury/Thatcham have the highest proportion of priority sector jobs while Canterbury, Maidstone and Gravesend have the lowest. All the Major Economic Hubs have at least 17% of jobs in priority sectors, which typically require higher skilled labour, usually with degree level qualifications or higher. These data do not include part-time work. This distorts the real employment mix for Major Economic Hubs with large sectors that involve part-time work (e.g. retail) such as Canterbury, Thanet, Herne Bay/Whitstable and Gravesend, where over 40% of those employed work part-time (in comparison to the Major Economic Hub average of 34%). Characteristically, jobs in these sectors are lower skilled.

Workplace and Residence Based Earnings

- 2.11 Figure 2.5 shows the average workplace and residence based earnings for full-time workers in each of the Major Economic Hubs (except Winchester and Epsom/Ewell due to unavailable data). The difference between these earnings provides an indication of the level and type of commuting that takes place in each Major Economic Hub. Major Economic Hubs with higher residence based earnings than workplace earnings are likely to have high higher levels of out-commuting than in-commuting (as residents earn more outside the Major Economic Hub in which they live), whereas Major Economic Hubs with higher workplace earnings than residence based earnings are likely to see more in-commuting than out-commuting.
- 2.12 The data presented in Table 2.5 shows that, on average, residence based earnings are higher than workplace in 31 out of the 34 Major Economic Hubs. The difference between these earnings is particularly high in Woking, Elmbridge and Haywards Heath/Burgess Hill. This suggests there are high levels of out-commuting (mostly towards London) in these towns. Nine of the ten Major Economic Hubs with the greatest difference between workplace and residence based earnings lie on high quality radial transport routes to/from London. This means that residents who live in these areas have easy access to London, can commute to higher earning jobs, and earn more than those who work locally.
- 2.13 In general, areas that have higher workplace and residence based earnings tend to have a greater difference between these earnings than areas with lower earnings (i.e. less prosperous areas). This suggests that people with higher skill levels and/or higher salaries are more likely to travel greater distances to find higher paid employment, whereas people with lower skills are more likely to find employment closer to home.
- 2.14 There are only three Major Economic Hubs in the South East area where workplace earnings are higher than residence based earnings. These are Slough, Bracknell and Folkestone. Each of these have highly specialised economies with skilled jobs that attract people from further afield. This is particularly the case for Slough and Bracknell, where the mean workplace earnings are close to the maximum for all of the Major Economic Hubs in the South East.

Figure 2.5: 2018 Gross Annual Pay by Major Economic Hub (Full Time Equivalent employee) (nearest £1,000)



Skills

- 2.15 If Major Economic Hubs are to attract higher value jobs to their local economy, then they also need to attract higher skilled people to take on these jobs. One way of analysing the labour market is to compare the number of people who are educated to National Vocational Qualification (NVQ) Level 4 or higher or equivalent (i.e. degree level) in each Major Economic Hub with the number of highly skilled jobs available in the same Major Economic Hub. This data is presented in Table 2.3. The difference between the number of highly skilled people and highly skilled jobs in each Major Economic Hub shows the extent of a skills ‘mis-match’ in each area³.
- 2.16 These data show that, in general, Major Economic Hubs with lower proportions of skilled workers tend to be more deprived areas and tend to have a surplus of highly skilled jobs. These areas therefore need to ‘import’ highly skilled workers. This trend is particularly notable in Medway.
- 2.17 In very general terms, the Major Economic Hubs with the greatest difference between mean residence based earnings and workplace earnings (e.g. Elmbridge, Winchester and Woking – as shown in Figure 2.5) tend to have the highest levels of mismatch between highly skilled jobs and highly skilled workers (as shown in Table 2.3). This indicates that many of the high earning residents in these Major Economic Hubs are out-commuting to seek higher paid jobs elsewhere.
- 2.18 Major Economic Hubs with higher proportions of skilled residents, on the other hand, tend to have a deficit of highly skilled jobs. In many cases these areas have a relatively high concentration of highly skilled jobs, but this is more than offset by an even higher concentration of highly skilled residents. This may be because highly skilled residents are more likely to commute to London and/or to other larger Major Economic Hubs for work. For example, 70% of jobs in Elmbridge are at a degree level or higher, but this Major Economic Hub is a significant net exporter of workers due to the fact that it is close to (and well connected to) London.
- 2.19 There are also some Major Economic Hubs with more highly skilled people than highly skilled jobs, but where the total number of highly skilled jobs represents a relatively low proportion of total jobs. These tend to be in historic cities such as Canterbury, Chichester and Winchester. These areas may attract people with high skills to live there for reasons other than employment prospects, such as quality of life. These people are also more likely to have the means to commute further for highly skilled jobs.

Conclusion

- 2.20 This Section has described the key economic characteristics of the Major Economic Hubs in South East England and the priority industrial sectors that they service. It has also highlighted notable imbalances in earnings and skills within each of the Major Economic Hubs, which drive the journey to work behaviours that will be considered in more detail in the next section.

³ It is acknowledged that the mismatch of skills is a much more complex topic than presented in this section (e.g. Priority Industrial Sector jobs in aeronautics probably require NVQ4+ qualifications in engineering and not just any NVQ4+ qualification). Nevertheless, it is helpful to understand if there is a global imbalance in “highly skilled” jobs and qualifications in the Major Economic Hubs.

Table 2.3: Population with NVQ Level 4+ qualifications and number of degree level jobs in each Major Economic Hub (Source: Census 2011, Business Register Employment Survey 2017, nearest thousand)

Major Economic Hub	NVQ4+ skilled population	% of total population	Number of degree-level jobs	% of total jobs	Difference (Jobs minus skilled population)
Medway Towns	38,000	16%	41,000	43%	3,000
Blackwater Valley	63,000	24%	64,000	51%	1,000
Maidstone	19,000	21%	20,000	41%	1,000
Bracknell	18,000	24%	19,000	43%	1,000
Basingstoke	25,000	23%	26,000	40%	1,000
Andover	9,000	19%	10,000	37%	1,000
Dartford	17,000	17%	18,000	34%	1,000
Ashford	11,000	17%	12,000	33%	1,000
Gravesend	8,000	17%	8,000	44%	-
Newbury/Thatcham	17,000	25%	17,000	41%	-
Crawley/Gatwick	35,000	19%	35,000	33%	-
Newport	4,000	17%	4,000	18%	-
Folkestone	12,000	18%	11,000	34%	(1,000)
Horsham	16,000	27%	15,000	52%	(1,000)
Haywards Heath/Burgess Hill	18,000	28%	17,000	54%	(1,000)
Maidenhead	19,000	20%	18,000	57%	(1,000)
Herne Bay/Whitstable	14,000	29%	12,000	47%	(2,000)
Royal Tunbridge Wells	19,000	27%	17,000	49%	(2,000)
Thanet	20,000	16%	18,000	40%	(2,000)
Redhill/Reigate	18,000	27%	16,000	54%	(2,000)
Bognor Regis	11,000	18%	9,000	48%	(2,000)
Epsom/Ewell	22,000	30%	20,000	65%	(2,000)
Chichester	12,000	31%	9,000	27%	(3,000)
Winchester	17,000	36%	13,000	34%	(4,000)
Slough	33,000	21%	29,000	35%	(4,000)
Canterbury	14,000	30%	10,000	28%	(4,000)
Eastbourne	23,000	19%	19,000	41%	(4,000)
Hastings/Bexhill	24,000	18%	20,000	40%	(4,000)
Woking	31,000	31%	27,000	60%	(4,000)
Guildford	25,000	36%	20,000	39%	(5,000)
Elmbridge	45,000	35%	39,000	70%	(6,000)
Reading	95,000	29%	86,000	52%	(9,000)
South Hampshire	173,000	20%	161,000	40%	(12,000)
Brighton and Hove	125,000	26%	109,000	49%	(16,000)

3 Journeys to Work

Introduction

3.1 This section describes the key characteristics of journeys to work between the Major Economic Hubs. It focusses on the highest flows between the Major Economic Hubs, which are defined as more than 1,500 journeys per average week day. This section describes:

- the **catchment areas** of the Major Economic Hubs and highlights differences in size and shape between inbound and outbound commuting;
- the **largest journey to work flows** in the South East;
- the level of **self-containment** exhibited by each Major Economic Hub, which can be analysed by examining the imbalance of jobs in and workers in each hub;
- the **distances travelled** by journeys to work for each Major Economic Hub;
- the **mode shares of** journeys to work for each Major Economic Hub; and
- the **sustainable transport potential** for the largest inter-urban flows cited above.

Catchment Areas

3.2 Census Travel to Work data has been mapped to show the catchment areas for each of the Major Economic Hubs. The results of this exercise are shown in Figure 3.1 to Figure 3.18. These maps show both journeys to and journeys from each Major Economic Hub. For the purposes of this analysis, the Major Economic Hubs have been grouped into five distinct areas: Gatwick Diamond, Sussex Coast, Kent (shown in three maps: East Kent, West Kent and South Kent), Thames Valley (shown in two maps: East Berkshire and West Berkshire/Hampshire), and The Solent. The shaded areas on these maps show flows of more than 10 journeys⁴ per weekday to/from each Major Economic Hub to Middle Layer Super Output Areas (MSOAs).

3.3 The maps presented in Figure 3.1 to Figure 3.18 appear to show the following notable trends:

- In almost every case, the size of the catchment area for in-bound commuting to each Major Economic Hub is larger than the catchment area for out-bound commuting from each Major Economic Hub. This is particularly notable in **Kent** (Figures 3.5 to 3.10) and **Surrey** (figures 3.15 and 3.16), which has relatively large catchment areas for in-bound commuters. This suggests the Major Economic Hubs in this area have large rural hinterlands – particularly Royal Tonbridge Wells (Figure 3.9) and Guildford (Figure 3.15).
- In contrast to most catchment areas, the areas for the **Sussex Coast** (Figures 3.3 and 3.4) are broadly similar in size. This perhaps reflects a more urban hinterland that stretches a long way across the coastline but does not penetrate particularly far inland.
- All of the out-bound catchment areas show significant flows to Central London. In many cases – notably the **Gatwick Diamond** (Figures 3.1 and 3.2) and the **Sussex Coast** (Figures 3.3 and 3.4) – out-bound commuting appears to follow radial rail routes into London. There are significant flows between Brighton and Crawley/Gatwick represented in these

⁴ A cut-off of ten journeys was used to remove anomalies from the presentation of this data.

catchment areas. This suggests a high portion of out-bound commuting trips are undertaken by rail.

- The shape of many of the in-bound commuting catchment areas, on the other hand, indicate there is more commuting by car. This is particularly notable in **Kent** (Figures 3.5 to 3.10) and the **Thames Valley** (Figures 3.11 to 3.14), where there are significant flows from towns and communities that are not served by the rail network.
- The shape of the catchment areas for Major Economic Hubs close to London appear to be skewed. For example, the shapes of the in-bound catchment areas for **West Kent** (Figure 3.7), **East Berkshire Thames Valley** (Figure 3.11) and **Surrey** (Figure 3.15) appear to cover greater areas further away from London and smaller areas closer to the capital. This reflects the density of the urban area in outer London, which restricts the distance commuters can realistically travel to Major Economic Hubs on the periphery of London (as journey speeds are typically much lower in urban areas). Interestingly, there appears to be a significant level of commuting from South East London to **West Kent** (Figure 3.7), but less commuting from West London into **East Berkshire Thames Valley** (Figure 3.11).
- The shape of the catchment areas in **South Hampshire, Isle of Wight and Winchester** area (Figures 3.17 and 3.18) are much rounder than those closer to London. This reflects the nature of the hinterland around South Hampshire, which is more rural in nature. It also reflects the transport network in this area, which is characterised by several radial corridors out of the South Hampshire Major Economic Hub.
- In contrast to the Solent area, the **Sussex Coast** catchment areas (Figure 3.1 and 3.2) are more linear in shape. This reflects the characteristics of the transport network in this area, which are more developed along the east-west axis than along the north-south axis (with the exception of the M23/A23/Brighton Main Line corridor).
- Finally, it is interesting to note the remarkably large size of the **West Berkshire/Hampshire Thames Valley** in-bound commuting catchment area (Figure 3.13), which stretches deep into Wiltshire towards the West of England. This reflects the relatively fast road network that stretches beyond the South East area into the West of England (e.g. the M4 and A303 expressways).

Figure 3.1: Inbound commuting journeys to Gatwick Diamond Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

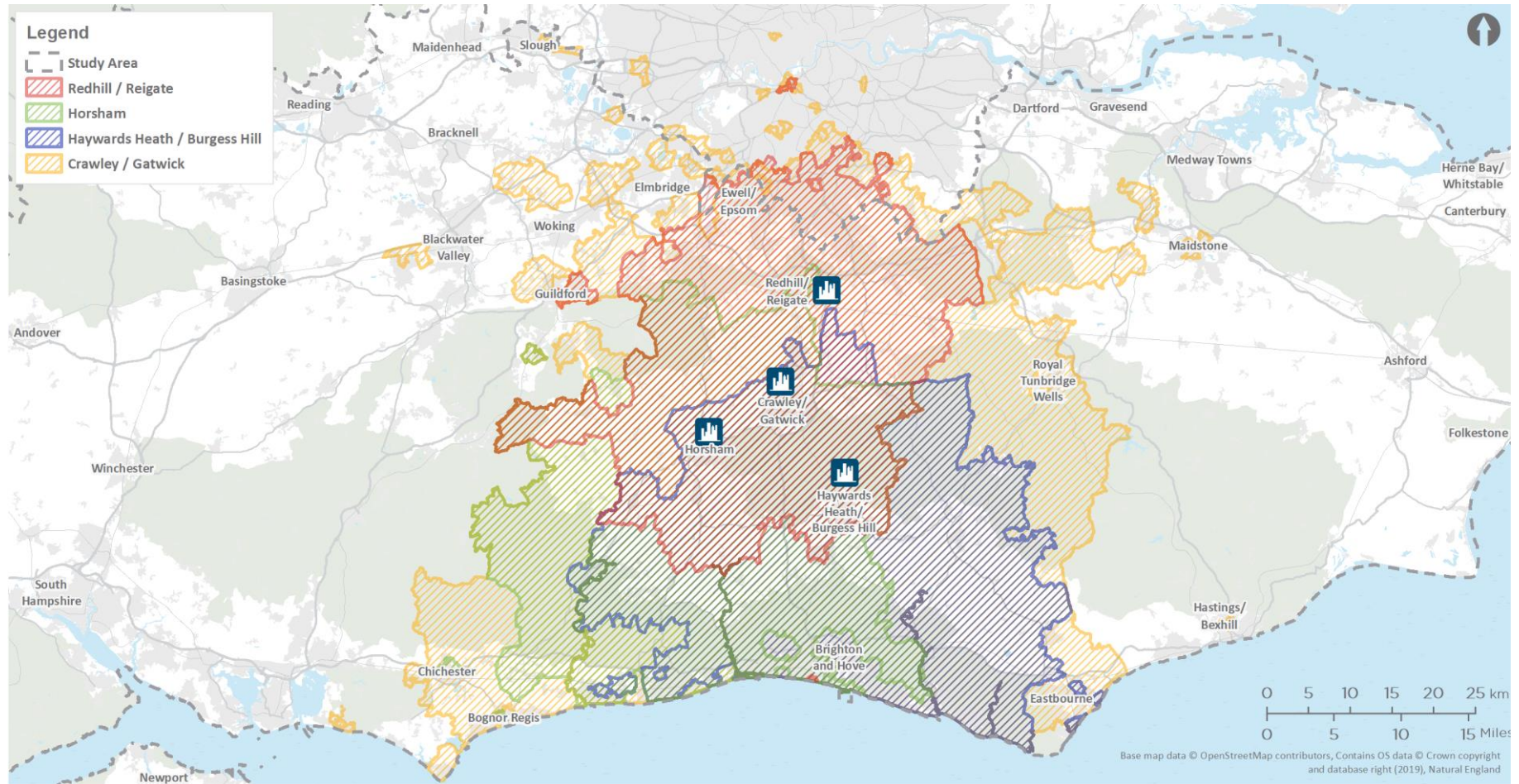


Figure 3.2: Outbound commuting journeys from Gatwick Diamond Corridor Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

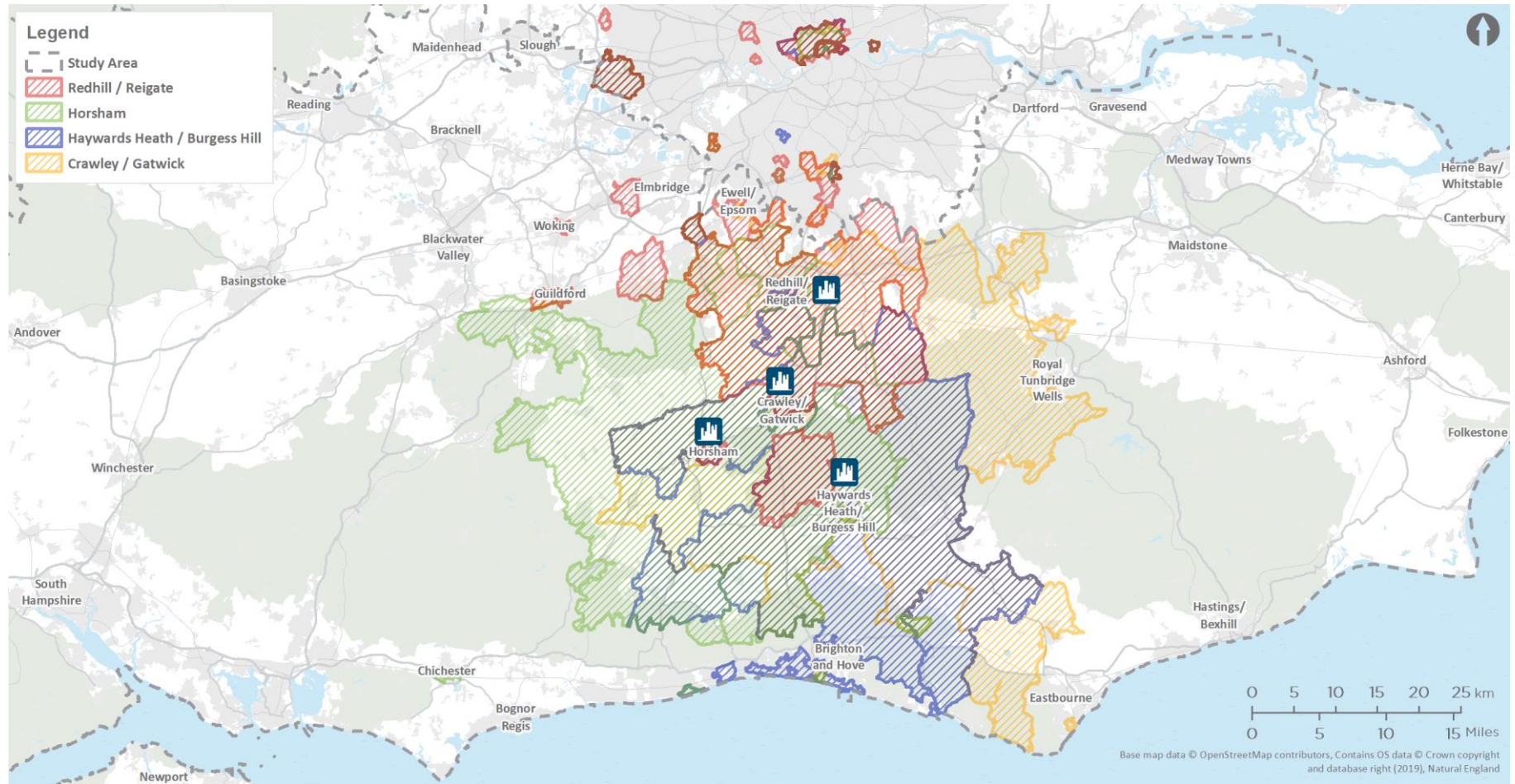


Figure 3.3: Inbound commuting Journeys to Sussex Coast Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

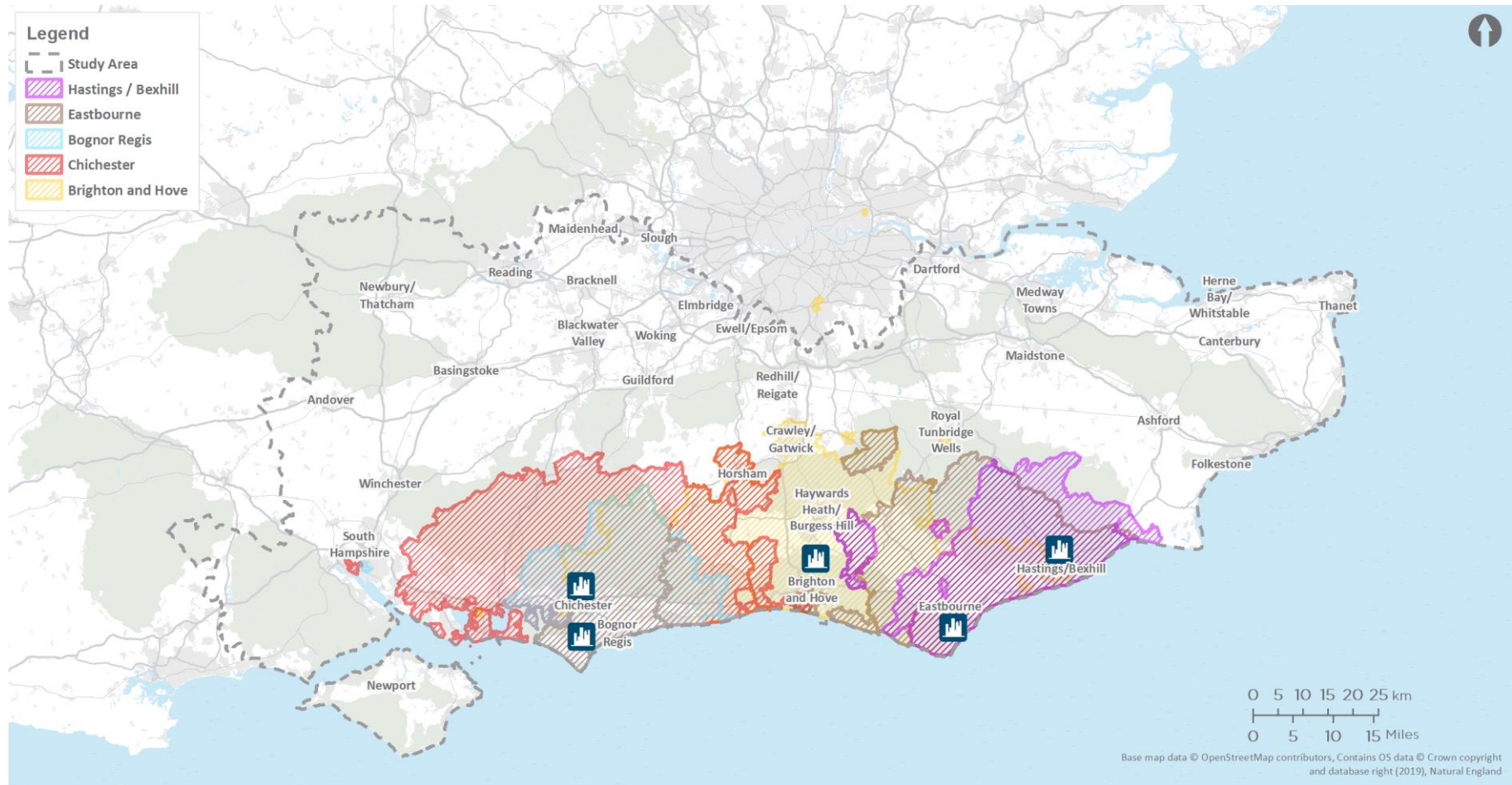


Figure 3.4: Outbound commuting journeys from Sussex Coast Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

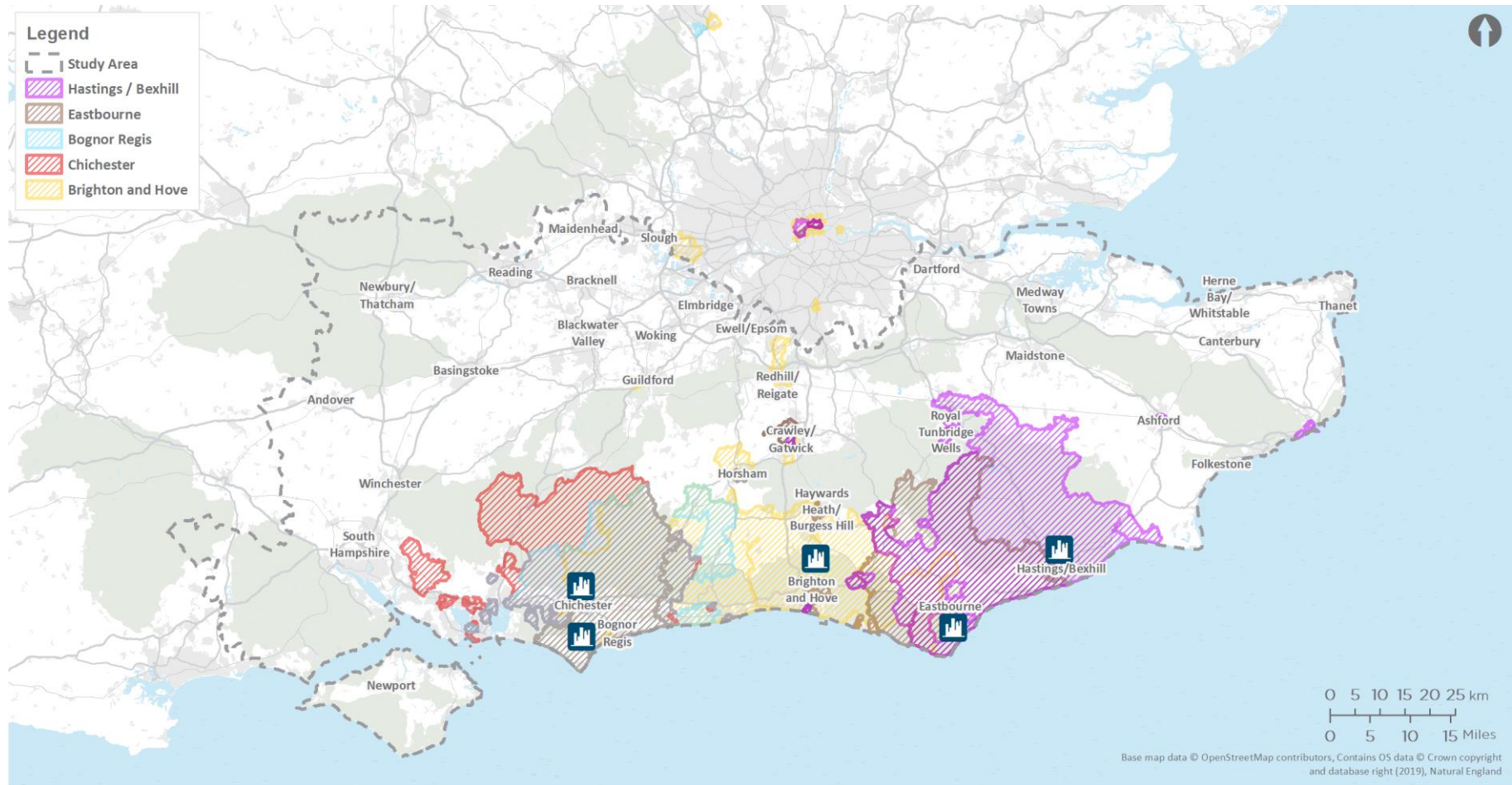


Figure 3.5: Inbound commuting journeys to East Kent's Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

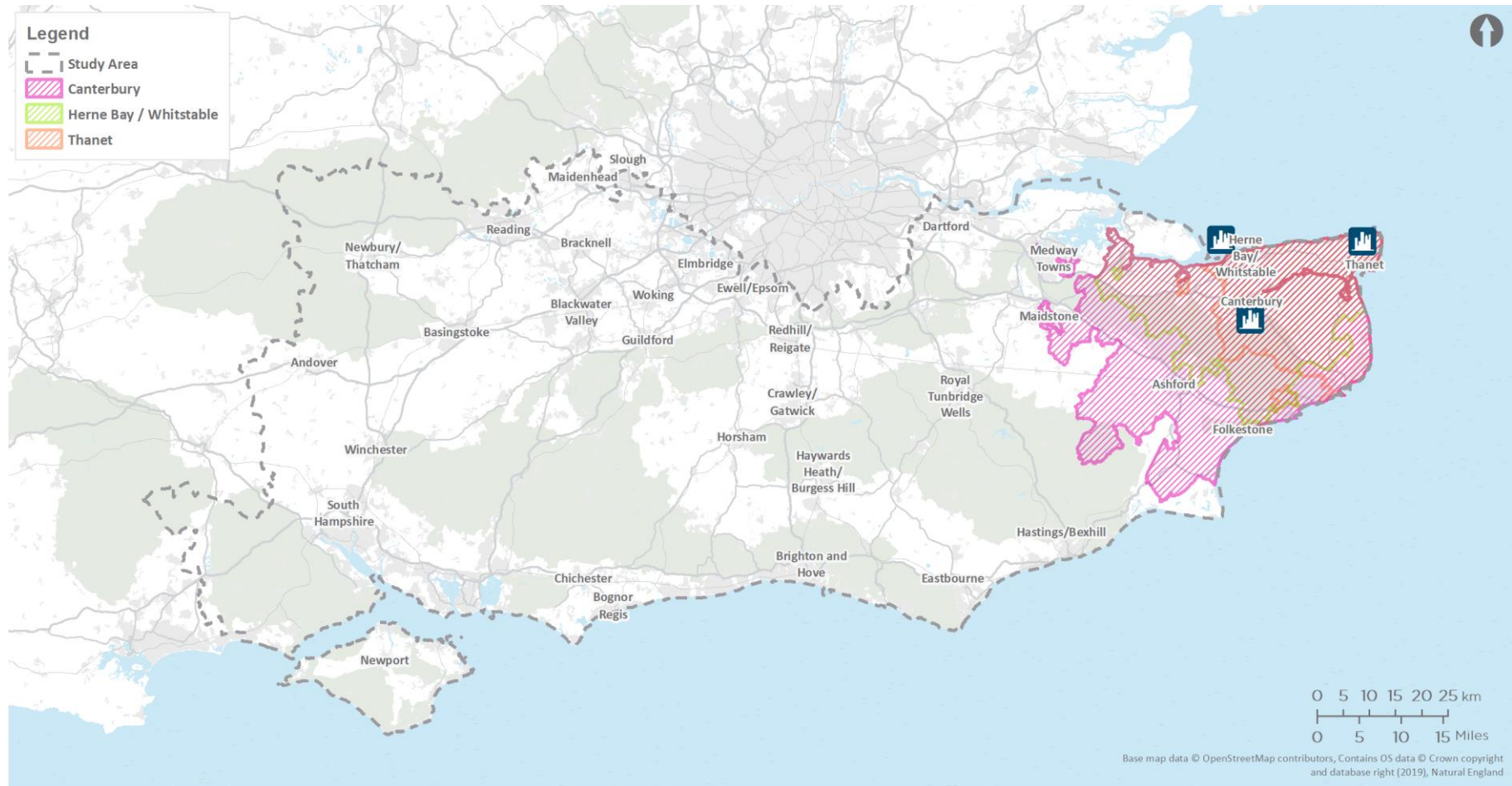


Figure 3.6: Outbound commuting journeys from East Kent's Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

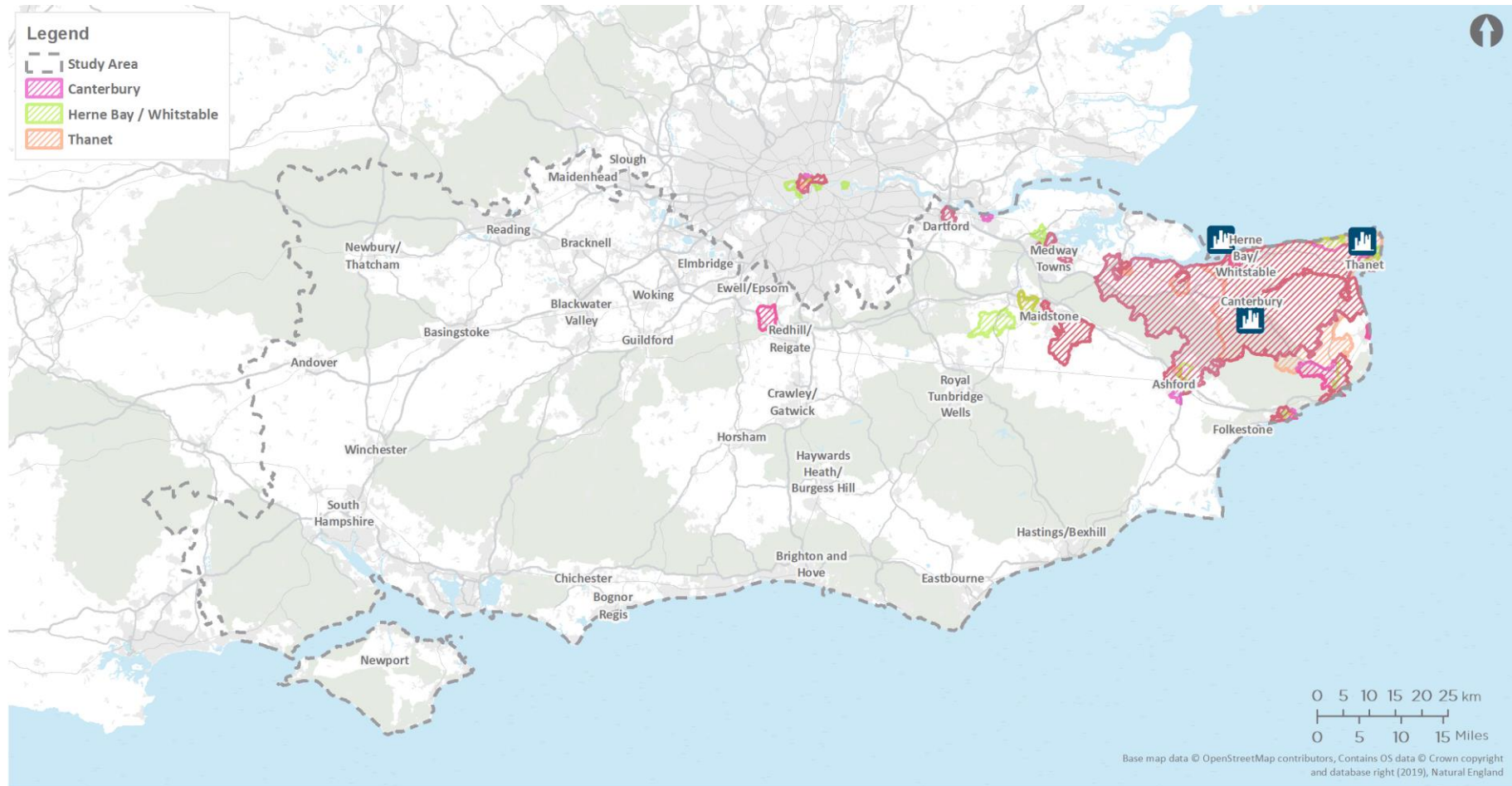


Figure 3.7: Inbound commuting journeys to West Kent's Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

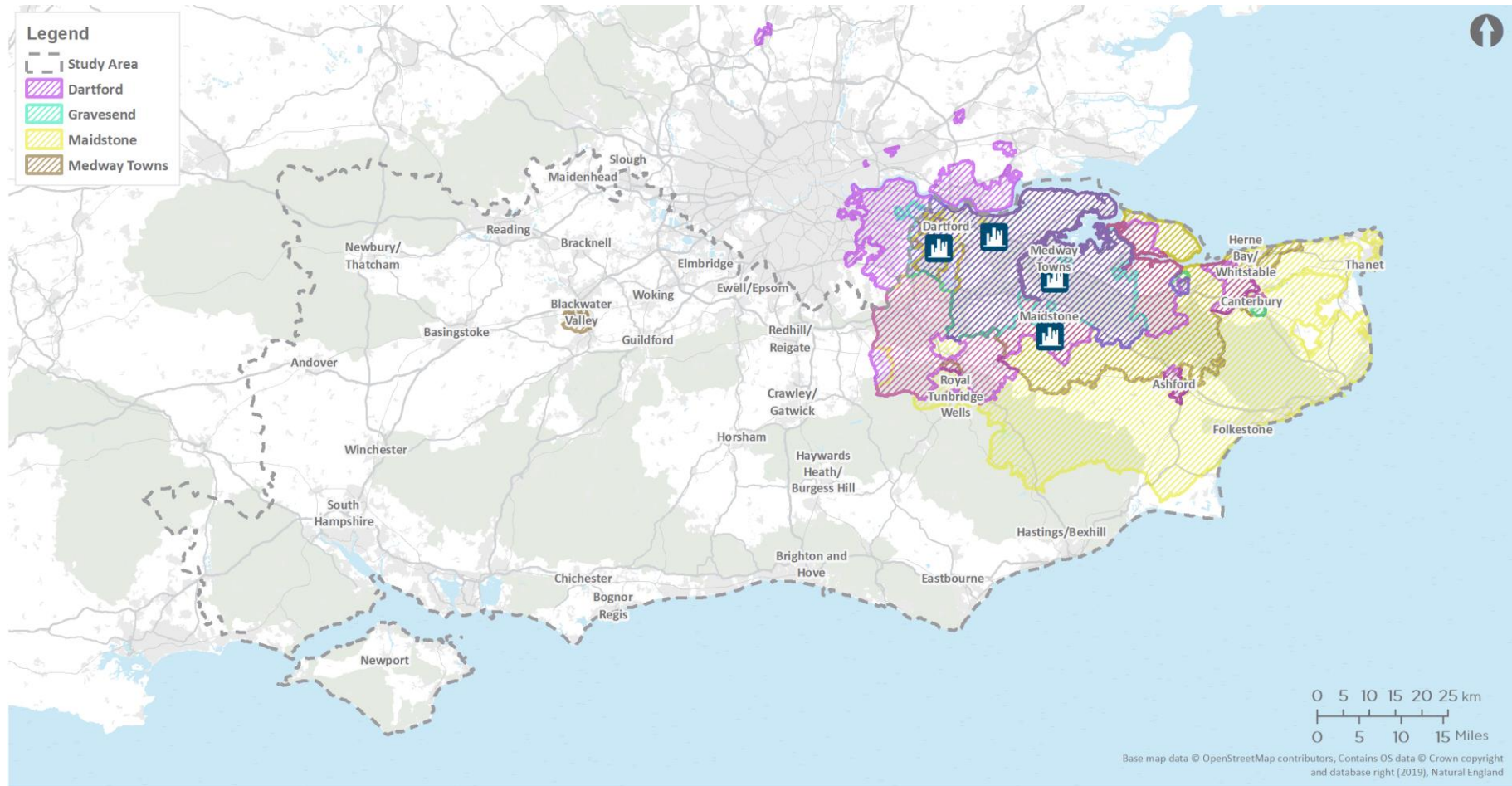


Figure 3.8: Outbound commuting journeys from West Kent's Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

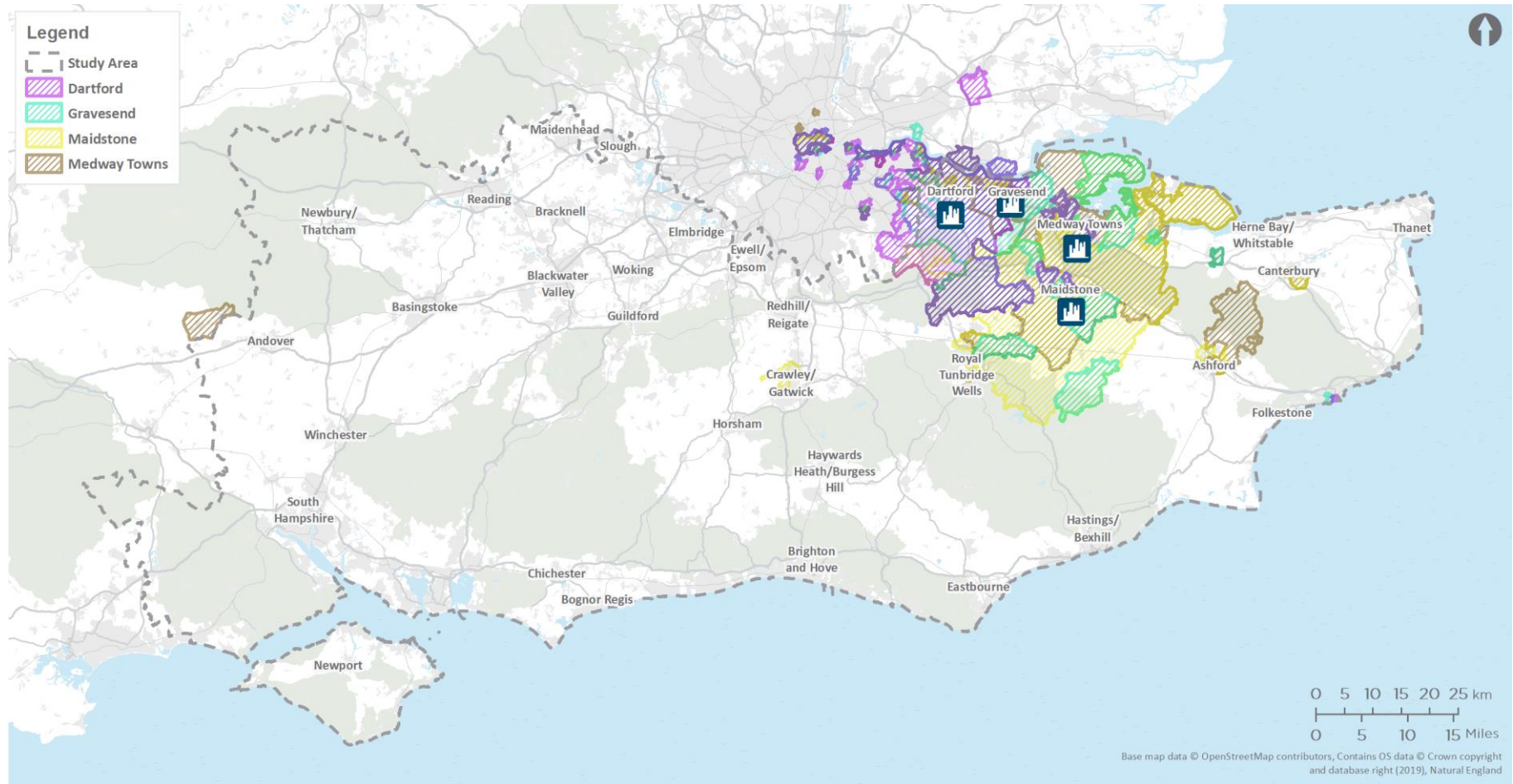


Figure 3.9: Inbound commuting journeys to South Kent's Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

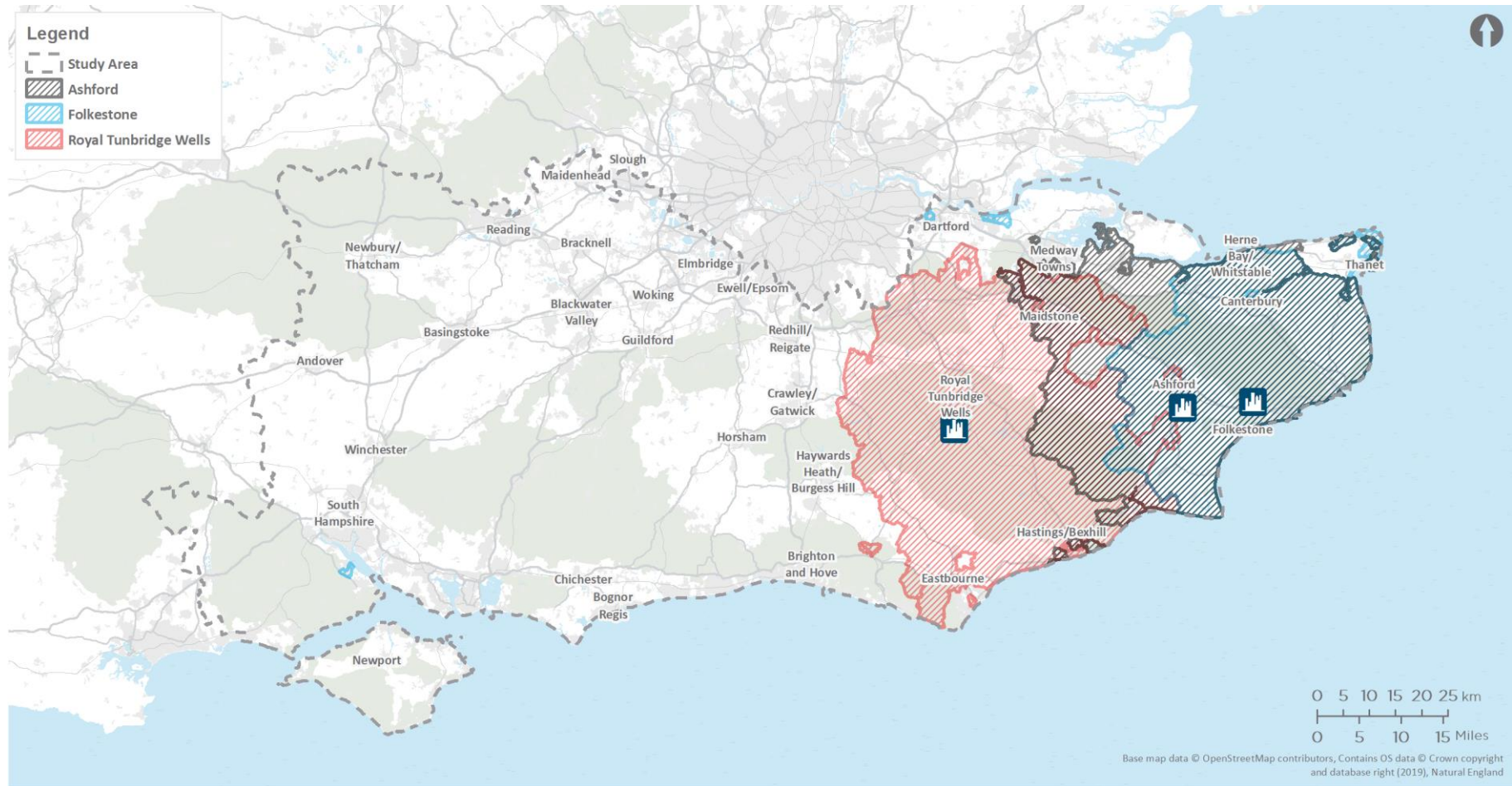


Figure 3.10: Outbound commuting journeys from South Kent's Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

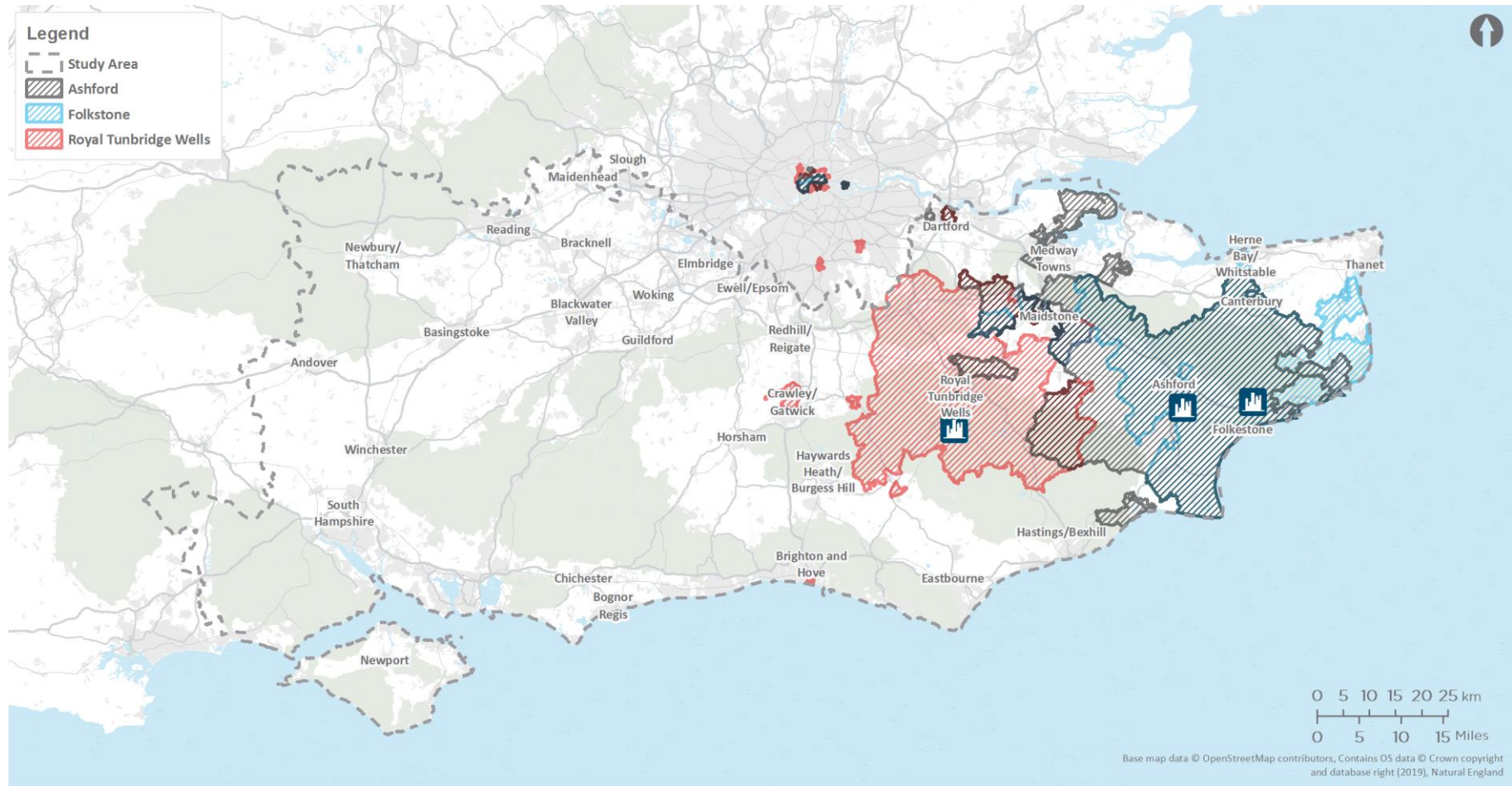


Figure 3.11: Inbound commuting journeys to East Berkshire Thames Valley Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

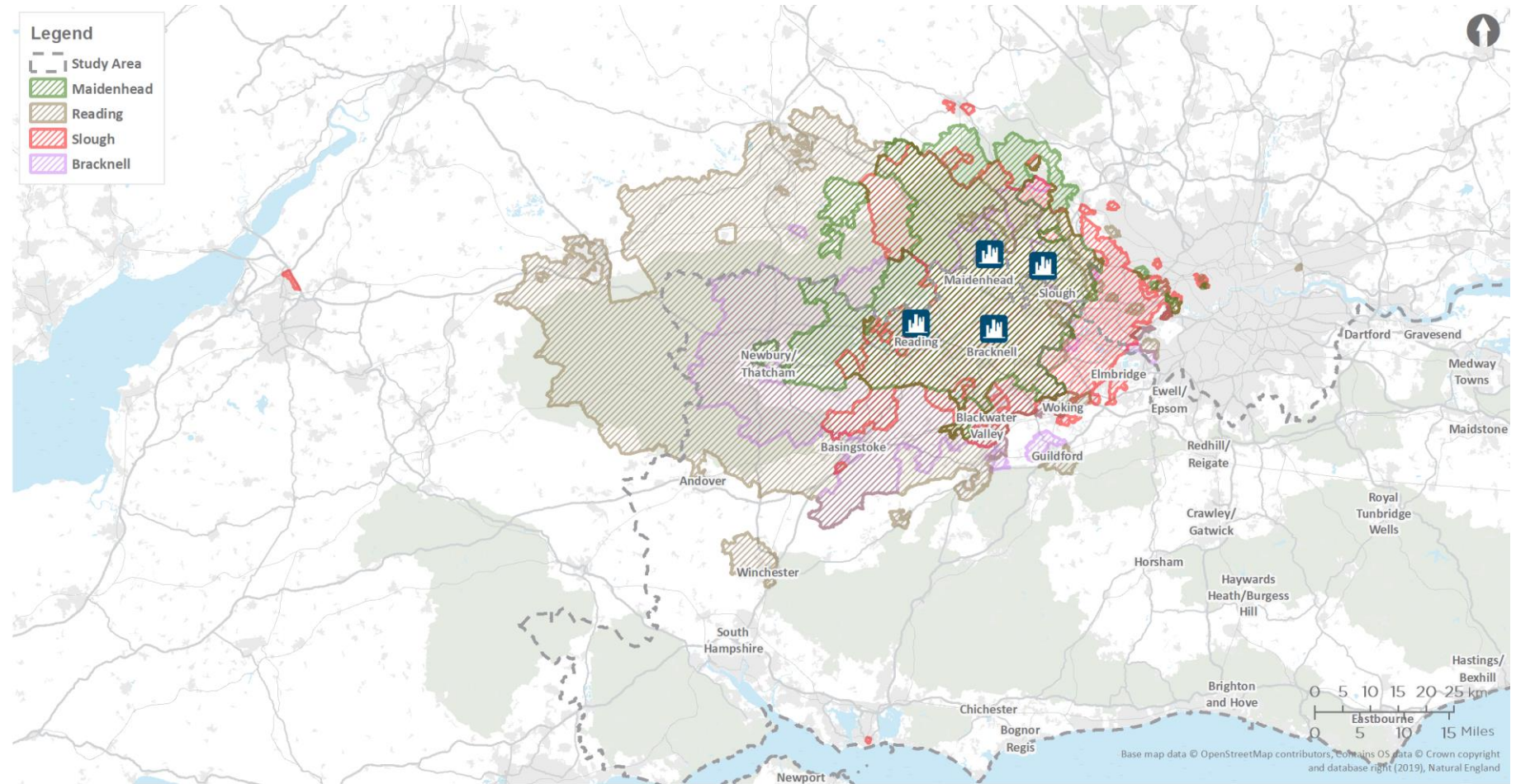


Figure 3.12: Outbound commuting journeys from East Berkshire Thames Valley Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

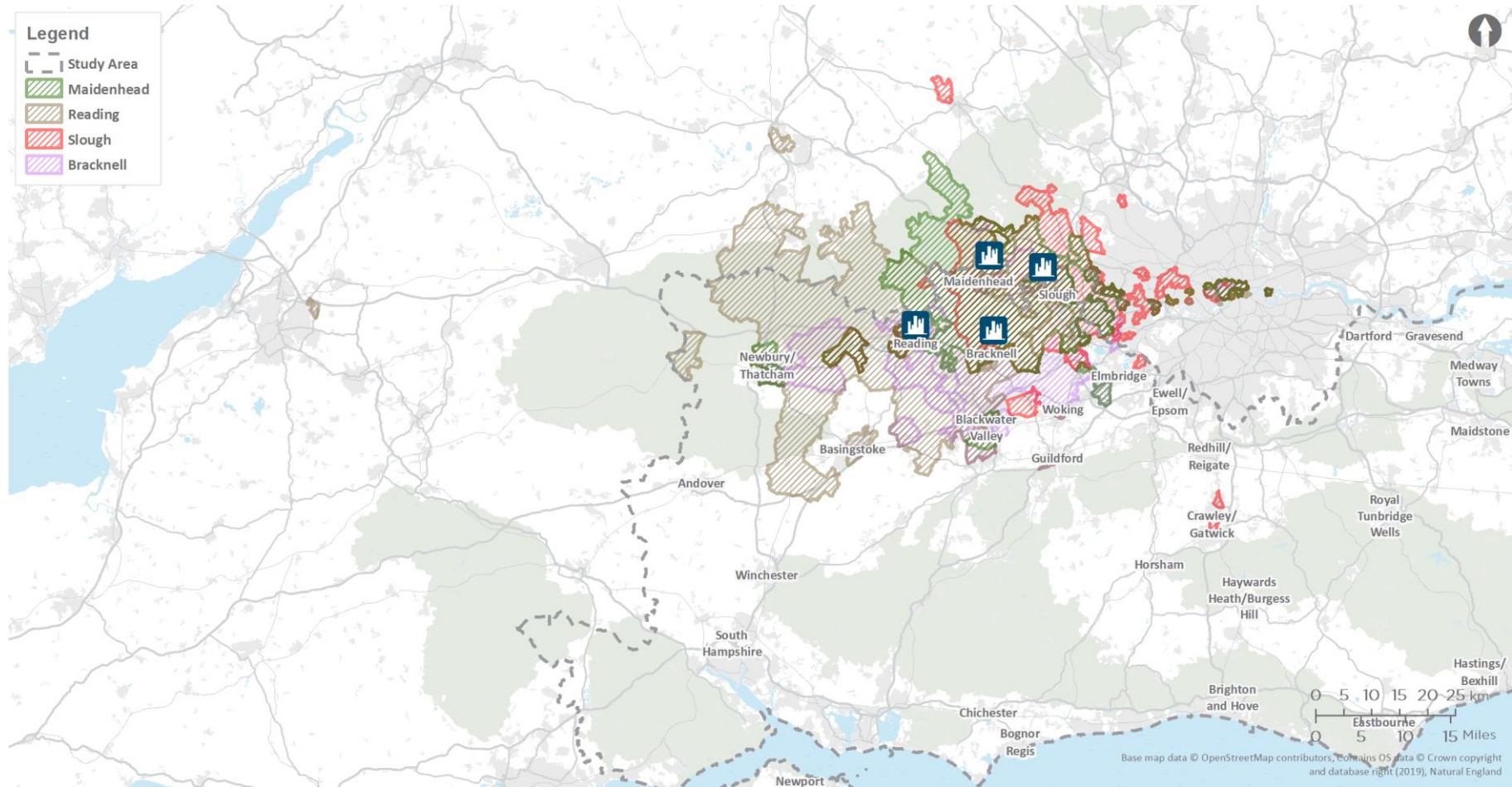


Figure 3.13: Inbound commuting journeys to West Berkshire/Hampshire Thames Valley Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

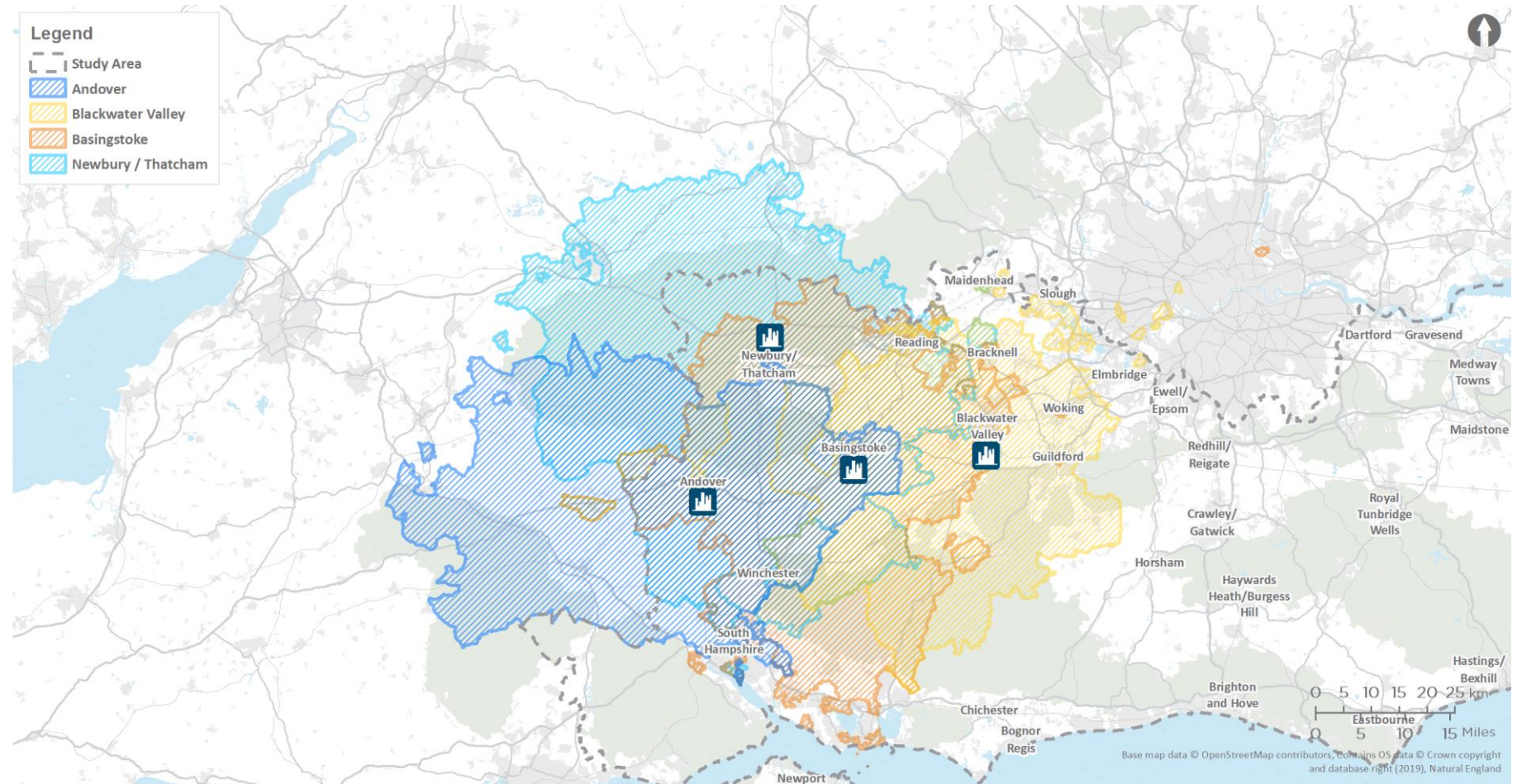


Figure 3.14: Outbound commuting journeys from West Berkshire/Hampshire Thames Valley Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

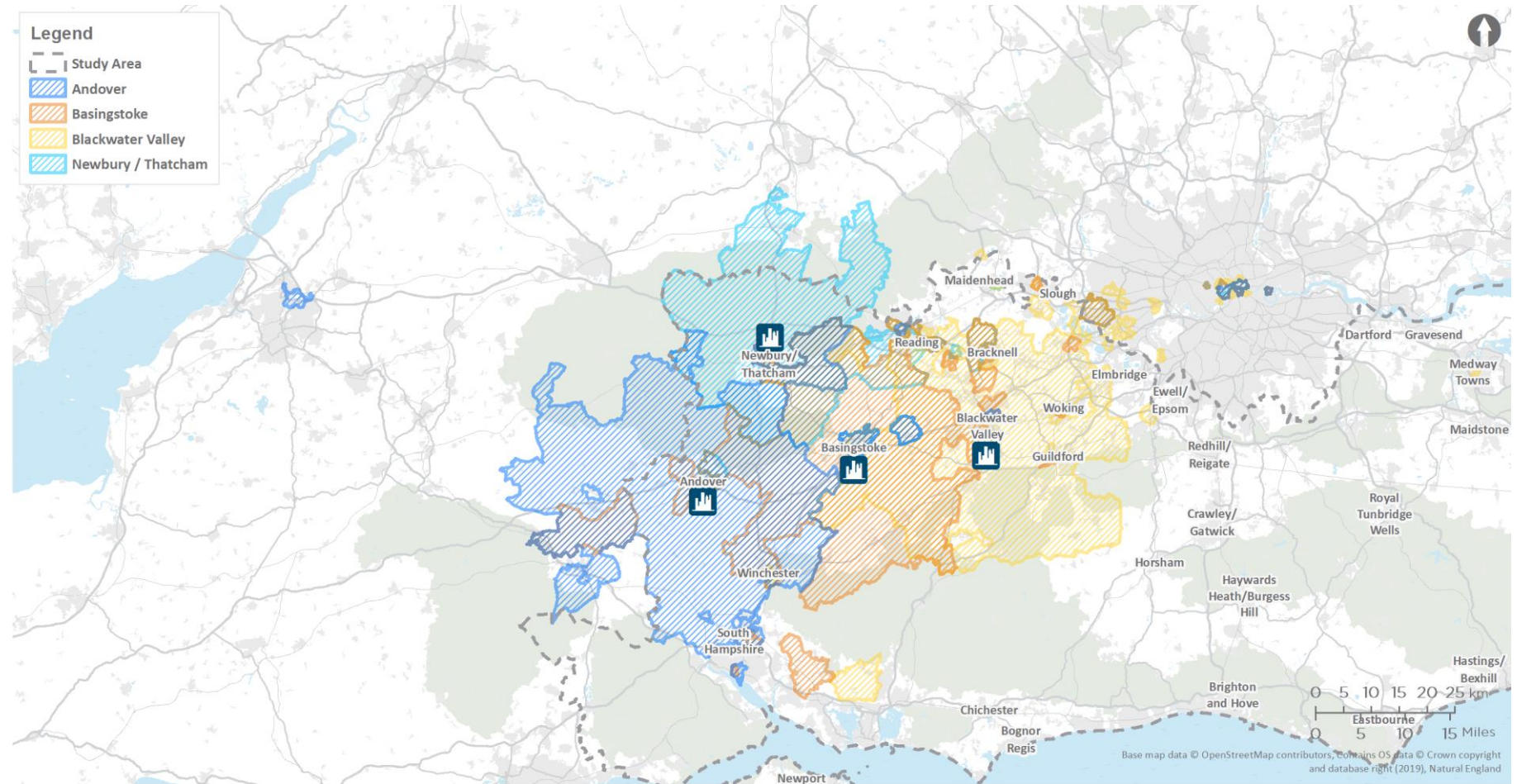


Figure 3.15: Inbound commuting journeys to Surrey Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

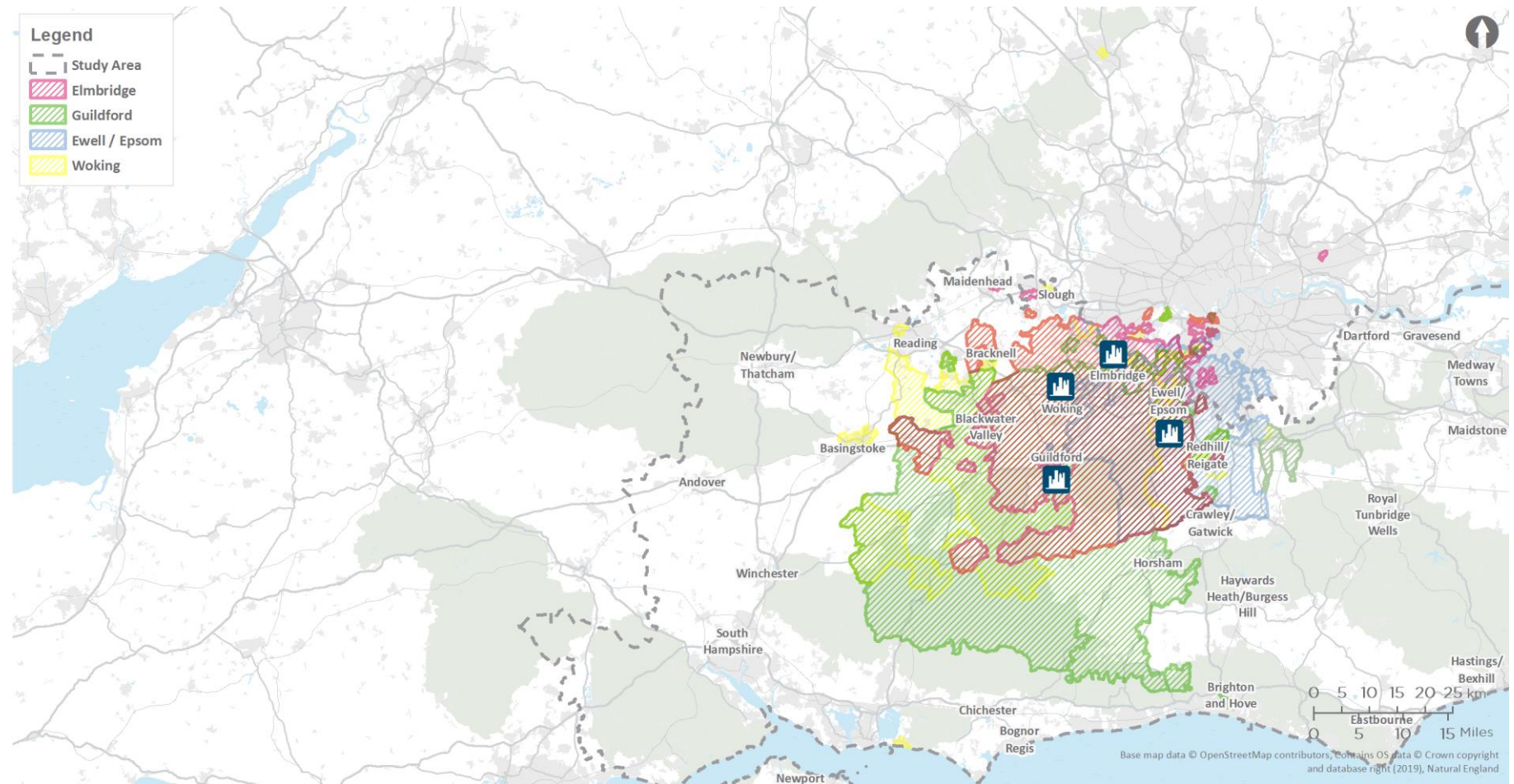


Figure 3.16: Outbound commuting journeys from Surrey Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

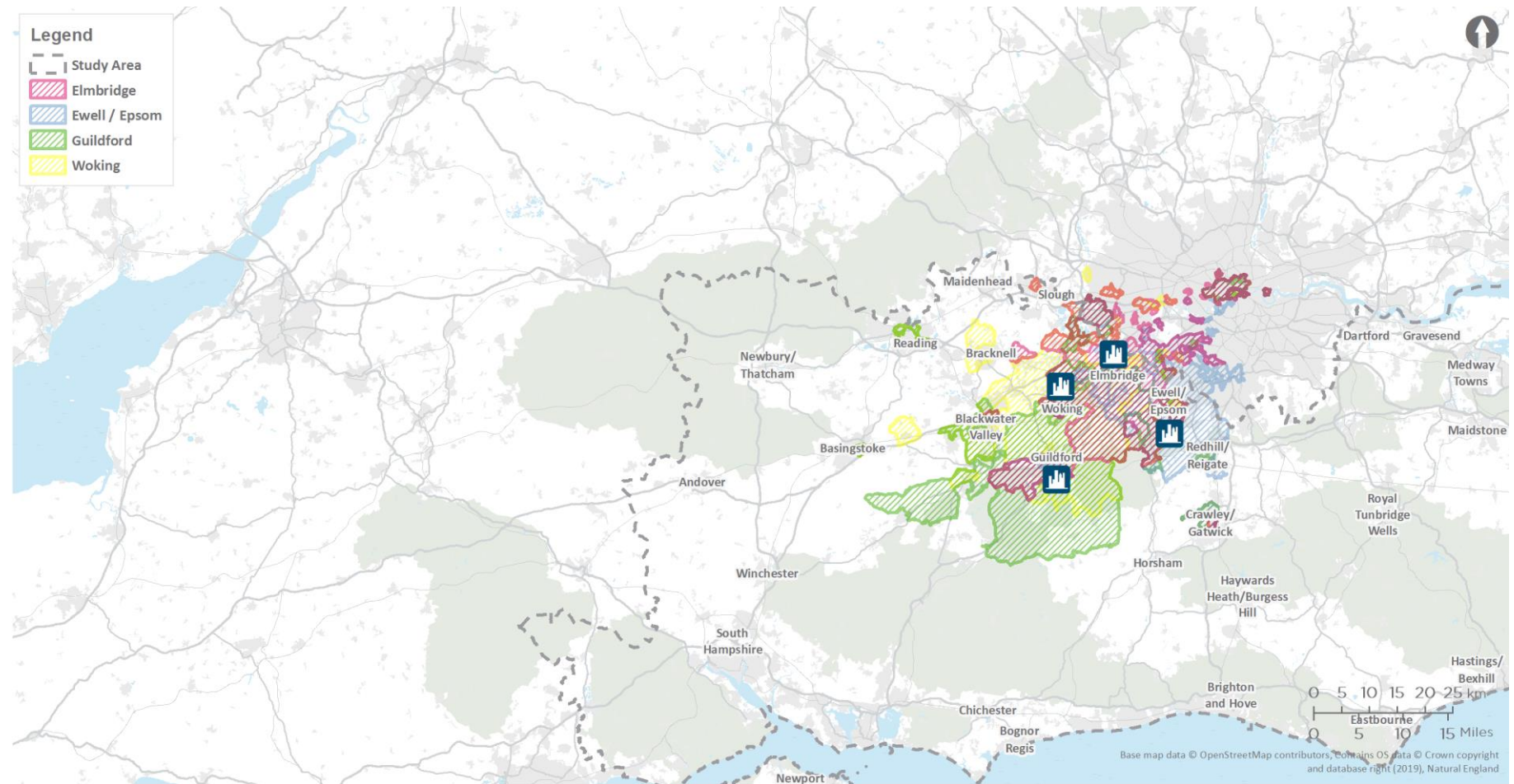


Figure 3.17: Inbound commuting journeys to the South Hampshire, Isle of Wight and Winchester Major Economic Hubs (Census Journey to Work 2011, Office for National Statistics)

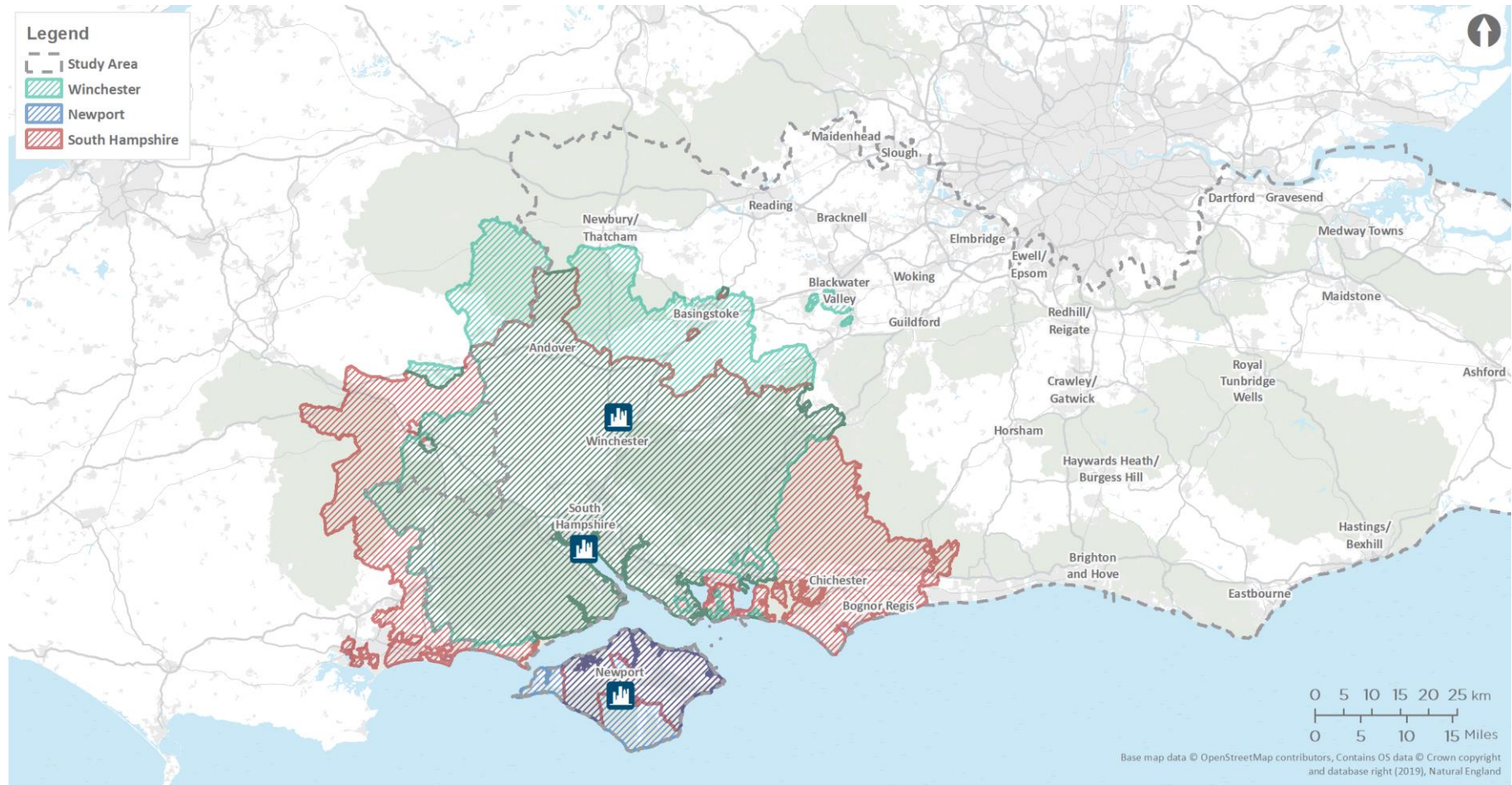
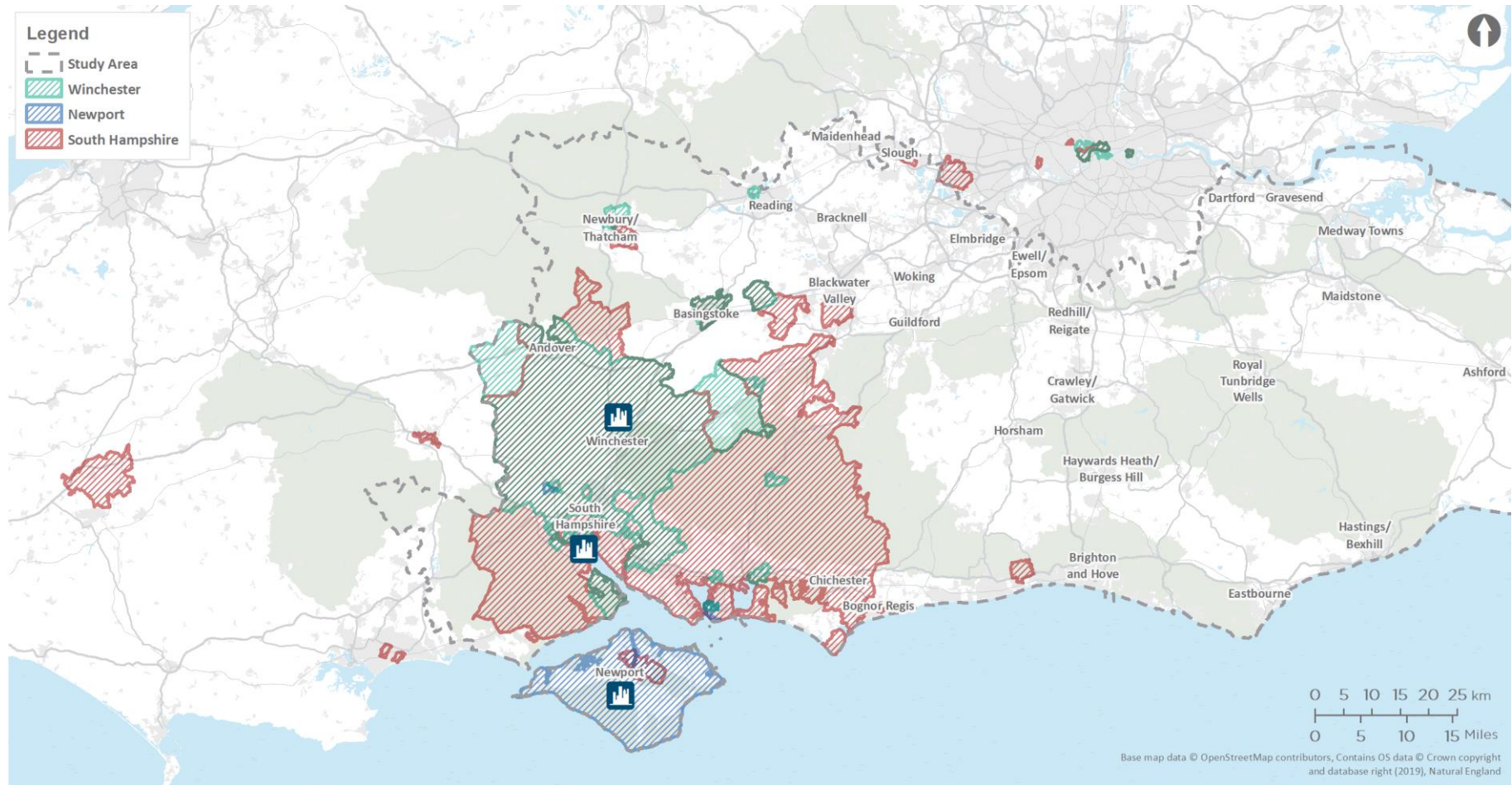


Figure 3.18: Outbound commuting journeys from the South Hampshire, Isle of Wight and Winchester Major Economic Hubs (Census Journey to Work 2011, ONS)



Largest Journey to Work flows in the South East

- 3.4 The largest journey to work flows in the South East are listed in Table 3.1. These flows include:
- Major Economic Hub to/from Major Economic Hub (shown in blue in Figures 3.19 to 3.21);
 - Major Economic Hub to/from other towns and built up areas (purple in Figures 3.19 to 3.21);
 - Flows within the South Hampshire Major Economic Hub; and
 - Major Economic Hub to/from London Boroughs (shown in purple in Figures 3.23 to 3.24).
- 3.5 For clarity, the maps presented in Figures 3.19 to 3.24 have been sub-divided as follows:
- Flows between Major Economic Hubs within the South East area excluding the South Hampshire area are shown in Figure 3.19;
 - Flows from Major Economic Hubs and Built-up Urban Areas to the South Hampshire area are shown in Figure 3.20;
 - Flows to Major Economic Hubs and Built-up Urban Areas from the South Hampshire area are shown in Figure 3.21;
 - Flows within the South Hampshire Major Economic Hub are shown in Figure 3.23;
 - Flows from Major Economic Hubs to the London Boroughs are shown in Figure 3.23; and
 - Flows to Major Economic Hubs from the London Boroughs are shown in Figure 3.24.
- 3.6 The largest non-London flows are clustered around Southampton, along the M3/South Western Main Line corridor, along the M23/A23/Brighton Main Line Corridor, along the A27/A259/Coastway Corridor, and between the Thames Valley towns. There are also large flows between Maidstone, Dartford and the Medway Towns, Tonbridge and Royal Tunbridge Wells, as well as around Ashford, Canterbury and Folkestone.
- 3.7 The largest London flows tend to be between Central London (specifically, the City of London and the City of Westminster) and the Major Economic Hubs closest to London. There are also large flows over longer distances between the largest urban centres in the South East and London (e.g. South Hampshire and Brighton and Hove). It should be noted that this data comes from the 2011 census, which means it may be underreporting some flows on High Speed 1 (e.g. Ashford – London), which introduced domestic services just before the 2011 census was undertaken.

Table 3.1: Largest Journey to Work flows in the South East (Census Journey to Work 2011, Office for National Statistics)

Group	Major Economic Hub <> Major Economic Hub	Major Economic Hub <> Other town/built up area	Major Economic Hub <> London	South Hampshire area
7,500+	<ul style="list-style-type: none"> Reading → Bracknell 			<ul style="list-style-type: none"> Southampton → Eastleigh
5,000+	<ul style="list-style-type: none"> Blackwater Valley → Guildford <ul style="list-style-type: none"> Aldershot → Guildford (2,500) Farnborough → Guildford (1,500) Bognor Regis → Chichester Bracknell → Reading Brighton & Hove → Crawley/Gatwick Herne Bay/Whitstable → Canterbury Medway Towns → Maidstone <ul style="list-style-type: none"> Chatham → Maidstone (2,500) Gillingham → Maidstone (2,000) 	<ul style="list-style-type: none"> Fleet → Blackwater Valley Fleet → Farnborough (2,000) 	<ul style="list-style-type: none"> Bexley → Dartford Dartford → Bexley Elmbridge → Central London Medway Towns → Central London <ul style="list-style-type: none"> Gillingham → Central London (2,500) Chatham → Central London (1,500) Rochester → Central London (1,500) Slough → Hillingdon 	<ul style="list-style-type: none"> Eastleigh → Southampton Eastleigh → Winchester Gosport → Portsmouth Horndean → Portsmouth
4,000+	<ul style="list-style-type: none"> Horsham → Crawley/Gatwick Redhill/Reigate → Crawley/Gatwick Brighton & Hove → Haywards Heath/Burgess Hill Haywards Heath/Burgess Hill → Crawley/Gatwick Reading → Blackwater Valley Blackwater Valley → Reading 	<ul style="list-style-type: none"> Saltdean/Woodingdean → Brighton & Hove 	<ul style="list-style-type: none"> Reading → Central London Brighton and Hove → Central London Dartford → Westminster/City of London Elmbridge → Kingston upon Thames 	<ul style="list-style-type: none"> Havant → Portsmouth Totton → Southampton
3,000+	<ul style="list-style-type: none"> Blackwater Valley → Bracknell Blackwater Valley → Woking Gravesend → Dartford Maidstone → Medway Towns Medway Towns → Dartford <ul style="list-style-type: none"> Rochester → Dartford (1,500) Newbury/Thatcham → Reading Reading → Newbury/Thatcham Reading → Slough Woking → Guildford 	<ul style="list-style-type: none"> Cowes → Newport Peacehaven → Brighton and Hove South Hayling → South Hampshire 	<ul style="list-style-type: none"> Blackwater Valley* → Central London Epsom/Ewell → Kingston upon Thames Ewell Epsom → Central London Hillingdon → Slough Kingston upon Thames → Elmbridge Sutton → Epsom/Ewell Woking → Central London 	<ul style="list-style-type: none"> Fareham → Portsmouth Hedge End → Southampton Southampton → Totton Southampton → Winchester

Group	Major Economic Hub <> Major Economic Hub	Major Economic Hub <> Other town/built up area	Major Economic Hub <> London	South Hampshire area
2,000+	<ul style="list-style-type: none"> Maidenhead → Slough Slough → Maidenhead Reading → Maidenhead Bognor Regis → Brighton and Hove Brighton & Hove → Chichester Crawley/Gatwick → Horsham Woking → Elmbridge Haywards Heath/Burgess Hill → Brighton & Hove Hastings/Bexhill → Eastbourne Redhill/Reigate → Crawley/Gatwick Thanet → Canterbury Brighton and Hove → Horsham Blackwater Valley → Basingstoke Bracknell → Blackwater Valley 	<ul style="list-style-type: none"> Fleet → Farnborough Maidstone → Ditton⁵ Medway Towns → Ditton Ryde → Newport Sandown/Shanklin → Newport 	<ul style="list-style-type: none"> Crawley/Gatwick → Central London Croydon → Crawley/Gatwick Elmbridge → Richmond Epsom/Ewell → Sutton Hounslow → Slough Redhill/Reigate → Central London Royal Tunbridge Wells → Central London Slough → Hounslow 	<ul style="list-style-type: none"> Gosport → Fareham Horndean → Havant Locks Heath/Warsash/Whiteley → Southampton Portsmouth → Fareham Portsmouth → Horndean Southampton → Hedge End Stubbington → Fareham

⁵ Note that Ditton is arguably within the broader Maidstone urban conurbation and commuting may be considered intra-Economic Hub.

Group	Major Economic Hub <> Major Economic Hub	Major Economic Hub <> Other town/built up area	Major Economic Hub <> London	South Hampshire area
1,500+	<ul style="list-style-type: none"> Basingstoke → Blackwater Valley Basingstoke → Reading Eastbourne → Brighton and Hove Eastbourne → Hastings/Bexhill Folkestone → Ashford Maidenhead → Reading Reading → Basingstoke Winchester → Southampton Woking → Blackwater Valley 	<ul style="list-style-type: none"> Bishop's Waltham → South Hampshire Denmead → South Hampshire Dover → Folkestone Godalming → Guildford Hartley → Dartford⁶ Hawkinge → Folkestone Hythe → South Hampshire North Baddesley → South Hampshire Romsey → South Hampshire Royal Tunbridge Wells → Tonbridge South Hampshire → Blackfield South Hampshire → Colden Common South Hampshire → Denmead Stone Cross/Westham → Eastbourne Stubbington → Gosport Thanet → Minster⁷ Tonbridge → Royal Tunbridge Wells Windsor → Slough 	<ul style="list-style-type: none"> Blackwater Valley → Hillingdon Croydon → Redhill/Reigate Dartford → Bromley Dartford → Greenwich Ealing → Slough Greenwich → Dartford Guildford → Central London Haywards Heath/Burgess Hill → Central London Reading → Hillingdon Slough → Central London South Hampshire → Central London 	<ul style="list-style-type: none"> Emsworth → Havant Emsworth → Portsmouth Fareham → Locks Heath/Warsash/Whiteley Gosport → Locks Heath/Warsash/Whiteley Havant → Chichester Locks Heath/Warsash/Whiteley → Portsmouth Portsmouth → Chichester Portsmouth → Locks Heath/Warsash/Whiteley Portsmouth → Southampton South Hayling → Havant South Hayling → Portsmouth Southampton → Locks Heath/Warsash/Whiteley Southampton → Portsmouth Stubbington → Gosport Stubbington → Portsmouth Totton → Eastleigh Winchester → Southampton

⁶ Hartley is a relatively small village, so this data may be picking up the surrounding villages.

⁷ Note that Thanet and Minster are very geographically proximal, and commuting may be considered intra-Economic Hub.

Figure 3.19: Key journey to work flows between Major Economic Hubs in the South East, excluding Southampton (Census Journey to Work 2011, Office for National Statistics)

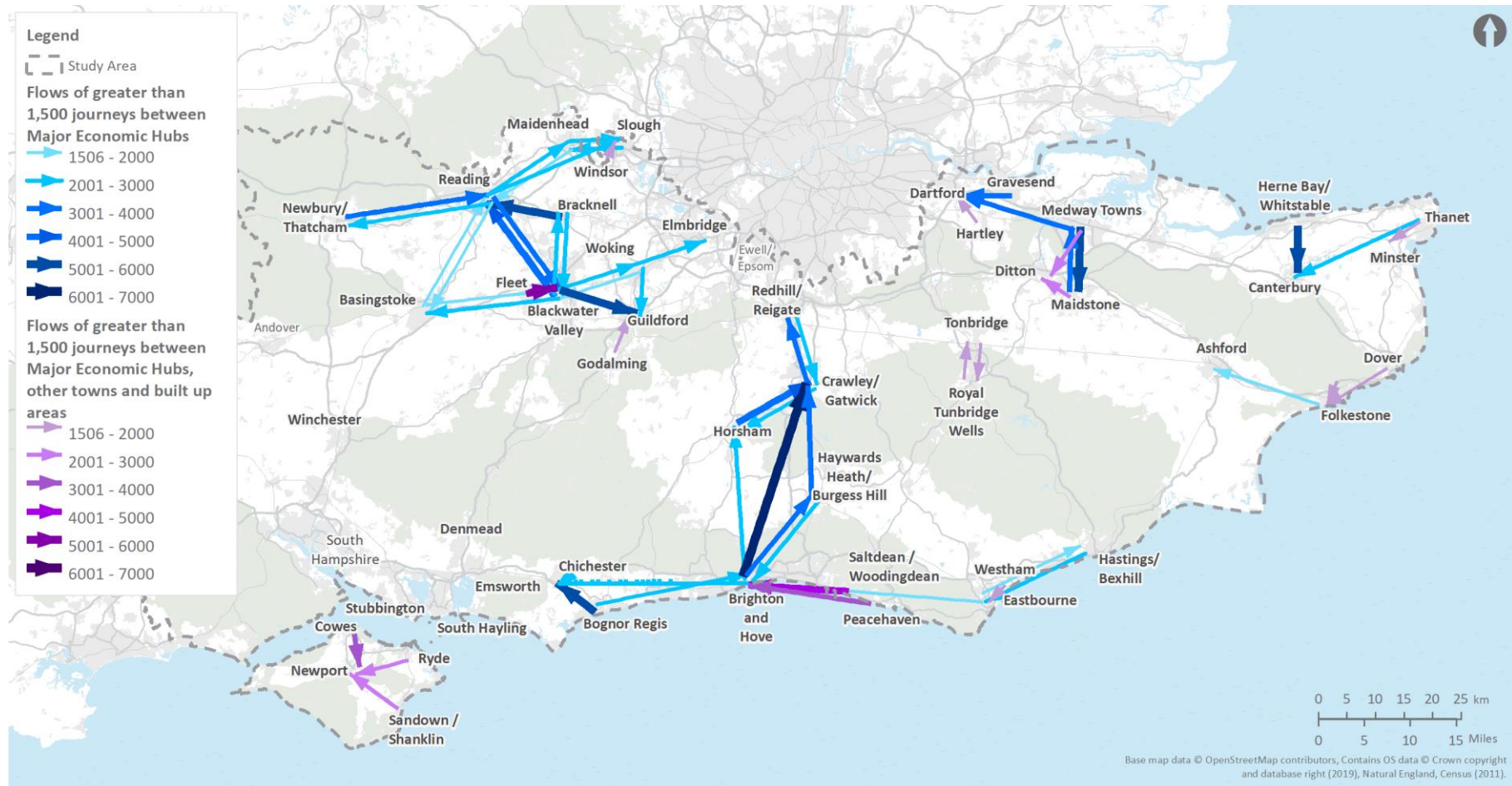


Figure 3.20: Key journey to work flows to South Hampshire from Major Economic Hubs in the South East (Census Journey to Work 2011, Office for National Statistics)

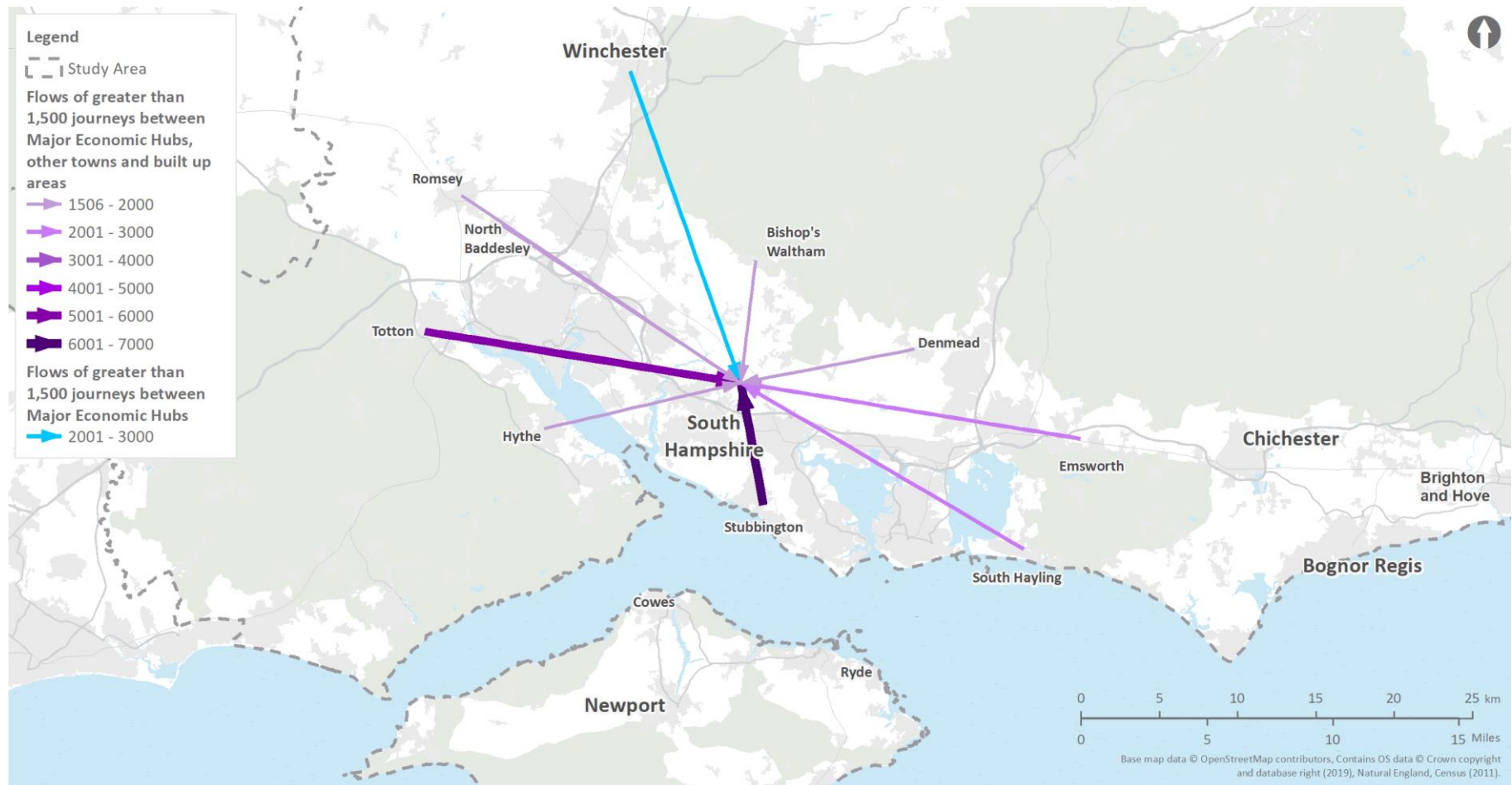


Figure 3.21: Key journey to work flows from South Hampshire to Major Economic Hubs in the South East (Census Journey to Work 2011, Office for National Statistics)



Figure 3.22: Key journey to work flows within the South Hampshire Major Economic Hubs

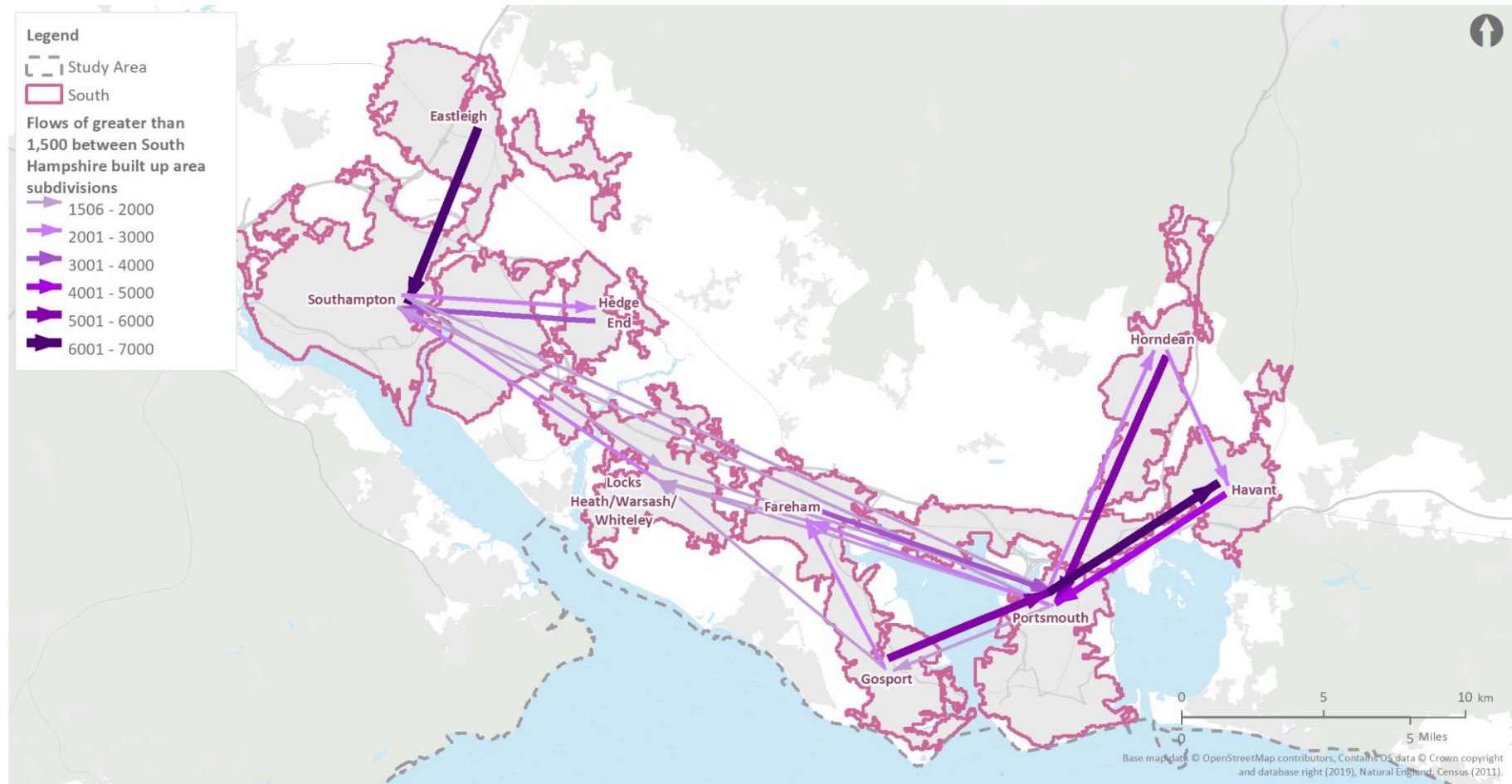


Figure 3.23: Key journey to work flows to London from Major Economic Hubs in the South East (Census Journey to Work 2011, Office for National Statistics)

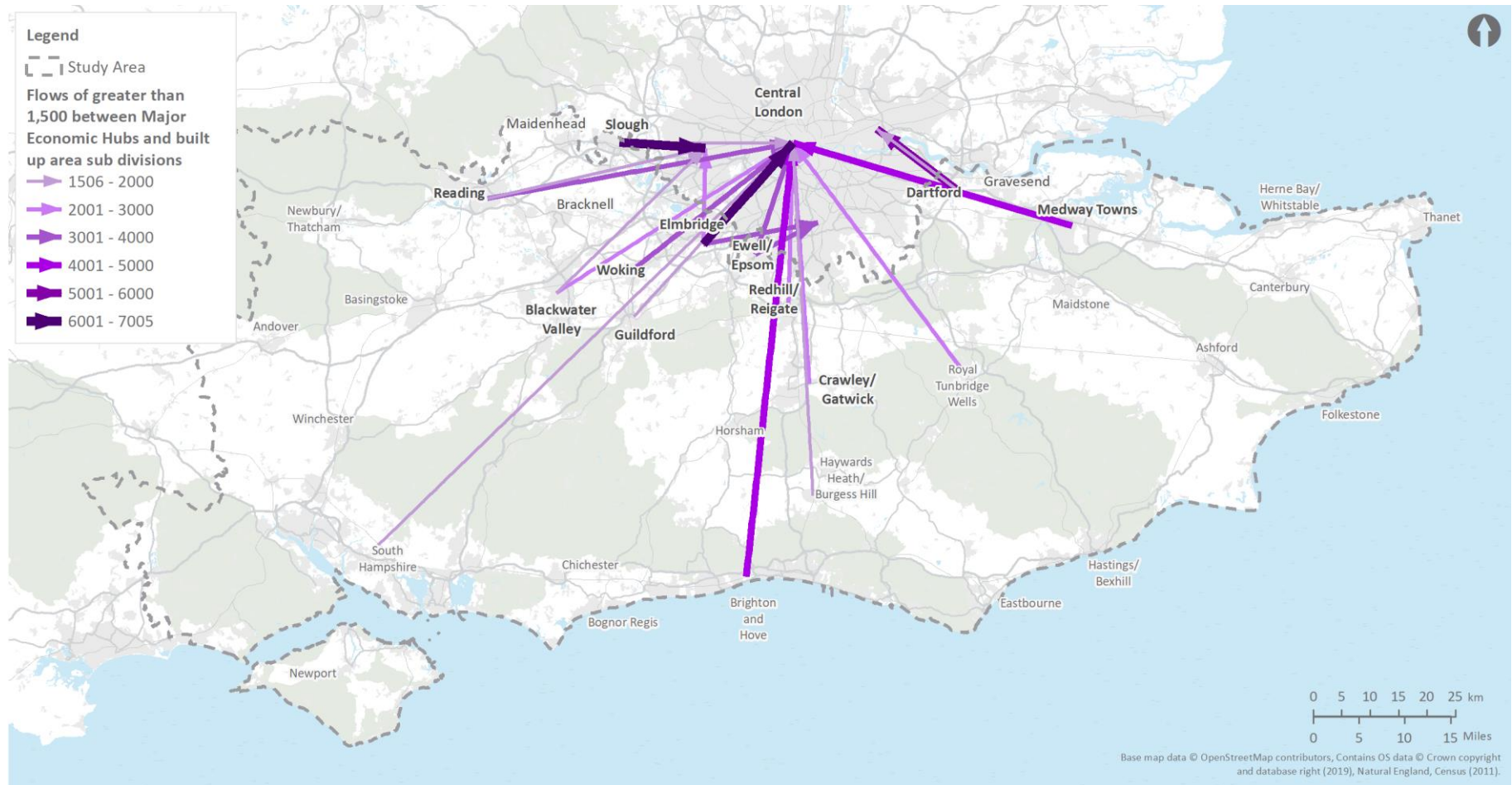
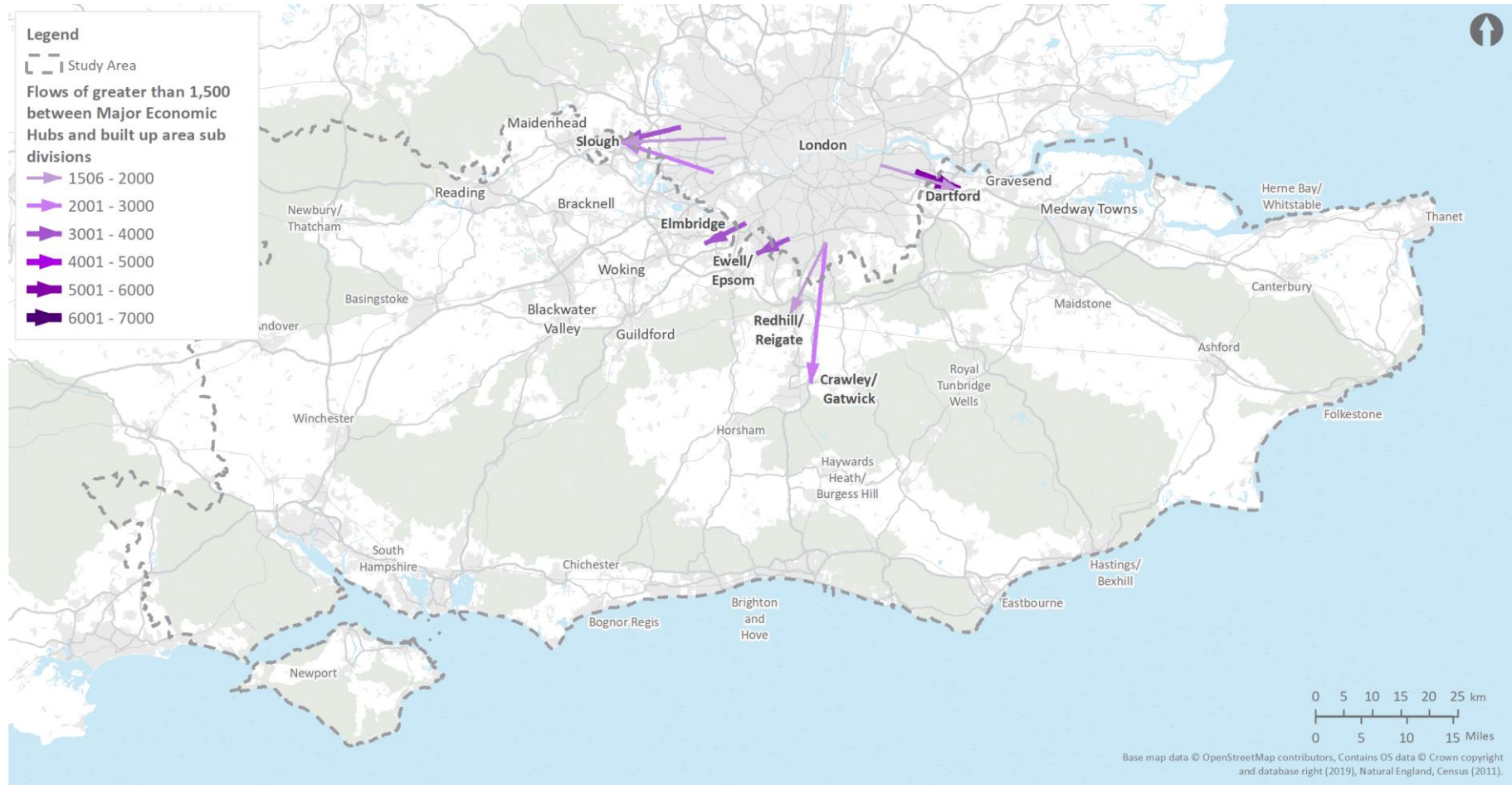


Figure 3.24: Key journey to work flows from London to Major Economic Hubs in the South East (Census Journey to Work 2011, Office for National Statistics)



Self-Containment

- 3.8 The catchment areas and flows described above point towards differing levels of ‘self-containment’ in the Major Economic Hubs. Understanding this relationship is important as Major Economic Hubs with high levels of self-containment are more likely to have more potential to shift to more sustainable transport patterns as residents in these areas will typically have shorter distances to commute. In contrast, Major Economic Hubs with low levels of ‘self-containment’ are likely to have more people commuting longer distances, which are less amenable to walking/cycling.
- 3.9 Table 3.2 shows the total number of workers and jobs in each Major Economic Hub and the proportion of people who live and work in each Major Economic Hub (i.e. ‘self-containment’). This shows whether the Major Economic Hub is a ‘net-importer’ or ‘net-exporter’ of labour.
- 3.10 Figure 3.25 and Figure 3.26 show the relationship between the ‘net import / export’ of labour and the percentage of people living and working in the same Major Economic Hub (i.e. ‘self-containment’). This shows that Thanet has the highest proportion of people who live and work in the same Major Economic Hub (at 82%). Thanet also has the lowest proportion of in-commuters to the area. Thanet is one of the most deprived communities in the South East; it has one of the lowest proportions of priority sector jobs and it has the highest level of unemployment and has a low proportion of NVQ 4+ workers (only 16%). This means there is little need for people to commute to Thanet as few skilled jobs are available there.
- 3.11 Redhill/Reigate, on the other hand, has the lowest proportion of people who live and work locally (29%). This Major Economic Hub is located near to London and has good rail connectivity, particularly to/from London and Gatwick Airport. It also has a relatively well-educated population (27% of the population have NVQ level 4+ skills) and more highly skilled residents than highly skilled jobs. It has many of the characteristics of a commuter town.
- 3.12 Major Economic Hubs with higher levels of ‘self-containment’ fall into three groups:
- **Coastal and estuarine Major Economic Hubs** (e.g. Bognor Regis, Eastbourne, Hastings/Bexhill, Herne Bay/Whitstable and Thanet): These Major Economic Hubs, which are highlighted in **light blue** in Figure 3.25, have relatively low skill and wage/salary levels of jobs. They are also less well connected to London, meaning they are less attractive to London commuters, which contributes to higher levels of self-containment.
 - **Well-connected larger rural hinterlands further from London** (e.g. Andover, Ashford, Crawley/Gatwick, Basingstoke, Newbury/Thatcham): Although many people commute to London from these Major Economic Hubs, thanks to their excellent rail connections to the capital, they also have relatively high levels of ‘self-containment’ themselves. These Major Economic Hubs, which are highlighted in **green** in Figure 3.25, are important regional centres in their own right and are ‘net importers’ of labour from large, rural catchments.

Table 3.2: Number of workers, self-containment of journeys to work and net importing of labour (Census 2011, Business Register Employment Survey, nearest thousand)

Major Economic Hub (MEH)	Total Workers	Total Jobs	% working and living in same MEH	Inward commute trips	Outward commute trips	Net importing of labour*
Thanet	58,000	38,000	82%	6,000	14,000	(8,000)
Hastings/Bexhill	62,000	44,000	80%	8,000	14,000	(6,000)
Brighton and Hove	255,000	219,000	70%	53,000	68,000	(15,000)
Bognor Regis	31,000	19,000	67%	4,000	14,000	(10,000)
Herne Bay/Whitstable	34,000	17,000	64%	5,000	15,000	(10,000)
Eastbourne	55,000	42,000	63%	14,000	17,000	(3,000)
Medway Towns	128,000	89,000	63%	27,000	50,000	(23,000)
Andover	27,000	27,000	56%	10,000	9,000	1,000
South Hampshire	448,000	386,000	56%	146,000	159,000	(13,000)
Basingstoke	64,000	66,000	54%	26,000	20,000	6,000
Folkestone	32,000	25,000	53%	12,000	10,000	2,000
Ashford	36,000	37,000	51%	15,000	12,000	3,000
Crawley/Gatwick	98,000	121,000	49%	47,000	33,000	14,000
Haywards Heath/Burgess Hill	37,000	30,000	48%	13,000	17,000	(4,000)
Newbury/Thatcham	40,000	42,000	48%	18,000	14,000	4,000
Reading	181,000	189,000	46%	73,000	77,000	(4,000)
Horsham	33,000	30,000	46%	13,000	15,000	(2,000)
Royal Tunbridge Wells	34,000	31,000	43%	16,000	14,000	2,000
Maidstone	53,000	45,000	42%	24,000	23,000	1,000
Woking	56,000	46,000	41%	20,000	28,000	(8,000)
Slough	85,000	91,000	37%	44,000	39,000	5,000
Gravesend	27,000	17,000	36%	9,000	15,000	(6,000)
Blackwater Valley	144,000	130,000	35%	64,000	76,000	(12,000)
Elmbridge	68,000	60,000	35%	27,000	35,000	(8,000)
Bracknell	46,000	50,000	34%	24,000	22,000	2,000
Maidenhead	35,000	37,000	34%	17,000	17,000	-
Epsom/Ewell	40,000	29,000	33%	15,000	23,000	(8,000)
Chichester	22,000	37,000	32%	21,000	7,000	14,000
Canterbury	25,000	40,000	32%	22,000	8,000	14,000
Newport	12,000	19,000	32%	12,000	3,000	9,000
Guildford	38,000	54,000	31%	30,000	16,000	14,000
Dartford	53,000	56,000	30%	33,000	27,000	6,000
Winchester	25,000	38,000	29%	23,000	9,000	14,000
Redhill/Reigate	31,000	37,000	29%	20,000	16,000	4,000

* Negative figure indicates Major Economic Hub is a 'net exporter' of labour

Figure 3.25: Comparison between the net import/export of labour and the percentage living and working in the same Major Economic Hub

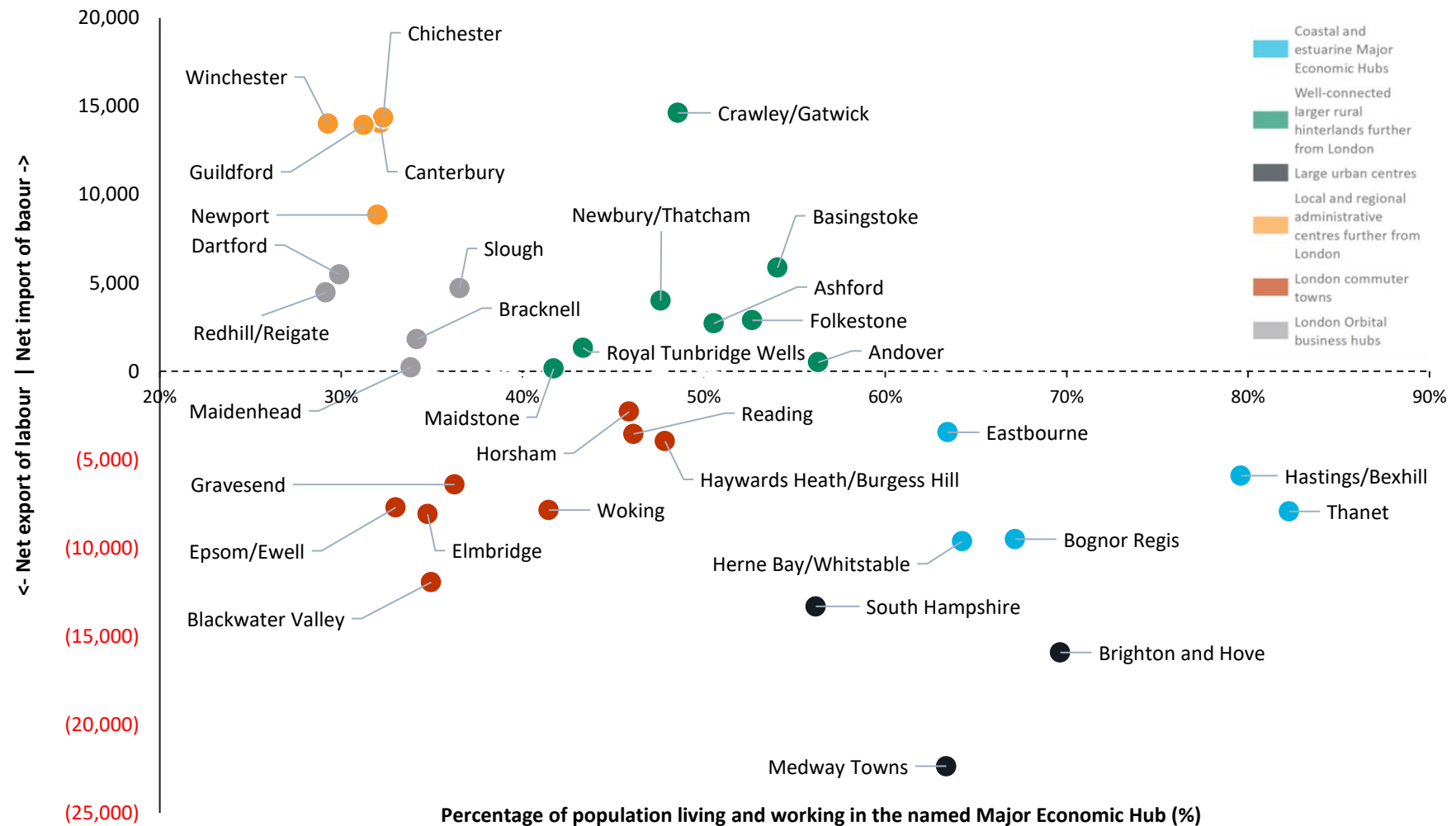
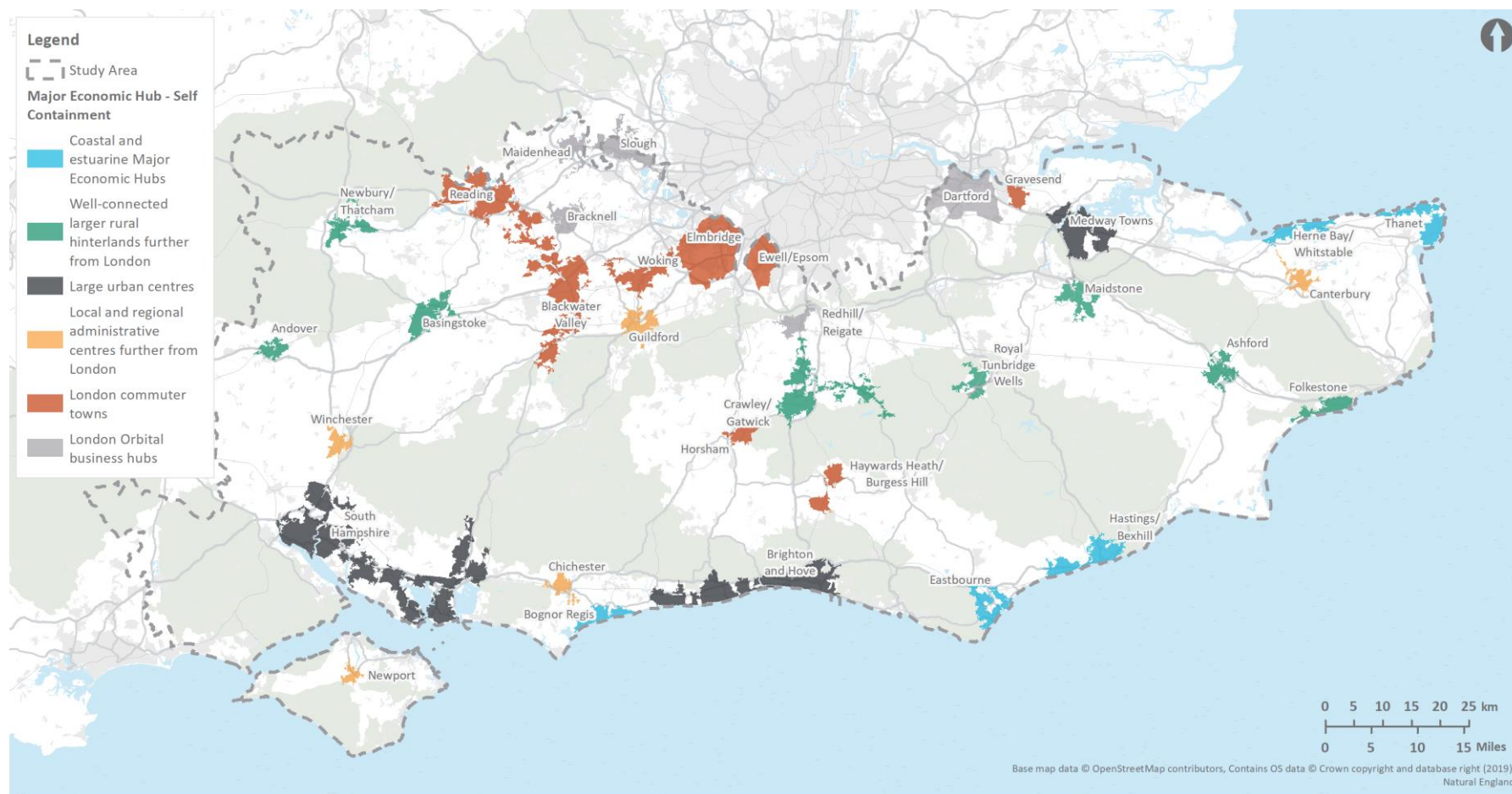


Figure 3.26: Map showing location of Major Economic Hubs (categorised as per Figure 3.24)



- **Large urban centres** (e.g. Brighton and Hove, Medway, and South Hampshire). These Major Economic Hubs, which are highlighted in **black** in Figure 3.25, are the largest urban centres in the South East area. They are home to industries and public institutions including hospitals and universities. They therefore have high levels of self-containment. However, they are also well connected to London, which means they are attractive to London commuters and are therefore net-exporters of labour. The volume of the net-export of labour reflects the size of these Major Economic Hubs rather than their reliance on London for highly skilled employment (i.e. while South Hampshire exports approximately 15,000 jobs, this represents just of 3% of the total jobs in this Major Economic Hub). It should be noted that while there is a lot of self-containment in these large urban centres, in reality there are significant commuting flows within them. The mode share for public transport within these large urban centres is influenced by their shape. For example, public transport and active travel mode share is relatively high in Brighton and Hove, which is orientated along the South Coast, whereas car mode share is higher in South Hampshire, which is more polycentric in urban layout⁸.

3.13 Major Economic Hubs with lower levels of ‘self-containment’ typically fall into three groups:

- **Local and regional administrative centres further from London** (Canterbury, Chichester, Guildford, Newport and Winchester): These Major Economic Hubs, which are highlighted in **orange** in Figure 3.25, have lower levels of ‘self-containment’ with many more jobs than workers. As historic, administrative centres (e.g. county towns, cathedral cities, universities) they are often desirable places to live but are constrained from expanding to accommodate proportionately more housing due to ‘greenbelt’ and environmental constraints (e.g. National Parks and Areas of Outstanding Natural Beauty). As such, they have high levels of ‘net-importing’ of labour.
- **London commuter towns** (e.g. Blackwater Valley, Epsom/Ewell, Gravesend and Woking): These Major Economic Hubs, which are highlighted in **red** in Figure 3.25, have higher levels of commuting to London and other nearby Major Economic Hubs. They are generally well served by the railway network and are within easy reach of London. As such, they are typically high ‘net exporters’ of labour.
- **London Orbital business hubs** (e.g. Bracknell, Dartford, Redhill/Reigate, Maidenhead, Slough): These Major Economic Hubs, which are highlighted in **grey** in Figure 3.25, are net-importers of labour but also have high levels of out-commuting and low levels of self-containment. These are typically areas located close to the M25, which have been successful in attracting investment into employment areas, but also have good rail links to London. These centres are attractive to both London commuters and local workers.

Distance Travelled

3.14 The distance travelled by people to work provides an indication of the potential for these journeys to be undertaken by bike or on foot. Figure 3.27 shows the proportion of journeys to work by distance bands to each Major Economic Hub. On average, 43% of the workforce in the Major Economic Hubs travel less than five kilometres to work, although this varies significantly across the area (from 21% in Dartford to 54% in Bognor Regis).

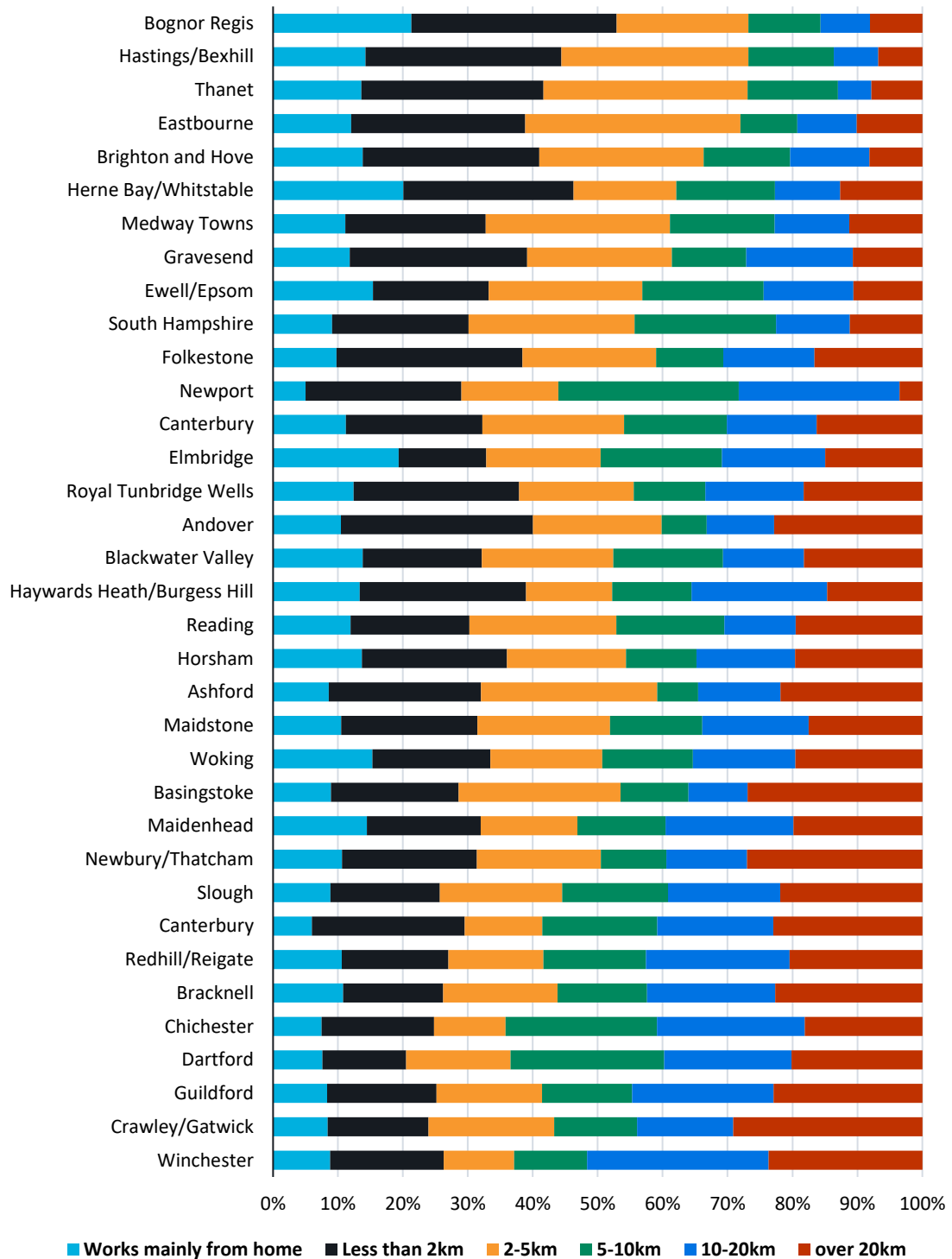
⁸ Further detail about active and public transport mode share within each Major Economic Hub is provided in Table 3.4.

- 3.15 In general, Major Economic Hubs in coastal areas have higher proportions of trips within two to five kilometres. These include Bognor Regis, Herne Bay/Whitstable and Hastings/Bexhill. They arguably have the most potential for commuters to walk and cycle to work.
- 3.16 In contrast, Crawley/Gatwick, Newbury/Thatcham, and Basingstoke have the highest proportion of workers travelling over 20 kilometres to work. These areas arguably have a lower potential for commuters to walk or cycle to work, although public transport options serving these Major Economic Hubs are generally high-quality.

Mode Share

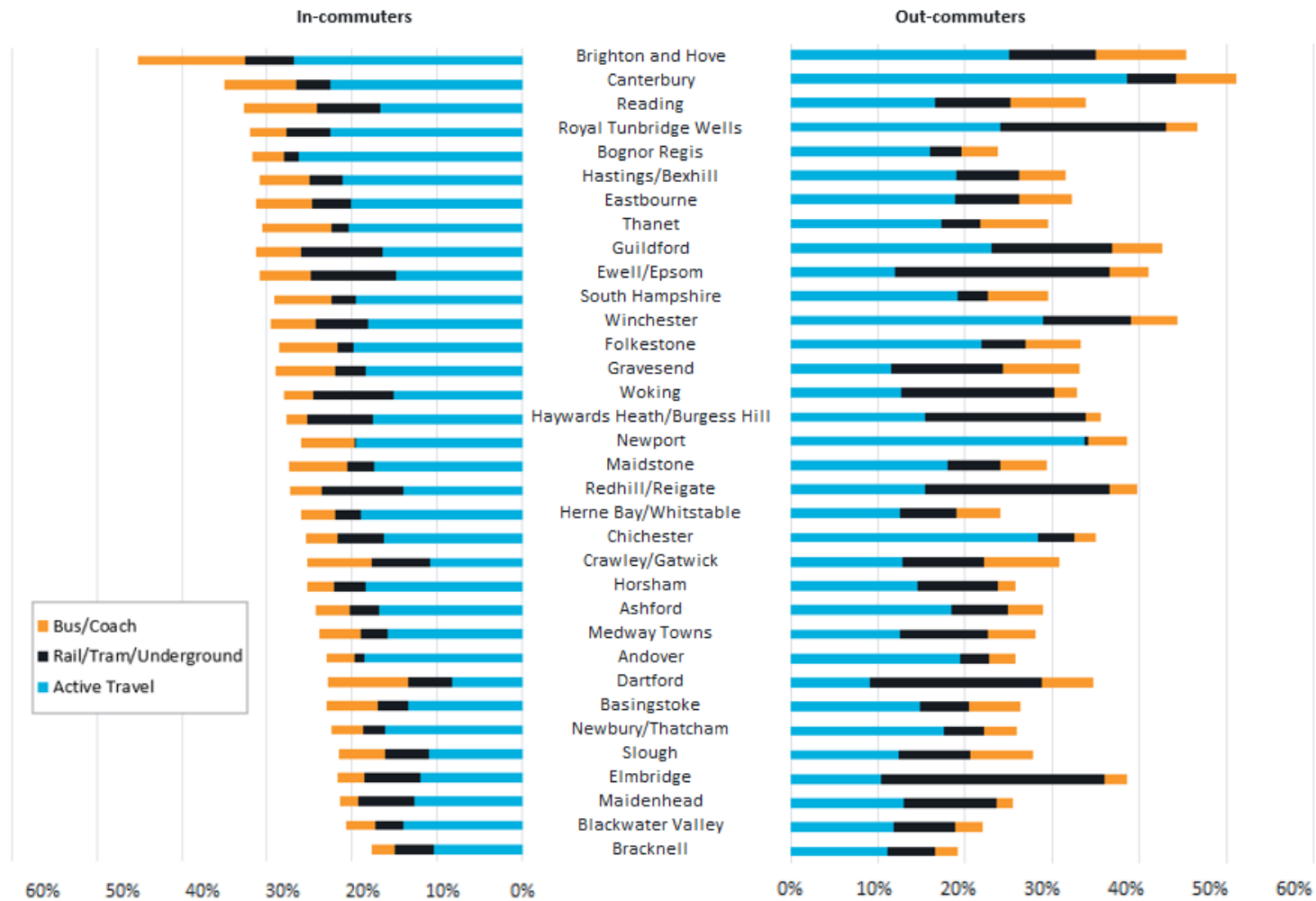
- 3.17 The proportion of commuting trips undertaken by ‘sustainable’ transport modes – that is, by public transport, walking and/or cycling (‘active travel’) – varies significantly between the Major Economic Hubs in the South East. The mode shares for each hub is shown in Figure 3.28.
- 3.18 Brighton and Hove has the highest proportion of journeys to work made by sustainable modes. This, in part, reflects the self-contained employment pattern in this city and the generally good provision of sustainable travel options available to the local population. Canterbury, Tunbridge Wells and Winchester also have high levels of sustainable travel, despite lower levels of self-containment.
- 3.19 In contrast, Bracknell has the lowest proportion of journeys to work made by sustainable modes. This is despite this town having a very highly developed footpath and cycleway network. It may be explained by the relatively slow rail service provided in the area and the high-quality road network that serves this (relatively new) town.
- 3.20 Dartford has the lowest walking and cycling mode shares of the Major Economic Hubs. Areas that are more deprived tend to have lower levels of cycling. That said, public transport mode share, particularly bus (Dartford is served by the London bus network), is relatively high here. Dartford is also served by Fastrack, an award-winning rapid bus transit system that serves Dartford and Gravesham with the explicit aim of providing transport to cater for the increasing number of jobs and homes that are coming to the area.
- 3.21 It is acknowledged that there is significant variation in the size and densities of the Major Economic Hubs, which gives rise to different commuting patterns. For example, the South Hampshire Major Economic Hub, which is the largest in the region (by area and population) and encompasses travel to work areas for Southampton and Portsmouth, will have different patterns than smaller Major Economic Hubs such as Winchester.

Figure 3.27: Distance travelled to work to each Major Economic Hub (Census Journey to Work 2011, ONS)⁹



⁹ This table presents the Major Economic Hubs in the ascending order of the weighted average length of journeys to work (journeys over 20km are assumed to be 20km for the purposes of this calculation).

Figure 3.28: Sustainable mode share split by Major Economic Hub (Census Journey to Work 2011, Office for National Statistics)



Public Transport Potential

- 3.22 The high journey to work flows listed in Table 3.1 should, in theory at least, have a high potential for public transport as the viability of public transport services generally increases with demand. In some cases, these flows are well served by public transport. However, in other cases there are gaps in good public transport provision. This study has sought to identify the flows that would benefit best from investment in improving public transport services.
- 3.23 This analysis considered two indicators for each of the flows listed in Table 3.1 – the current provision of public transport services, and the current mode share for public transport. This high-level analysis was undertaken by:
- **Analysing public transport connectivity** between Major Economic Hubs, Built-up Urban Areas (sub-divisions of some of the larger Major Economic Hubs), and London Boroughs, including first-mile and last-mile journey times (e.g. from the centre of the Major Economic Hub to the train station), using publicly available data from search engines and timetables. The links between pairs have been assessed as follows:
 - Where the public transport journey time is equal to or faster than the car journey time, public transport connectivity has been classified as **‘good’**.
 - Where the public transport journey time is between 0% and 50% higher than the car journey time, public transport connectivity is classified as **‘moderate’**; and
 - Where the public transport journey time is at least 50% higher than the car journey time (during peak hours), public transport connectivity is classified as **‘poor’**;
 - **Analysing current public transport mode** between the Major Economic Hubs, Built-up Urban Areas, and London Boroughs outlined above. The assessment of public transport mode share is based on analysis of MSOA to MSOA public transport mode share, which was interrogated using Datashine (which is based on ONS travel to work data). There are some drawbacks to this approach, not least due to the age of the data, but this approach allowed a large number of flows to be analysed efficiently to provide a high-level assessment of the competitiveness and use of public transport modes between the Major Economic Hubs. The mode share between pairs have been assessed as follows:
 - Links with a public transport mode share greater than 10% have been assessed as **‘good’** (on the basis that this represents higher than average mode share for public transport across the country).
 - Links with a public transport mode share between 5% and 10% have been assessed as **‘moderate’**; and
 - Links with a public transport mode share below 5% have been assessed as **‘poor’**.
 - The two indicators described above can be combined to create a **weighted assessment** of the connectivity and competitiveness of the flows analysed above.
- 3.24 The findings from this analysis are summarised in Table 3.3 and a map showing an assessment of the location of the key flows Figure 3.29.
- 3.25 This analysis shows the flows with the highest public transport mode share tend to be on routes to Central London. This is unsurprising given the faster journey times provided by rail to Central London, as well as limited (and expensive) car parking and congestion/Ultra-Low Emission Zone charging. By contrast, Major Economic Hubs on corridors with poor public transport connectivity and relatively good highway connectivity (such around South Hampshire) have lower bus and mode share. There is more potential to increase mode share on these routes through improving and marking public transport provision on these corridors

Table 3.3: Competitiveness and use of public transport on key flows between Major Economic Hubs

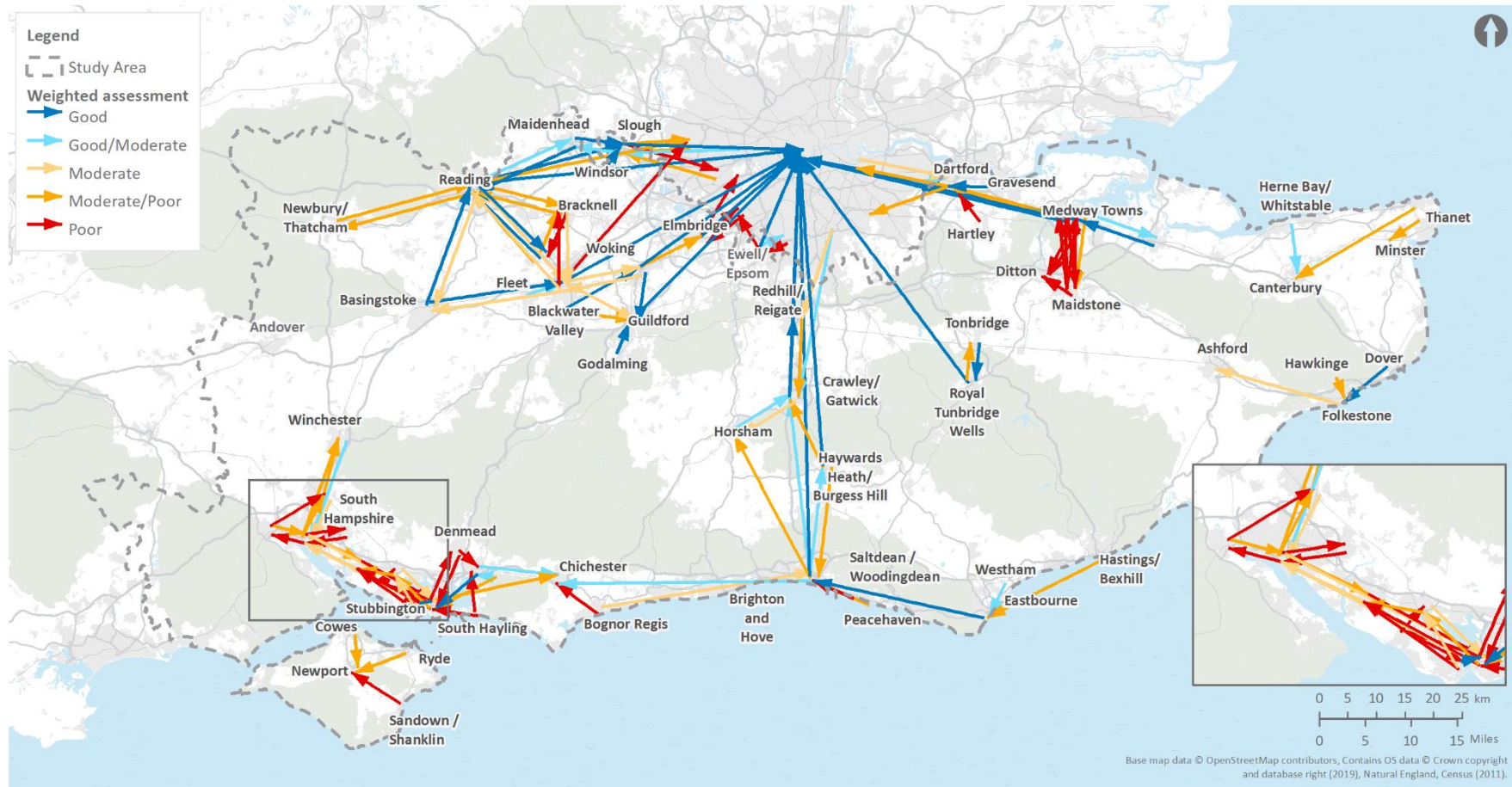
Origin	Destination	Connectivity	PT Mode Share	Assessment
Flows 7,500+				
Southampton	Eastleigh	Moderate	Poor	Moderate/Poor
Flows 7,000+				
Elmbridge	Westminster/City of London	Good	Good	Good
Reading	Bracknell	Moderate	Poor	Moderate/Poor
Flows 6,000+				
Bexley	Dartford	Moderate	Good	Good/Moderate
Brighton and Hove	Crawley/Gatwick	Good	Moderate	Good/Moderate
Eastleigh	Southampton	Good	Poor	Moderate
Slough	Hillingdon	Moderate	Poor	Moderate/Poor
Flows 5,500+				
Blackwater Valley	Guildford	Good	Poor	Moderate
Bognor Regis	Chichester	Poor	Poor	Poor
Gosport	Portsmouth	Good	Good	Good
Horndean	Portsmouth	Poor	Poor	Poor
Flows 5,000+				
Bracknell	Reading	Moderate	Poor	Moderate/Poor
Dartford	Bexley	Good	Good	Good
Eastleigh	Winchester	Moderate	Poor	Moderate/Poor
Fleet	Blackwater Valley	Good	Poor	Moderate
Herne Bay/Whitstable	Canterbury	Good	Moderate	Good/Moderate
Flows 4,500+				
Havant	Portsmouth	Good	Good	Good
Flows 4,000+				
Blackwater Valley	Reading	Good	Poor	Moderate
Brighton and Hove	Haywards Heath/Burgess Hill	Good	Moderate	Good/Moderate
Brighton and Hove	Westminster/City of London	Good	Good	Good
Dartford	Westminster/City of London	Good	Good	Good
Elmbridge	Kingston upon Thames	Poor	Poor	Poor
Horsham	Crawley/Gatwick	Moderate	Good	Good/Moderate
Saltdean/Woodingdean	Brighton and Hove	Poor	Poor	Poor
Totton	Southampton	Moderate	Poor	Moderate/Poor
Flows 3,500+				
Crawley/Gatwick	Redhill/Reigate	Good	Good	Good
Haywards Heath/Burgess Hill	Crawley/Gatwick	Moderate	Poor	Moderate/Poor
Peacehaven	Brighton and Hove	Moderate	Poor	Moderate/Poor
Reading	Blackwater Valley	Good	Poor	Moderate
Reading	Westminster/City of London	Good	Good	Good
Sutton	Epsom/Ewell	Poor	Poor	Poor
Flows 3,000+				

Origin	Destination	Connectivity	PT Mode Share	Assessment
Cowes	Newport	Moderate	Poor	Moderate/Poor
Epsom/Ewell	Kingston upon Thames	Poor	Poor	Poor
Epsom/Ewell	Westminster/City of London	Good	Good	Good
Fareham	Portsmouth	Moderate	Moderate	Moderate
Gravesend	Dartford	Good	Good	Good
Hedge End	Southampton	Poor	Poor	Poor
Hillingdon	Slough	Moderate	Poor	Moderate/Poor
Kingston upon Thames	Elmbridge	Poor	Poor	Poor
Newbury/Thatcham	Reading	Moderate	Poor	Moderate/Poor
Southampton	Totton	Poor	Poor	Poor
Southampton	Winchester	Moderate	Poor	Moderate/Poor
Woking	Westminster/City of London	Good	Good	Good
Flows 2,500+				
Aldershot	Guildford	Moderate	Poor	Moderate/Poor
Blackwater Valley	Bracknell	Poor	Poor	Poor
Blackwater Valley	Woking	Good	Poor	Moderate
Brighton and Hove	Chichester	Good	Moderate	Good/Moderate
Chatham	Maidstone	Poor	Poor	Poor
Crawley/Gatwick	Westminster/City of London	Good	Good	Good
Epsom/Ewell	Sutton	Good	Moderate	Good/Moderate
Gosport	Fareham	Poor	Good	Moderate
Haywards Heath/Burgess Hill	Brighton and Hove	Moderate	Poor	Moderate/Poor
Portsmouth	Fareham	Moderate	Poor	Moderate/Poor
Reading	Newbury/Thatcham	Moderate	Poor	Moderate/Poor
Reading	Slough	Good	Good	Good
Royal Tunbridge Wells	Westminster/City of London	Good	Good	Good
Slough	Hounslow	Poor	Poor	Poor
Southampton	Hedge End	Poor	Poor	Poor
Woking	Elmbridge	Moderate	Poor	Moderate/Poor
Woking	Guildford	Good	Good	Good
Flows 2,000+				
Blackwater Valley	Basingstoke	Good	Poor	Moderate
Blackwater Valley	Hillingdon	Poor	Poor	Poor
Bognor Regis	Brighton and Hove	Good	Poor	Moderate
Bracknell	Blackwater Valley	Good	Poor	Moderate
Brighton and Hove	Horsham	Moderate	Poor	Moderate/Poor
Crawley/Gatwick	Horsham	Good	Good	Good/Moderate
Croydon	Crawley/Gatwick	Good	Moderate	Good/Moderate
Dartford	Greenwich	Moderate	Poor	Moderate/Poor
Elmbridge	Richmond	Poor	Poor	Poor
Fleet	Farnborough	Good	Moderate	Good/Moderate
Folkestone	Ashford	Good	Poor	Moderate
Gillingham	Maidstone	Moderate	Poor	Moderate/Poor

Origin	Destination	Connectivity	PT Mode Share	Assessment
Gillingham	Westminster/City of London	Good	Good	Good
Hastings/Bexhill	Eastbourne	Moderate	Poor	Moderate/Poor
Haywards Heath/Burgess Hill	Westminster/City of London	Good	Good	Good
Horndean	Havant	Poor	Poor	Poor
Hounslow	Slough	Moderate	Poor	Moderate/Poor
Locks Heath/Warsash/Whiteley	Southampton	Moderate	Moderate	Moderate
Maidenhead	Slough	Good	Good	Good
Maidstone	Ditton	Poor	Poor	Poor
Medway Towns	Ditton	Poor	Poor	Poor
Portsmouth	Horndean	Poor	Poor	Poor
Reading	Maidenhead	Good	Moderate	Good/Moderate
Redhill/Reigate	Crawley/Gatwick	Moderate	Poor	Moderate/Poor
Redhill/Reigate	Westminster/City of London	Good	Good	Good
Ryde	Newport	Moderate	Poor	Moderate/Poor
Sandown/Shanklin	Newport	Poor	Poor	Poor
Slough	Maidenhead	Moderate	Good	Good/Moderate
Slough	Westminster/City of London	Good	Good	Good
Stubbington	Fareham	Poor	Poor	Poor
Thanet	Canterbury	Moderate	Poor	Moderate/Poor
Flows 1,500+				
Basingstoke	Blackwater Valley	Good	Good	Good
Basingstoke	Reading	Good	Good	Good
Chatham	Westminster/City of London	Good	Good	Good
Croydon	Redhill/Reigate	Good	Poor	Moderate
Dartford	Bromley	Moderate	Poor	Moderate/Poor
Dover	Folkestone	Good	Good	Good
Ealing	Slough	Good	Moderate	Good/Moderate
Eastbourne	Brighton and Hove	Good	Good	Good
Fareham	Locks Heath/Warsash/Whiteley	Poor	Moderate	Moderate/Poor
Farnborough	Guildford	Moderate	Poor	Moderate/Poor
Godalming	Guildford	Good	Good	Good
Gosport	Locks Heath/Warsash/Whiteley	Poor	Poor	Poor
Greenwich	Dartford	Moderate	Moderate	Moderate
Guildford	Westminster/City of London	Good	Good	Good
Hartley	Dartford	Poor	Poor	Poor
Hawkinge	Folkestone	Poor	Moderate	Moderate/Poor
Locks Heath/Warsash/Whiteley	Portsmouth	Poor	Poor	Poor
Maidenhead	Reading	Good	Good	Good
Portsmouth	Chichester	Moderate	Poor	Moderate/Poor
Portsmouth	Locks Heath/Warsash/Whiteley	Poor	Poor	Poor
Portsmouth	Southampton	Good	Poor	Moderate

Origin	Destination	Connectivity	PT Mode Share	Assessment
Reading	Basingstoke	Good	Poor	Moderate
Reading	Hillingdon	Moderate	Poor	Moderate/Poor
Rochester	Dartford	Moderate	Poor	Moderate/Poor
Rochester	Westminster/City of London	Good	Good	Good
Royal Tunbridge Wells	Tonbridge	Good	Good	Good
Southampton	Locks Heath/Warsash/Whiteley	Moderate	Poor	Moderate/Poor
Southampton	Portsmouth	Good	Poor	Moderate
Stubbington	Gosport	Poor	Poor	Poor
Stubbington	Portsmouth	Poor	Poor	Poor
Thanet	Minster	Moderate	Poor	Moderate/Poor
Tonbridge	Royal Tunbridge Wells	Good	Good	Good
Westham	Eastbourne	Good	Moderate	Good/Moderate
Winchester	Southampton	Good	Moderate	Good/Moderate
Windsor	Slough	Good	Poor	Moderate
Woking	Blackwater Valley	Good	Poor	Moderate
Flows 1,000+				
Aldershot	Woking	Good	Good	Good
Bracknell	Sandhurst	Poor	Poor	Poor
Chatham	Dartford	Moderate	Poor	Moderate/Poor
Chatham	Ditton	Poor	Poor	Poor
Emsworth	Havant	Good	Moderate	Good/Moderate
Emsworth	Portsmouth	Moderate	Poor	Moderate/Poor
Farnborough	Basingstoke	Moderate	Good	Good/Moderate
Farnborough	Reading	Good	Poor	Moderate
Farnborough	Westminster/City of London	Good	Good	Good
Farnborough	Woking	Good	Poor	Moderate
Gillingham	Dartford	Moderate	Poor	Moderate/Poor
Gillingham	Sittingbourne	Good	Moderate	Good/Moderate
Havant	Chichester	Good	Moderate	Good/Moderate
Maidstone	Chatham	Poor	Poor	Poor
Maidstone	Gillingham	Poor	Poor	Poor
Maidstone	Rochester	Poor	Poor	Poor
Reading	Farnborough	Moderate	Poor	Moderate/Poor
Reading	Sandhurst	Good	Good	Good
Rochester	Maidstone	Poor	Poor	Poor
Sandhurst	Bracknell	Moderate	Poor	Moderate/Poor
Sandhurst	Reading	Good	Good	Good
Sittingbourne	Gillingham	Good	Good	Good
South Hayling	Havant	Poor	Poor	Poor
South Hayling	Portsmouth	Poor	Poor	Poor
Totton	Eastleigh	Poor	Poor	Poor
Yateley	Reading	Moderate	Poor	Moderate/Poor

Figure 3.29: Weighted assessment of public transport provision and mode share on key journey to work flows¹⁰



¹⁰ It should be noted that this high-level assessment does not consider other attributes of car or public transport (e.g. cost, comfort, parking, punctuality, reliability, first and last buses/trains, layout of towns, etc), but it does provide an indicator of the “competitiveness” of public transport on key flows between the Major Economic Hubs. It is also recognised that both car and public transport options tend to be faster on radial corridors (to/from London) rather than orbital corridors (perpendicular to radial corridors). This is reflected in many of the journey to work flows shown in Figure 3.19, which shows longer flows along radial (mostly north-south) axis and shorter flows on orbital routes.

Opportunities for Interventions

- 3.26 This section has identified several opportunities for interventions in each of the Major Economic Hubs in the South East area. The particular opportunities are as follows:
- Major Economic Hubs with a **high level of self-containment** (50%+) generally have a good opportunity to increase sustainable travel (public transport and active travel) as many people live and work in these hubs and commute over short distances;
 - Major Economic Hubs with a **high percentage of journeys made under 2km** (20%+) generally have a good opportunity to increase walking and cycling;
 - Major Economic Hubs with a **high percentage of journeys made between 2k and 5km** (20%+) generally have a good opportunity to increase cycling;
 - Major Economic Hubs with a **high percentage of journeys made between 5km and 10km** (20%+) generally have a good opportunity to increase public transport mode share;
 - Major Economic Hubs with a relatively **low active mode share** (below 20%) have an opportunity to increase this mode share; and
 - Major Economic Hubs with a relatively **low public transport mode share** (below 15%) have an opportunity to increase this mode share.
- 3.27 A summary of the types of interventions that could be considered for each Major Economic Hub is provided in Table 3.4. Some Major Economic Hubs are well-suited to all of the interventions listed above, notably Basingstoke, Medway, and South Hampshire.

Conclusions

- 3.28 This section has analysed the key characteristics of the largest travel to work flows to and from the Major Economic Hubs in the South East area. It has identified three key issues:
1. Many Major Economic Hubs have **large, relatively 'round' journey to work catchment areas**, which drive journey to work flows that are not well served by public transport (and therefore have high car mode shares);
 2. Many Major Economic Hubs have **low levels of self-containment**, where there is a significant imbalance between the populations that work and live in the same hub; and
 3. There is **poor public transport provision and/or awareness** on some of the highest commuting flows in the South East area (e.g. Medway to/from Maidstone) are poorly served by public transport, which drives high car use.
- 3.29 This section has also identified three opportunities for promoting more sustainable transport outcomes on these key travel to work flows:
1. There are **opportunities to increase walking and cycling mode share** in Major Economic Hubs with high levels of self-containment, where a high proportion of journeys to work over short distances and where there is a low active travel mode share.
 2. There are opportunities for **improved public transport hubs and infrastructure** along routes that have high journey to work flows but poor connectivity (Table 3.3, first row).
 3. There are also opportunities to **better promote existing public transport services** where connectivity is good but public transport mode share is low (Table 3.3 second row).
- 3.30 Some Major Economic Hubs that have more opportunities for interventions than others. For example, there is potential to address every trip type in Major Economic Hubs such as Basingstoke, Medway, and South Hampshire. Others have less scope for intervention due to their local context and characteristics. These opportunities for interventions will be explored in more detail in the Area Studies that will be commissioned early in 2020.

Table 3.4: Summary of journey to work patterns and opportunities

Major Economic Hub	High self-containment (50%+)	High % of journeys under 2km (20%+)	High % of journeys 2 - 5km (20%+)	High % of journeys 5 – 10km (20%+)	Low active mode share (below 20%)	Low public transport mode share (below 15%)
Implication	Opportunity to increase sustainable transport mode share	Opportunity to increase active travel mode share	Opportunity to increase cycling mode share	Opportunity to increase public transport mode share	Opportunity to increase active travel mode share	Opportunity to increase public transport mode share
Andover	✓	✓	✓		✓	✓
Ashford	✓	✓	✓		✓	✓
Basingstoke	✓	✓	✓	✓	✓	✓
Blackwater Valley			✓		✓	✓
Bognor Regis	✓	✓	✓			✓
Bracknell					✓*	✓
Brighton and Hove	✓	✓	✓			
Canterbury		✓		✓		✓
Chichester				✓		✓
Crawley/Gatwick					✓*	
Dartford				✓	✓*	
Eastbourne	✓	✓	✓		✓	✓
Elmbridge				✓	✓*	
Epsom/Ewell			✓	✓	✓	
Folkestone	✓	✓	✓			✓
Gravesend		✓	✓		✓	
Guildford					✓*	
Hastings/Bexhill	✓	✓	✓		✓	✓
Haywards Heath/Burgess Hill		✓			✓	✓
Herne Bay/Whitstable	✓	✓		✓	✓	✓

Major Economic Hub	High self-containment (50%+)	High % of journeys under 2km (20%+)	High % of journeys 2 - 5km (20%+)	High % of journeys 5 – 10km (20%+)	Low active mode share (below 20%)	Low public transport mode share (below 15%)
Implication	Opportunity to increase sustainable transport mode share	Opportunity to increase active travel mode share	Opportunity to increase cycling mode share	Opportunity to increase public transport mode share	Opportunity to increase active travel mode share	Opportunity to increase public transport mode share
Horsham		✓			✓	✓
Maidenhead					✓*	✓
Maidstone		✓	✓		✓	✓
Medway Towns	✓	✓	✓	✓	✓	✓
Newbury/Thatcham		✓			✓	✓
Newport				✓		✓
Reading			✓	✓	✓	
Redhill/Reigate				✓	✓*	
Royal Tunbridge Wells		✓				
Slough				✓	✓*	✓
South Hampshire	✓	✓	✓	✓	✓	✓
Thanet	✓	✓	✓		✓	✓
Winchester						✓
Woking					✓*	

* The opportunity to increase active travel mode share at these Major Economic Hubs will be limited due to the relatively low % of journeys under 5km.

4 Proposals for Future Development

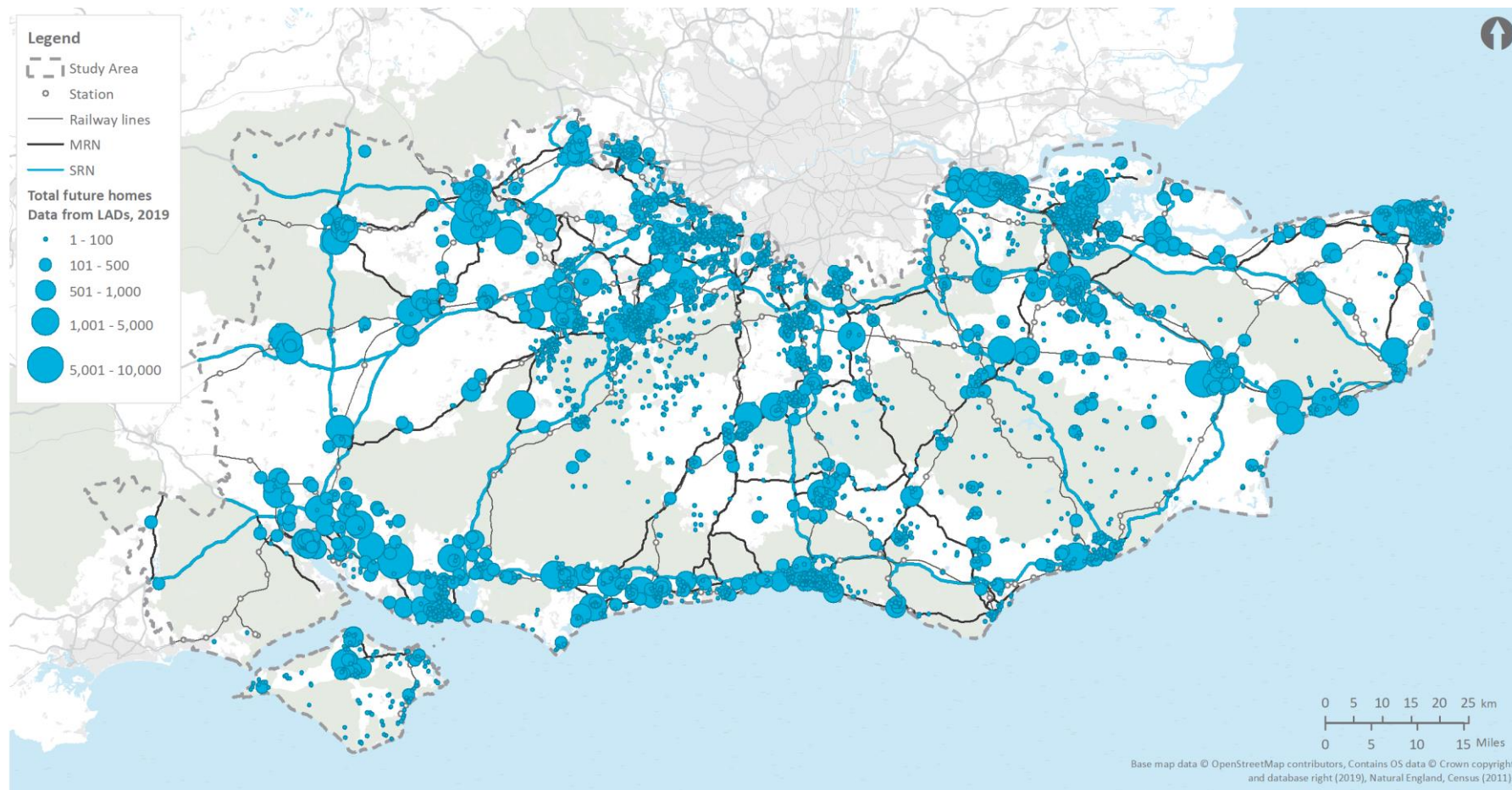
Introduction

- 4.1 The previous section described the patterns of economic and transport behaviours recorded by the 2011 census. This section considers how future developments might shape these behaviours in the future. Specifically, it examines whether these future developments may change the level of **self-containment** of each Major Economic Hub and considers if they are located in a way that is supportive of **sustainable transport** patterns and behaviours.

Self-Containment

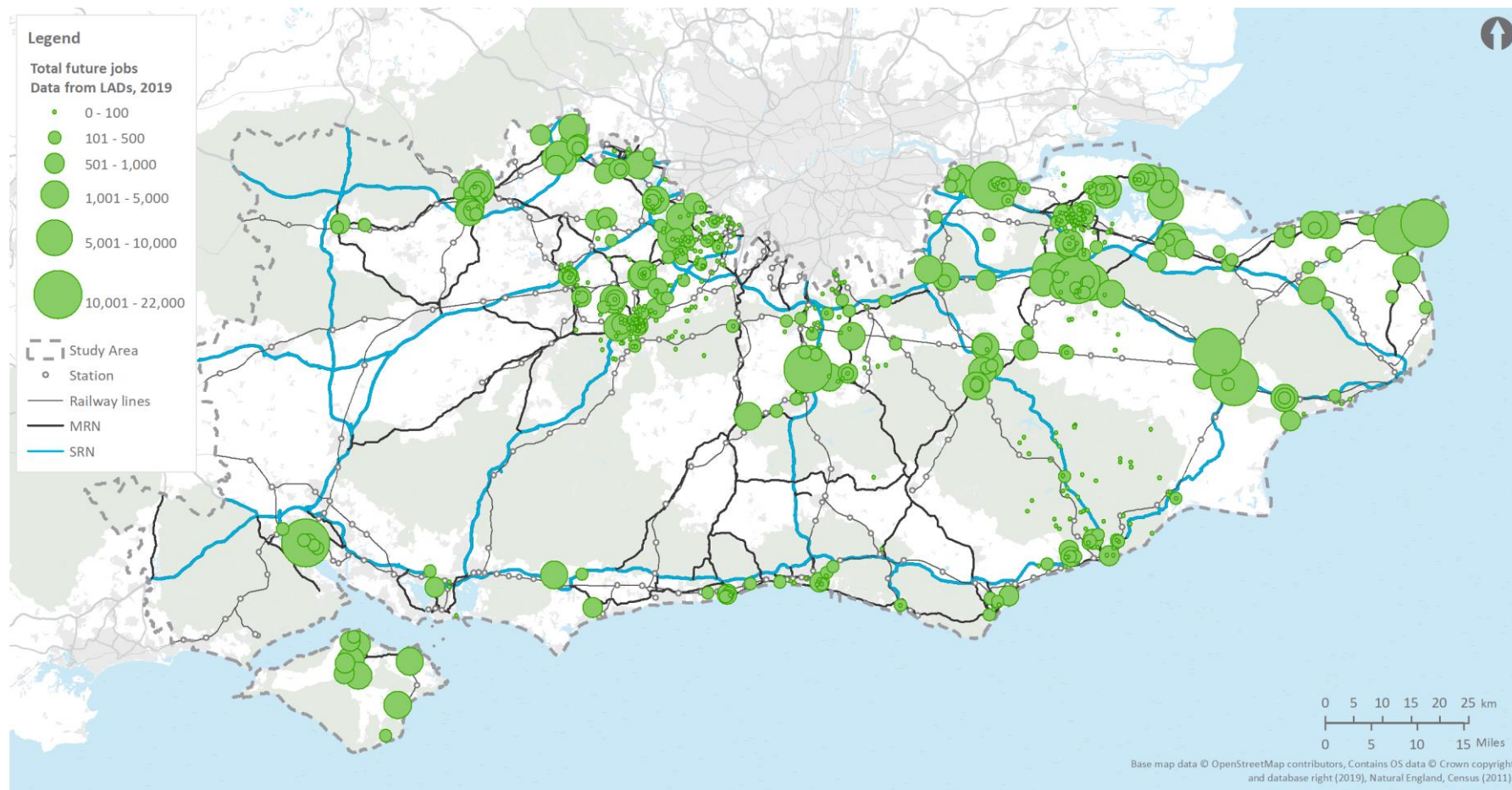
- 4.2 There are ambitious plans to provide additional housing and employment space in the South East. Many Major Economic Hubs in the South East are focal points for this development. The potential impact of these developments on the transport network will depend on:
- how they contribute to the balance of employment and housing supply within Major Economic Hubs;
 - the distribution and density of development;
 - the proximity of developments to public transport hubs and corridors;
 - the capacity of the transport network to accommodate the growth in trips; and
 - the provision of sustainable transport infrastructure within the planned developments.
- 4.3 Figure 4.1. shows the locations of the key planned housing developments in the South East, while Figure 4.2 shows planned employment developments. This data has been collected from the Local Planning Authorities in the South East area.
- 4.4 It is also important to consider how development forecasts will affect commuter patterns and the balance of jobs and workforce size within Major Economic Hubs, based on data provided by Local Planning Authorities, which extend to 2035 (i.e. Local Plan horizons). Table 4.1 shows current and forecast future levels of self-containment (measured by the degree of importing of labour), based on the Department for Transport's TEMPRO 7.2 data, which extends to 2050. It is acknowledged that some of the data presented here differs from LEP forecasts. However, to maintain consistency in approach, the analysis is limited to TEMPRO data only.
- 4.5 This data suggests 15 Major Economic Hubs are expected to become less self-contained, while just five are expected to become more self-contained. Specifically:
- Andover, Blackwater Valley, Elmbridge, Folkestone, Maidenhead and Royal Tunbridge Wells are expected to become **less self-contained**; whereas
 - Ashford, Basingstoke, Crawley/Gatwick, Dartford, Epsom/Ewell, Guildford, Medway Towns, Reading, Redhill/Reigate, Thanet and Winchester are expected to become **more self-contained**.

Figure 4.1: Location of planned residential developments (Transport Strategy data provided by Local Planning Authorities, 2019)¹¹



¹¹ Some data may be underreported on this map as not all local plans have been adopted by all planning authorities.

Figure 4.2: Planned future jobs growth (Transport Strategy data provided by Local Planning Authorities, 2019)¹²



¹² Some data may be underreported on this map as not all local plans have been adopted by all planning authorities.

Table 4.1: Changes in balance of jobs and workforce to work based on growth factors¹³

Major Economic Hub	Jobs (2019)	Workforce (2019)	Jobs / Workforce (2019)	Jobs Growth (2050)	Workforce Growth (2050) ¹⁴	Jobs / Workforce (2050)	Jobs - Workforce (Delta)
Andover	31,000	27,000	115%	35,000	29,000	121%	6%
Ashford	42,000	38,000	111%	47,000	45,000	104%	(6%)
Basingstoke	78,000	64,000	122%	86,000	74,000	116%	(6%)
Blackwater Valley	149,000	142,000	105%	164,000	149,000	110%	5%
Bognor Regis	24,000	29,000	83%	26,000	32,000	81%	(2%)
Bracknell	55,000	45,000	122%	60,000	50,000	120%	(2%)
Brighton and Hove	267,000	242,000	110%	294,000	266,000	111%	0%
Canterbury	42,000	23,000	183%	46,000	25,000	184%	1%
Chichester	42,000	21,000	200%	46,000	23,000	200%	0%
Crawley/Gatwick	128,000	92,000	139%	141,000	105,000	134%	(5%)
Dartford	65,000	56,000	116%	72,000	65,000	111%	(5%)
Eastbourne	56,000	50,000	112%	62,000	54,000	115%	3%
Elmbridge	67,000	65,000	103%	74,000	64,000	116%	13%
Epsom/Ewell	36,000	40,000	90%	40,000	40,000	100%	10%
Folkestone	37,000	31,000	119%	41,000	31,000	132%	13%
Gravesend	21,000	26,000	81%	23,000	28,000	82%	1%
Guildford	59,000	38,000	155%	65,000	45,000	144%	(11%)
Hastings/Bexhill	60,000	56,000	107%	66,000	60,000	110%	3%
Haywards Heath/Burgess Hill	37,000	36,000	103%	41,000	41,000	100%	(3%)
Herne Bay/Whitstable	26,000	37,000	70%	29,000	41,000	71%	0%
Horsham	35,000	31,000	113%	38,000	33,000	115%	2%
Maidenhead	40,000	33,000	121%	44,000	35,000	126%	5%
Maidstone	58,000	54,000	107%	64,000	61,000	105%	(2%)
Medway Towns	112,000	128,000	88%	124,000	133,000	93%	6%
Newbury/Thatcham	51,000	38,000	134%	56,000	41,000	137%	2%
Newport	24,000	12,000	200%	26,000	13,000	200%	0%
Reading	202,000	184,000	110%	222,000	219,000	101%	(8%)
Redhill/Reigate	40,000	30,000	133%	44,000	35,000	126%	(8%)
Royal Tunbridge Wells	40,000	33,000	121%	44,000	33,000	133%	12%
Slough	90,000	74,000	122%	99,000	84,000	118%	(4%)
South Hampshire	479,000	426,000	112%	528,000	476,000	111%	(2%)
Thanet	52,000	56,000	93%	57,000	54,000	106%	13%
Winchester	45,000	25,000	180%	49,000	29,000	169%	(11%)
Woking	54,000	55,000	98%	59,000	60,000	98%	0%

¹³ Sources: Census Journey to Work 2011, Office for National Statistics (% Self-containment and Net importing of Labour), TEMPRO v7.2 (Jobs and Workforce estimates)

¹⁴ Negative figures indicate decline in workforce and positive figures indicate growth.

Sustainable Transport

- 4.6 Future housing and employment space development is more likely to generate sustainable transport outcomes if they:
- minimise additional demand on the strategic highway network;
 - are well served by existing public transport; and
 - are located close to (i.e. within approximately 2km of) major employment sites and service centres (such as town centres), which can be accessed by walking and cycling; and
 - are well served by walking and cycling infrastructure.
- 4.7 To understand the likelihood that future developments in the Major Economic Hubs will generate more sustainable travel outcomes, a high-level assessment of the sustainability of the largest (by number of housing units planned) developments planned the Major Economic Hubs has been undertaken for 33 of the 34 Major Economic Hubs¹⁵.
- 4.8 The high-level assessment examined:
1. **Strategic Road Network risks:** The risk of the new development adding pressure to the Strategic Road Network, particularly the busiest parts of this network;
 2. **Public transport opportunities:** The potential for public transport to offer an attractive alternative to the car, based on current and (if known) future public transport provision; and
 3. **Active travel opportunities:** The potential for active travel (walking and cycling) to offer an attractive alternative to the car, based on the proximity of the development to major employment sites, public transport hubs, educational institutions, and town centres as well as walking and cycling infrastructure provision (where known).
- 4.9 The assessment is based on a qualitative analysis of the three following characteristics of the key major developments planned for each Major Economic Hub. It uses a simple rating system that ranges from 'good' to 'fair' to 'poor'. The ratings are assigned as follows:
- **Strategic and Major Road Network risks:**
 - If most of the planned residential development is located close to the Strategic Road Network and/or Major Road Network and/or appears to drive additional traffic onto it, then it is rated as Fair or Poor.
 - If the Strategic Road Network and/or Major Road Network is already congested during the AM peak, then the development is rated as **poor**.
 - If the Strategic Road Network and/or Major Road Network is not congested, then it is rated as **fair**.
 - If most of the planned residential development is not located close to the Strategic Road Network or Major Road Network and does not drive additional traffic onto it, then it is rated as **good**.
 - **Public Transport opportunities:**
 - If most of the planned residential and employment development is located close (i.e. approximately 2km) to public transport hubs (e.g. railway stations) and/or on public transport corridors (e.g. high frequency bus corridors) then the development is rated as **good**.

¹⁵ Maidenhead was not included as no significant developments are planned in this town.

- If most of the planned residential and employment development is located some distance from public transport hubs (e.g. railway stations) and/or on public transport corridors (e.g. high frequency bus corridors) but includes mitigating measures such as new public transport services and/or easy walking/cycling access to public transport hubs, then the development is rated as **fair**.
- If most of the planned residential and employment development is located some distance from public transport hubs (e.g. railway stations) and/or on public transport corridors (e.g. high frequency bus corridors) and does not appear to include mitigating measures, then the development is rated as **poor**.
- **Active Transport opportunities:**
 - If most of the planned residential development is located within easy walking and cycling distance (<2km) to Major Economic Hub focus points such as town centres, education institutions, and public transport hubs, then the development is rated as **good**.
 - If most of the planned residential development is located within easy cycling distance (2 to 5km) to Major Economic Hub focus points described above, but not within easy walking distance, then the development is rated as **fair**.
 - If most of the planned residential development is located more than 5km away from Major Economic Hub focus points (as described above), then it is rated as **poor**.

4.10 The results of the assessment summarised above are presented in Table 4.2. It should be noted that this analysis presented in this table was undertaken by desk study and is analysis is based on publicly available information, so it may not reflect the most up-to-date information.

4.11 This assessment exercise has identified some risks. For example, some Major Economic Hubs that have a relatively uneven local distribution of housing growth. In many cases these quite far away from employment sites, public transport hubs, educational institutions, and town centres. Several sites are also likely to place more pressure on already congested parts of the Strategic Road Network. These types of developments are likely to result in less sustainable transport outcomes.

Conclusion

4.12 This section has assessed how future planned development in the South East may change the level of self-containment and the attractiveness of sustainable transport modes in the South East's Major Economic Hubs.

4.13 Much of the housing and employment development planned for the South East's Major Economic Hubs will change the balance of jobs to workers in these hubs. In some cases, this will help places such as Ashford, Basingstoke and Haywards Heath/Burgess Hill become more 'self-contained'. In theory, this should help limit the level of commuting to and from these hubs. However, there are other Major Economic Hubs, such as Hasting, Medway, and Thanet, where the number of homes will outstrip the number of new jobs. This may generate more out-commuting in the long term.

4.14 The planned developments examined in this section also present a mixed picture. Some developments, particularly those within Major Economic Hubs, have clearly been designed in a way that will reduce car dependency and promote active and public transport. Other more peripheral developments risk increasing car dependency, although some have been designed with mitigations (e.g. improved active and public transport infrastructure and services), which should deliver more sustainable transport outcomes in the long term.

Table 4.2: High-level assessment of the sustainability of proposed developments at Major Economic Hubs in the South East

Major Economic Hub	Main location of housing growth	Main location of employment growth	Strategic and Major Road Network risks	Public Transport opportunities	Active Transport opportunities
Andover	West of Andover, e.g. Picket Twenty (1,500 homes) and Augusta Park (2,870 homes).	N/A	Fair: Development will occur to the north of the A303, which is one of the more reliable roads in the South East.	Fair: Most development will occur to the west of the town, but new bus routes are being established to serve these developments and new residents are being offered free bus travel for 1 year.	Fair/poor: Developments are planned in suburban locations, away from existing employment sites in town.
Ashford	Town centre, e.g. former Powergen site, (660 homes), and to the south and east of the town, e.g. Chilmington Green (2,500 homes), and the Cheesemans Green (559 homes).	North of the town e.g. Eureka Business park.	Poor: Development to the north is well served by the M20, but developments on the south will be forced to use the A2070, which sees some congestion in the morning peak.	Fair: Some development will be close to Ashford International railway station, however most development will be on the periphery of the town.	Good: Most housing development planned close to future major employment sites.
Basingstoke	Town centre, north west of the town, e.g. Park Prewett (585 homes), and west and south west of the town, e.g. the Manydown development (3,400 homes).	N/A	Fair: Development will be served by the M3 and the A339, which already sees congestion in the morning peak.	Poor: Most development will occur on the periphery of the town, not close to public transport hubs. The majority of these developments will be some distance from the current public transport network.	Fair: Approximately half of the future development sites are within walking/cycling distance of the town centre, future major employment sites, and/or the public transport network.
Blackwater Valley	Southern end of the area, e.g. Queensgate site (505 homes) and northern end (near Camberley).	Northern end of the area (near Camberley and Frimley).	Fair/poor: Development will be served by the A31, the A331, and the M3. The A331 already sees some congestion in the morning peak.	Good: Most development is close to Camberley, Frimley and Ash stations.	Good: Most housing development is planned close to future major employment sites and the public transport network.
Bognor Regis	Periphery of the town e.g. west of Bersted (6,250 homes) and Pagham North (2,000 homes).	The northern side of the town.	Poor: Development risks adding more stress to the A259 and the A269.	Fair: Some development close to the rail station, however most on the periphery of the town.	Fair: Approximately half of planned developments will occur in locations accessible to the town centre/public transport sites by walking/cycling.
Bracknell	Largely to the west, e.g. Bracknell Forest (500 homes).	N/A	Fair/poor: Development risks adding more stress to the A329, a road which already sees some significant congestion.	Fair/poor: Most planned development is poorly connected to the railway station, although some will be served by current bus routes.	Fair/poor: Developments to the east and west of the town are situated close to the town centre and railway station. Developments to the north of the town are further from the town centre and station.

Major Economic Hub	Main location of housing growth	Main location of employment growth	Strategic and Major Road Network risks	Public Transport opportunities	Active Transport opportunities
Brighton and Hove	Across the area, particularly at the Marina and along the River Adur e.g. the Shoreham harbour development (2,425 homes).	Predominantly in the city centre.	Poor: Pressure will be added to the A259, A23 and A270. These roads already see significant congestion.	Good: Most development will be well served by Brighton, Southwick, Hove and Mouslecoomb rail stations.	Good: Most development is situated within walking/cycling distance of the town centre and/or public transport hubs.
Canterbury	South and west of the of the city e.g. Site 9 Howe Barracks (500 homes).	South of the city.	Poor: Pressure will be added to the A2 and the A28. The A28 already sees significant congestion in the AM peak.	Fair: Development will mostly occur over 3km away from Canterbury East station. However, developers have proposed improvements to the public transport network, such as better bus priority measures.	Fair: Most development is situated at the outer limit of what is feasible for active transport access.
Chichester	Mostly to the north east of the city e.g. North East Chichester Strategic Development (200 homes) and the Land North of Stane Street (300 homes).	One major site to the west of the city, and one between Chichester and Tangmere.	Poor: Pressure will be added to the A27 and the A259. The A27 already sees significant congestion in the AM peak.	Fair: Most development will occur over 1.5km to the north of Chichester station.	Fair: Most housing development is on the periphery of Chichester urban area, but within feasible walking/cycling distance of the train station/town centre.
Crawley Gatwick	Most development in the centre e.g. 15-29 The Broadway Northgate Crawley (78 homes), with some to the west e.g. as Kilnwood Vale, (1,200 homes).	Some development in the Crawley town centre and major development at North Gatwick.	Poor: Most development planned close to the A2011 and the A2220, could add strain to the M23 These A-roads already see significant congestion.	Good: Most development will occur close to Crawley station.	Good: Most housing development in the city centre/within walking and cycling distance of public transport.
Dartford	Most development is in the centre e.g. the Mill Pond Development site (400 homes), except for a site to the north of the A206 e.g. The Bridge (278 homes).	Most development in the centre, except for a site to the north of the A206.	Poor: Developments may add some strain to the M25. Congestion is already a significant issue on the M25 near the Dartford Crossing.	Good: Most development will occur close to Dartford station.	Good: All developments will occur in built up urban areas, with local amenities within walking/cycling distance of developments.
Eastbourne	Most development in the centre in disparate sites e.g. 20 Upperton Road (73 homes), and to the north near Polegate and Stone Cross.	Predominantly near the harbour and the town centre.	Poor: Developments risk adding strain to the A27 and the A22. Both these roads see some congestion near major intersections.	Good: Most housing development planned near Eastbourne and Polegate stations.	Good: Most housing development planned within walking/cycling distance of public transport sites and the town centre.
Elmbridge	Around Walton-on-Thames e.g. the Bridge House development (35 homes) and near the South West Main Line e.g. 118 Ashley Road (50 homes).	Around Hersham and Weybridge.	Fair: Development risks adding more strain to the A305. This road sees congestion near major intersections in the AM peak.	Good: Most development will be located close to Weybridge and Walton-on-Thames.	Good: Most development is planned in built up urban areas and will therefore have good walking and cycling access to the public transport network and/or local amenities.

Major Economic Hub	Main location of housing growth	Main location of employment growth	Strategic and Major Road Network risks	Public Transport opportunities	Active Transport opportunities
Epsom Ewell	Focused around Epsom e.g. the TK Maxx store development (65 homes).	N/A	Poor: Developments will centre around the A24, which risks adding strain here. This road already sees major congestion in the AM peak.	Good: Most development planned around Epsom railway station.	Good: Future developments will be situated within walking/cycling distance of Epsom train station.
Folkestone	Large spread with some near the harbour e.g. the Folkestone Seafront development (1,000 homes), some to the west of the centre e.g. Shornccliffe Garrison, (1,200 homes) and a large site near Westenhange (5,500 homes).	Some in the town centre, but large volumes of development will occur at Westenhanger and Martello Lakes.	Poor: Developments may add some strain to the M20.	Fair/poor: Most development will occur around Folkestone Central railway station, but there are two major developments over 3.5km from the station.	Fair/poor: More than half of developments are located beyond walking/cycling distance from the town centre/public transport network.
Gravesend	One large hub around Ebbsfleet station (1,400 homes) and a smaller hub around Gravesend e.g. Heritage quarter (141 homes) and the Clifton slipways(133 homes).	Most development focused around Ebbsfleet and Northfleet.	Poor: Developments may add strain to the A227 and the A2. These roads already see high levels of congestion.	Good: Most development is planned around Gravesend and Ebbsfleet railway stations.	Good: Most housing development planned close to future major employment sites, urban amenities and public transport hubs.
Guildford	South and west of the town centre.	Mostly in the city centre, with a large site to the west.	Poor: May add some strain to the A3, particularly are there are several large job sites to the west. The A3 sees some significant congestion in the AM peak near major junctions.	Good: Most development is planned around Guildford railway station.	Good: Most housing development planned close to future major employment sites, the town centre and public transport sites.
Hastings Bexhill	In Hastings development is focused in the town centre e.g. Hastings Station Yard (103 homes) and around the perimeter ring road. In Bexhill development is focussed on the perimeter of town e.g. Gullivers Bowls Club (39 homes).	In Hastings, focused in the town centre and around the perimeter ring road in the north east of the town. In Bexhill, mostly on the perimeter of town.	Poor: Developments risk adding pressure to the A259 between Hastings and Bexhill and the A21 into Hastings.	Poor: In Hastings, some development will occur near the railway station, but most will occur on the perimeter of the town to the north east. In Bexhill, development is also quite far from the town centre.	Fair: Approximately a third of development will occur in sites which are beyond easy walking/cycling access of the city centre.
Haywards Heath Burgess Hill	North west of Burgess Hill (3,500 homes). South of Haywards Heath e.g. Rookery Farm (360 homes). Centre of Burgess Hill.	N/A	Poor: Developments risk adding some strain to the A272 and the A2300. These routes currently see some congestion in the AM peak.	Fair/good: Development will be to the south and west of the rail stations in Haywards Heath, and near Wivelsfield In Burgess Hill.	Fair: Most of this development will occur within reasonable walking/cycling distance of the public transport network/urban amenities.

Major Economic Hub	Main location of housing growth	Main location of employment growth	Strategic and Major Road Network risks	Public Transport opportunities	Active Transport opportunities
Herne Bay Whitstable	Small development near Herne Bay e.g. Herne Bay Court Canterbury Road development (157 homes).	N/A	Good: Minimal strain to the Strategic road network.	Good: Development planned near Herne Bay.	Good: The majority of this development will occur within reasonable walking/cycling distance of the public transport network and town centre.
Horsham	Town centre e.g. St Marks Court Chart Way (203 homes)	One major site to the north of the A264.	Fair: May add some strain to the A24 and A264, although these roads are currently relatively uncongested.	Good: Most developments are close to Littlehaven and Horsham stations	Good: Most future development planned within walking distance of key amenities and transport hubs.
Maidenhead	A significant development is planned for Maidenhead Golf Club, which is located just to the south of the railway station (2,000 homes).	Employment growth is focused on the outskirts of the town near the A404/M4 interchange.	Fair: The employment development is likely to result in additional pressure on the A404 and M4, although these roads currently perform relatively well, even during peak hours.	Fair: The housing development is located close to a major railways station and along a busy bus corridor. The employment development is somewhat more remote, however.	Fair: The housing development is within walking distance of Maidenhead Town Centre. The employment development is further out of town.
Maidstone	Across the area, with key sites to the south east e.g. Medvale House, (81 homes) and to the north of the town e.g. Invicta Park Barracks (1,300 homes).	North and west of the town.	Poor: Developments around Maidstone may add strain to the A229 and the M20. The A229 already sees high levels of congestion but the M20 is relatively uncongested.	Fair/poor: Some development planned around the major local stations, but some (e.g. Park Wood Trading Estate), is further away.	Fair/good: The majority of development will occur in locations within reasonable walking/cycling distances from the town centre.
Medway Towns	Three key areas: near the centre of Rochester/Chatham e.g. Rochester Riverside (1,400), to the north near Hoo St Werburgh e.g. (1,600 homes), and near the docks e.g. Chatham Docks (3,000 homes).	Around Gillingham and Rochester e.g. Rochester Airport site.	Poor: May add strain to the A2 and the A289. Both the A2 and the A289 have some congestion issues already at major junctions.	Fair/poor: Development near Rochester and Gillingham is near railway stations but development to the north of the Medway is a large distance from railway stations.	Fair: Approximately half of this development is in sites which are reasonable walking/cycling distance from town centre amenities, employment and public transport.
Newbury Thatcham	Close to the town centre e.g. Newbury Racecourse (1,500 homes) and to the south e.g. Sandleford (1,500 homes).	In the town centres.	Poor: May add some strain to the A339 and the A4. Both of these roads already see some congestion in the AM peak.	Fair: Most development close to Newbury station, except for one major development site 2.5km to the south.	Good/fair: Most development planned close to future major employment sites and the public transport network. Some development North of the River Medway beyond reasonable walking/cycling distance.

Major Economic Hub	Main location of housing growth	Main location of employment growth	Strategic and Major Road Network risks	Public Transport opportunities	Active Transport opportunities
Newport	Focused in a small geographical area around the town e.g. land west of Sylvan Drive (200 homes).	Focused in a small geographical area.	Fair: Will not affect the Strategic Road Network but will add some pressure to the Major Road Network.	Fair: The largest site is located on a bus route. There are no rail stations near the developments.	Good: Most future development within walking/cycling distance of the town centre.
Reading	In the town centre and to the south of the town on its periphery e.g. Broad Street Mall *250 homes).	In the town centre and to the south of the town on its periphery.	Poor: Development to the south may add strain to the A33. This road is relatively uncongested, with the exception of some points around major junctions.	Fair: Development in the centre is close to Reading railway station. Development to the south is far from the nearest public transport hubs.	Fair: Most housing development planned close to future major employment sites in the town centre. Developments to the south of the city centre may be forced to use private car to reach the city centre.
Redhill Reigate	Mostly in Redhill e.g. Marketfield Way (153 homes).	Mostly in Redhill.	Poor: May add some strain to the A23. This road already suffers from serious congestion.	Good: Most development will occur close to Redhill train station.	Good: Most future development is planned within walking and/or cycling distance of employment sites, amenities and public transport hubs.
Royal Tunbridge Wells	In the centre, to the north east e.g. High Brooms (170 homes) and the south west e.g. Telephone Engineering Centre (170 homes).	In the town centre.	Good: Unlikely to have a significant impact on the Strategic or Major Road Networks.	Good: Most development will occur near Tunbridge wells station.	Good: Most future development is planned within walking and/or cycling distance of employment sites, amenities and public transport hubs.
Slough	In the centre e.g. Lion House, Petersfield Avenue (155 homes).	Minor employment growth near Langley station.	Poor: Unlikely to add significant strain to the A4.	Good: Most development will occur at sites which are located close to railway stations.	Good: Most future development is planned within walking and/or cycling distance of employment sites, amenities and public transport hubs.
South Hampshire	Focused in Southampton and Portsmouth city centres e.g. Westquay Watermark, (260 homes), and Centenary Quay (853 homes). There are several other developments across the wider South Hampshire.	Focused in Southampton town centre.	Poor: Likely to add strain to the M27 and other strategic and major roads in this area, which already experience serious congestion, notably around major intersections.	Good: Most development will occur on public transport corridors and near public transport hubs (such as Southampton railway station). There is also a significant level of brownfield site regeneration in Portsmouth.	Good: Most future development is planned within walking and/or cycling distance of employment sites, amenities and public transport hubs.

Major Economic Hub	Main location of housing growth	Main location of employment growth	Strategic and Major Road Network risks	Public Transport opportunities	Active Transport opportunities
Thanet	Across the area with particularly large developments at Westgate (2,000 homes) and Manston Court Road (1,400 homes).	Concentrated at the Westwood retail park and to the north of Manston airport.	Poor: May add some strain to the A28 or the A299. However, at present this road is relatively uncongested.	Fair/poor: Some development will occur close to Ramsgate and Margate railway stations, but a large proportion will occur over 2.5km from either station.	Poor: A significant amount of development will occur in locations that are beyond reasonable walking/cycling distance from the town centre and/or public transport hubs.
Winchester	In the centre e.g. Silver Hill (307 homes), with some development to the north e.g. Barton Farm (2,000 homes).	N/A	Good: Should add limited strain to the strategic highway network.	Good: Most development will occur around Winchester railway station.	Good: Most development will occur in locations which are within a reasonable distance of the town centre/public transport hubs.
Woking	Around the South West Main Line e.g. the Car Park Oriental Road (250 homes).	Around the South West Main Line.	Poor: May add some strain to the A320 and the A324. Both of these roads already see significant congestion.	Good: Development is almost exclusively around Woking railway train station.	Good: Most future development is planned within walking and/or cycling distance of employment sites, amenities and public transport hubs.

5 Social Inclusion and Regeneration

Introduction

- 5.1 For a transport network to be truly sustainable, it needs to deliver economic, environmental and social benefits. Many of the Major Economic Hubs in the South East face have significant levels of deprivation, which need to be addressed if the South East is to become a leading region for sustainability. This section examines these challenges and identifies ways transport could help address them in the future.
- 5.2 This section starts by describing the social challenges each Major Economic Hub faces in terms of deprivation, education, and unemployment. Then, it examines the relationship between connectivity and deprivation. Finally, it identifies potential future investment opportunities to help to improve social inclusion and regeneration in the most deprived Major Economic Hubs in the South East area.

Social Challenges and Indicators

- 5.3 The following three figures present three indicators of social inequality: Index of Multiple Deprivation (which combines several indicators), educational attainment, and unemployment. There appears to be a strong correlation between all three indicators.
- 5.4 Figure 5.1 shows the percentage of Lower Super Output Areas for each Major Economic Hub which are in the 20% most and least deprived in England, based on the **Index of Multiple Deprivation**. This shows that the most deprived areas in the South East tend to be clustered around the Kent and East Sussex coastlines – particularly Thanet and Hastings/Bexhill. These are among the least well connected communities in the South East area (the relationship between deprivation and connectivity is explored in more detail below). In contrast, the least deprived areas of the South East tend to be located closer to London and/or high-quality transport corridors that provide good access to employment opportunities and international gateways (e.g. Elmbridge, Epsom/Ewell, Haywards Heath/Burgess Hill, Maidenhead and Winchester).
- 5.5 Figure 5.2 shows the **educational attainment** of the populations of each of the Major Economic Hubs based on National Vocational Qualification levels. This also shows that education attainment levels are lowest in coastal areas such as Thanet and Hastings/Bexhill. They are also relatively low in other parts of Kent including Gravesend and Medway Towns. The Major Economic Hubs with the highest education attainment levels are found in the many of the least deprived areas of the South East, notably Guildford, Elmbridge and Haywards Heath/Burgess Hill.
- 5.6 Figure 5.3 shows the **unemployment rates** for each of the Major Economic Hubs. Again, Kent and East Sussex coastal communities perform poorly on this indicator. The highest unemployment levels are found in Thanet, Gravesend, Folkestone, Hastings/Bexhill and Medway Towns. Slough also has high levels of unemployment, despite have a significant number of jobs locally (a skills mismatch is the likely driver here). In contrast, unemployment levels are lowest in many of the least deprived areas of the South East, notably Haywards Heath/Burgess Hill, Elmbridge, and Epsom/Ewell.

Figure 5.1: Deprivation in each Major Economic Hub (English Indices of Multiple Deprivation 2015, MHCLG)

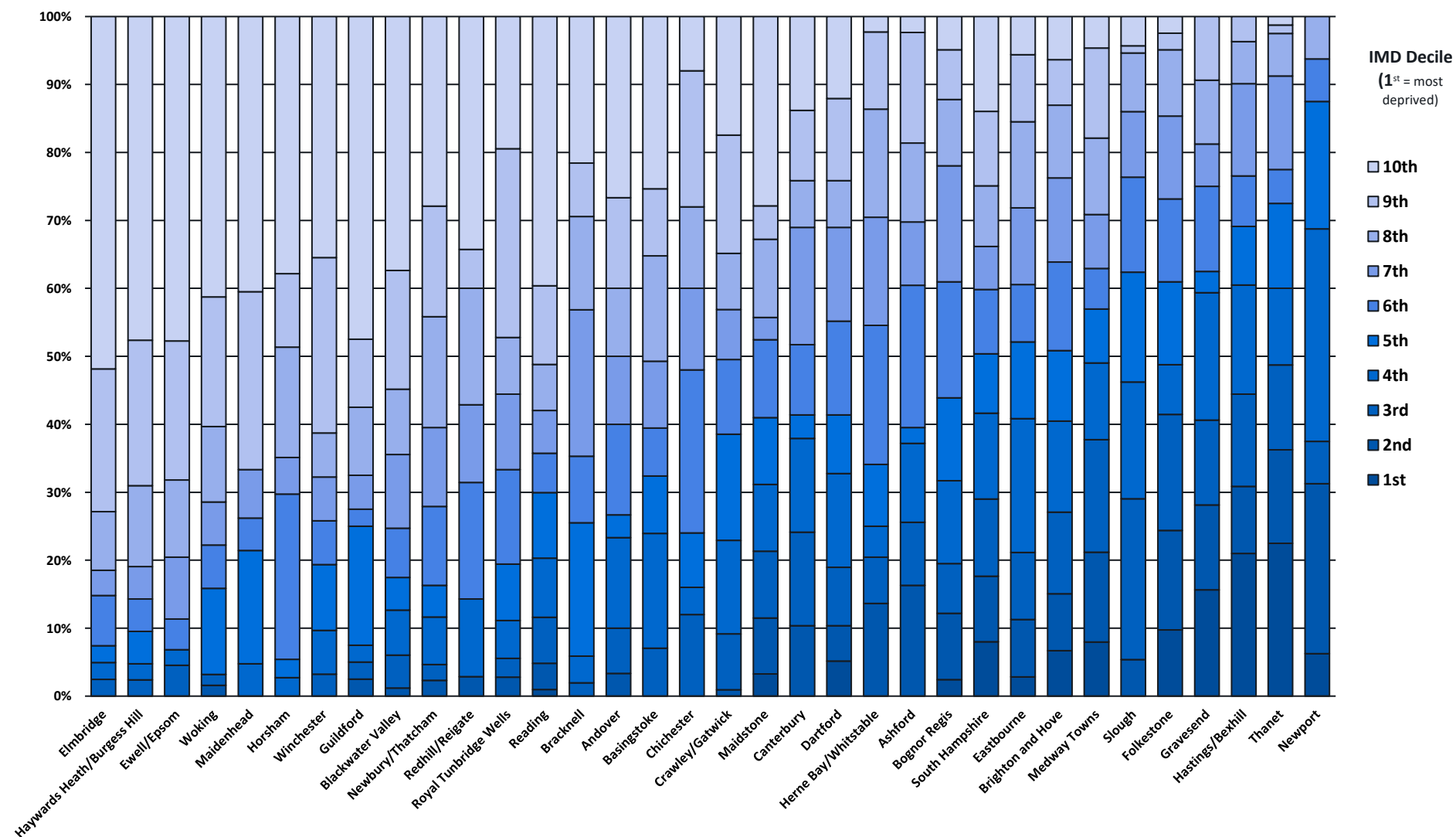


Figure 5.2: Highest level of qualification by percentage of working age population in each Major Economic Hub (Census 2011)

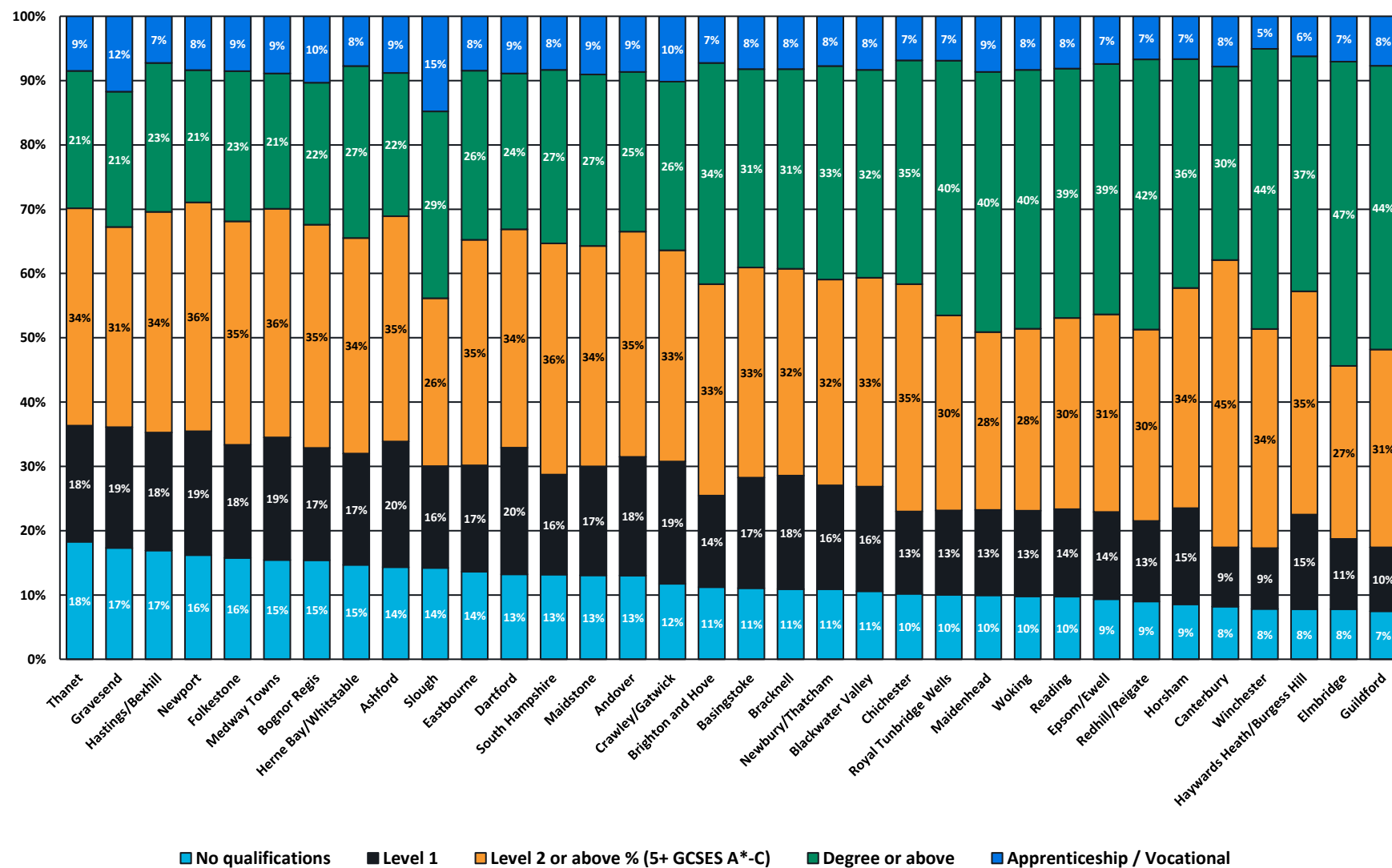
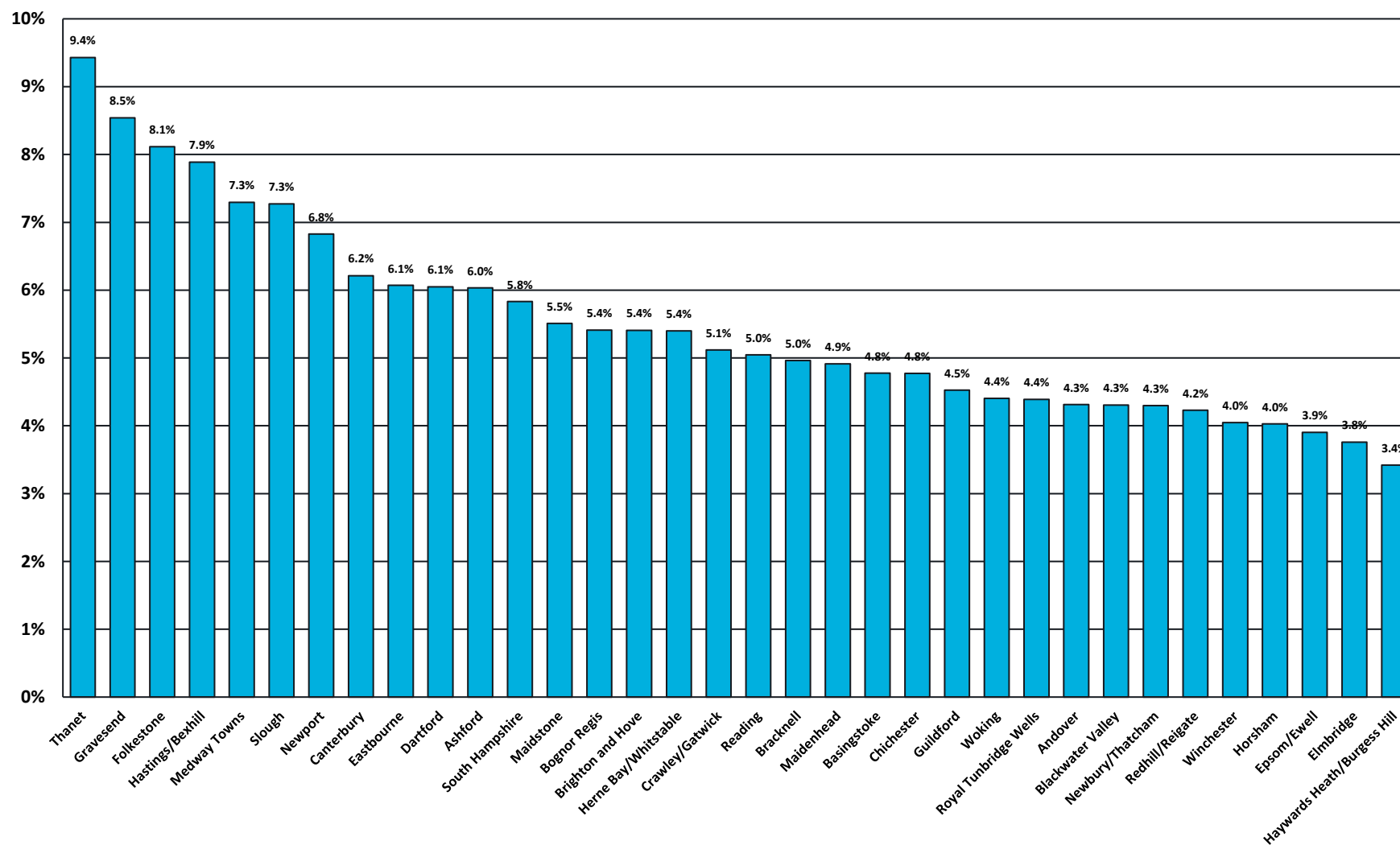


Figure 5.3: Unemployment rate in each Major Economic Hub (Economically active population, excluding full-time students) (Census 2011)



- 5.7 There appears to be a high correlation between the three indicators listed above. This is unsurprising as the IMD indicator includes employment and education indicators. Table 5.1 lists the ranking of each Major Economic Hub by each of the three indicators. The highest rank indicates the highest deprivation, lowest education, and highest unemployment levels.

Table 5.1: Ranking of each Major Economic Hub for social indicators

Major Economic Hub	Deprivation Rank	Education Rank	Unemployment Rank
Andover	20	15	26
Ashford	12	9	11
Basingstoke	19	18	21
Blackwater Valley	26	21	27
Bognor Regis	11	7	14
Bracknell	21	19	19
Brighton and Hove	8	17	15
Canterbury	15	30	8
Chichester	18	22	22
Crawley/Gatwick	17	16	17
Dartford	14	12	10
Eastbourne	9	11	9
Elmbridge	34	33	33
Epsom/Ewell	32	27	32
Folkestone	5	5	3
Gravesend	4	2	2
Guildford	27	34	23
Hastings/Bexhill	3	3	4
Haywards Heath/Burgess Hill	33	32	34
Herne Bay/Whitstable	13	8	16
Horsham	29	29	31
Maidenhead	30	24	20
Maidstone	16	14	13
Medway Towns	7	6	5
Newbury/Thatcham	25	20	28
Newport	1	4	7
Reading	22	26	18
Redhill/Reigate	24	28	29
Royal Tunbridge Wells	23	23	25
Slough	6	10	6
South Hampshire	10	13	12
Thanet	2	1	1
Winchester	28	31	30
Woking	31	25	24

- 5.8 Table 5.1 indicates there is a relatively strong correlation between each of the indicators described above. For example, Thanet is ranked as 1st for all three indicators. Gravesend, Hastings, Folkestone, and Newport (Isle of Wight) are also clustered towards the top for all three indicators. At the other end of the table, Elmbridge, Haywards Heath/Burgess Hill, Horsham and Winchester tend to be clustered at the bottom. There is a little more variation in positions for Major Economic Hubs in the middle of the table, although places like Maidstone appear almost in the same rank for all three indicators in the 'low-teens'. That said, there are some anomalies:
- **Canterbury** has very high education levels but relatively high levels of deprivation and unemployment. This may reflect the large university student population in this Major Economic Hub, which sits in a part of the South East that is relatively deprived.
 - **Guildford** has the highest education levels of all the Major Economic Hubs in the South East, but around average levels of deprivation and unemployment.
 - **Reading** also has high education levels set against moderate deprivation and unemployment.

Connectivity and Deprivation

- 5.9 Connectivity describes how fast and easy the populations of each Major Economic Hub can access services and opportunities within their hubs, in other hubs, and other important economic areas. Communities that have higher levels of connectivity are able to more easily connect their populations with employment, education and social opportunities. Two levels of connectivity can be considered: local connectivity and regional connectivity.
- 5.10 **Local Connectivity** describes how easy it is for a population to access services and opportunities *within* the same Major Economic Hub. This can be analysed by examining the percentage of each Major Economic Hub's population that has access to a public transport hub and/or a further education centre. This analysis has been undertaken using Department for Transport Journey Time Statistics (2016). It has showed that, in the South East area at least, there does not appear to be a relationship between local connectivity and deprivation. None of the areas with the poorest local connectivity were found to be in the 20% most deprived areas based on the Indices of Multiple Deprivation. Similarly, none of the areas with the poorest local connectivity have particularly high levels of unemployment, except Newport on the Isle of Wight.
- 5.11 In contrast, **Regional Connectivity**, which describes how easy it is for the population of a Major Economic Hub to access other services and opportunities *outside* their own community, does appear to have a stronger relationship with deprivation. Figure 5.4 shows the relationship between journey times to Central London and the most deprived areas in the South East. While it is acknowledged that most of the Major Economic Hubs have some deprived areas, including those that are perceived to be relatively prosperous, there appears to be a particularly high concentration of deprivation in communities with poorer levels of connectivity. This relationship is particularly strong in coastal communities in Kent and Sussex.
- 5.12 The regional connectivity issues highlighted in Figure 5.4 do not just apply to radial corridors to London. Figure 5.5 shows the relationship between connectivity and deprivation focussed on Brighton and Hove. This similarly shows that many of the most deprived areas of the South East are also less well connected to this Major Economic Hub than more prosperous areas.
- 5.13 Deprivation is driven by a wide range of socioeconomic factors. It does not necessarily follow that improving transport connectivity alone will, on its own, reduce deprivation. For example, there are some areas in the South East, such as Medway Towns and Gravesend, which are relatively well connected to London but still have relatively high levels of deprivation. This may be due to

characteristics of the local economies of these areas, which are still adjusting to structural changes in the national economy since deindustrialisation in the 1980s. This example shows that, while transport connectivity is important for minimising the likelihood of deprivation, there are other wider issues that need to be addressed.

- 5.14 One of the key outcomes Transport for the South East wishes to realise through its transport strategy is a more self-dependent South East. It envisages that the transport strategy will support the creation of highly skilled jobs – particularly in priority industrial sectors – in the area’s Major Economic Hubs. This vision would enable communities that may be far from London to benefit from their own growth and the growth of nearby Major Economic Hubs.

Conclusion

- 5.15 This Section has shown there is a correlation between deprivation, education, and unemployment. It has also found that many of the most deprived areas of the South East also have the lowest levels of connectivity to London and other parts of the South East area. These include many Major Economic Hubs on the Kent and Sussex coastlines (Bognor Regis, Dartford, Dover, Eastbourne, Folkestone, Gravesend, Hastings/Bexhill, Herne Bay/Whitstable, Medway Towns, Maidstone and Thanet). There are also pockets of deprivation in South Hampshire and the Isle of Wight.
- 5.16 Improving transport connectivity alone will not necessarily solve the social problems described in this section. For example, Gravesend is one of the best connected Major Economic Hubs in the South East, but it is still relatively deprived. That said, transport can play a role in unlocking regeneration opportunities in deprived areas and help improve access to employment and education opportunities.
- 5.17 In the longer term, Transport for the South East wishes to realise its vision of a more self-contained South East where skilled labour is better matched to local highly skilled job opportunities. This outcome helps drive economic and social progress, as well as reduce the length of commuting journeys. To achieve this vision, the transport network needs to be adapted to support the development of Major Economic Hubs as highly skilled employment centres in their own right, and not just dormitory communities supporting London commuters. This suggests investment priorities may need to shift towards improving orbital, coastal, and interurban corridors across all modes (but especially sustainable transport modes). Improvements to local roads may also be needed to encourage modal shift towards active travel for journeys under 5km.
- 5.18 This section therefore concludes by suggesting that the transport network needs to develop in two ways. First, it needs to deliver better connectivity to the most deprived areas of the South East (notably coastal communities). Second, it needs to support more equitable economic growth within each of the Major Economic Hubs. This is how Transport for the South East proposes to achieve a more prosperous and a more equitable South East.

Figure 5.4: Deprived areas and journey times to London (TRACC data, English Indices of Multiple Deprivation, 2015)

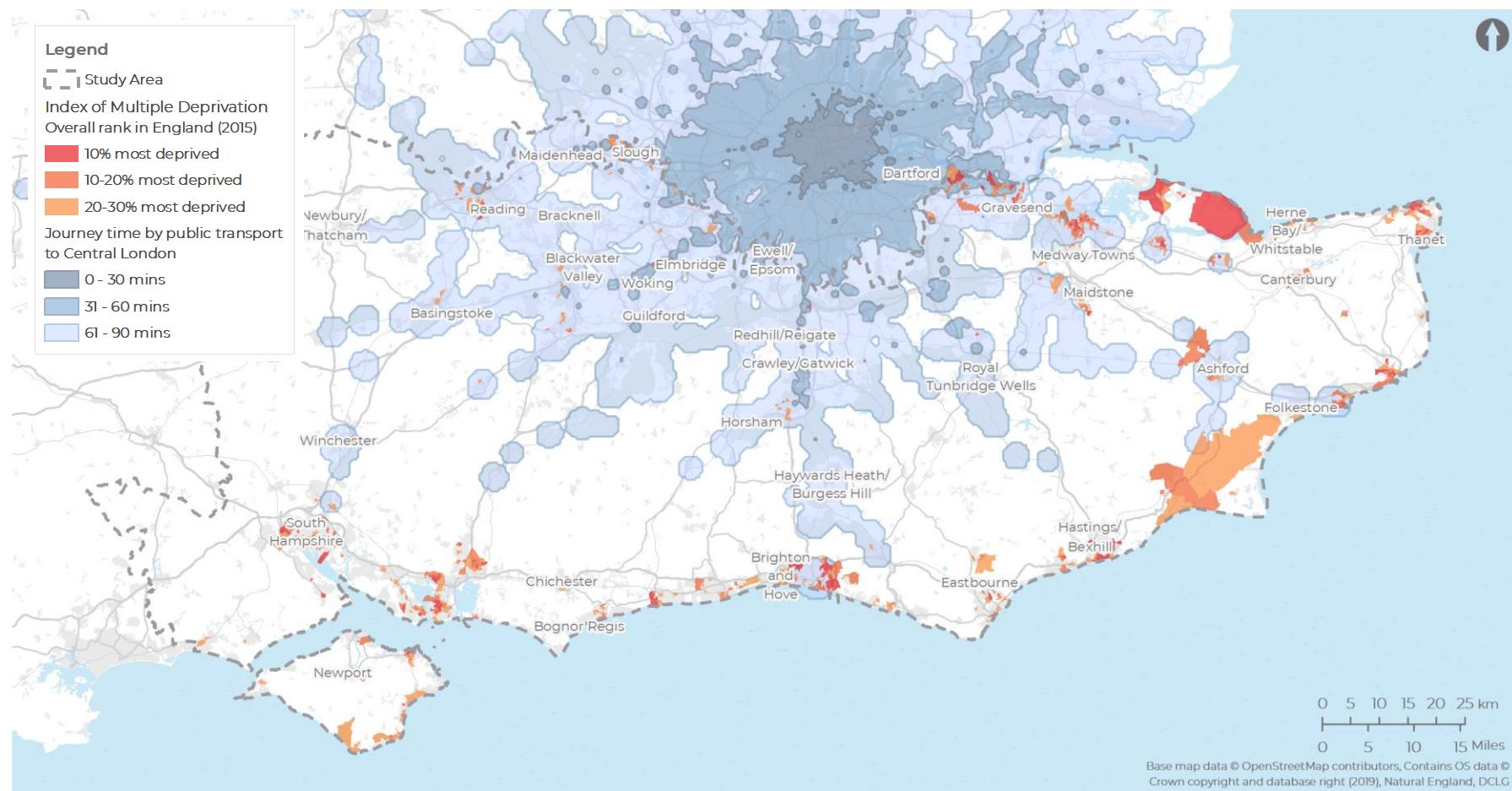
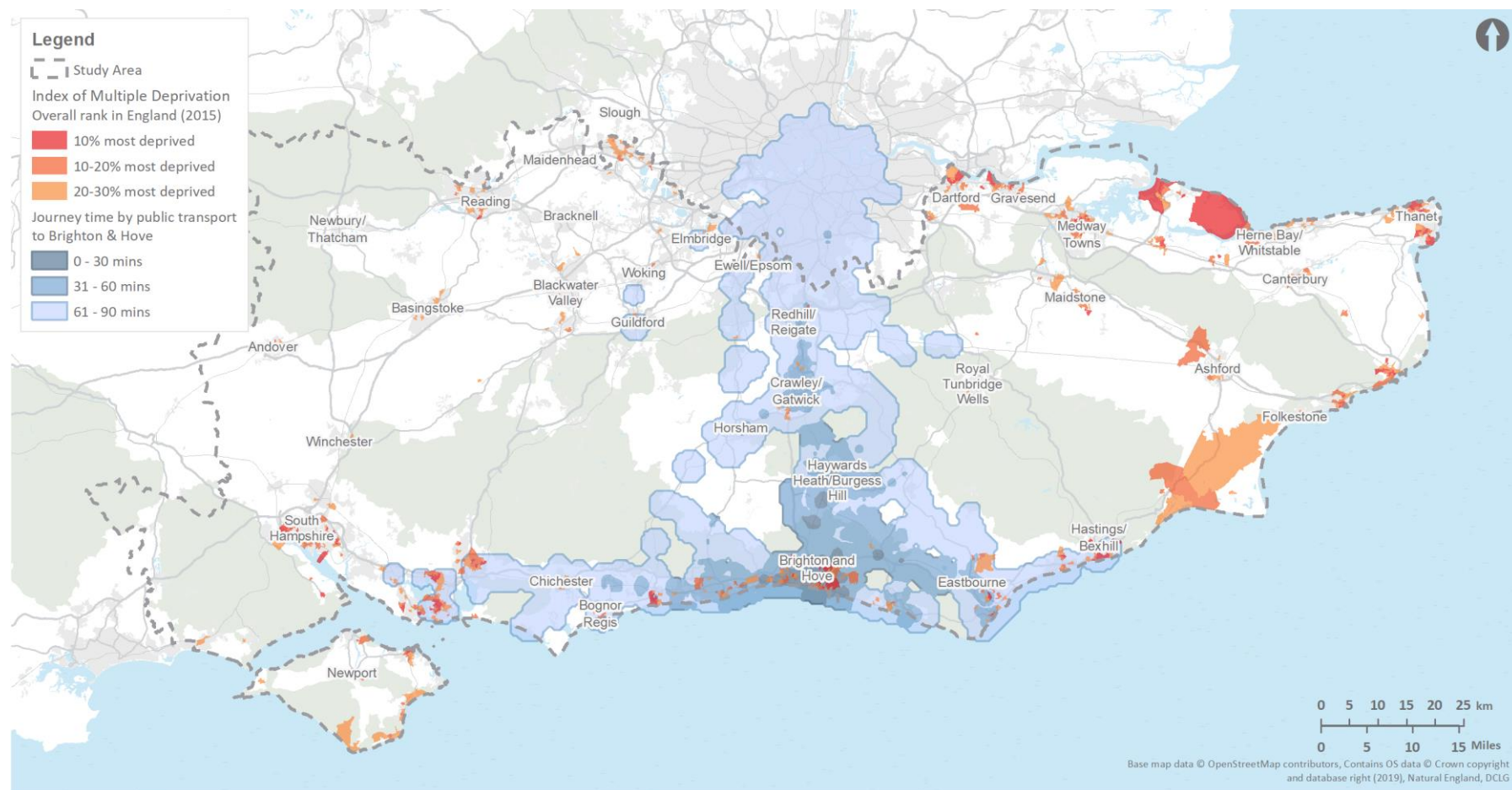


Figure 5.5: Deprived areas and journey times to Brighton (TRACC data, English Indices of Multiple Deprivation, 2015)



6 Summary and Conclusion

Concluding Remarks

- 6.1 This Technical Report has analysed the key characteristics of travel to work flows in the South East area. It has identified several issues that are driving unsustainable travel patterns:
1. **There is a mismatch between highly skilled workers and their jobs** in many Major Economic Hubs, which drives commuting, often over long distances;
 2. **Many Major Economic Hubs have large, relatively 'round' travel to work catchments**, meaning car mode share is high on these flows;
 3. **Many Major Economic Hubs have low levels of self-containment**, where there is a significant imbalance between the populations that work and live in the same hub;
 4. **There is poor public transport provision and/or awareness** affecting some of the highest travel to work flows in the South East area, which is driving high car use;
 5. **Some planned future development is likely to drive unsustainable travel outcomes**, particularly at remote sites located some distance from public transport hubs, employment sites, educational institutions, and town centres; and
 6. **Many of the most deprived areas in the South East suffer from poor Regional Connectivity.**
- 6.2 This Technical Report has identified opportunities to drive more sustainable outcomes by:
1. **Improving public transport mode share** through improving services on corridors that currently have poor public transport provision and/or through promoting public transport services that already provide a good service but have a relatively low mode share;
 2. **Increasing walking and cycling mode share** through investing in infrastructure and campaigns, particularly in Major Economic Hubs with high levels of self-containment, (which have a high proportion of journeys to work over short distances); and
 3. **Improving regional connectivity to coastal communities to create a more equitable South East**, as many of the most deprived areas in the South East are also among the least well connected to London and the rest of the country.
- 6.3 A summary of the transport opportunities, spatial planning considerations, and social challenges highlighted in this study for each Major Economic Hub is provided in Table 6.1.

Next Steps

- 6.4 Transport for the South East is currently consulting on a Draft Transport Strategy, which highlights many of the challenges described in this Technical Report. This Transport Strategy will be followed by five **Area Studies**, which will analyse the issues and opportunities of each corridor and Major Economic Hub in the South East area in more detail. These studies will provide an opportunity to explore some of the issues described in this Technical Note at a more granular level. In particular, they will focus on some of the issues and opportunities identified in this study. In doing so, they will help identify initiatives to enable the South East to become one of the leading global regions for sustainable development.

Table 6.1: Summary of transport opportunities, spatial planning considerations and social challenges for each Major Economic Hub

Major Economic Hub	Transport Opportunities	Spatial Planning Considerations	Social Challenges
Andover	<ul style="list-style-type: none"> There are opportunities to increase active travel and public transport mode share in this Major Economic Hub. There are no major travel to work flows centred on this Major Economic Hub. 	<ul style="list-style-type: none"> Most development is planned on the outskirts of the town, which does not lend itself well to active travel. That said, new bus routes are being established to serve some new developments, which should encourage public transport use. This Major Economic Hub is expected to become less self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.
Ashford	<ul style="list-style-type: none"> There are opportunities to increase active travel and public transport mode share in this Major Economic Hub. Public transport mode share between Ashford and Folkestone is low despite good public transport provision on this route. 	<ul style="list-style-type: none"> This is one of the fastest growing towns in the South East area. Most development is planned for the south of the town (which is not conducive to active travel) and around the international railway station, which has an excellent service to London (but is becoming increasingly crowded). Significant employment growth is also planned for this town, which should limit the need for new residents to seek employment elsewhere. Recent improvements to the Strategic Road Network (e.g. M20 Junction 10a) and local roads should ensure highway capacity is able to accommodate this growth. This Major Economic Hub is expected to become more self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.
Basingstoke	<ul style="list-style-type: none"> There are opportunities to increase active travel and public transport mode share in this Major Economic Hub. Public transport mode share between: <ul style="list-style-type: none"> – Basingstoke and Reading; and – Blackwater Valley and Basingstoke is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> This is also one of the fastest growing towns in the South East area. Approximately half of the future development sites are within walking/cycling distance of the town centre, future major employment sites, and/or the public transport network. That said, some of the more peripheral developments are a long way from the Town Centre, which suggests there will be a higher dependency on car travel for new residents. This Major Economic Hub is expected to become more self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.

Major Economic Hub	Transport Opportunities	Spatial Planning Considerations	Social Challenges
Blackwater Valley	<ul style="list-style-type: none"> There are opportunities to increase active travel and public transport mode share in this Major Economic Hub. Public transport mode share between: <ul style="list-style-type: none"> – Blackwater Valley and Bracknell; & – Blackwater Valley and Hillingdon is low and public transport is uncompetitive on this corridor. Public transport mode share between: <ul style="list-style-type: none"> – Blackwater Valley and Basingstoke; – Blackwater Valley and Guildford; – Blackwater Valley and Fleet; – Blackwater Valley and Reading; & – Blackwater Valley and Woking is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most housing development in this area is planned close to future major employment sites and the public transport network (notably near railway stations). That said, the highway network is already under significant pressure in this area and future developments risk exacerbating congestion on the A31 and M3. This Major Economic Hub is expected to become less self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.
Bognor Regis	<ul style="list-style-type: none"> There are opportunities to increase public transport mode share in this Major Economic Hub. Public transport mode share between Bognor Regis and Chichester is low and public transport is uncompetitive on this corridor. Public transport mode share between Bognor Regis and Brighton and Hove is low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Approximately half of planned developments will occur in locations accessible to the town centre/public transport sites by walking/cycling. However, other developments are planned on the periphery of this Major Economic Hub, which risks placing additional demand on the (already strained) local highway network. 	<ul style="list-style-type: none"> Educational attainment levels are relatively low in this Major Economic Hub.
Bracknell	<ul style="list-style-type: none"> There are opportunities to increase public transport mode share in this Major Economic Hub. Public transport mode share between: <ul style="list-style-type: none"> – Bracknell and Sandhurst; and – Bracknell and Blackwater Valley is low and public transport is uncompetitive on this corridor. Public transport mode share between: <ul style="list-style-type: none"> – Bracknell and Reading; and – Bracknell and Sandhurst is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most development is planned on the periphery of the town, although many developments will be served by existing bus routes. There is a risk this development will place more strain on the Strategic Road Network (M4) and Major Road Network (A329). 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.

Major Economic Hub	Transport Opportunities	Spatial Planning Considerations	Social Challenges
Brighton and Hove	<ul style="list-style-type: none"> In general, public transport mode share is high on most flows of the journey to work flows centred on this Major Economic Hub. Active travel is also high. Public transport mode share between Bognor Regis and Saltdean/ Woodingdean is low and public transport is uncompetitive on this corridor. Public transport mode share between: <ul style="list-style-type: none"> – Brighton and Bognor Regis; – Brighton and Eastbourne; – Brighton and Haywards Heath/Burgess Hill; – Brighton and Horsham; and – Brighton and Peacehaven is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most development is concentrated on public transport corridors close to shops, services, and employment areas. While there is a risk these developments will add some pressure on the local highway network, they should be well served by bus, rail, and active travel corridors. 	<ul style="list-style-type: none"> There are pockets of significant deprivation in this Major Economic Hub (although overall unemployment and education indicators are around average for the South East area).
Canterbury	<ul style="list-style-type: none"> There are opportunities to increase public transport mode share in this Major Economic Hub. Public transport mode share between Canterbury and Thanet is low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Development here will mostly occur over 3km away from Canterbury East station. However, developers have proposed improvements to the public transport network, such as better bus priority measures. The local highway network is already under strain and risks coming under more pressure as the local population grows. 	<ul style="list-style-type: none"> Unemployment is above average in this Major Economic Hub.
Chichester	<ul style="list-style-type: none"> There are opportunities to increase public transport mode share in this Major Economic Hub. Public transport mode share between Chichester and Bognor Regis is low and public transport is uncompetitive on this corridor. Public transport mode share between Chichester and Portsmouth is low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most housing development is on the periphery of Chichester urban area, although some development is located within feasible walking/cycling distance of the train station/town centre. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.
Crawley Gatwick	<ul style="list-style-type: none"> In general, public transport mode share is high on most of the key journey to work flows centred on this Major Economic Hub. Public transport mode share between: <ul style="list-style-type: none"> – Crawley/Gatwick and Redhill/Reigate; – Crawley/Gatwick and Haywards Heath/Burgess Hill is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most housing development in the city centre/within walking and cycling distance of public transport. However, the local highway network is already under significant strain and any future development risks placing additional pressure on these roads (and the Strategic Road Network). This Major Economic Hub is expected to become more self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.

Major Economic Hub	Transport Opportunities	Spatial Planning Considerations	Social Challenges
Dartford	<ul style="list-style-type: none"> In general, public transport mode share is high on most flows centred on this Major Economic Hub. Public transport mode share between: <ul style="list-style-type: none"> – Dartford and Bromley; and – Dartford and Greenwich is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most development planned for Dartford is either in the built-up area or in large new communities, such as Ebbsfleet Valley, which will be very well served by public transport. There is, however, a risk that development will place additional strain on the heavily congested M25 and Dartford Crossing. This Major Economic Hub is expected to become more self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are high levels of deprivation in this Major Economic Hub, including: <ul style="list-style-type: none"> – Relatively low educational attainment levels; and Above average unemployment.
Eastbourne	<ul style="list-style-type: none"> There are opportunities to increase active travel and public transport mode share in this Major Economic Hub. In general, public transport mode share is moderate/high on most flows centred on this Major Economic Hub. Public transport mode share between Eastbourne and Hastings/Bexhill is low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most housing development planned within walking/cycling distance of public transport sites and the town centre. However, there is a risk this development will place additional pressure on the Strategic Road Network (e.g. A27 and A259). 	<ul style="list-style-type: none"> There are high levels of deprivation in this Major Economic Hub, including: <ul style="list-style-type: none"> – Relatively low educational attainment levels; and – Above average unemployment. This Major Economic Hub has relatively poor levels of connectivity to London and other parts of the South East area.
Elmbridge	<ul style="list-style-type: none"> Public transport mode share between Elmbridge and Kingston upon Thames is low and public transport is uncompetitive on this corridor. Public transport mode share between Elmbridge and Woking is low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most development is planned in built up urban areas and will therefore have good walking and cycling access to the public transport network and/or local amenities. This Major Economic Hub is expected to see a significant decrease in self-containment, which suggests there will be more out-commuting in the future. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.
Epsom Ewell	<ul style="list-style-type: none"> There are opportunities to increase public transport mode share in this Major Economic Hub. Public transport mode share between Epsom/Ewell and Kingston upon Thames is low and public transport is uncompetitive on this corridor. Public transport mode share between Epsom/Ewell and Sutton is low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Future developments will be situated within walking/cycling distance of Epsom train station. However, several developments are located near the A24, which risks adding strain to this congested road. This Major Economic Hub is expected to become more self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.

Major Economic Hub	Transport Opportunities	Spatial Planning Considerations	Social Challenges
Folkestone	<ul style="list-style-type: none"> There are opportunities to increase public transport mode share in this Major Economic Hub. Public transport between Folkestone and Hawkinge is uncompetitive on this corridor (although public transport mode share is relatively high on this route). Public transport mode share between Folkestone and Ashford is low despite good public transport provision on this route. 	<ul style="list-style-type: none"> More than half of the major development sites are located beyond walking/cycling distance from the town centre/public transport network. There is a risk that many new residents will be highly dependent on the car. This Major Economic Hub is expected to become less self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are high levels of deprivation in this Major Economic Hub, including: <ul style="list-style-type: none"> Relatively low educational attainment levels; and Above average unemployment.
Gravesend	<ul style="list-style-type: none"> There is just one major travel to work flow centred on this Major Economic Hub (Gravesend to Dartford). Public transport mode share is high on this route. 	<ul style="list-style-type: none"> Most housing development planned close to future major employment sites, urban amenities and public transport hubs, which bodes well for public and active travel transport. Significant development is planned to the west of the town, but this will be well served by public transport. 	<ul style="list-style-type: none"> There are high levels of deprivation in this Major Economic Hub, including: <ul style="list-style-type: none"> Relatively low educational attainment levels; and Above average unemployment.
Guildford	<ul style="list-style-type: none"> There are opportunities to increase active travel mode share in this Major Economic Hub. In general, public transport mode share is high on most of the key journey to work flows centred on this Major Economic Hub. Public transport mode share between: <ul style="list-style-type: none"> Guildford and Aldershot; and Guildford and Farnborough is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most housing development planned close to future major employment sites, the town centre and public transport sites. This should encourage public and active transport. However, there is a risk this development will add further pressure to the Strategic Road Network (A3), which already experiences significant congestion during peak hours. This Major Economic Hub is expected to become more self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.
Hastings Bexhill	<ul style="list-style-type: none"> There are opportunities to increase active travel and public transport mode share in this Major Economic Hub. Public transport mode share between Hastings/Bexhill and Eastbourne is low despite relatively good public transport provision on this route. 	<ul style="list-style-type: none"> While some development in Hastings will be located near the railway station, most will occur on the perimeter, quite far from the town centre. In Bexhill, development is also quite far from the town centre. This does not bode well for public and active transport. There is also a risk that future development will place additional pressure on the (already constrained) Major Road Network in this area. 	<ul style="list-style-type: none"> There are high levels of deprivation in this Major Economic Hub, including: <ul style="list-style-type: none"> Relatively low educational attainment levels; and Above average unemployment. This Major Economic Hub has relatively poor levels of connectivity to London and other parts of the South East area.

Major Economic Hub	Transport Opportunities	Spatial Planning Considerations	Social Challenges
Haywards Heath Burgess Hill	<ul style="list-style-type: none"> There are opportunities to increase active travel and public transport mode share in this Major Economic Hub. Public transport mode share between: <ul style="list-style-type: none"> – Haywards Heath/Burgess Hill and Crawley/Gatwick; and – Haywards Heath/Burgess Hill and Brighton and Hove is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Significant development is planned for this Major Economic Hub, which risks placing additional pressure on the local highway network (including the Major Road and Strategic Road Network). That said, most of this development planned for this area will occur within reasonable walking/cycling distance of the public transport network/urban amenities. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.
Herne Bay Whitstable	<ul style="list-style-type: none"> There are opportunities to increase active travel and public transport mode share in this Major Economic Hub. There is just one major travel to work flow centred on this Major Economic Hub (Herne Bay/Whitstable to Canterbury). Public transport mode share is relatively high on this route. 	<ul style="list-style-type: none"> The majority of this development will occur within reasonable walking/cycling distance of the public transport network and town centre. This development should have a minimal impact on the Major Road Network. 	<ul style="list-style-type: none"> There are relatively low educational attainment levels in this Major Economic Hub.
Horsham	<ul style="list-style-type: none"> There are opportunities to increase active travel and public transport mode share in this Major Economic Hub. In general, public transport mode share is moderate/high on most of the key journey to work flows centred on this Major Economic Hub. Public transport mode share between Horsham and Brighton and Hove is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most future development planned within walking distance of key amenities and transport hubs. While these may add some strain to the A24 and A264, these roads are currently relatively uncongested and should be able to accommodate this growth. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.
Maidenhead	<ul style="list-style-type: none"> There are opportunities to increase public transport mode share in this Major Economic Hub. In general, public transport mode share is high on all of the key journey to work flows centred on this Major Economic Hub. 	<ul style="list-style-type: none"> The housing development planned for this area is located close to a major railway station and along a busy bus corridor. The employment development is somewhat more remote, however. There is a risk these developments will add pressure to the (already congested) M4 Strategic Road. This Major Economic Hub is expected to become less self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.

Major Economic Hub	Transport Opportunities	Spatial Planning Considerations	Social Challenges
Maidstone	<ul style="list-style-type: none"> There are opportunities to increase active travel and public transport mode share in this Major Economic Hub. The bus service on this corridor is relatively fast, however, the highway between Maidstone and Medway is also fast and is therefore more competitive than bus. Public transport mode share between: <ul style="list-style-type: none"> – Maidstone and Ditton; and – Maidstone and the Medway Towns (Rochester, Chatham and Gillingham) is low and public transport is uncompetitive on this corridor. 	<ul style="list-style-type: none"> Some development is planned for locations within reasonable walking/cycling distances from the town centre, which should encourage active travel and public transport use. However, some of the more peripheral development risks adding pressure to the Strategic and Major Road networks. 	<ul style="list-style-type: none"> Unemployment is above average in this Major Economic Hub.
Medway Towns	<ul style="list-style-type: none"> There are opportunities to increase active travel and public transport mode share in this Major Economic Hub. Public transport mode share between the Medway Towns and Maidstone/Ditton is low and public transport is uncompetitive on this corridor (see above). Public transport mode share is high between the Medway Towns and Sittingbourne. Public transport mode share between the Medway Towns and Dartford is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Development planned for Rochester and Gillingham is located near railway stations and on public transport corridors, which should encourage active travel and public transport. That said, development planned for the Hoo Peninsula is much further away from public transport hubs, commercial zones and employment areas. This risks encouraging higher dependency on car transport. This Major Economic Hub is expected to become more self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are high levels of deprivation in this Major Economic Hub, including: <ul style="list-style-type: none"> – Relatively low educational attainment levels; and – Above average unemployment.
Newbury Thatcham	<ul style="list-style-type: none"> There are opportunities to increase active travel and public transport mode share in this Major Economic Hub. Public transport mode share between the Newbury/Thatcham and Reading is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most development close to Newbury station, except for one major development site 2.5km to the south. These may add some strain to the A339 and the A4. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.

Major Economic Hub	Transport Opportunities	Spatial Planning Considerations	Social Challenges
Newport	<ul style="list-style-type: none"> There are opportunities to increase public transport mode share in this Major Economic Hub. Public transport mode share between: <ul style="list-style-type: none"> – Newport and Cowes; and – Newport and Ryde is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most future development within walking/cycling distance of the town centre. The largest site is located near to a major bus route. 	<ul style="list-style-type: none"> There are high levels of deprivation in this Major Economic Hub, including: <ul style="list-style-type: none"> – Relatively low educational attainment levels; and – Above average unemployment. This Major Economic Hub has relatively poor levels of connectivity to London and other parts of the South East area.
Reading	<ul style="list-style-type: none"> Public transport mode share is high on the remaining key journey to work flows focussed on this Major Economic Hub. Public transport mode share between: <ul style="list-style-type: none"> – Reading and Basingstoke; – Reading and Bracknell; – Reading and Blackwater Valley; – Reading and Farnborough; – Reading and Hillingdon; – Reading and Maidenhead; – Reading and Newbury/Thatcham; and – Reading and Yateley. is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Development in the centre is close to Reading railway station. Development to the south is far from the nearest public transport hubs such as Reading railway station. Development planned to the south of Reading risks adding pressure to (the already constrained) A33 highway. This Major Economic Hub is expected to become more self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.
Redhill Reigate	<ul style="list-style-type: none"> Public transport mode share between: <ul style="list-style-type: none"> – Redhill/Reigate and Crawley/Gatwick; and – Redhill/Reigate and Croydon (whole London borough). is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most future development is planned within walking and/or cycling distance of employment sites, amenities and public transport hubs. There is a risk these developments will add pressure to the A23. This Major Economic Hub is expected to become more self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.

Major Economic Hub	Transport Opportunities	Spatial Planning Considerations	Social Challenges
Royal Tunbridge Wells	<ul style="list-style-type: none"> Public transport mode share is high on all of the key journey to work flows centred on this Major Economic Hub. 	<ul style="list-style-type: none"> Most future development is planned within walking and/or cycling distance of employment sites, amenities and public transport hubs. This Major Economic Hub is expected to become less self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.
Slough	<ul style="list-style-type: none"> There are opportunities to increase public transport mode share in this Major Economic Hub. In general, public transport mode share is moderate/high on most of the key journey to work flows centred on this Major Economic Hub. Public transport mode share between Slough and Hounslow is low and public transport is uncompetitive on this corridor. Public transport mode share between: <ul style="list-style-type: none"> Slough and Hillingdon; and Slough and Ealing. is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most future development is planned within walking and/or cycling distance of employment sites, amenities and public transport hubs. However, these developments risk adding pressure to the (already congested) A4 highway. 	<ul style="list-style-type: none"> There are high levels of deprivation in this Major Economic Hub, including: <ul style="list-style-type: none"> Relatively low educational attainment levels; and Above average unemployment.

Major Economic Hub	Transport Opportunities	Spatial Planning Considerations	Social Challenges
South Hampshire	<p>Journey to work flows for this Major Economic Hub have broken down into constituent communities. In general, there are significant opportunities to improve public transport and active travel mode share across this area.</p> <p>Southampton</p> <ul style="list-style-type: none"> Public transport (PT) share between: <ul style="list-style-type: none"> – Southampton and Hedge End; and – Southampton and Totton is low and PT is uncompetitive. Public transport mode share between: <ul style="list-style-type: none"> – Southampton and Eastleigh; – Southampton and Locks Heath/Warsash/Whiteley; – Southampton and Portsmouth; and – Southampton and Winchester. is low despite good PT provision. <p>Portsmouth</p> <ul style="list-style-type: none"> Public transport mode share between: <ul style="list-style-type: none"> – Portsmouth and Horn Dean; – Portsmouth and Locks Heath/Warsash/Whiteley; and – Portsmouth and South Hayling. is low and PT is uncompetitive. Public transport mode share between: <ul style="list-style-type: none"> – Portsmouth and Chichester; – Portsmouth and Emsworth; and – Portsmouth and Fareham. is low despite good PT provision. <p>Other areas</p> <ul style="list-style-type: none"> Public transport mode share between: <ul style="list-style-type: none"> – Eastleigh and Totton; – Gosport and Locks Heath/Warsash/Whiteley; – Havant and Horndean; – Havant and South Hayling; and – Stubbington and surrounding areas. is low and PT is uncompetitive. 	<ul style="list-style-type: none"> Most development will occur on public transport corridors and near public transport hubs (such as Southampton railway station). There is also a significant level of brownfield site regeneration in Portsmouth. That said, these developments are likely to add strain to the M27 and other strategic and major roads in this area, which already experience serious congestion, notably around major intersections. 	<ul style="list-style-type: none"> There are several areas within the South Hampshire conurbation where there are high levels of deprivation including: <ul style="list-style-type: none"> – Relatively low educational attainment levels; and Above average unemployment.

Major Economic Hub	Transport Opportunities	Spatial Planning Considerations	Social Challenges
Thanet	<ul style="list-style-type: none"> There are opportunities to increase active travel and public transport mode share in this Major Economic Hub. Public transport mode share between: <ul style="list-style-type: none"> – Thanet and Canterbury; and – Thanet and Minster. is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> A significant amount of development will occur in locations that are beyond reasonable walking/cycling distance from the town centre and/or public transport hubs. There is a risk these developments will pressure strain to the A28 or the A299 (although the latter road is relatively uncongested). This Major Economic Hub is expected to become more self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are high levels of deprivation in this Major Economic Hub, including: <ul style="list-style-type: none"> – Relatively low educational attainment levels; and – Above average unemployment This Major Economic Hub has relatively poor levels of connectivity to London and other parts of the South East area.
Winchester	<ul style="list-style-type: none"> There are opportunities to increase public transport mode share in this Major Economic Hub. Public transport mode share between: <ul style="list-style-type: none"> – Winchester and Eastleigh; and – Winchester and Southampton is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most development will occur in locations with are within a reasonable distance of the town centre/public transport hubs (e.g. Winchester railway station). This Major Economic Hub is expected to become more self-contained, which suggests commuting trips outside this Major Economic Hub will increase. 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.
Woking	<ul style="list-style-type: none"> In general, public transport mode share is high on most of the key journey to work flows centred on this Major Economic Hub. Public transport mode share between: <ul style="list-style-type: none"> – Woking and Blackwater Valley; – Woking and Farnborough; and – Woking and Elmbridge. is relatively low despite good public transport provision on this route. 	<ul style="list-style-type: none"> Most future development is planned within walking and/or cycling distance of employment sites, amenities and public transport hubs (e.g. Woking railway station). 	<ul style="list-style-type: none"> There are no major issues with deprivation in this Major Economic Hub.

A Appendix

Standard Industrialisation Codes for Priority Industrial Sector

Sector	SIC Code/s
Data and IT	62 : Computer programming, consultancy and related activities
	63 : Information service activities
Engineering and architecture	71 : Architectural and engineering activities; technical testing and analysis
	43 Civil Engineering
Finance and insurance	64 : Financial service activities, except insurance and pension funding
	65 : Insurance, reinsurance and pension funding, except compulsory social security
	66 : Activities auxiliary to financial services and insurance activities
Transport and logistics	49 : Land transport and transport via pipelines
	50 : Water transport
	51 : Air transport
	52 : Warehousing and support activities for transportation
	53 : Postal and courier activities
Marine and maritime	50 : Water transport
	30.1 Shipbuilding
	33.15 Repair of ships
Tourism	55 : Accommodation
	56 : Food and beverage service activities
	93 : Sports activities and amusement and recreation activities
Advanced manufacturing	20 : Manufacture of chemicals and chemical products
	21 : Manufacture of basic pharmaceutical products and pharmaceutical preparations
	26 : Manufacture of computer, electronic and optical products
	27 : Manufacture of electrical equipment
	28 : Manufacture of machinery and equipment n.e.c.
	29 : Manufacture of motor vehicles, trailers and semi-trailers
	30 : Manufacture of other transport equipment
	33 : Repair and installation of machinery and equipment
Low carbon environmental	36 : Water collection, treatment and supply
	37 : Sewerage
	38 : Waste collection, treatment and disposal activities; materials recovery
	35 : Electricity, gas, steam and air conditioning supply
	74.901 Environmental Consulting
	29 Motor Vehicles
	28 Manufacture of Machinery
	24.46 Processing of Nuclear Fuel
	39 Waste Remediation
Biosciences	21 : Manufacture of basic pharmaceutical products and pharmaceutical preparations
Creative Industries	90 : Creative, arts and entertainment activities
	91 : Libraries, archives, museums and other cultural activities

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