

**DARTFORD LOCAL PLAN**

**Infrastructure Topic  
Paper**

**December 2021**

**DARTFORD**  
BOROUGH COUNCIL

---

## Contents

1	PURPOSE.....	3
2	NATIONAL PLANNING POLICY .....	5
3	SUSTAINABILITY APPRAISAL.....	7
	Publication Local Plan September 2021.....	7
4	POLICY S2 INFRASTRUCTURE PLANNING STRATEGY .....	9
	Relationship with existing policy .....	9
	Local evidence .....	11
5	POLICIES M16 TO M18 TRAVEL POLICIES & COMMUNITY USES .....	13
	Relationship with existing policy .....	13
	Local evidence .....	17
	APPENDIX 1 SUSTAINABILITY APPRAISAL EXCERPTS .....	21

# 1 PURPOSE

- 1.1 Dartford Borough Council has produced a series of Topic Papers to support the Submission Dartford Local Plan 2021<sup>1</sup>. This follows the publication of Pre-Submission (Publication) Local Plans<sup>2</sup> in February and September 2021. The Publication Local Plan was informed by previous consultations on the Local Plan in January 2020 (Preferred Options) and June 2018 (Strategic Issues)<sup>3</sup>.
- 1.2 The purpose of the five Topic Papers is to bring together relevant national planning policy and local evidence to justify the policies in the Pre-Submission Dartford Local Plan (referred to in this topic paper as the Local Plan).
- 1.3 This topic paper relates to infrastructure and sets out significant information in relation to the following policies in the Local Plan:

Strategic Policies:

S2 Infrastructure planning strategy

Development Management Policies:

M16 Travel Management

M17 Active Travel, Access and Parking

M18 Community Uses

- 1.4 Policy S2 is the overarching strategic policy, which includes setting the principle that development will be planned, delivered and co-ordinated with infrastructure; this includes community/ transport/ green infrastructure and other physical infrastructure. Policy M16 provides further detail, including on highways impacts, public transport provision, and promoting/ securing the use of river transport. Policy M17 also supplies criteria in relation to design requirements, including for pedestrians, cyclist and vehicle parking.
- 1.5 The purpose of these policies is to deliver the Strategic Objectives set out in paragraph 2.2 of the Local Plan. The most relevant Strategic Objectives relevant to the Infrastructure Policies include:

**W1:** Achieving cohesive, safe, walkable and attractive neighbourhoods, with a real sense of place and vitality that reflects the area's heritage and potential, and whose residents enjoy a choice of homes suited to their needs and easy access to local everyday facilities, including education and healthcare.

**W2:** Improving health and wellbeing, and air quality arising from congestion, through reducing the need to travel by private vehicle, particularly by retaining and providing jobs, services, shops, community facilities and open space at suitable locations close to residential areas and where good public transport services are within easy walking distance.

**W5:** Encouraging development that provides a wide range of opportunities for residents to enjoy good quality cultural, art, leisure and sports pursuits.

---

<sup>1</sup> under section 20(1) of the Planning and Compulsory Purchase Act 2004

<sup>2</sup> under Regulation 19 of the Town and Country Planning (Local Planning) (England) Regulations 2012

<sup>3</sup> under Regulation 18 of the Town and Country Planning (Local Planning) (England) Regulations 2012

**I1:** Continuing urban regeneration through optimising the re-use of accessible and suitable brownfield land primarily within the north of the Borough to meet future local housing and employment needs, and delivering new infrastructure for travel, schools/ skills, health, and other local services.

**I2:** Facilitating a range of upgrades to the transport network, and a choice of sustainable and active travel options, with rapid and reliable public transport linking existing neighbourhoods and developments to key destinations and facilities, together with a high quality and comprehensive walking and cycling network.

**G4:** Promoting sustainable local environments and habitats, achieving biodiversity net gain and active and healthy living, at new developments and through greenspace and landscape protection and provision, enhancing the green grid of footpaths, public rights of way, cycle routes, wildlife corridors, rivers and countryside links.

**G5:** Acting to ensure no increase in flood risk in the Borough, and creating attractive and accessible riversides, encouraging sensitive recreation and travel on and alongside the Rivers Thames, Darent and Ebbsfleet.

## 2 NATIONAL PLANNING POLICY

2.1 Chapters 8 to 10 on healthy communities, sustainable transport and communications are the key parts of the National Planning Policy Framework (NPPF) relating to infrastructure, though the overall presumption in favour of sustainable development is now also relevant. Table 1 outlines the key NPPF requirements in relation to infrastructure and provides a corresponding reference to the relevant part of the infrastructure policies that achieve the requirement.

**Table 1: NPPF Paragraph and Relevant Policy**

NPPF Paragraph	Plan Policies
<p><b>11(a) The presumption in favour of sustainable development:</b> align growth and infrastructure</p>	<p>S2:1 The requirement for growth and infrastructure to be aligned is addressed directly in the first criterion of the strategic policy, ensuring co-ordinated delivery of new infrastructure.</p>
<p><b>92 Promoting healthy and safe communities:</b> achieve healthy, inclusive and safe places</p>	<p>S2:3 Healthy, inclusive, accessible and safe communities are promoted throughout the Local Plan, and key principles embedded in policy S2. Part 3 of this policy focuses on public transport and active travel (including walking and cycling), reflecting national policy’s focus on cycling and walking routes.</p> <p>M17:1 Requires development to promote sustainable transport, including segregated cycle routes where possible.</p>
<p><b>93 Promoting healthy and safe communities:</b> provide the social, recreational and cultural facilities and services the community needs</p>	<p>S2:1 to S2:3 Integrated provision of uses, positively planning for accessible local services and appropriately retaining land and facilities, is featured throughout the strategic policy.</p> <p>M18:1 Guides the provision of community uses so they best meet community needs and local strategies for infrastructure.</p> <p>M18:2 and M18:3 Guard against the loss of valued services, including accounting for land identified to meet future needs.</p>
<p><b>104 Promoting sustainable transport:</b> transport issues should be considered from the earliest stages of plan-making</p>	<p>S2:1 Transport issues from development location and design have been considered from the outset of the Plan, and throughout strategic policies. Accounting for transport impacts and new opportunities for technology, walking cycling and public transport, and patterns of movement to create high quality places, are behind the first criterion of S2 for major proposals to be masterplanned and phased accordingly.</p> <p>M16:1 Reiterates the above, for development management.</p> <p>M16:2 and M17:3 Set out how transport impacts of development are addressed; focusing on overall highway impacts and wider effects, respectively.</p>

NPPF Paragraph	Plan Policies
<b>105 Promoting sustainable transport:</b>	S2:3 Working with the spatial strategy, outlines how patterns of growth need to be managed, limiting the need to travel and principles for providing a genuine choice of travel modes for development.
<b>106 Promoting sustainable transport</b>	M16:3 and M16:4 Establish how public transport routes will be secured to widen transport choice and support large scale development.  M17:4 Sets out further requirements on provisions for cyclists.
<b>107 and 108 Promoting sustainable transport: parking standards</b>	M17:5 Addresses parking.
<b>114 Supporting high quality communications</b>	S2:5 States physical infrastructure will be coordinated with providers and companies to serve development, and new high quality and advanced communications infrastructure developments will occur in line with national policy.

### 3 SUSTAINABILITY APPRAISAL

3.1 Sustainability Appraisal (SA) has been carried out at the Preferred Options and Publication stages of the Local Plan process (Preferred Options, first Publication Local Plan and second Publication Local Plan). The results have informed the infrastructure policies taken forward in the plan.

#### Publication Local Plan September 2021

3.2 Chapter 5 of the SA sets out the appraisal results for each policy. The table of scores for policy S2 is shown in Table 2. The full results can be found on pages 109-112 of the Sustainability Appraisal. A full key of the symbols used in the SA can be found at Appendix 1 and a brief description is provided below table 2.

**Table 2: Policy S2 Sustainability Appraisal Scores**

SA objective	S2
1. To ensure that everyone has the opportunity to live in a decent home.	+/-?
2. To ensure ready access to essential services and facilities for all residents.	++
3. To strengthen community cohesion.	+
4. To improve the population's health and reduce inequalities.	+
5. Facilitate a sustainable and growing economy and a vital and viable town centre.	+
6. To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	++/-
7. To conserve the Borough's mineral resources.	-?
8. To conserve the Borough's soils.	0
9. To maintain and improve the quality of the Borough's waters.	-?
10. To reduce air pollution and ensure improvements in air quality.	+/-
11. To avoid and mitigate flood risk.	+/-?
12. To minimise the Borough's contribution to climate change.	+/-
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	+/-?
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	-?

SA objective	S2
<b>15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.</b>	+/-?

KEY:

- ++ significant positive effect
- ++/- significant positive and minor negative effects
- + minor positive effect
- 0 negligible effects
- minor negative effect
- ? effect is uncertain
- +/- an equal mixture of minor positive and minor negative effects
- ++/-- an equal mixture of significant positive and negative effects

3.3 As can be seen, it is clear that the infrastructure policy has many positive affects when assessed against the SA objectives. The policy is expected to have positive, or a mixed level of positive and negative effect on the majority of the objectives. Policy S2 is expected to have a minor negative yet uncertain impact across three objectives, including:

- To conserve the Borough's mineral resources (SA7)
- To maintain and improve the quality of the Borough's water (SA9)
- To conserve and/ or enhance the Boroughs historic environment (SA14)



## 4 POLICY S2 INFRASTRUCTURE PLANNING STRATEGY

### Relationship with existing policy

- 4.1 Table 3 shows the relevant text from proposed policy S2 and relates these to the relevant parts of policies from the existing adopted Core Strategy 2011.
- 4.2 A focus on infrastructure is retained in the new plan, although parts of the approach have expanded (for example delivery arrangements) or some details have been refined. In particular it is considered a more cohesive approach to infrastructure planning is put forward through the integrated strategic policy. The presence of the CIL regime in Dartford is also recognised.

**Table 3: Proposed and Existing Policies**

Proposed Policy	Existing Policy
<p><b>S2:1</b> 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. New services and facilities will be provided to meet Dartford Borough's needs, with land retained within applicable large development for essential community, travel, flood defence and green infrastructure uses.</p>	<p>CS11: A balanced relationship is sought in development between homes, jobs and infrastructure. This includes by working with service providers on infrastructure capacity and delivery at the appropriate time and place.</p>
<p><b>S2:2</b> 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.</p>	<p>CS21:a) to c): Required that community services are provided at appropriate locations/ sites and in a timely way, located and phased to serve resident needs.</p>
<p><b>S2:3</b> 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. Focussing on sustainable locations/ transport provisions should support minimising pollution in Air Quality Management Areas and elsewhere.</p>	<p>CS15: Reduced need to travel and effective use of the transport network including by: encouraging a close relationship between homes, jobs, shops etc.</p>
<p><b>S2:4</b></p>	<p>CS15: Plans to work to secure and improve Fastrack and other</p>

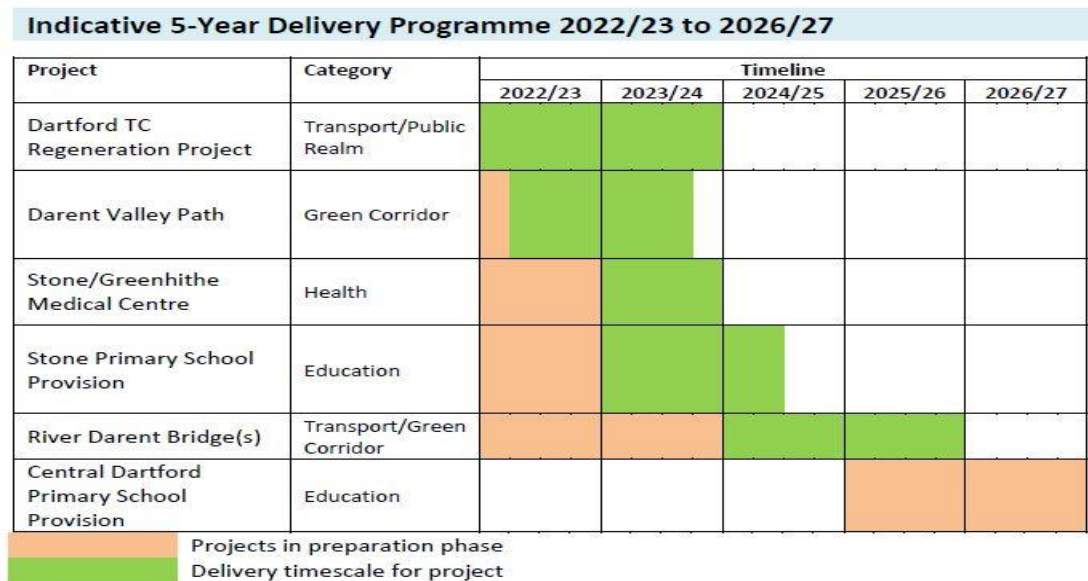
Proposed Policy	Existing Policy
<p>Opportunities to achieve transport upgrades will be maximised. This includes promoting:</p> <ul style="list-style-type: none"> <li>a) New and improved rail services and replacement or enhanced train stations.</li> <li>b) New and improved Fastrack and other bus services/ routes, including addressing non-dedicated sections of Fastrack routes which are vulnerable to general traffic congestion and bus priority at junctions where possible.</li> <li>c) Further highway and junction upgrades. Additional investment will be supported, dependent on further assessment by National Highways, Kent County Council, Dartford Borough Council and partners.</li> <li>d) Use of rivers for the sustainable transport of goods and passengers as part of proposals for strategic scale development</li> </ul>	<p>bus provision, and to enhance rail capacity and journey times.</p> <p>CS16: Sets out actions with partners to deliver a programme of highway investment.</p> <p>CS6: Promotes the use of the River Thames for sustainable transport.</p>
<p><b>S2:5</b> Physical and other infrastructure necessary to serve development, including beyond the plan period, will be co-ordinated with the relevant agencies, service providers and utility companies (including by liaison between them and the developer where appropriate). Space for strategic infrastructure provision, and access to it, will be reserved as required, including for flood defences and waste planning. New high quality and advanced communications infrastructure developments will occur in line with national policy to support the Borough's needs</p>	<p>CS15 &amp; CS16: Outline the partnership working on transport infrastructure.</p> <p>CS21 d) to g): Set out working together on health and waste infrastructure.</p> <p>CS24: b): Commits to engagement on the TE2100 project on long-term Thames Estuary flood risk.</p>
<p><b>S2:6</b> The Borough's Green Grid network will continue to be upgraded and expanded to a finer grain, including through improving existing green and blue infrastructure such as open spaces and water bodies, achieving appropriate new multi-functional greenspaces, and enhancing biodiversity. Development will also contribute proportionately to green infrastructure, with larger developments making significant provision on-site</p>	<p>CS14:b): Plans for a Green Grid network, included by contributions from applicable developments.</p>
<p><b>S2:7</b> Dartford's infrastructure planning documents will set out the Council's priorities for infrastructure, and be a principal basis for working with partners on infrastructure delivery. Development will contribute to infrastructure provision as necessary in line with national policy through:</p> <ul style="list-style-type: none"> <li>a) Contributions via Dartford's Community Infrastructure Levy; and/ or</li> <li>b) Planning obligations secured by Section 106 legal agreements, where applicable, for affordable housing or site specific infrastructure; and/ or</li> <li>c) Provision in-kind; or</li> <li>d) Any successor developer contribution scheme</li> </ul>	<p>CS16: c): Discusses Section 106 agreements and proposes to introduce CIL.</p>

## Local evidence

### Infrastructure Delivery Plan (IDP)

- 4.3 Dartford produced an IDP for the adopted Core Strategy 2011, and subsequently applied it in the context of the introduction of CIL. It has regularly reviewed and updated this to support planned new development in the Borough and meet the demands this will generate. The IDP sets out a variety of projects that have been identified by the Council and infrastructure providers including Kent County Council (KCC), NHS Kent & Medway Clinical Commissioning Group (CCG), Environment Agency (EA) and National Highways (NH).
- 4.4 The infrastructure projects contained in the IDP are categorised according to the progress of project design/ delivery, the certainty that the projects can be delivered and the funding available for each project. The IDP identifies those projects that require the allocation of CIL funding to support delivery which then form the Councils priority projects in an indicative 5-year delivery programme agreed alongside the IDP as shown in Figure 1. These schemes are evidently located at places that have already seen significant growth (for instance Stone) or with potential for further regeneration and development (Central Dartford). It can also be noted that none of these project examples are required to unlock any individual strategic allocation, as provisions are already in place for main identified needs; this is considered to largely reflect the advanced overall nature of the Borough’s strategic sites through the planning and delivery process.

**Figure 1: Dartford’s Indicative 5-Year Delivery Programme**



- 4.5 Further categorisation and delivery updates of potential projects are also provided. The IDP is, therefore, a key form of evidence setting out the infrastructure to be delivered and the priority projects for the allocation of CIL funding to support delivery. This is consistent with Policy S2 criterion 7.
- 4.6 The projects contained in the IDP support the delivery of infrastructure that would improve the provisions of transport, health facilities/ services, education, community facilities, green infrastructure, flood defence and waste services. Whilst the primary focus of the IDP is on the delivery of infrastructure within the next five years it also

recognises ongoing work that will generate a pipeline of projects to meet demand generated by future planned development set out in the Local Plan.

### **Dartford Future Infrastructure Statement**

- 4.7 The consistent growth of the Borough, and long-term nature of many key sites, and associated phased infrastructure are addressed through this statement. The document has been produced to justify the Local Plan, and to support its delivery by providing a perspective on the totality of infrastructure needs (including other/ physical infrastructure in Policy S2 criterion 7).
- 4.8 The statement combines the Council's key infrastructure planning and addresses the external service provider plans looking over the plan period, and potentially beyond, to incorporate wider service provider and local ambitions, setting a broad direction for the provision of infrastructure in line with the policies within the Local Plan. Diagram 2 in the Local Plan, which supports Policy S2, is consistent with the statement.

### **Transport Background Paper**

- 4.9 With the growth agenda planned in the Core Strategy, and subsequent detailed transport evidence and mitigations established through the developments accordingly permitted, there is extensive existing evidence available for the new Local Plan that has provided a clear background to recent transport modelling and proposed delivery strategy.
- 4.10 The overall expected approach to transport in the Borough, and dealing with its traffic issues, is informed by data outlined in this practical paper. It sets out the distinctive transport requirements of the Borough, notably the existing and extensive knock-on implications of the highly constrained Dartford Crossing, part of the national road network/ London Orbital. Crossing flow volumes and specific resilience problems significantly impact on junction performance at current, and - during incidents on the Crossing - Dartford's network as a whole. This reinforces the need locally to reduce the need to travel, especially by private vehicle, and the multi-modal priorities behind policy S2 criteria 4 and 5. The Background Paper provides an overview of the key information contained in existing various technical documents and studies that have assisted the Council in considering the approach to transport management and mitigation proposed in the Plan.
- 4.11 The paper covers key issues addressed in current detailed modelling and the progression of travel and transport projects, including:
- current circumstances with regard to the highways network in Dartford and sustainable travel provision
  - explanation of key existing transport impact assessments of future development
  - Local Plan strategic transport assessment: an account of modelling and liaison/ collaboration with partners. It should be noted that there are a number of other recent transport assessments that have been undertaken in Dartford, including for very large and detailed specific development proposals (i.e. planning applications), which provide additional information and understanding. This evidence has all informed the Dartford Local Plan 2021.

## 5 POLICIES M16 TO M18 TRAVEL POLICIES & COMMUNITY USES

### Relationship with existing policy

5.1 In brief, these policies now have a greater practical emphasis on the requirements in developments to achieve measures to secure enhanced walking/ cycling provisions, better rail provision and more effective travel plans with monitoring/ management measures. However, key principles remain, and many clauses of policies are virtually identical, including for community services.

**Table 4: Proposed and Existing Policies**

Proposed Policy	Existing Policy
<p><b>M16: Travel Management</b></p> <p>1. Development must be appropriately located and make suitable provision to minimise and manage transport impacts which arise. Proposals must also include appropriate vehicular access arrangements to the new development, and measures for active and sustainable travel. A Transport Assessment will be required on applicable proposals.</p> <p>2. Localised residual impacts on the highway network that are forecast to occur after on-site mitigations should be addressed by well-designed off-site deliverable transport measures. Development will not be permitted where the localised residual impacts from the development on its own, or in combination with other planned developments in the area, result in severe impacts on one or more of the following:</p> <ul style="list-style-type: none"> <li>a) road traffic congestion;</li> <li>b) air quality;</li> <li>c) safety of pedestrians, cyclists and other road users;</li> <li>d) excessive pressure for on-street parking.</li> </ul>	<p>DP3:1 Requires appropriate development location and minimising and managing transport impacts.</p> <p>DP3:2 Development will not be permitted with localised residual impact resulting in severe impact on congestion, air quality, safety or parking.</p>
<p><u>Public transport</u></p> <p>3. New major development sites should include layouts that allow for routes into and dedicated routes within the site for Fastrack, buses and taxis. These should ensure good connections to make community services and jobs easily accessible to all users/ employees, and assist the feasible and efficient operation of transport services. In this respect, the following will apply:</p> <ul style="list-style-type: none"> <li>a) Large developments at applicable locations must make early provisions for Fastrack, through extension or improvement within or outside the site, where consistent with</li> </ul>	<p>CS15:1b Major development sites should provide for Fastrack.</p> <p>DP4:2b Development should provide for efficient public transport and taxis, especially at trip generating destinations.</p>

Proposed Policy	Existing Policy
<p>additional potential demand and to benefit the existing and planned Fastrack network.</p> <p>b) Where appropriate, major developments will be required to facilitate new or extended conventional bus services if required to address demand that would arise.</p> <p>4. Land required for potential improved rail connectivity between Abbey Wood and Ebbsfleet International is safeguarded and development which will prejudice this will not be permitted. In the event of delivery of a significant rail infrastructure intervention to provide Elizabeth Line (Crossrail) services or to directly facilitate better access to Abbey Wood, a Local Plan review will ensure that sustainable regeneration and transport network integration opportunities are maximised. Any re-provision of railway stations on the North Kent line should enhance the capacity, quality and safety of the stations, and promote sustainable modes of onward travel through integrating ticketing/ facilities supporting all public and active transport modes.</p>	<p>CS15:1e/f The council will work in partnership with KCC and Network Rail to improve trains, stations and integrated ticketing.</p>
<p><u>Rivers</u></p> <p>5. Proposals should capitalise on all feasible opportunities to promote enhanced movement on and alongside rivers, including travel for passengers, products and the transportation of construction materials and waste. Development must not unacceptably adversely affect the operation of safeguarded wharves. Proposals for alternative development at existing non-safeguarded wharves will not be supported unless that facility is no longer viable or capable of being made viable for waterborne transport.</p>	<p>CS15:1i Encourage use of the Thames for sustainable goods and passenger transport.</p> <p>DP4:2c Movement and environments on and alongside rivers will be enhanced by developments.</p>
<p><b>M17: Active Travel, Access and Parking</b></p>	<p>DP4:1 Development design and layout must promote walking, cycling and public transport use through provision of attractive, well-designed and safe routes. Guidance set out in the Manual for Streets, or any future equivalent, must also be applied. Bespoke access and transport approaches may be agreed at large regeneration sites, where forming a suitable alternative.</p>
<p>1. Development must be of a design and layout to promote walking, cycling and public transport use through provision of attractive, well-designed and safe routes which address the needs of users. Segregated cycle routes should be considered where possible. Guidance set out in the Manual for Streets, or any future equivalent, must also be applied. Bespoke access and transport approaches may be agreed at large regeneration sites, where forming a suitable alternative.</p>	<p>DP4:1 Development design and layout must promote walking, cycling and public transport use through provision of attractive, well-designed and safe routes. Guidance set out in the Manual for Streets, or any future equivalent, must also be applied. Bespoke access and transport approaches may be agreed.</p>
<p>2. Transport assessments and travel plans must take account of applicable guidance by Kent County Council. A travel plan will be required where there are anticipated significant or negative impacts of transport movement arising from a development. In this respect, the following will apply:</p>	<p>CS15:1h Major new residential or trip generating development should be supported by a travel plan with monitoring and management.</p>



Proposed Policy	Existing Policy
<p>a) Travel plans should set deliverable actions for the promotion and delivery of safe and attractive active travel and public transport measures to increase their uptake, and reduce demand for less sustainable/ efficient forms of transport.</p> <p>b) An effective and robust travel plan should feature clear measures and actions to enable objectives to be met, including ongoing monitoring/ review with additional measures applied where outcomes are not being achieved, taking into account the operational characteristics of a development, and be capable of applying over a prolonged period as necessary.</p>	<p>None.</p> <p>None.</p>
<p>3. Adverse effects from the travel and movement issues associated with any development, including on amenity or the environment, must be minimised. Development will be supported where the layout and siting of all forms of access is acceptable in terms of residential amenity, highway capacity and safety, free flow of traffic, cycle and pedestrian provision, and visual impact. Provision should be made at applicable developments for loading, unloading and the turning of service vehicles to ensure highway and pedestrian safety.</p>	<p>DP4:2e/f Layout and siting of access is acceptable in terms of residential amenity, highway capacity and safety, free flow of traffic, cycle and pedestrian provision, and visual impact. Provision for loading/ unloading and turning to ensure safety.</p>
<p>4. Development must ensure that the following requirements are met:</p> <p>a) Provision is made for safe and convenient access to footpaths and cycle routes, with public rights of way protected including, where opportunities exist, delivering new or upgraded routes between key facilities, the Green Grid network, and to existing neighbourhoods. Urban area and village footpaths/ cycleways must be safe, overlooked and well lit.</p> <p>b) Supporting facilities for cyclists, including secure cycle parking/ storage and lockers, are provided, and in major developments which attract significant numbers of people (such as schools and large scale employment, retail and leisure developments), changing areas and showers should be included.</p> <p>c) Design features are provided for people with mobility and sensory difficulties, especially at road crossing points, public transport stops and changes in level on walking routes.</p>	<p>DP4:2a Provision is made for safe and convenient access to footpaths and cycle routes, with public rights of way protected including, delivering new or upgraded routes between key facilities, the Green Grid, and to existing neighbourhoods.</p> <p>None.</p> <p>DP4:2d Provide appropriate facilities for people with disabilities mobility, especially at road crossing points, public transport stops and changes in level on walking routes</p>

Proposed Policy	Existing Policy
<p>5. Development must provide an appropriate level and form of vehicle parking provision, taking into account any existing provision as relevant to the development, and in full accordance with the applicable Parking Standards SPD. In this respect, the following will apply:</p> <ul style="list-style-type: none"> <li>a) Electric vehicle charging points must be provided for all new residential properties with dedicated/ allocated parking spaces, and for a proportion of parking spaces provided as part of new employment, leisure and retail development. Charging points or cabling to allow their future installation must be provided for all shared car parking spaces provided on new residential developments.</li> <li>b) The conversion of front gardens for car parking is only allowed where it includes provision of a vehicle crossover and only where the garden is capable of accommodating a parking space in accordance with the parking bay minimum standards set out in the SPD, plus space for soft landscaping, and with unobstructed pedestrian access to the dwelling. New car parking must make use of appropriate permeable paving materials, in line with the SPD, and water quality protection objectives where applicable.</li> </ul>	<p>DP4:2g Car parking provision, taking into account any existing provision as relevant to the development, and in full accordance with the applicable Parking Standards SPD. None.</p> <p>DP4:2h The conversion of front gardens for car parking must include a vehicle crossover and only be where the garden is capable of accommodating a parking space in accordance with the parking bay minimum standards set out in the SPD, and with unobstructed pedestrian access to the dwelling. New car parking must make use of appropriate permeable paving materials, in line with the SPD.</p>
<p><b>M18: Community Uses</b></p> <p>1. New community facilities will be supported where they are in an appropriate location and of a type, scale and design to reflect the needs of the existing and emerging communities they will serve. In this respect, the following will apply:</p> <ul style="list-style-type: none"> <li>a) New services should be sited close to the population they will serve, with reference to access routes for active and other forms of travel, and a suitably locally based catchment for the facility provided.</li> <li>b) Wherever possible, new facilities must be provided and designed in a way that allows benefits to be shared by existing and new communities, and to be operated flexibly by a variety of users.</li> <li>c) Strategic developments must normally provide social and community facilities, with access to required facilities at an appropriately early stage. Land will be secured until a facility is in operation as set out in criterion 3. Where permanent provision</li> </ul>	<p>CS21:1b/c Seeks benefits of new facilities shared by existing and new communities, and locations close to the population. Facilities should be appropriately phased or temporary provision will be sought.</p> <p>DP21:1 Facilities permitted where appropriate in location, type and scale.</p>



Proposed Policy	Existing Policy
<p>is not possible from the outset, temporary provision will be sought for first occupants.</p> <p>d) Large scale new community uses that attract the majority of users travelling in from outside the Borough must demonstrate the local need for the scale of the proposal, unless delivering an essential public sector service or shown to be required to serve the neighbourhood community.</p>	
<p>2. Development of existing community facilities/ land for non-community purposes will be refused unless there is clear evidence that:</p> <p>a) the facility is not needed by the existing and future community; and</p> <p>b) all reasonable efforts have been made to preserve a community use, including exploration of appropriate solutions to retain the facility with operators/ service providers and, where appropriate, the local community. Consideration should include any potential future demand arising from new development located within the catchment area of the facility/ use.</p>	<p>DP21:2. Development of existing community facilities/ land for non-community purposes not permitted unless there is clear evidence that:</p> <p>a) the facility is not needed by the community; and</p> <p>b) all reasonable efforts have been made to preserve a community use with operators/ service providers and the local community. Including demand arising from new development.</p>
<p>3. Specific land that has been earmarked for community facilities through planning obligations, other formal agreements, approved planning permissions, or identified in Dartford’s published infrastructure planning documentation will be safeguarded until a community facility is delivered or agreement is reached that land for a community use will not be required.</p>	<p>DP21:3 Specific land that has been earmarked for community facilities through planning obligations, other formal agreements or approved planning permissions will be safeguarded until a community facility is delivered or agreement is reached that land for a community use will not be required</p>

## Local evidence

### Strategic Transport Modelling Stages 1 to 4

- 5.2 This evidence has been formed by consultants Stantec, for the Council as client working with partners, including National Highways (formerly Highways England) and Kent County Council as the leading highway authorities. Stages have progressed with the evolution of the Plan, culminating in Stage 3 on model scenario outputs and Stage 4 on applying findings and mitigations.
- 5.3 At the core of the strategic modelling for the Dartford Local Plan is the DCLTAM (part of the Lower Thames Crossing transport model) provided by National Highways. This model is the supplementary consultation version and forms a key component of the Local Plan strategic transport modelling. Stantec reviewed and updated the DCLTAM

to create a base year model and forecast year model and use this for Local Plan option testing.

5.4 In terms of the stages 1 to 3a documents:

**Stage 1 – Base year model:** this outlines- engagement with the highway authorities to agree a scope and methodology for Local Plan assessment, data gathering with respect to existing traffic data and availability of modelling data, review and adjustment of the Dartford Cordon of the Lower Thames Area Model (DCLTAM) by National Highways.

**Stage 2a – Forecast year baseline model:** this details- developing a baseline for a “no Local Plan” scenario based upon the DCLTAM model, reviewing growth of trips from base year (against that contained within TEMPro), allowing for committed highway schemes, assigning future peak hour baseline models with and without the Lower Thames Crossing included.

**Stage 2b – Reference Case methodology:** this has the purpose of presenting the proposed framework for the derivation of the Reference Case, and includes the predicted traffic generation from the DCLTAM and reference case land uses.

**Stage 3b – Local Plan option testing methodology:** this assesses the Local Plan proposed development against the Reference Case. The traffic generation from the Local Plan is calculated, considering the applicability of mode shift selectively and the location of each proposed site. For larger sites - especially Ebbsfleet Garden City - appropriate internalisation (within site trips) is considered. The internalisation of trips for these sites will be facilitated by the planned sustainable transport infrastructure serving those sites and the mix of uses and services within those sites. The Local Plan sites are applied with an appropriate distribution based upon journey to work census and / or DCLTAM distribution data. Local Plan scenarios are then generated and incorporated to the updated DCLTAM model for morning and evening peak hours and “with” and “without” Lower Thames Crossing. A comparison is made to assess the differences, between the scenarios considered, on the transport network when compared to the Reference Case.

5.5 This led to the document **Stage 3b – Local Plan option testing output, and Appendices documents**. This present results in terms of the assessment of the Local Plan developments compared to the Reference Case and effect on the highway network. The document (with appendices presented as a separate document) is structured as follows:

- Section 2 provides an overview of the assessment methodology applied to assessing the Preferred Local Plan.
- Section 3 provides an overview of the model inputs including the land use and traffic generation.
- Section 4 describes the scenarios assessed and output data extracted.
- Sections 5 and 6 review the strategic road network (A282/M25 and A2) flows and performance. This incorporates tables which feature traffic level modelled findings for different scenarios, including in certain circumstances where 15 or 30% model shift results can be presented.
- Section 7 summarises the assessment criteria used for the local road network.

- Section 8 provides an assessment of the A road corridors.
  - Section 9 provides an assessment of the B road corridors.
  - Section 10 provides a summary of the findings from the report.
- 5.6 The final Section 10 of the report explains, in brief, the assessment results for the 7 junctions on the strategic road network within the Borough (paragraph 10.1.11) and identifies junctions on the local road network (paragraph 10.1.16) where mitigation measures have been considered in further detail through Stage 4 of the transport modelling.
- 5.7 Therefore the modelling assessment for the Local Plan provides an overview of the traffic movements within the Borough as a result of the various scenarios tested. The outputs allow identification of locations where the operation of particular junctions is expected to deteriorate.
- 5.8 The final **Stage 4** of the transport modelling tested mitigation measures for those locations where the previous Stage 3b output report indicated that the planned development in the Local Plan would have a negative impact on the capacity and operation of the network. In general, it was concluded that the transport impacts of the Preferred Local Plan scenario, across both the strategic and local road networks, is unlikely to have a significant impact when compared with the Reference Case.
- 5.9 However, it is recognised that the use of the strategic DCLTAM to determine the location and magnitude of a scenario's effect, would need to be supplemented with more detailed modelling to confirm whether mitigation is indeed required at a specific location, and the extent of that mitigation. It is also recognised that there are complexities associated with both the strategic and local road networks within the Borough where more detailed modelling may be necessary, for example the possible interaction between junctions or the impact of constraints on the network.
- 5.10 On both the strategic and local road networks it may be necessary to carry out further detailed studies to demonstrate the ability of key junctions to serve planned development. Such work has already been identified for the A282 (M25) Junction 1a and feasibility studies have been commissioned. Detailed consideration would also be given through transport assessments supporting future planning applications that generated traffic through junctions where there are potential impacts on its capacity and operation. If capacity issues are confirmed and mitigation measures required these would need to be considered in conjunction with the cumulative impacts of other proposed developments to ensure that an effective solution is delivered. The impact of a wider application modal shift, as a result of implementing a Borough-wide sustainable transport strategy could also be tested to determine its impacts.

### **A Sustainable Travel Strategy for Dartford (Framework for Co-ordinated Implementation)**

- 5.11 The Dartford Sustainable Transport Strategy provides an overview of the actions and approach that the Council will pursue to support delivery of Local Plan policies- in particular detailed policies M17 criteria 2 and 4; and M16:4 . The objective is, in conjunction with its partners and developers, to enable an increase in the proportion of journeys made by more sustainable forms of transport. In summary it:

- Provides an overview of existing and future sustainable travel and transport measures for the Borough;
  - Supports Local Plan growth by offering alternatives to the private car and providing sustainable travel solutions to mitigate transport impacts;
  - Shows the contribution that would be made by a variety of partners, and the joint working required, to manage the adverse transport impacts arising from new development.
- 5.12 The central part of the Sustainable Travel Framework is section 5. This provides an overview of the sustainable transport projects and initiatives that are currently being pursued within the Borough and how further projects would be planned and delivered in the future. The Framework in section 5 has been divided into the three categories:
- Strategic/ Area Focused Interventions (notably Ebbsfleet and Dartford town centre specific projects, the priority approach of development mitigation, plus certain corridor focused packages)
  - Public Transport Measures (including several bus/ Fastrack upgrades, and priority hubs/ interchanges)
  - Active Travel Measures (including more detailed cycling/ walking route measures, and focal interventions to help deliver the Local Plan's green grid)
- 5.13 Under these groupings, information includes several actions and projects that are in the process of being delivered, in the planning stages or proceeding through feasibility/ option stages. The Framework also identifies where interventions will be the subject of further strategies or plans focused on the delivery of projects for specific transport modes. Where delivery is through a partnership then the lead organisation is identified. Where delivery would be through a separate programme of works, or implementation strategy/ plan, the lead organisation is identified where known.
- 5.14 Whilst there remain some locations on the highway network where traffic congestion needs to be tackled, this Framework is less focused on creating additional capacity and more related to improving the resilience of the network and issues affecting health and wellbeing, such as air quality and safety. Collectively, the measures identified within this Framework focus on achieving modal shift for local journeys away from the private car to more sustainable forms of transport. A transport assessment of the planned development in the Local Plan has considered the impact of a 15% and 30% modal shift for local journeys from new development. These were arrived at after considering the existing mode share of journey to work trips from the Census. Whilst these are not adopted targets they reflect an achievable to ambitious range for modal shift across the Borough; if most of the Sustainable Travel Strategy projects are significantly progressed. Also, a Local Cycling and Walking Infrastructure Plan has now commenced in Dartford, working with the County Council.
- 5.15 Appendix B of the Strategy gives a paragraph by paragraph outline of the Local Plan transport related policies, including a column on implementation and delivery.

## APPENDIX 1 SUSTAINABILITY APPRAISAL EXCERPTS

### Symbols – Key

++	This option is likely to have a significant positive effect on the SA objective(s).
++/-	The option is likely to have a mixture of <b>significant positive</b> and <b>minor negative</b> effects on the SA objective(s)
+	The option is likely to have a <b>minor positive</b> effect on the SA objective(s).
0	The option is likely to have a <b>negligible</b> or no effect on the SA objective(s).
-	The option is likely to have a <b>minor negative</b> effect on the SA objective(s).
-/+	The option is likely to have a mixture of <b>significant negative</b> and <b>minor positive</b> effects on the SA objective(s).
--	The option is likely to have a <b>significant negative</b> effect on the SA objective(s).
?	It is <b>uncertain</b> what effect the option will have on the SA objective(s).
+/- or ++/--	The option is likely to have an equal mixture of <b>both minor</b> or <b>both significant positive and negative effects</b> on the SA objective(s).

### Sustainability Appraisal Objectives and Cumulative Effects of Plan Policies

SA objective	Likely cumulative effect
SA 1: To ensure that everyone has the opportunity to live in a decent home	++
SA 2: To ensure ready access to essential services and facilities for all residents	++
SA 3: To strengthen community cohesion	++
SA 4: To improve the population's health and reduce inequalities	++/-
SA 5: Facilitate a sustainable and growing economy and a vital and viable town centre	++
SA 6: To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion	++/-
SA 7: To conserve the Borough's mineral resources	-
SA 8: To conserve the Borough's soils	++
SA 9: To maintain and improve the quality of the Borough's waters	+
SA 10: To reduce air pollution and ensure improvements in air quality	++/-
SA 11: To avoid and mitigate flood risk	+
SA 12: To minimise the Borough's contribution to climate change	++/-
SA 13: To conserve, connect and enhance the Borough's wildlife, habitats and species	++/-
SA 14: To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment	+/-
SA 15: To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape	+

**Policy M16: Travel Management**

<b>SA objective</b>	<b>M16</b>
<b>1. To ensure that everyone has the opportunity to live in a decent home.</b>	<b>0</b>
<b>2. To ensure ready access to essential services and facilities for all residents.</b>	<b>+</b>
<b>3. To strengthen community cohesion.</b>	<b>0</b>
<b>4. To improve the population's health and reduce inequalities.</b>	<b>+</b>
<b>5. Facilitate a sustainable and growing economy and a vital and viable town centre.</b>	<b>+</b>
<b>6. To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.</b>	<b>0</b>
<b>7. To conserve the Borough's mineral resources.</b>	<b>0</b>
<b>8. To conserve the Borough's soils.</b>	<b>0</b>
<b>9. To maintain and improve the quality of the Borough's waters.</b>	<b>0</b>
<b>10. To reduce air pollution and ensure improvements in air quality.</b>	<b>+</b>
<b>11. To avoid and mitigate flood risk.</b>	<b>0</b>
<b>12. To minimise the Borough's contribution to climate change.</b>	<b>+</b>
<b>13. To conserve, connect and enhance the Borough's wildlife, habitats and species.</b>	<b>0</b>
<b>14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.</b>	<b>0</b>
<b>15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.</b>	<b>0</b>

**Policy M17: Active Travel, Access and Parking**

SA objective	M17
1. To ensure that everyone has the opportunity to live in a decent home.	0
2. To ensure ready access to essential services and facilities for all residents.	+
3. To strengthen community cohesion.	+
4. To improve the population's health and reduce inequalities.	+
5. Facilitate a sustainable and growing economy and a vital and viable town centre.	+
6. To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	++
7. To conserve the Borough's mineral resources.	0
8. To conserve the Borough's soils.	0
9. To maintain and improve the quality of the Borough's waters.	0
10. To reduce air pollution and ensure improvements in air quality.	+/-
11. To avoid and mitigate flood risk.	0
12. To minimise the Borough's contribution to climate change.	+/-
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	0
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	0



**Policy M18: Community Uses**

SA objective	M18
1. To ensure that everyone has the opportunity to live in a decent home.	0
2. To ensure ready access to essential services and facilities for all residents.	+
3. To strengthen community cohesion.	++
4. To improve the population's health and reduce inequalities.	+
5. Facilitate a sustainable and growing economy and a vital and viable town centre.	0
6. To reduce the need to travel and encourage sustainable and active alternatives to motorised vehicles to reduce congestion.	+
7. To conserve the Borough's mineral resources.	0
8. To conserve the Borough's soils.	0
9. To maintain and improve the quality of the Borough's waters.	0
10. To reduce air pollution and ensure improvements in air quality.	+
11. To avoid and mitigate flood risk.	0
12. To minimise the Borough's contribution to climate change.	+
13. To conserve, connect and enhance the Borough's wildlife, habitats and species.	0
14. To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the Borough's historic environment.	0
15. To conserve and enhance the special qualities, accessibility, local character and distinctiveness of the Borough's settlements, countryside and landscape.	0