

**SETTLEMENTS AND
SUSTAINABLE LOCATIONS**

**SUPPLEMENTARY
PLANNING DOCUMENT**

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PLANNING & PLACE, DBC

DARTFORD
BOROUGH COUNCIL

SETTLEMENTS AND SUSTAINABLE LOCATIONS SPD

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1. INTRODUCTION

- 1.1 This is a Supplementary Planning Document (SPD) produced by Dartford Borough Council. It focuses on two important considerations: confirming how settlements are defined and how sustainable transport for locations are considered in the adopted Local Plan.
- 1.2 An SPD provides additional guidance on a topic or area, building on the policies contained in a Local Plan. By law, the Local Plan is very important as the starting point for making decisions on planning applications. In this Borough, it is the Dartford Plan to 2037 (adopted April 2024).
- 1.3 This SPD was adopted by Dartford Borough Council on 25 June 2026 (after public consultation on a draft version April to May 2026). It covers the whole of Dartford Borough, including the area of Ebbsfleet Garden City, where planning applications are considered by the Ebbsfleet Development Corporation (EDC). The SPD will be used alongside the Dartford Plan and national policy to decide relevant planning applications, across the Borough (south and north) including for proposed new homes, business and community uses, and many other developments.

SPD BACKGROUND & PURPOSE

- 1.4 This SPD provides guidance for residents, developers, landowners, decision-makers and others. It sets out practical advice on applying requirements in the Dartford Plan and the accompanying Policies Map. It does not consider all the environmental, social and economic issues that may relate to site sustainability (factors such as brownfield land status or flood risk for instance), and the Dartford Plan should be consulted at the outset. The SPD helps deliver the existing overall strategy for where development should be located by confirming precisely how towns and villages are mapped, and by detailing policies and benchmarks from the Dartford Plan that evaluate a location's accessibility in terms of nearby services, public transport, and walking and cycling. Guidance in SSL 2 below advises on planning and assessing locations through consideration of sustainable transport performance.
- 1.5 Settlements are cities, towns and villages. Dartford Borough contains towns and villages, plus small groups of buildings and homes that are not settlements. Locations that are not settlements could include hamlets, linear developments, estates built with few facilities (or without) or places that may have historically been considered as small villages but now lack sufficient local services to function as a settlement. For the Borough's settlements, see the Dartford Plan, SSL 1 below and the adopted Policies Map extracts set out in Appendix 2.
- 1.6 Settlements are where new development is usually focused by the UK planning system, especially medium-sized and larger settlements providing a range of uses and local infrastructure. In planning for economic, social, and environmental improvements, "infrastructure" not only includes physical systems and basic services for places to operate (e.g. transport and utility networks) but also community facilities and institutions, services in neighbourhoods essential to the well-being of people. This includes educational and NHS facilities plus public 'green' spaces like parks but also many other vital services.
- 1.7 The Dartford Plan recognises adverse consequences of congestion and pollution on health and environment, and potential impacts on investment and economic productivity are real and fundamental issues in the Borough. This is especially due to:
 - the very high volume of traffic in Dartford reliant on the strategic highway network of the M25 London Orbital and A2(T) and junctions in the Borough.

- acute and Borough-wide congestion problems due to the lack of resilience of the Dartford Tunnel part of the London Orbital when incidents occur, which is regularly.
- the sustained increase in vehicle (commuter and freight) trips associated with the large-scale growth of employment in Dartford in recent decades.

- 1.8 As a result, and for balanced sustainable development and to maintain the quality of life of residents, the development strategy in the Dartford Plan is based on reducing dependency on private vehicles, and providing a choice of alternative modes of transport. Most importantly, it aims to cut the ultimate sources of transport demand that create people's need to travel, particularly through a focus on the right location for all new development. This supports measures to address climate change, protect natural features such as Dartford's riverside, marshland, heaths and woodland, and maintain the overall character of the Borough, including Green Belt open countryside.
- 1.9 Planning new development with a concentration on Dartford's settlements (towns and villages in this SPD) both maximises use and efficiency of existing services in terms of infrastructure and also supports the character, vitality and prosperity of the settlements. For instance, Dartford town centre not only contains many heritage assets that help define the area but has the widest choice of facilities. Having a mix of uses within an area, i.e. jobs and services alongside houses, reduces the need to travel. Importantly, focusing on places with a sufficient range of activities and facilities also supports a social interaction and a sense of community.
- 1.10 This framework has been set by the Dartford Plan, and the SPD offers supporting guidance on how its policies should apply across the Borough. The SPD is also necessary to clarify the continuing operation of the adopted Local Plan, The Dartford Plan, in the context of new national planning policy (including as proposed). Relevant Dartford Plan policies include, but are not limited to:
- Policy S1: Borough Spatial Strategy
 - Policy S2: Infrastructure Planning Strategy
 - Policy S5: Sustainable Housing Locations
 - Policy M16: Active Travel, Access and Parking
 - Policy M17: Community Uses
 - Policy M18: Sustainable Economic Locations

2. APPLICABLE LOCAL PLAN & NATIONAL POLICY

NATIONAL PLANNING POLICY IN DARTFORD

- 2.1 Sustainable development has been the cornerstone principle of the national planning system (the National Planning Policy Framework (NPPF) 2024, paragraph 7):

The purpose of the planning system is to contribute to the achievement of sustainable development, including the provision of homes, commercial development and supporting infrastructure in a sustainable manner.

- 2.2 To help deliver this, local plans should include an overall strategy for the pattern, scale and design quality of places and make sufficient provision for development (NPPF 2024, paragraph 20).

- 2.3 This planned strategy for the pattern and scale of development will be strongly shaped by the transport and travel implications of growth. The NPPF 2024 states in paragraph 109: “Transport issues should be considered from the earliest stages of plan-making and development proposals, using a vision-led approach to identify transport solutions that deliver well-designed, sustainable and popular places”. It then adds considerations including:

- *the scale, location or density of development that can be accommodated,*
- *identifying and pursuing opportunities to promote walking, cycling and public transport use, and*
- *opportunities for avoiding and mitigating any adverse effects, and for net environmental gains.*

- 2.4 National policies support development at existing or new settlements, particularly to reuse brownfield land. The proposed changes to the NPPF, consulted on in 2025/26, indicate development decisions are expected to increasingly hinge on whether or not the site is within a settlement as defined in local policy. Settlements in the form of towns are significant to other parts of national policy (for example, the presence of a town can be influential as part of ‘grey belt’ land assessment in the Green Belt, the concept introduced in the NPPF 2024).

- 2.5 Paragraph 110 of the NPPF 2024 highlights the importance of actively managing growth patterns with a focus on sustainable locations, reducing congestion and the need to travel:

The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes.

It also adds sustainable transport opportunities “may vary in rural areas” as opposed to urban, however in the Dartford Borough, owing to its geographical context and existing infrastructure, this is likely to be less relevant.

- 2.6 To ‘actively managed patterns of growth’, national policy seeks to ensure sustainable transport modes are prioritised and that safe and suitable access to sites are achieved for all users (NPPF 2024, paragraph 115a–b). These are vital issues in Dartford, being a Borough identified as having suffered with issues of congestion and air quality. The rapid growth of Dartford’s towns has been supported by a genuine choice of transport modes, notably sites planned around the North Kent Fastrack system

and at locations with good and improved railway access, including Ebbsfleet International and Dartford stations. This needs to be complemented by better walking and cycling/wheeling¹ infrastructure.

- 2.7 The proposed (draft) NPPF puts forward the use of the national Connectivity Tool, using data on transport and locations, to give a perspective on the extent to which a location is well connected or requires travel to access key services. This may provide one source of general information; but this new national metric may not have regard to certain critical issues that determine how travel is undertaken in practice, limiting insight for specific sites and comparison in the Dartford context. Appendix 1 explains this and identifies how a more locally targeted indicative framework can be used.

THE DARTFORD PLAN (ADOPTED 2024)

- 2.8 The Dartford Plan (paragraphs 1.14–1.20) introduces the Borough as follows:

The northern part of the Borough has seen significant residential and commercial growth in recent years, most notably north of Dartford Town, along with the development at or near Ebbsfleet Garden City.

The southern part of the Borough comprises areas of open countryside, much of which is within the Green Belt, interspersed with villages and some hamlets. With a range of shops (including a supermarket) and other community facilities, Longfield is the best served settlement in the southern area. However, Wilmington parish, which adjoins Dartford, has a larger population.

The Borough has major national and international connections via the strategic road network and rail services (including High Speed 1 from Ebbsfleet International Station).

Dartford Railway Station is the busiest station in Kent. Ebbsfleet International and Greenhithe are the next best used stations in the Borough.

The A282/M25 Dartford Crossing and the arterial A2 London-Dover routes generate high volumes of traffic flow through the Borough. This can be attributed to be the principal cause of the Borough's higher carbon emissions per capita than the regional average, given that the majority of emissions are from transport sources.

As a result of economic growth in the Borough, more people travelled into the Borough for work than residents who left to work elsewhere, i.e. Dartford generated net in-commuting. In terms of how residents travel to work, the 2021 Census shows relatively high levels of private vehicle use (46% in total), with 12% of trips being made by public transport and only 6% of trips being made by active travel modes (walking and cycling). This compares with 10% in the South East made by active travel modes. The 2021 Census captured a significant proportion, 31%, of Dartford residents working mainly at or from home.

Between 2011 and 2021 Censuses, the population of Dartford Borough increased by 20%, the second largest increase in the country...

¹ "Wheeling" is used in this SPD to ensure consideration is given to wheelchair and other wheeled mobility aid users.

- 2.9 The Dartford Plan (paragraph 1.38) concludes that a key characteristic of the Borough is the high levels of mobility that puts pressure on public transport and creates traffic congestion that contributes to pollution levels.
- 2.10 The Dartford Plan has a very clear and distinct spatial strategy to ensure development is directed towards a sustainable location. It states at paragraph 2.14:

The overall spatial strategy is outlined in the Borough's Key Diagram (Diagram 1). With this development focus on sustainable locations in the urban north of the Borough, the character of Dartford's villages and the open countryside can best be maintained. Much of the southern area of the Borough is designated as Metropolitan Green Belt where national policy seeks to maintain openness and permanence. The purpose of the Metropolitan Green Belt is also to limit urban sprawl between Greater London and towns in Kent, with the strategic wedge of open land at Dartford Marshes in particular providing a vital role in this regard. Green Belt land will be maintained to complement high levels of growth occurring in urban Dartford. This will ensure a defined sustainable pattern of development that is planned, clear and agreed for the Borough's future growth.

- 2.11 This approach is confirmed in the first policy in the Dartford Plan, Policy S1:

Policy S1: Borough Spatial Strategy

1. *Sustainable development will occur at planned locations in the Borough to meet assessed needs, securing new infrastructure provision and brownfield land re-use, creating neighbourhoods resilient and adaptive to climate change. Development should provide a diverse and complementary balance of uses and services within settlements, and minimise the necessity to travel by private vehicles.*
2. *Growth will be located at strategic allocations, sites in the identified housing land supply, and in line with the economic strategy. Development is directed to:*
 - a. *Brownfield land not within the Green Belt; and*
 - b. *Sites with good access by public transport and walking/cycling to a range of local supporting services/infrastructure.*
3. *The overriding priority for development in the Borough is at:*
 - a. *Central Dartford; and*
 - b. *Ebbsfleet Garden City*

These growth locations will be regenerated with the provision of new and improved infrastructure and strategic mixed-use development.

- 2.12 Figure 1 below confirms the extent of Central Dartford in the Dartford Plan:

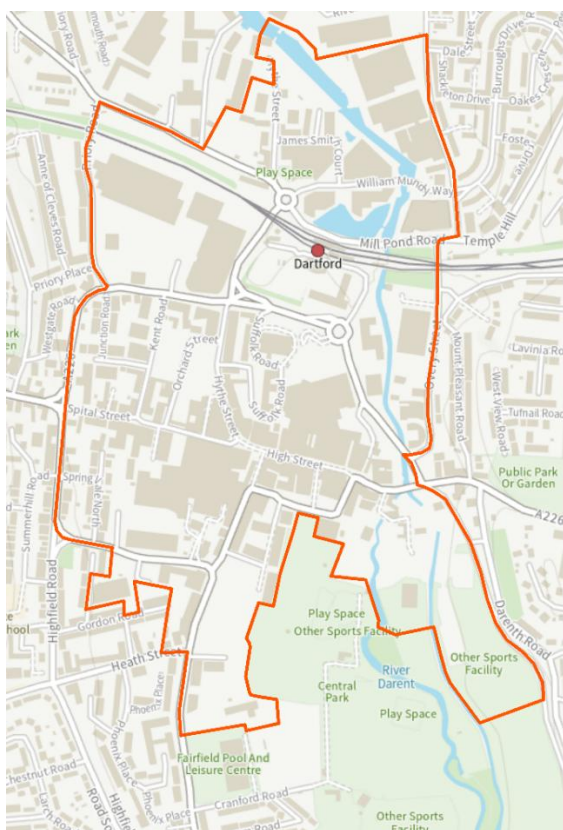


Figure 1: Central Dartford boundary

- 2.13 The Borough Spatial Strategy covers all uses, including major trip-generating activities such as business and industry. Co-locating a mix of activities in town centres and smaller centres is a particularly relevant way to minimise travel need, and to support public transport:

Policy S1: Borough Spatial Strategy

9. *Economic development and jobs growth will be delivered principally through supporting development opportunities, to deliver:*
- a. *Planned strategic expansions at, or additional floorspace within, the identified employment areas.*
 - b. *Redevelopment for modern retail/leisure premises and community facilities within the retail centres. The network of retail centres comprises:*
 - i. *Dartford Town Centre, which will attract a wide range of new businesses;*
 - ii. *Bluewater, which will continue its regional economic contribution;*
 - iii. *District Centres at Dartford, Ebbsfleet, Swanscombe and Longfield;*
 - iv. *Local Centres in the urban area and at villages.*
 - c. *Under policy S5 the policy is for residential development to show benefits outweigh the disbenefits, including taking account of the location's sustainability (unless sited in/around Dartford town centre, i.e. the defined Central Dartford area, or at Ebbsfleet) applies. As HMOs can often be an intense form of land-use, with multiple residents in one house, their location should take particular account of the sustainability and environmental impacts.*

- 2.14 Policy S1's strategy also addresses villages. This part of the policy in particular is supported through SSL 1 later in this SPD:

Policy S1: Borough Spatial Strategy

10. *The openness and permanence of the Metropolitan Green Belt in the south of the Borough and at Dartford Marshes will be maintained. Development will only occur where in full accordance with Green Belt policies.*
11. *Any residential or other development within the Borough's villages will be of proportionate scale and on non-Green Belt land.*

2.15 National planning policy requires all local plans to include a summary 'Key Diagram'. Dartford's Key Diagram (replicated as Figure 2 below) generally represents the Borough Spatial Strategy set out in Policy S1. It shows both essential policy area definitions and infrastructure that may support sustainable growth locations including:

- The Urban Area north of the A2, marked in grey.
- The strategic development sites (allocations in the overriding priority both areas) marked in bright red, and potential further growth areas (broad locations) as hatched.
- Dartford Town Centre and Ebbsfleet Garden City boundaries.
- The identified employment areas, marked by the light shaded areas.
- District and local centres in the retail network, marked by the coloured circles.
- Fastrack (the frequent North Kent modern bus service dedicated routeway), marked by light blue routes in the Urban Area.

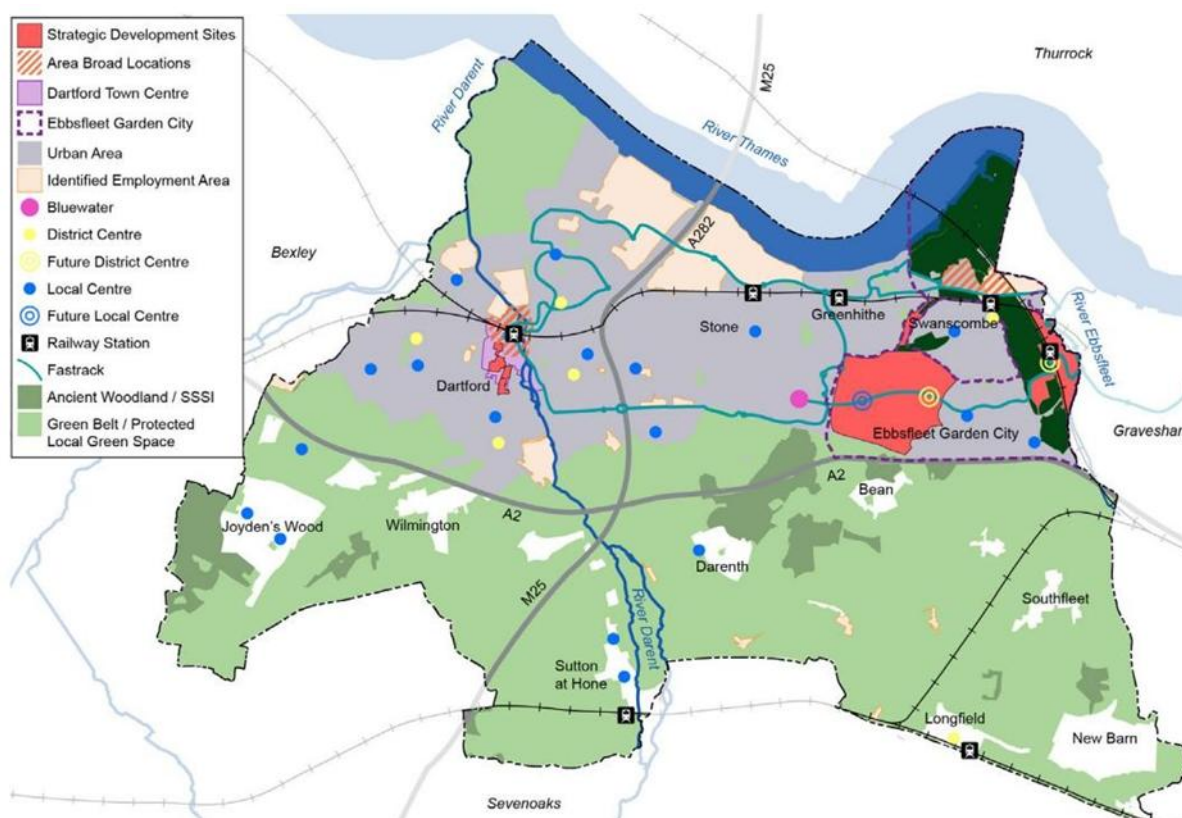


Figure 2: Key Diagram in the Dartford Plan

2.16 The Dartford Plan has an infrastructure-led approach to development, central aspects of which are set out in Policy S2 and Table 1 of the Dartford Plan:

Policy S2: Infrastructure Planning Strategy

1. *Borough development will be plan-led, and major proposals masterplanned and phased, in order to ensure the co-ordinated delivery of new infrastructure, and that demand is managed to remain within capacity as far as possible until necessary new infrastructure is provided.*

services and facilities will be provided to meet Dartford Borough's needs with key infrastructure provision identified in Diagram 2 and Table 1. Land will be retained within applicable large development for essential community, travel, flood defence and green infrastructure uses.

- 2. Community uses, including education, health, sports facilities, cultural services and local shops, will be retained, and new facilities delivered. Development will ensure communities have good quality and sustainable access to the day-to-day facilities they need including local services and jobs. Overall community infrastructure needs and growth will be regularly reviewed to ensure that a flow of sufficient new facilities are secured in appropriate locations.*
- 3. New development will be located where well-served by public transport, and within easy walking distance of local facilities and jobs (for new homes, or the labour force/primary catchment as applicable for other developments). All major development will feature significant measures to provide improved safe and secure active travel routes integrated with the surrounding area. Large and trip generating developments should support public transport use and new infrastructure. Focusing on sustainable locations/transport provisions should support minimising pollution in Air Quality Management Areas and elsewhere.*

- 2.17 The Dartford Plan at paragraphs 2.34 to 2.37 confirms the necessity for proposals to support the use of, and investment in, a range of transport modes, and in the Dartford context development can only be accommodated where the use of sustainable transport is increased:

In addition to Policy S2, Criterion 3 and 4, the main policies focused on transport include S1, D1, E1, M15, M16 and M20. A range of transport planning interventions are necessary, including reducing reliance on private vehicles in new developments and improving public transport and active travel provision...

Even after taking into account planned works, as described above, on both the strategic and local highway networks to address increased demand, development can only be accommodated if the proportion of journeys made by public transport and active travel modes are significantly increased together with other sustainable travel measures undertaken by new development to mitigate their impact. Policies M15 and M16 set out the further provisions required of development.

A clear Local Plan strategy has an important role to play by leading the forward planning for a sustainable pattern of new activities. Uses that generate significant movements of people, such as schools, healthcare and large shopping or employment areas, need to be well located in close proximity to each other and residential areas, with a realistic choice of travel modes.

Development will need to secure major modal shifts in transport choice in favour of expanded active travel and public transport provisions. These offer clear benefits for efficient travel and wellbeing, avoiding vehicular congestion, improving air quality and promoting healthy living. The Dartford Local Cycling and Walking Infrastructure Plan (LCWIP) will be applied to deliver new cycling and walking infrastructure.

- 2.18 With the level of transport demand and congestion in the Borough, sustainable transport, including walking and cycling, is critical to addressing climate change as set out in Policy S3:

Policy S3: Climate Change Strategy

1. *Development will be well located, and innovatively designed and constructed, to mitigate and adapt to the effects of climate change. Development in the Borough should contribute to minimising carbon emissions from properties and processes, and reducing the need for unsustainable travel, avoiding vulnerability and increasing resilience to the effects of climate change by a package of bespoke measures integrated within development at an early stage of design and planning, including the measures set out in Criteria 2 to 7.*
2. *The use of sustainable and active travel modes will be embedded into developments; designing for walking/cycling (particularly at locations which benefit the Green Grid), public transport and low carbon motorised personal transport (including for future electric vehicle charging points/cabling needs). This should be designed to be adaptable to allow for future changes to technology and transport methods.*

2.19 The final Borough-wide strategic policy is on the location of residential development, Policy S5. It is comprised of two parts. The first part addresses the location of residential and mixed-use development as specifically identified in the Dartford Plan, which under the plan-led system are expected to provide the predominance of new homes:

Policy S5: Sustainable Housing Locations

1. *Sites located in accordance with the Borough Spatial Strategy, Central Dartford, Ebbsfleet and Swanscombe, Bluewater policies, or remaining sites in the identified housing land supply as set out in Appendix A and where after taking into account applicable site constraints the proposed number of dwellings is broadly in line with the projected site capacity, will be permitted for residential development.*

At three residential-led allocations on the Policies Map and identified by diagrams in Appendix A, residential development will be permitted where:

- a. *Shown to be designed to:*
 - i. *Respond sensitively to local topography,*
 - ii. *Respect long distance views to the sites;*
 - iii. *Respect and enhance existing landscaping and landscape settings;*
 - iv. *Facilitate an integrated sense of place and community;*
 - v. *Create functional open space well related to the development and connecting to the wider green infrastructure network;*
 - vi. *Provide a fine grain of built form ensuring permeability and integration and safe connections to neighbour facilities, services and infrastructure; and*
 - vii. *Ensure an appropriate scale of development across each site, to create street scenes which contribute to and enhance the character of the surrounding areas.*
- b. *Demonstrated to be designed to fully utilise and support the public transport corridor and active travel potential of London Road (and also in the case of St James Lane Pit, Watling Street) providing safe, direct and attractive walking links from all dwellings to bus/Fastrack services, and achieving development well equipped to integrate with the wider cycle network (for commuter, recreational and other cycling).*

c. Meeting other Local Plan policy and infrastructure requirements, d. A design-led process leads to an agreed layout, showing: i. At St James Lane Pit Stone, up to 870 dwellings ii. At Stone Lodge Stone, up to 140 dwellings iii. At Knockhall Road Greenhithe, up to 61 dwellings.

2. *At other locations, residential development will be supported where the benefits of the proposal outweigh the disbenefits, including the sustainability of the site's location. Unplanned windfall development within Use Class C3 involving a net gain of five or more dwellings should also show that:*

- a. It is located on brownfield land, unless it has been demonstrated that the site is necessary to rectify a lack of five-year supply of deliverable housing land;*
- b. It is within easy walking distance of a range of community facilities including schools, shops, leisure and recreation services, and is well located with respect to walking/cycling and good public transport to a choice of employment opportunities; and*
- c. In the case of major development, it is also shown to be sufficiently served by infrastructure, after allowing for the infrastructure requirements of the sites identified in the housing land supply.*

2.20 The second part above of Policy S5 establishes the broad criteria for housing proposals that may be put forward at other locations. These requirements vary depending on the scale of proposed development:

- The first sentence, stating all benefits outweigh disbenefits including the sustainability of the site location, can apply to all proposals. This SPD may be of particular assistance to consideration of smaller proposals and the sustainability of their location, especially Appendix 1's framework for indicating a local sustainable transport rating.
- The content that follows (Policy S5 parts 2a-2b) applies to sites on the net gain of five or more dwellings. SSL 2 and text as follows in this SPD helps explain how the specific criteria and guidelines of Policy S5 of the Dartford Plan should be addressed in detail for these proposals.

2.21 Table 1 below, extracted from the Dartford Plan, outlines some of the main locations where business and housing growth is expected to be accommodated, and other key policies on locations such as Policy M18 on sustainable economic locations:

Table 1: Summary of types and locations of developments

What	Where	How
Homes	<p>Concentrated on specific sites identified in the housing land supply. This includes the following key areas:</p> <ul style="list-style-type: none"> • Ebbsfleet Garden City • Central Dartford <p>Depending on regeneration progress, additional suitable residential sites may become available, or suitable land delivery may be accelerated by the market in line with policy.</p>	<ul style="list-style-type: none"> • Completing sites under construction or with planning permission. • Maintaining a supply of specific deliverable sites. • Providing an ample amount and variety of new housing land at sustainable locations in the housing land supply. • Identifying available and suitable brownfield land. <p>Relevant policies: S1, S4, D4, D5, D6, E4, E5, M9</p>
Businesses	<p>Encouraged at appropriate locations in the Borough, particularly in identified employment areas at:</p> <ul style="list-style-type: none"> • Dartford east of M25 (9 areas) • Other urban (7 areas) • South of the A2 (5 areas) <p>Strategic commercial development and services are expected at:</p> <ul style="list-style-type: none"> • Dartford Town Centre • Ebbsfleet Central 	<ul style="list-style-type: none"> • Strategic expansions to areas in Littlebrook/The Bridge; • Riverside/Northern Gateway; Burnham Road; Crossways. • Completing sites already under construction or with planning permission. • Sustainable intensification or upgrade of the identified employment areas. • Criteria for other proposals. <p>Relevant policies: S1, S4, D2, E2, E4, M18, M19, M20.</p>

Source: Table 3 of the Dartford Plan

2.22 The Dartford Plan includes development management policies that may also apply, including M15 and M16 on public transport, active travel and safety, site travel plans and other aspects. There is also national and sub-regional guidance on transport matters in particular.

2.23 This SPD provides confirmation of how these policies will be applied, and the data relevant to consider what is a sustainable location accessible in transport terms in the Borough. It also should assist in the identification of the best possible development locations, clarifying the appropriate settlements as established in the Dartford Plan.

3. SPD POLICIES

- 3.1 Two SPD policies are set out below to guide landowner/developers and contribute towards decision-making on relevant proposals, alongside policies within the Dartford Plan to 2037.
- 3.2 Each SPD policy is followed by reasoned justification paragraphs; these being supporting text that help explain and apply the policy. Further illustrative explanation, including mapping, is provided for each policy in the Appendices.
- 3.3 A range of other local and national planning policies are likely to apply for example on design, housing supply and other topics, and should be taken into account as appropriate.

SSL 1: DEFINED SETTLEMENTS IN THE BOROUGH

1. **Settlements in the Dartford Borough area are those listed below within the Urban Area (which is defined by Policy S1 part 7 of the Dartford Plan) and those forming town and villages within applicable areas inset from the Green Belt in southern Dartford Borough. These are settlements:**
 - a) **In the urban north of the Borough**

Towns in the Urban Area:

 - **Dartford**
 - **Ebbsfleet**
 - **Greenhithe**
 - **Stone**
 - **Swanscombe**
 - b) **In the Borough south of the A2**

Non-Urban Area Town:

 - **Longfield**

Villages (Non-Urban Area):

 - **Bean**
 - **Darenth (Lane End)**
 - **Joyden's Wood**
 - **Southfleet**
 - **Sutton-at-Hone**
 - **Wilmington**
2. **The defined extent of Non-Urban Area settlements in 1b above is confirmed through the Policies Map extracts in Appendix 2.**
3. **Dartford Plan Policy S1 establishes the Borough strategy in settlements:**
 - **S1 part 3: states the overriding priority is at Central Dartford and Ebbsfleet,**
 - **S1 part 7: defines development principles for the rest of the Urban Area,**
 - **S1 part 11: outlines any residential or other development within villages will be of proportionate scale and on non-Green Belt land. This will require careful consideration of how the proposal is selected, located and designed. This SPD should be used to ensure development is proportionate to the village in terms of travel impacts, sustainable transport provisions and sufficient public transport accessibility.**

SSL 1 Introduction

- 3.4 The Borough's essential geographical characteristics have provided a clear and effective focus in successive Local Plans for the location of sustainable development and maintaining Dartford's character. The Borough features a distinct north-south divide delineated by the A2 strategic highway (eight lanes wide). North of this is the bulk of the Borough's population, employment and infrastructure, and the largest settlements (many of which originated on the River Thames or River Darent). The sustainability of this area as the most suitable location for development, was reinforced in recent decades by the availability of large previously developed (brownfield) sites.

- 3.5 The contrasting southern half of the Borough extends in the direction of Kent Downs National Landscape, and in contrast is over 80% designated as Metropolitan Green Belt. The Borough is also defined by a smaller Green Belt area at Dartford Marshes, located northwest of the Urban Area. This plays a vital role in maintaining the openness of Dartford from Greater London, at the confluence of the Rivers Thames and Darent.
- 3.6 SSL 1 above should be used in considering current and emerging national policy on settlements when applying Policy S1 and other policies in the Dartford Plan.
- 3.7 The Borough Spatial Strategy set out in Policy S1 and the Key Diagram of the Dartford Plan guides all development proposals across the Borough. It features overall guiding principles for development applying both in and outside of settlements:
- Overarching requirements are for development to be at planned locations and provide a balance of uses and services within settlements, minimising the necessity to travel by private vehicle (Policy S1, part 1).
 - It sets a focus on brownfield land not within the Green Belt and sites with good access by public transport, walking and cycling (Policy S1, part 2a-b).
- 3.8 The significance of sites that avoid generating additional transport demand and improving the quality of alternatives to private vehicles has increased further as a result of Dartford being one of the fastest growing parts of the country. It is unnecessary and likely harmful for Dartford's future development needs to be met at locations that do not meet local sustainability requirements as set out in the Dartford Plan. The assessed and agreed Borough strategy is that developments will be accommodated at planned locations with good access by public transport and walking and cycling. It therefore identifies Central Dartford (see Figure 1 above) and Ebbsfleet Garden City plus mixed-use and housing sites as allocated on the Policies Map. These are accessible sites that will meet development needs and are likely to be well placed to offer sustainable travel options.
- 3.9 The Dartford Plan includes the Urban Area on the Key Diagram (see Figure 2 above) and defines it as "north of the A2 and outside the Green Belt". The principal focus of development in the Dartford Plan is on this part of the Borough.
- 3.10 The adopted urban focus reflects that towns commonly benefit from offering their residents significant commercial activities and other supporting facilities and infrastructure within the settlement. A choice of transport options means services and jobs are readily accessible from the homes of residents. The mix of uses, open spaces and other infrastructure may provide social vibrancy, but will also cater for the predominance of local economic, social and environmental needs without travelling outside the settlement or dependence on private vehicles. There is every opportunity and need to make full provisions for sustainable transport, and to fully apply SSL 1 above.
- 3.11 Development planned at functioning settlements ensures the existing social infrastructure, including public services, is retained and efficiently used to the benefit of all. It enables the viable planning and provision of land and infrastructure funding to be realised, including investment in public transport, schools and healthcare.

South of the Borough Settlements

- 3.12 Under the Dartford Plan, the area south of the A2 in the Borough, including Longfield and the villages, falls outside the urban growth policies of the Dartford Plan (Policy S1 parts 3 and 7).
- 3.13 Many of the residential areas south of the A2 can be characterised as mostly interspersed neighbourhoods and estates largely developed in the 20th century, some of which included no facilities, as well as some generally medium-sized or small villages (a selected number of which have retained limited facilities). SSL 1 Clause 1 above and Appendix 2 to this SPD notes those places that have been confirmed as still retaining multiple key local services as settlements. These host facilities that are regularly used by broad parts of the population, and reasonably typical of well-functioning smaller settlements, such as essential local scale public services, and smaller scale retail and services.
- 3.14 Figure 3 below was published by the Council in support of the Dartford Plan:

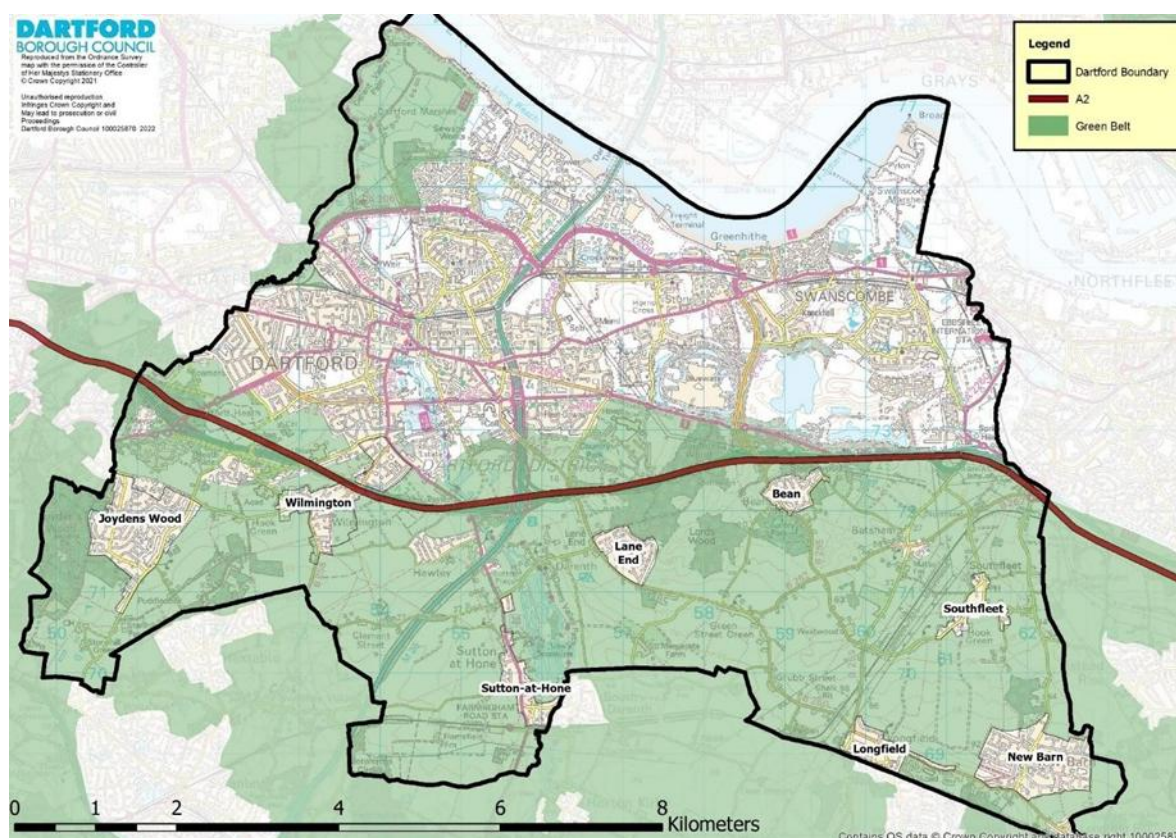


Figure 3: Smaller settlements and Green Belt in the Borough

- 3.15 In Figure 3, the A2 strategic highway is highlighted in red, and north of that, the well-developed Urban Area is evident. The Metropolitan Green Belt is shown, and in the south of the Borough there are several “insets” from the Green Belt of various sizes not covered by green.
- 3.16 This enables confirmation of not only which places are settlements, but also how far they extend, verified by latest ONS data². Under the Dartford Plan, the Council has consistently viewed all Green Belt land as not part of a defined settlement. SSL 1 and Appendix 2 confirm which of the insets fall in an identified settlement. There is no change to the definition or status of the existing Green Belt boundaries shown on the adopted Policies Map.

² See section 2 of the Supporting Evidence report.

- 3.17 There will be needs of residents and other people in the south of the Borough to travel out of this area's settlements to access employment and higher order services regularly (to places and facilities with a wider catchment/market area accessible to large numbers of people, e.g. hospitals, further education, leading comparison retailers, theatre, leisure centres. To address traffic generation (congestion, pollution, noise and safety impacts), effective public transport provision will be necessary (outlined further in SSL 2). The frequency, cost, reliability and choice and significance of destinations will be very influential as to the effectiveness of available public transport in the south of the Borough. Problems of achieving and maintaining sufficient public transport services make it challenging in non-urban areas to support high-density proposals.
- 3.18 In the southern parts of the Borough, the distances involved – with the dispersed services and population – can make any walking and cycling impractical, and investment in public transport infrastructure unfeasible. This in turn contributes to congestion and pollution, unattractive road environments for pedestrians and cyclists, and challenges efforts to tackle climate change. As a result, it cannot be assumed that the accessibility and sustainability problems of a plot of land anywhere in the Borough can necessarily be effectively mitigated; some locations may always be inappropriate for trip generating developments.
- 3.19 It should be noted that high traffic volumes across Dartford Borough may impact on the safety and likelihood of walking and cycling, especially with unlit or unsurfaced footpaths. Some village roads also lack footways and are not safe or convenient. Many locations outside settlements in the Borough can be inherently unsuitable in this respect.
- 3.20 In any event, development in villages should be of a proportionate scale and avoid Green Belt land (Policy S1, part 11 of the Dartford Plan). This will vary depending on the individual settlement.
- 3.21 Longfield and the village settlements are outlined in Appendix 2, confirming applicable boundaries shown on the adopted Policies Map.

SSL 2: PRINCIPLES OF ACCESSIBLE TRANSPORT FOR SUSTAINABLE LOCATIONS

1. **Across the Borough all development should be planned and designed from the outset to support sustainable travel.**
2. **Development locations should be integrated locally and strategically with sustainable transport infrastructure; achieving safe, convenient and green mobility both (a) within settlements through walking, cycling or wheeling, and also (b) to public transport options for longer distance travel:**
 - (a) **Development sites will – through early consideration of location, layout and optimal entry/egress points – ensure safe, convenient and green access by walking, cycling or wheeling to and from (and within) the site:**
 - i. **All housing development should be located (or make provision on site) so that a range of local community facilities and services are within a distance that is easy for walking, cycling or wheeling (and with safe, convenient and green routes available).**
 - ii. **Housing and all other trip generating developments must benefit from high quality non-vehicular routes to local services and infrastructure, that are direct or align with desire lines for pedestrians or cyclists or wheeling. Developments may be required to deliver new or upgraded walking, or cycling/wheeling routes, which will be safe, convenient and green.**
 - (b) **Trip generating developments – including residential and major employment, retail/leisure, community, cultural and sporting facilities – should be well served by accessible and frequent public transport in immediate proximity, to useful destinations.**
3. **Developments should at the earliest stage carefully consider the level of accessibility and any improvements that may be necessary. Assessment of the proposals will examine:**
 - **The Dartford Plan (including policies S1, S2, S5, M16 and M18).**
 - **This SPD and local requirements informed by sustainable transport performance indicators including Table 2/Appendix 1. A sustainable location in the Borough in Dartford Plan terms should not be shown solely through reliance on the national Connectivity Tool.**
 - **The Dartford Local Cycling and Walking Infrastructure Plan (LCWIP)³.**

SSL 2 Introduction

- 3.22 The vital importance in this Borough of sustainable and efficient transport is a cornerstone of the Dartford Plan (see Section 2 above). It is the fundamental enabler of growth, continued prosperity and local well-being in Dartford. Paragraph 2.81 of the Dartford Plan confirms: *“Good access to facilities, frequent public transport, and the provision of good quality pedestrian and cycling opportunities linking to facilities underpin the central Local Plan principle of encouraging a modal shift from car use to more sustainable forms of transport (Policies S2 and S3).”*

³ Currently: Dartford Local Cycling and Walking Infrastructure Plan 2023, and subsequent cycling and walking map guides.

- 3.23 Requirements in SSL 2 Clause 1 emphasise the significance of a good location in the earliest development consideration by prospective applicants/developers for trip generating uses of all sizes. The design of development and new infrastructure provision may address some of the issues arising from the trips generated, especially taking opportunities for provision presented by larger sites. Nevertheless, it is the location of land and the arising distance and quality of available connections to facilities (see definitions in paragraph 3.26 below) that are the principal determinants of the need to travel, and the transport mode selected.
- 3.24 Effective planning policies and development decisions can prevent the need for people to undertake regular or lengthy journeys through locating homes, jobs and services together (for instance at an identified or new settlement). This an aim of the Dartford Plan. SSL 2 Clause 2 recognises successful sites and places provide for the essential needs of their own population locally, i.e. through infrastructure and complementary uses provided within walking distance or a short cycle ride, whilst also ensuring a real choice of travel modes for trips further afield. A location within one of the Borough's towns (see the preceding SSL 1) is most likely to meet requirements – compared to other parts of the Borough – and accord with national and local policy, subject to site-specific factors and full assessment against the Dartford Plan.

Sustainable Transport including Active Travel: SSL 2 Clause 2(a)

- 3.25 Across the Borough, opportunities to maximise sustainable travel should always be taken. Policies M15 and M16 of the Dartford Plan should be consulted. Public transport and active travel, i.e. walking and cycling, are efficient in relieving pressure on the highway network, thereby reducing journey times. Importantly, with a focus on climate change, these are zero or low carbon modes of travel. Walking and cycling are also good for physical, mental and public health, forming good exercise for individuals without generating air or noise pollution for others, and can be very low-cost. Pedestrian interaction in towns and villages also supports the social strength of communities. Wheelchairs and other wheeled mobility aids can be essential to the mobility and well-being of individuals.
- 3.26 Key definitions in SSL 2 and throughout this SPD (for further explanations see Appendix 1) are:
- **Safe, convenient and green routes:** will be suitably surfaced, well-lit and benefit from passive surveillance wherever possible and otherwise provide a safe and inclusive environment, with soft landscaping/vegetation, and avoiding steep or stepped significant level changes. This also precludes pedestrian use of roads without a pavement, or reliance on a narrow or otherwise poor-quality pavement.
 - **Easy walking distance:** considered to be up to 800m (0.5 miles) at most. This will be measured along safe, convenient and green routes, recognising desire lines if available; not calculated as the crow flies.
 - **Useful destinations/usefulness of destinations:** appropriate destinations from housing would be to Dartford Town Centre, a GP (or hospital), secondary schools, Bluewater, or urban employment areas (or failing that if appropriate, a good choice of community facilities, a designated retail centre, and jobs sufficient to meet the needs of the scale of residential development). For non-residential trip generating development, useful destinations are towns and other large trip generating relevant attractions and facilities nearby where there is a realistic prospect of sustainable linked trips. Useful public transport will serve these destinations with sufficient frequency (see paragraph 3.34).
 - **Trip generating uses:** includes any housing, employment, hotel, retail, leisure, culture, education, health, sports, religious uses and other applicable community services and qualifying activities. It potentially incorporates any facility/ accommodation with residents, employees, users, customers, clients, visitors, participants or followers, or distribution function. It excludes uses, installations and

buildings into which people do not normally go, or go only intermittently for the purpose of inspecting or maintaining fixed plant or machinery. Proposals for residential or small extensions not creating a new dwelling, and where demonstrated to result in zero additional employees/customers or other visitors, do not apply for the purposes of this SPD.

- **Immediate proximity:** to public transport means a 400m (0.25 mile) or less actual walk or wheeling distance (not calculated as the crow flies), representing spending five minutes or less reaching the stop or station for an 'average person'.

3.27 Clause 2a(i) of SSL 2 above highlights the important principle for all new homes to have community facilities "in easy walking distance" (as per the Dartford Plan, Policy S2(3)). For housing, Policy S5, paragraph 2.81 of the Dartford Plan identifies a requirement for:

- *services close by (easy walking distance) should include "schools, shops, health facilities, and recreation facilities"; and*
- *developments have to show they are "well integrated into safe walking and cycle routes".*

3.28 The method for defining applicable walking routes and other factors is detailed in Appendix 1. The route most people may choose may not be along the highway, as there are extensive traffic free routes to consider. Footpaths and other public rights-of-way are woven into the fabric of Dartford's settlements and across Britain. These should be fully investigated to elicit scope for improvement and the best potential route. In all instances, routes need to be safe and convenient and green.

3.29 Any proposal focusing on accessibility by cycling will have to demonstrably illustrate how the specific routes expected to be used are safe and convenient green routes for cyclists of varied confidence and ability. This is especially so if relying on "high" or "moderate" cycling potential as rated under Table 2 in Appendix 1.

3.30 Walking and cycling routes may need to be provided or upgraded through sufficient and appropriate developer contributions as necessary guided by the Dartford LCWIP and associated information, and in line with legislation. The benefits of any new cycle/shared routes in providing green settings or contributing to biodiversity should also be considered.

Public Transport: SSL 2 Clause 2(b)

3.31 Clause 2(b) of SSL 2 above reflects the additional criteria for sites for five or more new homes, or major non-residential proposals for many trip generating uses, in the Dartford Plan (including through Policies S2 and S5).

3.32 These developments will generate a significant volume of journeys, some of which will be longer distance regular trips, e.g. commuting to work (but also to popular leisure pursuits or essential services such as healthcare). The Dartford Plan requires high – but realistic and necessary within this Borough – accessibility to public transport services. This ensures there is a genuine alternative to the car.

3.33 Many locations in Dartford's towns have good public transport accessibility. The Borough has seven railway stations served by three separate railway lines, and therefore direct services to a wide choice of termini in different parts of central London. There are a range of bus services that connect towns well, plus suburban routes, buses to villages and rural Kent, and buses by Transport for London. The modern and frequent Fastrack service is readily accessible for a large proportion of the Borough's population and major employers. This context is outlined further in Appendix 1.

- 3.34 Paragraph 2.84 of the Dartford Plan requires:
- A safe and convenient (and green) walking distance of 400m or less, i.e. in close proximity from railway station, or a bus stop with at least six buses an hour each way (these are not destinations in their own right so few people are willing/able to walk further).
 - Or if development is not a greenfield site over 1 hectare in size, a walking distance of 400m (via safe, convenient and green routes) from a railway station or a bus stop with two buses an hour each way. The usefulness or otherwise of the service will be taken into account, particularly the destinations reached.
- 3.35 These minimum service levels are necessary for public transport to have the prospect of being perceived as genuinely easy and appealing. The peak time frequency of six services an hour for each direction, a service every 10 minutes, is available in Dartford and allows users to ‘turn up and go’ encouraging regular public transport use. The peak service level is the scheduled maximum service level for two separate 60-minute periods in a weekday. See Appendix 1 for further methodological details. Comprehensively designing in bus services within the layout of large new sites is addressed in Policy M15 of the Dartford Plan.

Additional Guidelines for Non-residential Proposals: SSL 2 Clause 2

- 3.36 SSL 2 addresses all uses, not just residential. For non-residential uses creating travel demand, sustainable transport access is essential. A location with good public transport is expected (Clause 2(b)), this includes any use attracting significant employees, users, customers and visitors. Trip generating developments are defined in paragraph 3.23 above. Regard will be had to usefulness as defined of public transport destinations to the needs of the development; and the sufficiency of services at the time most required by the proposed use – see paragraph 3.31 frequency guidelines. Selection of an unsustainable location for non-residential uses may mean the proposed development is inappropriate against SSL 2, and mitigations may not always be sufficient.
- 3.37 The national ‘main town centre use’ definition will be applied, or for other non-residential proposals with employees or visitors the size threshold of nationally defined ‘major’ scale developments, for the purposes of triggering SSL 2 Clause 2(b). The Dartford Plan and national planning policy acknowledge town centres are generally sustainable locations for trip generating uses and developments in many forms and sizes.
- 3.38 Policies S1 (part 9) and M18 (parts 1-2) of the Dartford Plan steer Class E development (in particular but not exclusively) to identified centres in the Borough. Policy M20 is focused on how identified employment areas can sustain and accommodate office and industrial developments, subject to appropriate transport provisions. SSL 2 guidance can be used to demonstrate compliance with Dartford Plan M20 requirements such as M20 part 3a for service businesses.
- 3.39 Various activities including non-business uses may function intensively and lead to significant transport demand. The policy also can apply to some public services and many large or intensively used other uses (e.g. secondary schools/colleges and health facilities, large places of worship and recreation facilities used certain times by significant volumes of people). Even during off-peak periods of lesser commuter/school traffic congestion, SSL 2 should still be considered (including for environmental and well-being reasons, and as critical incidents at the Dartford Crossing can impact across the Borough at any time, and as public transport frequencies may be low). Note also, for applicable community uses, excluding essential public services or necessary neighbourhood scale uses, Policy M17 (part 1d) of the Dartford Plan requires demonstration of need where the majority of users travel from outside the Borough.

Summary indicators of local transport accessibility: SSL 2 Clause 3

- 3.40 In Clause 3 of SSL 2, proposals are advised that the suitability of a development's location in the Borough should principally be viewed against the adopted policies in the Dartford Plan and associated policies and documentation. In evaluating the sustainability of locations in terms of accessibility and connectivity, these provide a consistent and appropriate basis for considering performance relevant to the Borough, its development requirements, infrastructure, and services.
- 3.41 These principles have resulted in a framework for rating different sustainable transport modes in Appendix 1 (Table 2) that gives an indication of distances to access rail, bus and cycling travel. This approach does not factor in every issue but is a starting point which then allows account to also be taken of qualitative factors such as route service levels, and usefulness of destinations. Individual and up to date assessment is always needed of factors such as convenience, capacity and cost – or for walking and cycling, a safe and sufficient quality green environment should be established upfront.
- 3.42 The local approach and ratings identified in Appendix 1 can provide simplicity and clarity that may be useful for small sites in particular, for example single dwelling proposals.
- 3.43 In December 2025 the Government introduced the national Connectivity Tool. The Connectivity Tool provides information against national average levels of connectivity and is outlined in Appendix 1. However, there is concern that this fails to benefit from any significant local assessment or data in relation to the many key factors and qualitative aspects that determine the attractiveness and uptake of sustainable transport modes.
- 3.44 The national Connectivity Tool produces uniform results across grid areas and therefore is not bespoke to individual sites in nearly all circumstances and does not have regard to specific access/entry arrangements for any site. Additionally, issues have been identified with key methodological assumptions and thresholds used in the public transport and active travel modes; these all render the Tool of only limited applicability and insight in Dartford Borough.
- 3.45 SSL1 should be applied, with consideration where appropriate of the local method for rating sustainable transport performance set out in Appendix 1, and suitable bespoke evidence relevant in the context of the Dartford Plan.

4. APPENDICES

APPENDIX 1: ACCESSIBILITY RATINGS IN DARTFORD

4.1 This Appendix outlines sustainable travel provisions across Dartford and considers how the performance of locations can be measured locally in this respect.

Local Accessibility Metrics

4.2 Based on established and approved principles underlying the Dartford Plan (and associated documents), locations in the Borough can be rated in a simple way to provide a summary indication of their accessibility – see Table 2 below. The following benchmarks and national research should be used to consider the performance of locations against different sustainable transport modes, and to inform the application of the Dartford Plan and SSL 2 of this SPD. They may help give consideration to likely total journey time. The indicators and SPD are not intended to be implemented in isolation: note sub regional and national guidance may provide additional context, and regard should be had to the text following Table 2.

Table 2: Dartford sustainable travel rating indicators

Transport mode	Dartford Summary level of accessibility		
	High	Moderate	Low
Railway	Within 800m walk ⁴ (10 minutes) from a station in the Borough	800m to 1.6km walk from a station in the Borough	More than 1.6km walk ⁵ from a station in the Borough
Bus including Fastrack	Within 400m walk ⁶ (5 minutes) from a bus stop with at least 6 buses per hour (day time) in both directions	Within 400m walk (5 minutes) from a bus stop with an average of approximately 2 buses per hour (day time) in both directions	More than 400m walk from a bus stop with less than 2 buses per hour (day time) in both directions
Cycling <i>If at the specific location safe, green and convenient routes for cyclists of varying ability are available to useful destinations.</i>	Within 10 minutes cycle from Dartford Town Centre ⁷	More than 10 minutes cycle from Dartford town centre but within 10 mins of a District Centre ⁸	More than 10 minutes cycle from Dartford Town Centre or District Centre

Note: 400m = 0.25 miles 800m = 0.5 miles 1.6km = 1 mile

⁴ An acceptable walking distance is taken to be 10 minutes (approx. 800m) from the DfT Manual for Streets and IHT (2000) Guidelines for Providing Journeys on Foot.

⁵ Research by Wakenshaw and Bunn (2015) using National Travel Survey data based on the 85th percentile outside London gives 1.6km as the upper limit for walking to a railway station.

⁶ The 400m walking distance is based on guidance by IHT (2000) Guidelines for Providing Journeys on Foot, which advises an average walking speed equates to approximately 400m in 5 minutes. The guidance also suggests that a desirable walking distance for journeys generally is 400m. The 400m walking distance is also supported by the DfT (2005) Inclusive Mobility guidelines.

⁷ See the inner area of Figure 4 below.

⁸ District Centre addresses are provided in Appendix E of the Dartford Plan.

Application and Interpretation

- 4.3 It is essential that a range of qualitative issues are also considered, in addition to distances, in determining the performance of available sustainable transport options in the Borough. A variety of sources may be consulted but local issues of individual transport modes consistent with the Dartford Plan and its evidence are outlined below.
- 4.4 Rail may form a relatively quick means of transport, especially for travel outside the Borough (including to London's wide range of employment and attractions) and associated walking distances to stations in Table 2 reflect this. Overall, however, services in the Borough suffer from capacity issues, especially at peak times as all routes to London serve many other towns in Kent.
- 4.5 The Borough has the following railway lines:
- **North Kent line:** generally high frequency and with some choice of destination, especially from Dartford Station. Journey times can be relatively slow, for example sometimes nearly an hour or more to central London termini. Certain stations currently suffer from safety or structural issues in their operation, variable capacity, dependency on flights of steps or a negative environment (e.g. outside daylight hours). These issues can limit their use by some customers. *Stations: Dartford, Stone Crossing, Greenhithe, Swanscombe.*
 - **Victoria line:** lower frequency than North Kent line, with limited services stopping at Farningham Road in particular compared to other stations in the Borough. Its stations have very limited connecting onward public transport options to the rest of the Borough. *Stations: Farningham Road, Longfield.*
 - **High Speed 1 line:** rapid transport to eastern/northeastern London (Stratford International and St Pancras International). It is very costly as the specifically built route extracts an additional significant premium for High Speed service. Currently there are relatively limited onward public transport options for the south and west of the Borough. *Station: Ebbsfleet International.*
- 4.6 Bus services are not a destination in their own right. A 400m (0.25 mile) convenient walking threshold is relevant and the categories in Table 2 reflect the requirements of the Dartford Plan. Services are highly variable within the Borough, and subject to change:
- Fastrack services in the north of the Borough benefit from a modernising fleet and operate partly on dedicated busways (however subject to constraints due to traffic congestion and the ongoing long-term Galley Hill Road A226 closure).
 - The south of the Borough are not served by buses offering a convenient 'turn up and go' frequency and commonly lack any service in the evenings and at other off-peak times.
 - Main 'hubs' are at Dartford Town Centre (no specific bus station) and Bluewater (no rail interchange).
- 4.7 The quality of cycling routes and safety is absolutely critical. Regard may be had to the national guidance on designing high-quality, safe cycle infrastructure, and from Active Travel England. At present, cyclists in the Borough generally take routes on road. There are no significant stretches of high quality, safe and attractive segregated provision. Cyclists face particular physical deterrents and safety issues accessing and crossing the core area of Dartford, and many other parts of the Borough. Some locations could offer relatively short or flat journeys to local facilities such that cycling may prove practical even to less experienced cyclists, however, the infrastructure to support safe cycling at present is limited:

- With Dartford's extremely high vehicular traffic levels, including on local roads, the suitability of every location Borough-wide to offer safe and convenient cycle routes (including for short distances) will need to be verified. Each individual site will need consideration of its specific access arrangements.
- National Cycle Route 1 traverses the Borough east-west and although it enables routes towards Dartford town, much of it is not segregated or off-road. Pinch points (reliance on main roads) and steeper gradients are particularly found approaching Dartford town centre from East and West due to the river valley. North-south cycling provision is particularly limited in the Borough, and routes along the River Darent are generally unavailable for cycling at present.
- Reference may be made to the approved Dartford LCWIP and subsequent cycle guides/mapping by the Council. Emerging proposals for London Road, Stone may become relevant, if they reach a sufficiently advanced stage of delivery.

Appropriate Methodology

- 4.8 A range of data sources may provide context, and wider transport evidence overall can consider reasonable future scenarios in line with best practice in national policy. Each site will be considered on a case-by-case basis. It will however likely be necessary to look closely at prevailing local sustainable transport circumstances realistically. In applying Table 2, routes can be determined with reference to signed routes/advertise networks, transport guides, and measured with online mapping (which may require manual verification where appropriate). Up-to-date public transport timetables and network maps should be used.
- 4.9 Walking distance to bus stops should be measured to the specific location of a bus stop, not the general bus route or corridor. Timetable information can be sourced from bustimes.org, which is based on the government's Bus Open Data Service. Evidence and bus service levels will need updating when development proposals are put forward.
- 4.10 Minimum service levels for buses in Table 2 and the Dartford Plan are necessary to ensure public transport is genuinely effective and appealing, as an alternative to private vehicles. A frequent service every 10 minutes may encourage usage on a regular 'turn up and go' basis. This service level is available during peak times connecting a number of towns in the Borough. The peak service level is the scheduled maximum service level for two separate 60-minute periods in a weekday.
- 4.11 To calculate cycle routes, the National Cycle Network and in particular, Dartford LCWIP (and subsequent mapping/guides by the Council⁹) should be consulted, the latter being available from the Dartford Borough Council website. The 10-minute cycle time area from Dartford Town Centre is determined by using the LCWIP isochrones produced by PJA (2022) set out in Figure 4 below (see the inner area defined).

⁹ Most notably the 'Dartford Cycling Guide' (Dartford Borough Council, 2026).

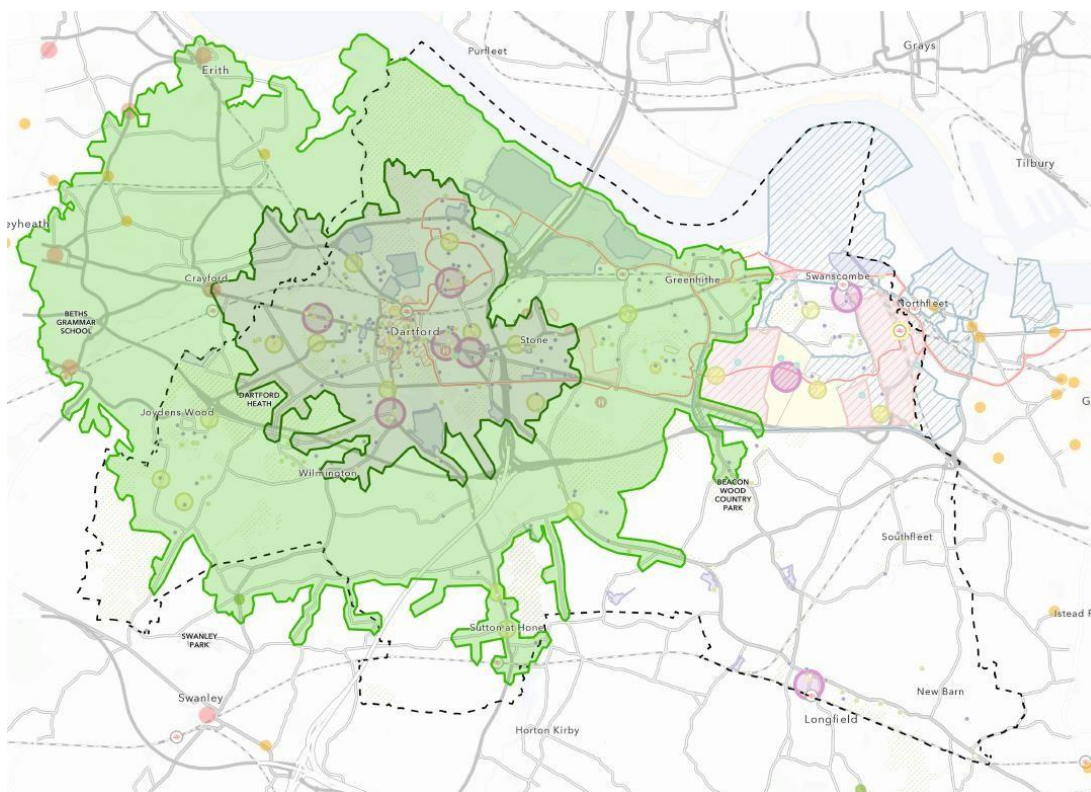


Figure 4: 10 and 20-minute cycling time isochrone from Dartford Town Centre. The darker (inner) zone is referred to in Table 2, extending east of the M25 and to a small extent south of the A2.

- 4.12 Ratings in Table 2 and the area in Figure 4 only give a high-level indication of distance, not the quality of route or safety. Any proposal focusing on accessibility by cycling will have to demonstrate how the specific location and its access benefits from safe, green and convenient routes for cyclists of varied confidence and ability, for example to local shops, schools and employment.
- 4.13 Table 2 ratings for cycling are contingent on this. Where a designated centre is in proximity to a site, but a route of sufficient quality is not available, the rating outcome should be downgraded to scoring 'Low'.

National Connectivity Tool

- 4.14 The new National Connectivity Tool aims to measure on a relative national basis how well a place enables people to get to where they want to go by walking, cycling or public transport. It covers England and Wales, and accounts for six types of destinations:
- employment
 - visiting people (residential)
 - education
 - shopping
 - entertainment (leisure and community)
 - healthcare
- 4.15 This can provide some context and a national perspective. It considers what is reachable within an hour and the destination 'value' (for example, more jobs can add more weight). This does not account for where there is a necessity or desire to travel more than an hour, and tool is weighted by people's willingness to travel on the specified transport mode.

- 4.16 The tool does not consider the quality of walking and cycling routes (for example, footway or cycle lane presence, width, surfacing, lighting). This is a fundamental issue, not least as walking and cycling is essential to access public transport – an unsafe or inconvenient walk to a bus stop may discourage potential users.
- 4.17 The tool calculates travel time from any given location within 100m x 100m grid squares across England and Wales, and therefore does not address specific small and medium-sized sites directly, or their immediate access arrangements. It finds the shortest route between origin and destination using public transport timetables at the time of publication, and it applies an average cycling speed of 16kph and an average walking speed of 4.8kph.
- 4.18 It combines the score of each destination to create an overall measure of a place's connectivity and is weighted by frequency of travel to each kind of destination (determined by the National Travel Survey).
- 4.19 Every location across England and Wales falls within a 100m x 100m grid square that is scored on a relative index (0 to 100). This provides a broad overall 'heat map' (see Figure 5):

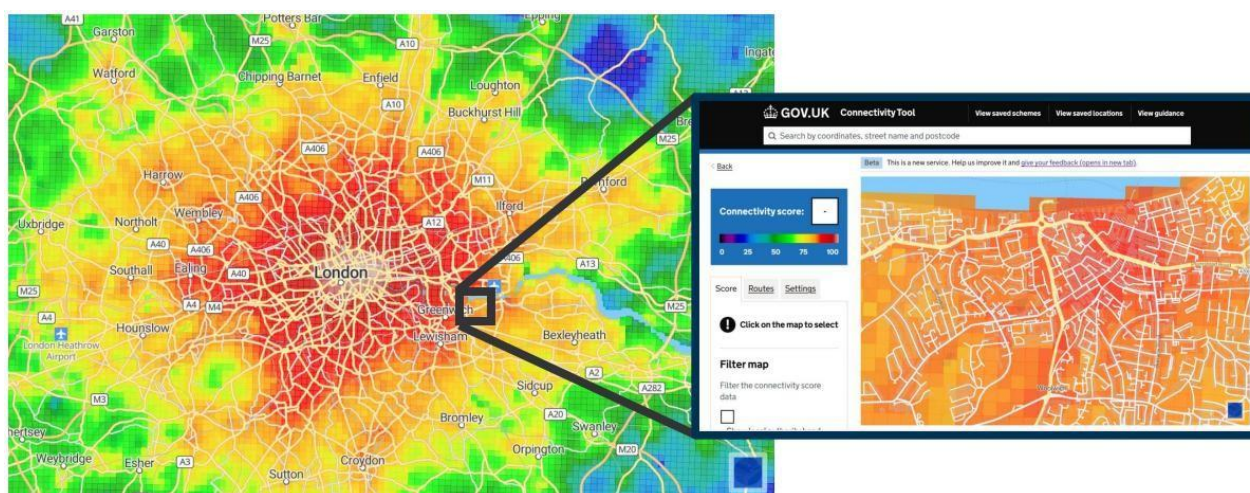


Figure 5: The national Connectivity Tool (source: Department for Transport).

- 4.20 It is expressed with each grid square overlaid by a coloured tile that corresponds to the 0 to 100 index (being lowest to highest connectivity). The colour-coded tile is also accompanied by a qualitative category (for example, a score falling within 50-60% is 'slightly above average connectivity'), as shown in Figure 6 below.



Figure 6: The 0-100 index and associated qualitative categories of the Connectivity Tool.

4.21 The national nature of the Connectivity Tool has direct implications for its utility in the local context. A development location in a county in central England, for example, will not necessarily have the same sustainable transport requirements as Dartford.

4.22 The following example of the cycling scoring in Figure 7 is instructive:

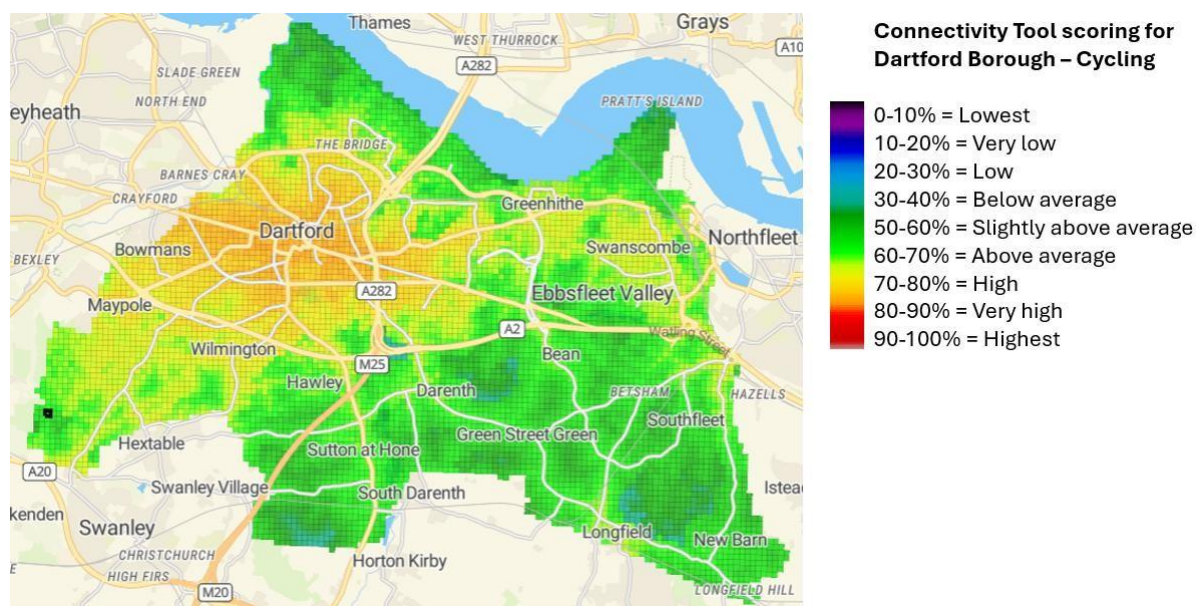


Figure 7: The overall Connectivity Tool score for cycling across Dartford Borough.

4.23 The Connectivity Tool finds almost all neighbourhoods in the Borough to be ‘above average’ (slightly above to high) for cycling. A very large proportion of the Borough’s residential areas score ‘high’ for cycling (most of the west of the Borough). This is contradictory to local observed characteristics and data.

4.24 The relative approach of the tool gives a national perspective but is a potentially fundamental weakness, along with other specific concerns, in its application for local development purposes.


4.25 Furthermore, the Connectivity Tool produces uniform results across grid areas and therefore is not bespoke to individual sites and fails to have regard to specific access and entry arrangements for any site. There is a need for all site-specific factors and evidence to be considered, and for decisions to be informed by sustainability needs of the area in question. The adopted Dartford Plan’s requirements, and appropriate consideration of the local ratings in Table 2, are preferred as the main indicator for development sites in the Borough.


APPENDIX 2: SMALLER SETTLEMENTS

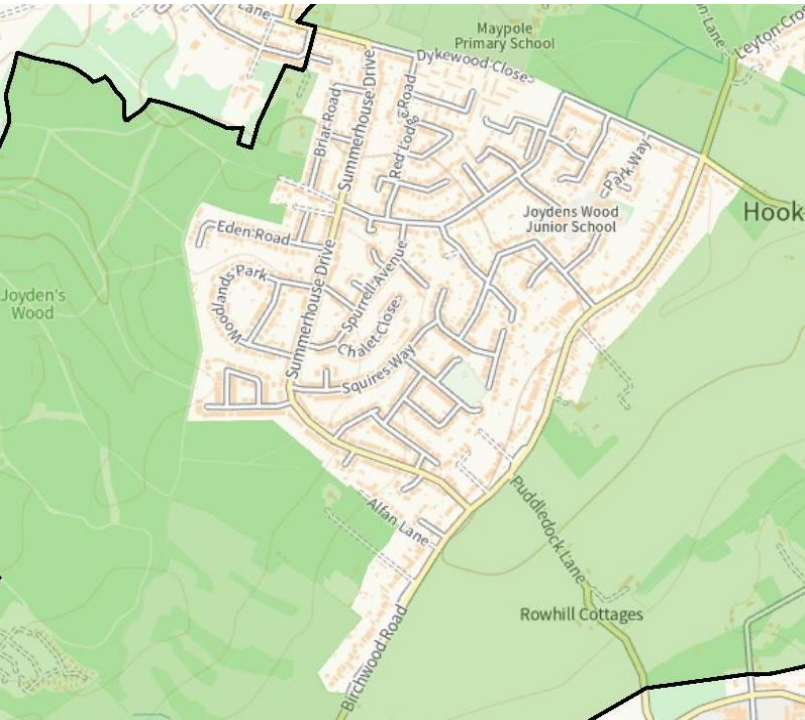
- 4.26 This Appendix complements SSL 1 by confirming the extent of settlements identified by reference to the adopted Policies Map. This existing geography has been verified against sources including ONS data¹⁰. No boundaries are changed.
- 4.27 The extent of settlements are shown in the Policies Map extracts in the tables below. For further reference, a summary is provided for the settlements identified. The relevant broad local geography, and general range of services underpinning the local settlement, are outlined in the middle column¹¹.
- 4.28 In addition, to potentially inform SSL 2 and other considerations, Appendix 1 (Table 2) sustainable transport ratings are provided for the centre point of each settlement in the right-hand column. The ratings are a broad transport indicator and are not alone determinative of proposals put forward in the settlements. All relevant Dartford Plan policies should be considered.
- 4.29 This is only an indication for the specific centre point example location:
- In terms of local sustainable transport ratings other results will apply elsewhere in the settlement. All developments should conduct their own site-specific assessment using the methodology set out in Table 2 of Appendix 1, alongside potentially identifying additional evidence.
 - As with all locations, the sustainable transport ratings shown here are indicative only and will vary and require verification, depending on the access arrangements of the site in question, for example. Walking routes to bus stops and stations should be safe, convenient and green. Bus routes in particular are subject to change.
 - This is particularly relevant for cycling, which as covered in this SPD should consider the quality of the route by assessing if the specific location is safe, green and convenient for cyclists of varying abilities and whether they can reach useful destinations. Therefore, the cycling scores provided in the righthand column of the tables below should be seen as conditional.


¹⁰ See section 2 of the Supporting Evidence report.

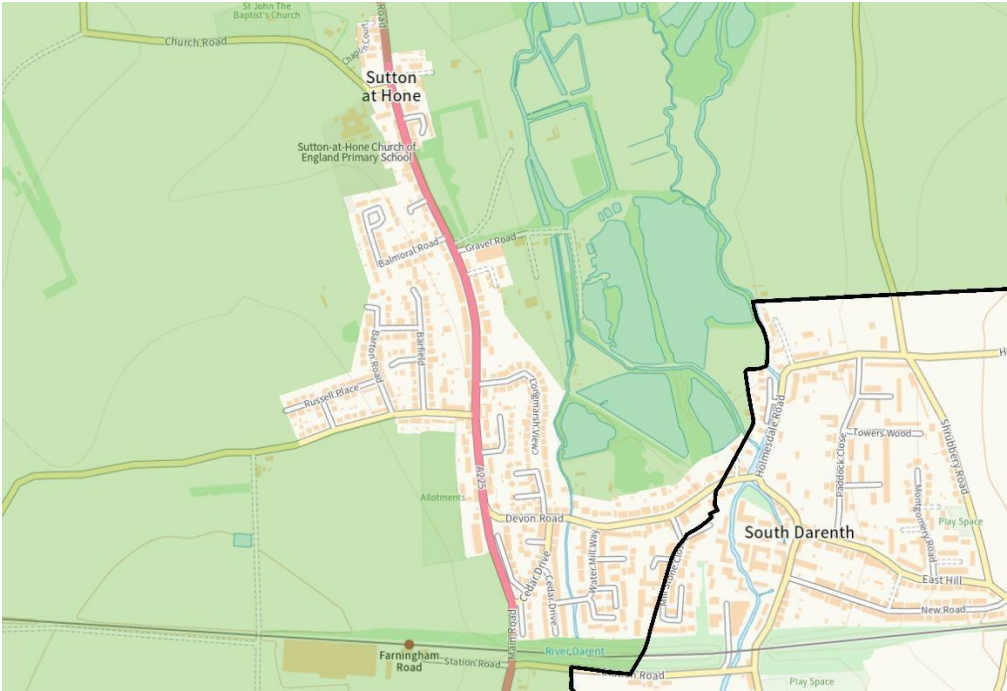
¹¹ For information on the development characteristics of places, see the nine Area Profiles 2025 produced by the Council (including profiles on Joydens Wood and Maypole & Leyton Cross; Wilmington, Sutton-at-Hone and Hawley; Darenth; Longfield, New Barn and Southfleet; Bean and Village Park; plus, four more in the Urban Area).

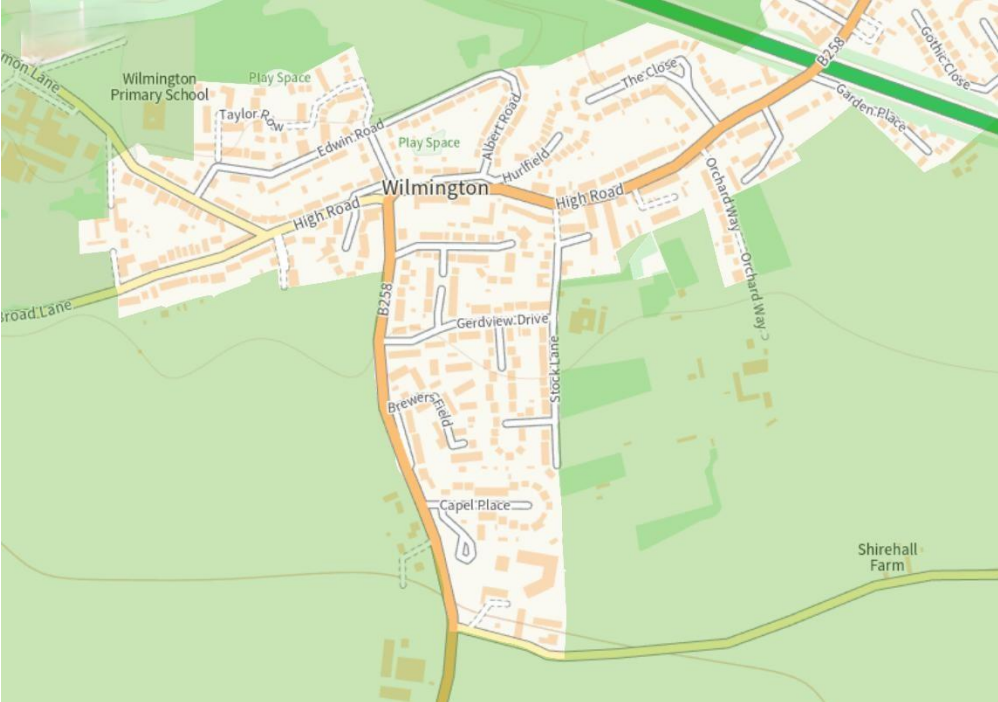
Settlement Boundary (see interactive Policies Map) Legend for extracts below <ul style="list-style-type: none"> • Black line: Borough boundary • Light green: adopted Green Belt in the Borough • Transparent (surrounded by green): extent of settlement 	Summary Rationale (Policy SSL 1 reference)	Centre point of settlement: sustainable transport rating (High / Moderate / Low) (Appendix 1, Table 2 outcome)
SSL 1: Bean Village		
 <p>The map shows the settlement of Bean, which is centrally located within the Borough. It is situated just south of the A2 road. The settlement boundary is clearly defined by a black line. The surrounding area is mostly light green, indicating the adopted Green Belt. The settlement itself is shown as a transparent area surrounded by green. Key features include Bean Primary School, allotments, a playing field, and various residential streets such as Bramble Avenue, School Lane, and Shellbank Lane.</p>	<p>Bean is central within the Borough, the settlement lying just south of the A2 with a clear village Dartford Plan boundary (single inset).</p> <p>The parish is small (even counting the very limited area north of the A2) but the settlement has a sufficient range of relatively useful or traditional local services, such as a convenience store, post office, village surgery and pub, to be regarded as a village.</p> <p>Nevertheless, it does not have a railway station in the vicinity. There is a moderate bus service with a peak of two buses per hour.</p>	<p>Rail: L Bus: M Cycling: L</p>

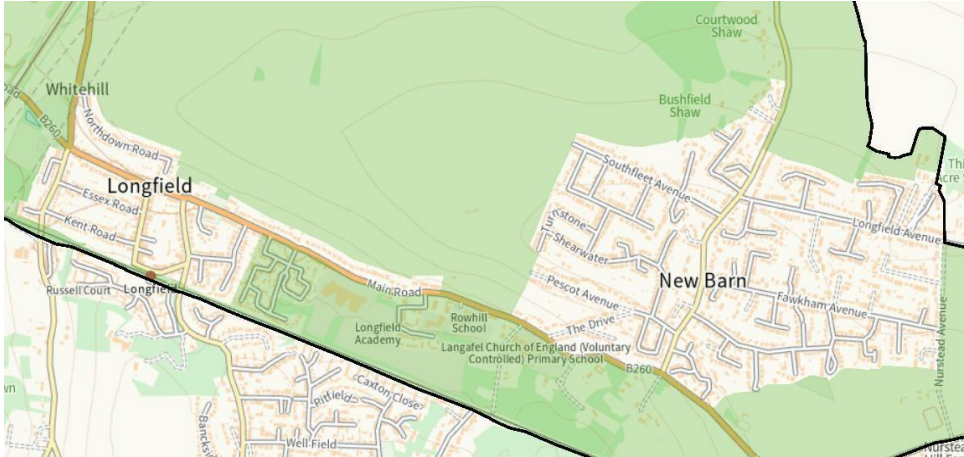
<p>Settlement Boundary (see interactive Policies Map)</p> <p>Legend for extracts below</p> <ul style="list-style-type: none"> • Black line: Borough boundary • Green: adopted Green Belt in the Borough • Transparent (surrounded by green): extent of settlement 	<p>Summary Rationale (Policy SSL 1 reference)</p>	<p>Centre point of settlement: sustainable transport rating (High / Moderate / Low) (Appendix 1, Table 2 outcome)</p>
<p>SSL 1: Darenth (Lane End) Village</p>		
 <p>The map shows the settlement boundary of Lane End, a village in Dartford. The settlement is outlined in black and is surrounded by green areas representing the Green Belt. The map includes various roads such as B260, Wood Lane, Sinker Way, Birchen Way, Hill Rise Green, Langlands Drive, and others. It also shows local amenities like a playing field, play space, allotments, and a hill rise playground.</p>	<p>Darenth has a much larger parish population, who predominantly live in the neighbourhood often known as Lane End located on the B260 Dartford to Longfield road. On this main road is Lane End's small Local Centre designated in the Dartford Plan, and a GP surgery nearby. There is a limited bus service with a peak of one bus per hour.</p> <p>Lane End is included as a village for the Dartford Plan defined by a clear single inset on the Policies Map.</p>	<p>Rail: L Bus: L Cycling: L</p>

<p>Settlement Boundary (see interactive Policies Map)</p> <p>Legend for extracts below</p> <ul style="list-style-type: none"> • Black line: Borough boundary • Green: adopted Green Belt in the Borough • Transparent (surrounded by green): extent of settlement 	<p>Summary Rationale (Policy SSL 1 reference)</p>	<p>Centre point of settlement: sustainable transport rating (High / Moderate / Low) (Appendix 1, Table 2 outcome)</p>
<p>SSL 1: Joyden's Wood Village</p>		
 <p>The map shows Joyden's Wood Village with a black boundary line. Key features include Maypole Primary School, Joydens Wood Junior School, and various roads like Summerhouse Drive, Eden Road, and Birchwood Road. The village is surrounded by green areas representing the Green Belt.</p>	<p>Joyden's Wood in the southwest of the Borough also has two designated Local Centres: shops at Birchwood Parade and at Summerhouse Drive, and facilities such as the library and school (adjoining infants and junior site). It clearly forms a functional village.</p> <p>To the north of the defined area lies some other facilities and neighbourhoods, but these are either relatively isolated or in the Green Belt and do not form Dartford Plan settlements.</p> <p>Joyden's Wood village boundary for the Dartford Plan is defined by a single inset.</p>	<p>Rail: L Bus: L Cycling: L</p>

<p>Settlement Boundary (see interactive Policies Map)</p> <p>Legend for extracts below</p> <ul style="list-style-type: none"> • Black line: Borough boundary • Green: adopted Green Belt in the Borough • Transparent (surrounded by green): extent of settlement 	<p>Summary Rationale (Policy SSL 1 reference)</p>	<p>Centre point of settlement: sustainable transport rating (High / Moderate / Low) (Appendix 1, Table 2 outcome)</p>
<p>SSL 1: Southfleet Village</p>		
 <p>The map shows the village of Southfleet with its settlement boundary highlighted in yellow. Key features include St Nicholas's Church, Sedley's Church of England (Voluntary Controlled) Primary School, Warren Road, Red Street, and Hook Green. Other labels include Court Hill Cottages, Withens, Sedley, Rectory Meadow, Allotments, Play Space, and Brakenfield Road.</p>	<p>In the east of the Borough, Southfleet is an attractive historic village that at its core has retained a pub and school. Its central neighbourhood is therefore included as a village for the purposes of the Dartford Plan. It is defined by a single inset that extends south.</p> <p>The parish has several other areas, many designated for heritage purposes or recognising the value of the built environment but are not regarded as settlements for the Dartford Plan. There are some clusters of buildings that do not qualify as villages, but these are generally small and the whole parish population is under 2,000 people. There is a limited bus service with a peak of one bus per hour.</p>	<p>Rail: L Bus: L Cycling: L</p>

<p>Settlement Boundary (see interactive Policies Map)</p> <p>Legend for extracts below</p> <ul style="list-style-type: none"> • Black line: Borough boundary • Green: adopted Green Belt in the Borough • Transparent (surrounded by green): extent of settlement 	<p>Summary Rationale (Policy SSL 1 reference)</p>	<p>Centre point of settlement: sustainable transport rating (High / Moderate / Low) (Appendix 1, Table 2 outcome)</p>
<p>SSL 1: Sutton-at-Hone Village</p>		
 <p>The map shows Sutton-at-Hone Village with a black line indicating the settlement boundary. The village is situated west of the River Darent. Key roads include Church Road, Balmora Road, Grovel Road, Devon Road, and Farningham Road. Landmarks such as St John the Baptist's Church and Sutton-at-Hone Church of England Primary School are marked. The map also shows the River Darent and surrounding Green Belt areas.</p>	<p>Sutton-at-Hone is a village principally west of the River Darent, on the southern boundary of the Borough. It has a generally linear form but with streets extending off the road to Dartford; the majority of properties are centred in and around a Local Centre designated by the Dartford Plan, with open land leading west/south to Farningham Road railway station. Further up the main road (A225) to Dartford is a smaller Local Centre near the library. This area, by the local school, is considered in Dartford Plan terms the northernmost part of Sutton-at-Hone.</p> <p>Beyond this, the remainder of the parish is mostly Green Belt land, and although there are some developed areas inset from it there are minimal public or essential local facilities supporting them. They do not form settlements.</p> <p>Sutton-at-Hone's village boundary for the Dartford Plan is defined by a single inset (adjoining the boundary with Sevenoaks District).</p>	<p>Rail: H Bus: L Cycling: L</p>

<p>Settlement Boundary (see interactive Policies Map)</p> <p>Legend for extracts below</p> <ul style="list-style-type: none"> • Black line: Borough boundary • Green: adopted Green Belt in the Borough • Transparent (surrounded by green): extent of settlement 	<p>Summary Rationale (Policy SSL 1 reference)</p>	<p>Centre point of settlement: sustainable transport rating (High / Moderate / Low) (Appendix 1, Table 2 outcome)</p>
<p>SSL 1: Wilmington Village</p>		
 <p>The map shows the settlement boundary of Wilmington Village, outlined in black. The area is surrounded by green, indicating the extent of the settlement. A green line represents the adopted Green Belt. The map includes labels for various roads such as High Road, Orchard Way, and Garden Place, as well as landmarks like Wilmington Primary School and Shirehall Farm.</p>	<p>Wilmington Parish area is large, includes a number of schools and mostly lies south of the A2. Within this is a clear centre of the settlement, including a pub and convenience store. Around this core, the Dartford Plan definition of the village is focused to a single inset south/southwest of A2. A clear and focused extent has been defined of the village for the purposes of the Dartford Plan.</p> <p>A moderate bus service runs through the centre of Wilmington with a peak of 3 buses per hour, however connections to railway stations are generally poor.</p>	<p>Rail: L Bus: M Cycling: H</p>

<p>Settlement Boundary (see interactive Policies Map)</p> <p>Legend for extracts below</p> <ul style="list-style-type: none"> • Black line: Borough boundary • Green: adopted Green Belt in the Borough • Transparent (surrounded by green): extent of settlement 	<p>Summary Rationale (Policy SSL 1 reference)</p>	<p>Centre point of settlement: sustainable transport rating (High / Moderate / Low) (Appendix 1, Table 2 outcome)</p>
<p>SSL 1: Longfield (Non-Urban Area Town)</p>		
	<p>Longfield benefits from a bank/building society, healthcare, schools and other public facilities. It is considered to include the community of New Barn, falling under the compact sized Longfield and New Barn Parish Council. The boundary is formed by two insets on the Policies Map in very close proximity.</p> <p>It has the only District Centre designated by the Dartford Plan in the south of the Borough, with a Waitrose supermarket located near the railway station. Between this and New Barn is the only secondary school in the south of the Borough (except for schools at Wilmington, further north and west). It should be noted that the transport ratings information provided here for the middle of Longfield will not apply in a number of places, especially in New Barn.</p> <p>Longfield’s comparatively good level of service provision and other characteristics are atypical of villages in the Borough such as Southfleet and Sutton-at-Hone. It is clearly one of the more sizeable places in the Borough, and its population is sufficient to fall within the ONS¹² ‘larger village / small town’ category.</p> <p>Located in the far south-east of the Borough away from A roads and motorways, and in an open rolling landscape, Longfield is not urban. For the purposes of national and local planning policy, it is regarded as a (non-urban area) town in the context of Dartford Borough and a settlement in SSL 1 Clause 2.</p>	<p>Rail: H Bus: M Cycling: M</p>

¹² See section 2 of the Supporting Evidence report for ONS data.