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THE SEVENOAKS DISTRICT STRATEGY FOR TRANSPORT 2010 - 2026

FINAL STRATEGY DOCUMENT






FINAL DOCUMENT – JULY 2010

Sevenoaks DISTRICT COUNCIL

Kent Highway Services

Document Control Sheet

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1.0 Foreword

1.1 Foreword

This Sevenoaks District Strategy for Transport (SDST) document is an important step forward in the overall changes that are happening in the way the planning system operates in the District. As the local Transport Authority, Kent County Council (KCC) is responsible for preparing, reviewing and updating the Strategy document.

The Strategy document is made up of three specific parts:

1. **The Strategy Document**
2. **The Strategy Appendices & Figures**
3. **The Strategy Implementation Plan**

Sevenoaks District Council (SDC) is in the process of preparing its Local Development Framework (LDF), with the Core Strategy of the LDF scheduled for adoption in 2010. An important aspect of the LDF is the need for future new developments to be more sustainably located. This Transport Strategy has been prepared in the context of the latest national approach to transport planning, as set out by Government in *Delivering a Sustainable Transport System* (*DaSTS),* which has set goals for the UK's future transport system which focus on the challenge on the challenge of delivering strong economic growth while at the same time reducing greenhouse gas emissions.

Changes in the way education and healthcare will be provided in the District and surrounding areas with schools amalgamating, new schools and hospitals opening and services being relocated both within and outside the District will place added importance on the role of the transport network for the future.

Ensuring that our transport network, particularly our highway network, continues to be the most appropriate for its users is even more pressing now. It is with this in mind that this Strategy document has been prepared. It does not set out solutions to specific problems, however it is intended to give clear guidance on suitable alternatives and options that can be considered as the strategy is delivered through the implementation plan. Our aspirations on improvements to the transport network and especially the highway network must be realistic, affordable and deliverable.

Achieving good value for money is a priority in the allocation of available funding to deliver 'fit for purpose' solutions to tackle a range of transport issues facing the District. Accordingly, this document focuses on the safety of the road users, tackling congestion and delays, addressing the impact of traffic on local communities (in particular noise and air pollution), and ensuring good accessibility to the transport network to provide access to key services.

The Strategy document will continue to evolve over the plan period, as we move forward with our partners and stakeholders to maintain and improve the transport network to meet future challenges.

2.0 Executive Summary

2.1 Executive Summary

Sevenoaks District is located within the Metropolitan Green Belt, and has a population of 109,305[1] with 45,000[2] dwellings and covers a geographic area of some 142 square miles. The District has five settlements with a population of over 5000 at the 2001 Census: the Sevenoaks urban area (population 22,667[3]), Swanley (15,879[4]), Edenbridge (7,808[5]), New Ash Green (6,289) and Hartley (5,395). Around 53% of the District's population live in these urban areas, which are the focus for residential, shopping, business and social activities and also cater for the needs of neighbouring villages. The south of the district is sparsely populated in the main.

The emerging LDF Core Strategy identifies Sevenoaks (urban centre), Swanley and Edenbridge as the primary locations for development over the period of this strategy (2006 – 2026). Limited development in Local Service Centres (New Ash Green, Otford and Westerham) and Service Villages (Brasted, Crockenhill, Eynsford, Farningham, Halstead, Hartley, Hextable, Horton Kirby, Kemsing, Knockholt Pound, Leigh, Seal, Sevenoaks Weald, Shoreham, South Darenth, Sundridge and West Kingsdown) is also proposed by the Core Strategy. In smaller settlements and rural areas development is heavily constrained by Green Belt and AONB policies.

The Sevenoaks District Strategy for Transport (SDST) aims to respond to existing transport challenges and those that may arise as a result of the scale and distribution of development proposed in emerging spatial planning policies. The Transport Strategy recommends that future investment in transport infrastructure is predominately structured around the distribution of development proposed by the LDF Core Strategy.

The Strategy sets out to reduce congestion and pollution and tackle problems of accessibility and road safety and the Districts priority initiatives to achieve the four shared priority objectives of the SDST which are:

- **Improving accessibility**
- **Tackling congestion**
- **Providing safer roads**
- **Improving air quality**

It is important that SDST is seen as a continually evolving document which needs to be reviewed in association with the preparation of future Local Transport Plans (LTP's) and the LDF. Annual Progress Reports will outline progress made towards the deliver of the strategy's objectives and targets.

The development of Annual Progress Reports will help to make the SDST a more visible document and should help to deliver transport performance improvements by encouraging transport operators to work towards the targets. Where monitoring shows that SDST targets are not being met, consideration will need to given to reviewing the priorities and initiatives identified in the SDST.

The current top priority transport initiatives (as defined by KCC's LTP) in Sevenoaks District are summarised in **Table 1 (see overleaf)**, and together they help to meet the four shared priority objectives of the SDST, which are to improve accessibility, tackle congestion, provide safer roads and improve air quality.

1 *Source Sevenoaks District Council Emerging LDF Document*

2 *Source Sevenoaks District Council Housing Strategy 2003*

3 *Source Sevenoaks District Council Emerging LDF Document*

4 *Source Sevenoaks District Council Emerging LDF Document*

5 *Source Sevenoaks District Council Emerging LDF Document*

In Table 1 each priority initiative is ranked in accordance with the four shared priority objectives of the SDST.

TABLE 1: Ranked Assessment of the SDST Priority Initiatives

Chapter No.	Page No.	Transport Issue	Primary Initiative	Ranking of Key Initiative Objectives			
				Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
8	34	**Roads, Traffic & Congestion**	Develop a Traffic Management Control system and introduce Intelligent Transport Systems that cover the high volume main road network in Sevenoaks District and Sevenoaks and Swanley town centres.	4	**1**	3	2
9	40	**Bus, Community Transport & Taxi**	Develop a Quality Bus Partnership (QBP) or similar local agreement and improve local bus services and infrastructure to support east-west, north-south services and services to Pembury Hospital, railway stations and rural villages.	**1**	2	4	3
10	45	**Rail Travel**	In combination with measures to promote alternative forms of transport to access stations, provide sufficient off-street parking at stations and controls in nearby streets	**1**	2	4	3
11	53	**Walking**	Improve pedestrian routes between residential areas and workplaces, schools and town centres and improve access for the mobility impaired, where appropriate.	**1**	2	4	3
12	55	**Cycling**	Provide cycle friendly infrastructure and introduce new cycle routes along the main transport corridors and improve home to school links.	**1**	3	2	4
13	59	**Powered Two-Wheelers**	Promote the use of small capacity powered two wheelers (PTW) as an alternative to the car.	**1**	**2**	3	4
14	60	**Smarter Choices**	Expand school, workplace and area travel planning and raise awareness including through rail station travel plans.	**2**	**1**	3	4

TABLE 1: Ranked Assessment of the SDST Priority Initiatives (Continued)

Chapter No.	Page No.	Transport Issue	Primary Initiative	Ranking of Key Initiative Objectives			
				Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
15	62	**Disability Access**	To help pedestrians with mobility impairments the following actions are being taken : • All pedestrian crossings are being upgraded to meet all current DDA requirements across the District. • For those with visual impairments, tactile paving will be installed at all pedestrian crossing points to help guide pedestrians safely to crossing points. • Ramps/dropped kerbs will be introduced along key transport corridors to improve accessibility for wheeler chair, mobility scooter users, and prams and push chairs. Bus stops along key transport corridors will have raised kerbs installed to improve wheelchair, pram and push chair access and this programme will be applied progressively to all bus stops in the District.	**1**	**3**	2	4
16	66	**Freight & Heavy Goods Vehicles**	Designate lorry routes within Sevenoaks District and develop a Freight Quality Partnership.	4	**1**	3	2
17	69	**Car Parking**	To promote alternative forms of transport to access stations, provide sufficient off-street long-stay parking at stations and controls in nearby streets.	**1**	3	4	2
18	71	**Kent's Airports**	Promote alternative forms of transport to access airports.	**1**	2	4	3
19	72	**Climate Change & Transport Planning**	Assist in the development and implementation of work place and school travel plans to reduce emissions from car journeys, improve air quality and promote health.	3	2	4	**1**
22	80	**Development Planning & Transport Assessments**	To ensure that Transport Assessments required under the provisions of the planning process for new developments, are developed in accordance with Kent County Council's (KCC's) Guidance on Transport.	2	**1**	4	3

The priority objectives and initiatives have been used to identify priorities in different parts of the District:

Sevenoaks Urban Area

- Improve public transport interchange facilities, in particular at the main bus and train stations in Sevenoaks District
- Maintain and improve capacity on peak train services
- Manage parking issues in the town centre and around train stations
- Bring forward measures to alleviate congestion and tackle air quality issues at Riverhead, Bat and Ball and Sevenoaks Town Centre
- Improve facilities for walking and cycling

Swanley

- Improve accessibility to Swanley Station by walking and cycling
- Ensure that development in Swanley does not have a significant negative impact on traffic on the Strategic Road Network
- Improve bus interchange facilities in Swanley
- Improve facilities for walking and cycling
- Bring forward measures to alleviate congestion and tackle air quality issues near Swanley town centre

Edenbridge

- Maintain and improve capacity on peak train services
- Increasing the number of destinations that can be accessed via train services from Edenbridge, including services to Gatwick Airport / improved services to Redhill
- Improve facilities for walking and cycling
- Maintain and, where necessary, improve safety on main access roads to Edenbridge

Villages and Rural Areas

- Maintain and improve accessibility to jobs, shops and services by non-car means, including walking, cycling, public transport and community transport
- Bring forward measures to alleviate congestion and tackle air quality issues, including those along the A25 corridor, at Seal and Westerham, and on the Strategic Road Network

3.0 Introduction

3.1 Introduction

The SDST sets out the vision for the district's transport network for the next 17 years until 2026. It will be used to inform planning and transport investment decisions, and through rigorous annual reviews. Its success in moving towards an improved, sustainable, transport network for all of Sevenoaks District, will be monitored.

A common thread throughout this strategy document is the emphasis placed on future transport demands and the decisions that must be made to manage such demands. There are often fine balances to be struck between providing the best possible facilities and services and how to best allocate resources across a wide set of demands. Another fragile balance are the competing demands between society's desire for easy convenience to a variety of transport modes and the potential harm transport can impart on the environment. The SDST takes these and other factors into consideration in order to provide a detailed, rational and ongoing response to the needs of the people of Sevenoaks District.

The SDST has been prepared by Kent County Council (KCC) with support from Sevenoaks District Council (SDC). It has been developed in parallel with the Sevenoaks LDF Core Strategy. The policies and initiatives in these documents should be seen as complementary. Since the development of the second Local Transport Plan (LTP) for Kent 2006-2011, significant investment in transportation has seen improvements made across Kent's transport network.

KCC and SDC acknowledge the impact unsustainable transportation has on the environment and wishes to promote 'green transport' options such as walking, public transport and cycling, as identified in the SDST. Transport issues should not only be seen as environmental issues, however, inefficient and unsustainable transport systems also result in economic and social issues, such as reduced economic productivity and social exclusion.

The Government's current definition of social exclusion, is as follows:

> *"Social Exclusion is a complex and multi-dimensional process. It involves the lack or denial of resources, rights, goods and services, and the inability to participate in the normal relationships and activities available to the majority of people in society, whether in economic, social, cultural or political arenas. It affects both the quality of life of individuals and the equity and cohesion of society as a whole"*

Consistent with the objectives of the District Community Plan (DCP), LDF and the LTP, the SDST acknowledges the need to tackle the environmental, social and economic impacts of transport over the short, medium and long term. With a changed emphasis on working towards the long term goal of promoting sustainable travel behaviour, the SDST will help to reduce the damaging impact that current travel behaviour has on the local environment, communities and the economy.

At the heart of the SDST is the need to work in partnership, both across service sectors within KCC and SDC, and with external partners in the community – at local, county and regional levels. It will emphasise the need for close working with neighbouring Councils, the Department for Transport (DfT) and local transport providers.

Community input has helped to shape this strategy, and it is proposed that further engagement with stakeholders and the public will help to refine the Strategy over its lifetime. Section 4 (Consultation) of this strategy outlines the methods of community engagement that were applied to inform the preparation of the SDST.

3.2 The Vision for Sevenoaks District

A vision for a sustainable transport system in the Sevenoaks District area has been developed. This builds on the visions set out in the emerging LDF Core Strategy and the Local Transport Plan for Kent (2006-2011).

The vision of the emerging Sevenoaks LDF Core Strategy is to:

- **Sevenoaks District will provide for future development requirements by making effective use of urban land within existing settlements, while protecting the environment.**
- **It will deliver the proposed housing requirements of the South East Plan in a sustainable way. A balance of new housing will be achieved with increased provision of affordable housing, smaller homes and housing designed to meet the needs of older people. Accommodation for gypsies and travellers will also be increased.**
- **The high quality natural built and historic environment will be conserved and enhanced, especially in those parts of the district designated to protect their distinct character. New development throughout the District will be of a high quality incorporating designs that respond to the distinctive local character of areas of high environmental quality or make a positive contribution to the environmental enhancement of other areas. The design of new development will incorporate sustainability principles taking into account potential climate change.**
- **The majority of new housing development will be focused in the urban areas of Sevenoaks and Swanley.**
- **Sevenoaks will continue to combine economic prosperity with environmental quality and new retail, office, tourism and housing development will support its role as a principal town centre within West Kent. Continued small-scale housing developments will occur on suitable sites throughout the town and a range of job opportunities will be provided generally on existing sites in employment use.**
- **Swanley will be regenerated to create a town centre that better meets the needs of the community and supports the economy through development to include a mix of new shops, offices, hotel and residential development together with accompanying environmental improvements. Existing employment areas in the town will be renewed and a new site developed adjoining the M25. Open space provision will be improved to serve this more densely developed town.**
- **Edenbridge will retain its role as a rural service centre serving the surrounding villages with a range of shops, services and employment.**
- **Within those villages that have a limited range of local facilities and transport options, there will be change on a more limited scale through smaller scale housing developments consistent with the size and relative sustainability of the settlement concerned. There will be an emphasis on retaining existing local services and employment. New Ash Green village centre will be regenerated and the quality of its environment improved so that it more effectively meets the needs of the community.**

- **The countryside outside existing settlements, and outside areas designated as major developed sites within the Green Belt, will continue to be protected and its distinctive character will remain. The separate identity and character of individually distinct villages and towns will be maintained. Small scale affordable housing schemes adjoining existing villages will be developed to meet identified local need. An active and vibrant rural economy providing a range of jobs and services in rural areas will be supported primarily based on the re-use of existing buildings. The existing major developed sites within the Green Belt will remain and further development within them may occur consistent with their status.**
- **The Kent Downs and High Weald Areas of Outstanding Natural Beauty are of national importance and the distinctive character of their landscapes will be conserved and enhanced. The biodiversity of the District will be conserved and opportunities taken for enhancement in urban and rural areas.**

*Note: The emerging Sevenoaks LDF Core Strategy does not support the redevelopment of Fort Halstead to provide a mixed use development.

The SDST contributes to the delivery of the LDF Vision and the LTP (2006-2011) Vision, which is:

> ***"To provide good, safe accessibility to jobs and services for all sections of the community in Kent, and to improve the environment and health of the community by reducing congestion and pollution, widening the choice of transport available, and by developing public transport, walking and cycling."***

3.3 KCC's Framework for Regeneration

The need for an Integrated Transport Strategy for Kent was identified in KCC's framework for regeneration titled '***Unlocking Kent's Potential': opportunities and challenges.***

This framework identifies the key opportunities and the challenges that must be addressed to deliver long lasting regeneration in the County and establishes a series of priority areas for action by KCC and its partners, between now and 2020, to achieve sustained regeneration.

Unlocking Kent's Potential (2009-2020) – *'Unlocking Kent's Potential'* redefines regeneration to include not only economic growth but also transformation in education and skills, the culture renaissance in the county, an efficient transport system, developing a strong civic spirit, tackling climate change and improving housing conditions.

It sets a clear direction for achieving economic growth and diversifying Kent employment, particularly across the professional sector, and to achieving wider regeneration in terms of education and skills, a changing demography and global climate change.

'Unlocking Kent's Potential' represents KCC's first step towards defining what Kent will look like in 2020 and provides a baseline for a broad policy approach that will inform the development and review of local transport strategies and implementation plans.

Delivering Regeneration through an Integrated Transport Strategy - The ability to provide high quality, reliable and affordable access to services and life opportunities in a sustainable manner in Sevenoaks District is essential to addressing the challenges presented in '*Unlocking Kent's Potential'* and meeting the commercial needs and the demands of the people of Sevenoaks District.

Transport is very much a catalyst for regeneration, it can improve access to employment, education, health care and leisure and recreation and enhance connectivity between markets, making the Sevenoaks District a more attractive place for businesses to locate and expand. The

SDST engages this premise and sets out an agenda to meet the future transport demands for Sevenoaks District.

4.0 Consultation

4.1 Introduction

Prior to defining the methods of community engagement to inform the preparation of the SDST which commenced in 2006, it was apparent that a significant amount of information had already been gathered about general community views on transport issues across the Sevenoaks District, and more widely across Kent. This information is evidenced within a number of policy documents, to include:

- ***'Kent on the Community Strategies (2000-4)'***
- ***'Local Strategic Partnerships (2002-5)'***
- ***'Kent Public Service Agreements (2001-4)'***
- ***'Sustainability Appraisal of Sevenoaks LDF (2006)'***

In addition, comprehensive public opinion work was undertaken by MORI to inform the first LTP for Kent (June 2000), and subsequently through annual reviews conducted by Kent's Residents Panel as part of the County's Annual Tracker surveys.

Whilst some of the information contained in the above-referenced documents was collected prior to 2006, it has been useful in understanding the established concerns and views of the public about transport issues across Kent, and specifically relating to the Sevenoaks District.

4.2 The SDST Consultation Process

The consultation stages to be followed in developing the SDST were formally agreed between representatives of KCC and the SDC working group, as shown below:

- **Stage 1 – Community and Stakeholder Introduction & Participation**
- **Stage 2 – First Draft Member and Officer Consultation**
- **Stage 3 – Public and Wider Stake Holder Consultation**
- **Stage 4 – Strategy Adoption**

A more comprehensive description of the key activities to take place at each stage is provided in turn below.

4.3 Stage 1 – Community and Stakeholder Introduction & Participation

As part of the early development of the SDST, it was important to actively involve local people, businesses, transport operators and users, health and education providers, environmental organisations and other interest groups. As key stakeholders, and 'Strategy Partners', their primary aim has been to ensure that the SDST represents a fully-inclusive account of the transport needs of the communities and interest groups they act for, and also, to help deliver the changes that the Strategy sets out to achieve.

Community and interest group involvement was initially achieved through the staging of two 'Transport Conferences'. The first in September 2006 was titled 'The Future of Transport in Sevenoaks' to discuss the transport issues within Sevenoaks District and the second in October 2007 was a Sevenoaks Transport Workshop, designed to explore specific transport issues in more detail.

For both events the 'Strategy Partners' involved included:

- ***Arriva Southern Counties***
- ***British Airport Authority***

- ***South Eastern Trains***
- ***Southern Trains***
- ***County Councillors***
- ***District Members***
- ***Parish Councillors***
- ***South East England Regional Assembly (SEERA)***
- ***Kent Rural Towns***
- ***Kent Business Link***
- ***Voluntary Transport Services***
- ***Sevenoaks Rail Travellers Association***
- ***Ramblers Association***
- ***Government Office for the South East (G.O.S.E)***
- ***SUSTRANS***
- ***Residents***
- ***Kent Police***
- ***Cyclist Touring Club (CTC)***

The outcomes from the Sevenoaks Transport Conferences held in 2006/07 and Sevenoaks Transport Workshops helped to establish the key issues to carry forward in the Sevenoaks District Transport Study (2007). Information gathered from the above-referenced sources formed part of the evidence base to inform the SDST and to derive the aims and objectives of the Strategy.

The Sevenoaks District Transport Study was commissioned by SDC to:

- **Provide KCC and SDC with the evidence base for the SDST development and the Local Development Framework (LDF)**
- **Compile a data base on which the Transport Strategy and planning policies can be based**
- **Identify key action points that the Council can take forward into the Transport Strategy**

4.4 Stage 2 – First Draft Member and Officer Consultation

The output achieved in Stage 1 helped to identify and establish a list of the most important transport issues in Sevenoaks District. The list of transport issues, together with the themes, cascaded into the driving of policy and scheme formulation through partnership working with District Council colleagues and politicians under the auspices of KCC's and SDC's Joint Transportation Board (JTB)

In May 2009, the first draft in the development of the SDST was presented to an invited audience of District Council Members, and Senior KCC and District Council Officers as the launch of an internal KCC and SDC consultation for Member and Officer Views.

4.5 Stage 3 – Public and Wider Stakeholder Consultation

The results achieved in Stage 2 helped to produce the first public and wider stakeholder consultation document in July 2009, following the Sevenoaks JTB meeting on Wednesday 15 July 2009. The consultees included all Statutory Consultees, the Strategy Partners, other interest groups and the Public.

The Consultation period commenced Friday 25th September 2009, ended on Friday 27th November 2009.

4.6 Stage 4 – Strategy Adoption

Consultation on the draft strategy formed a key part of the process and was very useful in informing the final strategy. Following consideration of all the consultation responses, a matrix table has been produced to summarise the responses received and the amendments made as a result of the responses received (refer to **Appendix 20**).

The results of Stage 3 were assessed and relevant information was used to inform the final version of the SDST. The SDST is consistent with, and supports, the development proposed within the Sevenoaks LDF and is the principal document that will help to guide future revisions of the LTP.

Copies of this Strategy document can be viewed at Sevenoaks Library in Buckhurst Lane Sevenoaks and the Council Offices. Copies will also be made available (on demand) to Parish Councils for display at their offices. A composite electronic version of the SDST is available on the KCC and SDC websites.

4.7 Stage 5 – Continuous Monitoring and Implementation

The SDST is a continually evolving document which will be reviewed and updated annually in association with the preparation of future LTP's and LDF Documents.

The Annual Review process will be carried out through the Sevenoaks Joint Transportation Board (JTB). Annual progress and review reports will be submitted to the Sevenoaks JTB to outline the Strategy's progress in delivering the strategy's objectives and targets.

The development of Annual Progress Reports will significantly help to make the SDST a more visible document and should help to deliver transport performance improvements by encouraging transport operators to work towards the targets.

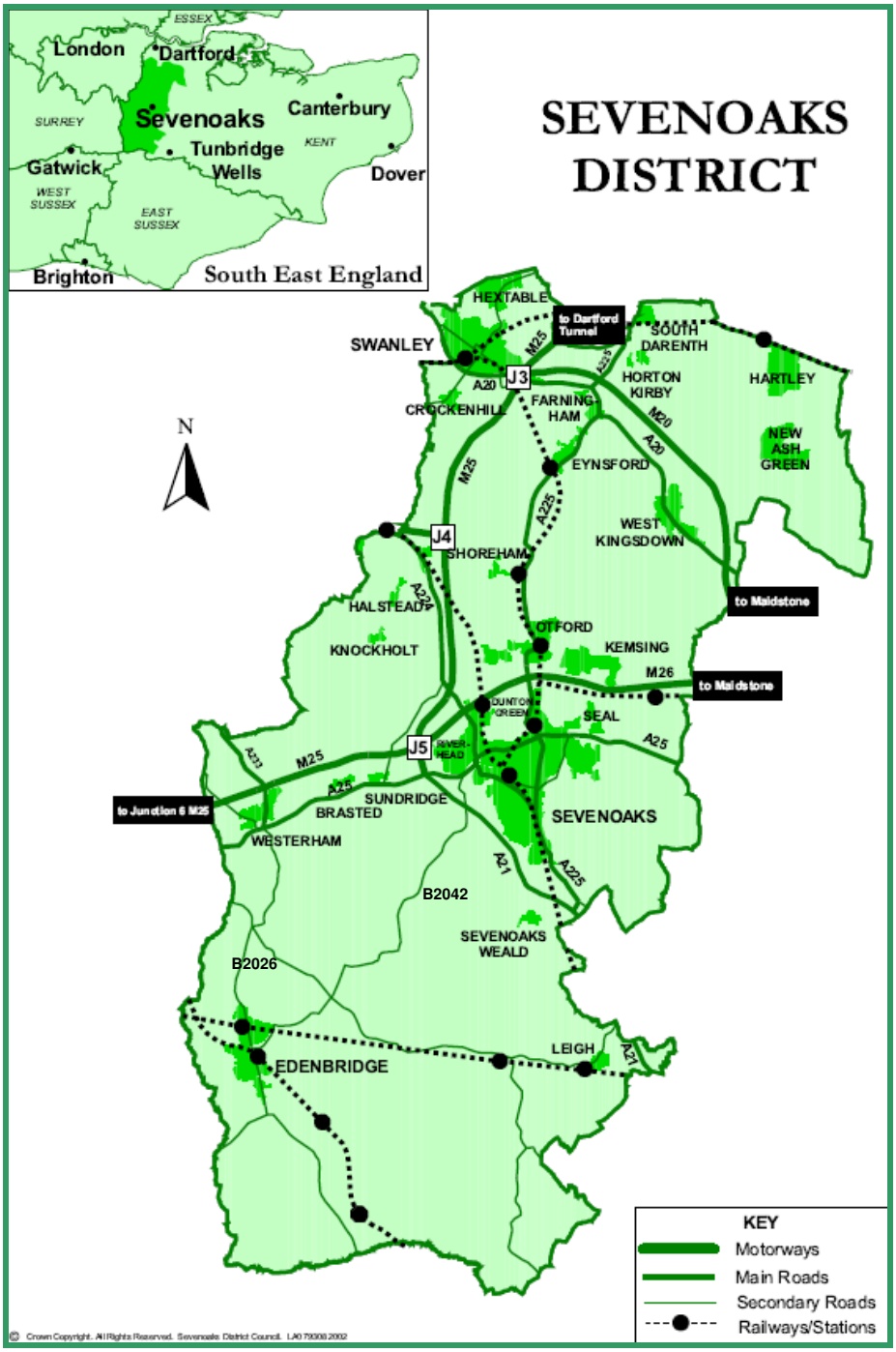
Where monitoring shows that SDST targets are not being met, consideration will need to given to reviewing the priorities and initiatives identified in the SDST.

5.0 Context

5.1 Character of the District

Sevenoaks District is located within West Kent and borders Greater London to the north-west, Surrey to the west and East Sussex to the south. It covers an area of 142 square miles and is largely rural in nature with the majority of the District designated as Green Belt (93%), with two areas designated as AONB.

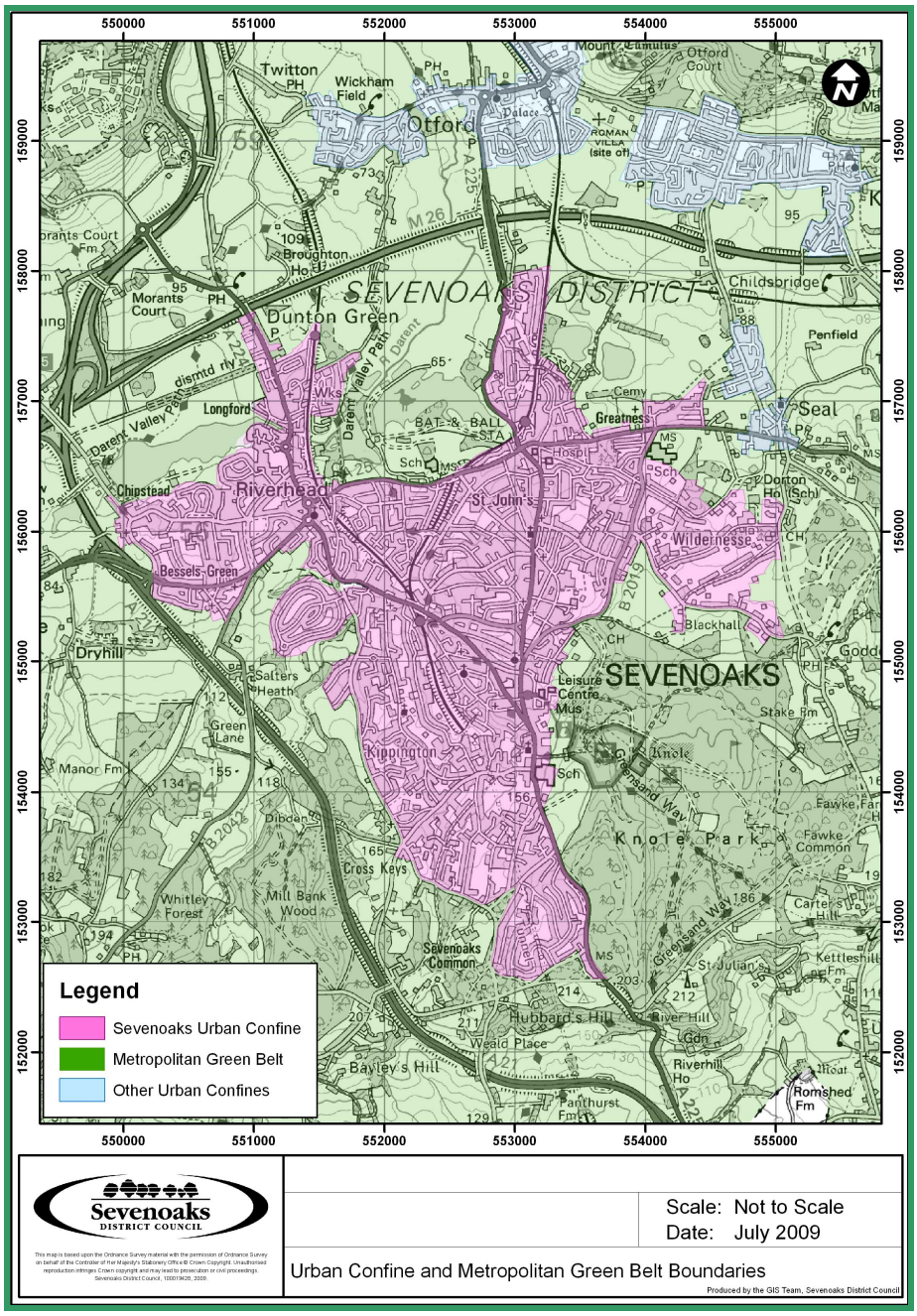
FIGURE 1: Sevenoaks District Main Urban centres and Villages



Source: Sevenoaks District Council

As drawn from available census data, Sevenoaks District had a population of 109,305[6] in 2001. The emerging Sevenoaks LDF Core Strategy records that five settlements within Sevenoaks District with a population in excess of 5,000 based on 2001 Census data. These areas are the Sevenoaks Urban Area (**see Figure 2**) (22,667); Swanley (15,879); Edenbridge (7,808); New Ash Green (6,289) and Hartley (5,395). Approximately 53% of the District's population live in these urban areas, which are the focus for residential, shopping, business and social activities and also cater for the needs of those in surrounding rural areas and smaller settlements.

FIGURE 2: Sevenoaks Urban Area



The remainder of the District's population live in smaller settlements, including those identified as Local Service Centres[7] and Service Villages[8] in the LDF Core Strategy, and predominately rural

[6] Source: 2001 Census cited in the Sevenoaks LDF Core Strategy: Preferred Options
[7] New Ash Green, Otford and Westerham

areas across the Sevenoaks District. The settlements identified as Local Service Centres and Service Villages in the LDF Core Strategy are considered to provide a range of services to meet many of the day-to-day needs of their communities. These settlements vary in the size of population, the number and range of services available (such as primary school, village shop, doctor's surgery, community hall, recreation ground) and access to public transport.

The emerging LDF Core Strategy identifies the Sevenoaks Urban Area, Swanley and Edenbridge as the three primary settlements in the Sevenoaks District and the principal locations for future development.

The Sevenoaks Urban Area is the principal settlement in Sevenoaks district with the widest range of services and facilities. The Sevenoaks Urban Area includes Sevenoaks Town, Riverhead, Dunton Green, Bessels Green and Chipstead. It is bounded by the Metropolitan Green Belt (see Figure 3). The Sevenoaks Urban Area has a successful town centre with a good range of independent shops and services and multiple stores without the range of department stores associated with larger centres lying just outside the district boundary, including Bromley and Tunbridge Wells, or the out of town centre at Bluewater. It is an important centre for commuting to London. It is also the main employment centre in the district.

Swanley is the second largest settlement within the district and is located close to the edge of Greater London. Although it is an important employment centre and has good bus and rail connections, it provides fewer services and facilities than Sevenoaks urban area. The town centre is dominated by a large Asda superstore. The town is developed to a higher density with less green space than other parts of the district.

Edenbridge is the third largest town and is the main centre in the rural south of the district. It has a good range of services and facilities as well as good employment provision. However, the settlement does not provide the full range of services and facilities (e.g. no secondary school). It has relatively good rail connections but is less well-connected to the main road network than Sevenoaks urban area or Swanley.

Whilst the main centres of employment are concentrated around the largest settlements, there are some substantial major developed sites in the Green Belt, notably at Fort Halstead which is used for science and technology uses and at Powder Mills, Leigh, which is used by the pharmaceutical industry. Brands Hatch Racing Circuit also lies in the Green Belt and is used for motor racing and related business and leisure uses.

The district is well located in terms of its proximity to London and the Continent. As a whole, the district has some relatively good communication and transport links and these include key roads such as the M26, M25, M20, A20, A21 and A25 and regular rail services to London and other parts of Kent from Sevenoaks, Swanley, Edenbridge and Otford. These help to facilitate high levels of out-commuting.

Given the rural nature of the area coupled with relative affluence, car ownership and dependence is high with nearly 50% of households owning two or more cars. Bus services in the area and other transport links in Sevenoaks district are often perceived to be poor - although recent frequency changes have been made to services to Orpington and to Tonbridge and Tunbridge Wells.

The high level of car ownership contributes to congestion and poor air quality in specific locations. The high levels of car ownership also result in bus operators finding it increasingly difficult to run commercially viable bus services. To some extent the dispersed rural nature and topography of Sevenoaks district act as barriers to the development of extensive cycle networks across the district. However, opportunities exist to improve cycle infrastructure in and around Sevenoaks (urban area), Swanley and Edenbridge. Further investment is also required in walking networks, particularly in Sevenoaks (urban area), Swanley and Edenbridge.

The SDST sets out to tackle the demand for travel with a fresh proactive approach and seeks to manage and maintain the road network in Sevenoaks district more efficiently, thereby tackling problems of congestion and pollution. Measures such as developing Travel Plans for schools,

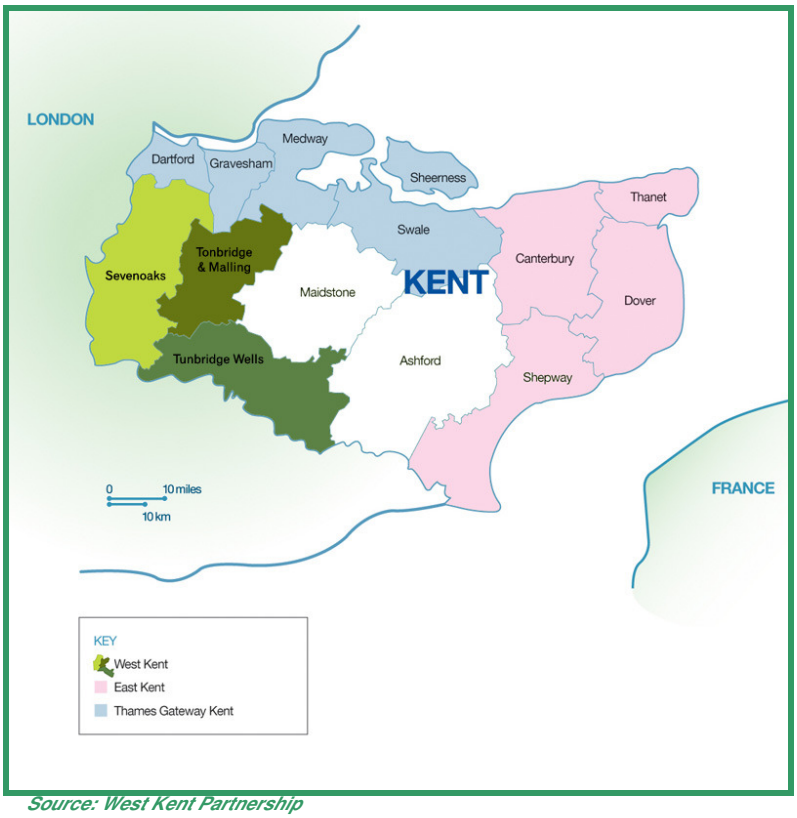
[8] Brasted, Crockenhill, Eynsford, Farningham, Halstead, Hartley, Hextable, Horton Kirby, Kemsing, Knockholt Pound, Leigh, Seal, Sevenoaks Weald, Shoreham, South Darenth, Sundridge and West Kingsdown

workplaces and new housing developments and encouraging more flexible ways and hours of working will also be necessary to tackle congestion in Sevenoaks district.

The SDST seeks to provide choice in the transport network and reduce dependency on the private car, thereby improving accessibility for the whole community and protecting the environment. It proposed that investment and initiatives are focused both on alleviating existing transport problems and tackling those that may arise as a result of development proposed in the emerging LDF Core Strategy. The Strategy also sets out ways of ensuring that roads are safer, and it seeks to deliver improvements to meet the transport needs of the districts economic areas in a sustainable way.

Through working with partners and the community, this Strategy has been developed to tackle these problems. Current identified schemes and initiatives to do this are set out in the short, medium and long-term sections of the Implementation Plan part of this Strategy.

FIGURE 3: Sevenoaks District within Kent and the border counties



Source: West Kent Partnership

5.2 Sevenoaks District and its place in Kent

There are significant locational influences which directly affect the transport demands within Sevenoaks district. These are primarily generated by its proximity to London to the north, Surrey to the west, East Sussex to the south and the rest of Kent and its established economic growth areas.

It is the influences now being created by the established growth areas in Kent that are likely to have the greatest impact on future transport demand in Sevenoaks district and it is important that the SDST recognises this and understands why and how.

There are two government designated 'Growth Areas' which fall within Kent - Ashford and Kent Thameside (encompassing Medway, Swale and Kent Thameside). In these areas, partnerships have been set up to implement the projects funded through the Government's Sustainable Communities Plan. In addition, Maidstone is designated a 'New Growth Point', whereby the Government is entering into a long-term partnership with the Borough Council, recognising mutual ambitions for growth, subject to the statutory regional and local planning process.

The higher growth planned in the surrounding areas in Kent is likely to result in an increase in through traffic in Sevenoaks district and generate additional outbound and inbound trips across the district, over and above Sevenoaks natural and planned growth projections. A simplistic but useful way of estimating the potential growth in private car trips (number of car journeys) associated with the planned level of growth in housing in Kent is to establish the typical trip rate per household in Kent and multiply it by the number of planned dwellings.

The average trip rate per household in Kent was established using TRICS, which is the national standard system of land use trip generation and analysis in the UK and Ireland, and is used as an integral and essential part of the Transport Assessment process.

TRICS generated the following average trip rate range for a typical household in Kent, excluding households in urban town centres in Kent:

Minimum - 6 trips per day generated per dwelling[9]
Maximum - 8 trips per day generated per dwelling[10]

Using the above maximum and minimum trip rates and by multiplying them with the South East Plan's additional dwelling requirement for Kent, it is possible to show, in **Table 2** below, the potential impact that planned housing growth is likely to have on Kent's road system on a district by district basis.

What is clear from the figures shown in **Table 2** is that the 139,420 additional dwellings planned for Kent over the next 20 years, has the potential to generate between 836,520 and 1,115,360 additional car trips per day on Kent's road network. It is important to point out that this calculation does not take account of the benefits that transport and land use planning can have in reducing the need to travel and promoting sustainable transport improvements. A key aim of the SDST must, therefore, be to reduce the need to travel and to promote an increase in the percentage of people travelling by public transport, walking or cycling. The impact of new development on the numbers of car trips will require monitoring over the lifetime of the SDST.

TABLE 2: South East Plan 2009 – Annual Average Net Additional Dwelling Requirement & Average Trip Rate per Dwelling

District/Strategic Development Area (SDA)	(A) Annual Average number of dwellings (SE Plan 2009)	(B) Total over 20 years	(A) x Ave' 6 car trips per dwelling per day	(B) x Ave' 6 car trips per dwelling per day	(A) x Ave' 8 car trips per dwelling per day	(B) x Ave' 8 car trips per dwelling per day
Ashford	1,135	22,700	6,180	136,200	9,080	181,600
Canterbury	510	10,200	3,060	61,200	4,080	81,600
Dartford	867	17,340	5,202	104,040	6,936	138,720
Dover	505	10,100	3,030	60,600	4,040	80,800
Gravesham	465	9,300	2,790	55,800	3,720	74,400
Maidstone	554	11,080	3,324	66,480	4,432	88,640
Medway	815	16,300	4,890	97,800	6,520	130,400
Sevenoaks	**165**	**3,300**	**990**	**19,800**	**1,320**	**26,400**
Shepway	290	5,800	1,740	34,800	2,320	46,400
Swale	540	10,800	3,240	64,800	4,320	86,400
Thanet	375	7,500	2,250	45,000	3,000	60,000
Tonbridge & Malling	450	9000	2,700	54,000	3,600	72,000
Tunbridge Wells	300	6,000	1,800	36,000	2,400	48,000
Total	**6,971**	**139,420**	**41,826**	**836,520**	**55,768**	**1,115,360**

Dwelling allocations were sourced from The South East Plan 2009

[9] Derived from TRICS® 2009(b)v6.4.1
[10] Derived from TRICS® 2009(b)v6.4.1

Economic and employment growth also have a direct influence over traffic patterns within Sevenoaks district, across Kent and, more widely, at the regional, national and global level. The SDST accounts for the associated impacts of economic growth through its annual monitoring process. Monitoring is essential to the all-embracing process of transport management and, importantly, it allows the SDST to be adaptive and responsive to changes to transport and development planning over time.

5.3 Existing Strategies and Policies

In conjunction with those local policy documents listed below, the SDST aims to improve the quality of life for people living and working in the district:

- ***'Kent Environment Strategy (2003')'***
- ***'KCC's Framework for Regeneration'***
- ***'Kent's Local Transport Plan (2006-2011)'***
- ***'Kent Partnership'***
- ***'Kent Prospects (2007-2012')***
- ***'Kent's Supporting Independence Programme (2002)'***
- ***'Sevenoaks District Community Plan'***
- ***'Sevenoaks District Emerging Core Strategy (2006 – 2026)'***
- ***'Sevenoaks District Local Plan Saved Policies'***
- ***'Sevenoaks District Air Quality Action Plan (2009)'***
- ***'South East Plan (2009)'***
- ***'West Kent Area Investment Framework'***
- ***'Vision for Kent (2006)'***

Further reference to these documents is made in **Appendix 01** of this Strategy.

5.4 Planning Policy

The government has revised the policy framework for transport planning in England at every level. This new framework is set out in Delivering a Sustainable Transport System (DaSTS) and has emerged following significant work and consultation by DfT and others to develop a way to ensure transport planning and investment is more responsive to achieving wider objectives. It also builds on the Stern and Eddington Reviews of 2006, and in particular seeks an approach to transport that supports economic growth whilst minimising carbon dioxide emissions.

The Government has identified five goals for transport. These Goals replace the shared priorities that previously agreed for Local Transport Plans in England.

The five goals for transport are:

- **to reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change**
- **to support national economic competitiveness and growth, by delivering reliable and efficient transport networks**
- **to promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society**
- **to contribute to better safety security and health and longer life-expectancy by reducing the risk of death, injury or illness arising from transport and by promoting travel modes that are beneficial to health**
- **to improve quality of life for transport users and non-transport users, and to promote a healthy natural environment**

The Sevenoaks Local Development Framework must accord with national and regional planning policy. The South East Plan requires Sevenoaks district to accommodate 165 dwellings per annum

in the period 2006 to 2026. The emerging Sevenoaks Local Development Framework Core Strategy sets out the proposed distribution of development to take place in Sevenoaks district in the period 2006 to 2026.

The Core Strategy: Draft for Submission proposes that Sevenoaks district will exceed the South East Plan housing requirement (165 dwellings per annum), by making provision for the development of 3,561 dwellings in the period 2006-2026. Of these 3,561 dwellings, at 31 March 2009 approximately 2,000 dwellings had been developed, were under construction or had been granted planning permission since 1 April 2006. The Local Development Framework will, therefore, need to make provision for the development of approximately 1,500 dwellings in the period to 2026 beyond existing commitments. Table 3 below shows the broad geographic distribution of these dwellings:

TABLE 3: Existing & Proposed Housing Allocations in Sevenoaks District[11]

	Sevenoaks Urban Area	Swanley	Edenbridge	Rest of District	Total
Housing Completions and Outstanding Permissions	862*	103	334	759	**2,058**
Proposed Additional Housing	469	557	77	370	**1,473**
Total Housing (approx)	**1,331**	**660**	**411**	**1,159**	**3,561**

* Note: The figure for the Sevenoaks Urban Area includes 500 dwellings given outline consent at West Kent Cold Store.

To ensure new development is supported by access to key services and transport facilities, development will be focused primarily on existing urban areas, with Sevenoaks (urban area) (approx 1,331 dwellings), Swanley (approx 660 dwellings) and Edenbridge (approximately 411 dwellings) earmarked to accommodate the majority of new dwellings. The remainder of the district, including Local Service Centres (New Ash Green, Otford and Westerham) and Service Villages (Brasted, Crockenhill, Eynsford, Farningham, Halstead, Hartley, Hextable, Horton Kirby, Kemsing, Knockholt Pound, Leigh, Seal, Sevenoaks Weald, Shoreham, South Darenth, Sundridge and West Kingsdown), will need to provide 1,159 dwellings between them, although the great majority of these additional dwellings are already committed.

Development in Local Service Centres and Service Villages will be of a scale consistent with the size and relative sustainability of the settlements and meeting the needs of the local community. New Ash Green village centre will be regenerated to improve the quality of the built environment, thereby meeting the needs of the local community. In other locations, development will only take place where it can be demonstrated that such development is compatible with policies for protecting the Green Belt and AONB.

The approach to employment and retail development is to retain existing provision in the urban centres of Sevenoaks (urban area), Swanley, Westerham, and Edenbridge, in addition to defined major developed sites at Chaucer Business Park (Kemsing), Glaxo Smith Klein (Leigh), North Downs Business Park (Dunton Green), Fort Halstead (Halstead) and the Local Service Centres.

It is proposed that provision will be made within the Sevenoaks LDF (emerging) for additional employment land at Swanley (approximately 8ha) and additional retail floor space in Sevenoaks town centre (approximately 4,000 sq m). In rural areas small-scale business development and rural tourism proposals will be supported provided they can be shown to be compatible with policies for protecting areas designated as Green Belt and/or AONB.

The Core Strategy promotes the use of Travel Plans, supports improvements to enhance the safety and convenience of public transport and seeks improvements for pedestrians and cyclists to reduce

[11] Source Sevenoaks District Council

dependence on travel by car. Schemes to improve public transport, walking and cycling facilities are developed in the SDST. The Core Strategy also requires new development to take account of the need to improve air quality and create safe, inclusive and attractive environments.

Where new development creates an additional requirement for new highways/transportation infrastructure, it will be expected to provide or contribute to the additional infrastructure requirement.

The current level of proposed development in Sevenoaks district in the existing Local Plan and emerging LDF does not support or justify the development of a major transport model. Rather, the scale of planned growth across the district will need to be tested on a development-by-development basis using standard junction and route modelling techniques to examine and assess impacts on the local road network and junctions within agreed scope of the Transport Assessment for a particular development, where required. However, the need for a District Transport Model will be constantly reviewed within the lifetime of the SDST.

5.5 Public Engagement

Through community involvement, as part of the statutory planning process or through community liaison initiatives. Opportunities will be created for members of the public to make their own contribution to enhancing the sustainability of Sevenoaks district.

Accordingly, local residents, businesses, schools and other organisations are encouraged to seek consensus on local problems and:

- **Contribute to and comment on emerging proposals for transport and major development schemes in the strategy corridors**
- **Develop their own transport plans and initiatives to improve transport choices and reduce traffic levels**
- **Consider transport issues within a local health improvement programme**

6.0 Strategy Development, Aims and Objectives

6.1 The Strategy Development

This Strategy aims to identify key transport issues affecting Sevenoaks district now and during the lifetime of the Strategy (and LDF Core Strategy) period so that they can be taken forward into the next Local Transport Plan for Kent (2011-2016) and the Sevenoaks LDF. The transport issues identified within this Strategy must be taken into account by developers, bus companies, train companies, Network Rail and the Highways Agency when considering transport issues within the district now and in the future.

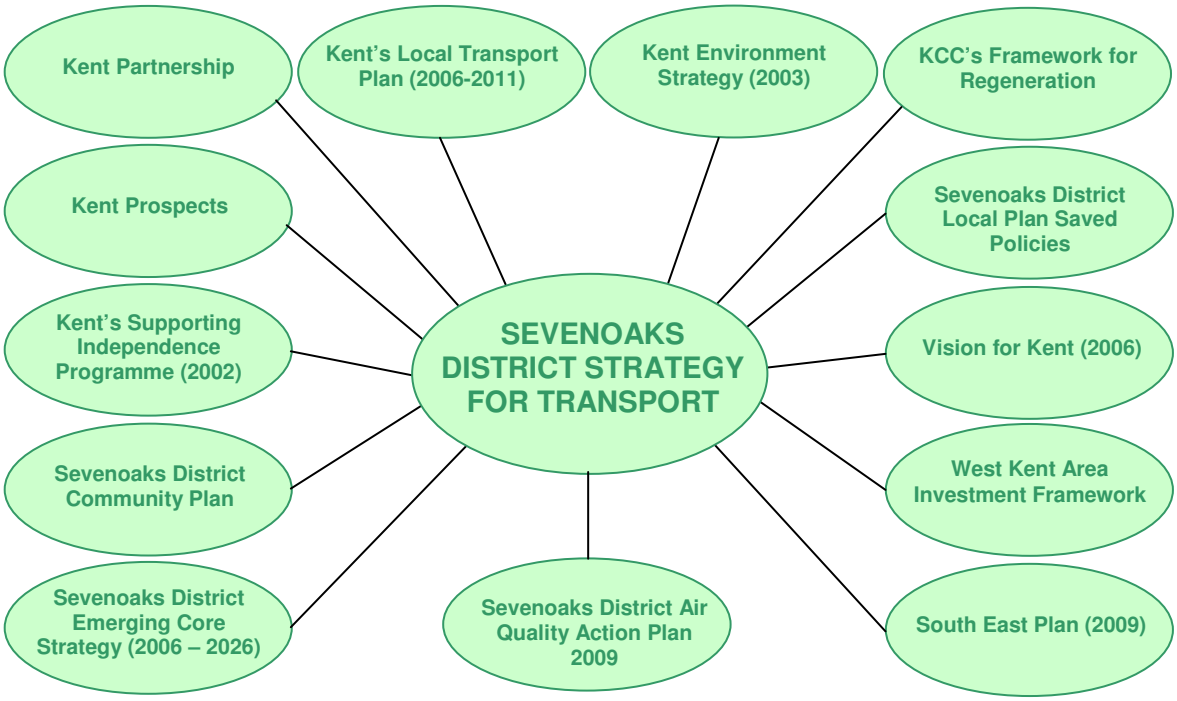
The Strategy document is made up of three specific parts:

1. **The Strategy Document**
2. **The Strategy Appendices & Figures**
3. **The Strategy Implementation Plan**

KCC and SDC have worked closely to produce this Strategy as part of the development of Sevenoaks District Council's LDF and the next Local Transport Plan for Kent (2011-2016).

The SDST has been developed in relation to relevant national, regional and local policies and other related strategic documents. The main policies and strategies linked to the SDST are summarised as follows:

FIGURE 4: Main Policies and Strategies Linked to the SDST



6.2 The Strategy Aims

The key aims of the Strategy are to promote an integrated transport network that:

- **Improves accessibility to jobs and services for all sections of the community**
- **Reduces congestion**
- **Improves safety**
- **Reduces the impact of transport on the natural and built environment**
- **Protects and enhances the District's position as an attractive location for business and investment**

6.3 The Strategy Objectives

In order to achieve these aims, KCC and SDC will work with key partners (such as the Highways Agency, Network Rail and bus and train companies) and all sectors of the community to pursue the following objectives:

- **Reduce the need to travel and the distance people need to travel**
- **Where there is a need to travel, enable people to be less dependent on cars for their travel needs**
- **Maximise the efficient use of existing infrastructure**
- **Divert traffic away from sensitive areas**
- **Encourage the integration of transport modes**
- **Reduce the effects of traffic and transport on air quality**
- **Improve road safety for all users**
- **Improve safety and security for all public transport users**

This requires investment in public transport, walking and cycling to make these modes more attractive and to reduce the reliance on the private car. At the same time, existing infrastructure must be maintained, managed and improved to ensure that this valuable resource can be used safely and effectively.

The integration of this strategy with the LDF Core Strategy will ensure that development is located where there is a range of good services and good public transport provision. As well as identifying existing transport issues, the transport impacts of the proposed distribution of development in the LDF Core Strategy have been assessed in preparing this strategy.

6.4 The Spatial Priorities for Transport Investment

The SDST has had regard to existing issues and the potential impacts of the policies and proposals of the emerging LDF Core Strategy in identifying spatial priorities for investment in transport infrastructure.

The spatial priorities for transport investment in order are:

1. **The urban areas of Sevenoaks, Swanley, and Edenbridge**
2. **Along principal transport corridors**
3. **Local Service Centres**
4. **Smaller settlements and rural areas**

For the purpose of the SDST, the main transport corridors in Sevenoaks district are identified as M20, M25, M26, A20, A21, A25, A225, A224, B2042, B2026 and all currently operational railway lines.

The following sections of this document identify the broad and spatially specific issues associated with different modes of transport and particular consequences of existing transport patterns in Sevenoaks district. Potential transport constraints to the delivery of the LDF Core Strategy vision and the proposed distribution of development are also identified. These sections identify a range of initiatives that may be employed to tackle existing and potential transport problems.

The sustainable transport options section of this Strategy considers the alternatives to the private car and sets out the future transport agenda for Sevenoaks district. It is the development of the alternative transport options that form the basis for identifying transport priorities and preparing specific schemes that will be taken forward in the LTP preparation process. Details of these schemes are set out in the Implementation Plan to this strategy.

7.0 Key Transport Issues & Development Pressures

7.1 Introduction

Sevenoaks district faces the challenge of accommodating relatively limited increased travel demand in a sustainable way while maintaining the area's economic competitiveness and vitality. Sevenoaks district must maintain and enhance its attractiveness to new business as an accessible location by building on its existing strengths, and offer an improved range of transport opportunities. In the long term the alternative of carrying on with traditional approaches will undermine the district's position as traffic levels rise, congestion grows and its existing locational advantage erodes.

Protecting the quality and character of the district's environment, whilst improving accessibility to jobs, shops and services in rural areas, is a key challenge for this strategy and for the Local Development Framework.

The district's local economy is not dominated by any large employers, although there are four designated 'Major Developed Sites' in the Green Belt (Chaucer Business Park, Kemsing; Glaxo Smith Klein, Leigh; North Downs Business Park, Dunton Green; Fort Halstead, Halstead). In addition, there are a large number of small and medium sized enterprises operating in the district.

The district's excellent proximity to London, adjoining counties and the rest of Kent has promoted significant levels of outward and inward commuting mainly by train. Good access to the M25, M20, A20, A21 and A25 has also promoted inward and outward commuting by car, which is currently the preferred form of transport, placing tremendous pressure on the strategic and local road network during the peak traffic times of the day.

7.2 Development Pressures

Although the South East Plan does not propose major development in Sevenoaks district, it is possible that the impacts of development in neighbouring sub-regions, in particular Kent Thameside and Ashford, will be felt on the transport network in Sevenoaks district. Additional journeys by private car resulting from future development in Sevenoaks district and in neighbouring authority areas will need to be accommodated by existing road infrastructure and the limited committed improvements. Through the LDF process, the Highways Agency have raised concerns about the impact of proposed development at Swanley on the M25 at junction 3. Basic modelling work will be undertaken to assess the potential impact of proposed development in Swanley on the Strategic Road Network.

Sevenoaks (urban area) and Swanley were identified by the Sevenoaks Transport Study (2007) as key public transport nodes in the district **(see Figure 5).** Sevenoaks urban area functions as the principal town centre within the district. It is a vital and viable town centre with a good range and choice of comparison goods retailers. The emerging LDF Core Strategy seeks to maintain and enhance Sevenoaks' position and proposes the development of additional retail floor space in the period to 2026.

The Core Strategy recognises that Swanley town centre is in need of regeneration so that it can better meet the needs of the people it serves. Edenbridge town centre provides a range of local shopping serving the town and surrounding areas. This role will be maintained through the emerging LDF Core Strategy.

Many comparison retailers in Sevenoaks district compete with Bluewater, just off the M2 in Dartford, Lakeside, in Essex off the M25 by the Dartford Crossing, Bromley and Tunbridge Wells which are all within 20 miles of Sevenoaks town centre and easily accessible by car. The north of Sevenoaks district, with a population of 41,809[12] lies within 8 miles of Bluewater. Outward travel by car for certain shopping trips commonly falls outside the weekday peak traffic pressures but it does introduce seasonal network traffic pressures and Saturday mid-day pressures.

[12] Office of national Statistics (ONS) Census 2001

Land use patterns and the rural nature of the district continue to encourage the use of the private car, and the distances involved do not allow for a high use of non-motorised modes. Lack of significant parking pressures in town centres and low density development do not support a good local public transport network. The focus of out-commuting to Central London supports the rail services network, which has in turn resulted in severe overcrowding on many trains. Further reference to the external pressure on Sevenoaks districts' transport system is made in **Appendix 02** of this Strategy.

7.3 Transport Pressures

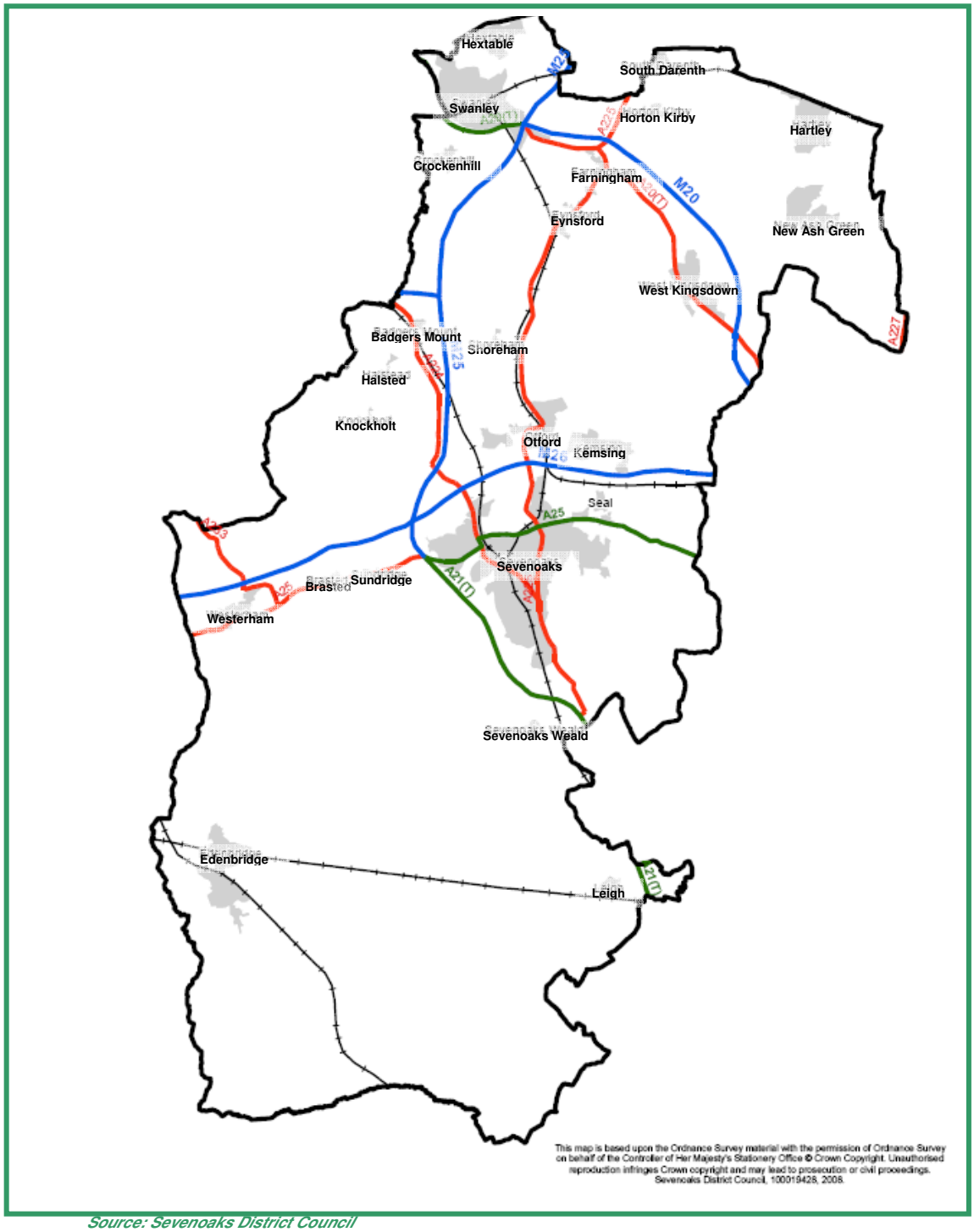
The Sevenoaks District Transport Study (2007) identified the following priority transport issues in Sevenoaks district:

- The main concentration of congestion is around Sevenoaks Town and Swanley
- There is heavy dependency on rail for commuting. Further improvements to services are needed
- There are major gaps in the current bus network to the north east of the district, as well as poor access to and from the predominately rural south of the district
- Provision for cyclists and pedestrians is generally poor
- Reliance on the private car in rural areas
- The ageing population will result in increasing reliance on community transport
- Parking problems exist around commuter stations and in town centres
- Air quality is poor in a number of areas, including the whole of the Strategic Road Network.

Development can contribute to both the prosperity and to the general amenity of an area. However as pressures on both the transport system and on the environment in general increase, it becomes more important to ensure that not only land-use patterns, but also each individual development for which Planning Consent is granted, is as sustainable as possible.

This means that, even where there are no other Planning or environmental issues, the Transport Impact of all but the smallest development will need to be assessed at the Planning Application stage, either through submission of a Transport Statement or, if transport impact is likely to be significant, a full Transport Assessment. Further guidance on Transport Assessments is set out in the Appendices to this Strategy.

FIGURE 5: Main urban Centres and Principal Road and Rail Transport Network in Sevenoaks District



Source: Sevenoaks District Council

8.0 Roads, Traffic and Congestion

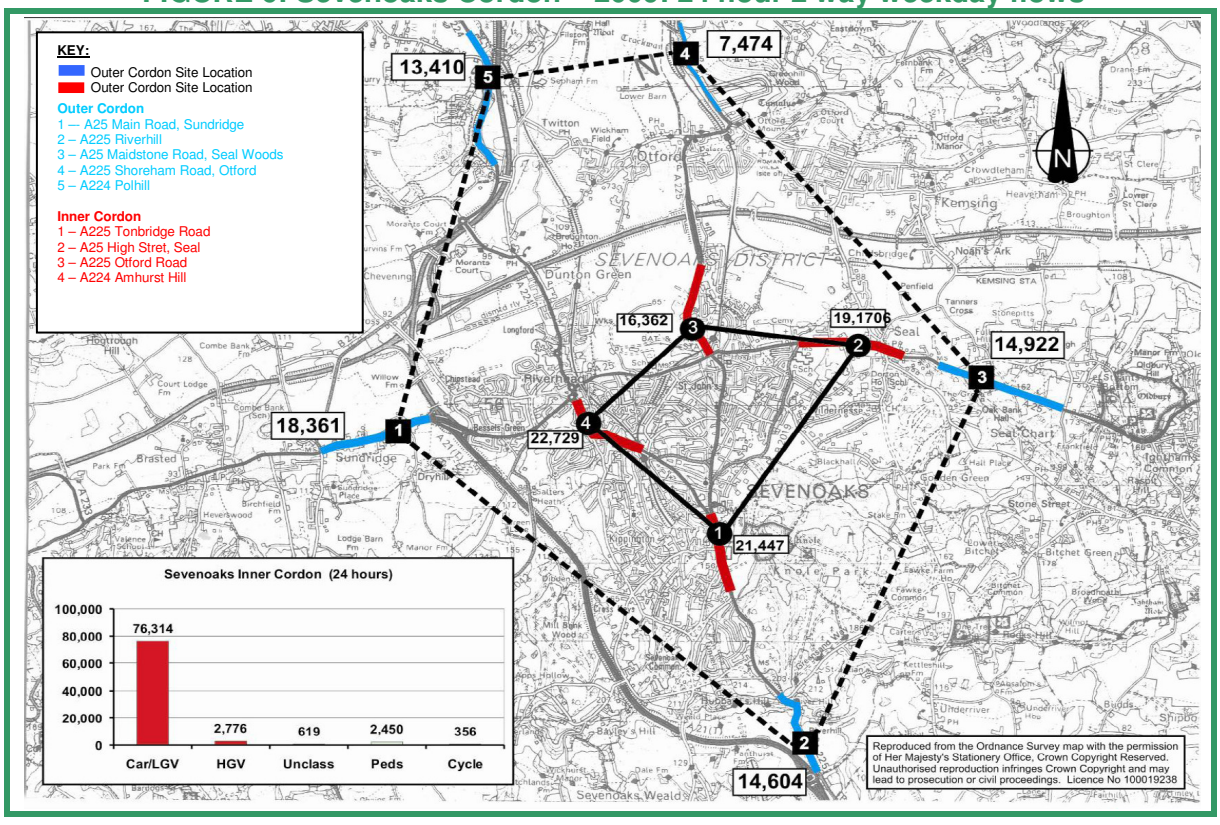
SDST Congestion Relief Priority Initiative	Ranking of Key Initiative Objectives			
	Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
"Develop a Traffic Management Control system and introduce Intelligent Transport Systems that cover the high volume main road network in Sevenoaks district and Sevenoaks Urban Area and Swanley town centres."	4	**1**	3	2

8.1 Roads - Network Management

Responsibility for the motorway and trunk road network within the Sevenoaks district falls with the Highways Agency (HA), whereas local roads are the responsibility of KCC. Good partnership working between KCC and SDC is an essential part of the day-to-day management of the overall network to ensure that network problems and capacity issues are kept to a minimum and mitigated, where possible. A partnership approach between these agencies is crucial to informing and determining future planning requirements and decisions.

Mobility and transport is an integral part of society and is a key issue in a predominantly rural area as characterised by Sevenoaks district. Increasing car ownership and usage in line with national trends result in a high dependency on the private car to satisfy movement needs. The resulting increase in traffic volumes and road congestion contribute to (and create) a poorer quality environment. The car is a convenient and versatile means of transport for many, but at increasing social, environmental and economic costs.

FIGURE 6: Sevenoaks Cordon – 2009: 24 hour 2 way weekday flows



Source: KCC Travel Report 2009

The Inner Cordon, the extent of which is defined in Figure 6 above, comprises four sections of the local highway network, as follows:

- Site I1: A225 Tonbridge Road
- Site I2: A25 High Street, Seal
- Site I3: A225 Otford Road
- Site I4: A224 Amherst Hill

The strategic road network, as defined by the M25, M26, M20 (Motorway network) and the A20 and A21 (trunk road network), ensures that the Sevenoaks district is highly accessible by road. As a result, Gatwick and Heathrow airports, the Channel Ports and the Channel Tunnel Rail Link are all within easy reach of residents of Sevenoaks district via the extensive road network.

The M25, one of Europe's busiest motorways, is subject to approximately 200,000 vehicle movements a day and suffers from severe congestion at peak periods, particularly between junctions 5 and 7. This congestion can impact on the A25 through Sundridge, Brasted, Westerham and the surrounding local road network. The Highways Agency has scheduled to widen the section of the M25 between junctions 5 and 7 through the introduction of a system to allow use of the hard shoulder by traffic during peak times (otherwise known as Managed Motorways). The Highways Agency has been considering options to improve the traffic flow from Junctions 5 to 7 since June 2008 and have been working on design arrangements to prepare for works to introduce the scheme after the London Olympics in 2016.

The M25, M20 and M26 motorways and the A21 serve as bypasses for Sevenoaks urban centre. However, the absence of east-facing slip roads to the M25 prevents access from the south to the M26 and the M20. As a result, the A25 is the most convenient alternative route through the north of Sevenoaks urban centre. The situation leads to congestion on the A25 at peak times, in addition to when problems are encountered on the M25/M26, resulting in traffic diversions being implemented via the A25. Both the trunk network and inner town road network experience heavy traffic volumes during peak periods, causing congestion and air quality problems.

The installation of east-facing slip roads to the M25/M26 could provide considerable capacity relief for the A25 and is a key consideration for this Strategy. The issue is currently being reviewed by the Highways Agency and options are under consideration for wider public consultation. KCC and SDC will work with the Highways Agency to find an appropriate solution to this issue. As part of this work, it will also be necessary to investigate whether the implementation of east-facing slips lead to a reduction in levels of congestion in certain locations, with a corresponding increase in traffic volumes on other parts of the highway network.

The M25 Orbit Multi Modal Study (2003) recommended that consideration be given to the construction of additional slip roads between the M26 and A21. The Secretary of State accepted this recommendation and the Highways Agency subsequently commenced work to further develop an appropriate scheme. It is hoped that the Highways Agency will be undertaking traffic analysis to establish the flows and destinations of traffic on the A25 to fully understand the benefits or otherwise to nearby settlements.

Although it has since been superseded by the South East Plan, policy TP2 of the Kent and Medway Structure Plan (2006) supported the introduction of slip roads to connect the A21 and M26 was:

> *"To enable a direct link between the M26 and A21 trunk road and thus*
> *` relieve the settlements on the A25 from through traffic"*

The A21 links the Hastings/Bexhill and Tonbridge Wells/Tonbridge conurbations to the M25, J5 and the trunk road network. It fails to link to the M26 because of the absence of east-facing slips. The A21 is administered by the Highways Agency rather than KHS because of its strategic importance. There is a continuing programme of investment, principally on dualling the remaining single carriageway sections. The first programmed improvement to the A21 is to upgrade the section between Pembury and Tonbridge in order to relieve congestion, provide an improved transport link

between Sevenoaks district and Tunbridge Wells and to improve accessibility by private car and public transport from Sevenoaks urban centre to Pembury Hospital.

An Implementation Plan is required to sit alongside and complement the SDST and LTP. The KCC LTP3 is currently under preparation and, once approved, will replace the extant LTP (LTP 2). The implementation plan will act as a detailed business plan for implementing the delivery of infrastructure projects set out in both the LTP and the SDST. Specifically, the Implementation Plan contains a description of the measures or packages of measures that will be delivered, where they will be delivered, their estimated costs, where the funding will come from, any risks or expected difficulties, and what objectives and targets the measures will be meeting.

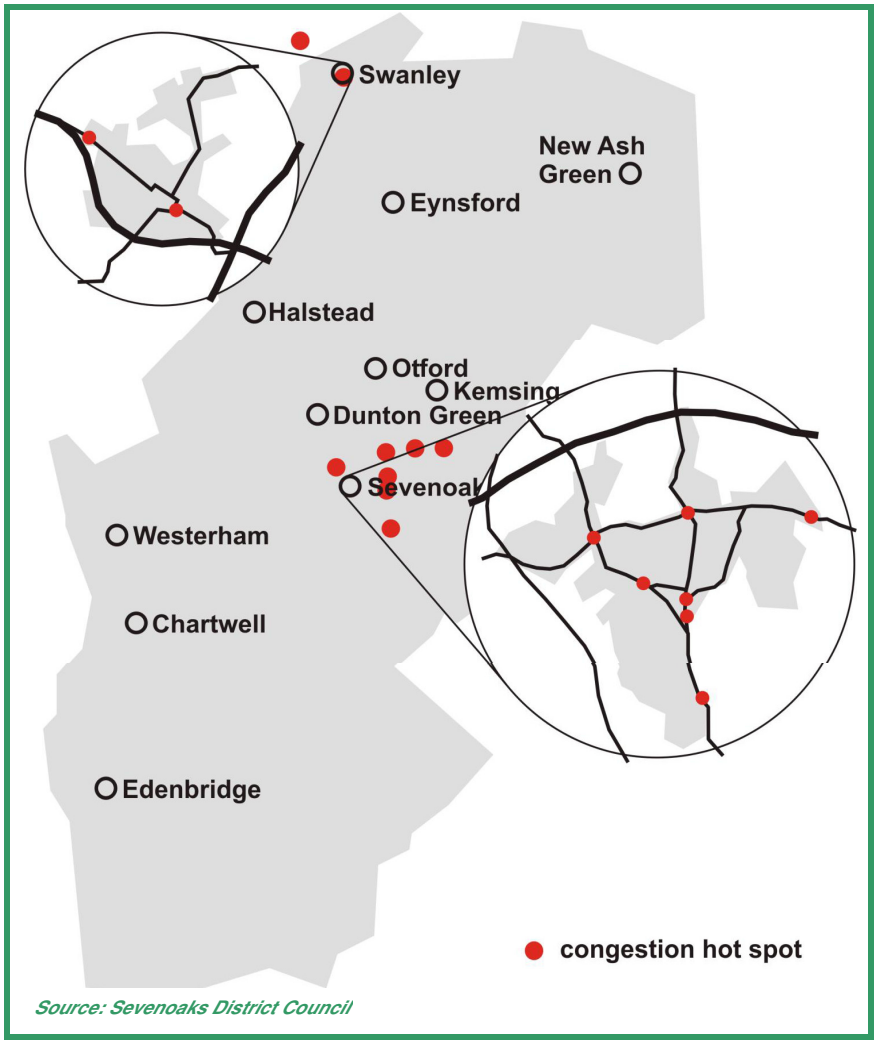
Although the Implementation Plan will cover the 17 years from 2009 to 2026 where implementation is heavily dependent on major interventions requiring a substantial planning timescale, it is appropriate for the plan to extend beyond its own plan period for these measures, reflecting the length of time needed to work up some interventions and gain approvals. In addition to the Implementation Plan, KCC will develop and manage a more detailed annual programme of specific schemes, which will be consistent with the Implementation Plan.

8.2 Congestion on Local Roads

Although the main congestion pinch-points are located on the motorway network, in particular sections of the M25 and at key junctions, there are a number of local congestion points.

The main congestion locations within the Sevenoaks district are around Sevenoaks urban centre and Swanley. The principal hotspot locations bulleted below (and shown in Figure 7), congestion is generally most pronounced during peak-hours (AM and PM).

FIGURE 7: Congestion Hotspots in Sevenoaks District



Source: Sevenoaks District Council

The main "Congestion Hotspots" are at the following locations:

- ***A25 Bat & Ball signalised junction***
- ***A25/A224 roundabouts, Riverhead***
- ***A224 Dunton Green to Riverhead***
- ***A224 London Rd/Hitchen Hatch Lane (near Sevenoaks Station)***
- ***A25 High Street, Seal***
- ***A225 High Street, Sevenoaks Town Centre***
- ***A225 Tonbridge Road, Sevenoaks Town (outside Sevenoaks School)***
- ***A225 Dartford Road j/w B2019 Seal Hollow Road (peak time delays)***
- ***B2173 High Street j/w Goldsel Road, Swanley***
- ***B2173 London Road j/w Birchwood Road, Swanley***

8.3 The impact of new development during the plan period (2006-2026)

The scale of housing development proposed in the Sevenoaks LDF Core Strategy is relatively limited (3,561 dwellings between 2006 and 2026). More than half of the proposed housing requirement for the period 2006-2026 has either already been built or granted permission since 2006[13]. Given the rather limited scale of residual (fewer than 95 dwellings per annum across Sevenoaks district), housing development proposed during the plan period of the emerging LDF, it is considered that the forecast population increase within Sevenoaks district will not significantly increase levels of congestion on the motorway and trunk road network within the district as a whole. KCC and SDC have worked together, and will continue to do so, to assess the impacts of the scale and distribution of development proposed in the LDF Core Strategy.

Clearly the detailed impacts of development proposals on the local network will need to be assessed as part of the statutory development control process. In some instances, the granting of planning permission for new development may be conditional on the implementation of specific transport mitigation measures that have been agreed through consultation with Kent Highway Services.

In addition to projected figures for growth within the Sevenoaks district, the cumulative effects of development proposed to be accommodated within neighbouring districts and sub-regions, in particular the Thames Gateway, and the associated implications for possible increases in the volume of traffic using the highway network must also be taken into consideration. An ageing population that is increasingly mobile will also exert an influence over the level of increased demand for travel and access to modes of transport.

Kent County Council and Sevenoaks District Council have worked to assess the impacts of the scale and distribution of development proposed in the LDF Core Strategy. The scale of development proposed is not felt to warrant a full transport model. However, basic transport modelling has be carried out for development in Swanley, where the Highways Agency has expressed concern about the impacts of development on the Strategic Road Network. This provides an indication of the likely transport impacts of the scale of development proposed. The information has been used to make a judgement about the range of public transport, walking and cycling improvements required to support development in Swanley.

Consideration of all future local road demand in Sevenoaks district and rebalancing transport provision to meet future demand is set out in the local and regional growth projections contained in the South East Plan, Kent Environment Plan (2003), Kent's Local Transport Plans (2006 – 2011) and emerging LTP3 (2011 – 2016). Following these strategies, the focus for Sevenoaks district in this Transport Strategy should be tackling congestion on the Strategic Road Network and those local congestion 'hot spots' identified above and improving road safety at locations identified in the 'Road and Travel Safety' section.

[13] SDST Table 2 of Chapter 7: Context

Sevenoaks District focus in all these planning documents can be reduced to the following strategic road transport issues:

- **Traffic capacity and congestion on M26, M25, and A21 Motorway and Trunk Road network**
- **Traffic capacity and congestion on the A25, A224 and A225**
- **Traffic capacity and congestion issues in Sevenoaks and Swanley Town Centres**
- **Road safety concerns on County road network**
- **Rural road network capacity and safety issues in the villages in the District**

Whilst the identified road congestion "hotspots" can be subject to serious traffic delays, the congestion periods are normally confined to the peak traffic times of the day. Outside peak traffic times there is usually minimal peak-hour spreading of the problem.

The SDST primarily sets out to reduce these traffic pressures by providing and investing in the alternative modes of transport to encourage and attract people out of their cars for journeys made at these times of the day. In parallel, the SDST also sets out to create more capacity within the existing road network through better management of the existing road space through new technology - Traffic Management Control system and Intelligent Transport Systems.

Future improvements that will benefit users of the private car will only be progressed if they are considered the most effective means of achieving the strategy's objectives, in particular reducing the harmful environmental effects of traffic on air quality.

The SDST aims to maintain and enhance the performance of the existing road network and to promote more efficient use through application of the following measures:

- **Working with the Highways Agency to find an appropriate solution to congestion on the A25 and access to / egress from the M25 / M26**
- **Ensuring that the effects of measures implemented to reduce congestion between junctions 5 and 7 of the M25 are monitored**
- **Working with the Highways Agency to ensure that new development does not have an unacceptable impact on the strategic road network**
- **Prioritising investment in the local road network at existing or potential congestion hotspots, including Air Quality Management Areas**
- **Develop a Traffic Management Control system and introduce Intelligent Transport Systems that cover the high volume main road network in Sevenoaks District and Sevenoaks and Swanley town centres**
- **Using traffic management to prevent the inappropriate use of different types of roads**
- **Encouraging the appropriate use of the road hierarchy in urban and rural areas to reduce traffic levels, rat-running, traffic speed and danger on local roads**
- **Making more use of traffic signal control to manage and direct traffic**
- **Using new technology to provide better travel information for drivers**
- **Making best use of the available road space, including reallocating it to other modes of transport, such as bus and cycle lanes where physically possible**
- **Taking account of all road users in the design of highway improvements**
- **Encouraging local people and organisations to reduce traffic demands, particularly at peak times, through car-journey sharing or changing their journey times**

Further reference to roads, traffic and congestion issues and justification for the initiatives is made in **Appendix 05** of this Strategy.

9.0 Bus, Community Transport and Taxi

SDST Improving Accessibility Priority Initiative	Ranking of Key Initiative Objectives			
	Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
"Develop a Quality Bus Partnership or similar local agreement and improve local bus services and infrastructure to support east-west and north-south services and link services to Pembury Hospital, Gatwick Airport, the railway stations and rural villages, and Sevenoaks and Swanley town centres."	**1**	2	4	3

9.1 Existing Provision

High levels of car ownership, associated with the relative affluence of the district, and the dispersed rural nature of much of the population of Sevenoaks district result in bus operators finding it difficult to run commercially viable bus services. There is therefore currently a combination of contracted and commercial bus routes within the district. Nevertheless, of the 44,364[14] households in Sevenoaks district, 14.6% or 6,491[15] do not have access to a private car/van.

Sevenoaks district is served by a large number of bus routes, although the vast majority of these services are low frequency with 2-hourly services and some with only 1 run per day. There are also a number of peak hour and school transport only services. Given its rural character, the service frequency provided by local bus operators, particularly on local routes, are commonly perceived to operate at an intermittent level of service. Accordingly, patronage levels are below national trends. The rather localised nature of certain services can also impact on connectivity.

Improved public transport services will be important in ensuring that future development does not lead to road traffic congestion on strategic and local roads of Sevenoaks district. The emerging LDF Core Strategy proposes that Sevenoaks (urban area), Swanley and Edenbridge will be the primary locations for future housing, employment and retail development. With increased populations in the most urban settlements across Sevenoaks district, it may become more economically viable to provide new and improved services between and within these settlements. This may help to ensure that services are more affordable, faster and more reliable and, therefore, more attractive to residents. To increase bus patronage levels over the plan period of the LDF, there is a need for improved waiting and interchange facilities to be provided.

In many Local Service Centres development proposed for the period 2006 – 2026 is unlikely to lead to significant increases in population, whilst in more rural settlements it may be anticipated that a lack of development, coupled with decreasing average household sizes, will lead to falling populations. This is unlikely to encourage private bus operators to provide new and improved services. Unless there are increases in subsidy towards bus services, it seems unlikely that adequate bus services to meet the needs of all those living in rural areas can be provided. Innovative solutions to providing access to shops, jobs and services by community transport in rural areas and some Local Service Centres, for example dial-a-ride, will need to be developed.

In order to accommodate the current and future housing and employment growth in Sevenoaks district, more efficient ways of getting people to where they want to go which reduces the reliance on the use of the private car is essential. Whilst trams and other light rail systems have been built elsewhere in the UK, Sevenoaks (urban area) does not have a large enough urban area with sufficient demand and congestion to justify the high expense of a tram network. Therefore, the bus lies at the heart of our planned integrated transport network.

[14] 2001 Census, Office of National Statistics
[15] 2001 Census, Office of National Statistics

The improved bus network for Sevenoaks district will be formed around integrating and connecting four different types of bus service, bus rapid transit, inter-urban services, local buses and rural transport.

9.2 Bus Rapid Transit

Bus Rapid Transit aims to provide a service that is of a higher quality than an ordinary bus service through improvements to infrastructure, vehicles and scheduling such as 'Fastrack' in Kent Thameside. The improved features include sections of bus only routes to bypass queues, a strong image/brand, and very frequent service on a relatively direct route and off bus ticketing. These are longer-term aspirations in this strategy, subject to proven viability. A linked service to Pembury Hospital and Tunbridge Wells could be an opportunity to provide such a service along a defined route.

9.3 Local Bus Services

The SDST sets out over its 17 year horizon to develop local bus services which penetrate into and serve local communities and then feed into the rapid transit and inter-urban services at key locations and via a town centre hub.

Bus services on key corridors into Sevenoaks (urban area), Swanley and Edenbridge town centres, as the principal locations for development in the LDF, need to be affordable, faster and more reliable, while rural services also need to be more flexible and responsive to local needs. Improved links to other areas and nearby centres will also be encouraged.

Public transport must continue to provide for community and socially necessary services, particularly to cater for the aging population of the district, as well as offering a truly attractive alternative to some car journeys. Where it is not feasible to provide viable public transport services, especially in rural areas, the provision of community transport needs to be encouraged.

9.4 Rural Bus Services

Only a limited number of the routes operating in Sevenoaks district can be run commercially. This is largely due to the rural, low density character of the district which makes a viable bus operation at acceptable service frequencies difficult.

The SDST, and through the KCC transport policies and priorities, will seek to maintain rural services, promote better interchange with core services, look to expand the Kent Karrier services and identify areas that would benefit from new minibus schemes supported by volunteer drivers. As bookings for volunteer services are made via the KCC contact centre, this provides a method of monitoring the level of usage and responding to customer feedback and responses.

9.5 Inter-urban Coach Service

The SDST aims in the long term to investigate and implement where possible a network of direct coach services between our urban areas which may also serve Kent's ports and airports, future Park & Ride sites (if deemed appropriate during any future Parking Strategy – see 17.4) and other significant out of town locations. These will be especially implemented on those routes where rail does not exist as a viable option to some residents within Sevenoaks district.

9.6 Bus Interchange

The importance of intermodal interchange, both between private and public transport (Park & Ride, Kiss & Ride, cycle storage, pedestrian access) and between local and regional / national public transport modes (rail stations, airports) is a critical issue that must be given appropriate attention. The synchronisation of bus and rail operator timetables requires partnership working of the various parties involved, while the introduction of PlusBus (add-on to the rail ticket for unlimited bus travel) has been successful in Tonbridge and Tunbridge Wells but this is not currently available in the

district. It is, however, appreciated that Sevenoaks district will require an improved route network to justify its introduction.

A crucial element of an integrated bus network is the ability to change from one kind of service to another. Principal settlements have sufficient transport demands to necessitate the need for transport interchanges. The urban centres of Sevenoaks and Swanley fit with this description. Indeed, the Sevenoaks Transport Study (2007) recommended proposals for the development of an improved bus interchange in Swanley Town Centre.

Within Sevenoaks, the redevelopment of the train station in addition to a possible future edge-of-town park and ride site will enable better integration of rural bus services with the existing commercial bus network, providing that the viability of such proposals can be clearly demonstrated. The introduction of a transport interchange could permit the enhancement of rural bus services.

The aspiration is to provide an integrated bus rail interchange at Sevenoaks station, utilising the existing turning loop at the front of the station. All buses that serve London Road or Hitchen Hatch Lane (Mount Harry Road) will enter the station forecourt, pick up and drop off passengers and then return to the highway using bus priority installed in the traffic signals. At the time of writing, the proposal remains at a conceptual stage. Real time information for both buses and trains will be displayed at the interchange and within the station (possibly on the platforms) and signs will be displayed throughout the station directing passengers to and from the interchange.

Potential constraints relate to the fact that works to reconfigure Sevenoaks station will need to tie in with NSIP works that Network Rail and South Eastern will be undertaking at the station. It is likely that the station building will be extended slightly into the loop and therefore the loop may need to be redesigned. Bus Priority needs to be installed in the traffic signals. The signals may need to be redesigned as a result of changes to the forecourt.

9.7 Community Transport and Taxi Service

The SDST aims to develop on the existing system of taxi ranks so that they are only provided where there is likely to be demand for their use. Taxis will play a vital role in providing for home to school transport, where public transport provision is not viable.

Where rural bus services cannot provide a service to isolated communities an option will be to develop car-pooling and other community-based schemes, such as dial-a-ride, for the remotest locations. The SDST supports the improvement and extension of community transport services for people with limited mobility.

9.8 Making Bus Travel Easier

The SDST will ensure that initiatives to make the bus network more user-friendly are developed with public transport operators. These will build on recent national initiatives such as online personal journey planning so residents can not only find out where routes go but also consider if taking the bus is cheaper and better for the environment.

9.9 Kent Freedom Pass

The introduction of the Kent Freedom Pass scheme which costs £50 for an annual pass, provides unlimited bus travel in Kent to students aged between 11–16yrs (academic years 7-11) attending schools in Kent. It has proved extremely successful in overcoming cost as a barrier to travel and tackling congestion in Kent and Sevenoaks district where it has been introduced. In 2010 this will also be extended to include those children residing within Kent but travelling to schools in neighbouring districts and boroughs outside Kent.

9.10 Kentcard/Smartcard Ticketing

It is important to consider technological progress being made in making public transport travel seamless across the range of services available. Therefore the SDST considers that the expansion

of the Kentcard/ Smartcard as an 'Oyster Card' form of ticketing for all forms of transport and to enable booking of car club vehicles, car and cycle hire, car parking and toll charges to be integral to future public transport provision in Sevenoaks district and beyond.

9.11 Real Time Passenger Information

The strategy positively supports improvements and the expansion of information on service arrivals for bus and rail at the points of service. Taking advantage of new technologies, building on real time passenger information already installed elsewhere in the county and focusing further enhancements at key interchanges and on interurban public transport routes is required.

9.12 Over 60s Bus Concessionary Travel

Free travel for over 60s and disabled people is likely to become a KCC responsibility in 2011. The SDST looks to develop the existing concessionary travel system to improve and extend hours of operation of the scheme in Sevenoaks district. These services address the accessibility issues of people with special needs, but do not improve rural accessibility for the general public, a factor that the SDST will seek to address.

9.13 Quality Partnership Bus Schemes and Kickstart Bids

New initiatives will be developed with local bus operators to improve the image, reliability and overall attractiveness of services, many as part of a 'Quality Partnership' approach and by using powers in the Transport Act 2008. Through preliminary (and informal) partnership discussions that have taken place with Arriva, it is known that (in principle) Arriva would support a Quality Bus Partnership (QBP) in Sevenoaks district.

A key aspect of the QBP is the amount of investment committed to local improvements, such as bus lanes and bus priority at traffic lights, in addition to bus stop improvements such as raised kerbing and traffic restrictions known as bus stop "clearways". Under the partnership arrangement that already operates in other Kent districts, bus operators have invested in easy-access low-floor and environmentally-friendly buses and are improving the frequency, punctuality and reliability of their services.

The SDST sets out to achieve an improvement in bus services and facilities through:

Buses

- **Development of a Quality Bus Partnership and Kick-start schemes, where appropriate**
- **The development of new and improved bus and coach services**
- **Greater integration between bus services and other forms of public transport**
- **Modernising the Sevenoaks town centre bus station with high quality facilities and improving bus interchange facilities in Swanley and Edenbridge**
- **Improving the comfort and security of waiting facilities at bus stops throughout the district**
- **Introducing bus priority measures to reduce journey times**
- **Improving reliability where appropriate**
- **Improving the availability, clarity and accuracy of public transport information, including real-time information at interchanges and bus stops**
- **Hastening the renewal and improvement of the bus fleet with low-floor, clean fuel vehicles**
- **Developing new fare and marketing strategies**
- **Provision of the Kent Freedom Pass in Sevenoaks district**

Community Transport and taxis

- **Developing car-pooling and other community-based schemes, such as dial-a-ride, particularly to serve rural areas**
- **Supporting community transport services for limited mobility**
- **Providing taxis for home to school transport, where public transport provision is not viable**
- **Ensuring that taxi ranks are conveniently located and that the local taxi fleet is accessible to disabled people**

Further reference to bus, taxi and community transport issues and justification for these initiatives is made in **Appendix 03** of this Strategy.

10.0 Rail Travel

SDST Improving Accessibility Priority Initiative	Ranking of Key Initiative Objectives			
	Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
"Promote increases in train patronage by lobbying for service and station improvements. In combination with measures to promote alternative forms of transport to access stations, provide sufficient off-street parking at stations and controls in nearby streets."	1	2	4	3

10.1 The Local Rail Network

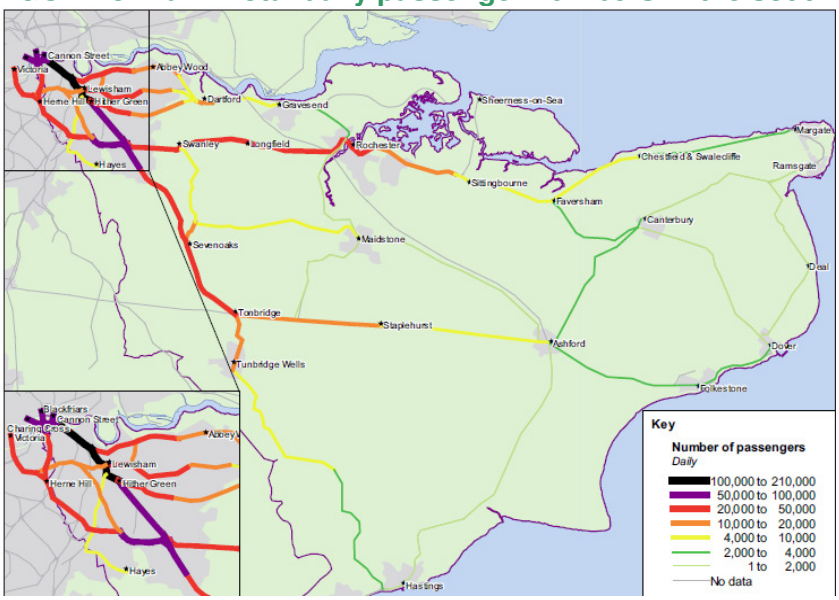
Sevenoaks district lies at a strategic point on the regional rail network served by six rail routes offering services to destinations in London, Kent, Surrey and Sussex.

As a result there is a strong emphasis on commuting to London, with a significant proportion by rail, as shown by the following statistics:

- ***34% or 26,600 of the district's resident population commutes to London***
- ***16.5% or 8,585[16] of the district's resident workforce commutes to London by rail***
- ***22% or 3,957[17] of Sevenoaks Urban Area's resident workforce commutes to London by rail***

Figure 8 (total daily passenger numbers) and Figure 9 (peak hour trips to London) show daily flows by route in 2002/03, as drawn from the South Eastern Regional Planning Assessment for the railway report (January 2007). It is anticipated that the market has grown since that time, but the broad picture of the relative importance of each route presented remains valid.

FIGURE 8: Rail - Total daily passenger numbers in the south east of England

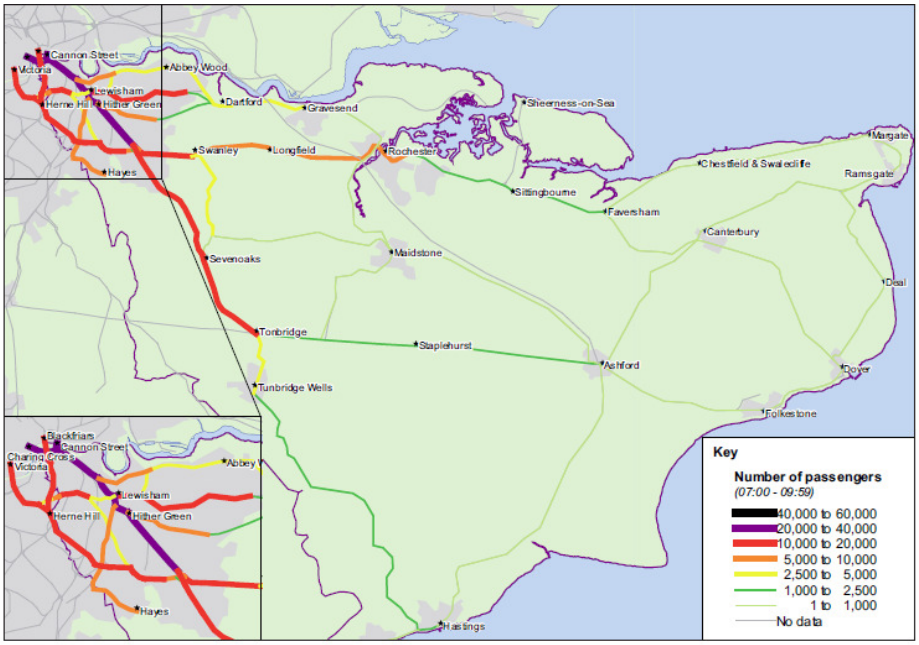


Source: South Eastern Regional Planning Assessment for the railway (January 2007)

16 2001 Census, Special Workplace Statistics, and Office of National Statistics

17 2001 Census, Special Workplace Statistics, and Office of National Statistics

FIGURE 9: Peak hour rail trips to London



Source: South Eastern Regional Planning Assessment for the railway (January 2007)

The total population of Sevenoaks district is 109,305[18]. The resident population in Sevenoaks district of all people aged 16-74 in employment is 78,405[19] which represents 71.7% of the total population. Due to high levels of rail commuting, the public transport mode share for travelling to work (16.5% or 8,585 passengers per working day) is the second highest in the County.

The Sevenoaks LDF Core Strategy document proposes that the majority of development in the district will take place in Sevenoaks (urban area), Swanley and Edenbridge, where some of the most frequent train services in Sevenoaks district operate. It is not anticipated that the support given in the Core Strategy for retention and enhancement of the employment land and retail offer in Sevenoaks district will result in declining levels of commuting to London by rail.

10.2 The issue of overcrowding of train services serving Sevenoaks District

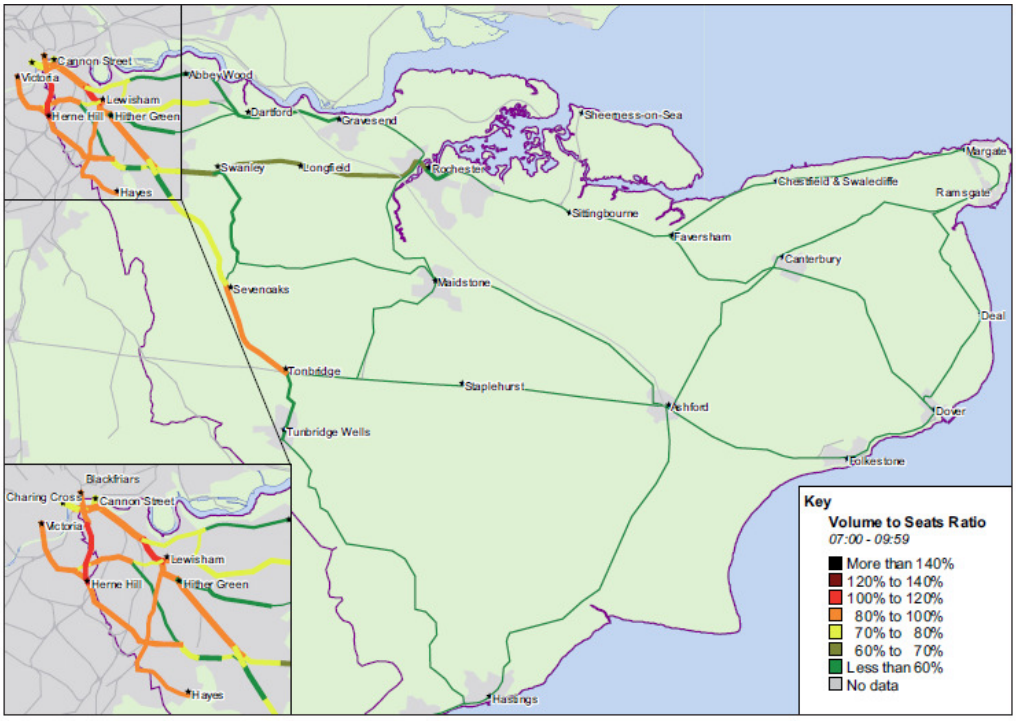
Almost all passengers boarding peak trains outside London, with the exception of Sevenoaks (and Chatham) find a seat available. On inner suburban services, the first stations inbound where passengers boarding have to stand are broadly Woolwich, Welling, Sidcup, St Mary Cray and Catford Bridge. Standing in crowded conditions is experienced on trains inward from Bromley South, Herne Hill, Lewisham and Greenwich.

Figure 10 overleaf sets out an estimate of number of people boarding morning peak period trains, and the proportion of those who find a seat, or have to stand, or who have to stand in crowded conditions.

[18] 2001 Census, Key Figures for 2001 Census, Office of National Statistics

[19] 2001 Census, Method of Travel to Work Statistics, (UV39 dataset), Office of National Statistics

FIGURE 10: Total rail passenger boardings, am peak: estimate of volume to seats ratio



Source: South Eastern Regional Planning Assessment for the railway (January 2007)

The issue of overcrowding is a product of the quick and frequent service between Sevenoaks and London that attracts a large number of commuters from a large area of West Kent. Network capacity is also a contributing factor, in particular because of the effect on the capacity of the line between Sevenoaks and Orpington, at Polhill Tunnel (two lines) which constrains the pathing of trains.

If passenger demand grows as forecast, crowding will be experienced inward from Sevenoaks on services from Hastings to London Bridge in the morning peak. However, it is considered there will remain large amounts of spare capacity in the off peak and in the contra-peak direction in the peak periods.

In the short/medium term, further investigation of the case for increasing peak and shoulder peak capacity from Sevenoaks and Tonbridge to London, to meet growing demand, should be considered and fed into annual reporting or future revisions of the SDST.

10.3 Enhancing the Benefits of Rail Services

For many, the existing rail network in Sevenoaks district and Kent will continue to be a vital service, influencing where people live and the quality of their lives.

It is important that improvements to the facilities at Sevenoaks district's stations and access to the stations by all modes is improved. Integrating rail travel with access by car, bus, walking and cycling is essential. It will also be important to explore the potential for new and exciting initiatives incorporating Smartcard technology to allow ticket-less integrated travel, cycle hire and storage and real-time journey information. The Sustainable Transport team within KCC will continue to work with organisations, businesses and education providers to promote sustainable modes of travel to / from the district's rail stations.

10.4 Thameslink

Thameslink is a government-funded £5.5bn programme of work to introduce new and improved stations, new track, new cross-London routes and new longer and more frequent trains with the objective of reducing overcrowding.

Under the Thameslink scheme, Network Rail will build new track, new stations, extend platforms and improve signalling. First Capital Connect will bring in a new fleet of trains and run the train service, parts of which will be jointly run with train operator Southeastern.

The Thameslink scheme will provide additional capacity through the Thameslink Tunnel to enable more services from north and south of London to access Blackfriars, City Thameslink, Farringdon and Kings Cross / St. Pancras directly. Currently only six trains per hour in each direction can pass through the tunnel but this will rise to 24 trains per hour in 2015 with 12 trains/per hour from 2012. Indications have been that services from Dartford, Ashford and Sevenoaks would use Thameslink from 2015, but it is likely that final service patterns will not be finalised until 2014.

In the short-term, the Thameslink scheme has led to the introduction of 23 new air-conditioned trains for the Thameslink route which are now in service. In the long term there will be increasingly more seats, more destinations, better stations, and - by the end of 2015 - a train through Central London every 2-3 minutes.

Construction at London Bridge will commence after the Olympic/Paralympic games and the full Thameslink capability is likely to be delivered some time after 2015. Information presented below provides coverage of the completions achieved in 2009, in addition to the planned completions by December 2011 and December 2012.

Completions by March 2009

- Preparatory work finished ready for stations at Farringdon and Blackfriars to be redesigned/redeveloped.
- Moorgate branch closed.
- New timetable in place offering new direct destinations from north Thameslink route stations to Kent and south east London
- Double the number of trains (up to 15 per hour) arriving at Blackfriars and City Thameslink stations in the rush hour, matching that of St Pancras and Farringdon
- New fleet of 23 four-carriage Electrostars (delivery completed January 2010)

Planned completions by December 2011

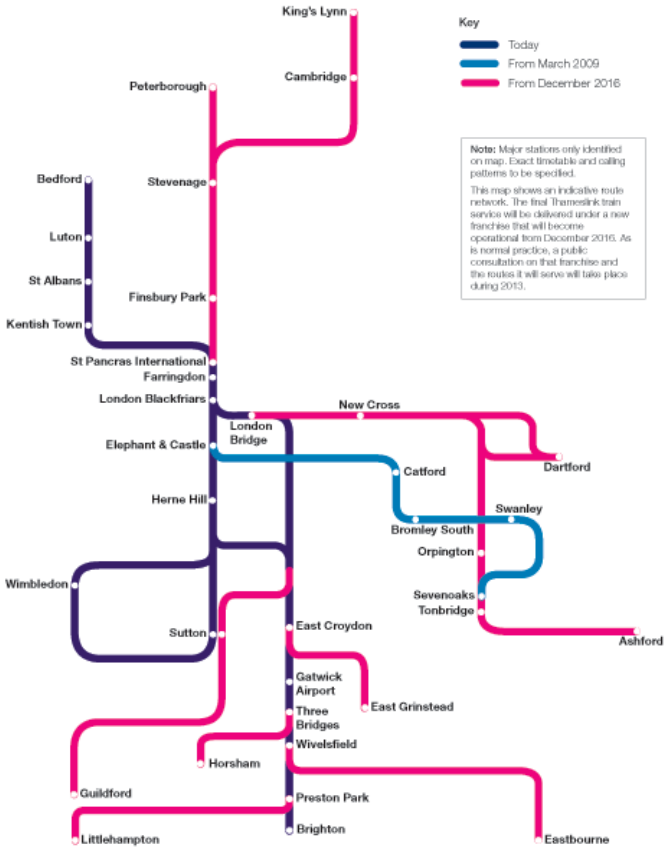
- Farringdon, Blackfriars and most stations on the Thameslink route main line capable of taking 50% longer, 12-carriage trains plus the capability for these to leave central London stations up to 16 times an hour at peak times.

Planned completions by December 2016

- London Bridge station redeveloped
- New fleet of trains
- Up to 24 trains per hour at peak times through central London
- An expanded network

Figure 11 (see overleaf) is an indicative map of how the First Capital Connect rail network could look by the end of 2016 as a result of the Thameslink project, though the actual train service that will operate has not yet been determined and will be the subject of development and consultation over the coming years.

FIGURE 11: Indicative map of how the First Capital Connect rail network could look by the end of 2016



Note: This map is only indicative of how the FCC network may look by the end of 2016.

Source: Source: http://www.thameslinkprogramme.co.uk/cms/pages/view/30

The future concern is that with Thameslink introduced in 2016 the residents of Sevenoaks district who, despite benefitting from an improvement to peak services through the Thameslink project, will lose a direct link to Cannon Street (the City), meaning commuters would have to change trains at London Bridge. The loss of the Sevenoaks to Canon Street service is the outcome of the recommended service pattern of the Route Utilisation Strategy (RUS) for Kent.

10.5 Crossrail

Network Rail has proposed to extend Crossrail from Abbey Wood to Gravesend post 2019, in its RUS for Kent, though funding arrangements have not been finalised. If the Crossrail proposal was delivered, commuters travelling between London and Sevenoaks (urban area) would benefit from the reduction in congestion on London's public transport system.

The new Crossrail line will significantly increase the capacity of services across London and provide services from Dartford, Sevenoaks and Ashford to the centre of London. This scheme will provide a significant improvement in the level and quality of accessibility from the Growth Areas of Kent to London and beyond. Construction commenced in 2007, with completion expected in 2012.

10.6 Route Utilisation Strategies

The forecast impacts of new housing development in Sevenoaks district have been taken into account in Network Rail's adopted and emerging RUS's that identify the needs for infrastructure and service improvements in the medium (2009-2019) and long (2020 – 2039) term.

The SDST recognises the importance of closely monitoring the objectives of the RUS to ensure that any proposed future service improvements takes account of the most pressing issues. For example, it will be important to understand major shifts in user travel patterns in Kent (especially the

continuing switch of commuters to east London destinations), as well as the rising trend of commuter traffic on the South East Main Line influenced by past and committed housing development. It is important that appropriate measures are implemented to assist in tackle issues of overcrowding within the Sevenoaks district.

A number of currently committed improvements, such as the introduction of domestic services on the High Speed One line and Thameslink works at London Bridge, will release sufficient capacity to run additional trains and longer trains on the Tonbridge Main Line, which serves Sevenoaks urban centre.

The Sussex RUS proposes that high peak trains on the Uckfield to London Bridge (via Edenbridge) line be lengthened to 8 car in the period 2009-2014 and again to 10 car in the period 2015-2019.

Despite these improvements, some overcrowding is forecast to be a problem on some high peak services from Sevenoaks district by 2019. This includes those services from Sevenoaks urban centre on the Tonbridge Main Line, for which the Kent RUS has identified no opportunities to increase capacity before 2019. Schemes that may provide additional capacity on rail services serving Sevenoaks district include dualling and electrification of the Uckfield to London Bridge line and extension of the London Underground / Docklands Light Railway to areas in South London currently served by suburban train services.

KCC will look to lobby for the reinstatement of off-peak half-hourly services on the Tonbridge / Redhill line by evidencing that the classification of Tonbridge/Tunbridge Wells as a 'Regional Hub' in the South East Plan strongly underpins the need for 'provision or potential to provide a range of multimodal transport services'.

There is considerable scope to encourage greater rail use for journeys other than those to and from London in the peaks, such as commuting into Redhill where there are wider links to the West Country and also Guildford, Reading, stations to the South of England and also Gatwick Airport. In 2009 South-eastern will begin operating domestic services on the High Speed One (CTRL) line from Ashford and stations in North Kent, including Ebbsfleet. This provides the opportunity to free up capacity on the Southeastern mainline with potential for more seats at stations in Sevenoaks district.

The SDST places considerable emphasis on working with partners to investigate the feasibility of lengthening platforms and providing more carriages to reduce overcrowding and increase capacity on the network.

The SDST aims to achieve an improvement in rail services through:

- **Maintaining and enhancing the frequency and quality of services, including reducing overcrowding**
- **Promoting train travel to a wider range of destinations, including via Redhill on the Tonbridge to Redhill line and lobbying to maintain services from Sevenoaks to Cannon Street**
- **Lobbying for dualling and electrification of the Uckfield to London Bridge Line**
- **Lobbying for infrastructure improvements that will provide additional capacity on the Tonbridge Main Line**
- **Provide an increase in the level of bus services serving Sevenoaks station,**

10.7 National Station Improvement Programme (NSIP)

Sevenoaks (urban centre) and Swanley stations are on the National Station Improvement Programme (NSIP). This presents opportunities to make rail travel a more attractive alternative to the private car for existing and future residents and to improve the accessibility of these stations by non-car modes.

KCC and SDC will work with Network Rail to ensure that improvements at these stations provide for more attractive environments for passengers, better information and improved interchange facilities. The local authorities will also lobby for improvements to Edenbridge stations and those in Local Service Centres and rural settlements.

10.8 Rail Objectives of the SDST

The Sevenoaks Transport Study (2007) purports that people living to the east of Sevenoaks district 'rail head'[20] into towns such as Sevenoaks and Swanley to take advantage of shorter journey times and less expensive fares. It might be expected that the introduction of High Speed One domestic services from December 2009 will have the impact of reducing some of this 'rail heading' into Sevenoaks district. However, additional station car parking will need to be provided at some stations in Sevenoaks district, especially those in Sevenoaks, Swanley and Edenbridge, to ensure that sufficient capacity is available to support future housing development.

Insufficient car parking at stations, combined with a lack of transport alternatives, can cause high demand for on-street parking in uncontrolled parking areas nearby. This can create accessibility problems for pedestrians and cyclists in areas around commuter rail stations and in town centres. Sevenoaks has the highest proportion of access by car of the larger stations in built-up areas within the RUS direct links to London, with 29% of passengers parking at or near to the station[21].

Parking on local roads around the Stations will need to be monitored to ensure that on-street parking does not increase. This strategy also aims to balance the provision of adequate parking at stations with the objective of reducing people's dependence on the private car and the impacts of commuters parking in nearby streets. Proposals to increase station car parking should, therefore, be combined with measures to improve accessibility by walking, cycling and public transport.

The SDST will promote the preparation of Station Travel Plans, as it is essential that passengers are encouraged to access the station using more sustainable modes where possible. The benefits of a Station Travel Plan is that it can bring together all the stakeholders with an interest in rail stations (rail industry, local authorities, passenger groups, bus and taxi operators, cyclists and others) to develop and agree common objectives and a coordinated approach to delivering them

The SDST aims to achieve an improvement in rail facilities through:

- **Improving the accessibility to stations serving the District by non-car means, including measures to**
  1. **co-ordinate bus and rail timetables, introducing through-ticketing and improving interchange facilities**
  2. **ensure convenient access to taxis at key public transport interchanges**
  3. **provide secure cycle parking at railway stations**
- **In combination with measures to promote alternative forms of transport to access stations, provide sufficient off-street parking at stations and controls in nearby streets**
- **Improving publicity on integrated services**
- **Improving passenger comfort, security and information at all stations.**
- **Working with South-eastern to develop rail station travel plans to bring together and promote all of the above**
- **Develop new walking and cycling links, wherever possible to rail stations within the Sevenoaks district**

[20] A railhead relates to people travelling into a town and to then commute onwards from it

[21] Source: South Eastern Regional Planning Assessment for the railway (January 2007). Ashford also has 29% of commuters parking at or near the station

Further reference to rail travel issues and justification for these initiatives is made in **Appendix 04** of this Strategy.

In parts of rural Sevenoaks district, rail connections provide higher levels of accessibility than local bus services. KCC propose to lobby Central Government to maintain existing and further rural support grants.

The SDST recognises the benefits that could be achieved by encouraging KCC to work alongside the Sussex Rail Partnership which draws together local authorities, railway companies, Network Rail, Passenger Focus and the local communities to improve the facilities and usage of local railways, with a focus on selected lines in East and West Sussex and running into Kent and Surrey.

11.0 Walking

SDST Tackling Congestion Priority Initiative	Ranking of Key Initiative Objectives			
	Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
"Improve pedestrian routes between residential areas and workplaces, schools and town centres and improve access for the mobility impaired, where appropriate."	**1**	3	2	4

11.1 Introduction

Walking is to be encouraged not only for a reduction of car use but also for the health benefits. The towns of Sevenoaks, Swanley and Edenbridge have a generally good network of pedestrian routes. However, the CENSUS 2001 data shows that the Sevenoaks district has the lowest percentage of population walking/cycling to work/education in the County with only 8.2% or 8,963[22] of the population, compared to an average of 12.6% or 13,962[23] for the County.

TABLE 4: Urban cordon pedestrian counts for Kent

Kent District	Count sites	Urban cordon pedestrian counts (12 hours, 7am to 7pm)					
		2005 Total	2006 Total	2007 Total	2008 Total	2009 Total	% change 08-09
Ashford	5	3,887	4,004	4,244	4,550	3,539	**-22.**
Broadstairs	5	-	-	4,868	4,187	4,406	**5.2**
Canterbury	9	25,283	17,145	17,962	18,251	23,087	**26.5**
Dartford	5	-	9,407	9,485	11,241	11,590	**3.1**
Dover	6	2,690	7,795	6,036	6,795	6,227	**-8.4**
Folkestone	6	4,831	7,630	7,169	6,918	7,659	**10.7**
Gravesend	5	-	15,666	16,009	16,458	17,008	**3.3**
Maidstone	10	-	8,765	8,167	8,518	9,335	**9.6**
Margate	5	5,875	5,302	4,905	5,021	6,554	**30.5**
Ramsgate	5	-	3,639	3,510	3,484	3,386	**-2.8**
Sevenoaks	**4**	**-**	**2,019**	**2,153**	**1,744**	**2,450**	**40.5**
Sittingbourne	5	-	7,491	6,964	8,705	8,160	**-6.3**
Tonbridge	5	-	10,992	11,867	12,643	11,522	**-8.9**
Tunbridge Wells	5	-	3,881	3,523	3,865	3,852	**-0.3**
Average	**-**	**8,513**	**7,661**	**7,633**	**8,027**	**8,484**	**5.7**

Source: KCC Personal Injury Crash Statistics- KCC Travel Report (2009)

[22] 2001 Census, Travel to work Statistics, (KS17 dataset), Office of National Statistics

[23] 2001 Census, Travel to work Statistics, (KS17 dataset), Office of National Statistics

It is important that LTP funding is targeted to improve existing walking networks and to introduce new crossing facilities to provide for and encourage short-distance trips, with improved safety and greater levels of enjoyment. Where possible, investment should be focused on those schemes that improve links to major trip generators, for example, work places, schools and colleges, stations and town centres. Specific improvements to the walking network, including Public Rights of Way, will be targeted in rural areas to address specific local needs.

The SDST aims to achieve an improvement in the walking environment by:

- **Enhancing safety and security on existing routes with improved surfacing, lighting and road crossings**
- **Providing new routes, particularly where they close gaps in the existing network or link to major trip generators or public transport**
- **Providing wheelchair-friendly routes, particularly in Sevenoaks, Swanley and Edenbridge town centres in association with 'Shop-mobility' where feasible**
- **Improving the walking environment**
- **Promoting the health benefits of walking including at primary schools through walking buses and other walk to school promotions**

11.2 Walking to School

The 'Walking Bus' concept is a now a well known, safe, healthy and environmentally friendly approach to walking large groups of children to and from primary school. It also allows children to have regular daily exercise and reinforces the habit of walking for shorter journeys. Primary Schools in Sevenoaks that currently operate walking buses generate less car traffic congestion at the school dropping off and picking up times of the school day. This means less traffic at these critical times of the day and less pollution. The SDST supports this initiative and acknowledges the importance of School Travel Plans as an instrument to encourage more walking to all education establishments.

Further reference to walking issues and justification for the initiatives is made in **Appendix 13** of this Strategy.

A number of independent educational establishments may also have a direct trip generation impact within the district. Although this is not intended to provide a comprehensive list some of the schools are:

- **Sevenoaks School** (co-ed. day/boarding school, ages 11 to 18 - 990+ pupils)
- **St Michael's – Otford** (co-ed. day school, ages 2 to 13 - 430+ pupils)
- **Walthamstow Hall** (girls day school, ages 3 to 18 - 420+ pupils)
- **The New Beacon** (boys day/boarding school, age 4 to 13 - 390+ pupils)
- **Coombe Bank – Sundridge** (girls day school, ages 3 to 18 - 400+ pupils)
- **Sevenoaks Preparatory** (co-ed. day school, ages 2 to 13 - 290+ pupils)
- **The Granville School** (girls day school, ages 3 to 11 - 195+ pupils)
- **Russell House – Otford** (co-ed. day school, ages 2 to 11 - 190+ pupils)
- **Solefields School** (boys day school, ages 4 to 13 - 170+ pupils)

12.0 Cycling

SDST Improving Accessibility Priority Initiative	Ranking of Key Initiative Objectives			
	Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
"Provide cycle friendly infrastructure and introduce new cycle routes along the main transport corridors and improve home to school links."	**1**	3	2	4

12.1 Introduction

In policy terms, previous strategy documents have attributed a relatively low priority to improving cycling facilities in Sevenoaks district. Consequently, little investment has been allocated to developing new infrastructure to extend the cycle network. There is, however, considerable potential to encourage greater cycle use, in particular for local journeys of five miles or less, to include journeys to school and rail stations.

Central Kent, including the Sevenoaks district, suffers from a poor level of coverage of the National Cycle Network (NCN). Indeed, Regional Cycle Route 12 that connects Penshurst Place and Tonbridge passing through Leigh in the very southeast of the district is the only significant piece of cycle infrastructure within the Sevenoaks administrative area.

The local SUSTRANS group is very keen to improve and extend the cycle network, and has identified a potential new route to connect Edenbridge with Regional Cycle Route 12. Improved connections to the national and regional cycle route networks in Sevenoaks district are strongly supported by the SDST.

To some extent the dispersed rural nature and topography of Sevenoaks district act as barriers to the development of an extensive cycle network across the district. There is, however, scope to improve the cycle infrastructure, particularly in and around Sevenoaks urban centre, Swanley and Edenbridge. Investment in new cycle infrastructure will be directed towards these settlements and will seek to connect the main trip generators identified in the Sevenoaks District Transport Study (2007) as well as key trip generators that are earmarked in the LDF.

12.2 Baseline cycle data (2006-2008)

Manual cycle count surveys were conducted between 2006 and 2008 to record cycle movements within the Sevenoaks Urban Cordon.

The Inner Cordon, the extent of which is defined in Figure 6, page 33, comprises four sections of the local highway network, as follows:

- Site I1: A225 Tonbridge Road
- Site I2: A25 High Street, Seal
- Site I3: A225 Otford Road
- Site I4: A224 Amherst Hill

A 12-hour manual cycle survey (two-way) performed between 07:00 and 19:00. Data for the weekday morning peak period (one way) was also recorded. A copy of the survey data is contained within **Appendix 14.**

Data available for the period 2006 and 2008 indicates that cycling levels for the average weekday (07:00 – 19:00) remained broadly consistent, ranging from 242 (2007), 253 (2008) and 267 (2006)

cycle movements across a 12-hour period. Whilst the data indicates a 4.5% increase in cycling activity between 2007 and 2008, the figure for 2008 is lower than the equivalent in 2006.

The relative ranking of the four routes within the Inner Cordon showed a consistent ordering, with the A225 Tonbridge Road corridor ranking as the most frequently used cycle route within the Inner Cordon, followed by the A224 Amherst Hill, A225 Otford Road and A25 High Street, Seal respectively.

As a proportion of total vehicle movements, to include cars, light goods vehicles, heavy goods vehicles, unknown movements and cycling, it was found that cycling was accountable for a maximum of 0.346% of total vehicle movements within the Inner Cordon over a 24-hour period[24].

The proportion of total vehicle movements attributed to cycling between 07:00 and 10:00 was found to be greater than the daily average, due to the contribution made by commuters. The highest recorded value for the weekday morning peak period was for north-bound cycle movements along the A225 Tonbridge Road corridor, for which cycling accounted for 1.4% of all vehicle movements between 07:00 and 10:00.

TABLE 5: Inner Cordon Cycle Counts (12 hours, 7am to 7pm)

Kent District	Count sites	2006 Total	2007 Total	2008 Total	2009 Total	% change 08-09
Ashford	5	832	825	945	708	**-25.1**
Broadstairs	5	291	324	352	372	**5.7**
Canterbury	9	1,626	1,579	1,399	1,749	**25.0**
Dartford	5	380	457	475	486	**2.3**
Dover	6	339	348	495	387	**-21.8**
Folkestone	6	390	420	461	483	**4.8**
Gravesend	5	551	482	587	655	**11.6**
Maidstone	10	623	567	605	718	**18.7**
Margate	5	683	636	717	484	**-32.5**
Ramsgate	5	549	471	495	457	**-7.7**
Sevenoaks	**4**	**267**	**242**	**253**	**356**	**40.7**
Sittingbourne	5	623	498	602	509	**-15.4**
Tonbridge	5	1,021	984	990	960	**-3.0**
Tunbridge Wells	5	554	564	676	734	**8.6**
Average 1 (continuous data)	**-**	**817**	**790**	**817**	**823**	**0.7**
Average 2 (live sites only)	**-**	**624**	**600**	**647**	**647**	**0.0**

Composite data drawn from the Kent Travel Plan (2009) (Table 5 refers) indicates that cycling activity within the Inner Cordon increased by 40.7% between 2008 and 2009.

The data indicates that cycling activity has remained at a very low base level in Sevenoaks, when compared with other forms of transport[25]. Furthermore, the data confirms that cycling activity is significantly below 1% of modal share, a situation that is influenced, in part, by the high volume of

[24] Cycle data was only collected over a 12-hour period (07:00 – 19:00), whilst other vehicle movements were recorded over a 24-hour period.
[25] It is important to note that the data does not account for any local cycling trips that do not pass through the Inner Cordon point associated with the four principal corridors.

motor vehicles that utilise the local road network on a daily basis. Furthermore, the high level of vehicle movements along principal corridors could also serve to constrain greater levels of cycling activity due to safety concerns, in particular in those instances where there is an absence of dedicated cycle infrastructure (either on or off-highway).

12.3 Cycling Objectives of the SDST

The principal objective of the SDST is to promote improvements to cycling facilities and networks, especially within the urban areas of Sevenoaks, Swanley and Edenbridge, to improve the safety and convenience of cycling as a modal choice. Opportunities will also be sought in connection with new development. For example, in Swanley it is proposed that a dedicated pedestrian/cycleway link will be provided between the railway station and the town centre to encourage access to the town centre by public transport. It will also be important to cater for, and promote, all levels of cycling activity, as appropriate.

Concerning the implementation of new (and improved) cycle infrastructure, SDC has powers to adopt many small scale schemes to encourage cycling. However, it is reasonable to assume that a proportion of any future schemes will need to be agreed and progressed in conjunction with other organisations, especially KCC.

The local nature of cycling enables the SDC to link measures to forthcoming developments and request funding from developers based on Section 106 of the Town and Country Planning Act 1990, although the significance of Section 106 as a funding mechanism for implementing local cycle infrastructure will be diminished due to the low quantum of development expected to occur during the lifetime of the strategy.

The local authorities will also seek to promote the provision of cycle friendly routes to serve major developments, for example employment centres, and to promote the implementation of cycle routes to link new residential areas with key shopping centres, railway stations and educational establishments for pedestrians and cyclists to enhance the use of non-motorised modes. Cycle lanes (on and off-street/ mandatory or advisory) provide dedicated infrastructure for cyclists. Other measures include the introduction of Advanced Stop Lines and cycle gates which give greater priority and allow access by bike in preference to vehicles. As well as making cycling safer, they can attract more people to cycle in preference to driving, hence reducing car use. The costs of implementing cycle schemes will depend very much on the availability of suitable corridors.

Where opportunities do not exist to provide formal cycle routes along existing key roads, the local authorities will investigate the potential for identifying off road cycle routes and encouraging cyclists to use safer and less busy roads, through appropriate signage.

Making the road network more cycle friendly by improving the safety and convenience of the network will make it more accessible for cyclists. Toucan crossings and cycle advanced stop lines should be introduced on main cycle routes.

An increase in secure cycle parking is required, especially in town centres and key public transport interchange point, in order to meet the current demands as well as enabling a further shift to both public transport and non-motorised modes. Secure cycle storage encompasses facilities protected from the weather, well lit, safe to use, providing both natural and additional surveillance (for example CCTV), located in close proximity to active frontages and entrances to main attractors/ interchange points. A safe and secure environment should be provided at day and night time.

The SDST aims to achieve an improvement in cycling facilities by:

- **Creating a well-signed cycle route network, particularly in Sevenoaks, Swanley and Edenbridge, incorporating both on-road and off-road routes. This network will link residential areas to identified and emerging key trip generators**
- **Promoting and targeting resources, it will be necessary to develop a district-wide cycling strategy, looking at all aspects, including both leisure and commuter cyclists and their journeys and such a move will be reflected in the Implementation Plan, where it is practical to do so**
- **Developing cycle routes connecting surrounding settlements to the countryside and linking to the National Cycle Network**
- **Improving safety for cyclists, particularly by providing new cycle crossings and measures to help cyclists through busy junctions**
- **Ensuring that routes are attractive and well landscaped**
- **Introducing safe and secure parking and storage facilities and encouraging provision at schools and places of employment**

The SDST growth figure target for cycling is 2% per annum between 2010 and 2026[26]. By applying the SDST growth figure target, this equates to the generation of an additional 95 cycle trips per day within the Inner Cordon by 2026, equivalent to a growth rate of 37.27% over the period. The equivalent annual growth rate is between 5 and 6.8 additional cycle trips per annum within the Inner Cordon. If the growth target was achieved, by 2026 there would be a total of 349 cycle trips per day within the Inner Cordon.

As well as defining the way forward, it is important that this strategy document focuses on immediate and medium / long-term objectives that are both feasible and achievable that will contribute towards the achievement of the 2026 target.

In order to capture (and respond to) the opinions of the resident population of Sevenoaks district, it is proposed that a questionnaire will be prepared and made accessible within the 12 months of the strategy's adoption. The questionnaire will be an important tool to identify, capture and understand levels of cycling demand across the Sevenoaks district, and to respond in a purposeful manner to raise participation in cycling. It is envisaged that the resulting feedback will assist in the prioritisation of targeted infrastructure improvements to encourage modal shift towards cycling, in particular local journeys (i.e. less than 3km), for which cycling is seen as a viable alternative to the private car.

Further reference to cycling issues and justification for the initiatives is made in **Appendix 14** of this Strategy.

[26] The average daily cycle trips recorded between 2006 and 2008 has been used to estimate cycling levels in 2010, which generates a value of 254 cycle trips per day within the Inner Cordon.

13.0 Powered Two-Wheelers

SDST Tackling Congestion Priority Initiative	Ranking of Key Initiative Objectives			
	Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
"Promote the use of small capacity and powered two wheelers (PTW) as an alternative to the car."	3	**1**	4	2

13.1 Introduction

The SDST aims to promote the use of small capacity and electric powered two wheelers (PTW) as an alternative to the car. It will achieve this by working with community transport operators to develop two 'Wheels 2 Work' schemes in key areas within the district. 'Wheels 2 Work' schemes help people access employment and education opportunities through the loan of a scooter where other forms of transport may not be available. The District Council and KCC will welcome provision of electric vehicle charging facilities for any permitted car parking space.

The promotion of PTW will help the SDST to achieve the following:

- **Reduce Congestion - PTWs take up less road space than cars**
- **Improve Accessibility - Many PTWs are cheaper to run than private cars. By improving conditions and parking facilities for users more people will be confident and able to access facilities that might not have been accessible without a car**
- **Improve Air Quality - Small capacity PTWs produce fewer emissions than most cars and help improve air quality if the journey would otherwise have been made by a car**

The SDST aims to improve safety and security for PTW users as part of its road safety agenda.

Further reference to powered two-wheelers and the initiatives proposed is provided in **Appendix 15** of this Strategy.

14.0 Smarter Choices

SDST Tackling Congestion Priority Initiative	Ranking of Key Initiative Objectives			
	Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
"Expand school, workplace and area travel planning and raise awareness including through the development of rail station travel plans."	2	**1**	3	4

14.1 Introduction

In recent years, there has been growing interest in a range of initiatives under the "Smarter Choices" umbrella. Such initiatives seek to give better information and opportunities, aimed at helping people to choose to reduce their car use while enhancing the attractiveness of alternatives. They are fairly new as part of mainstream transport policy, relatively uncontroversial, and often popular. Smarter Choice initiatives in this report include school, workplace and individualised travel planning, improving public transport information and marketing, car sharing, car clubs and flexible working.

As plans for growth and development in Sevenoaks district come to fruition it is vital that people are given attractive and viable alternatives to travelling alone by car, as set out in the emerging LDF Core Strategy, together with increased use of technology to reduce the demand for travel as a whole. Only through the introduction and wide take up of such, in conjunction with planned physical measures, may pressure on the road network be better managed for the benefit of all highway users.

The success of Smarter Choices relies on improved partnership working between government departments, businesses, schools and other stakeholders. Sevenoaks District Council has an important role to play in developing and promoting schemes at the local level and as transport authority, Kent County Council has responsibility for initiating and leading on many aspects of the SDST.

A rolling ten year action plan, coincident with the existing Local Transport Plan for Kent (2006-11) and future updates of the Local Transport Plan for Kent over the SDST life time up to 2026 is proposed to ensure these targets are achieved.

The targets are organised under the following Smarter Choices headings:

- **School Travel Plans**
- **Work Place Travel Plans**
- **Public Transport Information and Marketing**
- **Travel Awareness Campaigns**
- **Personalised Travel Planning**
- **Car Sharing**
- **Car Clubs**
- **Tele/Flexible Working**
- **Station Travel Plans (ATOC)**

Travel Plans can reduce reliance on the private car by promoting the opportunities for travelling to and from sites by public transport, walking or cycling and by offering new opportunities to reduce

car use, through the establishment of car sharing services or car clubs, for example. KCC will work with existing employers and schools to encourage them to prepare Travel Plans. SDC will require new developments to prepare and adopt them using KCC's guidance on Travel Plans (Transport Assessments and Travel Plans, October 2008) as the basis for determining when such plans will be required. For example, Policy LO4 of the Core Strategy document includes specific provisions for Travel Plans in Swanley.

This Strategy provides a framework for Smarter Choices in Sevenoaks district which can be found in **Appendix 17** of this Strategy.

15.0 Disability Access

SDST Improving Accessibility Priority Initiative

1. **All pedestrian crossings to be upgraded to meet all current DDA requirements across the district.**
2. **For those with visual impairments, tactile paving will be installed at all pedestrian crossing points for those with visual impairments.**
3. **Introduce Ramps/dropped kerbs will be introduced along key transport corridors to improve accessibility for wheelchair, mobility scooter users, and prams and push chairs.**
4. **Ensure bus stops along the key transport corridors will have raised kerbs installed where physically possible to improve wheelchair, pram and push chair access and this programme will be applied progressively to all bus stops in the district.**

Ranking of Key Initiative Objectives			
Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
1	3	2	4

15.1 Introduction

The SDST is committed to an accessible public transport system for disabled people to give the same opportunities to travel as other members of society.

The Disability Discrimination Acts (DDA) of 1995 & 2005 aim to end discrimination that disabled people face and this act was significantly extended in 2005 to give disabled people rights in the areas of access to goods, facilities and transport services.

The powers in Part 5 of the DDA 1995 allow regulations to be made requiring all new land-based public transport vehicles - trains, buses, coaches and taxis - to be accessible to disabled people, including wheelchair users. Regulations covering buses and coaches, the Public Service Vehicles Accessibility Regulations 2000 (PSVAR), have been made and cover all new buses and coaches introduced into service since 31 December 2000 which can carry more than 22 passengers and are used to provide a local or scheduled service.

Nationally the percentage of disabled people experiencing any difficulties in using transport related to their health problem or disability decreased from 27.2% in 2005 to 25.4% in 2006[27].

15.2 Buses

The provision of accessible vehicles is important to ensure that older people, people with disabilities and people with pushchairs are afforded equal access to bus transport. There is a need to comply with legal requirements in the provision of accessible vehicles as defined under the DDA 1995 & 2005. The SDST is very clear on the importance of partnership working and recognises the need for formal arrangements to be established with bus operators to ensure that all new vehicles are DDA compliant.

The Office of National Statistic's 'Omnibus Survey in 2006' produced the following results.

- 75% of adults with disabilities who experienced difficulties using bus services said they had difficulty getting to the bus stop, and a similar proportion said they had difficulty in getting on or off buses. Just over half cited difficulty with waiting at the bus stop.
- 69% said they did not use local buses at all.

[27] ONS Omnibus Survey 2006

Adequate and accessible roadside infrastructure is also an important element in affording people access to bus travel in Sevenoaks district. The Strategy commits to improving bus shelters and bus boarders across the district and to prioritise future infrastructure enhancements along the key bus corridors. This includes improvements to bus infrastructure in rural areas and where low floor accessible vehicles are operating within the district.

The existing network of rural shelters will also need to be maintained to ensure that they remain attractive and safe areas for bus users. The SDST will, therefore, continue to work with the operators and the Parish Councils to ensure that maintenance of the shelters is sustained and prioritise locations for the build of accessible infrastructure.

The SDST will also continue to ensure that all rural stops are identified with a bus stop flag and timetable case. In addition, the Strategy recognises the importance of working with Parish Councils to ensure that full use is made of the County Councils offer of a grant to Parish Councils who request a bus shelter in their Parish based on evidence of need.

15.3 Taxis

The regulation making powers in the DDA do not apply to private hire vehicles.

Accessible taxi policies remain a matter for individual local licensing authorities in line with previous guidance that has been issued by the Government.

The role of taxis and private hire vehicles (PHV) are recognised as part of an integrated transport system and as an important mode of transport for disabled people.

The SDST recognises that taxis have the following important role to play in the movement of people:

- The movement of business people and other visitors, particularly those attending conferences and other major events and visiting local businesses
- They provide services when it is not economic for public transport to operate frequently or to remote locations. Furthermore, it is not unusual for people without a car to take a bus to a shop or town centre and then use a taxi or PHV for the return trip with their purchases. Additionally, taxis and PHV's are used by vulnerable travellers (for example, unaccompanied children) for a range of daily trips, including home-to-school journeys
- They can help someone with a disability make a journey that could not be made by conventional public transport. Importantly, they are able to provide a flexible door-to-door service and drivers are reasonably prepared to assist with the carriage of shoppers or other loads into the passenger's house
- They can provide an important link in longer public transport journeys by providing access to railway, coach and bus stations and airports. Without such links, travellers might be encouraged to use private vehicle for the whole journey.

15.4 Rail

Transport is essential for providing access to employment, health services, education and leisure pursuits. Disabled people are particularly dependent on public transport with 60 per cent of disabled people having no car in the household, compared with 27 per cent of the general population. But spontaneous travel is difficult or impossible for many disabled.

In 2006, 59% of disabled rail passengers were satisfied with facilities at the train station met with their needs, and 67% were satisfied with the trains themselves met their needs. 80% of rail passengers who require special arrangements to travel by rail were satisfied with the booking process, however this drops to 50% when looking at how these arrangements were carried out on the day[28].

[28] National Rail Passenger Survey, Spring 2006

The Government's 'The Railways for All' Strategy was published in 2005 and explains what the railway industry is doing to improve access for disabled people. It's main objective is to increase the number of journey opportunities for disabled people by improving our stations, trains and related services. By doing this, more disabled people will be able to use the network, more often and for a wider range of journeys, giving disabled people greater access to employment opportunities and to participate in social and leisure activities.

Specific provision was made in the Disability Discrimination Act 1995 (DDA 1995) to ensure that station operators do not discriminate against disabled people and that all new trains meet improved accessibility standards. As a result and following the changes introduced in the Disability Discrimination Act 2005 (DDA 2005) all rail vehicles will have to meet these standards by a date no later than 2020.

This Strategy considers plans to improve the accessibility of all aspects of the rail industry including:

- **information, ticketing and reservations**
- **station buildings and platforms**
- **train carriages and**
- **the quality and consistency of staff training.**

The Strategy considers how the ring-fenced £370m 'Access for All' funding will be spent to improve stations by targeting investment at making a range of stations step-free whilst providing the flexibility and opportunity to deliver specific improvements to meet local needs. As rail stations are redeveloped by Network Rail, or funding becomes available from Central Government and/or other sources, further improvements will be made to increase the accessibility to stations across Sevenoaks district and some aspects of this may be aided by the National Station Improvement Programme that has been developed by Passenger Focus in 2009.

Through working with partners and the community, this Strategy will ensure that there are the necessary measures in place to provide disabled access from the public highway to all rail stations in the district, and that there is the necessary infrastructure in place, along the key transport corridors in main urban centres in Sevenoaks district, for disabled highway users to get to rail stations without difficulty.

15.5 Public Highway

The provision of dropped kerbs and tactile paving can reduce barriers to services for sections of the disabled community as well as those travelling with small children or carrying luggage, people with temporary mobility problems and many older people.

It is therefore important to install such facilities to enhance access, wherever possible, through an ongoing work programme based on audits by disabled groups as well as all new schemes.

To help pedestrians with mobility impairments the following actions are being taken:

- All pedestrian crossings are being upgraded to meet all current DDA requirements across the district.
- For those with visual impairments, tactile paving will be installed at all pedestrian crossing points to help guide pedestrians safely to crossing points.
- Ramps/dropped kerbs will be introduced along key transport corridors to improve accessibility for wheelchair, mobility scooter users, and prams and push chairs.
- Bus stops along the key transport corridors will have raised kerbs installed to improve wheelchair, pram and push chair access and this programme will be applied progressively to all bus stops in the district.

KHS will continue to engage with local access groups and forums such as the Sevenoaks District Access Group thereby identifying specific areas and corridors for improvement using all possible available funding mechanisms.

Further reference to disability access is made in **Appendix 16** of this Strategy.

16.0 Freight & Heavy Goods Vehicle Movement

SDST Tackling Congestion Priority Initiative	Ranking of Key Initiative Objectives			
	Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
"Designate lorry routes within Sevenoaks district and develop a Freight Quality Partnership."	4	**1**	3	2

16.1 Introduction

The Channel Corridor in Kent is a major gateway for the movement of international freight, which is dominated by road haulage, with 3.5 million lorries crossing the Channel every year (this equates to an approximate average of 400 heavy vehicles per hour). A consequence of this is the impact on Kent when cross channel services are disrupted and the resulting backlog of lorries are parked on the M20/A20, known as Operation Stack. The resulting closure of the M20/A20 has a knock-on affect on the wider motorway network in Kent including the M26 and M25 and can severely disrupt local roads close to the motorway networks.

The impact that the increasing volume of freight traffic has on the M25 is also an issue as general traffic levels frequently exceeds the design capacity of the road causing delays and traffic to divert onto the A25 through the centre of the district. The diverted M26 and M25 traffic in turn severely disrupts local traffic movements along the A25 route and adjoining local road network.

The SDST supports the need for all transport authorities to work closely to ensure that freight traffic passes through the County as harmlessly as possible, including local lorries not being directed down country lanes and through other sensitive areas.

The other potentially significant rail freight flow in the County is to and from the Thames deep sea container port where currently some 20% of the freight is taken by rail and there is potential to expand the port at Sheerness. The SDST recognises that further capacity development of these ports, particularly the rail freight operations, will help to relieve the pressure on the M20 and M25 in Sevenoaks district.

In response to the problems caused by disruption to cross-channel services, it should be noted that KCC is investigating a possible lorry park near Aldington between Junctions 10 and 11 on the south side of the M20. It would provide some 500 secure overnight parking spaces for heavy goods vehicles (HGV's) and an overflow area for some 2,000 additional HGV's during Operation Stack.

16.2 Freight Quality Partnerships / Freight Strategy

The development of Freight Quality Partnerships (FQP's) or a Freight Strategy is a key element to achieving a more efficient, safer and cleaner means of local goods distribution in across Kent and in Sevenoaks district. FQP's are formal agreements which are developed between local industry and local government.

Examples of what FQP's can achieve include agreements on routeing, load sharing and town centre access which can help reduce congestion, emissions and the number of vehicles in and around an urban centre.

16.3 Britdisc

The SDST supports the County Council's proposal to introduce a charge for lorries using Kent's roads to provide up to £40m per annum for the lorry park and other infrastructure improvements

which will mitigate the impact of cross-channel traffic on Kent's road network and the local road network in Sevenoaks district.

16.4 CTRL Rail Freight

The Channel Tunnel Rail Link (CTRL) offers a higher loading gauge than the rest of the rail network in the UK and could make the transfer of freight by rail between East London and mainland Europe much more competitive when compared with road haulage. The SDST recognises the benefits of moving higher volumes of freight by this means to the continent and supports KCC's campaign to press central and international government to put more freight through the Channel Tunnel. The more freight transported by rail the greater the relief on road capacity pressures, however, the economical arguments against freight from road to rail do not offer any possibility of this happening in the short term.

16.5 Lorry Management

Where practical, the SDST supports the need to signpost heavy transport and HGV routes away from rural, residential and environmentally sensitive areas and show these on a web-based Kent Lorry Route Map.

The Strategy provides for the efficient movement of freight essential for local business while seeking to reduce its effects on local communities, safety, congestion and air quality. Traffic survey counts conducted in the Sevenoaks urban centre confirms that there is a small amount of HGV through-traffic passing through the town centre, despite the A21 bypass to the west of Sevenoaks. Although not necessarily large in volume, the dominance of such vehicles, both moving and parked, is an issue in the High Street Conservation Area. SDC and KCC have considered removing through HGV traffic from the town centre, amongst a range of options. The feasibility of all possible solutions will be reviewed as part of any scheme to re-model Sevenoaks High Street.

The LDF Core Strategy states that the needs of business will be met primarily through the retention, intensification and regeneration of existing business areas at Sevenoaks (urban area), Swanley, Edenbridge, Westerham and Major Developed Sites. The Core Strategy also supports the diversification of the rural economy (policy LO8) and gives priority for business uses or tourist accommodation in the conversion of buildings in rural areas (draft policy SP8).

In addition, the current status of major developed sites will be maintained. The SDST considers that the scale and nature of business uses in the redevelopment of buildings in rural areas should be consistent with the aim of reducing the impact of freight movements on local amenity, safety, congestion and air quality. Given the scale and distribution of development proposed in the emerging Core Strategy, and the demand management measures incorporated within policy, there is unlikely to be any significant impact on the local highway network.

Clearly the detailed impacts of each significant proposal on the local network will need to be accompanied by a Transport Assessment and in some cases development may be conditional on implementation of specific transport mitigation measures. Particular consideration will be given to the impact of development at Swanley on Junction 3 of the M25.

The SDST supports national and regional policies to develop sustainable freight distributions systems by:

- **Encouraging customers and operators to move freight by rail**
- **Controlling the flows and routeing of heavy goods vehicle movements by traffic management measures**
- **Locating new industrial development appropriately in relation to residential areas and the transport network**

To help heavy traffic move quickly and smoothly and minimise its impact on the local community and the environment, KCC are developing a number of strategies to reduce the impact of HGV movements on local communities:

- **route signing to direct lorry traffic to and from commercial premises by the most appropriate routes**
- **working in partnership with Freight Associations, the police and other bodies to promote good practice and develop innovative ideas**
- **promoting 'Freight Quality Partnerships' to ensure lorry traffic is routed to and from sensitive areas in an effective, environmentally friendly manner**
- **working with satellite navigation companies to improve mapping**

KCC are currently updating a map for lorry drivers to direct them to principal commercial areas. Work being done will improve the situation across Sevenoaks district, and the initiative is strongly supported by the SDST.

16.6 Overnight Lorry Parks

The SDST supports the provision of over-night lorry parking and associated facilities at suitable sites adjacent to Kent's motorway and trunk road network. It also supports the need to work with other agencies to reduce the occurrence of inappropriate lorry parking on Kent's roads.

16.7 Low Emission Freight (LEF)

The SDST recognises the need to work in partnership with local hauliers/distributors/public transport operators and taxis to replace vehicle fleet with low emission vehicles (LEV) and incentivise local business, through business rate discounts, to utilise LEV's. It is also important to encourage local businesses and retailers to work in partnership to co-ordinate deliveries, particularly in outlying areas, to eliminate duplicated trips and reduce emissions.

16.8 Freight Strategy

The SDST recognises the need for a Freight Strategy for Kent which creates a framework for more sustainable freight distribution in Kent. The importance of sustainable freight distribution within the context of an integrated transport and land use policy is clearly set out in the Government White Paper and associated guidance. One of the key implications for local authorities in these documents is the emphasis placed on the establishment of FQP's between local authorities, the freight industry, business communities, residents and environmental groups. It is understood that a Freight Strategy for Kent is being developed alongside the preparation for the third LTP, scheduled for publication in March 2011.

Further reference to freight and heavy goods vehicle initiatives is made in **Appendix 06** of this Strategy.

17.0 Car Parking

SDST Improving Accessibility Priority Initiative	Ranking of Key Initiative Objectives			
	Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
"To develop a parking strategy that balances the need to promote the use of public transport, walking and cycling with demand for parking and the desire to promote good design and the efficient use of land."	**1**	3	4	2

17.1 Introduction

This section considers parking standards applied at new developments, car parks operated by SDC, controlled and uncontrolled on-street parking. Station car parking is considered by Section 10: Rail Travel. The section suggests that consideration should be given to producing a parking strategy for Sevenoaks district. The SDST does not attempt to set the policies and approach to be taken in a parking strategy, instead any parking strategy should be developed separately through consultation with stakeholders and local communities.

17.2 Vehicle Parking Standards

The government believes that the availability of parking has a major influence on the means of transport people choose for their journeys. National Planning Policy Guidance 13: Planning and Transport (PPG13) requires that Local Planning Authorities set and apply maximum vehicle parking standards when determining planning applications, including those for housing, retail and offices, to encourage the use of public transport, walking and cycling. Development proposals must comply with the respective vehicle parking policies adopted by Sevenoaks District Council and maximum standards contained in the Kent Vehicle Parking Standards.

Whilst the application of maximum parking standards remains government policy, recent government guidance, for example in 'Manual for Streets', recognises that heavily constraining the level of residential parking is likely to be more successful in some locations than others. 'Manual for Streets' notes that 'under provision may be unattractive to some potential occupiers and could, over time, result in the conversion of front gardens. This can cause significant loss of visual quality and increase rainwater run-off, which works against the need to combat climate change'. Furthermore, national Planning Policy Statement 3 (PPS3) recommends that residential parking policies should take account of expected levels of car ownership, the importance of promoting good design and the efficient use of land. The application of maximum parking standards in development control decisions must, therefore, take account of these issues.

In town centres, Planning Policy Guidance 13 recognises that there is a need to ensure that perverse incentives are not created for development to locate away from town centres as this may threaten future investment in town centres. Appropriate levels of town centre car parking, therefore, need to be determined after balancing the aim of promoting accessibility by public transport, walking and cycling with the aim of maintaining the viability and vitality of town centres.

In determining the levels of parking provision developers and local planning authorities must take into account:

- The aim of promoting public transport, walking and cycling
- Expected levels of car ownership
- The safety of all road users
- The aim of promoting good design
- The aim of ensuring the efficient use of land
- The need to ensure that perverse incentives for development to locate away from town centres are not created as this may threaten future levels of investment in town centres.

- The need for parking spaces for the mobility impaired.
- The need for convenient and safe cycle parking.
- The need for provision for powered two-wheelers.

17.3 Sevenoaks District Council Car Parks and On-Street Parking

The generally good supply of car parking in Sevenoaks district contributes to the high levels of car use and, as a result, some of the congestion that occurs around key settlements in Sevenoaks district. However, It is recognised that other centres, in particular Bluewater, with substantial levels of free car parking, compete with retailers in Sevenoaks and Swanley town centres. The Sevenoaks District LDF Core Strategy seeks to maintain and enhance the viability and vitality of town centres in Sevenoaks district. The provision of District Council operated car parks, controlled and uncontrolled on-street parking and vehicle parking standards applied to new development in town centres in Sevenoaks district needs to be balanced with the provision of improved accessibility by public transport, walking and cycling. An appropriate balance of car parking and accessibility by public transport, walking and cycling should contribute towards the aims of maintaining and enhancing the viability and vitality of town centres and reducing congestion. This will be a key issue for any future parking strategy for Sevenoaks district.

Parking schemes were introduced in Sevenoaks, Edenbridge, Westerham and Swanley in 2007 and 2008, with the aim of addressing commuter parking issues and maintaining the viability of the rural towns. Future reviews will also take account of this issue.

The Sevenoaks town parking scheme was introduced in June 2008, and as the largest generator of commuter trips, it was developed to take into account development proposed in the then emerging LDF Core Strategy. The schemes did not cover the whole of Sevenoaks district and a strategy will need to be developed over time to coincide with the aspirations of the SDST and Sevenoaks District LDF.

17.4 Park & Ride

The Sevenoaks Transport Study (2007) concluded that the existing population catchments of settlements in Sevenoaks district and the levels of urban congestion are currently not considered substantial enough to introduce viable conventional park and ride services, without significant and ongoing revenue support. However, amongst the parking options to be considered, a future Parking Strategy for Sevenoaks district should fully appraise the potential viability of Park and Ride, and it may be necessary to conduct a feasibility study at a future point. If deemed potentially viable operations and sites need to be identified, proposals should be taken into account in a future review of the LDF Core Strategy.

Further reference to car parking issues and further justification for the strategy is made in **Appendix 12** of this Strategy.

18.0 Kent's Airports

SDST Improving Accessibility Priority Initiative	Ranking of Key Initiative Objectives			
	Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
"Promote alternative forms of transport to access airports."	**1**	2	4	3

18.1 Maximising the benefits of Air Travel

It is assumed that most air passengers use the main London Hub airports (Heathrow, Gatwick, Stansted and Luton) for most of their air travel needs, yet Kent has two functional commercial airports: Kent International Airport (Manston), and London Ashford Airport (Lydd). There is also London Biggin Hill which is located in the London Borough of Bromley.

Both Kent airports are looking to increase passenger numbers and expand other air transport activities to meet the predicted future shortfall in runway capacity in the South East but both suffer from peripheral locations in relation to the M25 and the rail network.

The X11(Sevenoaks/Godstone) bus service connects with Gatwick Airport, serving both the North and South Terminals. It operates at a 2 ½ hour frequency, with a journey time of 30/40 minutes.

The loss of the Tunbridge Wells to Gatwick Airport rail service reduces the choice of transport mode to directly serve and access the most proximate airport to Sevenoaks district. The SDST proposes that KCC will lobby for improved surface connections to Gatwick Airport, either by bus or train, or a combination of the two.

Further reference to Kent's airports is made in **Appendix 07** of this Strategy.

19.0 Climate Change & Transport Planning

SDST Improving Air Quality Priority Initiative	Ranking of Key Initiative Objectives			
	Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
"Assist in the development and implementation of work place and school travel plans to reduce emissions from car journeys, improve air quality and promote health."	3	2	4	**1**

19.1 Introduction

There are considerable concerns being raised that the world's climate is significantly changing as a result of human activity. Current levels of CO2 emissions have caused the world to warm by more than half a degree Celsius and, over the next few decades, will lead to at least a further half a degree warming.

This is largely as a result of burning fossil fuels, deforestation and other land use changes. Transport is responsible for around half of the UK's CO2 emissions and so needs to make a considerable contribution to reduce this impact. By reducing emissions from transport this will also improve air quality and potentially reduce noise impacts.

The Climate Change Act (2008) commits central Government, by 2050, to reduce greenhouse gas emissions by at least 80 per cent lower than the 1990 baseline. In addition, five yearly budgets are to be set which will contribute to meeting the longer term targets.

Taking early and 'strong' action to begin reducing emissions should be viewed as an investment which will avoid the risks of very severe consequences in the future. This strategy is consistent with and aligns with the key national commitment to reduce greenhouse gases.

19.2 Delivering a Sustainable Transport System (2008)

Two out of five goals in the Governments 'Delivering a Sustainable Transport System' (DaSTS) document relate to climate change, these are:

- To reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change
- To improve quality of life for transport users and non-transport users, and to promote a healthy natural environment.

DaSTS states "we want to encourage low-carbon technology and improve efficiency of all modes of transport. We also want to ensure that, wherever practicable, there are low-carbon transport options for people to choose, and also solutions, such as better planning, which may reduce their need to travel". To decrease emissions, in the short to medium term, improved vehicle and fuel efficiency and behavioural change will play a significant role, "and increasing the carrying capacity of transport networks will be a key element in supporting economic growth".

However, in the longer term, moves towards electric vehicles, rail electrification and decarbonisation of electricity generation will continue towards the greenhouse gas reduction targets. In addition to technological advances, the relationship between economic growth and transport demand needs to considered, "for example by planning cities to bring housing, jobs and services closer". Over time, it must be clear that levels of emissions are declining in line with the greenhouse gas targets.

19.3 Local Transport Plan (2011-2016) Guidance

Local Transport Plan (LTP) 3 Guidance recognises that 'in addition to measures to reduce greenhouse gas emissions, it is important that local Transport Strategies put in place measures to improve the resilience of local transport to the impacts of climate change.'

This Strategy has carefully considered all achievable and deliverable options to meet the climate change agenda and these involve:

- **The development and implementation of work place and school travel plans to reduce emissions from car journeys, improve air quality and promote health**
- **Improvement of public transport services to reduce congestion**
- **Better integration of transport and land use planning to reduce the need to travel**

19.4 Regional Funding Allocation

All major schemes in an authority's Local Transport Plan are required to be assessed by the regional assemblies who then advise Government on which schemes should be funded.

The Government announced in its advice to regions for the 2008/09 Regional Funding Allocation refresh in 2008 that: "In developing their proposals, regions should note that carbon budgets and targets are likely to become more challenging over time. The Department for Transport (DfT) will therefore consider regional advice in the light of their aggregate impact on transport Carbon Dioxide emissions over time. In turn, regions should seek to estimate the effects of proposals on Carbon Dioxide emissions and to develop advice which supports delivery of this key DfT goal". Therefore it is reasonable to assume that greater value will be placed on schemes that reduce Carbon emissions.

In undertaking LTP3, Kent County Council will have to take into account the need to actively demonstrate Carbon benefits for its major schemes as identified in this Strategy's Implementation Plan.

Further reference to climate change and transport planning is made in **Appendix 08** of this Strategy.

20.0 Air Quality Management

SDST Air Quality Priority Initiative	Ranking of Key Initiative Objectives			
	Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
"To work towards achieving the national air quality objectives for nitrogen dioxide and particulates by implementing the actions and measures contained within the Sevenoaks District Air Quality Action Plan 2009." **Note: Exposure is as defined in LAQM Guidance TG(09)**	3	2	4	**1**

20.1 Introduction

Air pollution is a severe threat to public health and to the quality of life. Over the years the increase in road traffic has had a significant impact on air quality. The introduction of the Environment Act in 1995 required local authorities to regularly assess the air quality in their area against targets set in the National Air quality Strategy. Where targets are not or are unlikely to be met and the public are exposed to pollution, local authorities are required to designate Air Quality Management Areas (AQMA's).

Air quality is one of the principal concerns of the SDST, with the impact of widespread transport use and its detrimental impact on air quality and climate change being recognised as a major contributor. The wider impacts of poor air quality include detrimental effects on human health and quality of life. Without intervention the number and severity of Sevenoaks District AQMA's will grow, undermining the health of its communities and the ability of future generations to live in an environmentally sustainable society.

20.2 Sevenoaks Air Quality Management Areas

Sevenoaks District Council recently published the Sevenoaks Air Quality Action Plan 2009. The Air Quality Action Plan identifies 11 Air Quality Management Areas in Sevenoaks district (see below) and sets out the actions that the District Council intend to take to achieve the National Air Quality Strategy. Ten of the eleven AQMA's in Sevenoaks district have been designated because of higher than acceptable levels of NO_2. The other AQMA (AQMA 6) has been designated because of higher than acceptable levels of PM_{10}.

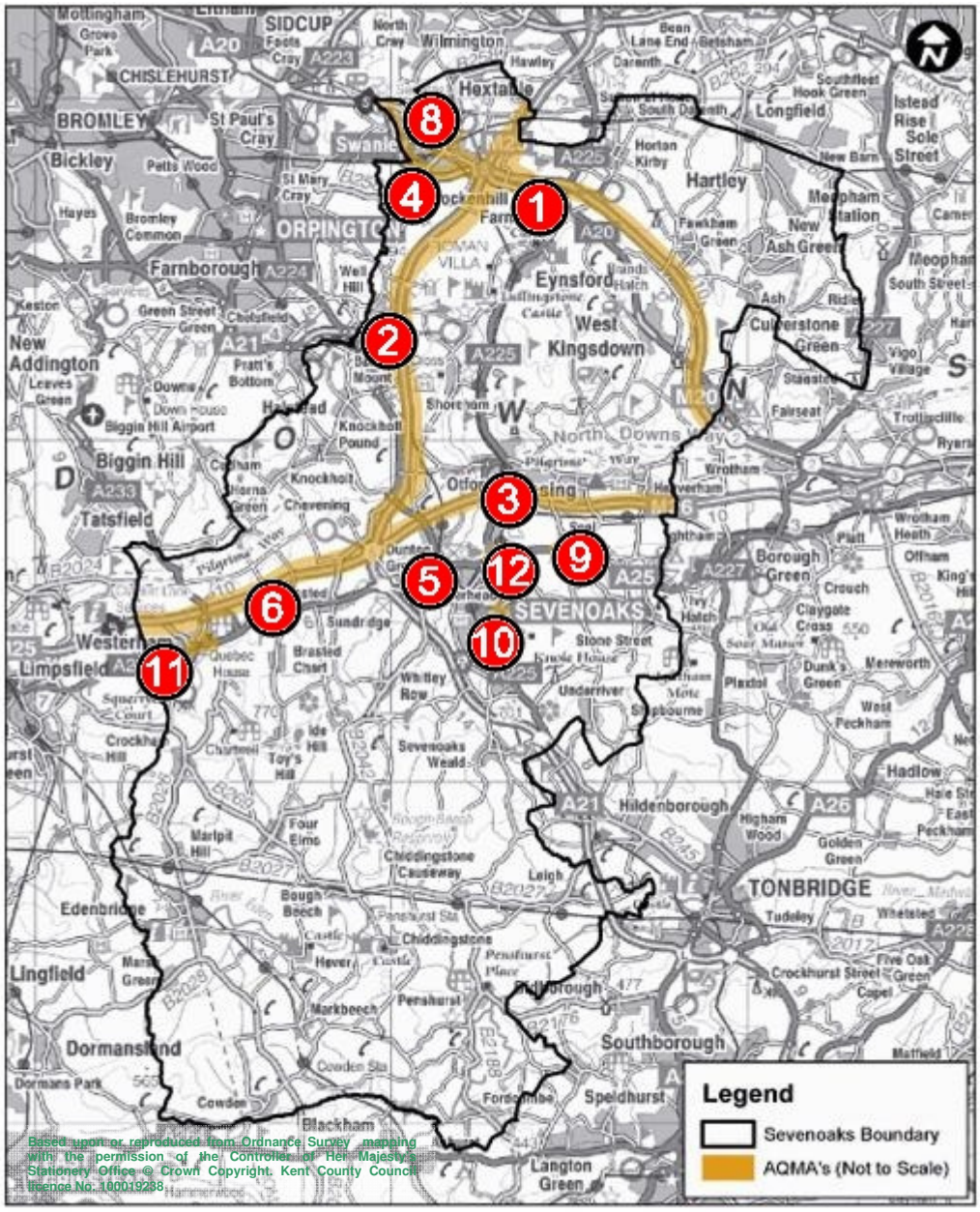
In conclusion the SDST aims to work towards achieving the national air quality objectives for nitrogen dioxide and particulates by implementing the actions and measure contained within the Sevenoaks District council Air Quality Action Plan 2009.

The Sevenoaks Air Quality Action Plan 2009 identifies 11 Air Quality Management Areas in Sevenoaks district. These are:

AQMA 1	M20 - from Junction 3 of the M25 to the district boundary with Tonbridge and Malling Borough Council (6.9 miles) and part of A20, Farningham.
AQMA 2	M25 - County border with Surrey to district border with Dartford, including Junctions 3, 4 and 5 and the extension of Junction 5 to connect with the A25 at Bessel's Green (13.5 miles).
AQMA 3	M26 - from junction 5 of the M25 to the district boundary with Tonbridge and Malling Borough Council (5.6 miles).
AQMA 4	A20 (T) Swanley Bypass - from junction 3 of the M25 to the district boundary with the London Borough of Bromley (2.7miles).
AQMA 5	A25 London Road, Riverhead and Dunton Green.
AQMA 6	M25 - Junction 5 to Kent / Surrey border (designated for PM10 levels)
AQMA 8	Swanley – London Road (East), High Street, Bartholomew Way and parts of Central town area.
AQMA 9	Seal – High Street
AQMA 10	Sevenoaks – High Street and part of London Road, Pembroke Road and parts of the town centre.
AQMA 11	Westerham – High Street, Market Square, Vicarage Hill, London Road (A233)
AQMA 12	Sevenoaks – Bat & Ball junction with A225

N.B. – AQMA 7 is not included.

FIGURE 13: Sevenoaks District – Designated AQMAs



Source: SDC (May 2007)

The Sevenoaks Air Quality Action Plan notes that Sevenoaks District Council will need to work with Kent County Council and the Highways Agency to develop schemes that will alleviate air quality problems. SDC and KCC have greater power to bring about interventions that have the potential to alleviate air quality problems at those Air Quality Management Areas on the local road network. Alleviating congestion and promoting non car modes along transport corridors through these locations are likely to be necessary to reduce air quality problems. A joint SDC / KCC Member and officer air quality working group has been formed to consider schemes to improve air quality at Sevenoaks District's AQMA's. This working group will recommend schemes for implementation to the Joint (KCC and SDC) Transportation Board.

20.3 The LDF Core Strategy Policies

The LDF Core Strategy provides for development at the most sustainable locations in Sevenoaks district. Proposals and policies in the Core Strategy should ensure that most new development is provided where jobs, shops and services are accessible by public transport, walking and cycling. Where this is not the case, the Core Strategy encourages developers to provide, or contribute to, transport improvements. The emerging LDF Core Strategy requires that development that may have an adverse impact on air quality incorporates measures to reduce the impact to acceptable levels.

In addition to the measures set out in the roads, traffic and congestion section above, in developing action plans for AQMA's, the SDST aims to:

- **Commit the Authorities to lobby the Highways Agency to consider air quality issues in decisions on the development of the motorway and trunk road network**
- **Reduce congestion at AQMAs on the local highway network**
- **Promote the use of public transport and walking and cycling**
- **Encourage customers and operators to move freight by rail**
- **Introduce measures to reduce bus emissions as part of a Quality Bus Partnership agreement or similar**
- **Address freight emission and fuel efficiency through Freight Quality Partnerships (FQP)**
- **Provide Air quality guidance for developers.**

Further reference to air quality issues and justification for the initiatives is made in **Appendix 09** of this Strategy.

21.0 Travel Safety

SDST Improving Safety Priority Initiative	Ranking of Key Initiative Objectives			
	Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
"Introduce crash reduction measures and re-engineer the highway to protect vulnerable highway users giving priority to journeys to school and speed reduction."	2	3	**1**	4

21.1 Introduction

Improving safety is a key objective of the strategy, particularly for vulnerable road users. High vehicle speed has been a prominent contributor to crashes that have occurred in the Sevenoaks district (Kent Crash Database analysis). However, the Sevenoaks District Transport Study notes that overall crash levels in Sevenoaks district are generally low compared to the rest of Kent.

TABLE 6: Personal Injury Casualty Record for Kent

Kent District	All Personal Injury Casualties					
	2005 Total	2006 Total	2007 Total	2008 Total	2009 Total	5yr Total
Ashford	540	509	495	529	514	**2587**
Canterbury	544	476	507	508	492	**2527**
Dartford	440	347	334	354	349	**1824**
Dover	403	377	351	338	368	**1837**
Gravesham	340	257	318	300	315	**1530**
Maidstone	616	557	634	617	590	**3014**
Shepway	386	292	370	285	309	**1642**
Sevenoaks	**390**	**325**	**340**	**341**	**305**	**1701**
Swale	429	412	395	403	358	**1997**
Thanet	572	610	543	493	512	**2730**
Tonbridge & Malling	440	389	452	432	434	**2147**
Tunbridge Wells	390	384	425	406	340	**1945**
TOTAL	**5490**	**4935**	**5164**	**5006**	**4886**	**25481**

Source: KCC Personal Injury Crash Statistics- KCC Travel Report (2009)

Through consultation, concern has been expressed about road safety on the B2026 and B2042 corridors to Edenbridge and in the villages of Hartley, New Ash Green, West Kingsdown, Chiddingstone Causeway and Penshurst.

The Kent Crash Database holds information for every crash recorded by the Police on Kent's road network which has resulted in a personal injury casualty. The database was established more than 28 years ago through a joint collaboration between Kent Police and Kent County Council. The database is used to identify crash sites that require some form of intervention and this form of analysis is carried out annually right across Kent's road network. It is also used to monitor crash

trends and establishes how successful mitigating intervention has been. In this way crashes in Sevenoaks district will continue to be identified, remedied and monitored.

Particular attention will be given to reducing traffic speed, and this will be achieved in partnership with the Kent and Medway Safety Camera Partnership and the Kent Constabulary. This will include promoting speed-awareness education and improved enforcement of speed limits.

Any proposed new development is required to take account of the Kent Design Guide, which has been adopted as a Supplementary Planning Document by SDC. Proposals for new development should also take account of Manual for Streets. The Kent Design Guide contains information on best practice in terms of designing for safety within new development. More information on this best practice is provided in **Appendix 11** of this Strategy.

The SDST aims to achieve an improvement in road safety by:

- **Promoting low speed limit regimes in built up residential areas consistent with the Governments advice on the setting of local speed limits**
- **Identifying and tackling high-risk, single-site crash locations and routes which have speed and related casualty problems**
- **Identifying and tackling high-risk road casualty areas, particularly where the use of otherwise good pedestrian and cycle routes is discouraged**
- **Targeting measures to calm traffic in areas of high pedestrian activity including school entrances and shopping areas**
- **Supporting the application of the principles of the Kent Design Guide and Manual for Streets**

Further reference to road and travel safety issues and the initiatives identified here is made in **Appendix 11** of this Strategy.

22.0 Development Planning and Transport Assessments

SDST Tackling Congestion Priority Initiative	Ranking of Key Initiative Objectives			
	Improving Accessibility	Tacking Congestion	Improving Safety	Improving Air Quality
"To ensure that Transport Assessments, required under the provisions of the planning process for new developments, are developed in accordance with KCC's Guidance on Transport Assessments and Travel Plans, published in October 2008."	2	**1**	4	3

22.1 Introduction

The Implementation Plan identifies the schemes to achieve the initiatives set out in the thematic sections above. Schemes are identified by timescale, broad location and transport mode. Proposed funding sources for the schemes are set out in the Implementation Plan. Where LTP funding is identified as the most likely source of funding, schemes will be subject to appraisal by Kent County Council's Scheme Prioritisation System (formerly PIPKIN), which will make a recommendation on whether LTP funding be made available or not.

The lists of schemes identified in the Implementation Plan will be reviewed during Annual Progress Reports. This will help to make the SDST a living document and will allow the Implementation Plan to react to changing priorities in Sevenoaks district as development associated with the LDF Core Strategy is brought forward. Revised Implementation Plans will take account of projects that have been completed, new projects and feasibility studies that may have emerged over the course of the year.

In addition to investments in infrastructure and services, as set out in the Implementation Plan, initiatives of the SDST will be implemented through the application of Transport Assessments, Travel Plans and Vehicle Parking Standards. Transport Assessments are used to identify the likely transport impacts of development. Travel Plans are used to promote sustainable transport initiatives at a more local level and in greater detail than the SDST is able to do. Travel Plans can be developed for new or existing workplaces and schools, for example. Vehicle Parking Standards set the maximum number of parking spaces to be provided for a new development.

22.2 Transport Assessment

To enable the Planning Authority to determine whether a Transport Assessment is likely to be needed, the developer will need to prepare and submit an initial Transport Statement which determines how accessible the development is by all modes of transport, whether the site access can accommodate the predicted level of traffic, if any, and what measures can be undertaken to encourage travel by walking, cycling and public transport.

A Developer is required to submit a Transport Assessment in the following cases:

- **Where there are particular transport, accessibility or environmental issues in connection with the proposed site**
- **In any case where the development exceeds the threshold given in Table 5.**

Smaller development applications within the Sevenoaks district, will be required to submit an initial Transport Statement for approval and consideration of amalgamated impact of such smaller developments on the district road network will assessed to determine the most effective package of highway improvements needed.

TABLE 7: Thresholds for Provision of a Transport Assessment

Class	Land use	Threshold
A1	Food Retail	1000 m2 GFA
A1	Non-food Retail	1000 m2 GFA
A2	Financial and Professional Services	2500 m2 GFA
A3	Restaurants and Cafes	1000 m2 GFA
A4	Drinking Establishments	1000 m2 GFA
A5	Hot Food Takeaways	1000 m2 GFA
B1(a)	Offices	2500 m2 GFA
B1(b&c)	Research & Development/Light Industry	3000 m2 GFA
B2	General Industry	5000 m2 GFA
B8	Storage & Distribution	4000 m2 GFA
C1	Hotels	100 Bedrooms
C2	Residential Institutions (including hospitals)	100 parking spaces
C3	Housing	100 units
D1	Primary and Secondary Schools, Higher and Further Education	All new locations Expansion of existing facilities to be individually assessed
D1	All other non-residential Institutions	2500m2 GFA
D2	Assembly and Leisure	1000 m2 GFA
D2	Stadia	1500 Seats
	Use not filling any of the above classifications (Sui Generis)	Individually Assessed

(Source SPG4, superseded by the South East Plan in July 2009)

The location of currently proposed development within the district is shown in the **Appendices** of this Strategy by location. It should be noted that the proposals identified include a number that have been granted planning permission and a number where planning applications are yet to be submitted or determined. Identification of these schemes in the SDST does not indicate if they would or would not be supported by saved Sevenoaks District Local Plan Policies or the emerging Local Development Framework. This list of sites is also not exhaustive and further small scale developments continue to be submitted to the Council. The Appendices and Figures of this Strategy will be the subject of regular review to keep the information up-to-date.

22.3 Travel Plans

Changes in Government Guidance have led to a significant increase in Travel Plan Conditions secured through the planning process. In this context a Travel Plan can be defined as 'a strategy for

managing multi-modal access to a site or development focusing on promoting access by sustainable modes'. The main objective of a Travel Plan is to reduce the number of single occupant car trips to a site. A successful Travel Plan will give anyone travelling to and from a business or organisation a choice of travel options and encourage them to use the more sustainable ones.

The development of workplace and school travel plans help to identify ways of reducing private vehicle use and encourage the use of alternative modes of transport.

A number of schools and businesses in Sevenoaks district have travel plans in place. It is important to continue the good progress that is being made in this area of transport planning towards the implementation of smarter choice techniques. To influence people's travel behaviour towards more sustainable options, through improving public transport and marketing services such as travel awareness campaigns, setting up websites for car share schemes, implementing "walk to school" event, supporting car clubs and encouraging tele-working.

22.4 Employer / Developer Travel Plans

Provision of an effective Travel Plan will never be able to justify the positioning of a development in a totally unsuitable location. However, a sufficiently strong Travel Plan may help to counterbalance the disadvantages of a site where sustainable access without Travel Plan measures would be less than ideal. A Travel Plan will need to be robust enough to give assurance that the sustainable travel patterns predicted by the developer will be delivered once the site is complete and operating.

Significant progress has been made in the last year in clarifying the protocols and processes between KHS, District Planning Authorities and the Highway Agency for the scoping, implementation, monitoring and enforcement of Travel Plan conditions. This has included the publication of Kent's "Guidance on Transport Assessment and Travel Plans" which is intended for adoption by KCC as a material consideration in Planning.

The five tests relating to the appropriate use of planning obligations (as set out in ODPM Circular 05/2005) will be adhered to when considering the Travel Plan as part of the legal agreement. The use of conditions will also need to be in line with the guidance outlined in the DoE Circular 11/95. This is particularly important in the current economic climate where KHS and the Planning Authority need to balance what is 'reasonable' and viable with environmental and sustainability considerations.

22.5 School Travel Plans

The School Travel Plans project is now entering its final 'official' year. As part of funding secured by the Government's "Travelling to School" initiative, KCC – along with all other Local Authorities – is expected to deliver School Travel Plans at 100% of schools in Sevenoaks district and the County by March 2010.

There are 42 primary schools, 4 secondary school, 3 special schools and 1 pupil referral unit in Sevenoaks district. Of these, 29 primary schools, 1 secondary school and 1 special school has a KCC approved school travel in operation. The remaining schools are either awaiting KCC approval or are currently developing a school travel plan. There are also 13 Independent Schools operating in Sevenoaks district. *Source: KCC*

As well as showing a demonstrable impact on the school-run, the initiative has also secured additional capital funding to schools in Kent which have been spent on a wide range of initiatives to support the objectives of School Travel Plans e.g. cycle storage, sheltered waiting areas for parents, footpaths etc.

Further reference to development planning and transport assessments is made in **Appendix 18** of this Strategy.

23.0 Setting, Achieving & Monitoring Targets

23.1 Introduction

This section sets out the performance measures that will be used to measure the local authorities progress in achieving the transport objectives and policies outlined in chapter 6.

The effectiveness of the policies, initiative and interventions proposed and set out in the SDST will be monitored throughout the period of the Strategy and measured against a series of **4** performance indicators and **16** respective targets. The SDST indicators are grouped under the 'Shared Priority' objectives of **improving accessibility**, **tackling congestion**, **journey time reliability, providing safer roads** and **improving air quality** as, agreed between Government and Local Authorities, and to the transport and wider policy objectives of the SDST.

This Strategy has sought to set challenging, yet realistic targets. The targets selected reflect progress towards the achievement of KHS' measurable outcomes given its own resources and the resources of Strategy Partners between 2010 and 2026.

The SDST's targets for the strategy period 2010 to 2026 are summarised in sections 23.2 to 23.7 below under the relevant shared priority headings.

23.2 Improving Accessibility

The SDST's accessibility targets aim to monitor the ability of local people to physically access public transport services in Sevenoaks district and their ability to access key services using public transport. Improving access to key services can significantly impact on the quality of people's lives and on their life chances. Through working with the Strategy Partners, the SDST can develop a range of effective transport solutions for all sections of the community. The SDST's approach to tackling accessibility is based on an assessment of the needs and problems across the district, which are established using Kent's Local Transport Plan approach to accessibility planning as outlined in the **Accessibility Strategy for Kent** (ASK).

Access to health care facilities schools, education facilities and employment are the key focus areas of the SDST.

The SDST's Accessibility Targets comprise:

- **To increase household access to Pembury hospital within 30 minutes by 15% over the Strategy period (base figure of 58% in 2005/06, with a target in LTP 2 of a 10% increase by 2010/11)**
- **To increase household access by public transport to GP surgeries in Sevenoaks District within 15 minutes by 10% over the Strategy period (base figure of 89% in 2005/06, with a target in LTP 2 of a 5% increase by 2010/11)**
- **To increase the number of pedestrian trips into Sevenoaks and Swanley town centres by 15% over the Strategy period (the measure is the number of pedestrians entering the inner cordon). The base figure was 1744 pedestrian movements within the Inner Cordon over a 12-hour survey period (07:00 – 19:00) in 2008**
- **To ensure that all buses operating in Sevenoaks District have low floor access by 2017 (base figure of 44% in 2005/06, with a target in the LTP 2 of a 35% increase by 2010/11)**

It should be noted that all of the above indicators and targets are derived from Kent's Local Transport Plan 2006-11 (LTP1 & 2) and will be subject to revision based on targets produced in the next Local Transport Plan.

23.3 Tackling Congestion

Congestion is one of Sevenoaks district's biggest problems. Increasing car ownership, the need for suitable alternatives, future planned growth and Kent's role as the gateway to Europe all combine to put extra pressure on the local transport network, reducing journey time reliability, causing extra delay and affecting local communities through poor air quality and noise.

Making changes to the way people travel can help reduce congestion, with the greatest impact being possible during the peak traffic periods of the day. Reductions in car use can help to reduce carbon emissions, has a positive effect on climate change and encourages more sustainable transport development.

23.4 Congestion Targets

Demand management represents the most fundamental policy approach to achieving a significant proportion of the 'Shared Priority' objectives and targets in the SDST.

The SDST aims to achieve a reduction in road congestion in Sevenoaks district through the following targets.

To limit traffic growth in Sevenoaks overall road network to less than 2% per annum up to 2026 by:

- **Increasing bus patronage in Sevenoaks from 2010 – 2026 by 0.5% per annum up to 2026.**
- **Increasing the average number of daily cycle trips from 2010 – 2026 by 2% per annum up to 2026**
- **Increasing the proportion of pupils travelling to school by sustainable transport modes from 2010 – 2026 by 2% (Secondary Schools) and 1% (Primary Schools) per annum up to 2026.**

It should be noted that all of the above indicators and targets are derived from Kent's Local Transport Plan 2006-11 (LTP1 & 2) and will be subject to revision based on targets produced in the next Local Transport Plan.

The SDST aims to achieve a reduction in road congestion in Sevenoaks district in conjunction with the above targets the following SMARTer Targets:

- **All employers in Sevenoaks District employing more than 100 staff to have Travel Plans by 2015**
- **20% increase in the number of primary school children (5-10 year olds)[1] travelling to school by 'sustainable modes' (2005/06 base) by 2018. This will be off-set against non-car sharing car/van trips**
- **10% increase in the number of secondary school children (11-16 year olds)[2] travelling to school by 'sustainable modes' (2005/06 base) by 2018. This will be off-set against non-car sharing car/van trips**

[1] LTP 2 data - base figure of 52% in 2005/06 for kent, with a target in LTP 2 of a 10% increase by 2010/11

[2] LTP 2 data - base figure of 75% in 2005/06 for Kent, with a target in LTP 2 of a 5% increase by 2010/11

It should be noted that all of the above indicators and targets are derived from Kent's Local Transport Plan 2006-11 (LTP1 & 2) and will be subject to revision based on targets produced in the next Local Transport Plan.

23.5 Journey time reliability

KCC, SDC and its Strategy Partners will continue to work with partners and stakeholders to manage the local road network through pro-active co-ordination to minimise the impact of congestion and disruption with an aim of improving journey time reliability.

Journey time reliability is considered to be a more appropriate measure than journey time reduction, as most people wish to have a consistent journey time so that they can plan their journeys and perhaps influence modal shift more directly.

23.6 Providing Safer Roads

KCC, SDC and its Strategy Partners will continue to work towards reducing the number of road casualties in Sevenoaks district.

KCC is already committed to reducing road casualty rates in line with the national targets set in the Government's Road Safety Strategy.

The SDST is also committed to achieving the Governments road casualty reduction rate targets which are currently set at and comprise:

- **Achieving a 40% reduction in the number of people killed or seriously injured on Kent's road network in Sevenoaks District from 2010 – 2026 by 1% per annum up to 2026**
- **Achieving a 50% reduction in the number of children killed or seriously injured from 2010 – 2026 by 1% per annum up to 2026**
- **Achieving a 10% reduction in the number of slight injuries from 2010 – 2026 by 8% overall**

It should be noted that all of the above indicators and targets are drawn from Kent's Local Transport Plan 2006-11 (LTP1 & 2) and will be subject to revision based on targets produced in the next Local Transport Plan.

These targets may need to be revised in accordance with future revisions of the Governments Road Safety Strategy. Fundamentally, these targets will be used to measure the impact of a wide range of road safety initiatives and the impact of the ongoing road safety scheme identification and implementation programmes in Sevenoaks district.

23.7 Improving Air Quality

Kent's LTP sets an ambitious air quality target aimed at reducing NO2 emissions in line with the national target at AQMA sites in Kent, many of which are located in densely populated and heavily trafficked urban areas. There are currently 11 AQMA's declared within Sevenoaks district (see section 20 of this document).

KCC and SDC are committed to improving local air quality and through the SDST have identified a number of transport measures that could improve air quality in Air Quality Management Areas (AQMA's). Targets identified in this section will be used to monitor the impact of the measures identified in the SDST.

Sevenoaks Air Quality Target comprises:

"To work towards achieving the national air quality objectives for nitrogen dioxide and particulates by implementing the actions and measures contained within the Sevenoaks District Air Quality Action Plan 2009."

*** Note;-Exposure is as defined in LAQM Guidance TG(09)**

Each target has a robust methodology and includes a quantifiable base year and target year figure set against a time-series trajectory covering the period of the plan.

23.8 Ability to Report on Performance Measures

The local authorities ability to measure its performance against these indicators and targets is dependent on a further range of factors. First, robust and up-to-date data must be available. For many of the measures, the data is required to be collected and analysed on an annual basis. The SDST proposes that necessary steps will be taken to ensure data can be collated to perform an annual review of the indicators and targets, as appropriate. Where this is the case, progress will be reported as part of the Annual Review process, which will be carried out through the Sevenoaks Joint Transportation Board. Census data is also only available every ten years. The local authorities will, therefore, only possess the ability to measure performance in some locations less frequently than principal locations.

24.0 Key Background Documents

A number of important international, national, regional and Local publications and policy documents have been used to guide and shape the development of this Strategy.

Some of the Key documents are:

24.1 International

'Rio Earth Summit 1992 –'
http://www.un.org/geninfo/bp/enviro.html

'Kyoto Climate Change Conference 1997 –'
http://unfccc.int/2860.php

'Montreal Climate Change Conference 2005 –'
http://ec.europa.eu/environment/climat/montreal_05.htm

24.2 National

'A new deal for Transport, Better for Everyone 1998 –'
www.dft.gov.uk/stellent/groups/dft_about/documents/page/dft_about_610276.hcsp

'Transport Act 2000 –'
www.opsi.gov.uk/ACTS/acts2000/20000038.htm

'Transport White Paper, Future of Transport 2004 –'
www.dft.gov.uk/stellent/groups/dft_about/documents/divisionhomepage/031259.hcsp

'Planning Policy Guidance 13 2001 –'
www.communities.gov.uk/index.asp?id=1144015

24.3 Regional

'South East Plan 2009 –'
www.southeast-ra.gov.uk/southeastplan/plan/view_plan.html

24.4 Local

'South East Plan 2009 –'
www.southeast-ra.gov.uk/southeastplan/plan/view_plan.html

'Supplementary Planning Guidance 4 –'
www.kmsp.org.uk/pdfs/draft/SPG4VPSSep03.pdf

'Kent County Council Local Transport Plan 2006-2011 –'
www.kent.gov.uk/static/local-transport-plan/index.html

Local Plans / Local Development Frameworks / Local Development Documents for Sevenoaks District **– these can be found on the Sevenoaks District's Planning Website.**

'Sevenoaks District Council Air Quality Action Plan 2009 –'
http://www.sevenoaks.gov.uk/environment/pollution/air_quality/487.asp

'Rural Street Lanes – A Design Handbook (Draft)'
http://www.kentdowns.org.uk/PDF/RuralStreetsandLanes.pdf

25.0 Glossary

The following is a list of the abbreviations (in alphabetical order) used in this document for reference purposes:

AQMA - Air Quality Management Area
ASK - Accessibility Strategy for Kent
ATOC - Association of Train Operating Companies
CTC - Cyclist Touring Club
CTRL - Channel Tunnel Rail Link
DaSTS - Delivering a Sustainable Transport System
DCP - District Community Plan
DDA - Disability Discrimination Act
DfT - Department for Transport
FQP - Freight Quality Partnership
G.O.S.E- Government Office for the South East
HGV - Heavy Goods Vehicle
IP - Implementation Plan
ITS - Integrated Transport Scheme
JTB - Joint Transportation Board
KCC - Kent County Council
KHS - Kent Highway Services
KIA - Kent International Airport
LDF - Local Development Framework
LEV - Low Emissions Vehicle
LTP - Local Transport Plan
NCN - National Cycle Network
NSIP - National Station Improvement Programme
ODPM - Office of the Deputy Prime Minister
ONS - Office of National Statistics
PHV - Private Hire Vehicle
PIPKIN - Integrated Transport Scheme Prioritisation Methodology (now SPS)
PSVAR - Public Service Vehicles Accessibility Regulations
PTW - Powered Two-Wheelers
QBP - Quality Bus Partnership
RUS - Route Utilisation Strategies
SDC - Sevenoaks District Council
SDST - Sevenoaks District Strategy for Transport
SEERA - South England Regional Assembly
SPG - Supplementary Planning Guidance
SPS - Scheme Priority System (formally PIPKIN)
SRA - Strategic Rail Authority