# Appendix 7.2 ◆ Detailed Baseline

## INTRODUCTION

7.2.1 **Chapter 7: Land use and socio-economics** reports the existing socio-economic and employment conditions relevant to the study areas of the London Resort, and assesses the impact of the London Resort upon those baseline conditions.

7.2.2 However, it is important to outline the baseline conditions in more detail than **Chapter 7: Land use and socio-economics**. This appendix reviews the baseline conditions at a more detailed geography and presents additional metrics and industry specific data.

7.2.3 This appendix follows the same structure as the baseline presented in the chapter, where data relevant to each effect is listed in order of the effects assessed. **Chapter 7: Land use and socio-economics** concludes on the sensitivity of each receptor relevant to each effect, that sensitivity is not repeated in this appendix.

7.2.4 The study areas are consistent with that presented in the main chapter, as shown in Table 7.2.1 below. Notably, the listed study area abbreviations are used throughout the appendix.

**Table 7.2.1 Study areas considered in the London Resort**

| Geographical Study Area | Definition | Rationale |
|---|---|---|
| The Project Site Boundary (PSB) | The DCO Order Limits. Refer to Figure 7.1 in Chapter 7 for a map of the PSB | The PSB study area is used for effects which are at the Project Site level. It is used for the assessment of displacement / loss of businesses. |
| Community Impact Area (CIA) | A 500m radius around the PSB | The CIA is used to assess the displacement / loss of community uses, such as open spaces, public rights of way and other recreational or community facilities as the community uses affected will be in or near the Project Site. |
| Dartford | The borough boundary of Dartford local authority | The Dartford dwelling requirements are used to assess the impact of the displacement of dwellings as a result of property acquisition on the Dartford housing market |
| Core Study Area (CSA) | Dartford, Gravesham and Thurrock (local authorities) | The three local authorities that the Project Site falls within. Many of the effects are expected at the CSA. |
| Sub-Regional Context Area[1] (SRCA) | Kent and Medway, Essex, Thurrock (combination of districts) | This study area is presented in the baseline for context but is not used to assess the significance of any effects. |
| Labour | A 60-minute travel time | 60-minutes is considered a reasonable |

[1] Defined as county / unitary authorities to be consistent with ONS statistical data releases.

| Geographical Study Area | Definition | Rationale |
|---|---|---|
| Catchment Area (LCA) | (car or public transport) to the site[2]. | commuter time for an employee. This study area is used to assess employment effects given it is likely that the majority of workers will come from within this study area. |
| Regional Context Area (RCA) | South East, East and London | This study area is presented in the baseline predominantly for context. This area is used to assess the significance of one effect – trade diversion from other theme parks. This is because the majority of other top theme parks in the UK are also located within the RCA. |
| National Area | England, Great Britain, United Kingdom (depending on data source availability) | Due to the nationally significant nature of the London Resort, some socio-economic effects need to be considered at a national level. |

## CONSTRUCTION PHASE

### Employment generation and effects on businesses in the supply chain

7.2.5 The London Resort is expected to support a large construction workforce. To understand the impact of this, it is important to understand the existing construction employment and construction workforce availability.

#### *Number and proportion of construction workers*

7.2.6 In 2019, there were 17,300 working age residents in the CSA that were employed in construction; 8.5% of the total residential workforce. The LCA had 361,000 residents employed in the construction workforce, accounting for 3.8% of the residential workforce. Within the LCA, the largest individual supply of construction workers of any Local Authority within 60-minutes of London Resort is in Newham. Newham is home to 20,300 construction workers[3] and has an average peak hour commute time to the Project Site of 33-minutes by car and 44-minutes by public transport.

7.2.7 By comparison, the SRCA had 9.3% of its total workforce employed in construction, the RCA had 7.4% and the UK had 7.2%, showing that the local study areas have a higher prevalence of construction workers than the larger / further afield study areas. This is

[2] Travel time data for car and transit modes of travel are sourced from the Google Maps distance matrix API. For PT travel times, Ebbsfleet International or Tilbury (whichever is closer for each MSOA) is taken as the end point of the journey. It has then been assumed that the onward transfer from Ebbsfleet and Tilbury to the site will take 10 minutes. These assumptions have been made in order to provide more realistic commutable labour market zones for consideration, because the travel time from both Ebbsfleet and Tilbury to the site will be considerably improved in the Future Baseline as a result of the scheme. The simplistic assumptions made here are illustrative at this stage (although deemed likely to be materially appropriate for these purposes) and may be refined for the ES.

[3] ONS, Annual Population Survey, 2019

likely to reflect the scale of construction activity that has taken place in these areas historically, placing a larger requirement for a construction workforce, and making the construction profession more attractive to residents.

**Table 7.2.2 Working age residents employed in construction, January to December 2019**

| | Working age residents employed in construction | Total workforce | % of employed residents working in construction |
|---|---|---|---|
| CSA | 17,300 | 203,000 | 8.5% |
| SRCA | 161,000 | 1,723,100 | 9.3% |
| LCA | 390,000 | 4,330,600 | 8.3% |
| RCA | 913,700 | 12,396,300 | 7.4% |
| UK | 2,335,900 | 32,551,900 | 7.2% |

*Source: ONS, Annual Population Survey, 2019; Volterra calculations*

***Sub sectors of construction employment***

7.2.8 In 2018, the LCA had 221,500 workplace based construction workers and the CSA had 13,010 workplace based construction workers – accounting for 4.5% and 7.8% of the LCA and CSA total workplace based workers respectively. 27% of these worked in electrical, plumbing and other construction installation activities. A further 24% worked in the construction of residential and non-residential buildings. These two subsectors were the largest in terms of construction employment in the SRCA, LCA, RCA and GB. The CSA appears to have a large proportion of their workplace construction workforce employed in other specialised construction activities (19%) compared to the SRCA, LCA, RCA and National levels (13%, 8%, 8% and 11% respectively).

**Table 7.2.3 Construction sub-sector employment, 2018**

| | CSA | | SRCA | LCA | | RCA | GB |
|---|---|---|---|---|---|---|---|
| Electrical, plumbing and other construction installation activities | 3,500 | 27% | 28% | 53,000 | 24% | 25% | 26% |
| Construction of residential and non-residential buildings | 3,100 | 24% | 23% | 64,000 | 29% | 28% | 24% |
| Building completion and finishing | 1,900 | 14% | 16% | 32,000 | 14% | 16% | 16% |
| Construction of other civil engineering projects | 600 | 4% | 6% | 16,000 | 7% | 8% | 9% |
| Development of building projects | 500 | 4% | 7% | 26,000 | 12% | 10% | 7% |
| Construction of roads and railways | 200 | 2% | 5% | 8,500 | 4% | 4% | 4% |
| Demolition and site preparation | 800 | 6% | 2% | 3,000 | 1% | 1% | 2% |

| | CSA | | SRCA | LCA | | RCA | GB |
|---|---|---|---|---|---|---|---|
| Construction of utility projects | 30 | 0% | 0% | 800 | 0% | 1% | 1% |
| Other specialised construction activities n.e.c. | 2,500 | 19% | 13% | 18,500 | 8% | 8% | 10% |
| Total construction workforce | **13,000**[4] | **100%** | **100%** | **221,500** | **100%** | **100%** | **100%** |
| Total workforce | **163k** | | **1.4m** | **4.9m** | | **12.4m** | **30.8m** |
| % of total workforce employed in construction | **7.8%** | | **6.8%** | **4.5%** | | **4.7%** | **4.8%** |

*Source: ONS, Business Register and Employment Survey, 2018.*

### *Construction business counts by size*

7.2.9 In 2019, there were 3,200 construction firms in the CSA, accounting for 22% of all firms. This is a higher proportion than the SRCA (19%) and substantially higher than the regional and national comparators (13%).

**Table 7.2.4 Construction business counts, 2019**

| | Construction firms | All firms | Proportion of all firms |
|---|---|---|---|
| CSA | 3,200 | 14,800 | 22% |
| SRCA | 26,600 | 143,500 | 19% |
| RCA | 154,700 | 1,208,900 | 13% |
| UK | 343,700 | 2,718,400 | 13% |

*Source: ONS, UK Business Counts, 2019. Note: due to data availability, LCA estimates have been excluded due to unreliable data. An approximation will be investigated further for DCO application.*

7.2.10 In 2019, 96% of construction firms in the CSA were micro firms (firms with less than 10 employees), broadly in line with the SRCA, RCA and UK comparators (95.4%, 95.6% and 94.4% respectively). The CSA has a slightly smaller proportion of medium firms (0.3%) compared to the other geographies, but 0.2% of firms are large firms, compared to 0.1% in all other geographies.

**Table 7.2.5 Construction businesses by size (number of employees), 2019**

| | CSA | SRCA | LCA | RCA | UK |
|---|---|---|---|---|---|
| Micro (0 to 9) | 96.0% | 95.4% | 96.0% | 95.6% | 94.4% |
| Small (10 to 49) | 3.6% | 4.0% | 3.5% | 3.8% | 4.9% |
| Medium (50 to 249) | 0.3% | 0.5% | 0.5% | 0.4% | 0.6% |
| Large (250+) | 0.2% | 0.1% | 0.1% | 0.1% | 0.1% |

[4] Due to rounding in the original datasets, this total does not match that of Table 7.2.2

*Source: ONS, UK Business Counts, 2019*

### *Mobility*

7.2.11 The construction workforce is known for being highly mobile compared to other industries. CITB construction workforce mobility regional reports demonstrate that, in 2018/19, approximately half of workers in the South East and East and approximately a third of workers in London travelled at least 50 miles to work in the 12 months prior to the survey. Construction workers in the South East travelled an average of 27 miles from their residence to work, slightly higher than workers in the East (24 miles) and higher than the UK construction worker average of 18 miles. By comparison, the average commuting distance across England for all commuters was 9.0 miles, 10.5 in the South East, 11.5 in the East and 7.8 in London, highlighting that on average construction workers travel double the distance to work than the average across all industries.[5]

**Table 7.2.6 Construction workforce mobility in the South East, East and London**

| | | South East | East | London | UK |
|---|---|---|---|---|---|
| Proportion of construction workforce who travelled at least 50 miles from their home to work in the last 12 months | | 48% | 52% | 34% | * |
| Proportion of construction workforce who travelled at least 10 miles from their home to work in the last 12 months | | 17% | 15% | 13% | 17% |
| Proportion of construction workforce who are staying in temporary accommodation | | 7% | 5% | 10% | 5% |
| Average commuter distance (miles) | Construction workers | 27 | 24 | 16 | 18 |
| | All Industries (National Travel Survey) | 10.5 | 11.5 | 7.8 | 9.0 (England) |

*Sources: CITB Workforce Mobility and Skills Reports (South East, East of England and Greater London), 2019; National Travel Survey FY18. *denotes missing data.*

### *Workforce availability (unemployment, NEETs, churn, claimants)*

7.2.12 In 2018, there were 7,900 unemployed people in the CSA, equivalent to 3.9% employment rate. This is lower than the unemployment rate recorded across all other geographical comparators. The LCA is estimated to have 251,700 unemployed people at a rate of 4.6%; higher than the national comparator.

**Table 7.2.7 Unemployment and unemployment rate, January to December 2018**

| | Unemployed | % |
|---|---|---|
| CSA | 7,900 | 3.9% |

[5] National Travel Survey, Table NTS2212, FY18

| | Unemployed | % |
|---|---|---|
| SRCA | 67,300 | 4.0% |
| LCA | 251,700 | 4.6% |
| RCA | 503,100 | 4.1% |
| UK | 1,374,600 | 4.3% |

*Source: ONS, Annual Population Survey, 2018*

7.2.13 A young person not in education, employment or training (NEET) provides a potential source of workforce. NEETs are a market which may benefit from the employment and skills initiatives offered by the London Resort. Data is not available at the CSA level, therefore the SRCA is used to proxy the NEET availability. In the three months to February 2019, there was an average of 3,720 16 to 17 year olds in the SRCA that were classified as NEET. The majority of these were in Kent (2,070). The count of NEETs as a proportion of 16 to 17 year olds was 5.1%, which is slightly higher than the RCA (4.9%) and slightly lower than England (5.5%). The proportional representation of NEETs is noticeably higher in Medway (6.9%) and Kent (6.4%).

**Table 7.2.8 NEETs 2018-19**

| | NEETs (aged 16 to 17) | NEETS (as a proportion of 16 to 17 year olds) | Of which known to be NEET | Of which activity not known |
|---|---|---|---|---|
| SRCA | 3,720 | 5.1% | 2.6% | 2.5% |
| *Kent* | *2,070* | *6.4%* | *2.8%* | *3.6%* |
| *Medway* | *440* | *6.9%* | *2.8%* | *4.1%* |
| *Thurrock* | *60* | *1.6%* | *1.6%* | *0.0%* |
| *Essex* | *1,150* | *3.7%* | *2.4%* | *1.3%* |
| RCA | 23,410 | 4.9% | 2.3% | 2.7% |
| England | 61,830 | 5.5% | 2.6% | 2.9% |

*Source: Department for Education, NEET and participation: local authority figures, 2018-2019*

7.2.14 Labour market churn (employees moving from one job to another) is also an indication of the proportion of the workforce that will become available within a given year. As can be seen from 7.2.14 below, the majority of construction workers in all geographies expect to move jobs within the next 12 months.

**Table 7.2.9 Proportion of construction workforce that expected to be at their current job for less than 12 months**

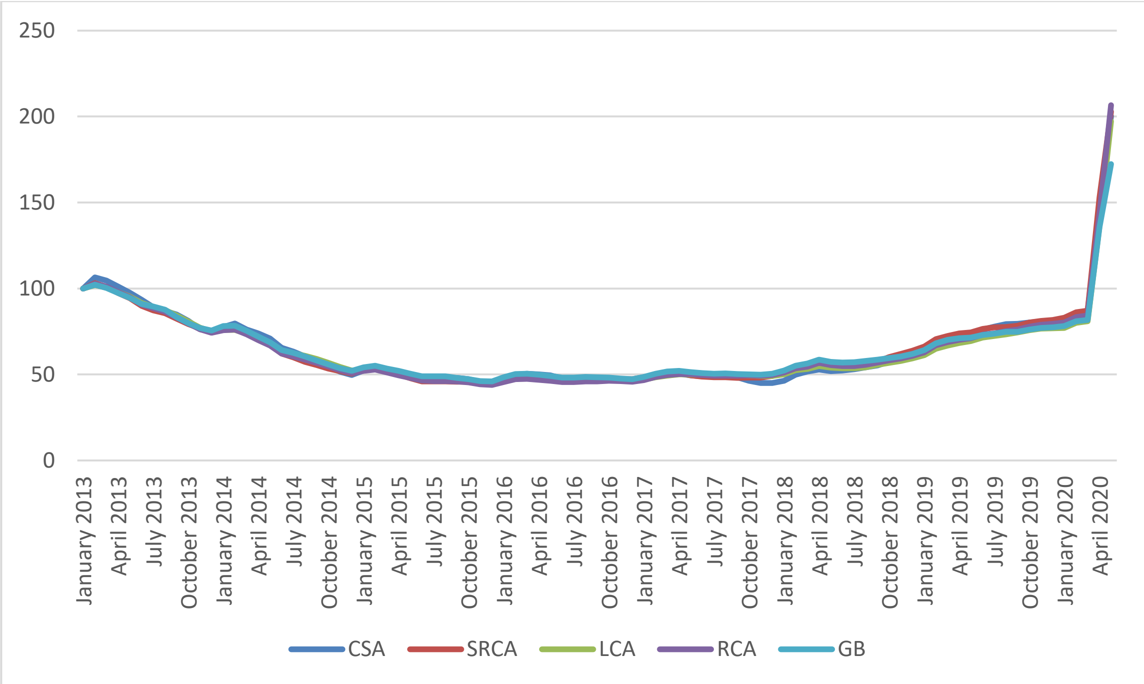
| | South East | East | London | UK |
|---|---|---|---|---|
| Proportion | 67% | 70% | 73% | 66% |

*Source: CITB Workforce Mobility and Skills Reports (South East, East of England and Greater London), 2019*

7.2.15 According to an ONS survey of employment, 30% of construction workers are with a different employer from that which they had 12 months prior and 5% moved from being employed to not in employment within 12 months. This is compared to 29% and 6% across all industries, implying that construction worker annual churn is on par with that of all industries.[6]

7.2.16 Given the recent pandemic, it is important to check that the most recent statistics of certain metrics have not been affected in such a way that they would not be representative of the pre-pandemic state of the baseline. Figure 7.2.1 shows that there has been a pronounced increase in claimants in all geographies since the beginning of 2020. In order to remove the impacts of the pandemic, therefore, average counts from each month in 2019 have been used to inform worker availability.

**Figure 7.2.1 Index of all claimants, January 2013 = 100**




*Source: ONS, Claimant Count, 2013 to 2020*

7.2.17 In 2019, there were an average of 6,000 claimants in the CSA and 51,000 in the SRCA, which includes those claiming jobseekers allowance and unemployment related universal credit. As a proportion of the 16-64 population, claimants account for 2.6% in the CSA and in the LCA, slightly lower than GB level (2.7%) but higher than the SRCA (2.4%) and RCA (2.2%).

**Table 7.2.10 Claimant count, 2019**

| | CSA | SRCA | LCA | RCA | GB |
|---|---|---|---|---|---|
| **All claimants** | **6,000** | **51,000** | **143,000** | **344,000** | **1,101,000** |
| **Proportion of 16-64 year olds** | **2.6%** | **2.4%** | **2.6%** | **2.2%** | **2.7%** |

[6] ONS, Employee turnover levels and rates by industry section, UK, January 2017 to December 2018

*Source: ONS, Claimant Count, 2020; ONS, 2018 Mid-year population estimates*

***Future baseline – construction employment***

7.2.18 In 2019, the Construction Skills Network estimated that 168,500 UK construction jobs would be created between 2019 and 2023, reaching 2.79 million in 2023. This equates to 0.5% annual growth, in line with the whole economy average.[7] The annual growth is extrapolated to 2024 to provide estimates for the peak year of construction. Table 7.2.11 below displays the growth in each relevant region.

**Table 7.2.11 Construction employment growth 2019-2023**

| | Construction jobs required (2019 to 2023) | Total construction jobs 2023 | Growth (2019 – 2023) | Annual growth | 2024 |
|---|---|---|---|---|---|
| South East | 13,200 | 429k | 3.9% | 0.8% | 432k |
| East of England | 24,550 | 250k | 2.0% | 0.4% | 251k |
| Greater London | 17,800 | 453k | 4.8% | 0.9% | 457k |
| UK | 168,500 | 2.79m | 2.6% | 0.5% | 2.8m |

*Source: CITB, Construction Skills Network forecasts 2019-2023, 2019; Volterra calculations.*

7.2.19 Further work will be done for the DCO application submission to consider the possible construction workforce requirements of the Ebbsfleet Garden City and Lower Thames Crossing, as it will be important to consider the combined impact of these three major developments within the future baseline to inform the assessment.

**Labour market, skills and training**

7.2.20 The London Resort will provide a valuable opportunity to raise the qualifications of construction workers, providing upskilling and training opportunities. To assess the impact of this, the existing level of skills and training in the construction labour market need to be understood.

***Resident qualifications***

7.2.21 The qualification levels of the workforce within specific industries are not available. The qualifications of the whole resident workforce therefore provide an indication of likely construction qualifications, since construction workers make up part of the overall residential population. In 2019, only 33% of CSA residents were qualified to NVQ4+ level, comparable to the SRCA (35%) but lower than the RCA (46%) and the UK (40%). Of all CSA residents, 9% had no qualifications- slightly higher than the SRCA and UK levels (8%) and higher than the RCA (7%). These statistics imply that working residents

[7] Construction Skills Network forecasts 2019-2023, 2019

of the CSA are qualified to a lower level than other geographical comparators.

**Table 7.2.12 Resident qualifications, January to December 2019**

| | CSA | SRCA | LCA | RCA | UK |
|---|---|---|---|---|---|
| NVQ4 or above | 33% | 35% | 45% | 46% | 40% |
| NVQ3 or above | 52% | 54% | 61% | 62% | 58% |
| NVQ2 or above | 72% | 73% | 75% | 78% | 76% |
| NVQ1 or above | 83% | 85% | 84% | 87% | 86% |
| Other Qualifications | 7% | 6% | 8% | 7% | 7% |
| No Qualifications | 9% | 8% | 8% | 7% | 8% |

*Source:* **ONS, Annual Population Survey, 2019**

***Workplace qualifications***

7.2.22 Table 7.2.13 below shows qualifications of the whole workforce across the various study areas, not specific to construction (which is detailed in the following section), from the Census 2011, which is the most recent reliable and comprehensive source available. This shows that 23% of workers in the CSA are qualified to level 4 and above – far lower than the RCA (40%) and England (35%). On the other hand, 19% of workers in the CSA are qualified to level 1 – far higher than the RCA (13%) and England (14%). The CSA also has a larger proportion of workers that have no qualifications (13%) than Regional (9%) and national (10%) comparators, but marginally more with Apprenticeships or other qualifications (11% in comparison to 9% across England). This implies that workers in the CSA are generally qualified to a less high level than the regional and national comparators.

**Table 7.2.13 Workplace qualifications, 2011**

| | No qualifications | Level 1 | Level 2 | Level 3 | Level 4 and above | Apprenticeships and other qualifications |
|---|---|---|---|---|---|---|
| CSA | 13% | 19% | 20% | 14% | 23% | 11% |
| RCA | 9% | 13% | 15% | 13% | 40% | 10% |
| England | 10% | 14% | 17% | 15% | 35% | 9% |

*Source: ONS, 2011, Census. Note: due to data availability, LCA and SRCA estimates have been excluded due to unreliable data. An approximation will be developed for DCO application.*

***Construction qualifications***

7.2.23 The most recent source for workplace based qualifications by industry is also the 2011 Census. This shows that, in 2011, 14% of construction workers in the CSA were qualified at a Level 4 or above (degree level qualification or higher) – lower than the RCA (18%) and UK (17%). All three geographical areas have 13% of construction workers with no qualifications. Comparing this with the qualifications across the whole workforce shows that construction workers are similarly likely to have no qualifications, but considerably less likely to have Level 4 or above level qualifications. This is further accentuated by the lower rate of higher level qualifications in the CSA, which is true both generally across workers, but also specifically within the construction industry. Apprenticeships are a more prevalent form of qualification across the construction industry than the national average across all sectors, and the CSA's rate of qualification is on par with the national and regional levels.

**Table 7.2.14 Construction qualifications, 2011**

| | CSA | RCA | UK |
|---|---|---|---|
| Level 4 or above | 14% | 18% | 17% |
| Level 3 | 17% | 15% | 17% |
| Level 2 | 20% | 17% | 17% |
| Level 1 | 19% | 16% | 16% |
| Apprenticeship | 18% | 19% | 19% |
| No Qualifications | 13% | 13% | 13% |

*Source: ONS, 2011, Census. Note: due to data availability, LCA and SRCA estimates have been excluded due to unreliable data. An approximation will be developed for DCO application.*

### *Construction worker incomes*

7.2.24 The Annual Survey of Hours and Earnings shows that as of 2019, construction workers within the CSA earned an estimated annual income between £38,300 (residence based) and £38,500 (workplace based).[8]

7.2.25 The residence-based annual income of construction workers in the CSA, at £38,300, is slightly lower than the SRCA (£39,400) and RCA (£39,300), but higher than the corresponding national average (£36,500). In contrast, the workplace-based annual income of construction workers in the CSA, at £38,500, is higher than that of any other study area.

7.2.26 Across all geographies and whether residence- or work-place based, the construction industry annual incomes are higher than the average across all industries.

**Table 7.2.15 Annual incomes of construction workers, 2019**

| | Residence based | | Workplace based | |
|---|---|---|---|---|
| | Construction | All industries | Construction | All industries |
| CSA | £38,300 | £31,900 | £38,500 | £32,000 |

[8] Annual income estimates for construction workers are obtained by calculating the income differential between the weekly earnings of the construction industry and all industries. In order to factor in the seasonality of construction incomes, the income differential is based on a 12-month average of weekly earnings. The differential is applied to annual incomes for relevant study areas from ASHE.

| | Residence based | | Workplace based | |
|---|---|---|---|---|
| | Construction | All industries | Construction | All industries |
| SRCA | £39,400 | £32,800 | £36,100 | £30,100 |
| RCA[9] | £39,300 | £32,800 | £37,700 | £31,400 |
| UK | £36,500 | £30,400 | £36,500 | £30,400 |

*Sources: ONS, EARN03 Average Weekly Earnings, 2019; Annual Survey of Hours and Earnings, 2019. Note: due to data availability, LCA estimates have been excluded due to unreliable data. An approximation will be developed for DCO application.*

### *Construction, Planning and the Built Environment Apprenticeship starts*

7.2.27 According to the Department for Education, there were 140 starts in the CSA in construction, planning and the built environment in the academic year 17/18. Starts in this sector equated to 6% of all apprentices in the CSA for that academic year, in line with England (6%), slightly higher than the RCA (5%) and slightly lower than the SRCA and South East LEP (SE LEP) (7%). The number of starts has been slowly rising over time; there were 75% more starts in 17/18 in the CSA than in 14/15. Growth in starts over time has also been observed at the other geographies, but the growth was fastest in the CSA.

7.2.28 In 17/18, there were 70 apprenticeship achievements in the CSA. Over the period 14/15 to 17/18, the CSA has seen an annual average achievement rate of 48%. This is slightly higher than the RCA (47%), SRCA and SE LEP (44%) and slightly lower than the England level (51%).

**Table 7.2.16 Apprenticeship starts in construction, planning and the built environment, academic years 14/15 to 17/18**

| | 14/15 | 15/16 | 16/17 | 17/18 | | | |
|---|---|---|---|---|---|---|---|
| | Starts | Starts | Starts | Starts | % of all starts | Achieve ments | Annual average achievement rate (14/15 to 17/18) |
| CSA | 80 | 110 | 110 | 140 | 6% | 70 | 48% |
| SRCA | 1,100 | 1,300 | 1,370 | 1,600 | 7% | 800 | 44% |
| SE LEP | 1,270 | 1,460 | 1,550 | 1,770 | 7% | 880 | 44% |
| RCA | 4,920 | 5,870 | 5,710 | 6,630 | 5% | 3,150 | 47% |
| England | 18,390 | 21,560 | 21,390 | 22,870 | 6% | 12,540 | 51% |

*Source: Department for Education, 2019*

### *Future baseline – construction labour market, skills and training*

7.2.29 The Construction Skills Network forecast stated that the most in demand jobs over the

[9] London has been excluded from the RCA to avoid skewing the earnings data.

2019-2023 period (in absolute terms) would be: other construction process managers (3,420), other construction professional and technical staff (3,260) and wood trades and interior fit-out (2,380). In terms of base 2019 employment, the biggest requirements were predicted for scaffolders (3.1%), logistics personnel (2.6%), and plant operatives (2.3%).[10]

## Crime levels

7.2.30 Concerns are often raised on major projects that the presence of a large construction workforce can affect crime levels. The crime baseline in the CSA, is therefore considered here.

### *National crime data*

7.2.31 Table 7.2.17 below shows that there were 114 crime incidents per 1,000 population in 2019 in the CSA, a 35% higher prevalence of crime than the average across England and Wales (84 per 1,000). The type of crime with the highest rate in the CSA was violence without injury (20 per 1,000) which was almost double the national rate of 11. For many types of crime, the CSA is in line with, or only slightly higher than England and Wales rates, however criminal damage and arson, shoplifting, stalking and harassment, vehicle offences and violence without injury are all higher in the CSA than the national rate.

**Table 7.2.17 Crime incidents per 1,000 population, year ending December 2019**

| | CSA | England and Wales |
|---|---|---|
| All other theft offences | 9 | 8 |
| Bicycle theft | 1 | 1 |
| Burglary | 7 | 6 |
| Criminal damage and arson | 13 | 9 |
| Death or serious injury caused by illegal driving | 0 | 0 |
| Drug offences | 2 | 3 |
| Homicide | 0 | 0 |
| Miscellaneous crimes against society | 3 | 2 |
| Non-residential burglary | 2 | 2 |
| Possession of weapons offences | 1 | 1 |
| Public order offences | 9 | 7 |
| Residential burglary | 5 | 4 |
| Robbery | 1 | 1 |
| Sexual offences | 3 | 3 |
| Shoplifting | 9 | 6 |
| Stalking and harassment | 12 | 8 |
| Theft from the person | 1 | 2 |
| Vehicle offences | 12 | 7 |

[10] Construction Skills Network forecasts 2019-2023, 2019

| | CSA | England and Wales |
|---|---|---|
| Violence with injury | 10 | 9 |
| Violence without injury | 20 | 11 |
| Total | 114 | 84 |

*Source: ONS Crime Statistics, 2019*

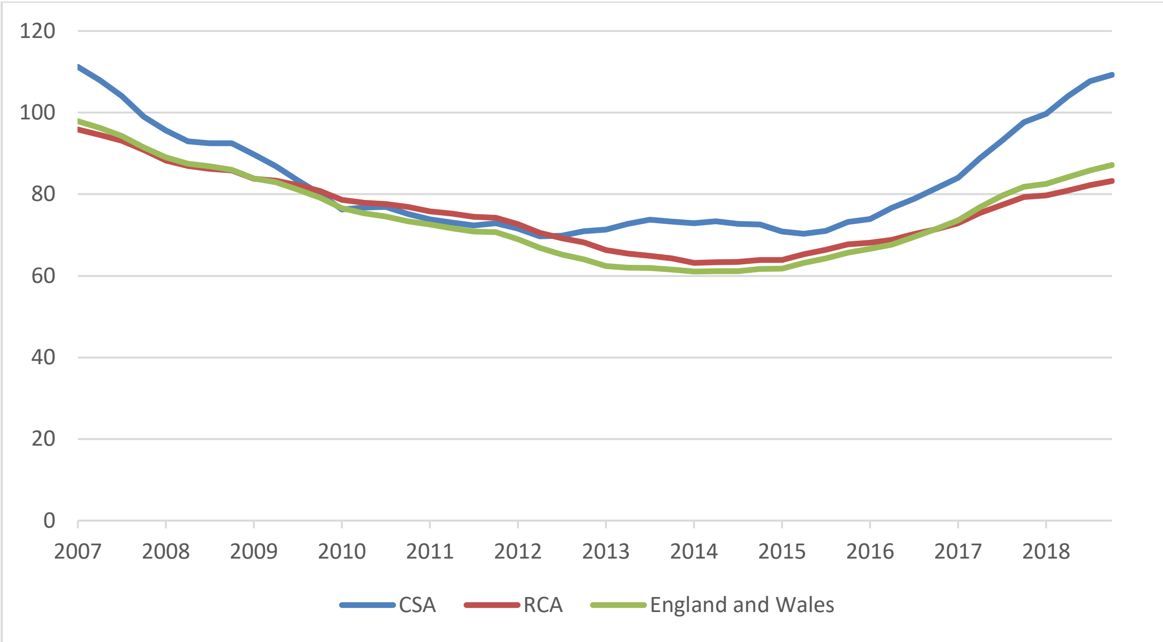
7.2.32 Data from the 2019 Index of Multiple Deprivation shows that Dartford, Gravesham and Thurrock collectively rank within the top 25% most deprived areas when it comes to crime.[11] Individually, Dartford and Gravesham respectively rank as the 6$^{th}$ and 19$^{th}$ most deprived local authorities in terms of crime (out of 317 local authorities), whereas Thurrock ranks 75$^{th}$ on that list. In comparison to other local authorities, the CSA therefore performs particularly poorly when it comes to crime.

***Crime over time***

7.2.33 Over time, the figure below (Figure 7.2.2) shows that whilst crime levels per 1,000 population in the CSA have generally moved in the same direction as the corresponding trends exhibited by both the RCA and nationally (both rising in the past three years), there has been a relatively faster increase in the rate of crime in the CSA since 2016 than other comparators, indicating a persistently more pronounced problem with crime in the CSA..

[11] Index of Multiple Deprivation, 2019 MHCLG

**Figure 7.2.2 Number of crimes per 1,000 population, 2007 – 2018**




*Source: ONS Crime Statistics, 2018 – Police Force Area Data Tables*

***Future baseline – crime levels***

7.2.34 This report found no data to inform the future baseline, and effects are assessed against the current baseline levels.

**Local healthcare**

7.2.35 The large construction workforce supported by the London Resort could require local healthcare services in the form of GPs, dentists, pharmacies and emergency care. Existing healthcare provision is therefore considered here, so that the relative additional strain on healthcare provision can be determined.

***Primary healthcare***

7.2.36 Data on GP provision across the CIA shows that two GP practices are situated within a 500m radius of the site, both of which are located on the north side of the river, whilst one other GP which lies just outside the CIA boundary is located on the south side, as shown in Figure 7.2.3. Across all three GPs, a total of approximately 42,200 patients are currently registered, and are served by 9.4 FTE practitioners. This equates to a ratio of 4,500 patients for every GP FTE. There are a total of 178 FTE GPs across the CSA, which serve over 420,000 patients, resulting in a ratio of 2,400 patients for every GP FTE. The CSA, but the CIA in particular, therefore has a patient to GP ratio which is considerably higher than the recommended benchmark set by the Department of Health and Social

Care (DHSC), which currently stands at 1,800 patients per FTE GP.[12]

**Table 7.2.18 GPs in the CIA**

| GP Name | Borough | Total Patients | Total GP FTEs | Patients per GP FTE |
|---|---|---|---|---|
| Tilbury Health Centre | Thurrock | 11,500 | 2.5 | 4,600 |
| Swanscombe Health Centre | Dartford | 20,400 | 5.9 | 3,400 |
| Sai Medical Centre | Thurrock | 10,300 | 1.0 | 10,300 |
| **Total - CIA** | **-** | **42,200** | **9.4** | **4,500** |
| **Total - CSA** | **-** | **420,700** | **178.0** | **2,400** |

*Source: NHS Digital – GP Workforce Statistics March 2020*

7.2.37 Additionally, two pharmacies have been identified within the CIA. These pharmacies fall just outside the PSB and are Ackers Chemists Ltd and Swan Valley Pharmacy.

7.2.38 There are four NHS registered dental surgeries that are situated within the CIA. Across all four surgeries, a total of 14 dental practitioners carry out these dental services. NHS information on each surgery also indicates that only one of these practices is not taking in new patients.

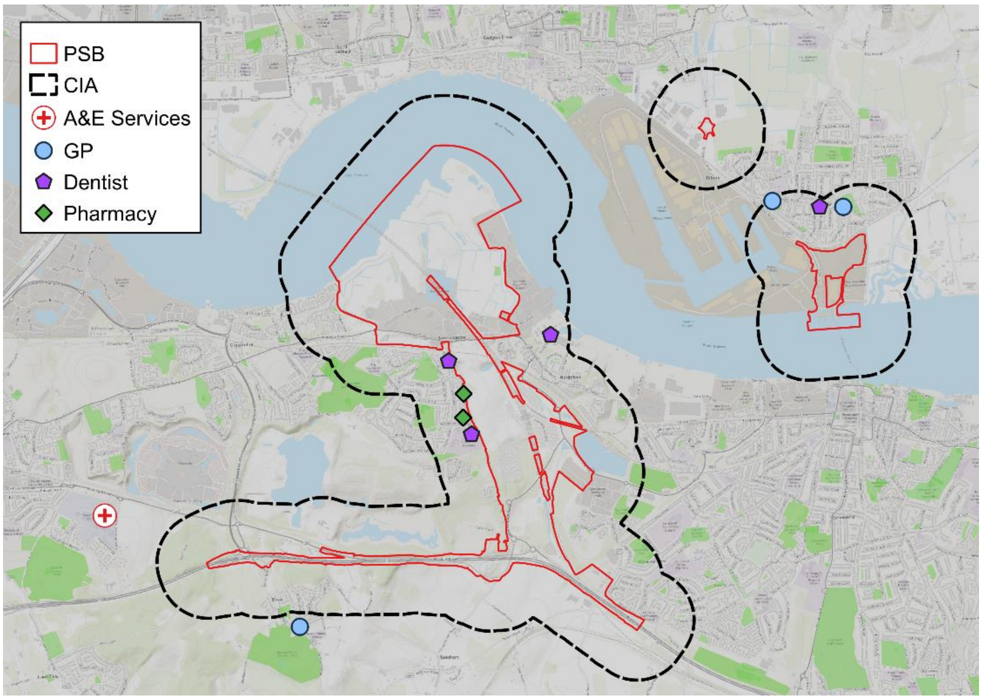
**Table 7.2.19 Dental practices within the CIA**

| Dental practice name | No. of practitioners | Taking in new patients? |
|---|---|---|
| Aligndent NK Ltd | 5 | Yes |
| Hews House | 1 | No |
| Elite Dental Studio | 4 | Yes |
| Patiali Limited | 4 | Yes |
| **Total** | **14** | **-** |

*Source: NHS Dental Statistics, 2019-20*

[12] NHS London, 2009. HUDU Planning Contribution Model Guidance Reports.

**Figure 7.2.3 Healthcare Facilities in the CIA**




*Sources: Ordnance Survey, Addressbase Premium; Google Maps; Volterra calculations*

### *Emergency healthcare*

7.2.39 The nearest A&E to the site is Darent Valley Hospital, which is part of the Dartford and Gravesham NHS Trust. The Dartford and Gravesham Trust also covers Queen Mary's Hospital and Erith & District Hospital, but these do not offer A&E services.

7.2.40 Table 7.2.20 shows the number of A&E attendances in 2018/19 and the percentage of A&E visits that were admitted, transferred or discharged within 4 hours at the Dartford and Gravesham Trust. This is compared to that of the three other NHS Trusts falling under the Kent and Medway CCG that have Accident and Emergency (A&E) departments. It can be seen that the Dartford and Gravesham Trust is performing better than two of the other Trusts and slightly better than the national average for England, with 87% of people being attended to in under 4 hours. No trusts hit the NHS target of 95% of A&E patients admitted, transferred or discharged within 4 hours, however it can be seen that this is also the case at the national level, demonstrating countrywide constraints.

**Table 7.2.20 A&E attendances and performance**

| NHS trust name | A&E attendances 2018-19 | Percentage admitted, transferred or discharged in 4 hours or less 2018-19 |
|---|---|---|
| **Dartford and Gravesham NHS Trust** | **132,300** | **87%** |
| East Kent Hospitals University NHS Foundation Trust | 221,400 | 70% |

| NHS trust name | A&E attendances 2018-19 | Percentage admitted, transferred or discharged in 4 hours or less 2018-19 |
|---|---|---|
| Maidstone and Tunbridge Wells NHS Trust | 183,400 | 91% |
| Medway NHS Foundation Trust | 125,900 | 80% |
| **England** | **22,367,800** | **84%** |

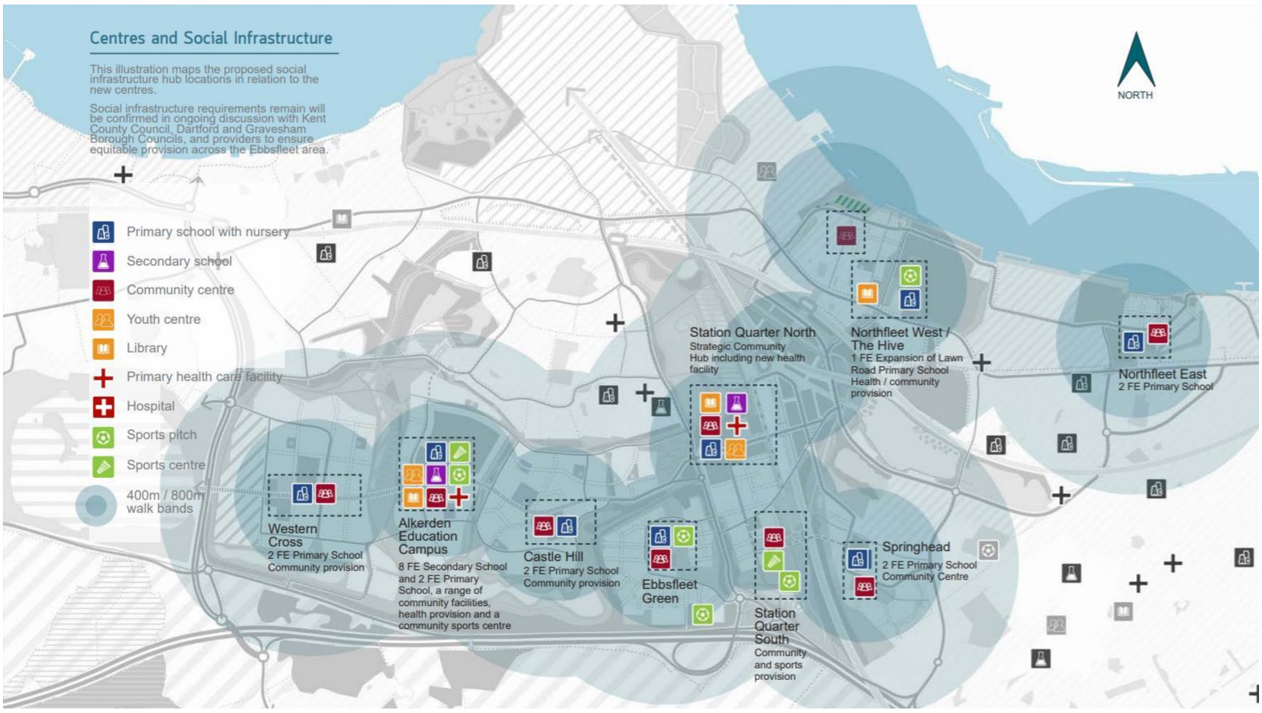
*Source: NHS Digital, 2018/19 - Provider level analysis for HES Accident and Emergency Attendances*

### *Future baseline – healthcare*

7.2.41 The Dartford Borough Council Infrastructure Delivery Plan[13] states that a new primary healthcare facility is to be provided within Ebbsfleet Garden City (EGC), although it is unsure of the timing of the delivery. Furthermore, a new primary healthcare facility is being provided at Stone / Greenhithe area (just outside the CIA) providing new facilities for three GP practices in order to meet demand from new housing development nearby. This will be delivered by 2022. The Plan also mentions the potential expansion at Darent Valley Hospital in response to demand from development, but this is uncertain.

7.2.42 The Ebbsfleet Implementation Framework will be used by the EDC to shape and support its plans. The provisional locations of future primary healthcare facilities in the EGC Framework are shown in Figure 7.2.4. This will help to meet some of the additional demand that new residents at EGC will impose.

**Figure 7.2.4 Centres and social infrastructure**




[13] Dartford Borough Council, 2019, Infrastructure Delivery Plan

*Source: Ebbsfleet Development Corporation, Ebbsfleet Implementation Framework Summary, 2017*

**Effect of temporary construction on the temporary accommodation market**

7.2.43 A number of the construction workforce are expected to be non-home based, and will require temporary accommodation near to the site – usually in the form of tourism accommodation or private housing. Information on the existing accommodation market in the CSA (considered to be the location that most non-home based workers will seek accommodation) has therefore been collected and is presented here. As well as existing capacity, availability and affordability of the accommodation options need to be considered. The underlying assumptions with regards to availability and affordability are outlined for each of the choices below.

***Baseline***

Tourism accommodation stock

7.2.44 Visit Britain[14] reported 4,900 tourism bed spaces in the CSA across hotels, holiday dwellings and campsites in 2016. Visit Britain[15] also reported that hotel bed space occupancy reached a peak of 63% over 2019 which has conservatively been applied as a year-round occupancy despite lows of 44%. Analysis suggests that 15% of these bed spaces will be affordable for construction workers[16]. In the absence of more information, the same hotel occupancy and affordability has been applied to holiday dwellings which is conservative as these are likely to be more affordable (on a per room per occupied night basis) than hotels.[17] For campsites, occupancy rates for English holiday parks / campsites reached a peak of 70% in 2018 which has conservatively been applied as a year-round occupancy despite high variability with lows of 11%.[18] The same survey reported that the total cost of holiday accommodation (touring pitch fees, park fees and park facility fees) was £26, hence all pitches are considered affordable.

7.2.45 Since the 2016 stock audit, the offering of short-term home lettings to visitors has grown in number and popularity and is considered a strong tourism accommodation option for construction workers. As such, it has been considered here separately. It is not clear from the Visit Britain data whether short-term home lettings (via platforms

[14] Visit Britain, 2016, Accommodation Stock Audit
[15] Visit Britain, 2019, Accommodation Occupancy
[16] Under the Construction Industry Joint Council (CIJC) Working Rule Agreement, construction industry workers can receive subsistence allowances of little over £40 a night to cover accommodation and food and drink. For workers not subject to the Agreement, workers may be able to afford a higher rate per working day. It is assumed that £40 is an appropriate basis for determining affordability. Hotel bookings websites in the CSA were used to determine the average daily rate of local rooms and compared to the affordability threshold. The proportion of average daily rates that fell within the threshold is the proportion considered affordable. More detail will be available for DCO application.
[17] House of Commons Library, Briefing Paper Number 8395, 26 May 2019, The growth in short-term lettings (England)
[18] UK Caravan and Camping Alliance, 2019, Pitching the Value: Economic Benefit Report for Holiday Parks and Campsites UK

such as Airbnb) are included in their data or, if so, to what extent, so this report has conservatively halved the identified stock number of rentals found in the CSA in order to avoid double counting with the Visit Britain data. Further work will be done in advance of the DCO application to consider this further.

7.2.46 The airdna.co.uk site offers occupancy for each local authority, which has been averaged to 68% for the whole area to inform availability. For affordability, the site also offers ADRs which were adjusted to a per bedroom basis and averaged across the area at £42.20. This was used to inform the assumption that 75% of these might be considered affordable for construction workers. The site provides average bedrooms per rental, which was 2.1 across the whole area. It has been conservatively assumed that there was one bed space per bedroom in these rentals.

7.2.47 Combining together these various sources, it is estimated that there are 580 available and affordable tourism accommodation bed spaces within the CSA – Table 7.2.21 shows the distribution of these by accommodation type, showing that the vast majority (over 75%) are in hotels. Short-term home lettings (such as Airbnbs) also form a considerable proportion of available and affordable stock however (just under 20%).

**Table 7.2.21 Tourism accommodation bed spaces in the CSA**

| **Tourism accommodation type** | | **Bed spaces** |
|---|---|---|
| Hotels | Bed spaces | 4,800 |
| | Available and affordable | 450 |
| Holiday Dwellings | Bed spaces | 60 |
| | Available and affordable | 10 |
| Campsites | Bed spaces | 10 |
| | Available and affordable | 10 |
| Home lettings | Bed spaces | 220 |
| | Available and affordable | 110 |
| Total available and affordable | | 580 |

*Sources: Visit Britain, 2016, Accommodation Stock Audit; airdna.co.uk, 2020*

Housing market stock – PRS

7.2.48 In terms of the Private Rented Sector (PRS), it is estimated that there are 24,500 PRS dwellings in the CSA.[19] According to the Census,[20] there were 2.3 bedrooms per PRS dwelling and it is assumed that there is one bed space per bedroom. The English Housing Survey reports that approximately 10% of PRS dwellings across England are vacant[21] and that this has been the case since early 2000s.[22] In the absence of more

[19] ONS, Subnational dwelling stock by tenure estimates, 2018. These research outputs are not official statistics on dwelling stock by tenure.
[20] Census, 2011, KS402EW and DC4405EW
[21] English Housing Survey, 2018
[22] MHCLG, 2011, Dwelling Stock Estimates: 2011 England.

localised data, this is used to proxy PRS vacancy rates in the study areas. This vacancy rate includes natural vacancies which are required to give the market fluidity and allow it to function. This fluid element is approximated by taking the proportion of dwellings in the study areas that were living at a different address one year before the survey was taken (c. 30%)[23] and adjusting to a monthly statistic of c. 2%. This leaves a latent property vacancy rate of c. 8%. In terms of affordability, the Valuation Office Agency (VOA) release rental market summary statistics, breaking down monthly rent in the PRS sector by region, administrative area, and number of bedrooms.[24] This analysis has adjusted the data for the study areas to be on a per room per working night basis.[25] These gave mean and median rents per room per working night as shown in Table 7.2.22. Based on these rents, the assumed proportion that will be affordable have been estimated (as in the table).

7.2.49 Overall, it is estimated that there are 4,540 available and affordable PRS bed spaces within the CSA.

**Table 7.2.22 PRS bed spaces in the CSA**

| | **Bed spaces** |
|---|---|
| PRS dwellings | 24,500 |
| PRS bedrooms | 56,770 |
| *Mean rent per room per working night* | *29* |
| *Median rent per room per working night* | *26* |
| *Proportion considered vacant/available (assumption)* | *8%* |
| *Proportion considered affordable (assumption)* | *100%* |
| Total available and affordable | 4,540 |

Housing market stock – Owner Occupied sector

7.2.50 In terms of the Owner Occupied (OO) sector, it is estimated that there are 106,900 OO dwellings in the CSA.[26] According to the English Housing Survey, 4.3% of OO households are vacant, and 3% of England OO households moved in the past year.[27] This results in an estimated 1.3% latent capacity in the OO sector. Notably, the profile of construction workers that would tend to seek this type of accommodation is more senior, managerial roles. Given this, these workers are most likely to either live by themselves (in a 1-bed or studio) or to live with their families (who would take up other bed spaces in the dwelling but are not included in the jobs estimates). Very few would look to buy and share with another worker(s). Therefore, a conservative ratio of one worker bed space per OO dwelling has been assumed. The median house price in the CSA is £296,000, higher than the England rate (£240,000). The median house price to

[23] Census, 2011, Table UKMIG011
[24] MHCLG, 2018/19, Private rental market summary statistics
[25] Where an average of 16 working nights per month has been applied
[26] ONS, Subnational dwelling stock by tenure estimates, 2018. These research outputs are not official statistics on dwelling stock by tenure.
[27] English Housing Survey, 2018

affordability ratio in the CSA is 9.1, meaning that a resident on a median income would need just over nine times their earnings in order to afford a house in the area. This is higher than the equivalent ratio for England (7.8).[28] Overall, it can be deduced that houses are slightly less affordable in the CSA than the national average. Given the expected managerial profile of OO seekers (likely on higher than median incomes), it has conservatively been assumed that half of the dwellings in the CSA will be affordable for construction workers.

7.2.51 Overall, there are expected to be 1,390 houses available for sale each year in the CSA, 690 of which could be considered affordable, equating to 690 bed spaces.

**Table 7.2.23 OO bed spaces in the CSA**

| | Bed spaces |
|---|---|
| Total privately owned dwellings | 106,900 |
| Available for sale each year | 1,390 |
| **Total available and affordable (assumption)** | **690** |

7.2.52 In summary, there are estimated to be 5,820 available and affordable bed spaces within the CSA, the majority of which (4,540, 78%) are in the PRS sector.

**Table 7.2.24 Bed spaces within the CSA**

| Accommodation type | Available and affordable bed spaces |
|---|---|
| Tourism accommodation | 580 |
| Private rented sector housing | 4,540 |
| Owner occupied housing | 690 |
| Total | 5,820 |

*Source: Volterra calculations*

***Future baseline – temporary accommodation market***

7.2.53 The EDC Implementation Development Framework[29] outlines, for the six existing development proposals with consent, that there is maximum consent for over 21,000 sqm of hotel floorspace for five of the six proposals. Of this, 11,000 sqm is at Eastern Quarry (along the bottom of the CIA) with 5,000 sqm each at Ebbsfleet Green and Northfleet Embankment West. There is also 147,000 sqm across an (undefined) split of retail, hotels and leisure in Ebbsfleet Central.

7.2.54 Considerable housing growth is planned in the CSA, some of which will be delivered before the construction of the London Resort. A proportion of this new housing might reasonably be assumed to be available and affordable either as OO or PRS options for construction workers. Similarly, the rise in popularity of short -term, home lettings (such as Airbnb), coupled with the rise in dwelling stock might feasibly mean that more

[28] MCHLG, Median house price to residence based earnings, 2019
[29] Ebbsfleet Development Corporation, Ebbsfleet Implementation Framework, 2017

properties or rooms are available via this route.

7.2.55 All of these would contribute towards increased temporary accommodation available in the future baseline, across all types. However, in order to be conservative, none of this is assumed to occur nor relied upon. This assessment therefore assesses effects against the current baseline levels.

**Displacement/loss of business and other services**

7.2.56 The London Resort will result in the displacement of businesses and services from the PSB, which may be able to relocate or may be lost. Baseline information on these existing businesses is presented here. Limited information is known at this time about the employment supported by the current uses on site and so estimates are made, which are described in this section. A land referencing exercise is being undertaken which will provide more detailed information to inform the DCO application submission.

***Baseline***

Estimating businesses located within the PSB

7.2.57 The employment within the PSB has been estimated based on two methods:

- Using ONS data from the Business Register and Employment Survey which has estimates of employment by industry at the LSOA level;[30] and
- Using data from the Valuation Office Agency allows the floorspace that lies within the red line to be calculated by use type. The floorspaces can then be converted into employment estimates using typical employment densities.

ONS BRES – LSOA method

7.2.58 The LSOAs are small areas used for collecting data by the ONS. Due to the size of these areas, they do not perfectly match with boundaries, such as the PSB. For example, one LSOA (Dartford 002D) covers most of the red line area and so is used as the best-fit employment estimate for the existing level of employment. There are other LSOAs which overlap with the red line, but since they do so by only a proportionally small amount, including them would likely lead to an overestimate of employment.

7.2.59 Ebbsfleet International Station lies within with the PSB. The employment at the station would not be displaced as a result of the London Resort. While that is the case, it is difficult to adjust the employment estimate for the station without knowing the exact split of employment uses there. It should therefore be noted that the employment

[30] Lower Layer Super Output Area (LSOA) is a geospatial statistical unit used in England and Wales to facilitate the reporting of small area statistics. They have a minimum population of 1,000 with a mean size of 1,500.

estimate may overstate onsite jobs by including those related to Ebbsfleet station. This is also true for other parts of the PSB where land uses are potentially included within the estimates presented here but the uses themselves would not be displaced.

7.2.60 Swanscombe town centre is outside of the PSB but also falls within the LSOA; likely town centre uses are therefore removed from the LSOA employment estimate. In particular, this means that the following industries are excluded:

- Retail trade, except of motor vehicles and motorcycles (95 FTE jobs); and
- Food and beverage activities (35 FTE jobs).

7.2.61 BRES is used to estimate jobs contained within the LSOA. In 2018, the latest date for which BRES data is available, Dartford 002D LSOA supported 1,620 jobs,[31] equivalent to 1,420 full-time equivalent (FTE) jobs.[32]

7.2.62 After adjusting for town-centre related employment (in Swanscombe), the LSOA is estimated to have 1,445 jobs, equivalent to 1,295 FTEs.

7.2.63 The issue with this approach is that any jobs on the Essex Project Site are excluded and there may be additional jobs included on the Kent Project Site because the statistical area does not match exactly with the PSB, but conversely it also likely includes jobs which are located within the LSOA but not within the PSB.

VOA – floorspace method

7.2.64 An alternative approach is to review the VOA data, which lists all commercial property identified within the PSB, including their floorspace and use type. This dataset confirms that the majority of the floorspace lies within the northern part of the Dartford LSOA, with limited businesses on the Essex Project Site, providing confidence that the first estimate based on ONS data would have identified the vast majority of employment.

7.2.65 Table 7.2.25 summarises the total commercial floorspace by use type within the PSB. For the reasons outlined above, commercial floorspace at Ebbsfleet International station is removed.

**Table 7.2.25 Floorspace within the PSB**

| Use type | Floorspace (NIA, m$^2$) |
|---|---|
| Retail, store or showroom | 2,300 |
| Industrial / manufacturing | 11,200 |
| Light industrial | 7,800 |
| Storage | 51,700 |

[31] Business Register and Employment Survey. ONS Crown Copyright Reserved [accessed from Nomis on 18 May 2020]
[32] A full-time equivalent job is a measure that adjusts for the number of hours worked. For these purposes it is assumed that one 'part-time' job is equivalent to half of a full-time job.

| Use type | Floorspace (NIA, $m^2$) |
|---|---|
| Food and beverage | 200 |
| Offices | 1,500 |
| **Total** | **70,100** |

*Source: Valuation Office Agency*

7.2.66 There is a total of approx. 70,100$m^2$ (NIA) of floorspace within the PSB. Typical employment densities are then applied to each use type. For example, there is typically between 8$m^2$ and 13$m^2$ of floorspace for every office-based FTE employee,[33] meaning that 1,500$m^2$ of NIA office floorspace might support between 115-190 employees.

7.2.67 The typical densities used are in line with the Employment Densities Guide. It should be noted that applying densities to each use type is inexact as densities can vary significantly within each use class. A range of possible values is therefore estimated rather than a single best-guess value.

7.2.68 Applying densities in this way it is estimated that there are between 1,330 and 1,870 FTEs (equating to between 1,520 and 2,140 jobs) within the red line. This is above the estimate of c.1,295 FTE employees (1,445 jobs) using the BRES LSOA method. While some of this is due to the properties that lie outside of the single LSOA used in the BRES estimate, occupancy is also likely to be an issue. The floorspace approach assumes that each property in question is fully occupied. In reality, there will be some degree of under-occupancy and some property might even be vacant for significant periods.

**Table 7.2.26 Estimate FTE jobs by use type within the PSB**

| Use type | FTE jobs |
|---|---|
| Retail, store or showroom | 115 - 150 |
| Industrial / manufacturing | 360 |
| Light industrial | 190 |
| Storage | 560 – 1,000 |
| Offices | 115 – 180 |
| **Total (FTEs)** | **1,330 – 1,870** |

*Sources: Valuation Office Agency; Employment Densities Guide*

7.2.69 The VOA approach assumes that all businesses are occupied at full occupancy, which is unlikely given the Applicant's understanding of the Project Site. However, in order to be conservative, it is assumed that the Project Site currently supports 1,330 FTEs (1,520 jobs), the lower of the VOA estimate but higher than the LSOA estimate. Land referencing work is underway to understand the businesses on site and the number of jobs supported. This will be provided in the ES. This is comparable with a range of employees provided to the Planning Inspectorate by Bramwell Associates[34] (who

[33] Homes and Community Agency (2015), Employment Densities Guide
[34] Reply to written question - 07 July 2020 https://infrastructure.planninginspectorate.gov.uk/projects/south-east/the-london-resort/?ipcsection=advice&ipcadvice=60e9228ac3

represent owners and businesses likely affected) in June 2020 of between 1,000 and 1,500 employees.

***Future baseline - businesses***

7.2.70 The estimates of current workforce within the PSB are viewed likely to be conservative in terms of job numbers which might be displaced. All users within the red line are aware of the status of the project, and within the estimates full occupancy is already assumed. It is therefore viewed unlikely that any additional workforce over and above the existing baseline estimated could be supported by the present uses, and so the future baseline position is assumed to remain the same as the current baseline. The effects are therefore assessed against the current baseline levels.

7.2.71 The EDC Implementation Development Framework outlines, for the six existing development proposals with consent, that there is maximum consent for over 600,000 sqm of office floorspace. Of this, 120,000 sqm is at Eastern Quarry (along the bottom of the CIA) and 450,000 sqm is in Ebbsfleet Central (in the centre of the CIA). In Northfleet Embankment West, 46,000 sqm is allocated to B1 (office), B2 & B8 (industrial). In Northfleet Embankment East, 87,550 is allocated across B1, B2 & B8. In terms of retail space, there is expected to be a maximum of 28,000 sqm delivered across five of the six proposals (26,000 sqm at Eastern Quarry) and 147,000 sqm across an (undefined) split of retail, hotels and leisure in Ebbsfleet Central.[35]

7.2.72 In the future baseline it is therefore likely that in terms of quantum, the new floorspace delivered will more than offset the 70,100m$^2$ (NIA) of floorspace within the PSB which is lost as a direct result of the London Resort. However it is known that some of the uses currently on the site are bespoke to the location (some are known as 'bad neighbour' uses), and therefore in order to appropriately assess the loss of floorspace as a result on the London Resort, the loss of the 70,100m$^2$ (NIA) of floorspace within the PSB is considered.

**Displacement/loss of community uses**

7.2.73 The London Resort will result in the displacement or disruption (potentially indirectly through other effects) of some community uses. Baseline information on these existing community uses is presented here.

***Community uses within the PSB and CIA***

Community uses

7.2.74 This section uses a variety of sources to identify the potential community uses located within the PSB and then more widely within the CIA. 7.2.77 shows a breakdown of the facilities within the PSB and CIA by type. Their locations across the PSB and CIA are also shown in Figure 7.2.5.

[35] Ebbsfleet Development Corporation, Ebbsfleet Implementation Framework, 2017

7.2.75 Using Addressbase Premium, four potential community facilities are identified as being located within the PSB: a public convenience facility, Essandor Sports and social club, London Bus & Truck Ltd, and a rifle range. Being within the PSB, these uses are at risk of displacement. At this stage we have been unable to identify any further detail about these. Further work will be done in advance of the DCO application submission to determine their presence (or not) and the extent to which they are facilities currently used by the community.

7.2.76 Some 80 potential community facilities have been identified across the CIA; 39 of these are community serving businesses, 18 are community services, 13 are places of worship, and 7 are sports facilities. There are also 2 emergency services and a library.

7.2.77 Community serving businesses can include: post office, market (indoor/outdoor), public house/bar/nightclub, restaurant/cafeteria, shop, and other licensed premise vendors. Community services are defined as any facility that can be classed as a public/village hall, public convenience centre, church hall/religious meeting place, and community service centre/office.

**Table 7.2.27 Current provision of community facilities**

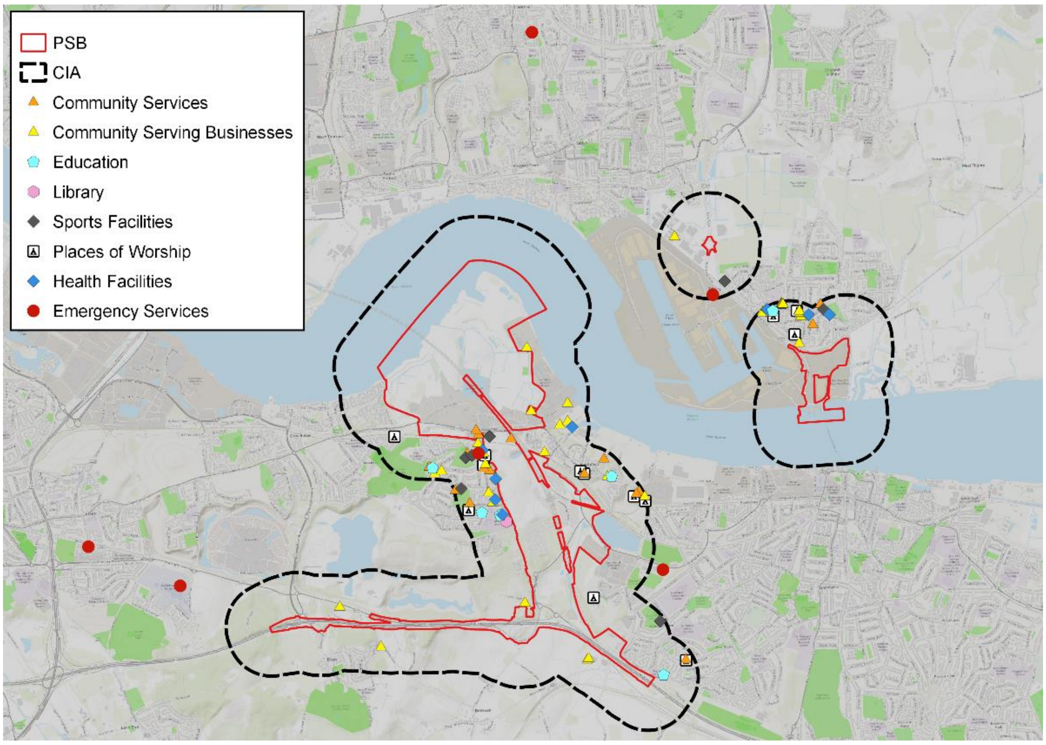
| Type | No. of community facilities/services provided | |
|---|---|---|
| | CIA | PSB |
| Community Services[36] | 18 | 2 |
| Community Serving Businesses[37] | 39 | 1 |
| Places of Worship | 13 | 0 |
| Library | 1 | 0 |
| Emergency Services | 2 | 0 |
| Sports Facilities | 7 | 1 |
| **Total** | **80** | **4** |

*Sources: Ordnance Survey, Addressbase Premium; Google Maps; Volterra calculations*

**Figure 7.2.5: Community Facilities / Services within the PSB and CIA**

[36] Community Services have been defined as any facility that can be classed as a public/village hall, public convenience centre, church hall/religious meeting place, and community service centre/office.

[37] Community Serving Businesses includes the following entities – post office, market (indoor/outdoor), public house/bar/nightclub, restaurant/cafeteria, shop, and other licensed premise vendor.




*Sources: Ordnance Survey Addressbase Premium; Google Maps*

7.2.78 Research suggests that it is best practice for one community centre to be provided for every 7,000 – 11,000 people residing in a community.[38] Earlier research by the same authors suggested that the catchment population required to sustain one community centre, in terms of viability, is approximately 4,000 people.[39] Within the CIA there are eight public / village halls or other community facilities (which are contained within the 'community services' category), and the area has a population of 69,500; this means that there is a community centre per approximately 8,700 residents in the area, within the optimum range indicated by research for both financial viability and best practice.

7.2.79 The CIA is within the 5th decile (where 1st is the most deprived) on the IMD's barriers to access to housing and services subdomain, indicating that the area has average levels of access to public services.[40] Data indicates that problems are more likely to be associated with homelessness and housing affordability, rather than access to services (refer to housing baseline below).

7.2.80 In terms of emergency services, A&E services are located towards the lower western area of the London Resort (refer to the health baseline). There are two police stations – one is located in the CIA and on the north side of the river (Tilbury Police Station) and the other is located on the south side of the river on the eastern part of the London Resort (North Kent Police Station), just outside the CIA. There are also three fire stations in the vicinity of the London Resort – one is within the CIA whilst the other two are

[38] Barton, Grant and Guise, 2010, Shaping neighbourhoods for local health and global sustainability
[39] Barton, Grant and Guise, 2003, Shaping Neighbourhoods: A Guide for Health, Sustainability and Vitality
[40] MHCLG, 2019, English Index of Multiple Deprivation

located on either sides of the river but lie outside of CIA boundary.

Open space

7.2.81 The baseline found 39 open spaces within the CIA, one of which is situated within the PSB. This open space (OS36) has been identified as a playing field along Manor Way, and it will be retained. It is highlighted by red text in Table 7.2.28.

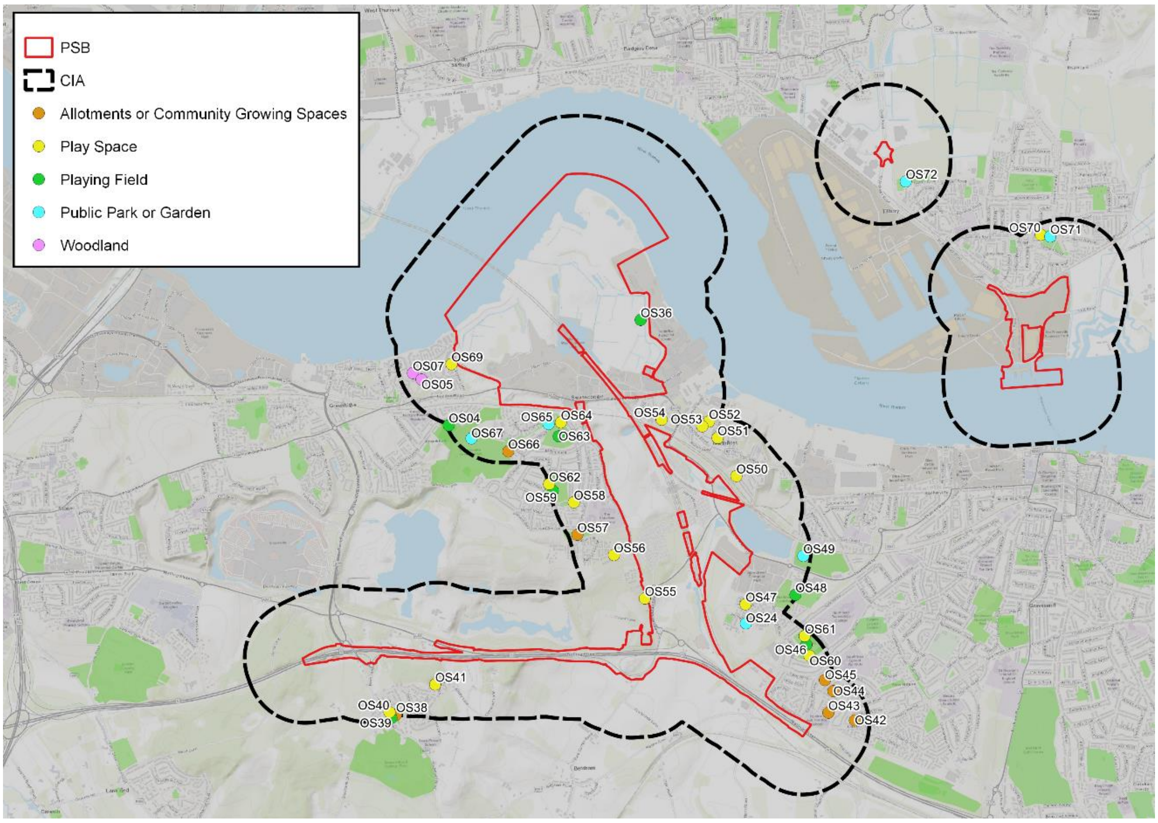
7.2.82 It should be noted that this open space definition does not include the three marshes which overlap with the PSB, which are discussed later on in this section. The 39 open spaces that have been identified are summarised in Table 7.2.28, and also illustrated in 0Figure 7.2.6.

**Table 7.2.28 Open spaces within the PSB and CIA**

| ID | Name | Type of Open Space |
|---|---|---|
| **OS04** | Knockhall Recreational Ground | Playing Field |
| **OS05** | Ingress Abbey Lawns and Boulevard | Woodland |
| **OS07** | R/O Ingress Abbey | Woodland |
| **OS24** | Penn Green | Public Park or Garden |
| **OS36** | Manor Way | Playing Field |
| **OS38** | n/a | Allotments or Community Growing Spaces |
| **OS39** | n/a | Playing Field |
| **OS40** | n/a | Play Space |
| **OS41** | n/a | Play Space |
| **OS42** | n/a | Allotments or Community Growing Spaces |
| **OS43** | n/a | Allotments or Community Growing Spaces |
| **OS44** | n/a | Allotments or Community Growing Spaces |
| **OS45** | n/a | Allotments or Community Growing Spaces |
| **OS46** | Wombwell Park | Playing Field |
| **OS47** | n/a | Play Space |
| **OS48** | n/a | Playing Field |
| **OS49** | Northfleet Urban Country Park | Public Park or Garden |
| **OS50** | n/a | Play Space |
| **OS51** | n/a | Play Space |
| **OS52** | n/a | Play Space |
| **OS53** | n/a | Play Space |
| **OS54** | n/a | Play Space |
| **OS55** | n/a | Play Space |
| **OS56** | n/a | Play Space |
| **OS57** | n/a | Allotments or Community Growing Spaces |
| **OS58** | n/a | Play Space |
| **OS59** | Swanscombe Park | Playing Field |
| **OS60** | n/a | Play Space |
| **OS61** | n/a | Play Space |
| **OS62** | Swanscombe Park Playground | Play Space |
| **OS63** | Broomfield Park | Playing Field |
| **OS64** | Broomfield Park Playground | Play Space |

| | | |
|---|---|---|
| **OS65** | Broomfield Park | Public Park or Garden |
| **OS66** | n/a | Allotments or Community Growing Spaces |
| **OS67** | Swanscombe Heritage Park | Public Park or Garden |
| **OS69** | n/a | Play Space |
| **OS70** | n/a | Play Space |
| **OS71** | Anchor Fields Park | Public Park or Garden |
| **OS72** | n/a | Public Park or Garden |

**Figure 7.2.6: Open space within the PSB and CIA**




*Contains Ordnance Survey data © Crown copyright and database right 2019*
*Sources: OS Open Greenspace; Google Maps*

Marshes

7.2.83 In addition to the open spaces identified, there are three marshes which overlap with the PSB. These are: Black Duck Marsh, Botany Marshes and Broadness Salt Marsh.

7.2.84 Black Duck Marsh is relatively inaccessible due to water levels, although the northern side of the marsh has numerous pathways along the river and flood embankments that are frequently used by local people taking walks through the residential area of Ingress Park.

7.2.85 Botany Marsh is a wildlife reserve managed by the Kent Wildlife Trust and primarily funded by the industrial owners, Cemex. It consists of open waterbodies, reedbeds and aquatic areas, scrub, wet woodland and shingle areas. A network of pathways provide access around the eastern perimeter and into the main marshland areas in the interior of the reserve (although it appears flooding is an issue that is impeding access).

7.2.86 Broadness Salt Marsh on the northern peninsula is currently remote in character and flanked to the east by heavy industrial uses and to the south by further scrubby areas and wetland. The area has been artificially raised by landfill and industrial waste and is not publicly accessible.

7.2.87 Black Duck Marsh and Botany Marshes are accessible by official Public Rights of Way (PRoW)s to the wider area. These PRoWs are reasonably well used. Broadness Salt Marsh is not accessible through official paths, though it is understood that some people do use unofficial paths.

PRoWs and routes

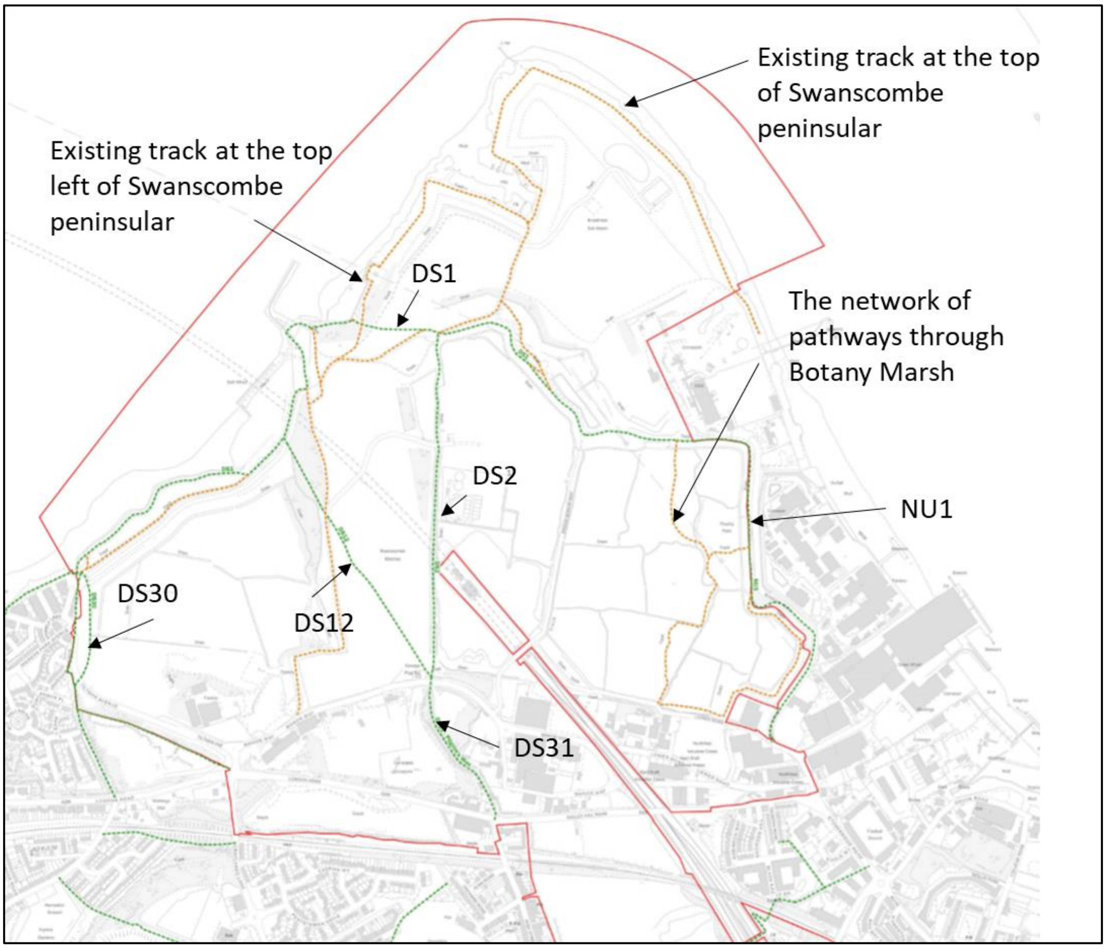
7.2.88 The initial PRoW and route assessment[41] finds that there are nine PRoWs and routes that will be affected by the London Resort.

7.2.89 All remaining PRoW and routes that are not discussed in this baseline are at this stage assumed to be retained through both the construction and operation phase and are not considered to face significant impacts as a result of the London Resort.

7.2.90 This assessment is a work in progress and the route alignments are still being refined. The assessment is subject to change and will be reviewed in the ES.

[41] This is informed by an initial PRoW and routes assessment by EDP. The assessment currently deals only with those routes affected on the Peninsula. The remaining routes are being reviewed in due course, with limited interventions expected. All remaining rights of way that are not discussed in this baseline are at this stage assumed to be retained through both the construction and operation phase and are not considered to face significant impacts as a result of the London Resort.

**Figure 7.2.7: PRoW and routes affected by the London Resort**




*Source: EDP*

***Future baseline – community uses***

7.2.91 The Dartford Borough Council Infrastructure Delivery Plan[42] states that there is to be a new hub facility for lifelong learning – including library provision – at Eastern Quarry within the Ebbsfleet Garden City in order to meet new demand arising from development in the area. This facility, which will be within the CIA, is to be delivered by 2022.

7.2.92 The EDC Implementation Development Framework outlines, for the six existing development proposals with consent, that there is maximum consent for approximately 70,000 sqm of community floorspace. Of this, 50,000 sqm is at Eastern Quarry (along the bottom of the CIA) and 21,000 sqm is in Ebbsfleet Central (in the centre of the CIA).[43]

[42] Dartford Borough Council, 2019, Infrastructure Delivery Plan
[43] Ebbsfleet Development Corporation, Ebbsfleet Implementation Framework, 2017

7.2.93 Figure 7.2.40 outlines the EDC Framework ambition for future social infrastructure uses (schools, community centres, youth centres, libraries, sports pitches, sports centres and healthcare provision), many of which will fall within the CIA.

7.2.94 Figure 7.2.8 and Figure 7.2.9 display the EDC Framework ambition for the garden grid and major parks respectively. According to the Framework, the focus is on delivering an integrated blue and green network, connecting the city's parks and open spaces into a unified network which allows residents to travel across the city within green corridors.

7.2.95 The Framework also outlines ambitions for seven city parks to be developed from existing open spaces within Gravesham and Dartford areas, providing areas for sports, play and informal recreation, as well as long distance views and ecological enhancement.

7.2.96 Finally, it is the ambition of the EDG that Swanscombe Peninsula Park, currently made of three marshes (Botany Marsh, Black Duck Marsh and Broadness Marsh), will be consolidated into one coherent ecological reserve.

**Figure 7.2.8 Garden grid**

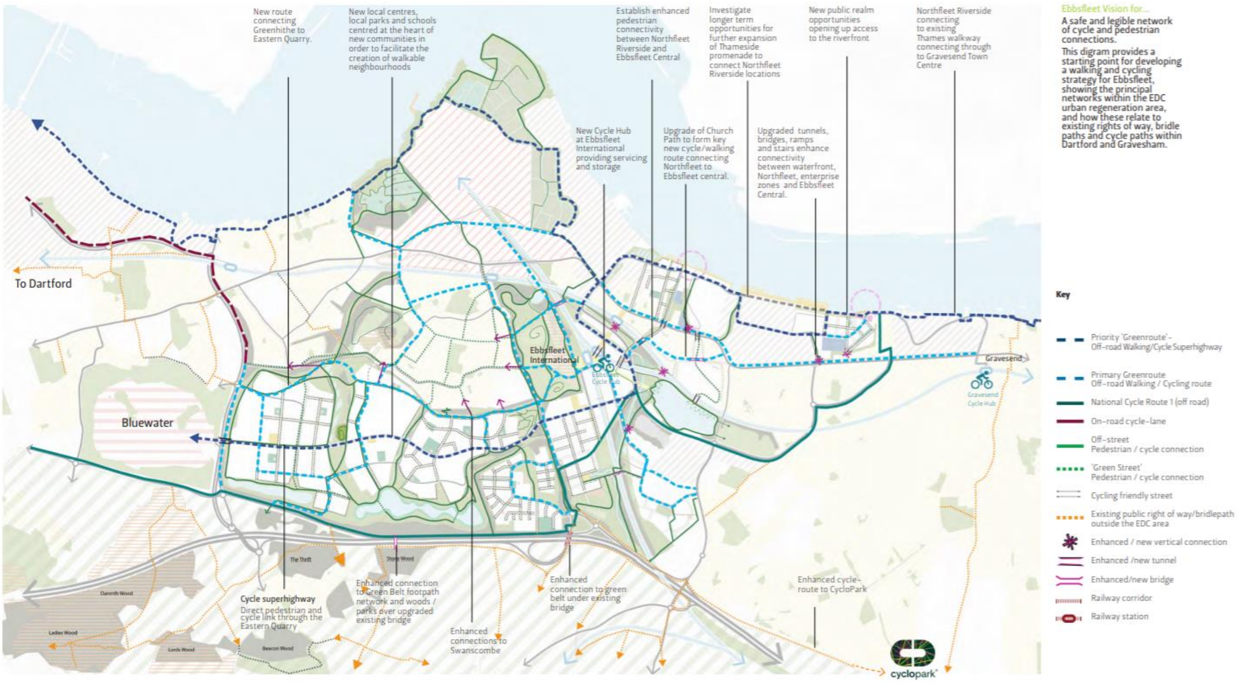

*Source: EDC, Ebbsfleet Implementation Framework, 2017*

**Figure 7.2.9 Major parks**


*Source: EDC, Ebbsfleet Implementation Framework, 2017*

7.2.97 Figure 7.2.10 displays the EDC Framework ambition for cycle and pedestrian connections and routes. The Framework notes that the area is currently strategically well connected but locally inaccessible, reducing the ability to travel between communities. Tied with the green grid framework, the plan therefore aims to address the severance by upgrading and redeveloping existing routes.

**Figure 7.2.10 Cycle and pedestrian connections**




## Displacement of residential dwellings within the PSB as a result of property acquisition

7.2.98 The construction of the London Resort will result in the displacement of some residents from their home. This effect is assessed at two levels: the effect that the displacement would have on the residents themselves (assessed at the individual dwelling level) and the effect that the displacement would have on the local (Dartford) housing market.

### *Baseline – dwellings within the PSB that will be acquired*

7.2.99 This effect is considered at an individual home scale, with only directly affected households considered to form the receptor.

7.2.100 The displacement is expected to affect one building within the PSB: 19 London Road. There are understood to be three residential dwellings within the building: flats 19, 19b and 19d. 19c is registered with Royal Mail to MDZ Motors but this appears to be the land to the rear that they occupy. Another piece of land is occupied by All Night Cars.

### *Baseline – Dartford housing market*

7.2.101 In 2018, there were 46,300 dwellings within Dartford, 87% of which were in the private sector.[44] The ONS estimate that, of these 87%, 74% are owner occupied (compared to 63% in England) and 13% are in the PRS (compared to 20% in England).[45] MCHLG also

[44] MCHLG, Live tables on dwelling stock (including vacants), Table 100 Dwelling stock: Number of Dwellings by Tenure and district: England; 2018

[45] These research outputs are not official statistics on dwelling stock by tenure.

note that 9% of dwellings in Dartford are local authority owned, higher than 7% across England. By contrast only 4% are private registered providers, compared to 11% in England. According to MCHLG, there were 1,200 vacant dwellings in Dartford in 2018, equivalent to 2.6% of the total stock; on par with that of England.[46]

7.2.102 The median house price in Dartford was £320,000 in 2019, far higher than the CSA (£296,200) and England (£240,000). The affordability ratio was 9.3 in Dartford in 2019, meaning that a Dartford resident on a median wage would need just over nine years' worth of income to afford a house. This is slightly higher than the CSA (9.1) and England (7.8) ratios.[47]

7.2.103 When considering PRS affordability, median rents in Dartford were £950 per month (all bedroom types), higher than the England average (£695). Comparing gross monthly income to PRS rents, rents in Dartford accounted for 34% of these monthly earnings; higher than England (28%) and higher the benchmark 30% considered affordable.[48]

7.2.104 In terms of housing need, Dartford has 0.27 rough sleepers per 1,000 households; slightly higher than England (0.24). The borough also has 2.20 being accepted as homeless per 1,000 households which is higher than England (2.03). Finally, Dartford has 1.18 in temporary accommodation per 1,000 households, which is lower than England (2.22).[49]

7.2.105 A more detailed description of the CSA housing market is provided in 7.2.153 to 7.2.168.

***Future baseline – dwellings within the PSB that will be acquired***

7.2.106 It is not anticipated that the number of dwellings within the PSB to be acquired will change through to 2022, and so the effect is assessed against current baseline levels.

***Future baseline – Dartford housing market***

7.2.107 In terms of future housing need, the Dartford five year housing supply (2019 – 2024) identified a requirement for 4,184 additional dwellings within the borough; an average of 837 per year. If all were delivered at this rate, by 2022 Dartford could have added 2,510 additional dwellings by 2022. The borough identified 4,718 deliverable dwellings over the five year period, equating to 113% of the requirement. Of these 4,718, 3,674 dwellings are forecast at sites that have already commenced. This gives an indication that a large proportion will have been delivered by 2022.

## OPERATIONAL PHASE

[46] MCHLG, Live tables on dwelling stock (including vacants), Table 100 Dwelling stock: Number of Dwellings by Tenure and district: England; 2018
[47] MCHLG, Median house price to residence based earnings, 2019
[48] ONS, Percentage of renters' median monthly household income spent on median monthly rent, by region, England, FYE 2018
[49] Local Authority Homelessness Statistics (England), 2019

**Employment generation and labour markets, skills and training**

7.2.108 The operational phase of the London Resort is expected to support a large number of staff, a large proportion of which are expected to be local residents. To assess the impact of this, existing employment on site, as well as in the CSA and LCA should be understood, along with the mobility and availability of the potential workforce.

7.2.109 The operational phase of the London Resort will also provide key learning opportunities for its employees to upskill and train, reaching higher levels of qualification and, subsequently, improving employability and incomes.

7.2.110 Notably, the baseline for these two employment effects is not split by effect but by residential and workplace-based employment data. Where data is relevant to both, it has been listed in the residence-based section but is clearly signposted.

Baseline – residence based

Population and population growth

7.2.111 In 2018, the CSA had a residential population of approximately 388,600. It had grown 12% since 2008; faster than the SRCA (9%), RCA (10%) and UK comparator (7%).

**Table 7.2.29 Population and population growth, 2008 and 2018**

| | 2008 | 2018 | % growth |
|---|---|---|---|
| CSA | 347,000 | 388,600 | 12% |
| SRCA | 3,208,300 | 3,496,800 | 9% |
| LCA | 7,355,500 | 8,359,800 | 14% |
| RCA | 21,946,900 | 24,242,900 | 10% |
| UK | 61,823,800 | 66,435,600 | 7% |

*Source: ONS, Mid-year population estimates, 2018.*

7.2.112 Table 7.2.30 shows that 63% of the CSA residential population are of working age (16 to 64 years); broadly comparable with the UK (63%), RCA (64%) and SRCA (61%) levels. A full detailed breakdown of the LCA population by age was not available, but the working aged (16-64) represents 5.5m, or 65% of the total population. Only 15% of the CSA population are aged over 65; lower than the SRCA (20%), RCA (17%) and UK (18%).

**Table 7.2.30 Population age structure, 2018**

| | 0 to 4 | 5 to 11 | 12 to 17 | 18 to 64 | 65+ | 16 to 64 |
|---|---|---|---|---|---|---|
| CSA | 28,400 | 38,900 | 28,100 | 235,200 | 57,900 | 244,100 |
| | 7% | 10% | 7% | 61% | 15% | 63% |
| SRCA | 6% | 9% | 7% | 59% | 20% | 61% |
| LCA | 7% | 9% | 7% | 63% | 14% | 65% |

| | 0 to 4 | 5 to 11 | 12 to 17 | 18 to 64 | 65+ | 16 to 64 |
|---|---|---|---|---|---|---|
| RCA | 6% | 9% | 7% | 61% | 17% | 64% |
| UK | 6% | 9% | 7% | 61% | 18% | 63% |

*Source: ONS, Mid-year population estimates, 2018*

***Population and employment density***

7.2.113 The LCA and CSA have high population densities at 13.6 and 11.6 residents per hectare respectively; far higher than the SRCA (4.7), RCA (6.1) and UK (2.7). Similarly, both the LCA and CSA have higher employment densities at 7.9 and 4.9 workers per hectare respectively than the SRCA, RCA and UK (1.9, 3.1 and 1.3 respectively).

**Table 7.2.31 Population and (workplace) employment density, 2018**

| | Population | Population Density | Employment | Employment Density |
|---|---|---|---|---|
| CSA | 388,600 | 11.6 | 163,000 | 4.9 |
| SRCA | 3,496,800 | 4.7 | 1,410,000 | 1.9 |
| LCA | 8,359,800 | 13.6 | 4,890,500 | 7.9 |
| RCA | 24,242,900 | 6.1 | 12,446,000 | 3.1 |
| UK | 66,435,600 | 2.7 | 30,814,500 | 1.3 |

*Sources: ONS, Mid-year population estimates, 2018; ONS, Business Register and Employment Survey, 2018; ONS, Census Table QS102UK, 2011*

***Economic activity of residents***

7.2.114 In 2018, 83% of working age residents in the CSA were economically active, higher than all other geographies. In the LCA, 79% were economically active, only slightly higher than the UK (78%). Additionally, 80% of working age CSA residents were in employment – higher than all other geographies. In the LCA, 75% were employed, on par with the national average (75%) but lower than every other geography.

**Table 7.2.32 Labour market characteristics, January to December 2018**

| | Working age pop | Economically active | | Employed | |
|---|---|---|---|---|---|
| CSA | 243,600 | 201,900 | 83% | 193,900 | 80% |
| SRCA | 2,113,500 | 1,692,200 | 80% | 1,624,900 | 77% |
| LCA | 5,472,000 | 4,300,600 | 79% | 4,101,100 | 75% |
| RCA | 15,342,900 | 12,246,200 | 80% | 11,743,200 | 77% |
| UK | 41,250,300 | 32,308,100 | 78% | 30,933,500 | 75% |

*Source: ONS, Annual Population Survey, 2018*

***Resident and workplace qualifications***

7.2.115 The construction baseline (see paragraphs 7.2.21 and 7.2.22) found that the residents and workers of the CSA appear to be qualified to a lower level than the comparator geographies. Conversely, residents in the LCA had a higher proportion of residents qualified to NVQ4+ and NVQ3+ level (45% and 61% respectively) than the UK (40% and 58%).

***Median earnings***

7.2.116 Table 7.2.33 shows that both residence-based and workplace-based earnings in the CSA are higher than their corresponding national averages.

7.2.117 Residence-based analysis shows that annual incomes in the CSA are marginally (-2.7%) lower than annual incomes across the SRCA and RCA, whereas workplace-based analysis shows that annual incomes in the CSA are slightly (+1.9% to +6.3%) higher than incomes across the SRCA and RCA.

**Table 7.2.33 Annual earnings across study areas, 2019**

| | **Median annual earnings** | |
|---|---|---|
| | **Residence based analysis** | **Workplace based analysis** |
| CSA | £31,900 | £32,000 |
| SRCA | £32,800 | £30,100 |
| RCA[50] | £32,800 | £31,400 |
| UK | £30,400 | £30,400 |

*Source: ONS, Annual Survey of Hours and Earnings, 2019. Note: due to data availability, LCA estimates have been excluded due to unreliable data. An approximation will be developed for DCO application.*

***Availability of workforce***

7.2.118 The construction baseline (Table 7.2.7) found that, in 2018, there were 7,900 unemployed people in the CSA; an unemployment rate of 3.9%, lower than the national rate 4.3%. In the LCA, there are estimated to be 251,700 unemployed people (4.6%), higher than the national rate. In 2019, there were 3,720 NEETs in the SRCA (data is not available at the CSA level) which equates to 5.1% of 16 to 17 year olds – slightly lower than the national average of 5.5%. As noted previously, the proportional representation of NEETs is noticeably higher in Medway (6.9%) and Kent (6.4%) than the SRCA (5.1%). The construction baseline also found that there were an average of 6,000 claimants in the CSA and 51,000 in the LCA (both 2.6% of the 16-64 population), slightly lower than the national average (2.7%).

7.2.119 In terms of general workforce churn, the Bank of England report that, on average, every quarter around 6% of working-age people move between the three labour market

[50] London has been excluded from the RCA to avoid positively skewing the earnings data.

states: employment, unemployment and inactivity. A further 2% move between jobs.[51] The ONS found that 29% of workers have a different employer to the one they had 12 months prior, and 6% of workers had moved from being employed to not in employment.[52]

### *Education*

7.2.120 There are currently eight schools that within the CIA, seven of which are primary and one of which is secondary.

7.2.121 For primary schools, three are operating at or above capacity, and hence are constrained. These are highlighted in red text in Table 7.2.34. The total for the CIA is 91% compared to 92% for both the CSA and England & Wales.

**Table 7.2.34 Primary education provision within the CIA**

| School Name | Type | No. of Students | Total Capacity | % of School Capacity |
|---|---|---|---|---|
| Cherry Orchard Primary Academy | Primary | 192 | 420 | 46%[53] |
| Lawn Primary School | Primary | 241 | 262 | 92% |
| Bean Primary School | Primary | 203 | 210 | 97% |
| Painters Ash Primary School | Primary | 411 | 420 | 98% |
| Manor Community Primary School | Primary | 673 | 674 | 100% |
| The Craylands School | Primary | 301 | 300 | 100% |
| St Mary's Catholic Primary School | Primary | 254 | 210 | 121% |
| CIA | Primary | 2,275 | 2,496 | 91% |
| CSA | Primary | 36,126 | 39,231 | 92% |
| England & Wales | Primary | 4,557,852 | 4,938,159 | 92% |

*Source: Edubase 2020*

7.2.122 There is one secondary school within the CIA, which is operating at 83% of capacity compared to 92% for the CSA and 85% for England & Wales.

**Table 7.2.35 Secondary education provision within the CIA**

[51] Retrieved from https://www.bankofengland.co.uk/monetary-policy-report/2020/january-2020/in-focus-the-labour-market. Accessed June 2020.
[52] ONS, Employee turnover levels and rates by industry section, UK, January 2017 to December 2018
[53] This schools' relatively low operating capacity could be due to the fact that it only recently opened in September 2017

| School Name | Type | No. of Students | Total Capacity | % of School Capacity |
|---|---|---|---|---|
| The Ebbsfleet Academy | Secondary | 625 | 750 | 83% |
| CSA | Secondary | 26,143 | 28,348 | 92% |
| England & Wales | Secondary | 2,987,009 | 3,507,312 | 85% |

*Source: Edubase 2020*

7.2.123 Across the CSA, there are six colleges/further education establishments (3 in Dartford, 2 in Gravesham, and 1 in Thurrock). Complete data on each college is only available for 3 of the 6 colleges. All 3 of these colleges are operating under full capacity, although Northfleet Technology College is nearing full capacity (currently operating at 98%).

7.2.124 A diverse range of courses are on offer at these colleges. For instance, Dartford Science & Technology College offers vocational courses in digital technology and travel & tourism54, whilst The Leigh UTC offers programmes with a focus in engineering and computer science.[55] Northfleet Technology College also provides courses that are more creative-based such as art & design as well as languages (French and Spanish).[56]

**Table 7.2.36 Colleges and further education provision within the CSA**

| College Name | Borough | Type | No. of students | Total capacity | % of capacity | Relevant courses |
|---|---|---|---|---|---|---|
| The Leigh UTC | Dartford | University technical college | 481 | 960 | 50% | IB school with STEM rich experiences, universities and business partners<br>Technical Baccalaureate (/ T-levels)<br>Advanced Apprenticeships<br>Higher Apprenticeships |
| Dartford Science & Technology College | Dartford | Foundation school | 741 | 950 | 78% | Vocational courses including Travel and Tourism (theory based course leading towards a career in hotels), Financial Studies and Business |
| Northfleet Technology College | Gravesham | Foundation school | 966 | 989 | 98% | Creative courses including Art & design as well as languages (including French and Spanish) |

[54] Dartford Science & Technology College, Post 16 Course Directory 2020/21
[55] https://theleighutc.org.uk/post-16/
[56] https://ntc.kent.sch.uk/options/

| College Name | Borough | Type | No. of students | Total capacity | % of capacity | Relevant courses |
|---|---|---|---|---|---|---|
| LINK19 College | Gravesham | Special post 16 institution | NA | 60 | NA | Vocational subjects include retail, catering and hospitality. Courses include supported work experience, working with many placement providers in the community where interns learn the specific skills of that job as well as develop their transferable employability skills. |
| North Kent College | Dartford | Further education | NA | NA | NA | Hospitality and catering professional development courses including Chef Diplomas, food service diplomas and hospitality & event management. The programme can be assessed at work or in a simulated professional restaurant. |
| National College for the Creative and Cultural Industries | Thurrock | Further education | NA | NA | NA | The National College works closely with a wide range of employers to deliver exceptional training to the creative sector (defined broadly as technical and production, audience and participation, costume and set design, stage management, front of house and operation). |

*Source: Department for Education, Edubase 2020*

***Future baseline – residence based***

7.2.125 Table 7.2.37 shows the projected population (all ages and working age) for the CSA, LCA and England across key assessment years, and the cumulative growth from 2018 for each future year.

7.2.126 It can be seen that the CSA is due to experience significant population growth over the next 20 years, with a higher cumulative growth than both the LCA and England at each assessment year. This is likely due to the substantial development planned in the area, most notably Ebbsfleet Garden City. The LCA is expected to grow at a faster rate than England in all assessment years.

7.2.127 These patterns are seen in both the all ages and working age population statistics. The CSA labour market (workforce) is forecast to grow by an estimated 7% over the period to 2025 and 13% over the period to 2038. This report found no data to inform the future baseline levels of skills and training of the workforce, and effects are assessed against the current baseline levels.

7.2.128 However, at all geographies, the working age population is growing at a slower rate than the total population, reflective of the national expectation of an aging population.

**Table 7.2.37 Projected population growth between 2018 and 2038**

| | | 2018 | 2022 | 2023 | 2025 | 2026 | 2030 | 2038 |
|---|---|---|---|---|---|---|---|---|
| All ages | CSA | 389,000 | 405,000 | 409,000 | 415,000 | 418,000 | 429,000 | 447,000 |
| | | | 4% | 5% | 7% | 8% | 10% | 15% |
| | LCA | 8,360,000 | 8,603,000 | 8,652,000 | 8,736,000 | 8,774,000 | 8,919,000 | 9,204,000 |
| | | | 3% | 4% | 5% | 5% | 7% | 10% |
| | England | 55,977,000 | 57,282,000 | 57,558,000 | 58,060,000 | 58,297,000 | 59,182,000 | 60,766,000 |
| | | | 2% | 3% | 4% | 4% | 6% | 9% |
| 16 to 64 | CSA | 244,000 | 253,000 | 256,000 | 260,000 | 262,000 | 268,000 | 277,000 |
| | | | 4% | 5% | 7% | 7% | 10% | 13% |
| | LCA | 5,472,000 | 5,606,000 | 5,634,000 | 5,680,000 | 5,697,000 | 5,760,000 | 5,837,000 |
| | | | 2% | 3% | 4% | 4% | 5% | 7% |
| | England | 35,049,000 | 35,522,000 | 35,624,000 | 35,812,000 | 35,880,000 | 36,043,000 | 36,066,000 |
| | | | 1% | 2% | 2% | 2% | 3% | 3% |

*Source: ONS, Population projections - local authority based by single year of age, 2018*

7.2.129 These projections have been sense checked against the Ebbsfleet proposals and they appear broadly consistent with the anticipate population growth planned within the EDC. The projections remain under review and alternative projections may be presented for the ES. For example, the transport assessment will be informed by detailed models for the ES which will be based on projections for both population and employment. This analysis will use those projections, where possible, to ensure consistency across the ES.

7.2.130 Figure 7.2.4 shows the EDC Framework for education provision. The Dartford Borough Council Infrastructure Delivery Plan[57] states that there is to be a 2FE primary school in the Northern Gateway by 2020, however this is outside the CIA, near Dartford Town Centre. Also, a 4 to 8 FE secondary school at Alkerden (Eastern Quarry) will be delivered (4FE by 2021) to meet demand from EGC developments and potentially some demand

[57] Dartford Borough Council, 2019, Infrastructure Delivery Plan

from outside this area. Eastern Quarry itself will deliver 2 primary schools by 2022-2027 (phased delivery with 1FE at first, then 1FE in line with the housing development), to meet demand from the later phase of the project. Finally, an 8FE secondary school is to be delivered in Stone (just outside the CIA), in order to meet demand from nearby housing growth and demographic changes. This will be delivered by 2021-2023.

***Baseline – workplace based***

Employment on site

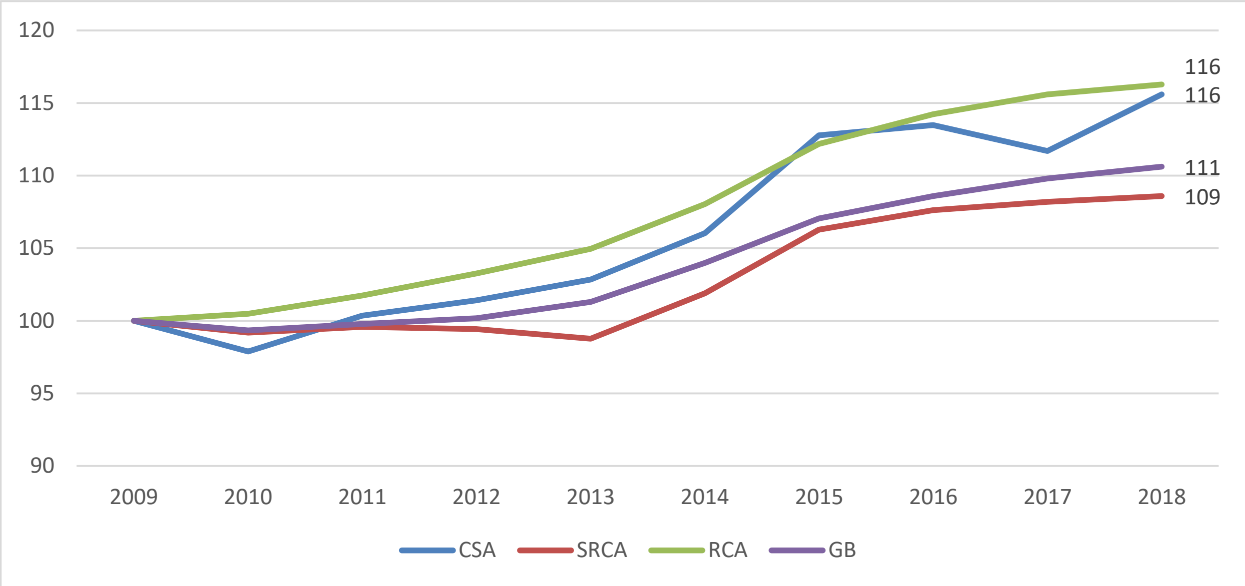
7.2.131 A thorough assessment of existing employment on site is being carried out and will be finalised before DCO application submission. The approach to arriving at initial estimates is described earlier in this baseline (see paragraphs 7.2.57 to 7.2.69). At this stage, it is estimated that businesses located within the PSB support 1,330 FTEs (1,520 jobs). Notably, this method assumes full occupancy, so may overestimate on site employment.

Historic employment growth

7.2.132 Figure 7.2.11 below displays an index of employment growth across the study areas, where the LCA cannot be defined at this stage due to data availability. Since 2009, the CSA and RCA have grown by 16%, faster than GB (11%) and SRCA (9%).[58] The CSA did experience a dip in 2017 which was not seen in other areas. This was mostly driven by Dartford, which recorded 5,000 fewer jobs in 2017 than in 2016. Half of these Dartford losses (2,500 jobs) were recovered in 2018.

[58] The Business Register and Employment Survey 2009 to 2015 did not include VAT/PAYE businesses. Since then, however, the lead definition has changed and so the 2015 to 2018 series does include these businesses. The difference between the two 2015 values in each series is c. 1%. Although the two series cannot therefore be directly equated, both have been shown for trend comparison purposes.

**Figure 7.2.11 Index of employment growth 2009 to 2018 (2009 = 100)**




*Source: ONS, Business Register and Employment Survey, 2009 to 2018*

***Number and proportion of workers by industry***

7.2.133 Table 7.2.38 shows that, of the 163,000 workers in the CSA, retail has the highest proportion of employment at 15%, far higher than the SRCA (11%), RCA (9%) and GB (9%) levels. Similarly, a high proportion of workers are employed in transport and storage (12%) compared to the other geographical comparators (5% to 6%). On the other hand, the CSA has a smaller proportion of its workforce employed in professional, scientific and technical industries (4%) than the SRCA (7%), RCA (11%) and GB (9%).

**Table 7.2.38 Employment by industry, 2018**

| | CSA | | SRCA | LCA | | RCA | GB |
|---|---|---|---|---|---|---|---|
| Agriculture, forestry & fishing (A) | 1,000 | 1% | 2% | 2,500 | 0% | 1% | 2% |
| Mining, quarrying & utilities (B, D and E) | 2,400 | 1% | 1% | 46,500 | 1% | 1% | 1% |
| Manufacturing (C) | 8,800 | 5% | 7% | 151,000 | 3% | 5% | 8% |
| Construction (F) | 12,800[59] | 8% | 7% | 221,500 | 5% | 5% | 5% |
| Motor trades (Part G) | 4,800 | 3% | 3% | 57,500 | 1% | 2% | 2% |
| Wholesale (Part G) | 6,500 | 4% | 4% | 154,500 | 3% | 4% | 4% |
| Retail (Part G) | 24,500 | 15% | 11% | 414,000 | 8% | 9% | 9% |
| Transport & storage (inc postal) (H) | 18,800 | 12% | 6% | 196,000 | 4% | 5% | 5% |

[59] Note that this does not match the 13,000 reported in Table 7.3 due to rounding in the original BRES dataset

| | CSA | | SRCA | LCA | | RCA | GB |
|---|---|---|---|---|---|---|---|
| Accommodation & food services (I) | 11,000 | 7% | 7% | 381,500 | 8% | 8% | 8% |
| Information & communication (J) | 3,300 | 2% | 3% | 329,000 | 7% | 6% | 4% |
| Financial & insurance (K) | 1,500 | 1% | 3% | 379,000 | 8% | 4% | 3% |
| Property (L) | 1,800 | 1% | 2% | 120,000 | 2% | 2% | 2% |
| Professional, scientific & technical (M) | 7,300 | 4% | 7% | 675,000 | 14% | 11% | 9% |
| Business administration & support services (N) | 19,800 | 12% | 8% | 509,000 | 10% | 10% | 9% |
| Public administration & defence (O) | 3,800 | 2% | 3% | 164,500 | 3% | 4% | 4% |
| Education (P) | 13,300 | 8% | 10% | 364,500 | 7% | 8% | 9% |
| Health (Q) | 16,800 | 10% | 13% | 497,000 | 10% | 11% | 13% |
| Arts, entertainment, recreation & other services (R,S,T and U) | 4,600 | 3% | 4% | 227,500 | 5% | 5% | 5% |
| Total | 163k | 100% | 1.4m | **4.9m** | **100%** | 12m | 31m |

*Source: ONS, Business Register and Employment Survey, 2018*

***Businesses counts***

7.2.134 There are 15k registered businesses in the CSA, 91.7% of which are micro firms. This is only slightly higher than the comparator geographies, all of which have a large majority of firms as micro. The CSA has a slightly smaller proportion of small firms (6.8%) compared to the national level (8.6%) and a very slightly smaller proportion of large firms (0.2%) than the national level (0.4%).

**Table 7.2.39 Business by size (number of employees), 2019**

| | | **Micro (0 to 9)** | **Small (10 to 49)** | **Medium (50 to 249)** | **Large (500+)** | **Total** |
|---|---|---|---|---|---|---|
| CSA | Number | 13,580 | 1,010 | 200 | 40 | 15k |
| | % | 91.7% | 6.8% | 1.3% | 0.2% | 100% |
| SRCA | | 90.2% | 8.1% | 1.4% | 0.3% | 143k |
| RCA | | 90.4% | 7.8% | 1.5% | 0.4% | 1.2m |
| UK | | 89.5% | 8.6% | 1.5% | 0.4% | 2.7m |

*Source: ONS, UK Business Counts, 2019. Note: due to data availability, LCA estimates have been excluded due to unreliable data. An approximation will be developed for DCO application.*

***Zero hours contracts***

7.2.135 It is estimated that, across the UK, there are currently 1 million people on zero hours contracts (ONS, 2020); equivalent to 3% of the workforce. 16-24 year olds represent 36% of all those on zero hour contracts despite only representing 11% of the total workforce, implying that young workers are more likely to be on these types of contracts. The contracts were banned in Ireland in 2019 in almost all circumstances. The TUC have been leading calls alongside trade unions such as Unison, Unite and GMB to ban zero-hours contracts.

***Apprenticeship starts (per 1,000 workers, by industry, by age, by level)***

7.2.136 In the academic year 17/18, there were 2,490 apprenticeship starts in the CSA. This is a smaller number of starts than seen in any of the other academic years; this decline is a pattern seen across all geographies. In fact the reduction in starts was slightly less severe in the CSA than in all other geographies (-16% in comparison to between -20 and -25% across the other geographies). The 17/18 CSA starts equated to 15.3 starts per 1,000 workers – on par with rates seen in the SRCA and SE LEP (15.1), slightly higher than England (14.0) and far higher than the RCA rate (10.1) which is mainly brought down by London, which only has 7.2 starts per 1,000 workers.

7.2.137 In 17/18, there were 1,630 achievements in the CSA. Over the period 14/15 to 17/18, the CSA saw an annual average achievement rate of 58% (where annual average achievement rate is the sum of achievements 14/15 to 17/18 as a proportion of sum of starts over same period, to account for the fact that apprenticeships can take multiple years before they are achieved), which is on par with all geographies.

**Table 7.2.40 Apprenticeship starts and average annual achievement rates, academic years 14/15 to 17/18**

| | 14/15 | 15/16 | 16/17 | 17/18 | | | |
|---|---|---|---|---|---|---|---|
| | **Starts** | **Starts** | **Starts** | **Starts** | **Starts per 1,000 workers** | **Achieve ments** | **Annual average achievement rate (14/15 to 17/18)** |
| CSA | 2,980 | 2,930 | 2,910 | 2,490 | 15.3 | 1,630 | 58% |
| SRCA | 26,960 | 27,100 | 26,340 | 21,320 | 15.1 | 14,410 | 57% |
| SE LEP | 31,940 | 32,440 | 31,610 | 25,240 | 15.1 | 17,270 | 57% |
| RCA | 151,960 | 154,520 | 149,580 | 121,000 | 10.1 | 83,150 | 57% |
| England | 500,090 | 509,430 | 495,070 | 376,030 | 14.0 | 276,350 | 58% |

*Source: Department for Education, Apprenticeships and traineeships data, 2019; ONS, Business Register and Employment Survey, 2018*

7.2.138 Table 7.2.41 shows that 34% of CSA starts in 17/18 were in business administration and law, which is the industry with the highest proportion of starts across all comparison areas. All geographies only have c. 2% of starts in leisure, travel and tourism.

7.2.139 All industries vary slightly in their average annual achievement rates, with the highest tending to be leisure, travel and tourism and the lowest in construction, planning and the built environment.

**Table 7.2.41 Apprenticeship starts and achievements (academic year 17/18) and average annual achievement rate (14/15 to 17/18)**

| | | Business, Administration and Law | Construction, Planning and the Built Environment | Engineering and Manufacturing Technologies | Health, Public Services and Care | Leisure, Travel and Tourism | Retail and Commercial Enterprise | Other* |
|---|---|---|---|---|---|---|---|---|
| Starts (17/18) | CSA | 860 | 140 | 450 | 460 | 60 | 330 | 230 |
| % starts (17/18) | CSA | 34% | 6% | 18% | 18% | 2% | 13% | 9% |
| | SRCA | 30% | 7% | 16% | 23% | 2% | 14% | 8% |
| | SE LEP | 30% | 7% | 15% | 24% | 2% | 14% | 8% |
| | RCA | 31% | 5% | 14% | 23% | 3% | 14% | 9% |
| | England | 30% | 6% | 16% | 24% | 2% | 14% | 8% |
| Achievements (17/18) | CSA | 490 | 70 | 260 | 440 | 60 | 180 | 140 |
| Average Annual Achievement Rate | CSA | 56% | 48% | 53% | 60% | 65% | 62% | 63% |
| | SRCA | 55% | 44% | 57% | 55% | 69% | 63% | 62% |
| | SE LEP | 55% | 44% | 57% | 55% | 70% | 63% | 62% |
| | RCA | 53% | 47% | 63% | 54% | 70% | 61% | 61% |
| | England | 56% | 51% | 61% | 55% | 72% | 61% | 60% |

*Source: Department for Education, Apprenticeships and traineeships data, 2019. *Note: 'Other' industries consist of: Agriculture, Horticulture and Animal Care, Arts, Media and Publishing, Education and Training, Information and Communication Technology and Science and Mathematics*

7.2.140 In 17/18, nearly half of apprenticeship starts in the CSA were at an advanced level (47%), slightly higher than other geographical comparators (44% to 46%). A small proportion of starts were at the higher level (14%), which is on par with other comparators (13% to 15%).

7.2.141 Between 14/15 and 17/18, the annual average achievement rate is highest for intermediate apprenticeships in all areas (the CSA has the highest at 66% compared to 62% to 63% in other geographies). The higher apprenticeship has the lowest average annual achievement rate of all the levels: it is 27% in the CSA and only reaches a high of 31% (SE LEP level).

**Table 7.2.42 Apprenticeship starts and average annual achievement rates by level, academic year 17/18**

| | | Intermediate | Advanced | Higher |
|---|---|---|---|---|
| Starts | CSA | 980 | 1,160 | 350 |
| % starts | CSA | 39% | 47% | 14% |
| | SRCA | 43% | 44% | 13% |
| | SE LEP | 43% | 44% | 13% |
| | RCA | 39% | 46% | 15% |
| | England | 43% | 44% | 13% |
| Achievements | CSA | 850 | 680 | 100 |
| Average Annual Achievement Rate (14/15 to 17/18) | CSA | 66% | 54% | 27% |
| | Sub-RCA | 63% | 54% | 30% |
| | SE LEP | 62% | 54% | 31% |
| | RCA | 63% | 54% | 28% |
| | England | 63% | 56% | 29% |

*Source: Department for Education, Apprenticeships and traineeships data, 2019*

7.2.142 In 17/18, apprenticeship starts were fairly evenly split across age groups, with c. 30% for under 19s and for 19-24s, and 39% for 25+ year olds. This is on par with all geographical areas except the RCA, which only had 25% of starts at the under 19 age group, and 43% at the 25+ age group.

7.2.143 In general, the 19-24 age group had the highest average annual achievement rate (just over 60% in all geographies) and the under 19s were slightly lower (between 58% and 60% across all geographies). The 25+ age group had a lower average annual achievement rate than the other age groups, at between 52% and 54% across all geographies.

**Table 7.2.43 Apprenticeship starts and average annual achievement rates by age, academic year 17/18**

| | | Under 19 | 19-24 | 25+ |
|---|---|---|---|---|
| Starts | CSA | 760 | 770 | 970 |
| % starts | CSA | 30% | 31% | 39% |
| | Sub-RCA | 30% | 31% | 39% |
| | SE LEP | 29% | 30% | 41% |
| | RCA | 25% | 31% | 43% |
| | England | 28% | 30% | 41% |
| Achievements | CSA | 470 | 480 | 670 |
| Average Annual Achievement Rate (14/15 to 17/18) | CSA | 59% | 62% | 53% |
| | Sub-RCA | 58% | 63% | 53% |
| | SE LEP | 58% | 62% | 52% |
| | RCA | 60% | 61% | 52% |
| | England | 60% | 62% | 54% |

*Source: Department for Education, Apprenticeships and traineeships data, 2019*

### *Commuting patterns*

7.2.144 This analysis has used the three Middle Layer Super Output Areas[60] (MSOAs) that surround the Kent Project Site as a proxy for appropriate commuting patterns.

7.2.145 The 2011 Census Location of usual residence and place of work by method of travel to work (MSOA level) dataset was used to ascertain the geographical distribution of commuting trips to the Kent Project Site. A total of 4,750 people commute to these three MSOAs from 690 different origin MSOAs across England and Wales.

7.2.146 Aggregating the trips to local authority level, the table below (Table 7.2.44 shows that a large number of commuting trips had their origin in Gravesham or Dartford, making up a combined 57% of all trips. Despite the Project Site being located in Dartford, the majority of commute trips according to the census originated in Gravesham. This is likely because Dartford is better connected to other employment locations and London, with Ebbsfleet International station for example lying in the borough and close to the site, making Dartford residents more likely to commute outside of the borough.

**Table 7.2.44 Proportion of trips to the CIA by Local Authority**

| County | Origin Local Authority | Proportion of trips to the Kent Project Site |
|---|---|---|
| Kent | Gravesham | 34% |
| Kent | Dartford | 23% |
| Kent | Medway | 12% |
| London | Bexley | 5% |
| Kent | Sevenoaks | 4% |
| Kent | Maidstone | 3% |
| Kent | Tonbridge and Malling | 2% |
| London | Greenwich | 2% |
| London | Bromley | 2% |
| Kent | Swale | 2% |
| London | Lewisham | 1% |
| Essex | Thurrock | 1% |
| Kent | Canterbury | 1% |
| Kent | Ashford | 1% |
| Kent | Tunbridge Wells | 1% |
| | Other | 8% |

*Source: ONS Crown Copyright Reserved [from ONS on 23 January 2020]*

7.2.147 An alternative aggregation is made by splitting the MSOA origins into travel time bands

[60] Middle Super Output areas are small areas designed to improve the reporting of small area statistics in England and Wales. They are fixed boundaries drawn such that the minimum population in any MSOA is 5,000 with a mean of 7,200 people.

based on the AM peak travel time between MSOA centroids. For each MSOA, the travel time (network car/transit travel time in AM peak traffic) to the site is estimated[61] and the MSOAs are grouped into broad travel time bands. These travel time bands represent how long a worker working in the Kent Project Site commutes for and is a better representation of how far workers travel than 'as the crow flies' distance.

7.2.148 The distribution of trips from each travel time band is shown in Table 7.2.45 and shows that 29% of car commute trips are made locally, within a 15-minute drive time of the Kent Project Site. Most car trips (69%) are made from within 30 minutes. There is a clear difference between the trips made by car and by public transport within each time band, reflecting the fact that car travel times are generally quicker, allowing more people to access the site within shorter times.

**Table 7.2.45 Estimated proportion of trips to the Kent Project Site by travel time band and mode**

| Travel time band (from worker origin) | % of car trips to the Kent Project Site | % of public transport trips to the Kent Project Site |
|---|---|---|
| **Less than 15 minutes** | **29%** | **0%**[62] |
| **15 to 30 minutes** | **40%** | **57%** |
| **30 to 60 minutes** | **26%** | **23%** |
| **60 to 90 minutes** | **3%** | **9%** |
| **90 to 120 minutes** | **0%** | **5%** |
| **More than 120 minutes** | **1%** | **6%** |

*Source: Google distance matrix API, with Volterra estimations applied*

***Future baseline – workplace employment***

7.2.149 Table 7.2.46 shows employment projections by assessment year for the CSA and UK. No single source was available which provided consistent job forecasts for each LPA so the forecasts have been projected using the implied compound annual growth rate from several different sources, as described in Table 7.2.46. The projections remain under review and alternative projections may be presented for the ES. For example, the transport assessment will be informed by detailed models for the ES which will be based on projections. This analysis will use those projections, where possible, to ensure consistency across the ES.

7.2.150 Based on the forecasts below (Table 7.2.46) employment in the CSA is expected to grow

[61] Travel time data for car and transit modes of travel are sourced from the Google Maps distance matrix API. For PT travel times, Ebbsfleet International or Tilbury (whichever is closer for each MSOA) is taken as the end point of the journey. It has then been assumed that the onward transfer from Ebbsfleet and Tilbury to the site will take 10 minutes. These assumptions have been made in order to provide more realistic commutable labour market zones for consideration, because the travel time from both Ebbsfleet and Tilbury to the site will be considerably improved in the Future Baseline as a result of the scheme. The simplistic assumptions made here are illustrative at this stage (although deemed likely to be materially appropriate for these purposes) and may be refined for the ES.
[62] Travel times are taken from MSOA (population weighted) centroids. Due to the way the MSOAs are drawn around the Kent Project Site, no centroid is within a 15minute walk or public transport journey of the site

by an average rate of 1.3% a year, which is higher than the national annual growth rate (0.5%). The do-nothing projections are under review and updated projections will be presented in the ES if better and consistent forecasts are identified through further research or consultation.

**Table 7.2.46 Do nothing employment projections by assessment year**

| Area | Source for Forecast | Implied compound annual growth rate | 2018 | 2022 | 2023 | 2025 | 2026 | 2030 | 2038 |
|---|---|---|---|---|---|---|---|---|---|
| Thurrock | Forecast growth in labour force in the 2017 SHMA (2014 – 2037).[63] | 1.1% | 68,000 | 71,000 | 72,000 | 73,000 | 74,000 | 77,000 | 84,000 |
| Gravesham | Forecast jobs growth from the North Kent Strategy Housing & Economic Needs Assessment (2012-2028).[64] | 0.9% | 33,000 | 34,000 | 34,000 | 35,000 | 35,000 | 37,000 | 39,000 |
| Dartford | Forecast jobs growth in Dartford between 2013 and 2031.[65] | 1.8% | 61,000 | 66,000 | 67,000 | 69,000 | 71,000 | 76,000 | 88,000 |
| CSA | Sum of the above | 1.3% | 162,000 | 171,000 | 173,000 | 178,000 | 180,000 | 190,000 | 211,000 |
| National | Forecast jobs growth from the OBR between Q1 2018 and Q1 2024.[66] | 0.5% | 32.3m | 32.9m | 33.0m | 33.4m | 33.5m | 34.1m | 35.4m |

7.2.151 These projections have been sense checked against the Ebbsfleet proposals and they appear broadly consistent with the anticipated employment growth planned within the EDC.

**The housing market**

7.2.152 There will be indirect effects on housing supply in the CSA as a result of the London Resort. This will include the impact both on quantum of housing demand (as a result of the increased workforce at the London Resort who require somewhere to live) and the impact on type of housing demanded. While the employment opportunities created by the London Resort will have a positive economic impact on the area, the workers and visitors attracted to the area may increase demand for housing, having an impact on current housing need (in terms of price, tenure, size etc) as well as the demand that arises from the London Resort. This will include potential impacts on affordability,

[63] Turley Economics (2017), Addendum to the South East Strategic Housing Market Assessment. Table 3.2.
[64] GVA (2017), North Kent Strategic Housing & Economic Needs Assessment: Employment Land Needs Assessment. Table 24.
[65] https://www.kent.gov.uk/__data/assets/pdf_file/0017/50345/Understanding-Kent-and-Medways-growth-requirements-GIF.pdf
[66] https://obr.uk/forecasts-in-depth/the-economy-forecast/labour-market/

additional housing need and release of land for housing.

*Housing stock*

7.2.153 According to MCHLG, there were 156,900 dwellings in the CSA, 84% of which were in the private sector, comparable to 83% across England. The ONS estimate that, in the CSA, this 84% is split between 68% owner occupied (compared to 63% in England) and 16% are in the private rented sector (compared to 20% in England).[67] MCHLG also note that 13% of CSA dwellings are local authority owned, higher than the 7% across England. By contrast, only 4% of CSA dwellings are private registered providers, compared to 11% in England.

**Table 7.2.47 Dwelling stock by tenure, 2018**

| | Total dwellings | Local authority owned | Private registered provider | Other public sector | Owner occupied | Private rented sector |
|---|---|---|---|---|---|---|
| CSA | 156,900 | 19,800 | 5,700 | 0 | 106,900 | 24,500 |
| | | 13% | 4% | 0% | 68% | 16% |
| England | 24,172,000 | 1,592,000 | 2,539,000 | 43,000 | 15,276,700 | 4,807,600 |
| | | 7% | 11% | 0% | 63% | 20% |

*Sources: MCHLG, Live tables on dwelling stock (including vacants), Table 100 Dwelling stock: Number of Dwellings by Tenure and district: England; 2018; ONS, Subnational dwelling stock by tenure estimates, England, 2018*

7.2.154 According to MCHLG, there are 3,800 vacant dwellings in the CSA, equating to 2.4% of total dwellings. This is on par with England, which is reported to have 634,500 vacant dwellings or 2.6% of total.[68] In the CSA, there were 100 vacant local authority owned dwellings, equivalent to 0.7% of total local authority owned dwellings. This is far lower than the 1.5% vacancy across all local authority owned dwellings in England. For private registered provider dwellings, the CSA is reported to have 60 (1.0% of total dwellings) compared to 1.3% at the national level. Vacant dwellings for other public sector dwellings was negligible.

**Table 7.2.48 Vacant dwellings, 2018**

| | Total | | Local authority owned | | Private registered provider | |
|---|---|---|---|---|---|---|
| CSA | 3,800 | 2.4% | 100 | 0.7% | 60 | 1.0% |
| England | 634,500 | 2.6% | 23,200 | 1.5% | 33,400 | 1.3% |

*Source: MCHLG, Live tables on dwelling stock (including vacants), Table 615 All vacant dwellings by local*

[67] These research outputs are not official statistics on dwelling stock by tenure.
[68] MCHLG, Live tables on dwelling stock (including vacants), Table 615 All vacant dwellings by local authority district, England, 2018

*authority district, England, 2018*

7.2.155 The above table (Table 7.2.48 does not provide further tenure breakdowns for vacant dwellings. However, the English Housing Survey reports that approximately 10% of PRS dwellings across England are vacant[69] and that this has been the case since early 2000s.[70] Furthermore, given the large proportion of owner occupied housing, it can be expected that total dwelling vacancy (2%) will be highly representative of owner occupied vacancy.

***House prices and affordability***

7.2.156 For the affordability baseline, London has been excluded from the RCA due to high earnings, median house prices, PRS rents and affordability ratios potentially skewing the data.

Owner occupied

7.2.157 In 2019, the median house price in the CSA was £296,200, lower than the SRCA (£303,800) and RCA (£306,200), but higher than the national average (£240,000). Median house prices since 2010 have grown by 71% in the CSA, far faster than growth in the SRCA (55%), RCA (49%) and England (33%).

7.2.158 The affordability ratio was 9.1 in 2019 in the CSA, meaning that a CSA resident on a median wage would need just over nine years' worth of income to afford a house in the area. This is slightly lower than that of the SRCA (9.2) and RCA (9.4) but higher than the England average (7.8). As with the median house prices, the affordability ratio in the CSA has grown far faster than all other geographical comparators.

7.2.159 Typically, mortgage lenders will loan four to five times a residents' earnings. Therefore, a couple who reside in the CSA and are both on the median wage for the area (earning a combined £65,100) would still require a house deposit of £35,700 if they are able to borrow four times their earnings. This is lower than the deposit required in the SRCA (£40,000) and RCA (£45,000), but higher than that required nationally, where a mortgage of four times joint earnings would cover the cost of the house. In all geographical areas, a mortgage of five times joint earnings would cover the cost of the house. It should be noted however that this affordability pressure will be further heightened for single earning households or households where earnings are below the average levels. There is a generally agreed housing crisis across the country, with a particular focus on London and the South East, where houses are becoming increasingly unaffordable for first time buyers.

[69] English Housing Survey, 2018

[70] MHCLG, 2011, Dwelling Stock Estimates: 2011 England. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/6868/2039750.pdf

7.2.160 Overall, the affordability baseline finds that, whilst houses in the CSA are very slightly more affordable than the SRCA and RCA, they are less affordable than the England average, and prices have been growing much faster, as has the affordability ratio.

**Table 7.2.49 Median house price, affordability ratio and house deposits required**

| | Median House Price | | Affordability ratio | | Median joint earnings 2019 | Deposit required after mortgage | |
|---|---|---|---|---|---|---|---|
| | 2019 | Change since 2010 | 2019 | Change since 2010 | | 4 times joint earnings | 5 times joint earnings |
| CSA | £296,200 | 71% | 9.1 | 51% | £65,100 | £35,700 | -£29,400 |
| SRCA | £303,800 | 55% | 9.2 | 32% | £65,900 | £40,000 | -£25,900 |
| RCA | £306,200 | 49% | 9.4 | 28% | £65,200 | £45,300 | -£20,000 |
| England | £240,000 | 33% | 7.8 | 14% | £61,300 | -£5,300 | -£66,600 |

*Source: MHCLG, House price to residence-based earnings ratio, 2019*

Private Rented Sector

7.2.161 Table 7.2.50 below shows the private rental market statistics as reported by the VOA in FY18. In the CSA, median rents were £900, far higher than the SRCA (£838), RCA (£835) and England (£695). This is mainly driven by Dartford, where median rent was reported at £950. Rents vary across the number of bedrooms in all study areas. The CSA has higher median monthly rent than all study areas for all house sizes except four bedrooms, where the RCA is higher than the CSA.

**Table 7.2.50 Median monthly rents (£), FY18**

| | All | Room | Studio | 1 bed | 2 bed | *per room* | 3 bed | *per room* | 4 bed | *per room* |
|---|---|---|---|---|---|---|---|---|---|---|
| CSA | 900 | 538 | 602 | 717 | 900 | *450* | 1,133 | *378* | 1,442 | *360* |
| SRCA | 838 | 475 | 553 | 668 | 837 | *419* | 1,024 | *341* | 1,413 | *353* |
| RCA | 835 | 426 | 560 | 675 | 825 | *413* | 998 | *333* | 1,500 | *375* |
| England | 695 | 390 | 575 | 615 | 675 | *338* | 760 | *253* | 1,320 | *330* |

*Source: Valuation Office Agency, PRS rents by administrative area, FY18*

7.2.162 Comparing these rents to 2018 residence based earnings, this baseline has estimated affordability using the ONS benchmark which found that PRS rents were considered affordable if they were less than 30% of gross household income,[71] where earnings has been used here to proxy household income. In the CSA, PRS rents (all bedroom types) accounted for 34% of monthly earnings, higher than the affordability benchmark of 30%. It is also a higher proportion in the CSA than the SRCA and RCA (32%) England

[71] ONS, Percentage of renters' median monthly household income spent on median monthly rent, by region, England, FYE 2018

(28%).

**Table 7.2.51 FY18 PRS rents against 2018 monthly earnings**

| | 2018 earnings | Monthly earnings | All PRS rents | Proportion of monthly income spent on rent |
|---|---|---|---|---|
| CSA | 31,752 | 2,646 | 900 | 34% |
| SRCA | 31,484 | 2,624 | 838 | 32% |
| RCA | 31,626 | 2,635 | 835 | 32% |
| England | 29,849 | 2,487 | 695 | 28% |

*Sources: Valuation Office Agency, PRS rents by administrative area, FY18; MHCLG, House price to residence-based earnings ratio, 2019*

### *Housing need*

7.2.163 Table 7.2.52 below shows that the CSA has seen substantial growth in the number of rough sleepers between 2010 and 2018 (1300%) compared to the RCA (175%) and England (165%) growth over the same period, although the CSA growth was starting from a very low base of just 3 rough sleepers in 2010. The large CSA growth was mainly driven by Gravesham, which saw 20 additional rough sleepers over the period.

7.2.164 In 2018, the CSA had 0.30 rough sleepers per 1,000 households, higher than the RCA (0.21) and England (0.24) rates. This rate, too, saw high growth in the CSA between 2010 and 2018 (1461%) compared to RCA (147%) and England (151%).

**Table 7.2.52 Rough sleepers, 2010 and 2018**

| | Rough sleepers | | | Rough sleepers per 1,000 households | | |
|---|---|---|---|---|---|---|
| | 2010 | 2018 | growth | 2010 | 2018 | growth |
| CSA | 3 | 42 | 1300% | 0.02 | 0.30 | 1461% |
| RCA[72] | 516 | 1418 | 175% | 0.08 | 0.21 | 147% |
| England | 1768 | 4677 | 165% | 0.10 | 0.24 | 151% |

*Source: Street counts and estimates of rough sleeping in England, Autumn 2010-2018*

7.2.165 Between 2010 and 2017, the number accepted as being homeless grew by 46% to 395 residents in the CSA, faster than the growth across England over the same period (28%). This was mainly driven by Dartford and Thurrock, which saw high growth compared to a contraction in Gravesham. The CSA had 2.60 accepted as homeless per 1,000 households – higher than the England equivalent (2.45). The rate per 1,000 households also grew faster (36%) than England (21%).

[72] For baseline information on rough sleeping, London has been excluded from the RCA to avoid biasing the estimates given the high rates seen in the capital.

**Table 7.2.53 Number accepted as being homeless (per 1,000 households), 2010 and 2017**

| | Number accepted as being homeless | | | Number accepted as being homeless per 1,000 households | | |
|---|---|---|---|---|---|---|
| | **2010** | **2017** | **growth** | **2010** | **2017** | **growth** |
| CSA | 270 | 395 | 46% | 1.92 | 2.60 | 36% |
| England | 44,159 | 56,595 | 28% | 2.03 | 2.45 | 21% |

*Source: Local Authority Homelessness Statistics (England), 2019*

7.2.166 In 2017, there were 325 CSA residents in temporary accommodation; 195% growth from the 2010 figure of 110, again driven by Dartford and Thurrock. This was faster growth than was seen across England (67%) over the same period. There were 2.14 residents in temporary accommodation per 1,000 households in the CSA which is smaller than the rate for England (3.50). However, the growth since 2010 in the rate was 174%; far higher than the growth across England (58%).

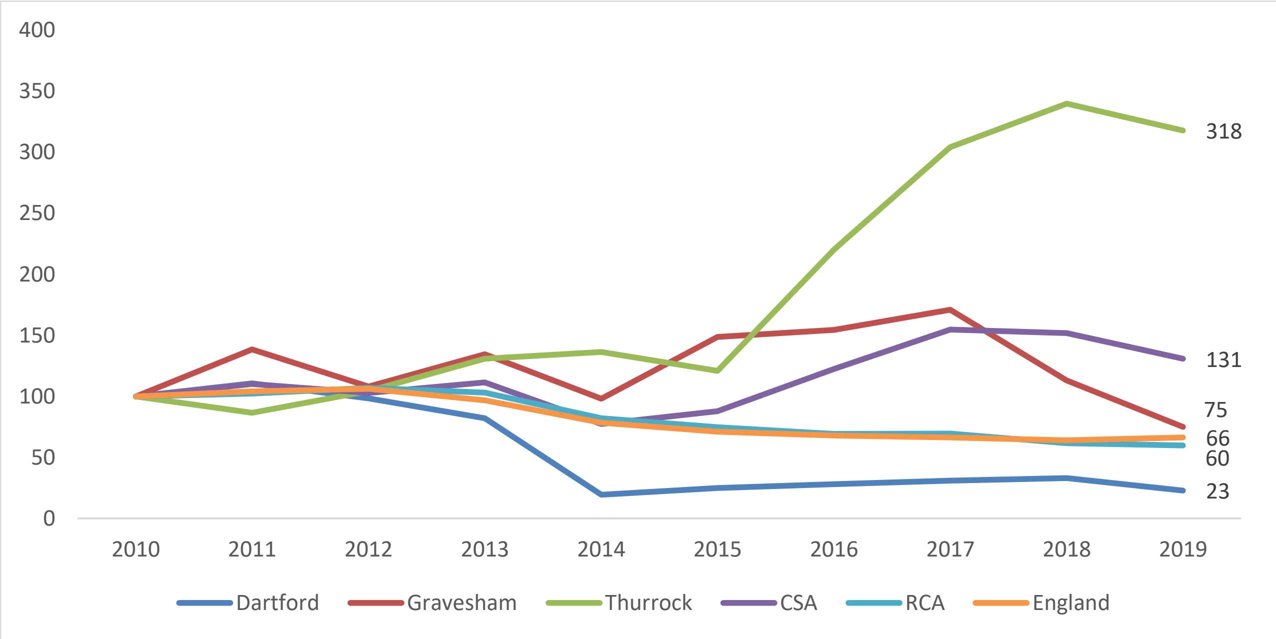
**Table 7.2.54 Number in temporary accommodation (per 1,000 households), 2010 and 2017**

| | Number in temporary accommodation | | | Number in temporary accommodation per 1,000 households | | |
|---|---|---|---|---|---|---|
| | **2010** | **2017** | **growth** | **2010** | **2017** | **growth** |
| CSA | 110 | 325 | 195% | 0.78 | 2.14 | 174% |
| England | 48,236 | 80,657 | 67% | 2.22 | 3.50 | 58% |

*Source: Local Authority Homelessness Statistics (England), 2019*

7.2.167 Figure 7.2.12 below shows the index of households on local authority waiting lists between 2010 and 2019. As can be seen, many geographies have experienced decreases in their list sizes. However, Thurrock has seen a huge increase (+218%) which means that the CSA itself has also seen an increase (+31%) despite decreases in both Dartford (-77%) and Gravesham (-25%). England overall has seen a decrease of 33%.

**Figure 7.2.12 Index of households on local authority waiting lists (2010 = 100)**




*Source: MCHLG, Table 600: Numbers of households on local authorities' housing waiting lists, by district: England, 31 March 1997-2019. Note: RCA here excludes London so as not to skew the data*

7.2.168 In 2018, there were 12,400 households in the CSA which were on the local authority waiting list, accounting for 62% of local authority dwellings – lower than that of England (70%). Notably, there is a slight difference between households and dwellings,[73] however household stock by tenure is not available so dwellings have been used as a proxy and it is assumed that the differences between households and dwellings are the same at a CSA and England level so that the two percentages are comparable.

**Table 7.2.55 Households on Local Authority waiting lists as a proportion of Local Authority dwellings, 2018**

| | Households on LA waiting list | LA dwellings | Households as a % of LA dwellings |
|---|---|---|---|
| CSA | 12,400 | 19,800 | 62% |
| England | 1,114,500 | 1,592,000 | 70% |

*Sources: MCHLG, Table 600: Numbers of households on local authorities' housing waiting lists, by district: England, 31 March 1997-2019; MCHLG, Live tables on dwelling stock (including vacants), Table 100 Dwelling stock: Number of Dwellings by Tenure and district: England; 2018*

[73] A household is one or more people who live in the same dwelling and share meals and living spaces. One or more households can exist in the same dwelling if meals and living space are not shared.

***Future baseline – the housing market***

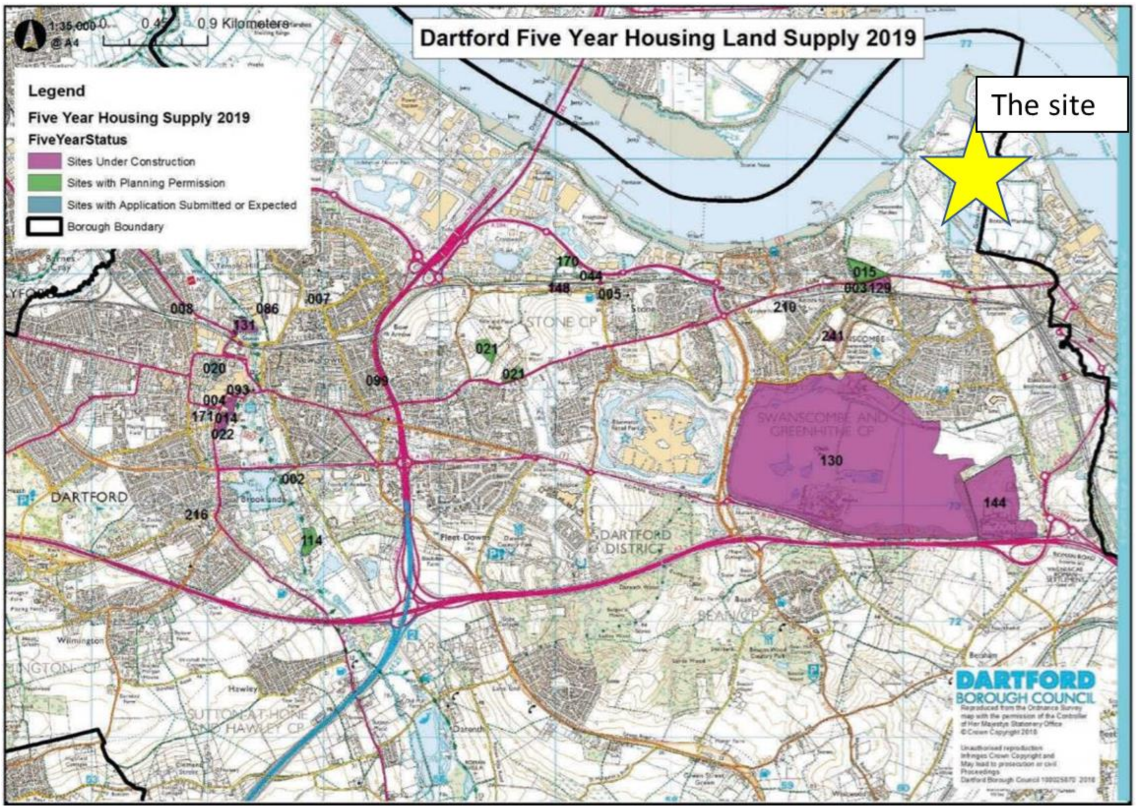
Dartford Borough Council Five Year Housing Supply 2019 – 2024

7.2.169 Dartford has published their housing need in their Five year housing land supply, for April 2019 to 31 March 2024.

7.2.170 Within the Dartford Core Strategy, major growth and regeneration plans are focused on three priority areas: Dartford town centre/ Northern Gateway, the Thames Waterfront, and Ebbsfleet to Stone. Major sites at these locations have all contributed significant levels of new home completions. Dartford officially completed 3,206 (net) new homes over the last three financial years.

7.2.171 Starts on sites recorded in 2019 indicate that high delivery levels are likely to be maintained. Large consented sites are now being delivered at Ebbsfleet and elsewhere and provide a robust and sizeable source of future supply, in addition to a variety of smaller permissions. Dartford has 4,718 deliverable new dwellings over the five year period. In total, 3,674 dwellings are forecast at sites that have already commenced (76% total forecast). Figure 7.2.13 shows the five year housing supply in the context of the site.

**Figure 7.2.13 Dartford five year housing deliverable sites**




*Source: Dartford Borough Council, Dartford Five Year Deliverable Housing Supply, 2019. Note: Star identifying site location is illustrative only.*

7.2.172 The government's Local Housing Need (LHN) standard method resulted in a requirement of 3,985 dwellings to be completed in the borough over the five year period (797p.a.) This is within the Dartford's Local Plan current (Core Strategy) housing aims of 585 to 865p.a. dwellings but will be updated on the basis of new national datasets. The NPPF requires a buffer of 5% to ensure choice and competition in the market for land. This increases the requirement to 4,184 dwellings.

Gravesham Borough Council Five Year Deliverable Housing Land Supply Statement 2018 - 2023

7.2.173 Policy CS02 of the Gravesham Local Plan Core Strategy sets out the scale and distribution of development and includes a housing requirement for at least 6,170 additional dwellings for the plan period 2011-2028, to be delivered at a variable rate as follows:

- at least 325 dwellings per year for 2011/2012 – 2018/2019,
- at least 363 dwellings per year for 2019/2020 – 2023/2024,
- at least 438 dwellings per year 2024/2025 – 2027/2028.

7.2.174 Of these 6,170 required, 1,030 are expected at Northfleet Embankment & Swanscombe Peninsula East Opportunity Area.[74]

7.2.175 Between 2011/12 and 2017/18, the net dwelling target in Gravesham was 325 per annum (total 2,275). This target was only reached in one of the seven years (401 dwellings were completed in 2012/13). Overall, only 1,601 dwellings were delivered over the seven years; an under delivery of 674 (30% below target). These 674 are carried forward into the remaining plan years, hence the delivery requirement for 2018 to 2028 is now 4,569 and, within this, the new target for 2018 to 2023 is 2,451. Including a 20% buffer as required by the NPPF[75], the total requirement for 2018 to 2023 is 2,941.

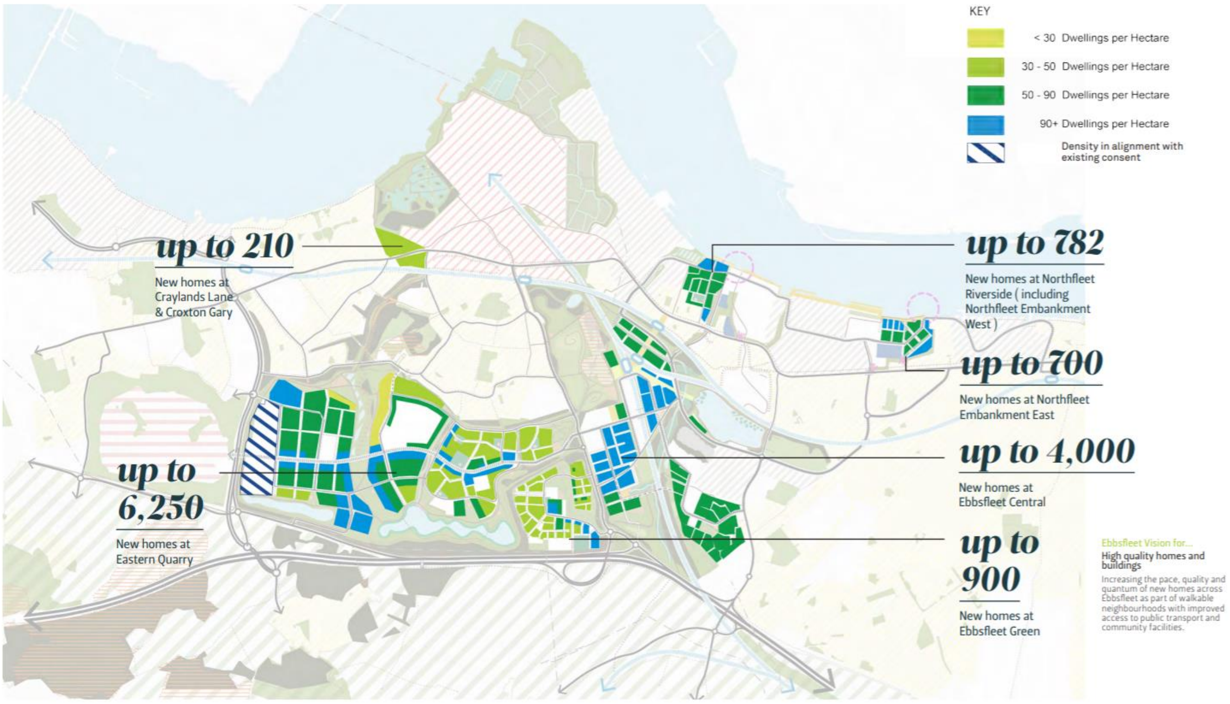
7.2.176 Sites have been identified with the capacity to deliver 2,585 dwellings within the five year period. This is less than the 2,941 required by policy, hence Gravesham has insufficient housing land supply.

7.2.177 To address this, the Government requires Local Planning Authorities to identify sites from years 6-10 which can be brought forward into the five year land supply period. The council is working in partnership with the Ebbsfleet Development Corporation to bring forward development within the area. Both Dartford and Gravesham Borough Councils have adopted the EDC's Framework Masterplan for the area, as well as progressing discussions with developers and site owners to expedite delivery of development. To date this has resulted in delivery of Springhead, Ebbsfleet at a greater pace than previously envisaged, as well as an increase in the quantum and pace of development at Northfleet Embankment East.

[74] Gravesham Local Plan Core Strategy, 2014.
[75] In cases of historic under delivery, as in Gravesham, policy requires that the 5% buffer is increased to 20% to provide a realistic prospect of achieving the planned supply and ensure choice and competition in the market for land.

7.2.178 Additionally, the EDC Implementation Development Framework (covering the years to 2037) outlines, for the five existing development proposals with consent, space for some 11,000 homes (6,000 in Eastern Quarry approx.. 3,000 in Ebbsfleet Central). The majority of these are in Dartford, but some also appear in Gravesham.[76] This additional Dartford figure is on par with their expectations as outlined in previous discussions with Dartford Borough Council, which stated that 5,320 houses will be built past 2026 (the end of the plan period), with the majority expected to arise from the Ebbsfleet Garden City site at Ebbsfleet Quarry.

**Figure 7.2.14 Homes**




*Source: EDC, Ebbsfleet Implementation Framework, 2017*

Thurrock Five Year Housing Land Supply Position Statement 2016 - 2021

7.2.179 Despite intentions that this statement be updated at least annually, the 2016 version is the most recent. Thurrock Council are in the process of producing the 2019 update.

7.2.180 The South Essex Strategic Housing Market Assessment identifies a range of objectively assessed needs for Thurrock of between 919 and 973 dwellings per annum (4,595 to 4,865 over the five year period). After adjusting for the residual requirement (2014 to 2016) and the 20% buffer required by policy, the total housing requirement over the five year period is 6,409 to 6,841 (1,282 to 1,369 per year).

7.2.181 The five year supply for housing is estimated to be 3,441 dwellings. Of these, 3,293 are from sites with permission. This only equates to between 50.2% and 53.6% of the

[76] Ebbsfleet Development Corporation, Ebbsfleet Implementation Framework, 2017

updated requirement. Of these, c. 500 are in Tilbury. Thurrock are currently in the process of producing an updated document with an April 2019 base date. Once available, this will be used to inform the housing future baseline.[77]

## Local accommodation options

7.2.182 The London Resort will attract a large number of visitors, which may place additional demand on local accommodation options.

### *Accommodation stock*

7.2.183 It is expected that some visitors to the London Resort will prefer to choose local accommodation options, within the CSA. According to the Visit Britain accommodation stock audit, there were 2,111 hotel rooms in the CSA in 2016, 948 (45%) of which were in Dartford. The average room occupancy in each borough was 76% in 2019. This means that there are approximately 512 available rooms in the CSA.

**Table 7.2.56 Rooms and occupancy in the CSA**

| | Total rooms | Average occupancy | Total available rooms |
|---|---|---|---|
| Dartford | 948 | 76% | 231 |
| Gravesham | 559 | 76% | 136 |
| Thurrock | 604 | 76% | 145 |
| CSA | 2,111 | 76% | 512 |

### *Future baseline – accommodation stock*

7.2.184 The EDC Implementation Development Framework outlines, for the six existing development proposals with consent, that there is maximum consent for over 21,000 sqm of hotel floorspace for five of the six proposals. Considerable housing growth is also planned, which could increase the stock of properties available for holiday rentals or short-term home lettings. These would contribute towards increased temporary accommodation available in the future baseline, across all types. However, in order to be conservative, none of this is assumed to occur nor relied upon. This assessment therefore assesses effects against the current baseline levels.

## Potential effects of trade creation and diversion relating to theme parks

7.2.185 The London Resort will provide a tourist attraction unlike any that currently exist in the UK. It may also attract some trade away from similar attractions (or be perceived to do so) that already exist in the UK. Existing provision of theme parks at different spatial

[77] Retrieved from https://www.thurrock.gov.uk/foi-responses/5-year-housing-land-supply-position. Accessed July 2020

levels are therefore detailed in this section .

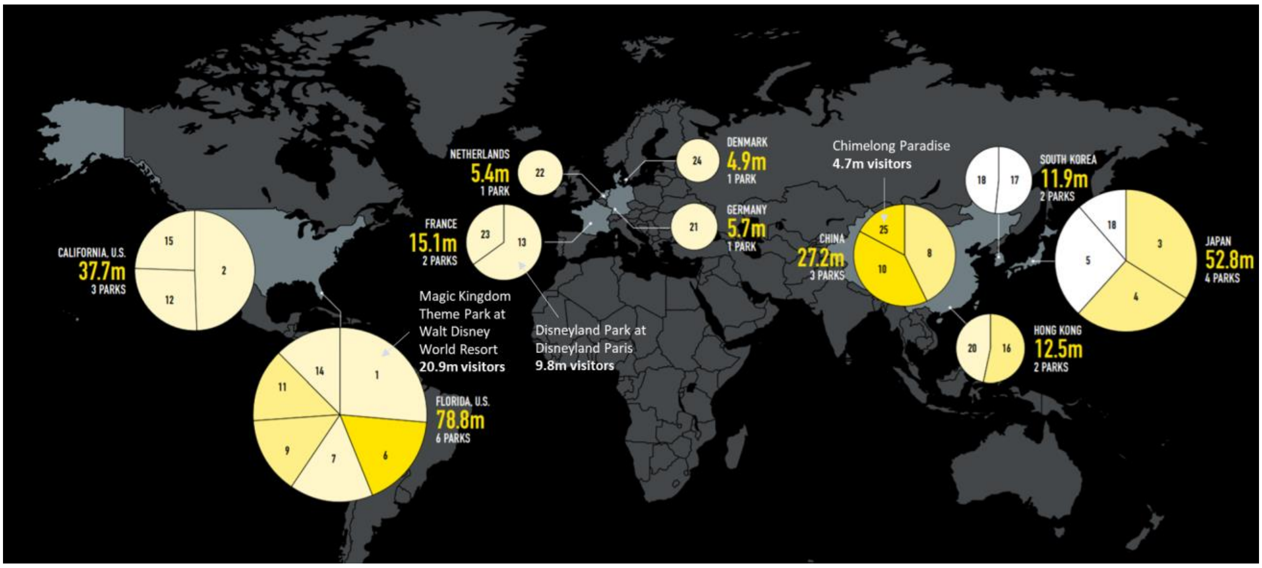
***Baseline***

Entertainment parks – Global

7.2.186 Figure 7.2.15 displays the locations of the top 25 global amusement / theme parks, according to Aecom, by visitor number. Visitor numbers ranged from 4.7m (Chimelong Paradise, Guangzhou, China) to 21m (Magic Kingdom Theme Park at Walt Disney World Resort, Lake Buena Vista, FL, U.S.). The London Resort is expecting to be within this range of visitors per year, hence would be considered a global attraction.

7.2.187 None of the top 25 are in the UK; the closest being Disneyland Paris and Walt Disney Studios Park (at Disneyland Paris) in France (with 9.8m and 5.3m visitors respectively).

**Figure 7.2.15 Global amusement / theme parks and 2018 visitor numbers**

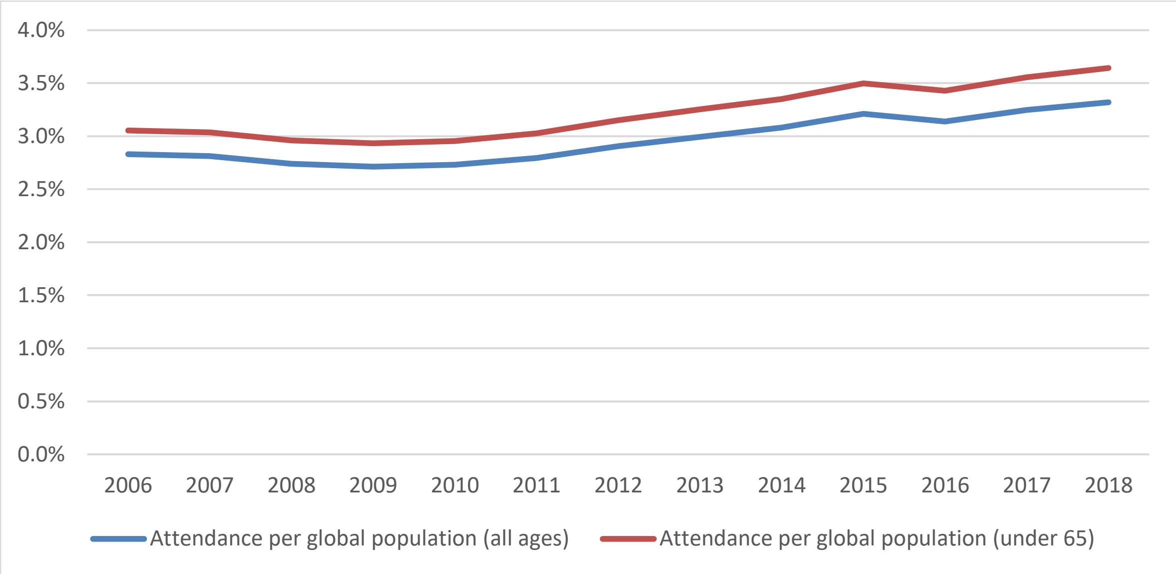



*Source: Aecom, Theme Index, 2018*

7.2.188 Over time, attendance at the top 25 global theme parks has been growing, from 187m in 2006 to c. 252m in 2018. Over this time period, both the total global population, and the population aged under-65 (the most likely demographic to visit such global attractions[78]) has been growing but at a slightly slower rate. The global population has increased from 6.6bn in 2006 to 7.6bn in 2018, and the under 65s have grown slightly slower from 6.1bn in 2006 to 6.9bn in 2018. This means that attendance as a proportion of total population has also been increasing, from 2.8% in 2006 to 3.3% in 2018. As a proportion of the under 65s, attendance has grown from 3.1% to 3.6%

[78] This population comparison is intended to capture the majority of likely visitors to these top 25 theme parks. It is not an exclusive metric.

**Figure 7.2.16 Global theme park attendance per global population (all ages and under 65), 2006 to 2018**




*Sources: Aecom Global Attractions Reports, 2006 to 2018; World Bank Population Statistics, 2006 to 2018*

7.2.189 A comparison of provision in proportion to the residential population (all ages) can give an idea of provision for each country. Figure 7.2.15 Figure 7.2.16shows the count of the global parks as identified by Aecom, and the population of each country, with the ratio of global theme parks per million population. It can be seen that Hong Kong has the highest rate of provision at 0.27, and China the lowest at 0.00. The US, Japan and France all have 0.03 per million population, putting them on par but towards the lower end of the scale relative to other countries.

7.2.190 A country's global park provision can also be compared to tourism international arrivals in the country, to give an idea of the ability for the country to serve its tourist population with the parks. It can be seen that Japan and South Korea have the highest rate of provision at 0.13 parks per million tourist international arrivals, followed closely by the US at 0.11. France has the lowest at 0.02. In reality theme parks attract visitors from a variety of markets, and the penetration rates vary by theme park and by visitor category. These indicators are nevertheless indicative of the ranges of potential population and tourist numbers which can support theme parks of a global calibre.

7.2.191 Clearly, without even one global park, the UK is considerably underprovided on both metrics. The UK's population in 2019 was c. 67m and its tourism arrivals in 2018 were 36m. If its provision of theme parks was on par with the average provision across the countries containing the top 25 global theme parks, it would have 2-3 theme parks.[79]

[79] Calculated by applying the median park provision per population and tourism international arrival from Table 7.2.57 to relevant UK stats.

**Table 7.2.57 Global (top 25) theme park provision per million population and tourism arrivals**

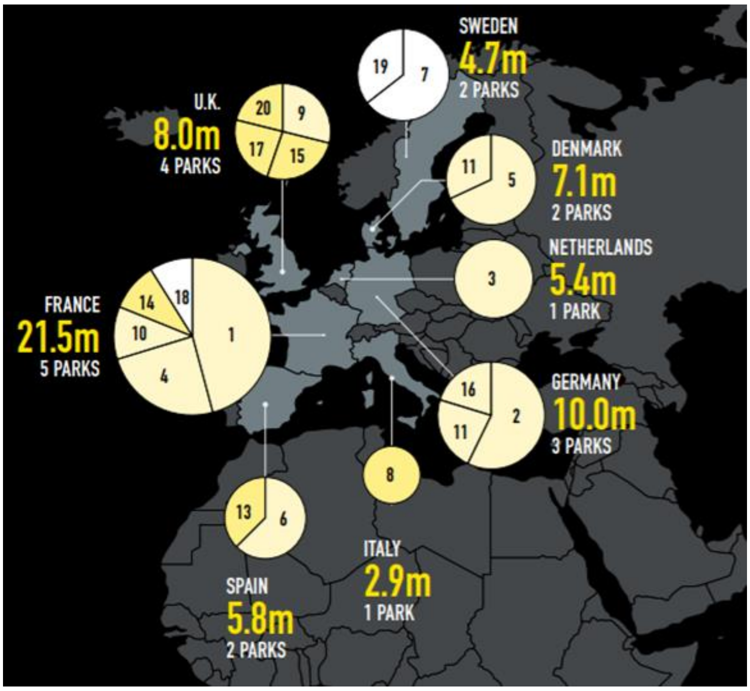
| | Count of (top 25) global theme parks | Population (2019) (million) | Count per million population | Tourism - International Arrivals (2018) | Count per million arrivals |
|---|---|---|---|---|---|
| US | 9 | 328 | 0.03 | 80 | 0.11 |
| Japan | 4 | 126 | 0.03 | 31 | 0.13 |
| China | 3 | 1,398 | 0.00 | 63 | 0.05 |
| France | 2 | 67 | 0.03 | 89 | 0.02 |
| Hong Kong | 2 | 8 | 0.27 | 29 | 0.07 |
| South Korea | 2 | 52 | 0.04 | 15 | 0.13 |
| Germany | 1 | 83 | 0.01 | 39 | 0.03 |
| Netherlands | 1 | 17 | 0.06 | 19 | 0.05 |
| Denmark | 1 | 6 | 0.17 | 13 | 0.08 |

*Sources: Aecom Global Attractions Report, 2018; World Bank Population Statistics, 2019; World Bank Tourism Arrival Statistics, 2018*

Entertainment parks – EMEA

7.2.192 Once the geography considered is limited to Europe, Middle East and Africa (EMEA), England's theme parks represent more of a presence. According to Aecom, of the top 20 Europe, Middle East and Africa (EMEA amusement/theme parks in 2018 (by visitor number), four were in England.

**Figure 7.2.17 Top 20 amusement parks in EMEA**




*Source: Aecom Global Attractions Report, 2018*

7.2.193 Taking the same metrics as above for the global theme parks, Table 7.2.58 outlines the top 20 EMEA parks for million population (all ages) and million international tourism arrivals. As can be seen, the UK fares about average on provision per million population at 0.06, lower than France, Sweden and Denmark but on par with the Netherlands and higher than Spain, Germany and Italy. In terms of provision per tourism international arrivals, the UK ranks third of the eight countries, only behind Denmark and Sweden. This latter metric is less relevant in this context, however, as the UK's current theme parks are predominantly catering to the domestic rather than international tourism market.

**Table 7.2.58 Top 20 EMEA park provision per million population and tourism arrivals**

| Country | Count of (top 20) EMEA theme parks | Population (2019) (million) | Count per million population | Tourism - International Arrivals (2018) | Count per million arrivals |
|---|---|---|---|---|---|
| UK | 4 | 67 | 0.06 | 36 | 0.11 |
| France | 5 | 67 | 0.07 | 89 | 0.06 |
| Spain | 2 | 47 | 0.04 | 83 | 0.02 |
| Italy | 1 | 60 | 0.02 | 62 | 0.02 |
| Germany | 3 | 83 | 0.04 | 39 | 0.08 |
| Netherlands | 1 | 17 | 0.06 | 19 | 0.05 |
| Denmark | 2 | 6 | 0.34 | 13 | 0.16 |
| Sweden | 2 | 10 | 0.19 | 7 | 0.27 |

*Sources: Aecom Global Attractions Report, 2018; World Bank Population Statistics, 2019; World Bank Tourism Arrival Statistics, 2018.*

Entertainment parks – UK

7.2.194 Figure 7.2.18 shows the UK's top 10 attractions (by visitor number), where the top four are those noted by Aecom. Table 7.2.59 provides information regarding visitor numbers and ticket prices at each (where known).

**Figure 7.2.18 Top attractions in the UK**


*Sources: Volterra; Googlemaps*

7.2.195 Table 7.2.59 shows that, of those with known visitor numbers, Legoland attracted the highest number of visitors at 2.3m (notably, only half the lowest visitor number seen in the top 25 global attractions - 4.7m at Chimelong, China). All of the top four attractions are owned and operated by the same party – Merlin Entertainments. The 'Merlin Annual Pass' enables visitors to visit any Merlin attractions over the course of the membership, and therefore the visitor numbers are also likely to be inter-related by nature of this fact.

7.2.196 Also close to the Project Site is Margate Dreamland on the very eastern tip of Kent, approximately 60 minute drive from the Project Site. In 2019, visitor numbers reached the highest they had been at 650,000.[80] There is also Paulton's Park (Peppa Pig World) in Southampton, approximately 110 minute drive from the Project Site, which consistently attracts over 1,000,000 visitors each year.[81]

7.2.197 Annual visitor numbers are not available for Warner Bros. Studios - The Making of Harry Potter tour, which opened in 2012 (and has been the subject of three expansions since

[80] Retrieved from https://interpark.co.uk/dreamland-margate-enjoys-record-breaking-year/. Accessed July 2020.
[81] Retrieved from https://blooloop.com/features/paultons-park-peppa-pig-world-mancey/ Accessed July 2020

in 2015, 2017 and 2019). Booking must be made online in advance, and it is frequently booked up months in advance, reflecting high demand. Paulton's Park was attracting approximately 500,000 visitors per season, however with the opening of Peppa Pig World in 2011, visitors doubled to 1 million. There is no evidence that the opening of either the Harry Potter studio tour or Peppa Pig World had an adverse impact on the visitor numbers at the Merlin Entertainments' parks. Both these examples indicate that, when a park with a well themed attraction is open, it can create a new visitor market.

**Table 7.2.59 Top attractions in England**

| Attraction | 2018 Visitors | (Uncongested) Drive time to site (mins) | Ticket price if bought on the day (2020) |
|---|---|---|---|
| Legoland | 2.3m | 73 | £48 - £59 (off peak to super peak) |
| Alton Towers | 2.1m | 178 | £58 |
| Thorpe Park | 1.9m | 57 | £55 |
| Chessington World of Adventures | 1.7m | 47 | £52 |
| Flamingo Land | 1.7m | 236 | £41.50 |
| Paulton's Park Home of Peppa Pig World | 1.0m | 110 | £38.50 |
| Drayton Manor | 0.9m | 150 | £39.50 |
| Dreamland, Margate | 0.7m | 60 | £16.00 |
| Crealy Park | * | 210 | £15.00 |
| Gulliver's Land, Milton Keynes | * | 90 | £19.00 |
| Warner Bros. Studios - The Making of Harry Potter | No annual figure available however capacity for 6,000 daily visitors and requirement for online booking only due to high demand and sold out days | 66 | £47.00** |
| Blackpool Pleasure Beach - with Nickelodeon Land | * | 270 | £39.00 |

*Sources: AECOM Global Attractions Attendance Report, 2019; Theme Park's websites; Google Maps. Note: * denotes missing data. **Must be booked online*

Waterparks

7.2.198 According to Aecom, of the top 10 water parks in EMEA, none are in the UK.[82] The waterpark with the highest number of visitors in EMEA was Therme Erding, Germany, with 1.5 million visitors. There are, however, a number of smaller waterparks around the UK. Some of the most well-known include Waterworld in Stoke on Trent (approximately 400,000 visitors a year) and the Wave in Coventry offering six large slides, the UK's biggest wave pool, a lazy river, café, gym and spa.[83] There is also the Alton Towers Waterpark in Staffordshire which includes wild water features, rapids and slides. Coral Reef Waterworld in Bracknell, which welcomed 460,000 visitors in 2018.[84] In Hampshire, Lymington Sea Water Baths offer open air sea water pool for swimming, inflatable fun, kayaking, paddle boarding and zorbing.

7.2.199 There are also a number of other holiday 'destination' Resorts which include some form of waterpark offering. These include the five Center Parcs locations across the UK, and Bluestone in Wales. Each of these have a variety of outdoor activities, watersports beaches or lakes, indoor water-based leisure as well as other organised activities.

***Future baseline – market trends***

7.2.200 In terms of global market trends, Forbes provide a summary of the 2018 Global Theme and Amusement Park Outlook report from the International Association of Amusement Parks and Attractions (IAAPA).[85] It reported that worldwide spending on theme parks surged by 5% between 2017 and 2018 to a record $44.8bn, driven by the increased demand for 'experiences' rather than products. Much of the increased demand is coming from millennials who are keen to 'share' their experiences on social media platforms.

7.2.201 At the UK level these global trends are reiterated. A recent Deloitte report on UK leisure spending reports that the growth in social media has driven consumer appetite for the experiential. In 2017, UK spending on entertainment grew year on year by over 10% whilst spending on clothing grew only by 1.4% and on groceries by 3.8%.[86] Research by Mintel finds that 65% of British adults would spend their money on experiences rather than possessions, rising to 72% for millennials.[87]

7.2.202 In terms of domestic tourism trends, recent research by Barclays suggests that there is a growing interest in the 'staycation' in Britain. They report that 55% of tourism businesses reported an increase in domestic tourism since 2017. According to the holidaymakers, the attraction of the staycation is driven by 34% convenience, 21%

---

[82] Aecom Global Attractions Report, 2018

[83] Retrieved from https://thewavecoventry.com/. Accessed June 2020.

[84] Retrieved from https://www.bracknellnews.co.uk/news/17794658.bracknell-leisure-centre-coral-reef-visits/. Accessed June 2020.

[85] Forbes, 'Experience Economy' Boosts Theme Park Spending To A Record $45 Billion, 2018. Retrieved from https://www.forbes.com/sites/csylt/2018/11/04/experience-economy-boosts-theme-park-spending-to-a-record-45-billion/#497730c329e4. Accessed July 2020.

[86] Deloitte, Experience is everything: The UK leisure consumer, June 2019

[87] Mintel, Healthy, Ethical and Experiential: The Holy Trinity of British Consumer Spending, July 2019

desire to visit places they haven't before and 19% because of the affordability.[88] Merlin Entertainments state that the catchment for the short breaks market has increased from 2-3 hours drive time to 5 hours drive time.[89]

***Future baseline – Entertainment parks***

7.2.203 According to Allied Market Research, the global theme park vacation market was valued at $47.2 billion in 2018 and is anticipated to hit $74.7 billion by 2026 (a CAGR of 6.0% from 2019 to 2026).[90] The IAAPA report (as summarised by Forbes) states that global attendance is set to increase steadily over the next few years and spending in line with it (estimated to grow at 6.5% annually to hit $60.5 billion in 2022) as prices rise and new parks open. The report outlines a multitude of large global investments, including more than $3bn in Universal Studios Beijing (expected opening 2021), 11 new Six Flags parks in China (the first opening in 2021) and a $2.2bn project in Tokyo DisneySea including a new hotel (due to be completed 2022). In Europe, a $2.3bn expansion project in Disneyland Resort Paris has begun, with phased launch beginning 2021. On the back of this European investment, the report estimates a 12% increase in attendance at European theme parks between 2017 and 2022 to 192m.[91]

7.2.204 In the UK, the Merlin Group was bought in 2019 by the owner of Legoland, who aims to expand the company reach to Asia (especially China) and South Korea. Domestic strategy to increase visitor numbers includes developing theme parks into destination resorts by adding onsite, themed accommodation.[92] Recently, permission was sought to provide 102 accommodation pods at Alton Towers, creating 45 part time jobs.[93] The group also plan to add more Midway attractions (indoor attractions where guests typically spend one or two hours located in city centres or malls).[94]

7.2.205 Also in the UK, Therme in Manchester has recently been approved and is due to open in 2023. Costing £250m and covering 28 acres, it will have a wellbeing focus with mineral baths, steam rooms, sauna, fitness classes etc, as well as a family zone featuring waterslides, a wave pool, and indoor and outdoor pools. It is expected to attract 2

[88] Retrieved from https://home.barclays/news/2019/05/barclays-research--the--staycation--is-on-for-british-holidaymak/. Accessed June 2020.

[89] Merlin Entertainments, Introduction to Merlin Entertainments, March 2017. Retrieved from https://www.merlinentertainments.biz/media/1185/introduction-to-merlin-presentation-mar-2017-final-6.pdf. Accessed July 2020.

[90] Retrieved from https://www.globenewswire.com/news-release/2020/04/08/2013686/0/en/Global-Theme-Park-Vacation-Market-Is-Expected-to-Reach-74-7-Billion-by-2026-Says-AMR.html. Accessed July 2020.

[91] Forbes, 'Experience Economy' Boosts Theme Park Spending To A Record $45 Billion, 2018. Retrieved from https://www.forbes.com/sites/csylt/2018/11/04/experience-economy-boosts-theme-park-spending-to-a-record-45-billion/#497730c329e4. Accessed July 2020.

[92] Retrieved from https://www.merlinentertainments.biz/about-us/our-strategy/. Accessed July 2020.

[93] Retrieved from https://www.stokesentinel.co.uk/news/local-news/alton-towers-set-win-permission-1646189. Accessed July 2020.

[94] Retrieved from https://www.merlinentertainments.biz/about-us/our-strategy/. Accessed July 2020.

million visitors per year.[95] Also due to open in 2023 is the Elysium in Bournemouth, featuring a large waterpark and 'water-based spa'. Some attractions will also include virtual reality and augmented reality technology. Costing £160m and covering 75 acres, the scheme has a 4,000+ daily capacity and is expecting over 1 million visitors yearly.[96] Finally, the Waterworld Group plan to invest £10m in the Waterworld site (in Stoke on Trent) to extend their offering, including a new M Club Spa & Fitness Club, a new trampoline park, new water rides and attractions and the arrival of an indoor adventure golf concept called 'Adventure Mini Island Golf'. Visitor numbers are expected to exceed 3-4 million people.[97]

7.2.206 The earlier future baseline (see Table 7.2.37) found that national population is expected to grow from 56 million in 2018 to 57 million in 2022 (+2% from 2018 value), to 57.6 million in 2023 (+3%) 58.1m in 2025 (+4%), 58.3m in 2026 (+4%), 59.2m in 2030 (+6%) and 61m in 2038 (+9%). Population is expected to grow in the CSA at a faster rate than the national average in all assessment years. This means that, along with national growth in similar trade offerings, it is likely that there will be increased national demand for such offerings as well. This is particularly true as the millennial cohort increase their earnings and spending power, as Experian note.[98]

7.2.207 The Tourism Sector Deal states that, in 2018, the UK attracted 38 million international visitors, who added £23 billion to the economy, making tourism one of the country's most important industries and the third largest service export. Current forecasts predict the sector will deliver a 23% increase in inbound visitors by 2025, and domestic tourism is also set to increase by an estimated 3% per annum until 2025.[99] These forecasts are taken from a 2013 Deloitte report, UK tourism GDP was expected to grow by 3.8% per year (CAGR) through to 2025; 0.8% higher than the UK (total GDP). This would equate to £257.4bn in 2025 (up from £126.9bn in 2013). Inbound tourism was expected to be the largest driver, with 6% demand growth per year (compared to 3% domestic and 1.5% outbound demand).[100]

**Visitor and worker expenditure**

7.2.208 The London Resort is expected to attract a large number of visitors each day of operation, who might also spend money in local retail centres. Furthermore, the new workers that will be supported by the London Resort may also choose to spend in local centres. The impact of this should be assessed against existing spending at retail centres

[95] Retrieved from https://www.thermegroup.com/planning-approved-for-therme-manchester/#:~:text=Therme%20Manchester%20will%20combine%20hundreds,before%20seen%20in%20the%20UK.&text=The%20central%20focus%20of%20the,the%20national%20flower%20of%20England. Accessed June 2020
[96] Retrieved from https://elysiumwaterpark.com/. Accessed June 2020.
[97] Retrieved from https://www.businessleader.co.uk/waterworld-group-announces-go-ahead-10m-expansion-plan/35925/. Accessed June 2020.
[98] Experian, Millenial Growth: Spending Power Index
[99] Department for Business, Energy and Industrial Strategy, Department for Digital, Culture, Media and Sport, Policy Paper: Tourism Sector Deal, June 2019
[100] Deloitte, Oxford Economics, Tourism: jobs and growth: The contribution of the tourism economy in the UK

local to the Site.

***Baseline***

Expenditure in the CSA

7.2.209 The most recent expenditure surveys for Dartford, Gravesham and Thurrock were published in 2012, which reported spending in 2006 and 2011 and estimated future spending based on population growth for the years 2016, 2021 and 2026. Household surveys on expenditure in local town centres is split into zones. Table 7.2.60 presents expenditure estimates for 2016 for the zones which hold the best fit to the CSA, given that exact CSA data is not available.

**Table 7.2.60 2016 residual expenditure (after deducting special forms of trading) in relevant zones (£m)**

| | Comparison | Convenience | Total |
|---|---|---|---|
| Dartford – Zones 16, 17, 20, 21 and 22 | 244 | 138 | 382 |
| Gravesham – Zones 31 to 35 | 316 | 186 | 502 |
| Thurrock – Zones 2 to 9 | 548 | 314 | 861 |
| CSA (total relevant zones) | 1,107 | 638 | 1,745 |

*Sources: Gravesham Borough Council, Retail Study Update 2012, Final Report; Thurrock Council, Retail Study Update 2012, Final Report*

7.2.210 In Dartford in FY18, of six district centres in the borough, the maximum vacancy rate is 3% and two district centres have 0% vacancy. This is low compared to the GB value of 11.8%.[101]

7.2.211 The latest information on vacancy rates in Gravesham are from the 2011 Health Check of Gravesend town centre, which reported 74 vacant units (15.2%), above the GB average. However, only 9.5% of town centre floorspace was vacant, only slightly above the national average of 9.3% and below the Kent town centres average of 13%. This is perhaps a reflection of the number of small units in the town. Vacancy had improved slightly since the previous study (10.5%).[102]

7.2.212 In Thurrock, vacancy rates in main centres varied from 5.6% (Socketts Heath) to 17.6% (Tilbury, Stifford Clays). [103] Some other centres had 0% vacancy rates but these tended to be for fairly small (<10) numbers of total units. Of the 14 centres discussed, only three had vacancy rates above the GB average of 11%.[104]

***Future baseline – expenditure***

[101] Dartford Borough Council, Authority Monitoring Report 2018-2019
[102] Gravesham Borough Council, Health Check Update of Gravesend Town Centre, 2011
[103] Thurrock Council, Thurrock Town and Local Centre Health Check Assessment, 2018
[104] Thurrock Council, Thurrock Town and Local Centre Health Check Assessment, 2018

7.2.213 The same retail studies offer projections of spending to 2026. This assessment has taken the compound annual growth rate (CAGR) between each five year spending forecasts and estimated the spending in each of the relevant assessment years based upon the expected annual growth rate. Since the forecasts only go to 2026, the five year CAGR between 2021 and 2026 (the most recent) has been assumed to apply onwards to 2038 in order to estimate spending in the assessment years 2030 and 2038. These are presented in Table 7.2.61.

7.2.214 Overall, there is expected to be strong growth in spending in the CSA, with £2.3bn in 2025 and £3.6bn in 2038. A large proportion of this (approximately half) is expected in Thurrock.

**Table 7.2.61 Future residual expenditure (after deducting special forms of trading) in relevant zones (£m)**

| | | 2016 | 2018 | 2022 | 2023 | 2025 | 2026 | 2030 | 2038 |
|---|---|---|---|---|---|---|---|---|---|
| Dartford | Comparison | 200 | 300 | 300 | 400 | 400 | 400 | 500 | 700 |
| | Convenience | 100 | 100 | 200 | 200 | 200 | 200 | 200 | 200 |
| | Total | 400 | 400 | 500 | 500 | 600 | 600 | 700 | 900 |
| Gravesham | Comparison | 300 | 300 | 400 | 400 | 400 | 500 | 500 | 700 |
| | Convenience | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| | Total | 500 | 500 | 600 | 600 | 600 | 700 | 700 | 900 |
| Thurrock | Comparison | 500 | 600 | 700 | 700 | 800 | 800 | 1,000 | 1,300 |
| | Convenience | 300 | 300 | 300 | 300 | 400 | 400 | 400 | 400 |
| | Total | 900 | 900 | 1,000 | 1,100 | 1,100 | 1,200 | 1,300 | 1,700 |
| CSA | Comparison | 1,100 | 1,200 | 1,400 | 1,500 | 1,600 | 1,700 | 1,900 | 2,600 |
| | Convenience | 600 | 700 | 700 | 700 | 700 | 700 | 800 | 900 |
| | Total | 1,700 | 1,900 | 2,100 | 2,200 | 2,300 | 2,400 | 2,700 | 3,500 |

*Sources: Gravesham Borough Council, Retail Study Update 2012, Final Report; Thurrock Council, Retail Study Update 2012, Final Report; Volterra calculations*

## Healthcare

7.2.215 During the operational phase of the London Resort, workers and visitors may place additional demand on local healthcare services. To estimate the impact of this, existing provision is considered here.

### *Baseline*

7.2.216 The construction baseline found that within the CIA there are currently 3 GPs, 4 dental surgeries, and 2 pharmacies. There is 1 hospital department for emergency healthcare services which is just outside of the CIA. GP provision is significantly constrained at a ratio of 4,500 patients for every GP FTE. In contrast, the provision of dental services is less constrained as 3 out of the 4 dental surgeries are currently taking in new patients.

7.2.217 A&E services in close proximity of the CIA are only provided by the Darent Valley Hospital (the sole provider of A&E services in the Dartford and Gravesham NHS Trust). Nonetheless, the A&E performance of the Dartford and Gravesham Trust is relatively high when compared to the national level as well as surrounding NHS Trusts in the regional area, whilst all still performing below the national target, reflecting countrywide constraints on healthcare.

***Future baseline – healthcare***

7.2.218 The Dartford Borough Council Infrastructure Delivery Plan[105] states that a new primary healthcare facility is to be provided within Ebbsfleet Garden City (EGC), although it is unsure of the timing of the delivery. Furthermore, a new primary healthcare facility is being provided at Stone / Greenhithe area (just outside the CIA) providing new facilities for three GP practices in order to meet demand from new housing development nearby. This will be delivered by 2022. These will help to meet some of the additional demand that new residents in the area will impose. The Plan also mentions the potential expansion at Darent Valley Hospital in response to demand from development, but this is uncertain.

**Public services**

7.2.219 The London Resort does not contain a residential element which is expected to accommodate any school-aged residents. However, due to the impact of the workforce on the local housing market and the likely links with local schools and colleges, the education baseline is considered below. Furthermore, the operational phase of the London Resort is expected to support a number of additional visitors and workers in the area, all of which may place additional strain on emergency services (police stations, ambulance stations and fire stations).

***Baseline***

Education

7.2.220 Please refer to 7.2.120 to 7.2.124 for information on the education baseline.

Emergency services (police stations, ambulance stations, fire stations)

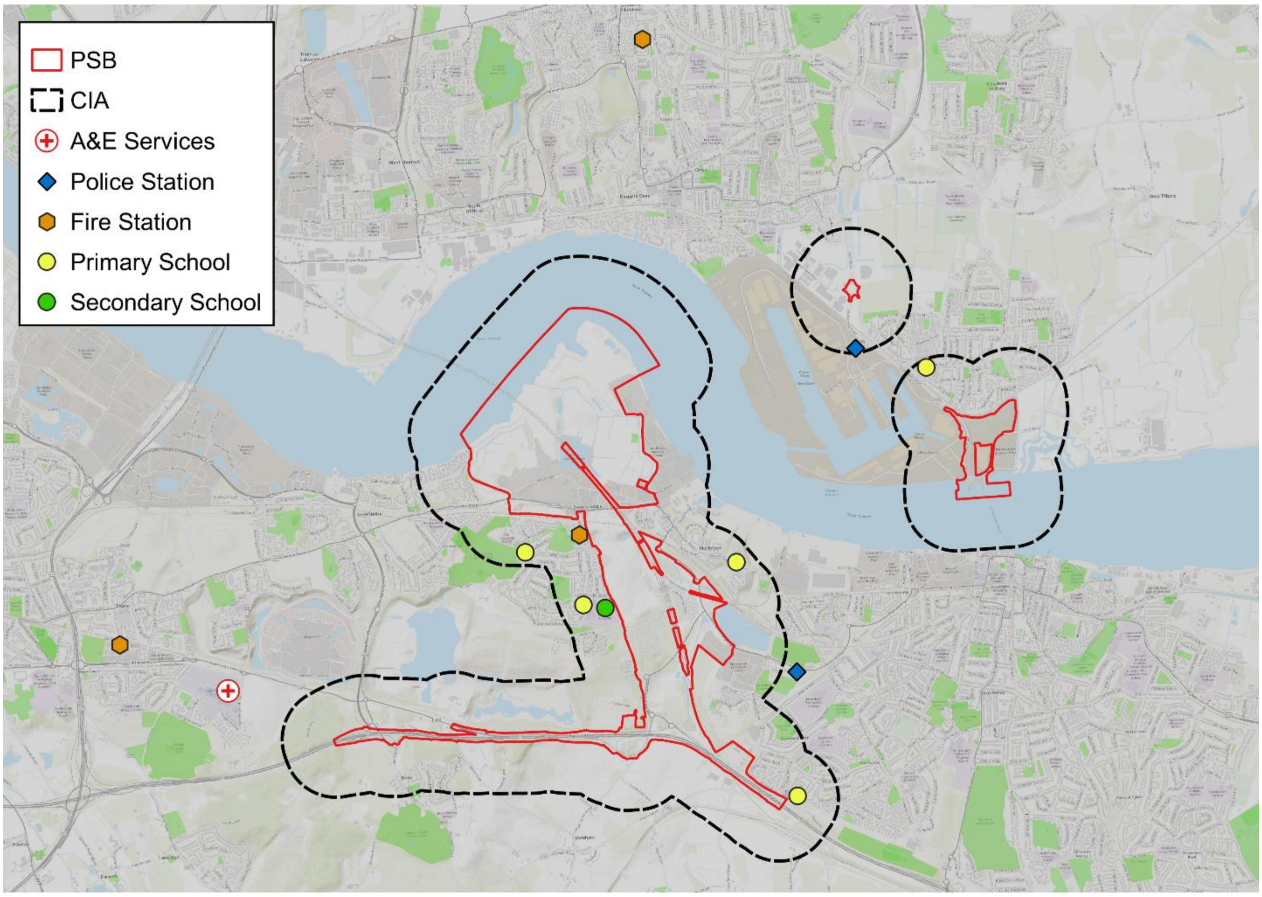
7.2.221 Figure 7.2.19 illustrates the defined public services that are contained within the CIA.

7.2.222 In terms of emergency services, A&E services are located towards the lower western area of the London Resort, whilst two police stations are located, one on each side of the river – Tilbury Police Station is located on the north-side and North Kent Police Station is located on the south-side towards the eastern part of the London Resort. There are also three fire stations in the vicinity of the London Resort – one is within the CIA whilst the other two are located on both sides of the river but lie outside of CIA

[105] Dartford Borough Council, 2019, Infrastructure Delivery Plan

boundary.

**Figure 7.2.19 Public Services within the CIA**




*Source: Ordnance Survey, Addressbase Premium, Google Maps, London Resort Holdings Company calculations*

### *Future baseline – public services*

7.2.223 Please refer to 7.2.130 for information on future education provision.

7.2.224 For public services, 7.2.41Figure 7.2.4 discusses potential changes to emergency healthcare provision. For police, ambulance, and fire services, no future baseline information could be found and so effects are assessed against current levels.

### Local retail and leisure, including town centres

7.2.225 The London Resort is expected to significantly contribute to retail and leisure provision, offering an addition to the CSA tourist attractions, cultural assets, event spaces and e-sports facilities.

***Baseline***

Retail and leisure

7.2.226 Table 7.2.62 displays retail floorspace in each borough in the financial year ending March 2019 (FY19). As can be seen, the CSA has a slightly higher proportion of non-domestic floorspace that is retail (21%) than the RCA (20%) and England and Wales (18%). This is mainly driven by Dartford (26%) and Gravesham (24%).

**Table 7.2.62 Retail floorspace provision (FY19)**

| | **Retail floorspace (sqm)** | **Total non-domestic floorspace** | **% of total non-domestic floorspace** |
|---|---|---|---|
| **Dartford** | **282,000** | **1.1m** | **26%** |
| **Gravesham** | **164,000** | **697,000** | **24%** |
| **Thurrock** | **404,000** | **2.3m** | **18%** |
| **CSA** | **850,000** | **4.1m** | **21%** |
| **RCA** | **40.4m** | **201.4m** | **20%** |
| **England and Wales** | **106.1m** | **586.7m** | **18%** |

*Source: VOA, NDR Business Floorspace Tables, 2019*

7.2.227 The Dartford Core Strategy outlines four major shopping centres:

- Dartford town centre providing weekly convenience and comparison shopping; leisure, recreation, hotel(s), community, health, social care and service facilities. Mainly serving the district level population, town centre employees and has a sub-regional catchment for Orchard Theatre
- Bluewater providing specialist comparison shopping, top-up convenience shopping, leisure and a hotel. Mainly serving a regional level catchment, with UK and international tourists linked to Ebbsfleet station.
- Ebbsfleet/Eastern Quarry providing daily/weekly convenience, comparison and service needs, hotels, services and leisure. Mainly serving local residents and workers and business and tourist travellers from Ebbsfleet.
- Longfield providing daily/weekly convenience shopping and service facilities. Mainly serving residents in Longfield and surrounding cluster of villages.

7.2.228 A Dartford Retail and Leisure study is currently being developed in partnership between Dartford Borough and Ebbsfleet Development Corporation to inform. If this is published before the DCO application, it will be used to inform the assessment.

7.2.229 According to the 2009 Gravesham retail and leisure study, there were 60 outlets in Gravesend (the main retail centre in Gravesham), the majority of which were local independents, and the town centre was lacking branded outlets or higher quality establishments. [106] This has been reinforced more recently as remaining true. In 2019, Gravesham council submitted an expression of interest in the Future High Streets Fund for Gravesend town centre. Appendix 2 of the submission summarises the current challenges in the town centre.[107] These include the loss of the town's 'big name' retailers: Marks & Spencer, BHS, Poundworld Plus, Poundland, and Brighthouse, leaving large vacancies in the main shopping streets. It is noted that there is a risk of future departures. Town centre footfall has decreased by 9% over the last three years. Independent businesses currently comprise 66% of units, representing a mix of retail, food, and service related activity, which are vulnerable to the loss of footfall. The town lacks a larger presence of commercial leisure that will attract people, especially as there is a strengthening presence of cinema, gyms and other leisure alongside branded restaurants at Bluewater and Medway Valley Leisure Park, all within a 15 minute drive of Gravesend town centre. A number of larger poor-grade, dated retail frontages and neglected smaller units and longer term vacancies, in a declining state of repair, have a significant impact on the street scene.

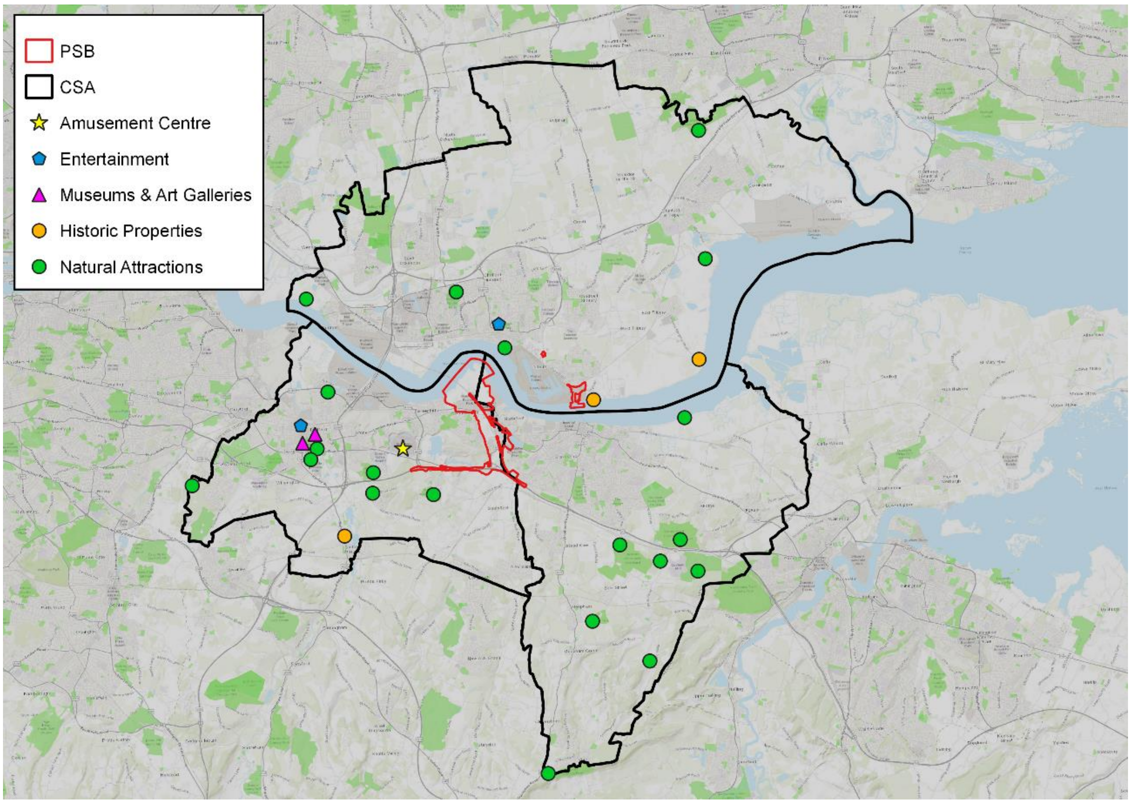
7.2.230 Information for Thurrock retail provision is currently being collected and will be complete before the DCO application submission.

Tourist attractions and cultural assets

7.2.231 Figure 7.2.20 shows various attractions and cultural assets in the CSA, where a large number are concentrated in Dartford, with a notable cluster around Bluewater Shopping Centre. In Thurrock, most are located to the south of the borough, on the river.

[106] Gravesham Borough Council, Gravesham LDF Retail and Commercial Leisure Study, 2009
[107] Gravesham Council, Future High Street Fund Expression of Interest: Gravesend Town Centre, Appendix 2, 2019

**Figure 7.2.20 Tourist attractions and cultural assets in the CSA**





*Source: Volterra*

7.2.232 There are a number of attractions that are currently located in Dartford.[108] For the younger demographic, there is a children's amusement centre called Dinotropolis - situated in the Bluewater Shopping Centre. Entertainment wise, the Orchard Theatre holds just under 1,000 people and hosts a wide range of events. Other attractions include a number of parks/woodlands, public gardens and lakes: Central Park, Darenth Country Park, Waller Park, Brooklands Lake, Beacon Wood Country Park, Joyden's Wood, and The Enchanted Woodland. Additionally, there are several cultural assets on offer, such as the Dartford Borough Museum, Stephen Oliver Studio & Gallery, and St John's Jerusalem – a National Trust property with gardens and a 13th-century chapel.

7.2.233 The Gravesham Tourism Strategy notes several visitor offerings, including the Thames riverside, its heritage and Gravesend's historic role as the maritime gateway to London; strong historic associations with Charles Dickens, Pocahontas, General Gordon and others; historic landscapes at Cobham Park & Ashenbank Woods; and exceptional countryside with the Kent Downs Area of Outstanding Natural Beauty, Thames Estuary Marshes and popular country parks at Shorne Woods, Trosley, Camer Park and Jeskyns

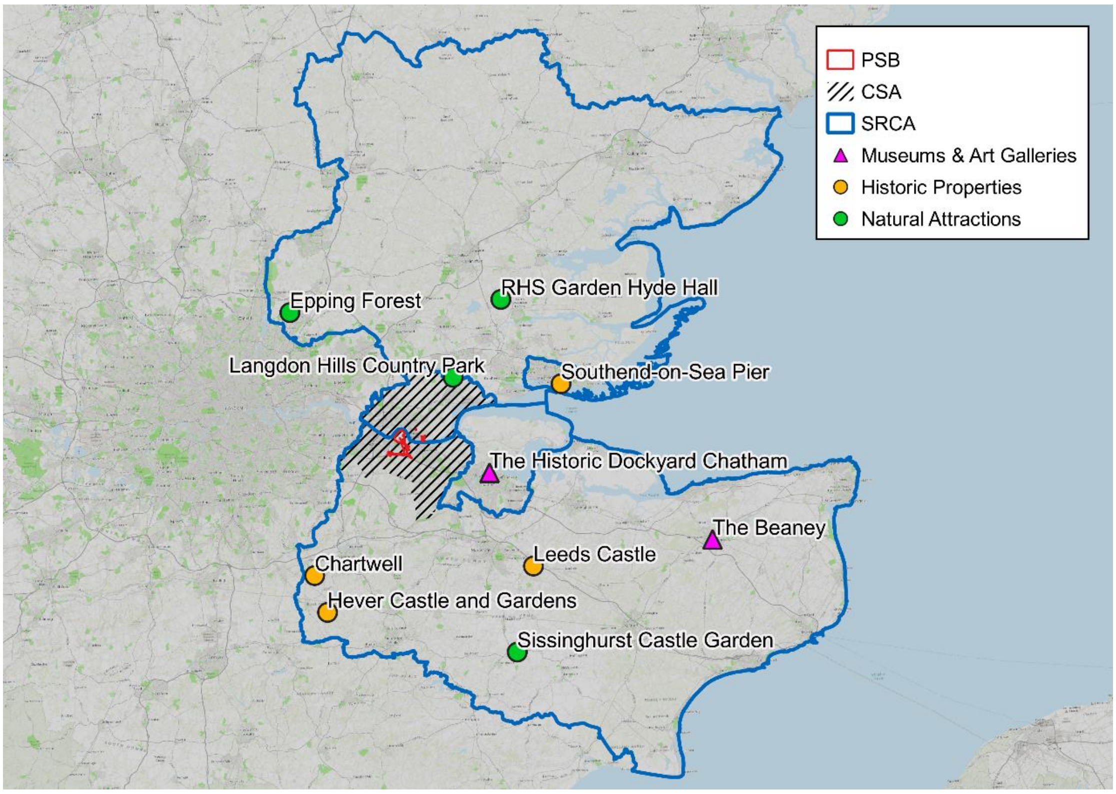
[108] Source: Tripadvisor – Top Attractions in Dartford

Farm.[109]

7.2.234 Thurrock also offers a number of visitor attractions, including Tilbury Fort, Thameside Theatre, Essex Wildlife Trust Chafford Gorges Nature Park and Grays Beach Riverside Park. The Core Strategy notes that 'the Council will work with partners to deliver tourism, festivals and attractions to support regeneration areas and town centres and other Thurrock Assets including Coalhouse Fort, Tilbury Fort, Thames riverfront and the RSPB Nature Reserve.'[110]

7.2.235 According to Visit Britain, there are 72 tourist attractions and cultural assets in Kent and Essex. Of these, Epping Forest was the most visited attraction in Kent and Essex, with 4.2m visitors in 2018. The next most visited was Leeds Castle in Kent, which had considerably fewer visitors (465,700). The top 10 attractions are displayed on Figure 7.2.21 and in (Table 7.2.63) below.

**Figure 7.2.21 Top attractions in Kent and Essex**




*Contains Ordnance Survey data © Crown copyright and database right 2019*
*Source: Volterra*

[109] Gravesham Borough Council, A Tourism Strategy for Gravesham (2009 – 2012) – Draft, 2009
[110] Thurrock Council, Core Strategy and Policies for Management of Development (as amended) Adopted January 2015, 2015

**Table 7.2.63 Top attractions in Kent and Essex**

| Attraction | County | District | Category | 2018 visitors |
|---|---|---|---|---|
| Epping Forest | Essex | Loughton | Country Parks | 4,200,000 |
| Leeds Castle | Kent | Maidstone | Historic Properties | 465,706 |
| Langdon Hills Country Park | Essex | Stanford-le-Hope | Country Parks | 400,000 |
| Hever Castle and Gardens | Kent | Edenbridge | Historic Properties | 389,407 |
| Southend-on-Sea Pier | Essex | Southend-on-Sea | Historic Properties | 367,142 |
| RHS Garden Hyde Hall | Essex | Chelmsford | Gardens | 333,323 |
| The Beaney (including Canterbury Tourism Information) (previously 'Canterbury Royal Museum and Art Gallery') | Kent | Canterbury | Museums & Art Galleries | 275,245 |
| Chartwell | Kent | Westerham | Historic Properties | 246,336 |
| The Historic Dockyard Chatham | Kent | Chatham | Museums & Art Galleries | 189,919 |
| Sissinghurst Castle Garden | Kent | Cranbrook | Gardens | 189,540 |

*Source: Annual Survey of Visits to Visitor Attractions, 2018*

Conferences, exhibitions, events, trade shows, cinemas and theatres

7.2.236 The main cinema in Dartford is the Cinema de Lux Bluewater – Showcase Cinema, with 17 screens and a capacity of 2,879. The cinema also has conference and meeting room facilities and a Party Room.[111] Dartford also offers the Sir Peter Blake Gallery as an exhibition space showcasing emerging and established artists, as well as providing exhibitions of interest. It is situated in the same building as Dartford Library and the Borough Museum.[112]

7.2.237 In Gravesham, the Woodville Halls Theatre (in Gravesend) offers an 810-seat auditorium which acts as a space for theatre, concerts, banquets, weddings, and trade shows. Underneath the main auditorium is another studio space seating up to 150 and the Blake Gallery offering exhibition space. The Woodville also holds the Paul Greengrass cinema, offering one screen.

7.2.238 In Thurrock, there are only two operational cinemas: the West Thurrock Warner Multiplex which has 7 screens and the West Thurrock UCI Multiplex which has 10

[111] Retrieved from https://www.showcasecinemas.co.uk/cinema-info/showcase-cinema-de-lux-bluewater. Accessed June 2020.

[112] Retrieved from https://www.dartford.gov.uk/by-category/leisure-and-culture2/gallery. Accessed June 2020.

screens. Both have capacity of over 2,000.[113] The Thameside Theatre (c. 320 seats) is part of the Thameside Complex, a multi-purpose arts venue that also includes Thurrock Museum, Grays Library and an exhibition area.[114]

E-sports

7.2.239 The London Resort would expand the existing market into new sectors through offering different options, such as immersive experiences and productions and e-sports. These markets are significant and growing – indeed global e-sports was estimated to generate $1.1bn in 2019, with year on year growth of 26.7%, and a global audience of 452.8m.[115] However, there are limited options for these types of leisure experiences in the CSA and the UK, particularly at this scale.

***Future baseline – retail and leisure provision***

7.2.240 The forecast population growth is presented in Table 7.2.37. The population of the CSA is expected to grow at a faster rate than the national average, increasing demand for retail and leisure uses in the CSA.

7.2.241 Table 7.2.64 below shows expected retail floorspace growth in the CSA to 2026. Due to data restrictions, it should be noted that Dartford figures are based on planning consents (at the time of the plan), however, both Gravesham and Thurrock figures demonstrate the net retail floorspace requirements to 2026. By 2026, it is expected that between 106,815 and 110,815 sqm of retail floorspace will have been added in the CSA.

**Table 7.2.64 CSA net retail floorspace (sqm) by 2026**

| | Comparison | Convenience | Total |
|---|---|---|---|
| Dartford | 33,300 – 37,300 | 10,500 | 43,800 – 47,800 |
| Gravesham | 18,140 | 1,270 | 19,415 |
| Thurrock | 35,000 | 8,600 | 43,600 |
| CSA | 86,440 – 90,440 | 20,370 | 106,815 – 110,815 |

*Sources: Dartford Council, Dartford Core Strategy, 2011; Gravesham Borough Council, Retail Study Update 2012, Final Report; Thurrock Council, Retail Study Update 2012, Final Report*

7.2.242 The Dartford Core Strategy Policy CS 12: Network of Shopping Centres outlines council plans to create links between Dartford town centre, Bluewater, Ebbsfleet/Eastern Quarry and Longfield.

7.2.243 Grays and the Lakeside Basin are the key shopping centres in Thurrock, both being located on the north side of the river from the Project Site. In 2012, it was reported

[113] Retrieved from https://www.thurrock.gov.uk/historical-places-in-thurrock/thurrock-cinemas. Accessed June 2020.
[114] Retrieved from https://www.thurrock.gov.uk/thameside-theatre/our-stage-and-equipment. Accessed June 2020.
[115] Newzoo (2019), Free 2018 Global Esports Market Report.

that, to 2021, Grays would contribute 16%-18% of additional comparison floorspace (total 34,000 – 36,000 sqm), compared to 82%-84% at Lakeside Basin. Also, that Grays would contribute 25%-30% of additional convenience floorspace (total 5,000 – 8,000 sqm) compared to 40%-50% at Lakeside Basin (with the remaining 25%-30% at Purfleet, 10-minute drive to the west of Lakeside Basin, still north of the river from the Project Site).[116] The Thurrock Core Strategy[117] Policy CSTP7 sets the Council's support for the regeneration of the remainder of the Borough's network of centres with particular reference to the need to promote Grays town centre as a focus for cultural, administrative and educational functions, whilst providing retail development that is complementary to the Lakeside Basin. This is due to be completed by 2026.

7.2.244 The EDC Implementation Development Framework outlines, for the six existing development proposals with consent, that there is maximum consent for 28,000 sqm retail space delivered across five of the six proposals (mostly at Eastern Quarry) and maximum consent for 24,000 sqm of leisure floorspace at Eastern Quarry. Furthermore, there is 147,000 sqm across an (undefined) split of retail, hotels and leisure in Ebbsfleet Central.[118] Most of these plans are relevant to the Dartford side of the EDC area.

7.2.245 In terms of similar trade within the CSA, there is little indication as to future growth of tourist attractions, cultural assets, cinemas, theatres and event space. In terms of e-sports, Newzoo estimate that the global esports market will generate $1.8bn in 2022.[119]

[116] Thurrock Council, Thurrock Retail Study, 2012
[117] Thurrock Core Strategy 2011 (as amended 2015)
[118] Ebbsfleet Development Corporation, Ebbsfleet Implementation Framework, 2017
[119] Newzoo (2019), Free 2018 Global Esports Market Report.