

SAFER RELIABLE JOURNEYS

THE SEVENOAKS DISTRICT STRATEGY FOR TRANSPORT 2009 - 2026

APPENDICES & FIGURES

Image to go here

JULY 2009



THE SEVENOAKS DISTRICT STRATEGY FOR TRANSPORT 2009 - 2026

APPENDICES	PAGE	
APPENDIX 01	EXISTING STRATEGIES AND POLICIES	04
APPENDIX 02	KEY TRANSPORT & EXTERNAL PRESSURES	09
APPENDIX 03	BUS, TAXI & COMMUNITY TRANSPORT	12
APPENDIX 04	RAIL TRAVEL	21
APPENDIX 05	ROADS, TRAFFIC AND CONGESTION	28
APPENDIX 06	FREIGHT	30
APPENDIX 07	KENT’S AIRPORTS	32
APPENDIX 08	CLIMATE CHANGE & TRANSPORT PLANNING	33
APPENDIX 09	AIR QUALITY MANAGEMENT	35
APPENDIX 10	KENT DESIGN – BEST PRACTICE	36
APPENDIX 11	ROADS, RAIL AND BUS TRAVEL SAFETY	39
APPENDIX 12	CAR PARKING	44
APPENDIX 13	HEAVY GOODS VEHICLE MOVEMENT	47
APPENDIX 14	WALKING	49
APPENDIX 15	CYCLING	50
APPENDIX 16	POWERED TWO-WHEELERS	51
APPENDIX 17	DISABILITY ACCESS	52
APPENDIX 18	SMARTER CHOICES	53
APPENDIX 19	DEVELOPMENT PLANNING & TRANSPORT ASSESSMENTS	58
APPENDIX 20	SETTING & ACHIEVING TARGETS	60

THE SEVENOAKS DISTRICT STRATEGY FOR TRANSPORT 2009 - 2020

TABLES		PAGE
TABLE 1	LIST OF KCC SUPPORTED BUS SERVICES IN THE DISTRICT	13
TABLE 2	RAIL SERVICES IN THE SEVENOAKS DISTRICT	21
TABLE 3	JOURNEYS TAKEN FROM 13 STATIONS IN KENT	27
TABLE 4	CASUALTIES ON KCC ROADS, BY DISTRICT 2003 TO 2008	36
TABLE 5	CASUALTIES ON KCC ROADS, BY MODE OF TRAVEL	36
TABLE 6	CRASH DATA FOR FIXED & MOBILE SAFETY CAMERA SITES	41
TABLE 7	BEFORE AND AFTER DATA FOR INTERACTIVE SPEED SIGNS	41
TABLE 8	SDC CAR PARKING (COUNCIL OPERATED CAR PARKS)	44
TABLE 9	HGVs AT MOTORWAY AND TRUNK ROADS MCC SITE	48
TABLE 10	INNER CORDON CYCLE COUNTS	50
FIGURES		PAGE
FIGURE 1	LOCATION OF HEALTHCARE IN WEST KENT	10
FIGURE 2	SOUTH EASTERN NETWORK MAP	22
FIGURE 2	THAMESLINK KEY OUTPUT 1	23
FIGURE 4	THAMESLINK KEY OUTPUT 2	24
FIGURE 5	EXTRACT OF SOUTHERN NETWORK MAP	26
FIGURE 6	LOCATIONS OF 13 STATIONS AND THEIR FLOWS	27
FIGURE 7	PUBLIC TRANSPORT MAP	64
FIGURE 8	PROPOSED DEVELOPMENTS IN EDENBRIDGE	65
FIGURE 9	PROPOSED DEVELOPMENTS IN HALSTEAD	66
FIGURE 10	PROPOSED DEVELOPMENTS IN HORTON KIRBY	67
FIGURE 11	PROPOSED DEVELOPMENTS IN NEW ASH GREEN	68
FIGURE 12	PROPOSED DEVELOPMENTS IN SEVENOAKS	69
FIGURE 13	PROPOSED DEVELOPMENTS IN SWANLEY & CROCKENHILL	71

EXISTING STRATEGIES AND POLICIES

There are a number of local policies that have informed the Sevenoaks Transport Strategy, these are:

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

The Vision for Kent (2006) is a community strategy for the County. It is aimed at improving the quality of life of all Kent residents. The vision for transport is: 'to provide good accessibility to jobs and services for all sections of the community in Kent and to improve the environment by reducing congestion and pollution, widening the choice of transport available, developing public transport, walking and cycling.' The Vision sets out a number of long term goals and short term priorities.

The Kent Partnership was formed in 2002. It oversees Kent's community strategy (Vision for Kent). The partnership meets every 3 months and encourages community leadership as well as supporting new initiatives and the effective delivery of services. In between these meetings, 5 working groups address key issues. The 3 groups that are related to transport are: Safer and Stronger Communities, Healthy Communities and Older People, Economic Development and Sustainable Communities.

A number of transport related aims make up the **Sevenoaks District Community Plan**. These aims focus on increasing transport options and encouraging public transport use by making it safer and more frequent. There is also a focus on improving accessibility, particularly for people with disabilities and those living in rural areas. Sevenoaks acknowledges the impact transportation has on the environment and wishes to promote 'green transport' options such as walking, public transport and cycling.

The **Local Plan** focuses on people choosing public transport and other sustainable modes of transport instead of the private car. The Local Plan will eventually be replaced by the LDF, which is currently being developed; the most recent timetable

for completing the Local Development Framework expects the Local Development Framework to be adopted in April 2009.

Kent's Supporting Independence Programme (SIP) began in April 2002. Its aim is to promote better working partnerships between public, private and voluntary sectors in order to help people gain more independence. SIP has identified 10 groups of the most vulnerable people in our society that require help with gaining access to jobs, services and opportunities. Transport plays a key role in gaining this access.

The Kent & Medway Structure Plan is to be used as a guide in the development of Local Plans and LDFs. It also guides and informs investment decisions made in both the private and public sectors. The transport network in Kent is likely to come under strain with new housing and employment targets set by the County in line with current Government guidance. Therefore, the need for people to change their travel behaviour is vital in minimising this negative effect of population growth. This plan will be replaced by the South-East Plan when it is fully adopted.

The draft of the **South-East Plan** was submitted to government on 31st March 2006. It is a document that looks at the future of the region up until 2026. It looks at the issues that Kent may face in housing, the economy, transport and the environment, and how the County will tackle these issues. To date the South East Plan has been through the Examination in Public Process with an independent panel proposing changes to the document. The Government has recently agreed that there will be no changes to the amount of housing to be delivered in the Sevenoaks District, which will be 165 homes a year.

The South East Plan identifies the regions transport system faces a number of challenges including;

- ***The South East's gateway function means that it plays a pivotal role in the wider transport system of both North-West Europe and the UK, with access to/from the region's airports and ports a key issue not only for South-East England but also for the rest of the UK.***
- ***The proximity to, and economic relationship with, London mean that the transport system plays a critical role in supporting economic and social activity in the wider South East, extending well beyond the region's boundaries.***
- ***Despite the impressive economic performance of the region, there remain pockets of deprivation throughout the region, some relatively poorly connected.***
- ***In the more economically buoyant parts of the region severe congestion, particularly on the road and rail networks, gives rise to unreliable and protracted journeys that reduce business performance and productivity for the region as a whole.***
- ***The Plan's sustainability appraisal highlighted a growing concern regarding the impact of the transport system on the environment. The policies contained in the Regional Transport Strategy should therefore be read in conjunction with those in the Sustainable Natural Resources Section and particularly policies NRM7 – Air Quality – and NRM8 – Noise.***

Therefore the South East Plan's Transport Strategy and Policies, which local authorities should take into account in their Local Development Documents and Local Transport Plans, are focused on a set of core principles some of which are relevant to the Sevenoaks District and these are as follows;

- ***Managing and investing – Through achieving a rebalance of the transport system in favour of non-car modes as a means of access to services and facilities. Foster and promote an improved and integrated network of public transport services in and between both urban and rural areas. Include measures that reduce the overall number of road casualties. Include measures to minimise negative environmental impacts of transport and where possible, to enhance the environment and communities through such interventions.***
- ***Rural Transport – Take a co-ordinated approach to encouraging community based transport in areas of need. Include a rural dimension to transport and traffic management policies, include looking for opportunities to improve provision for cyclists and pedestrians between towns and their nearest villages.***
- ***Communications technology – Investment in communication technology that increases access to goods and services without increasing the need to travel should be actively encouraged and taken into consideration in identifying future transport needs.***
- ***Mobility Management – The policies and proposals set out in Local Development Documents and Local Transport Plans will seek to achieve a rebalancing of the transport system in favour of non-car modes and will be based on an integrated package of measures including the following; the allocation and management of road space used by individual modes of travel; the scale of provision and management (including pricing) of car parking both off and on street; an increase in bus priority; improvements in the extent and quality of pedestrian and cycle routes; improvements to intra and inter regional rail services; measures that increase accessibility to rail stations.***
- ***Parking – set maximum parking standards for land uses; support an increase in the provision of parking at rail stations where appropriate.***
- ***Travel Plans and Advice – All major travel generating developments must have a travel plan agreed and implemented by 2011.***

Increasing levels of traffic is one of the 6 challenges faced by the County noted in the **Kent Environment Strategy (2003)**. The strategy puts forward a number of ideas to tackle this problem. The majority of the ideas focus on making improvements to public transport to reduce dependency on the motor vehicle. In 2007, a progress report showed that the level of traffic actually fell in the last year for which data was available. This suggests people are willing to use alternatives to the car, however the carbon dioxide emissions have risen in the last year. A full review of the strategy is expected in 2008.

The four main objectives of **Kent's Local Transport Plan (2006-2011)** are; Improving Accessibility, Tackling Congestion, Improving Air Quality and Reducing Casualties. By achieving these aims KCC hopes to provide its residents with a better

quality of life as well as protecting the environment against negative effects of transportation. The **Second Local Transport Plan (LTP2)** sets out a number of targets. These targets are as follows;

- **10% increase (from 58%) by 2011 in the number of households within 60 minutes travelling time of a hospital by public transport (LTP 1b);**
- **A 5% increase (from 88.9%) by 2011 in the number of households within 15 minutes of a GP's surgery by public transport (LTP1b);**
- **By 2007/08 a 40% reduction on 2000 base level in the number of people killed & seriously injured on Kent's roads with a corresponding 50% reduction for children (BVPI99x & BVPI99y);**
 - **The 2007/08 KSI figure is 604 with a 2000 base level of 1006**
 - **Child base figure for the year 2000 is 137 and in 2007/08 is 89**
- **A reduction in average vehicle speeds on Kent's local roads by 10% by 2011, base year is 2005/06 at 59% and projected forecasts takes the figure to 49% for 2010/11 (KLTP 7);**
- **A 2% increase per year in bus patronage on the 2003/4 level (43.4 million passenger journeys countywide), target - 49.9 million journeys by 2011 (BVPI 102);**
- **A 6% improvement in bus punctuality by 2011 - overall 89% of bus services were within a tolerance of a 6 minute window in 2005/06 - target rises to 95% by 2011 (LTP 5);**
- **A 38% increase in cycling on 2003/4 levels by 2011, base data indicated the number of recorded cycle trips being 8809 (LTP3);**
- **Restraining Kent wide traffic growth to less than 2% per annum (LTP2);**
- **Kent County Council will achieve a 5% reduction in journeys by car (inc. vans and taxis) for children aged 5 - 16 based on 2006/07 base year data (LTP 4).**

In order to help to achieve these targets a number of Integrated Transport Schemes have already been identified, and those schemes that have been put forward for funding for the last 2 years of this current Local Transport Plan period are identified in the **Implementation Plan**. A number of other improvements have been identified and are included within the Implementation Plan of this strategy.

In August 2006 the Department for Transport published the document "Circular Road 1/2006 Setting Local Speed Limits" which gave guidance on the setting of speed limits and which also required all "A" and "B" class roads in Kent be brought up to the standards contained in the document. In order to comply with this policy Kent County Council has been assessing the speed limits on "A" and "B" class roads, with a pilot review of speed limits being carried out on "A" and "B" class roads in the Maidstone District. A review of speed limits on all "A" and "B" class roads within the Sevenoaks District will be carried out in the 2010/2011 financial year, with consultation on any proposed changes being carried out in 2011/2012 financial year for implementation during the 2012/2013 financial year. Until that time no changes can be made to

speed limits on “A” or “B” class roads unless there is an identified crash problem which warrants a change in the speed limit.

The Sevenoaks District has a number of Conservation Areas. These areas have been designated as areas of special architectural and/or historical interest. The aim of a Conservation Area is to preserve and enhance the best of the existing features and ensure that any changes within these areas is sympathetic towards and makes a positive contribution to its character.

There are currently 40 Conservation Areas within the District. The reason for the designation of these areas is a combination of architectural and historic features for which the area is notable. Each of the 40 Conservation Areas has an appraisal which has been adopted as Supplementary Planning Guidance. These appraisals identify the particular characteristics, architectural styles and historic development that must be respected by any new development or changes to the streetscape.

These Conservation Areas should be considered before any of the proposed improvements identified within this Strategy are implemented. Those Conservation Areas which could be affected by proposed improvements identified within this Strategy include the following;

- ***Bessels Green***
- ***Brasted High Street***
- ***Chiddingstone***
- ***Chiddingstone Hoath***
- ***Edenbridge***
- ***Eynsford***
- ***Otford***
- ***Penshurst***
- ***Riverhead***
- ***Seal***
- ***Sevenoaks – Granville and Eardley Road***
- ***Sevenoaks – High Street***
- ***Sevenoaks – The Vine***
- ***Sundridge***
- ***Westerham***

The Kent Downs Area of Outstanding Natural Beauty Streetscape Design Handbook was published in November 2007 as a consultation draft. It provides good practice principles as well as design examples that conserve and enhance the precious landscape. Before the handbook can be adopted as policy, it needs to be presented to the Highways Advisory Board. If the handbook is adopted as policy, it will need to be taken into consideration when implementing any future schemes.

KEY TRANSPORT & EXTERNAL PRESSURES

In Sevenoaks some 85% of households have access to one or more car, this compares to approximately 78% throughout Kent. The Government's projections to 2025, based on the National Transport Model, predict that this will increase and that traffic in England will grow by 26% between 2000 and 2010. At a regional level, it is likely that the rate of growth in car ownership and traffic levels in the South East region will be above the average figure predicted for England. Conversely, 22% of households in Kent do not have access to a car, which restricts people's ability to gain access to key services and employment.

The private car remains the dominant mode of travel for journeys to work in Sevenoaks with approximately 40% of the district's resident workforce (78,405) either driving or being driven to their places of work. This level of use reflects current levels of car ownership in the district brought about by higher rates of disposable income, and the trend in the fall of motoring in real terms.

In addition to the key pressures brought about by significant levels of road and rail transport there remains other external pressures on the District such as;

Development Pressures;

Be this residential, retail or commercial/industrial, the District has produced the Local Development Framework (LDF) to provide the basis for the determination of planning applications and together with the South East England Regional Spatial Strategy (currently being prepared by SEERA) will form the Development Plan for Sevenoaks District.

Gatwick Airport Expansion;

The demand for air travel is still forecast to grow, because people want to fly more frequently air travel has also become far more affordable in real terms and it is most often used for holidays and business travel.

Government policy; The proposed future expansion of London Gatwick Airport and the implications this may pose for the local road, rail and public transport networks and as a background to the proposal; The Government published The Future of Air Transport White Paper in 2003, setting the context for airport development in the UK up to 2030. The White Paper said that the first priority was to make best use of existing runways. It also said that there should be two new runways in the south east between now and 2030: the first at Stansted, followed as quickly as possible by a third short runway at Heathrow, but only if strict noise and air quality limits could be met. It said that land should be safeguarded for a second runway at Gatwick after 2019, in case a new runway at Heathrow could not meet the environmental limits.

Motorway and Major Road Corridors;

Widening of the M25 between junctions 5 and 7 to four lanes, and the possibility of providing east facing slip roads onto the M25, would have significant impacts with implications on the transport network in the district.

There are several other areas for consideration such as ;

- A25 Bat & Ball junction improvements
- Sevenoaks High Street/Town Centre (as part of AQMA)
- Junction modeling at M25/A21 Chipstead (Highways Agency)

Access to Healthcare;

Access to the major hospitals and primary care centres in Sevenoaks vary considerably throughout the district – currently a new 512 bed hospital being built at Pembury by the West Kent Primary Care Trust with the first phase planned to accept patients in early 2011.

Primary Care Trusts (PCT), are the NHS organisations responsible for improving the health of the people living in their area. PCT's plan local health services, in partnership with local NHS Trusts, local government and the local community.

Figure 1: Location of Healthcare in West Kent (source WKPCT)



West Kent Primary Care		Community Hospitals	
1	Headquarters – Tonbridge	1	Edenbridge War Memorial
2	Maidstone office	2	Gravesham Community
3	Gravesham office	3	Hawkhurst
4	Preston Hall office	4	Livingstone (Dartford)
Acute (Hospital) Trusts		5	Sevenoaks
1	Darrent Valley Hospital	6	Tonbridge Cottage
2	Kent & Sussex Hospital	Mental Health Service	
3	Maidstone Hospital	1	Kings Hill office
4	Pembury Hospital	2	Darent House (Sevenoaks)
Emergency Care Centres		3	Highlands house (T Wells)
1	Maidstone Hospital	4	Little Brook (Dartford)
2	Sevenoaks Hospital	5	Darent Wood Road
3	Gravesham	6	Priority House (Maidstone)
Urgent Care Centre		7	Trevor Gibbons Unit (Maidstone)
4	Darrent Valley Hospital		

Access to Education and Learning;

Ensuring access to education and learning has been a key target of 'Towards 2010', the policy document published by KCC's Leader, Paul Carter in 2005 and one of the successes is the Kent Freedom Pass with initial pilot schemes being extended across all twelve Kent districts by the June 2009.

KCC first introduced the Kent Freedom Pass scheme in June 2007, providing bus travel free at the point of use to students attending school in three pilot areas (Canterbury district, Tonbridge town and Tunbridge Wells district). Since then it has proven very successful, encouraging children away from car travel and on to Kent's bus network. By the end of the first year, pass holders had made more than 1 million journeys and the 10,000th pass was issued in October 2008.

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 where it has been introduced. Subject to cost, KCC is looking at extending this scheme to 17 year olds and journeys across the Kent boundary.

The scheme has now been extended to cover the remaining districts and boroughs this year and this will cover schools in; Ashford, Dartford, Gravesham & **Sevenoaks**

BUS, TAXI & COMMUNITY TRANSPORT

The Sevenoaks District is serviced by a large number of bus routes, although some of these are low frequency with 2 hourly services and some with only 1 run a day. There are also a number of peak hour and school transport only services. Because of the high car use in rural areas, bus operators find it increasingly difficult to run commercially viable bus services, there is therefore a combination of contracted and commercial bus routes within the District. Bus operators are already operating bus routes where they are commercially viable, and despite frequent requests any new, or improvements to, existing routes would not be commercially viable and would need public funding to be operated.

In 2003 the Department for Transport made available funding for Kickstart schemes, which were “intended to enhance commercial bus services in terms of quality and frequency which could not be justified on commercial grounds; to push marginal supported services into the commercial areas and to encourage the development on new services to meet needs”. Schemes funded under Kickstart should represent partnership working between local authorities and bus operators and should aim to be either commercially viable at the end of Kickstart funding, or alternatively to have a guarantee of local authority revenue support, at the end of the Kickstart funding period.

Kickstart schemes have been able to directly improve the transport on offer to the travelling public and the community in the project areas and are widely acknowledged by both local authorities and bus operators to be schemes which would not have been developed without the impetus provided by Kickstart funding. Kickstart has been successful in uplifting marginal commercial services to new levels of revenue and patronage, and in establishing their long term viability. A number of bus services within Sevenoaks are marginally commercial, further discussions should be held with bus operators to assess whether any of these services can be put forward for Kickstart funding.

As a result any new or improved routes will only be forthcoming from developers through S106 agreements or funded through Kent County Council (funding for which is already limited and fully utilised).

Bus operators are already in discussions with developers regarding planned development at Fort Halstead and the West Kent Cold Store, regarding improvements to bus services in these areas. It is expected that these services are going to need financial support through section 106 agreements, and such support is only likely to last a few years, after which time funding is going to need to be found to run these services or they will cease. Larger developments are required in order to support a bus service, unfortunately there are very few significantly sized development proposed within the Sevenoaks District which would help to support a new or improved bus service. A development of around 1,000 houses would be needed to be able to support a commercially viable bus service, given current patterns of usage. This therefore further illustrates the need to concentrate development in existing urban areas or medium to large sized villages, in order to help to create better more sustainable bus services within the District.

Some services in the north of the District are covered by a number of high frequency services, which fall within the Transport for London (TfL) bus network (London travel

zone 6), operated by Metrobus. Arriva runs a number of hourly bus services across the District, linking the major towns of Swanley, Bromley, Dartford, Sevenoaks Town, Tonbridge, Tunbridge Wells and Bluewater. However bus operators are finding it difficult to run a commercially viable bus service to Shoreham and Otford (possibly due to the rail services which are available creating spaces on the bus services), a Saturday service which uses this route is already being subsidised by Kent County Council.

Table 1 illustrates the gaps in the bus network within the rural areas east of the villages of New Ash Green and Hartley, as well as the rural areas between Sevenoaks Town and Chiddingstone Causeway. Due to the rural and sparsely populated nature of these areas a frequent commercial public transport service cannot operate. This is because the cost of running such a service greatly outweighs any revenue gained from the number of people within these areas that need to use such a service.

The bus services within the Sevenoaks District are often perceived to be poor, and residents are reluctant to use them, in many cases the services are piecemeal, as a result it can be difficult to produce a complete and easy to understand timetable. In other areas of the County bus operators have produced pocket-sized timetables, however these have not been produced for the Sevenoaks District because the bus services are so irregular and infrequent. However if there is a bus service that is frequent the operator will carry out a door-to-door advertisement of the service.

Bus operators have also tried to integrate the bus services that are available with train services where possible, however this cannot always be done on every occasion because train services are more frequent.

Kent County Council subsidises bus services within the Sevenoaks District at a cost of £1.1 million a year, **Table 1** shows those bus services within the Sevenoaks District that are subsidised wholly, or in part by Kent County Council. Without this subsidy these services would not be able to operate.

Table 1: List of KCC supported bus services serving the Sevenoaks district (source KCC)

Service no.	Basic frequency	Days	Route
231/233/234	Hourly (some school variations)	Mon - Sat	Edenbridge, Bough Beech, Penshurst, Fordcombe Green, Tun. Wells
232/234/238	Numerous variations	Mon - Sat	Edenbridge – Hever – Cowden – Tun. Wells
235	2 Journey	SDO	Leigh, Penshurst, Tun. Wells, Hildenborough
236 (Surrey contract)	3 Journeys	Mon – Fri	Westerham, Crockham Hill, Edenbridge, Lingfield
237	2 Journeys	SDO & Sat	Edenbridge, Four Elms, Chiddingstone, Penshurst, Tun. Wells
246 (TfL contract)	30 min	Mon – Sun	Chartwell, Westerham, Biggin Hill, Bromley
306/308	Hourly	Mon – Sun	Sevenoaks, Seal, Ightham, Borough Green, Wrotham, Vigo, Gravesend, Bluewater

Table 1: List of KCC supported bus services serving Sevenoaks the district KCC (continued)

Service no.	Basic frequency	Days	Route
401	Hourly	Mon – Sun	Chartwell, Westerham, Brasted, Chipstead, Sevenoaks, Tonbridge, Tun. Wells
402	30 min	Mon – Sat	Tun. Well, Tonbridge, Hildenborough, Sevenoaks, Dunton Green, Knockholt, Badgers mount, Bromley
404	5 Journeys	Mon – Fri	Edenbridge, Four Elms, Ide Hill, Sevenoaks, Ivy Hatch, Plaxtol
405	2 Journeys	Wed	East Hill, W Kingsdown, Otford, Sevenoaks
407/408/409/ 418/419/422	Hourly with numerous variations	Sat	Swanley, Farningham, Eynsford, W Kingsdown, Wrotham, Borough Green
413/414/415	30 min	Mon – Sat	Eynsford, S Darenth, Horton Kirby, Sutton at Hone, Dartford
421	4 Journeys	Mon – Sat	Swanley, Eynsford, Otford, Sevenoaks
422	1 Journey	Thurs	Eat Hill, W Kingsdown, Farningham, Horton Kirby, Bean, Bluewater, Gravesend
431/432	Hourly	Mon – Sat	Kemsing, Seal, Sevenoaks, Otford, Shoreham, Dunton Green, Riverhead, Sevenoaks
433	Hourly	Mon – Sun	New Ash Green, Longfield, Darrent Valley Hospital, Bluewater
474/475	4 Journeys	Mon – Sun	Greenhithe, Bluewater, Longfield, Bean
477	20/40 min	Mon – Sun	Orpington, Crockenhill, Swanley, Hextable, Dartford, Darrent Valley Hospital, Bluewater
489	Hourly	Mon – Sun	New Ash Green, Longfield, Gravesend
R5 (TfL contract)	Hourly	Mon – Sat	Orpington, Knockholt, Halstead, Cudham,

The District Council also provides subsidised minibus travel for older residents, residents with special needs, those who cannot easily access public transport and the mobility impaired. However these services and those subsidised by Kent County Council do not help to address the rural accessibility issues for the general public.

Kent County Council and Sevenoaks District Council have a responsibility to maintain and provide appropriate facilities at bus stops within the District, and Sevenoaks District Council have recently introduced new bus stop poles and timetable cases on a number of bus stops throughout the District. Kent County Council has also recently carried out an assessment at each bus stop within the Sevenoaks District which has focused on the type of service information each stop needs to be equipped with (i.e. the sort of flag it needs, the type/size/layout of timetable information, if the flag has bus service numbers on it etc) and these improvements are to be carried out shortly.

Similar improvements have also been identified within the Action Plan which can be found in the **Implementation Plan**.

Kent County Council are planning to carry out a more detailed assessment of each bus stop to taken into account the need for shelters, bus borders and clearways as part of a retendering of the councils Roadside Infrastructure Unit. This work will need to take into account of the need to improve the “accessibility” of buses at bus stops. Bus operators have a target of 2015/2016 to have a 100% “accessible” fleet, and new vehicles have a “kneeling” capability or ramps which make them more accessible.

However kerbs will still be required to be set at a certain height to ensure as level an access as possible as wheelchairs may still have difficulty boarding or alighting from a low kerb. Also such new technology on buses will be of little use if parked cars are obstructing the bus stop completely, in such instances bus clearways, pavement build-outs of bus stop piers should be introduced.

The Action Plan, which can be found in the **Implementation Plan**, identifies where better facilities for bus stops including bus timetable information and therefore where promotion can be provided, in order to encourage use of the bus services within the District that are available. However it is also suggested that the bus operator along with Kent County Council and District Council officers drive the bus routes with a bus so that a thorough assessment of every bus stop is carried out and improvements identified where necessary (such as the need for the introduction of bus boarders and clearways).

Quality Bus Partnerships (QBP's)

Kent County Council (KCC) has established or is in the process of establishing QBP's in the following areas of the county.

- **Ashford**
- **Canterbury**
- **Maidstone**
- **Thanet**
- **Tunbridge Wells**
- **Dover**

It is envisaged to extend these QBP's to other areas of the county – but they are very dependant of strong partnership bonds, good viable bus services and additional funding streams for implementation.

These partnerships aim to bring about significant improvements in the quality of bus services within the County. The local authorities are investing in improvements such as bus lanes and bus priority at traffic lights as well as bus stop improvements such as raised kerbing and traffic restrictions known as bus stop "clearways". The bus companies are investing in easy access low floor buses and are improving the frequency, punctuality and reliability of their services.

All parties must recognise that these objectives require high quality reliable public transport that can only be delivered through working in partnership, with a commitment to co-ordinate investment and complementary initiatives.

Rural Transport

Much of the district is within the greenbelt and within areas of outstanding natural beauty. However with the decline of the farming industry comes the rise in diversity and the use of rural accommodation for residential use not directly associated with that industry.

The loss of many village shops, Post Offices, local services and the decline in local services such as schools and healthcare places a burden on transport for the rural community to substitute those losses by travelling.

Understandably the lack of density of population does not give rise to economic provision of public transport but what are the options;

- ***Subsidised public transport***
- ***Cycling and walking***
- ***Car share***
- ***Use of the private car***

For education (primarily secondary schools) the school bus has been successful but the costs have been continually rising. The service is difficult to manage with some pupils starting early and some pupils being involved in after school activities. Distances often preclude cycling and walking along with safety. Hence it is unlikely that the private motor vehicle will be replaced.

Given the likely limited expansion of housing stock in rural locations any significant funding from planning gain will not support the expansion of public transport. What therefore needs to be done is see if the limited funding can support joint ventures such as shared car journeys, shared bus journeys (school and commuter trips) and improved highway safety to encourage walking and cycling. The latter may only be achievable by the introduction of lower speed limits but this would need a national review of rural speed limits and the support of the police.

The rural and sparsely populated nature of the Sevenoaks District, coupled with high car ownership and poorly utilised services makes it difficult to run a frequent, commercially viable bus service. As a result those people who do not have access to a car experience significant accessibility problems.

There are several medium-sized rural villages located within the District that have poor public transport accessibility. In addition, the rural nature of the Sevenoaks District attracts significant levels of leisure tourism which is highly dependent on motorised individual transport due to restricted public transport provision (particularly buses) both in terms of frequency and times of operation. The Darent Valley has experienced significant growth in car borne leisure traffic in recent years, this is supported by data from the National Statistics Survey (DfT 2005), which shows that 31% of all trips nationally in 2005 were for leisure purposes, 70% of which were made as a car driver or car passenger.

Historic sites, parks, walks and other leisure destinations within the Sevenoaks District include;

- ***Chartwell - Winston Churchill's former home,***
- ***Chiddingstone Castle,***
- ***Darent Valley Path,***
- ***Eagle Heights (near Eynsford),***
- ***Eden Valley Museum,***

- ***Emmetts Garden, (Ide Hill),***
- ***Hever Castle,***
- ***Ightham Mote,(Tonbridge and Malling District)***
- ***Knowle House & Park,***
- ***Lullingstone Castle,***
- ***Lullingstone Park Visitors Centre,***
- ***Lullingstone Roman Villa;***
- ***North Downs Way,***
- ***Penshurst Place,***
- ***Quebec House, (Westerham),***
- ***Shoreham Woods Visitors Centre,***
- ***Squerryes Court (Westerham)***

The rural accessibility issues within the District looked at detail in this document under the heading “Accessibility” the strategy, and ways to improve public transport provision within the rural areas of the Sevenoaks District are set out in the Implementation Plan of this strategy.

Community Transport

Due to the sparsely populated and rural nature of the District and resultant lack of rural public transport services, the population within such areas must find alternative modes of transport, one such mode being community/voluntary transport services. Sevenoaks District Council runs a community bus service using 9 buses, which vary in size from 15 to 24 seat vehicles. The service currently operates using a permit system, with a permit costing £60 per year (or £30 for 6 months) a reduced rate is also available for those that use the service infrequently. In order to obtain a permit, users must meet a certain criteria to ensure that only those that need these services use them.

At present approximately 500 people within the District have registered to use this service which is aimed at people that can not access public transport because there are currently no services or existing services are poor, as well as those that are mobility impaired and are not physically able to access public transport services. The service is available Monday to Friday, 8:30am to 4:00pm, however for an additional fee; the service can also operate out of hours.

A budget of £463,450 has been set aside to run the Sevenoaks District Council mini-bus service for this current financial year (2009/2010). A proportion of this cost is offset by payments, for Day Centre Transport, from Kent County Council Social Services (some via Age Concern) and West Kent PCT. It is estimated that these payments will total approximately £70,000 for this financial year. However these figures do not take into account the huge increase in diesel fuel costs, which have increased by 38% since budgets were set and are predicted to rise still further, placing further pressure on the budget which is already very limited, although such services are in constant high demand.

The following services are provided by the mini-bus service: Day Centre Transport, Shopping Bus Services, Club Transport, Private Hire Services and Organised Youth Trips, and are explained in further detail below.

Day Centre Transport

For operational procedures the district has been split into three areas: Swanley, Sevenoaks and Edenbridge so that two vehicles are able to operate in each area carrying passengers to and from the day centres and lunch clubs that are available within these areas.

A contract between Sevenoaks District Council and Edenbridge Hospital is in place to provide a transport service to and from Edenbridge Hospital for the local health authority; two vehicles operate each day to transport users to and from the hospital day centre.

In Swanley Sevenoaks District Council support Darent Valley Rural Age Concern by providing transportation to and from day centres and lunch clubs in Swanley, and in so doing also provides a useful transport service for residents in Darent, within the Dartford District. Darent Valley Rural Age Concern support Sevenoaks Community Transport Services through recommending clubs which are likely to require transport services, as well as liaising with members of the public for individual transport requests, as well as organising shopping trips.

In Sevenoaks clients are taken to Holybush Day Centre and Edenbridge Day Centre on behalf of Age Concern. The service also provides shopping trips for sheltered housing groups and clubs.

Shopping Bus Services

These services are provided by Sevenoaks District Council and are used to provide better access for the mobility impaired and those who are frail and do not have access to a private car. Currently these services operate in the following areas: Cowden, West Kingsdown, Westerham, Weald, Kemsing, Ide Hill, Dunton Green, Sevenoaks Town, Bough Beech, New Ash Green, Hartley, Leigh, Chiddingstone, Brasted, Holybush, Riverhead, Horton Kirby, Swanley, West Kingsdown, Marsh Green Edenbridge, Fordcombe, Sundridge, Eynsford, Four Elms, Rockdale, East Hill, Otford, Penshurst and Roman Court. However there are currently no services serving Halstead, Knockholt, Chiddingstone Causeway, Fawkham, Shoreham and Underriver but there are plans to extend services to these areas.

These services provide a vital transport link from these rural areas, where public transport services are poor or non-existent, as well as for those people who have mobility problems and cannot physically access public service vehicles. These services allow residents to access goods and services that would otherwise be inaccessible to them.

Private Hire & Club Transport

To supplement the limited community transport service's budget, Sevenoaks District Council carry out private hire work for youth and elderly groups within the District, such work can include providing transport for a day trip to the coast. In addition to this subsidised transport is also provided by Sevenoaks District Council for youth groups, however the service is very limited due to budgetary restrictions and therefore only operates three times a year. As a result very few youth groups use this service.

Overall community transport services for the young within the district are extremely limited. Where commercial bus services do operate the service that they provide normally ceases in the evening, resulting in passengers (including the

young/teenagers) being able to use public transport services to travel to their evening destination but do not provide a return service during the evening. Kent County Council and Bus Operators also provide school transport, however these services only operate directly after the school day ends, preventing those students wanting to attend after school clubs from doing so. Sevenoaks District Council would like to run a service to allow students to attend, after school, and other clubs, however the funding is not available to run such a service.

If the private hire work was not carried out a number of community transport services would not be able to operate, Sevenoaks District Council, has to operate such services commercially. The Community Transport Services which operate are continually under pressure, with no way to cut current operating costs (if any Community Transport Services are cut, the ability to generate support through the private hire work also reduces) this pressure continues.

Voluntary Services

A number of organisations currently operate voluntary transport services within the Sevenoaks District, these include:

- **Edenbridge Transport Bureau;**
- **Sevenoaks and Swanley Volunteer Centres;**
- **Compaid Trust;**
- **Voluntary Services Unit;**
- **Schools;**
- **Youth Zone Van.**

The Edenbridge Transport Bureau provides transport to hospitals, using volunteers who use their own vehicles and accept donations from individuals who use the service to cover the cost of fuel. The service operates through individuals contacting the bureau with the time and day they require transport, the centre organizer then arranges the transport by contacting volunteers to see who is able to provide transport for individuals. Sevenoaks and Swanley Volunteer Centres provide similar transport services but rely on donations from individuals to cover fuel costs and grants from social services.

The Compaid trust provides transportation for people with special needs, transport is provided not only for Compaid clients (Compaid Trust is a charity that focuses on using computers as a communication tool for people who for various reasons are unable to speak and/or express themselves) but also for Social Services, the local Health Authority and those within the local community who may be disabled and/or elderly. This voluntary transport service is operated by six people, who operate a fleet of cars and wheelchair accessible minibuses covering a wide area including, Kent, Surrey, Sussex and Essex, although journeys much further a field can be arranged.

Some schools also have their own minibus, providing transportation to sporting events and other school trips. However this is solely run by the schools themselves out of their own costs.

Due to the lack of available public transport in some rural areas of the District and particularly in areas where there are a number of low income families, Sevenoaks District Council tries to transport services to these areas. For example the Youth Zone Van is used by voluntary youth workers to provide outreach facilities to young

people in the community that have difficulty in accessing such facilities. The Youth Zone Van can also be used to take key services to those in rural areas, where there are low income families with little access to transport. Such services that can be provided using the Youth Zone van include family planning clinics, advice on council tax and housing benefits.

Sevenoaks District Council has also given consideration to providing a dial-a-ride service following requests for such a service from Edenbridge and Cowden. However concern was raised regarding how much demand there would be for such a service, it was felt that the demand for such a service would not be sufficient enough to make it commercially viable. To operate such a service an annual fee and service charge would need to be introduced and even if such a service was commercially viable it would need to be subsidised initially which Sevenoaks District Council does not have the funding available to support such a service.

Kent County Council already operates a similar Kent Karrier 'dial-a-ride' service in Swanley which provides transport to anywhere in Dartford, Gravesham, Sidcup, Bexley, Bexleyheath and Crayford. This service operates for those people who have a medical condition which makes travelling on public transport difficult and for those who live in a rural area more than 500m from a conventional bus route, transport is provided for trips to Doctor's appointments, shopping, visits to family and friends as well as to provide connections to other bus and train services. A year's membership of this scheme costs £5 and a fare is also charged for every journey. Users phone when they want to travel, and the service operates between 8am and 6pm Mondays to Fridays and 9am to 6pm on Saturdays and Sundays. This service is funded by Kent County Council at a cost of approximately £25,390 per annum.

The Community and Voluntary Transport Services provided within the Sevenoaks District help to address the accessibility issues for those people with special needs, and/or those who are mobility impaired who are either unable to access public transport services that are available or there are no public transport services for them to access. However these services do not help to improve rural accessibility for the general public where public transport services are poor, they also do not improve access for the elderly who do not use day centres. And although a large sector of the population within the Sevenoaks District has access to a private vehicle there is a small section of the population, particularly those on low incomes in rural areas who do not have access to good, reliable transport. This section of the community needs to be identified and ways to improve their transport needs assessed.

RAIL TRAVEL

The Sevenoaks district is served by a number of rail routes offering destinations to central London, Kent, Surrey, Sussex and London Gatwick airport;

Table 2: Rail Services in the Sevenoaks district

Franchise	Line	London termini	SDC stations served
Southeastern	Sevenoaks mainline	Blackfriars, Charing Cross, London Bridge, Waterloo East	Bat & Ball, Dunton Green, Eynsford, Knockholt, Shoreham, Swanley
	Ramsgate & Dover mainlines	London Victoria	Sevenoaks, Swanley
	Maidstone lines	Charing Cross, Cannon Street, London Bridge, London Victoria	Swanley, Leigh, Penshurst, Edenbridge
	Tonbridge to Gatwick airport		Leigh, Penshurst, Edenbridge
Southern	Uckfield	London Bridge	Cowden, Hever, Edenbridge Town

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

- **26,600 (34%) of the District's resident workforce commute to London;**
- **11,800 (15%) of the District's resident workforce commutes by rail;**
- **2,800 (17%) of Sevenoaks residents (all 6 wards) travel by rail.**

Source: 2001 Census, Special Workplace Statistics, Office of National Statistics

Southeastern Railway services

Consequently the Southeastern Mainline between Sevenoaks and Orpington is one of the most highly utilised during the morning peak within the South London rail network. Network Rail's South London Route Utilisation Strategy (RUS) confirmed that fast services on this line have passengers in excess of capacity at peak times.

The dependency on rail for commuting is expected to increase, with an extra 366 rail trips during the AM Peak expected by 2019. A number of improvements have already implemented or programmed to resolve some of the capacity problems and include the following.

The High Speed One (CTRL) line was completed in November 2007 which resulted in the removal of Eurostar Trains from the section between Fawkham Junction (near Longfield) and Waterloo releasing sufficient capacity to enable additional services to run on the Chatham mainline via Herne Hill. Southeastern took the opportunity to double the frequency of off peak services between Orpington and Victoria via Herne Hill and reduce journey times of other services from Chatham and Maidstone East that affect stations such as Swanley and Otford.

In late 2009 Southeastern will begin operating domestic services on HS1 from Ashford and stations in North Kent. This provides the opportunity to free up capacity

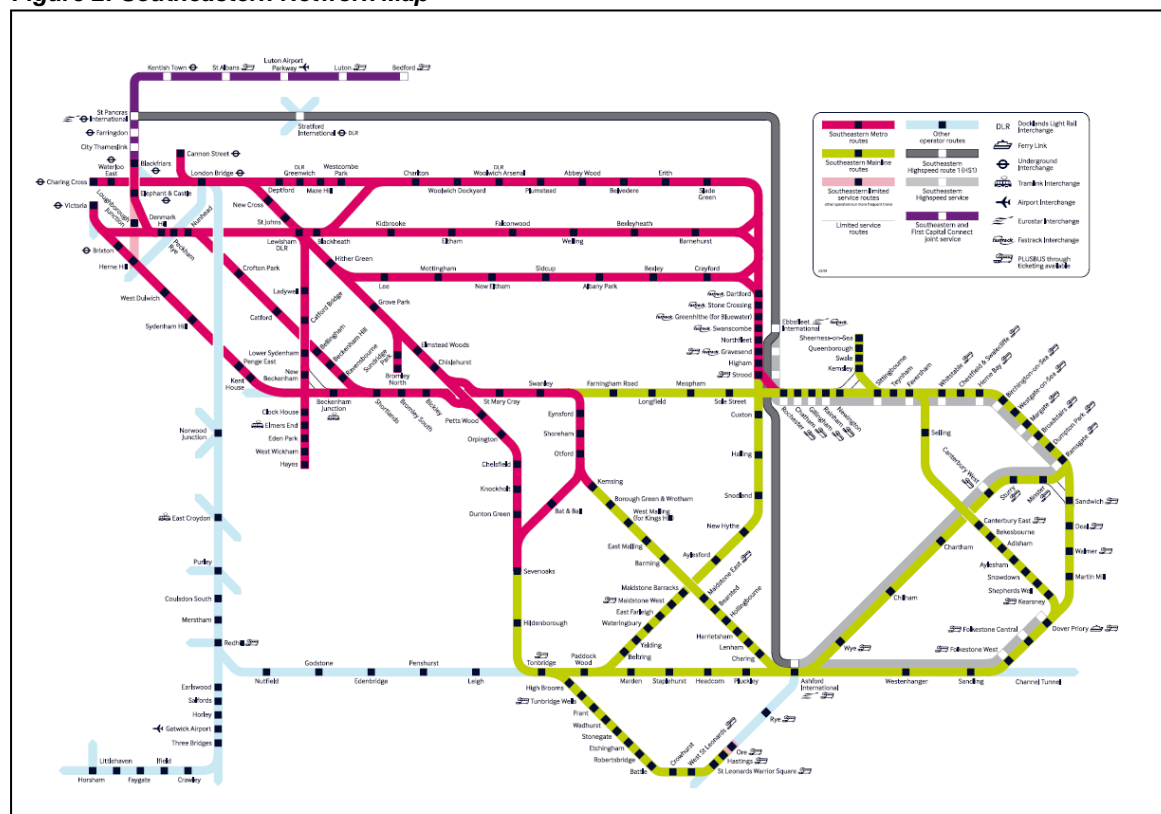
on the Southeastern Mainline with potential for more seats at stations in Sevenoaks district.

Infrastructure improvements elsewhere on the network will enable the remainder of the integrated Kent Franchise to be implemented at this time increasing the number of services from Sevenoaks to London on the Southeastern mainline. The off-peak service provision is expected to be as follows:

Via Sevenoaks

- **Tunbridge Wells – London via Sevenoaks 2 trains per hour (tph)**
- **Hastings – London via Sevenoaks 2 tph**
- **Ramsgate/ Dover Priory – London via Sevenoaks 2 tph**
- **Sevenoaks to London via Dunton Green 2 tph**
- **Sevenoaks – Blackfriars and beyond via Otford 2 tph**

Figure 2: Southeastern Network Map



These improvements in off peak service at Dunton Green are welcomed as anecdotal evidence suggests that passengers from its catchment area prefer to drive to Sevenoaks to use the faster and more frequent services.

Improved services will be required at Dunton Green with the proposed redevelopment of the West Kent Cold Store site, and strong consideration should be given to increasing operating hours at Dunton Green. Currently the last weekday train from London arrives at Dunton Green at 21:43, although services to Sevenoaks operate until approximately 01:00.

Via Otford

- **Sevenoaks – Blackfriars and beyond 2 trains per hour (tph)**
- **Ashford/Maidstone – Victoria 2 tph**

Via Swanley

- **Sevenoaks – Blackfriars and beyond 2 tph**
- **Ashford/Maidstone East – Victoria 2 tph**
- **Gillingham – Victoria 1 tph**

Thameslink Services

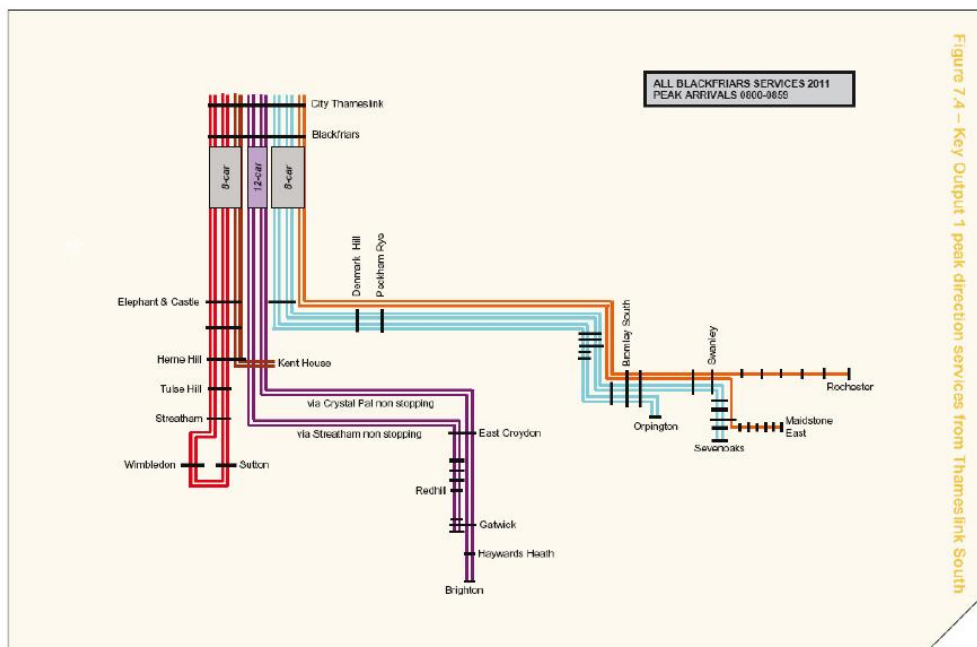
Network Rail’s recently completed South London RUS presents a detailed analysis of how Network rail plans to cope with the growth in demand on the suburban rail network and implement the Thameslink programme approved by Government, with a horizon year of 2019.

The commencement of construction work on the Thameslink programme at Blackfriars in early 2009 will result in the closure of platforms 1-3, requiring all services into Blackfriars to continue to operate northwards, meaning that stations such as Sevenoaks, Bat & Ball, Otford, Shoreham, Eynsford and Swanley benefit from new direct journey opportunities beyond Blackfriars to stations such as St. Pancras International, Kentish Town and beyond to St. Albans, Luton and Bedford.

Between 2009 and 2011 work will involve lengthening platforms at Farringdon and Blackfriars and upgrading signalling systems and when complete will allow 12 car trains and a higher frequency of service to operate on the Thameslink network. The focus of this is on the route via Elephant & Castle (Key Output 1), resulting in Maidstone East and Rochester services via Swanley also being extended north of Blackfriars.

Figure 3:

Thameslink Key Output 1



Reconstruction of London Bridge will be a critical issue for the 2012 – 2015 period and when complete will eliminate the current bottleneck caused by the existing track and station layout in the London Bridge area. The current envisaged network by the rail industry is shown in **Figure 3**, resulting in additional fast Thameslink services via Swanley and Otford, and fast Thameslink services on the Sevenoaks mainline via

London Bridge. The RUS suggests that these will be a replacement of current fast Cannon Street services rather than new additional services.

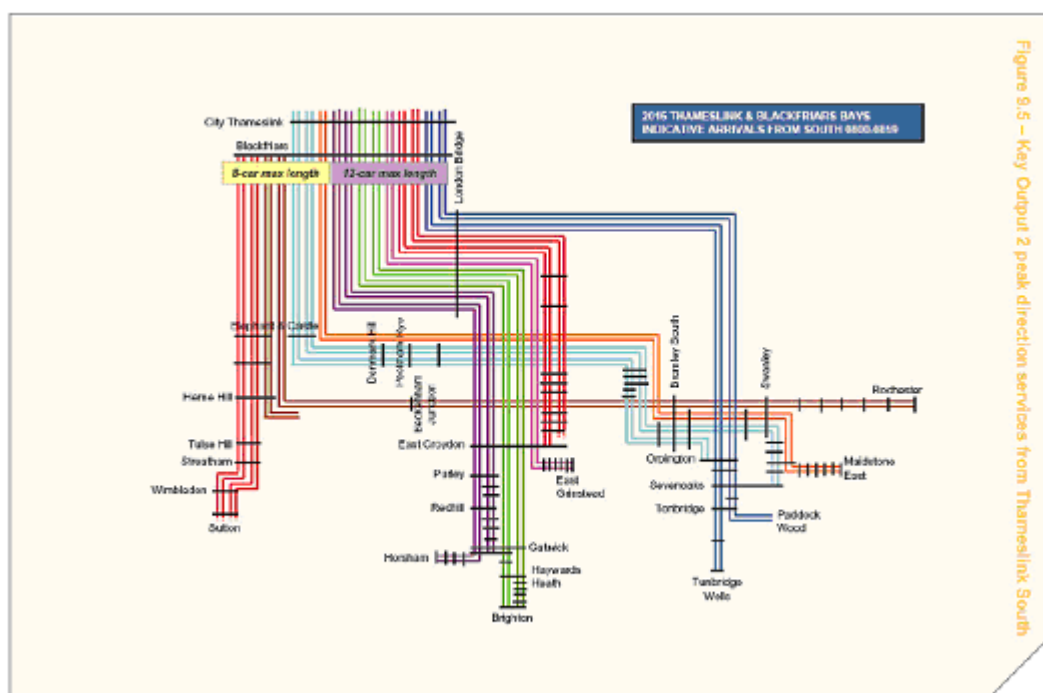
The suggestion of additional Thameslink services on the Maidstone East Line via Otford and Swanley is welcomed. Anecdotal evidence suggests that some passengers from its catchment area currently drive to Sevenoaks to use faster and more frequent services, adding to overcrowding and local traffic problems. The completion of Thameslink Key Output 2 will also have major benefits for other non Thameslink services. For instance all trains from Sevenoaks to Charing Cross will be able to call at London Bridge.

In addition to these major infrastructure changes the rail network is expected to see an ongoing renewals programme and signalling changes as detailed in Network Rail's Route Plan for Kent.

Network Rail have also proposed in the South London RUS to lengthen trains from 10 cars to 12 cars on the Sevenoaks (via Chislehurst) line by 2011 in order to accommodate predicted growth and alleviate crowding. However, further operational analysis and infrastructure improvements are needed before these improvements can be implemented.

Figure 4:

Thameslink Key Output 2



It is noted that Network Rail are currently preparing the Kent RUS to examine the fast services that operate from the county to London. It is important that the strategy evolves and helps influence the outcome of the RUS during the consultation stage.

Improvements are also proposed at the Sevenoaks and Swanley Railway Stations as part of The National Stations Improvement Programme (NSIP), which is a Department for Transport (DfT) backed programme that is to be implemented by Network Rail and the train operators, Southeastern Railway, and which will be partly funded by third parties including Councils and developers as part of Section 106

agreements. The amount of money to be invested in the improvement work is expected to be in the region of £1.6 million for Sevenoaks Station and £0.5 million for Swanley Station. The objectives of the improvements are to increase passenger perception of security, to improve access and egress, to enhance the overall presentation of the station and to improve information provision and other facilities.- Network Rail and Southeastern Railway are working in close cooperation to develop the proposed improvements.

Although the responsibility for the provision of new infrastructure and services is the responsibility of Network Rail and the Train Operating Companies, the Local authority have powers to improve access to the railways stations for those travelling on foot, by cycle, bus or by car as well as providing improved public transport information and better integration of different transport modes. The Implementation Plan identifies where better integration of transport modes around train stations and better public transport information and promotion can be provided, in order to encourage use of these transport modes.

Southern Services

Southern operates an hourly service from Uckfield to London Bridge via Edenbridge Town. Prior to Govia taking over the South Central franchise the service was largely a shuttle between Oxted and Uckfield using old slam door rolling stock, with interchange on to East Grinstead to London services required. Unlike the majority of the rail network in Kent the service is operated by modern diesel trains since the line south of Hurst Green is not electrified. However there are no current plans to electrify the line.

Operating hours on this line have improved in recent years, but nonetheless the last train from London is generally earlier than other comparable lines in the District. For instance the last weekday and Saturday train from London Bridge to Edenbridge Town leaves at 2205. Sunday services are inferior to the rest of the week, with services restricted to a shuttle connecting with the hourly East Grinstead to Victoria service with the last connecting train from London leaving at 2122. No significant alterations to Uckfield services are proposed as a result of the Brighton Mainline December 2008 timetable changes.

A recent study commissioned by East Sussex County Council has examined the potential to reopen the railway between Uckfield and Lewes allowing trains on the line to serve south coast destinations such as Brighton. However a low benefit to cost ratio was discovered meaning that the scheme is unlikely to proceed in the near future without additional population growth or further change in travel behaviour.

The Tonbridge-Redhill line currently experiences a half hourly service at off peak times with 1tph from Tunbridge Wells to Horsham via Gatwick Airport and 1tph from Tunbridge Wells to London Bridge via East Croydon. At peak times these services are generally replaced by a shuttle between Redhill and Tonbridge connecting with Brighton Mainline services at Redhill. These services are generally an all stations service. While some of the services are operated by new Electrostar stock, some of the services are operated using the oldest stock (Class 508) on the Southeastern network which lack toilets and high quality seating. Services operate later to Edenbridge than on the neighbouring Uckfield line to Edenbridge Town allowing connections to be made at Redhill from the 2310 service from London Victoria, Monday to Saturday.

Despite recent growth in passenger numbers, the proposed December 2008 timetable on the Brighton Mainline is set to result in a reduction in off-peak services on the Tonbridge-Redhill line, when it becomes part of Southern Railway's network. The reduction in off-peak service on the line will be caused by removing the service to Horsham via Gatwick Airport with the remaining hourly service between Tonbridge and Charing Cross via East Croydon. The rationale behind this change is to make use of scarce capacity for more frequent trains to/from Horsham via Norwood Junction and a new service from Charing Cross to Reigate. The proposals will also remove direct trains from Edenbridge to Tunbridge Wells (currently off peak only) necessitating a platform change at Tonbridge.

The South Central franchise is due to be re-let in December 2009, and will include both the Tonbridge-Redhill line and Uckfield Line. As part of the submission documents for the new franchise specification, the District Council has suggested number of improvements that could be made to services on these two lines, including the retention of the twice an hour service between Tonbridge and Redhill and also ensuring that the direct link to Gatwick Airport remains. The Sevenoaks Transport Strategy supports these objectives.

Figure 5: Extract of Southern network map



Table 3 below shows the single train journeys taken from strategically chosen stations in Kent. The table shows journey numbers that are translated from ticket

sales during each calendar year. Ticket sale figures do not include tickets purchased on the internet.

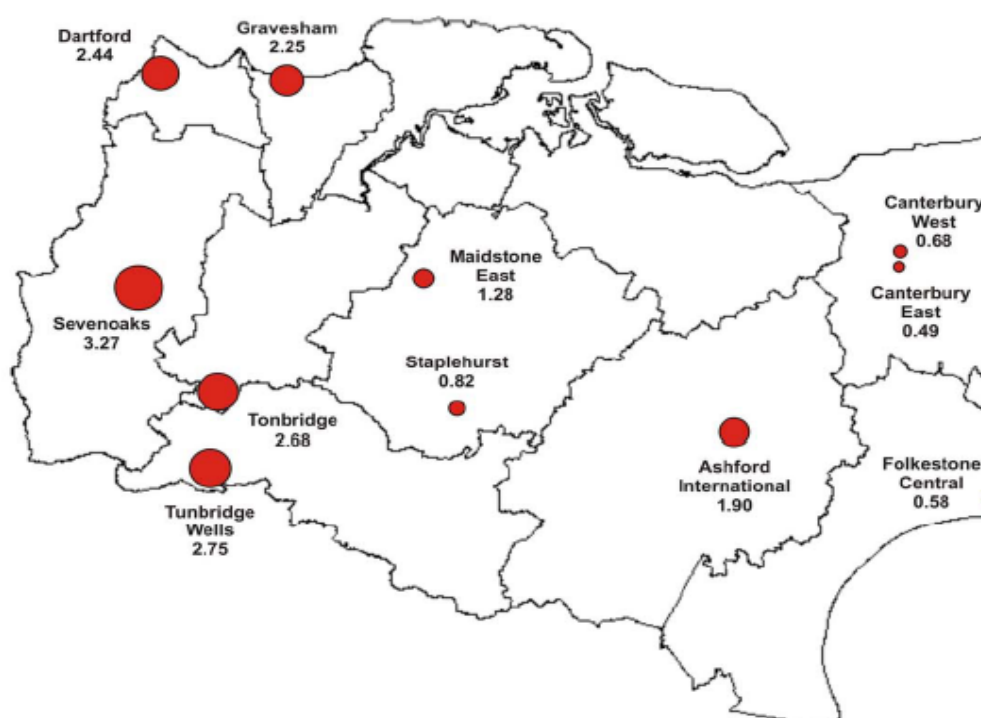
Ticket sales data is acknowledged by the industry as a fair measure of the number of passengers using each station. Also included are season tickets (equivalent to 480 journeys), weekly tickets (10.3 journeys) and other special tickets that are purchased at each station, in addition to conventional single and return purchases.

Table 3: Journeys taken from 13 railway stations in Kent (1000s)

Station	2001	2002	2003	2004	2005	2006	2007	2008	% Growth 07-08
Ashford	1,391	1,430	1,519	1,591	1,619	1,747	1,882	1,901	1.0
Canterbury East	413	403	416	449	451	496	491	494	0.6
Canterbury West	436	419	437	461	518	543	668	685	2.5
Dartford	2,046	2,090	2,137	2,223	2,194	2,311	2,482	2,436	-1.9
Deal	301	296	308	291	297	328	335	377	12.5
Dover Priory	404	408	442	483	438	476	511	531	3.9
Folkestone Central	434	428	438	455	498	541	601	584	-2.8
Gravesend Central	1,545	1,661	1,822	1,899	1,924	2,036	2,247	2,251	0.2
Maidstone East	914	950	984	1,024	1,035	1,098	1,229	1,282	4.3
Sevenoaks	2,808	2,782	2,856	2,994	2,965	3,169	3,380	3,274	-3.1
Staplehurst	671	673	710	733	732	785	827	823	-0.5
Tonbridge	2,267	2,297	2,289	2,414	2,397	2,505	2,690	2,681	-0.3
Tunbridge Wells	2,048	2,123	2,142	2,274	2,258	2,407	2,677	2,745	2.5
AVERAGE	1,206	1,228	1,269	1,330	1,333	1,419	1,540	1,543	0.2

(source Southeastern Railway 2008)

Figure 6: Locations of the 13 Stations and their flows for 2008 (millions)



Circle diameters are directly proportional to journey numbers

ROADS, TRAFFIC & CONGESTION

Increasing congestion is one of the districts biggest problems. Increasing car ownership, a lack of 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 communities through poor air quality and noise.

The private car is a very successful and attractive mode of travel and in Sevenoaks 85% of households own one or more cars. The overall cost of motoring has remained at or below its 1980 level compared with the 37% rise in bus, coach and rail fares. It therefore remains a dominant mode of travel for journeys to work, representing 67% of all work trips made and is exacerbated by Kent's dispersed settlement pattern which results in a high proportion of intra and inter-district commuting.

The Government's projections for traffic growth to 2025, based on the National Transport Model, predict that traffic in England will grow by 26% between 2000 and 2010. At a regional level, it is likely that the rate of growth in car ownership and traffic levels in the South East region will be above the average figure predicted for England.

Kent's strategy to tackle congestion comprises five broad approaches:-

- Introducing better public transport services and infrastructure, improving walking and cycling facilities and reallocating road space and managing of traffic in favour of these sustainable alternatives,
- Active management of the availability, cost and enforcement of parking provision at the journey destination,
- Raising awareness of the impact of travel and the availability of alternatives relevant to people's needs to promote behavioural change,
- A consistent approach to new development to ensure the demand for travel they create is met in sustainable ways,
- Measures to restrain car use and reduce the need to travel to access goods and services.

Additionally there are many sustainable transport options available such as;

Car Sharing

- **saves money – reduce your transport costs by up to £1000 a year**
- **reduces the number of cars on the roads**
- **less congestion**
- **less pollution**
- **fewer parking problems**
- **provides a real solution to the transport problems of rural areas**
- **gives employees and employers more transport options**
- **reduces the need for a private car**

- **If half of UK motorists received a lift one day a week, congestion and pollution would be reduced by 10%, and traffic jams by 20%!**

Travel Plans

- **A Travel Plan is a set of measures that are designed to suit an organisation's specific transport needs. Its aim is to reduce the number of regular journeys made by car, particularly car journeys with a single occupant.**
- **A Travel Plan will usually feature a variety of measures; car-share schemes, encouraging cycling and walking, home working, and so on. And there are grants and tax benefits to help organisations set up and use a Travel Plan.**
- **Kent County Council can help you plan, create and put in place a Travel Plan that works for you, your employees, parents and pupils, and visitors.**

Walking Buses;

- **A Walking Bus is a supervised group of children walking to or from school.**
- **It is made up of at least two adult volunteers, who act as a 'driver' and a 'conductor' to escort the children.**
- **Adults and children all wear high-visibility waistcoats.**
- **The bus follows a set route and 'walks' along a defined route to a published timetable.**
- **Children can join or leave the bus at set points along the route.**
- **Walking Buses benefit children, parents, the school and the local community by;**
 - **developing pedestrian and social skills,**
 - **promoting healthy exercise,**
 - **saving time for parents,**
 - **developing children's independence in a supervised environment,**
 - **reducing traffic congestion around schools,**
 - **improving air quality.**

FREIGHT

Introduction

The Channel Corridor 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. 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. This closure of the M20/A20 severely disrupts local roads and results in severe congestion and lengthy delays.

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 along the north 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 potential significant rail freight flow in the County is to and from the Thames port 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, particular 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 HGVs and an overflow area for some 2,000 additional HGVs during Operation Stack.

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.

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.

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.

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.

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 LEVs. It is also important to encourage local businesses and retailers to work in partnership to co-ordinate deliveries, particularly in outlying areas, to reduce duplicated trips and emissions.

Freight Strategy

The SDST recognises the need for a Freight Strategy for Kent which creates a framework for more sustainable freight distribution in Kent. It is understood that one is being developed alongside the preparation for the third Local Transport Plan for Kent which will be published in March 2011.

KENTS AIRPORTS

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 the air travel needs, yet Kent has two functional commercial airports; Kent International Airport (Manston) and London Ashford Airport (Lydd).

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.

Kent International Airport (KIA)

Kent International Airport (Manston) has the potential to develop into a regional airport and become one of the largest single generators of economic activity within the county. The airport predicts that it will serve around 6 million passengers and cater for 500,000 tonnes of freight by 2033. This could generate over 3,500 jobs by 2018 and 7,500 jobs by 2033 within Kent in a range of employment opportunities. Its future growth depends upon its ability to attract passengers from the major London airports and to capture new markets.

The development of this airport is likely to have important influence on airport choice for air travel customers. This in turn will impact on general travel patterns to and from airports on existing transport systems in Sevenoaks district. It is not known if this will have a positive or negative impact on the current travel patterns in Sevenoaks district and this will have to be monitored and taken into consideration over the life time if the SDST.

KIA Parkway Station

The KIA draft masterplan proposes major expansion with 6 million flights in operation by 2033, supported by a Parkway station with high speed rail services from London, serving not just the airport but also the local area. This will be located near to the perimeter of KIA, with improved bus links and local road improvements to link to the A253.

CLIMATE CHANGE & TRANSPORT PLANNING

Introduction

There is now overwhelming evidence from scientists 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.

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 be 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.

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.’

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. 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 reduced Carbon emissions.

In undertaking LTP3, Kent 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 .

AIR QUALITY MANAGEMENT

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 (AQMAs).

The first five AQMAs within the Sevenoaks District were declared in 2002, and encompassed mainly the trunk road network including the M25, M26, M20 and the A20 Swanley by-pass. However one area of the local road network, the A25/A224 junction at Riverhead was also declared an AQMA as it was expected to exceed the Nitrogen dioxide (NO₂) annual average objective.

A further five areas were designated as AQMAs in 2006, these are;

- **A225 - Sevenoaks High Street**
- **A25/A225 - Bat & Ball junction**
- **A25 - Westerham High Street**
- **B2173 - Swanley Town Centre**
- **A25 - Seal High Street**

These five areas above as well as the A25/A224 Riverhead junction are looked at in greater detail in this strategy and detailed ways to encourage the use of alternative forms of transport as well as possible improvements to reduce air pollution in these areas are suggested in the Strategy's Implementation Plan.

Additional Air Quality monitoring since 2006 has highlighted additional locations which experience poor air quality but which have not exceeded air pollution levels in order to be designated as Air Quality Management Areas, these locations include, the A25 through Sundridge and A20 at Farningham.

KENT DESIGN – BEST PRACTICE

The Kent Design Guide seeks to provide a starting point for good design while retaining scope for creative, individual approaches to different buildings and different areas. It aims to assist designers and others achieve high standards of design and construction by promoting a common approach to the main principles which underlie Local Planning Authorities' criteria for assessing planning applications. It also seeks to ensure that the best of Kent's places remain to enrich the environment for future generations.

Designing for Movement

Activity is the life blood of a successful community. The ease with which people can move within and between neighbourhoods fundamentally affects activity. Once the fundamental elements of the layout are fixed, a strategy for movement can be designed.

Designing for Pedestrians and Cyclists

Developments should be 'permeable' (*easy to move through in all directions*) and linked to the surrounding network, allowing safe, direct routes for pedestrians and cyclists.

Streets and paths should be naturally overlooked. Walking and cycling on safe routes is a requirement,. Schemes such as 'Safe Routes to Schools' are encouraged (www.saferoutestoschools.org.uk). Convenient cycle storage should be provided in homes and outside community facilities, shops and other destinations.

It is particularly important to ensure that pedestrian and cycle routes are safe, secure and convenient; if they are not, people will feel forced back onto the roads resulting in conflict over the use of road space. In certain locations and street types e.g. home zones, pedestrians should have clear priority. 'Trim trails' and attractive walking routes will encourage residents to take regular exercise.

Routes that link key areas should be considered at the outset so that, over short distances, residents are encouraged to walk or cycle.

Many development sites will include existing footpaths and bridleways which can be incorporated into more strategic routes for walkers and riders. Safety is enhanced by increasing the number of walkers and cyclists, and children will benefit from routes segregated from traffic. Routes should be designed to allow for the needs of blind or partially-sighted people.

People with disabilities benefit from direct links to and from services that have a smooth and well-maintained surface. The Kent County Council Public Rights of Way advice note provides further information on the design of rights of way. Ribbed tactile paving should be used and raised line markings can be used to assist visibly impaired pedestrians to use the appropriate part of the path and to indicate the presence of side accesses or crossings.

Direct routes through developments should be provided for walkers and cyclists.

These may either be segregated or combined, but must be 'user-friendly'. They should not be too far removed from surveillance or hidden from roads or houses. Walking and cycling should be promoted as a dominant mode of travel for short trips, so these routes should be more direct than those for cars. Strategic foot and cycle ways should be well lit to encourage use, unless they are primarily for leisure use where night time use is unlikely, or in rural surroundings where lighting would be inappropriate.

Cycle routes need to be planned strategically, rather than on a piecemeal basis. Where cyclists will share the use of a path with pedestrians and it is considered that conflicts will pose an unacceptable risk, it is desirable to segregate the two uses. Where it is intended to include provision for cyclists on a public right of way, the 'Cycle Tracks Act 1984' should be referred to.

Space for cyclists should be designed to ensure safety of cyclists and pedestrians and encourage use. However the need to provide and indicate segregation should be balanced against the need to minimise the clutter and confusion created by small areas of different coloured surfacing, tactile paving, line markings and signs.

Factors such as the width of paths, cycling speeds, likely levels of use and the frequency of interruptions from side accesses and crossings should be considered at the initial design stage. The forward visibility requirements of cyclists should also be considered.

Adequate secure storage for cycles must be provided at dwellings and at destinations such as workplaces, shops, community facilities and transport nodes. It should be integrated with the design of buildings and streets, be weather protected and either within a lockable curtilage or have good natural surveillance.

Public Transport

Good public transport should be available at the initial phase of a new development, either by linking to existing networks or by establishing new routes. A coordinated approach between different transport modes should be encouraged with cycle pedestrian routes and taxi ranks linked to stations and all key transport nodes.

Designing for Bus Passengers

Bus stops should generally provide shelter facilities. Where real-time information services can be made available, such facilities must also be incorporated. Other considerations are:

- **bus stops should be within a convenient walking distance,**
- **shelters should be designed as an integral part of the streetscape and should be in context with the local area and the form of the development,**
- **Kerbs adjacent to bus stops should be raised to facilitate easy boarding,**
- **bus priority measures should be considered where appropriate,**

- **provide accessible routes to bus stops with dropped kerbs and tactile paving as appropriate (*routes should be overlooked*).**

Motor Vehicle Provision

Access provision for motor vehicles should cater for the size and frequency of essential vehicles and should reflect the need for public safety and the requirements of all modes of transport.

Support for Sustainable Transport

A comprehensive movement framework will not be effective unless people are aware of it and are willing to support the more sustainable forms of transport. With the more major forms of development, schools, businesses and developers should submit 'travel plans' which encourage staff and, where appropriate visitors, to think about their travel choice and consider alternatives to the car. It is not an all-or-nothing choice. The essence of a travel plan is travel blending, where an alternative to the car is used perhaps once a week. Incentives can be offered to those supporting such initiatives.

Highway design should relate to a specific spatial type, use, form and function. Guidance on the design of roads has previously tended to rely on a strict application of geometric standards related to road type and design speed. This may simplify matters for designers but it often restricts the ability to create attractive places and thoroughfares complementing surrounding buildings or open spaces. So, in addition to outlining the usual parameters applicable to each road function, this section gives guidance on flexibility of use and where in some cases minimum or maximum standards must apply. The tables should be used as guidance – flexibility is permitted to produce well designed solutions.

ROADS & TRAVEL SAFETY

Kent County Council's Road Safety Plan sets out how Kent is to contribute towards reducing road crash casualties in line with the national targets unveiled in "Tomorrow's Roads – Safer for Everyone".

Based on the average figures for 1994 - 1998, the minimum targets for 2010 are:

- ***A 40% reduction in the number of people killed or seriously injured (KSI) in road crashes between 2000 and 2010 (BVPI 99x) – KSI rates have decreased from 840 in 2004 to 725 in 2007, This is projected to continue to fall to 650 by 2010,***
- ***A 50% reduction in the number of children killed or seriously injured (KSI) between 2000 and 2010 (BVPI 99y) – child KSI rates have declined from 85 in 2004 to 61 in 2007. This is above the LTP objective of 75 by 2010,***
- ***A 10% reduction in the slight casualty rate, expressed as the number of people slightly injured per 100 million vehicle kilometres driven between 2000 and 2010 (BVPI 99z) – these have decreased from the 2004 rate of 5925 to 5750 in 2007. However this is higher than the LTP trajectory of 5525 for 2007 and a predicted drop to 5360 by 2010.***

KCC successfully reached these targets during the 2007/08 financial year. The target for KCC now is to achieve further improvement in their performance of reducing the number of casualties on the County's roads.

KCC's ability to meet these targets has been in part a result of a research led approach to reducing road casualties relying on the quantitative and qualitative research analysis of crash and casualty data, provided by Kent Police, which provides valuable information about where and when crashes happen. The data also provides information on who was involved and identify any factors such as weather conditions and time of day/night that the crash happened. Although little information is provided on key factors such as the behaviour of the road users involved at the time of the crash.

Since 2003 KCC Road Safety has used the findings of qualitative research to find out more about the causes of crashes and to inform education, training and publicity (ETP) priorities and programmes of work. This approach to research also leads KCC's evaluation techniques enabling greater insight into why particular interventions are more successful than others. KCC will continue to use this approach to maintain their level of success in terms of reducing the numbers of casualties on the County's roads.

Overall crash levels in the Sevenoaks District are considered to be low because during the annual review of personal injury crashes carried out by Kent Highway Services. Few locations are identified with significant crash problems that can be identified as "crash hot spots" (i.e. locations with more than 6 personal injury crashes in the last 3 year period). These can be addressed by implementing engineering measures that could reduce the number of crashes occurring.

Table 4: Casualties on KCC roads, by district 2003 to 2008 (source KCC 2009)

District	2002			2003			2004			2005			2006	
	KSI	Slight	Total	KSI	Slight	Total	KSI	Slight	Total	KSI	Slight	Total	KSI	Slight
Ashford	78	519	597	62	512	574	70	462	532	67	473	540	56	453
Canterbury	70	456	526	77	468	545	68	518	586	67	477	544	51	425
Dartford	49	344	393	37	339	376	27	364	391	46	394	440	30	317
Dover	49	364	413	44	320	364	43	290	333	45	358	403	52	325
Gravesham	47	327	374	33	268	301	32	266	298	41	299	340	26	231
Maidstone	86	502	588	94	513	607	75	586	661	72	544	616	63	494
Sevenoaks	82	381	463	58	330	388	66	340	406	39	347	386	39	253
Shepway	45	304	349	55	319	374	50	298	348	36	354	390	41	284
Swale	62	392	454	52	367	419	53	378	431	46	383	429	41	371
Thanet	62	545	607	66	468	534	55	451	506	50	522	572	72	538
T & M	70	455	525	61	393	454	83	443	526	60	390	440	34	355
Tun Wells	60	381	441	44	355	399	63	334	397	63	327	390	54	330
TOTAL	760	4,970	5,730	683	4,652	5,335	685	4,730	5,415	632	4,858	5,490	559	4,376

Table 5: Casualties on KCC roads, by mode of travel district 2003 to 2008 (source KCC 2009)

Table 5 below shows casualties by mode of transport. It shows that, in 2008, motorcyclists are the most vulnerable with nearly **24%** of all motorcycle casualties being killed or seriously injured. The safest were car users with just **7.1%** of car casualties being killed or seriously injured. On average, **10.4%** of all casualties were killed or seriously injured.

Table 5: Casualties on KCC roads, by mode of transport 2003 to 2008 (source KCC 2009)

District	2004			2005			2006			2007			2008			% Change 07-08		
	KSI	Slight	Total	KSI	Slight	Total	KSI	Slight	Total	KSI	Slight	Total	KSI	Slight	Total	KSI	Slight	Total
Pedestrian	134	546	680	107	592	699	123	581	704	123	575	698	105	483	588	-14.6	-16.0	-15.8
Cycle	36	269	305	41	292	333	41	249	290	35	263	298	35	262	297	0.0	-0.4	-0.3
Motorcycle	165	501	666	166	480	646	124	413	537	152	456	608	127	408	535	-16.4	-10.5	-12.0
Car	323	3,129	3,452	297	3,266	3,563	255	2,910	3,165	253	3,005	3,258	237	3,110	3,347	-6.3	3.5	2.7
Other	27	285	312	21	228	249	16	223	239	23	279	302	16	223	239	-30.4	-20.1	-20.9
TOTAL	685	4,730	5,415	632	4,858	5,490	559	4,376	4,935	586	4,578	5,164	520	4,486	5,006	-11.3	-2.0	-3.1

Measures that have been introduced to try to reduce the number of personal injury crashes on the County’s roads, where all other measures have been unsuccessful, include the installation of safety cameras. There are two types of safety cameras, and these are as follows;

- **Fixed Camera – these cameras are permanent cameras which are installed at the side of the road.**
- **Mobile Camera – these cameras are located temporary at sites for a short period and are operated at the site within a well marked vehicle. The safety camera is operated at each site at regular intervals.**

Only one fixed camera site and seven mobile camera sites operate within the Sevenoaks District, however all sites where a safety camera operates have seen a reduction in the number of personal injury crashes that have occurred. **Table 6** overleaf shows the number of personal injury crashes at each of the camera sites within the Sevenoaks District, before and after the cameras began operating.

Table 6: Crash data for fixed and mobile safety camera sites (source KCC 2009)

Site Location	Date Camera Installed	Camera Type	No. of People Killed or Seriously Injured Prior to Camera Installation	No. of People Killed or Seriously Injured Since Camera Installation
A20 Gorse Hill - West Kingsdown	December 2003	Fixed	5	1
A225 Sevenoaks Road	July 2002	Mobile	2	1
A224 London Road	March 2004	Mobile	5	2
A21 Sevenoaks bypass (southbound)	March 2003	Mobile	0	6
A21 Sevenoaks bypass (northbound)	March 2003	Mobile	0	1
Ash Road/Hartley Road Junction	October 2005	Mobile	3	5
A25 Seal Road	March 2003	Mobile	5	2
B2016 Seal Hollow Road	July 2006	Mobile	4	0

As shown in the above table, safety cameras may help to reduce the number of personal injury crashes at a particular location. However strict criteria have to be met before a safety camera can be installed at any location, to ensure that safety cameras are only installed where necessary to reduce personal injury crashes.

These criteria includes there having to be at least 3 serious or fatal casualties within the location of the proposed safety camera site. No additional sites have been identified for safety camera installation as part of this strategy, however Kent County Council assesses crash data and identifies possible sites on an annual basis.

Interactive speed signs have also been installed around the County, including a number within the Sevenoaks District. A report produced by the County's consultant, Jacobs, assessed the effectiveness of a number of interactive signs around the County in 2006, in terms of their ability to reduce vehicle speeds and personal injury crashes. Two sites within Sevenoaks were assessed and the results of the assessment of these two sites are shown in **Table 7** below.

Table 7: Before and After data for Interactive Speed Signs (source KCC 2009)

Site Location	Date Interactive Sign Installed	Mean Speed Before Sign Installed	Mean Speed 4 Years after Sign Installed	No. of Crashes Before Sign Installed	No. of Crashes 3 Years After Sign Installed
A25 Brasted	February 2002	36.9 mph	34.4 mph	1 fatal, 1 serious, 1 slight	2 slight
A25 Seal	February 2002	33.3 mph	28.5 mph	5 slight	none

The results above show that the installation of interactive signs at these two locations has resulted in the reduction of vehicle speeds and crashes. Additional sites are identified as part of the County's annual assessment of crash data, and can only be installed where there is clear evidence of a speed and personal injury crash history. Sites also have to be carefully selected to ensure that the radar equipment within the interactive sign operates properly.

In order to ensure that interactive signs are only located where the equipment will operate and will actively result in reducing vehicle speeds and personal injury crashes KCC has produced criteria which have to be met before an interactive sign can be installed at an appropriate location. The criteria are as follows;

- **Signs should be located between 100m and 250m from the start of the speed limit.**
- **There should be sufficient verge or footway width to accommodate the sign ideally a minimum of 1.4 m.**
- **These signs are triggered by a radar beam and so the section of road leading to the sign should therefore be straight**
- **The sign needs to be free of vegetation and sites where extensive annual clearance would be needed should be avoided.**
- **Consultation with house owners is necessary if the sign is to be installed close to a private dwelling.**
- **The sign should not face the windows of nearby properties.**
- **The sign should not be installed near any natural or engineered feature that already acts as a speed reducing feature.**
- **Electrical supply should be available.**

No additional interactive signs have been suggested as part of this strategy due to the additional work required in order to identify possible sites (including carrying out speed surveys). However additional sites are continually being identified during KCC's annual crash assessment.

Any proposed new development should take account of the Kent Design Guide which contains information on best practice in terms of designing for safety within new development and makes the following recommendations;

- **Parking should be designed in a way that promotes safety for all highway users.**
- **Unrealistically low parking provision with new developments can result in inappropriate parking, which may affect highway safety.**
- **Safety is enhanced by increasing the number of walkers and cyclists.**
- **Routes should be designed for the mobility and visually impaired by using tactile paving and dropped kerbs.**
- **Walking/cycling routes should be well overlooked, not hidden from roads and houses.**
- **Footways, cycle-ways and paths should be well lit, unless they are primarily for leisure use (and therefore are only likely to be used during the day) and in rural areas where lighting would not be appropriate.**
- **Space for cyclists should be designed to ensure the safety of cyclists and pedestrians, and encourage use. However the need to provide and indicate segregation should be balanced against the need to minimise clutter and confusion created by small areas of different coloured surfacing, tactile paving, line markings and signs.**
- **Access provision in the new development should cater for the size and frequency of essential vehicles and should reflect the need for public safety and the requirements of all modes of transport.**

The “Kent Design Guide” also sets out parameters for visibility at junctions, carriageway widths and distances between speed restraint features in order to “design out” inappropriate vehicle speed and the design of new development must also take this into account.

Any proposed new development within the District should also take account of any improvements that are required on the existing highway and infrastructure. For example the introduction of footways (particularly where the development is located in a rural area), pedestrian crossings, cycle ways and improved (or in some cases the introduction of) highway lighting may be required in order to improve safety for those travelling to and from the completed development.

CAR PARKING

The effect of high car ownership within the District is masked by some extent due to the high commuting public transport mode split. CENSUS data also does not take into account the importance of car travel as an access mode to public transport and the resultant congestion and parking problems around commuter stations. Leisure traffic is also largely based on car travel creating pressure on town centre car parks with car parking spilling out onto surrounding residential streets.

There are 21 District Council operated car parks in the Sevenoaks District, **Table 8** shows the number of car parking spaces at each location within the District.

Table 8: SDC Car Parking (Council Operated Car Parks) in the district (source Sevenoaks DC)

Town	Location	Car Park Spaces	Disabled spaces
Kemsing	Kemsing Village	40	2
Shoreham	Filston Lane	28	
Eynsford	High Street	21	
Sevenoaks	Blighs	241 + 51 off London Road	7
Sevenoaks	Bradbourne	48 + 168 Season tickets	
Sevenoaks	Suffolk Way	156	9
Sevenoaks	Council Offices (Gordon Road)	146 (Saturdays only)	
Sevenoaks	South Park	143	7
Sevenoaks	Buckhurst 2	291 + 150 Season tickets	
Sevenoaks	Sennocke	84	
Sevenoaks	St Johns Hill	65	
Sevenoaks	Buckhurst 1	60	3
Sevenoaks	Pembroke Road	54	
Sevenoaks	St James Road	21	
Swanley	Bevan Place	80	
Swanley	Station Road	48	
Swanley	Park Road	34	
Westerham	Darent	97	4
Westerham	Quebec Avenue	35	3
Westerham	Vicarage Hill	13	1
Westerham	Fullers Hill	11	

Large parts of the District still have uncontrolled on-street parking, this can create accessibility problems for pedestrians and cyclists in areas around commuter rail stations and in town centres as parked vehicles block footways and cycle ways.

Commuter parking can also be inconvenient to residents of roads that suffer from commuter parking.

Although parking problems around railway stations appears to be a local problem, a significant element of those parking come from outside the District, travelling some

distance by car to reduce the cost of their train ticket to London, as well as taking advantage of the free parking around some stations, and a better train service. The train operator, Southeastern Railways are currently proposing to increase parking charges within their car parks, as well as to start charging for parking where there currently is no charge, the impact that any increase in (or new) parking charges will have on cars parking on local roads around the Stations will need to be monitored to ensure that on-street parking does not increase.

A review of on-street parking facilities was carried out by Sevenoaks District Council in January 2008, one of the aims of which was to maximise parking facilities for commuters whilst minimising inconvenience to residents, whilst also trying to prevent displacement of commuters in to residential roads. The review also resulted in so called “green” vehicles being exempt from parking charges within District Council owned car parks. Those “green” vehicles exempt from parking charges include those powered by electricity, bio-fuel, LPG, Hydrogen-Fuel Cells and other recognised hybrid vehicles that combine such power sources with petroleum or diesel. Cycle and motorcycles are also exempt from car parking charges within the District.

Park & Ride

The limited capacity for town centre parking and congestion caused by cars entering Sevenoaks Town suggests the use of Park and Ride sites. However the Strategy recognises the need for any such sites to be considered in consultation with local residents and with the impact on the environment in mind. It is understood that previous Park and Ride schemes have not been financially self funding and this is clearly an important factor that must be borne in mind in the possible consideration of Park and Ride or Kiss and Ride schemes.

It is important that Park and Ride facilities are sited so that they intercept existing or potential car journeys rather than generating additional car trips. Park and Ride should be provided as part of an overall transport strategy for an area.

Key to this strategy is the identification and acquisition of suitable sites, ensuring they are designed and developed to high standards and represents the best value for money. It could be that if the vision was to be fully embraced these facilities they could provide transfer nodes for school bus transfers, bus and coach services as well as pedestrians and cyclists.

One such vision for example would be the development of the park and ride previously tried north of the Bat and Ball junction on the A225 Otford Road. Such a facility could not only serve Sevenoaks town centre but Bat and Ball station and Sevenoaks railway station, reducing traffic at Riverhead as well as releasing station parking and could result in a reduction of on street parking demand. Buses could be equipped to transfer cycles to assist those cyclists less enthusiastic to make the climb to the town centre. Extend the concept further and the park and ride could also provide a service for those wishing to access a bus service to Dartford, Bromley, Tonbridge and Tunbridge Wells. Repeat the park and ride concept in the vicinity of the Dunbrik depot to the west and Morley’s round-about to the south and similar gains may be accrued.

The development of such sites could incorporate facilities for a tourist information centre, emergency service stand or cycle hire facility that would generate movements and surveillance giving security for those all day parking

A great deal of work will need to be undertaken to;

- ***Identify and prioritise main corridors in terms of current and predicted traffic forecasts;***
- ***Identify potential sites and options for their acquisition and development.***
- ***Clarify and resolve long-term funding issues;***
- ***Design and develop high quality park and ride sites;***
- ***Monitor the usage of all park and ride services as well as customer satisfaction levels to identify and disseminate best practice.***

It is to be acknowledged that there would be impacts on the Green Belt to be considered but the possible gains in reduced congestion, air quality and potential highway safety need to be carefully considered.

HEAVY GOODS VEHICLE MOVEMENT

The transfer of goods and materials is essential for both the national and local economy.

Nationally industry should be encouraged to use rail where the economics and infrastructure permit. This will require significant investment by the rail industry to ensure that any transfer operations are well related to the road distribution network.

Once on the highway network the strategy needs to address the routes that larger vehicles and HGV's use. As a district it is within their remit to ensure that any new industrial development is restricted to locations with good accessibility from the distributor network. There are however a number of pressures/conflicts arising from existing use rights and Government direction in the form of diversification. Coupled with the EU directive of increasing the size of HGV's many of the minor roads are under pressure to accommodate these vehicles.

All too often highway safety on local roads is perceived as being compromised by the need for wider roads and larger turning circles. Additional pressure is placed on local trade by such vehicles, as the historic areas for loading and unloading are not large enough, or are being inappropriately used for storage and staff parking, or not available at all.

A level of HGV traffic in the rural environment has historically been necessary and continue, even if the need is not fully accepted by everyone. Collection and delivery of many goods will continue via the local road network and in some situations farm diversification has resulted in an increased frequency of HGV's movements often over the whole year rather than just seasonal.

With drivers being unfamiliar with routes and locations they often rely heavily on satellite navigation systems, often such devices do not recognise the constraints of the rural road network. KCC are collating a comprehensive inventory that will provide accurate data relating to road widths, height restrictions, gradients and traffic orders, this data will be provided to Ordnance Survey and the satellite navigation companies in order to introduce this data into their devices.

KCC is keen to see that satellite navigation equipment and map data is improved to reduce the number of large vehicles being directed, inappropriately down unsuitable roads. It must be recognised however that this is a longer term solution due to the complexity of the data held by KCC and the lead times for new data to be utilised by the mapping industry and users.

As part of its monitoring programme, the County Council reports on HGV flows. In total, three different sources of data collection are used, e.g. 12 urban area cordon counts, 43 inter-urban counts, and 11 manual counts on motorways and trunk roads. Of the 43 inter-urban counts, the summary below presents the total number of HGVs counted by Rigid and Articulated (tractor cab unit coupled to a trailer) configuration and the number of axles. In 2006 the 43 inter-urban counts changed from manual counts to automatic counts using Metrocount machines, 24 hours per day over all days Monday to Sunday. The old 12 hour manual counts were only during weekdays Monday to Friday. The HGV figures for 2006, 2007 and 2008 cannot be compared with previous years to calculate growth rates.

Table 9: HGV's at Motorway and Trunk Roads MCC Site (24 Hour) (source KCC 2009)

District	12 hour manual counts (7am to 7pm)						24 hour Metrocounts			Growth 07-08
	2000	2001	2002	2003	2004	2005	2006	2007	2008	
Ashford	2,802	3,002	2,437	2,192	2,111	2,222	4,396	4,593	3,639	-20.8
Broadstairs	-	-	-	-	-	-	1,251	1,184	692	-41.6
Canterbury	4,213	4,525	4,038	4,283	4,284	4,117	6,846	7,376	7,093	-3.8
Dartford	1,676	1,590	1,553	1,609	1,626	1,565	3,085	2,987	3,767	26.1
Dover	-	9,944	8,461	8,500	9,733	10,111	2,827	2,696	2,949	9.4
Folkestone	-	3,662	3,569	3,452	3,591	3,197	5,522	2,744	5,856	113.4
Gravesend	1,362	1,536	1,453	1,462	1,486	778	2,842	2,840	2,685	-5.5
Maidstone	2,161	4,691	4,355	4,515	4,680	3,804	8,975	8,971	8,964	-0.1
Margate	1,329	1,077	1,015	1,067	1,126	1,515	3,128	2,988	2,768	-7.4
Ramsgate	-	-	-	-	-	-	2,425	2,506	2,329	-7.1
Sevenoaks	-	1,628	1,441	1,521	1,493	1,577	2,541	2,437	2,496	2.4
Sittingbourne	-	-	-	2,582	2,259	2,526	3,934	3,968	3,843	-3.2
Tonbridge	1,779	2,009	1,866	1,844	1,859	1,846	3,483	3,071	3,047	-0.8
Tunbridge W	-	3,099	3,170	2,983	3,051	3,111	5,866	5,655	5,311	-6.1
AVERAGE	2,189	3,342	3,033	3,039	3,108	2,844	4,080	3,858	3,960	2.6

WALKING

Walking is to be encouraged not only for a reduction of car use but also the health benefits, it needs to be a pleasant experience in urban areas routes to destinations need to be identified and if necessary improved. Those improvements are not only to ensure accessibility for all, but lighting and cleansing.

Those destinations need to cater for pedestrians as well as the provision of secure pushchair and pram stores as well as the setting out point. For integration bus stops, stations and taxi stands all need to consider provisions for pedestrians, shelters with real time information, where possible landline public telephones should be available or mobile phone coverage ensured to promote the feeling of security.

Pedestrian routes need to be in good repair, trips and hazards reduced. Statutory service providers need to be made aware that covers, cabinets and poles do impact on pedestrian use and that their statutory rights should not have adverse impact on pedestrian movement.

Walking in the rural environment is difficult given that most rural communities have restricted footway provision and in some cases none at all.

In village centres parking is an issue, parking can restrict pedestrian transit and hinder movement across the carriageway both physically and reduced sight lines. Once again sites need to be assessed, where required traffic regulation orders put in place and enforced.

Walking is not only for to and from place of employment, transfer mode or to and from schools and shops but is a recreational pastime.

Access to start of routes is important so public transport does play a part as well as parking provision.

Rural footpaths (PROWS) are a valuable addition to access and landowners should be encouraged to provide and maintain sustainable routes. When these routes share the rural highway network “Quiet Lane” approach coupled with speed reductions can make the experience for pedestrian and equestrians more acceptable. After all if motorways can be subject to 30/40 mph speed limits to protect the workforce why should it be different for rural roads, where pedestrian, equestrian and slow moving farm vehicles are to be expected.

Where pedestrian footways are subject to ‘pavement parking’ such occurrences should be investigated. There will be situations where enforcement of parking restrictions or obstructions can and should be encouraged. Where it is not possible solutions such as reduced speed limits or designed shared surfaces can be introduced to make those areas a good experience for all road users.

CYCLING

Although Census data reveals the low levels of non-motorised modes of transport within the Sevenoaks District, there is potential to increase provision for cyclists and walkers within the District.

Indeed one of the objectives within the second Local Transport Plan for Kent 2006-11 is to increase the number of daily cycle trips, to help to reduce traffic on Kent's roads and consequently reduce congestion and pollution. There are already a good number of cycle routes within the County, with over 490km of cycle network, cycling levels also increased by 56% from 2001-2006.

However there are only four significant lengths of cycle route within the Sevenoaks District and, these are in the following locations;

- **Edenbridge relief road,**
- **B2173 London Road, Swanley,**
- **A20 West Kingsdown,**
- **Old London Road, Halstead**

Coverage of the National Cycle Network is also poor, with only Regional Cycle Route 12 passing through Leigh in the very southeast of the District.

Despite the lack of dedicated cycling facilities, cyclists are a visible component of Sevenoaks District traffic. There is also a possibility that there is a significant level of latent demand for cycling that could be released. The Sevenoaks Sustainable Development Action Plan revealed that over 70% of all car journeys within the District are under 5 miles in length and 46% are less than 2 miles. Such journeys have the potential to be replaced by cycling journeys if provision for cyclists were improved.

As part of its monitoring programme, the County Council reports on cycle flows. In total, three different sources of data collection are used, i.e. 12/14 inner urban area cordon counts, 21 automatic cycle counts and 43 inter urban counts. However, as from 2006 the 43 sites are monitored by Metrocount machines which do not count cycles. Hence, cycles counts at the 43 locations are only up to 2005.

Table 10: Inner Cordon Cycle Counts (12 Hours, 7am To 7pm) (source KCC 2009)

District	2000	2001	2002	2003	2004	2005	2006	2007	2008	% Growth 07-08
Ashford	342	972	660	676	548	611	832	825	945	14.5
Broadstairs	~	~	~	~	~	~	291	324	352	8.6
Canterbury	1,589	1,691	1,111	1,451	1,568	1,714	1,626	1,579	1,399	-11.4
Dartford	461	403	416	296	345	407	380	457	475	3.9
Dover	~	285	347	279	241	318	339	348	495	42.2
Folkestone	~	489	367	279	333	378	390	420	461	9.8
Gravesend	562	472	555	482	398	207	551	482	587	21.8
Maidstone	257	409	293	334	307	307	623	567	605	6.7
Margate	434	375	446	503	383	429	683	636	717	12.7
Ramsgate	~	~	~	~	~	~	549	471	495	5.1
Sevenoaks	~	140	120	160	110	137	267	242	253	4.5
Sittingbourne	~	~	~	573	460	461	623	498	602	20.9
Tonbridge	793	799	928	925	956	960	1,021	984	990	0.6
Tunbridge Wells	~	547	497	485	446	628	554	564	676	19.9
AVERAGE	634	598	522	537	508	546	624	600	647	7.8

POWERED TWO-WHEELERS

The SDST positively promotes 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 positive 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 less 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.

DISABILITY ACCESS

The Disability Discrimination Acts 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, transport services.

The provision of dropped kerbs and tactile paving reduces barriers to goods and services for disabled people 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 wherever possible through an ongoing work programme based on audits by disabled groups as well as all new schemes and the highway enhance access wherever possible.

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 via all possible available funding mechanisms.

SMARTER CHOICES

Setting SMARTer Targets

Targets have an important role to play in measuring and monitoring progress towards achieving the overall objectives. Some of the key targets have been set by the DfT, particularly in relation to School Travel Plans (40% of schools by 2006 and 100% of schools by 2010) but there are clear benefits to setting other District targets to enable the delivery of the strategy to be monitored and continually developed. Such targets should be SMART i.e. Specific, Measureable, Achievable, Realistic and Timed.

Key achievements:

- **50-60 new School Travel Plans, taking the Kent Total to 470 (approx) or 78%;**
- **A 1% shift to sustainable modes of travel to school (against 2006/07 school census base data);**
- **114,000 school-run journeys saved through walk to school initiatives (as of March 09);**
- **Over 13,000 Kent Freedom Passes issued, with an estimated 2%-6% improvement in journey times outside those schools with a significant uptake of the scheme;**
- **£100,000 of capital investment in sustainable travel to school facilities, within school grounds (Local Transport Plan);**
- **A projected 3,163,283 car journeys saved in 2009 through 'Kentcarshare' which equates to a saving of over 1000 metric tonnes of CO₂.**

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

Smarter Choices operates within the context of the following major national and local priorities:

- **Travelling to School: An Action Plan – Department for Education and Skills (DFES)/Department for Transport (DfT) (2003) – which made significant funding available to local authorities and schools and set a target of 40% of schools to have travel plans by 2006 and 100% by 2010**
- **The Future of Transport – DfT (2004) – “promoting the use of school travel plans, workplace travel plans and personalised travel planning to encourage people to consider and use alternatives to their cars.”**
- **Choosing Health – Department of Health (DoH) (2004) – which sets out the key principles for supporting the public to make healthier and more informed choices in regards to their health.**
- **LTP2 Guidance – DfT (2004) – which includes a mandatory requirement for all local authorities to set targets for mode share of journeys to school for the period 2006 to 2011.**
- **Every Child Matters – DfES (2004) – which sets out the national framework for local change programmes to build services around the needs of children and young people under the headings “be healthy; stay safe; enjoy and achieve; make a positive contribution and achieve economic well-being”.**
- **The Next Four Years – KCC (2003) – which sets out the County Council’s priorities for the term of the administration, including initiatives aimed at “Keeping Kent Moving”.**
- **Vision for Kent – KCC (2003) – the Community Strategy for improving the economic, environmental and social wellbeing of the county of Kent over the next 20 years.**
- **Local Transport Plan for Kent 2006-2011 – KCC (2005) – which includes the vision “to widen the choice of transport available and reduce dependency on the private car, thereby providing good accessibility to jobs and services for all sections of the community and conserving and enhancing the environment”. The Strategy is accountable to a steering group of senior officers from the Environment & Regeneration and Education & Libraries Directorates and is ultimately accountable to the Cabinet Members for Environment, Highways and Waste and Education and School Improvement.**

Delivery, Objectives and Targets

The successful delivery of Smarter Choices Kent presents a challenge for a wide range of stakeholders. However, the benefits of its delivery provide an important stimulus for action. An action plan is required to reverse the ever increasing number of car journeys and the decline in more sustainable forms of travel such as walking to school. The following sections set out the key objectives of Smarter Choices, overall targets and a detailed action plan to ensure their delivery.

The key objectives of Smarter Choices Kent are:

- **To give people better information about their existing travel options. For example through the development of Traffic Management and**

Information systems, providing real-time travel information to the public through a variety of media. This will enable people to make informed decisions about their journey before leaving their homes or workplaces and also to react to situations affecting their journey en-route.

- **To market sustainable transport options more effectively. For example, through signage at key congestion hot-spots throughout the County advertising the Kentcarshare initiative and forging effective partnerships with the media.**
- **To make improvements to bus services, so that they better meet the needs of a particular group of people. For example, through the development of Quality Bus Partnerships with the aim of building on relationships between Local Authorities, principal bus operators and local transport user groups.**
- **To provide new transport services, closely focused on a particular target market such as a workplace or a residential area. For example, through the provision of dedicated high quality school bus services. The priority for providing a bus needs to be assessed using those School Travel plans which help to identify the greatest potential for a switch away from private car at lowest overall cost and cost per passenger of the service.**
- **To provide new options that reduce the need to travel. For example, through the promotion and development of flexible working and IT solutions, led and championed by the County Council.**

Smarter Choices Kent – An Action Plan

School Travel Plans

School Travel Plans are an initiative to encourage pupils, parents and staff to address the issues of congestion, road safety, health and the environment in relation to their school and wider community. Schools are encouraged to think about their own unique environment and ethos, the needs of their particular community and what issues matter to them.

In line with the one of the key national targets set by the DfT, it is proposed that **100%** of schools in Sevenoaks District will have an approved Travel Plan by 2010.

Workplace Travel Plans

Travel plans can cover a single site or a cluster of businesses, for example on a business park.

The targeted marketing of travel plans to companies in Sevenoaks District with more than 100 Staff will be applied to ensure that all businesses of this size and above have an adopted 'Plan' in place by 2018.

Public Transport Information and Marketing

There is much potential to promote individual bus routes to people through travel plans and other Smarter Choices initiatives by:

- **Supporting the delivery of the Public Transport Information Strategy;**
- **Promoting public transport through school and workplace travel plans;**
- **Developing new *Kickstart* bids with public transport operators.**

Travel Awareness Campaigns

Travel awareness campaigns improve understanding of traffic growth and encourage people to think about their own travel behaviour, they use a wide range of media and co-ordinate with national events such as Walk to School Week.

Travel awareness messages are general and tend to be aimed at the whole population rather than particular groups. It is proposed to:

- **Establish and promote the New Ways 2 Work, New Ways 2 School and New Ways 2 Travel brands across Kent whilst supporting existing branding**
- **Develop and tailor initiatives to support nationally and internationally recognised events and travel awareness programmes e.g. Walk to School Week, National Green Transport Week and European Mobility Week**
- **Establish partnerships with local media serving those travelling to work in key congestion areas e.g. Maidstone, Canterbury and Tunbridge Wells**

Personalised Travel Planning

Personalised travel planning (PTP) is a targeted marketing technique, providing travel advice and information to people based on an understanding of their personal trip patterns. PTP can have a significant impact in promoting more sustainable journeys, so much so it now has its own national web site for door-to-door journey information at www.transportdirect.info

Car Sharing

Car sharing schemes can have a significant impact on tackling congestion, reducing parking pressures and saving travel costs. The most successful car share schemes are those which support the daily commute. Such schemes can operate within a company, or across a number of different employers in the same area.

It is planned to expand car sharing by:

- Launching a dedicated car share scheme for schools (*schoolrun*)
- Marketing the schemes through a variety of innovative and targeted media
- Supporting companies and schools registering with the schemes

Car Clubs

A car club gives people access to a car whenever they need it, but without the high fixed costs of individual ownership. Car club members are able to mix and match

their travel modes, using a car when that is the best option but travelling by public transport, on foot or by bike at other times. The number of schemes in the UK is small but growing steadily.

It is planned to facilitate car clubs by:

- **Promoting car clubs where appropriate at new developments.**

Tele/Flexible Working

Tele/flexible working generally involves working remotely from a usual office base by phone and computer. Nationally this practice has been increasing at 13% pa.

To support this Smarter Choices proposes to:

- **Promote tele/flexible working as part of workplace travel plans.**

Partnership Working

A fundamental principal of Smarter Choices is to develop and deliver highway schemes and services which are aligned with people's travel needs; this can be achieved by engaging with the public and other stakeholders to raise awareness, ownership and behavioural change.

Conclusion

By working together with key partners and stakeholders, Smarter Choices has the potential to make a substantial contribution to reducing the impact of congestion through the provision of innovative, viable and cost effective alternatives to the private car. Smarter Choices will also support a wide range of other government policies and initiatives and provide an opportunity to benefit the health of individuals and the economic vitality of town centres and businesses.

DEVELOPMENT PLANNING & TRANSPORT ASSESSMENTS

Mechanisms for controlling the impact of traffic are already in place. The planning process seeks the views of parish council's, residents, local and county members as well as Kent County Council as Highway Authority and the Highways Agency as a consultee.

Through the planning process the impact of development is identified. Where the impact is identified as being detrimental to existing highway conditions developers are expected to put in place, provide for fund mitigating measure to ensure that the impact is negated to provide a sustainable development. This can be done by condition or legal agreement.

It is therefore essential that a catalogue of potential highway improvements is developed. By doing so where priorities for public funding preclude such improvements contributions from a development can be essential to pump prime or fund them can be a decisive issue.

Indeed this strategy document is the forerunner if any such wish list to be put together by KCC, SDC and parish councils who are uniquely positioned to the local needs.

It is therefore essential that SDC or KCC continue to work in partnership to continue to seek to deliver a quality highway network.

- ***Planning controls on new applications;***
- ***Enforcement of existing on site turning and loading areas;***
- ***Enforcement of loading and unloading restrictions and provide appropriate location with enforcement to prevent misuse;***
- ***Review HGV routing strategy or signing;***
- ***Working with Satellite Navigation providers to ensure both permanent routes and temporary directions routes are identified.***

A sustainable community is a place where people want to live and work, now and in the future. But is this more about hot air rather than clean air, or building civic empires rather than green environments?

Central government is working with councils, partner agencies and local people to create 'sustainable communities'. These are seen as the residential and workplace surroundings in which people live and thrive, where there is a balance and integration of the social, economic and environmental components that define a community area.

In short, these communities are likely to be:

- ***safe and inclusive***
- ***well planned, built and run***
- ***offering equality and opportunity for all***

But forget the 'one size fits all' template, because sustainable communities are diverse, reflecting their own local circumstances.

There can be many forms of social exclusion. Physical restrictions such as mobility can be easily recognised, dropped crossings for mobility chairs and push chairs and prams along with controlled and uncontrolled crossings can address many of their needs. Additionally adaptation of transport and the means of access goes a long way to complete those with physical impairment. But those with sight and hearing deficiencies also need to be considered. There are however further sections of the community that are subject to social exclusion. The young who need to use the highway safely and need to become streetwise. Those that can not or do not have the use of the car, or unable to use a two wheel cycle. Public transport may be their only means of accessing employment, shopping and leisure facilities. It is therefore essential that accessible and affordable public transport is available where ever possible with dial-a-ride and taxi services on hand where it fails.

SETTING & ACHIEVING TARGETS

It is important that this strategy is seen as a living document and needs to be reviewed in association with the preparation of future Local Transport Plans and Local Development Frameworks and opportunities for further study may arise from these in future.

However the overall aims and objectives of this Strategy are as follows;

- **Improve accessibility to jobs and services for all sections of the community;**
- **Reduce the need to travel;**
- **Where there is a need to travel, enable people to be less dependent on cars for their travel needs;**
- **Reduce the harmful environmental effects of traffic and transport;**
- **Improve safety and personal security for all travellers; and**
- **Protect and enhance the District's position as an attractive location for business and investment.**

The success of the improvements identified within this Strategy should be measured against targets identified within the Local Transport Plan 2006-11, which will also help to achieve similar objectives identified within, The Vision for Kent (2006), the Sevenoaks District Community Plan, The South East Plan and Kent's Environment Strategy (2003). This Strategy sets out following specific targets under the 9 key targets headings designed to measure every aspect of the Strategy's overall performance.

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 13 respective targets. The SDST indicators are grouped under the 'Shared Priority' objectives of improving accessibility, tackling congestion, 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 what progress KHS can make towards achieving measurable outcomes given its own resources and the resources of Strategy Partners between 2009 and 2026.

The SDST targets for the strategy period 2009 to 2026 are summarised below under their appropriate shared priority heading.

Improving Accessibility

The SDST 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 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 Accessibility Targets comprise:

- **To increase household access to hospitals within 30 minutes by 15% over the Strategy period.**
- **To increase household access to GP surgeries within 15 minutes by 10% over the Strategy period.**
- **To increase the number of pedestrian trips into Sevenoaks and Swanley town centres by 15% over the Strategy period.**
- **To increase the number of buses operating in Sevenoaks District with low floor access by 100% by 2017.**

Tackling Congestion

Increasing 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 Sevenoaks 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.

The private car is a very successful and attractive mode of travel and in Sevenoaks, 44% of households own two or more cars (compared with nearly 38% for the South East). The overall cost of motoring has remained at or below its 1980 level compared with the 37% rise in bus, coach and rail fares. The private car therefore remains the dominant mode of travel for journeys to work and for leisure trips. By the year 2025 the number of cars on the roads is expected to double, reaching 40 million. Today 50 per cent of our car trips are less than five miles and 25 per cent are less than two miles. This is exacerbated by Sevenoaks dispersed settlement pattern which results in a high proportion of intra and inter-district commuting.

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 seeks to achieve a reduction in road congestion in Sevenoaks District through the following targets:-

- To increase bus patronage in Sevenoaks by **0.5%** per annum up to 2026.
- To limit traffic growth in Sevenoaks overall road network to less than **2%** per annum up to 2026.
- To increase the average number of daily cycle trips by **2%** per annum up to 2026.
- To increase the proportion of pupils travelling to school by sustainable transport modes by **2%** (Secondary Schools) and **1%** (Primary Schools) per annum up to 2026.
- To restrict peak hour traffic growth A25/A225 Bat & Ball junction to less than **2%** per annum up to 2026 and no more than **32%** by 2026, against the predicted **3%** per annum growth (2004 base year).
- To increase the average number of daily cycle trips by **2%** per annum up to 2026.

Providing Safer Roads

KCC, Sevenoaks District Council and its Strategy Partners will continue to work towards reducing the number of road casualties in Sevenoaks District. This will improve the health of local communities, tackle perceptions of vulnerability and address issues of social exclusion and accessibility. KCC will build upon its excellent casualty reduction record through a co-ordinated programme of enforcement, education and engineering measures. Greater emphasis will be placed on the need to tackle the psychology of improving driver behaviour as well as the need to educate road users, particularly children, and enforce local speed limits and controls.

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 between 2000 and 2010 and thereafter by **1%** per annum up to 2026.
- Achieving a **50%** reduction in the number of children killed or seriously injured between 2000 and 2010 and thereafter by **1%** per annum up to 2026.
- Achieving a **10%** reduction in the number of slight injuries between 2000 and 2010 and thereafter by **0.5%** per annum up to 2026.

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.

Improving Air Quality

Kent County Council and Sevenoaks District Council 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 (AQMAs).

Kent's LTP sets an ambitious air quality target aimed at reducing NO₂ emissions in line with the national target at 11 AQMA sites in Kent, many of which are located in densely populated and heavily trafficked urban areas. There are currently 22 AQMAs declared across Kent, and 5 are within the district of Sevenoaks:

Sevenoaks District Council designated the following five AQMAs on 1st March 2002 for expected exceedence of the NO₂ annual average objective for 2005 and part of the M25 for exceedence of the PM₁₀ 24hr 2004 objective:

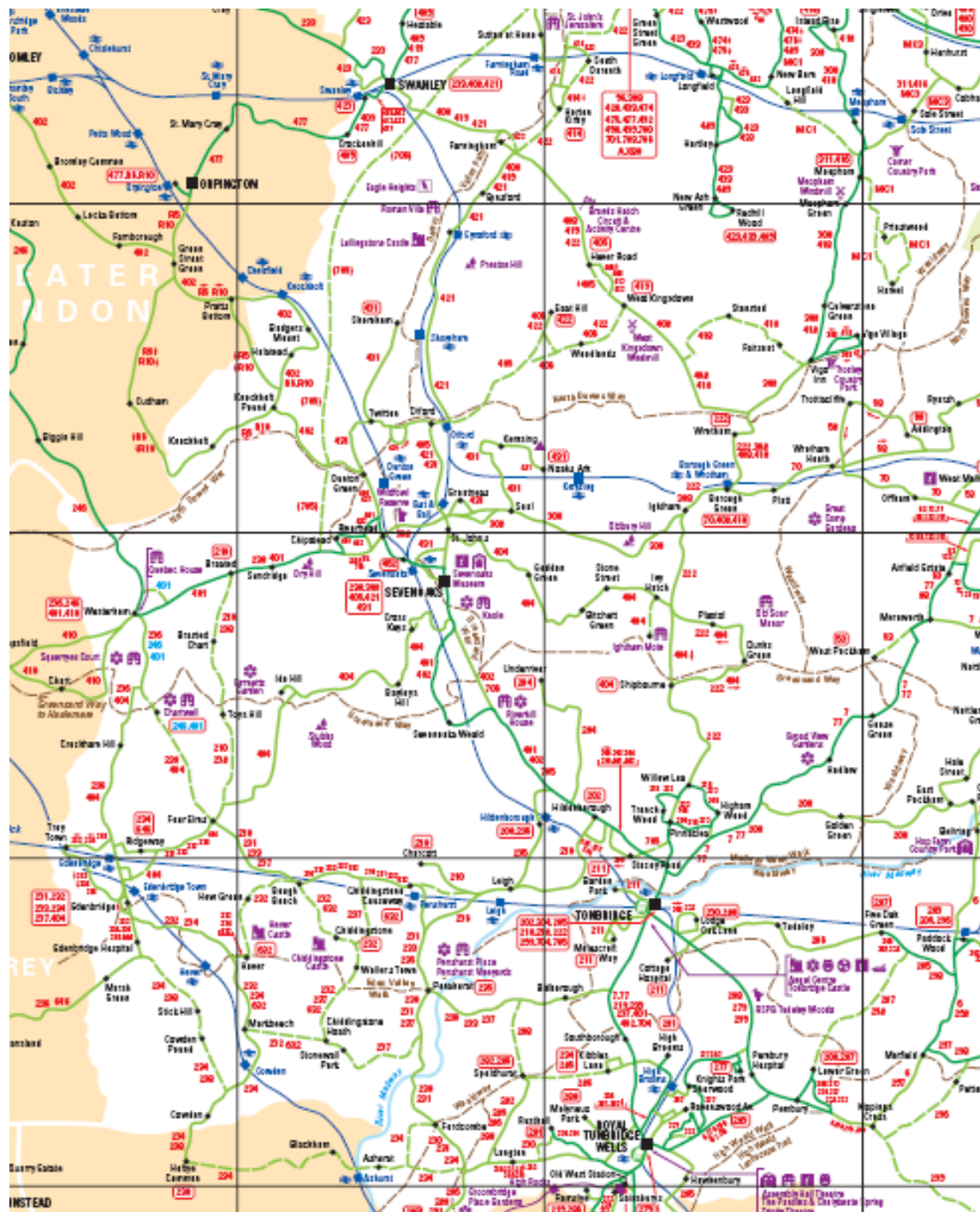
- **M20, Sevenoaks -Junction 3 of the M25 to the District Boundary with Tonbridge and Malling (11 km)**
- **M25 (whole length in District) - Sevenoaks County border with Surrey to District border with Dartford including Junction 3, 4 and 5 and the extension of Junction 5 to connect with the A25 at Bessels Green (21.6 km)**
- **M26 (whole length in District), Sevenoaks - Junction 5 of the M25 to the district boundary with Tonbridge and Malling (9.0 km)**
- **A20T Swanley Bypass, Sevenoaks - Junction 3 of the M25 to the District boundary with the London Borough of Bromley (4.3 km)**
- **A25/A224 Riverhead, Sevenoaks - junction of the A25 and A224 at Riverhead to the north of Sevenoaks town centre.**

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 AQMAs will grow, undermining the health of its communities and the ability of future generations to live in an environmentally sustainable society.

Sevenoaks Air Quality Targets comprises:

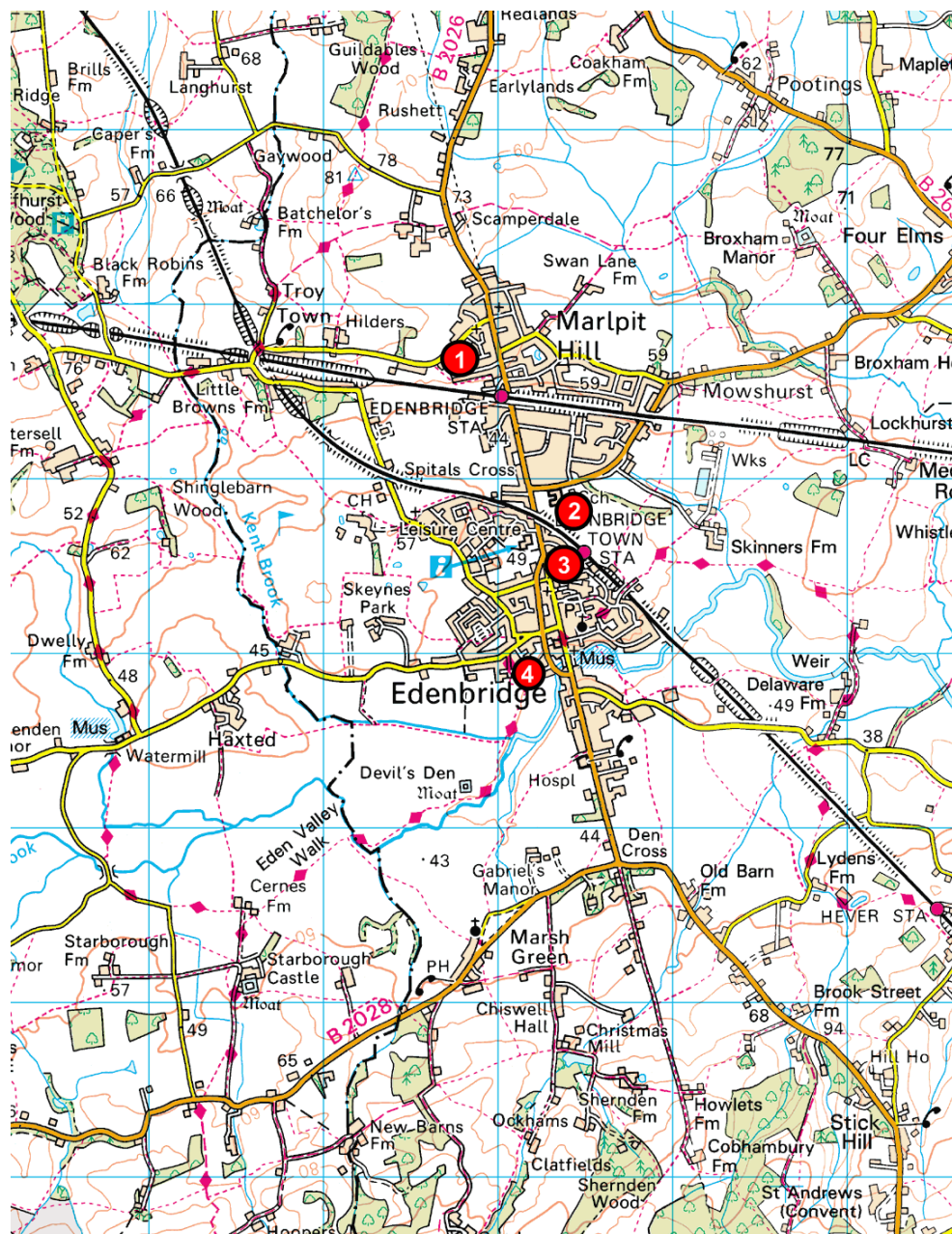
- **To reduce the annual average level of NO₂ missions at Sevenoaks 5 AQMAs to 40 µg/m³ by 2018. Intermediate traffic flow monitoring will form annual trajectory for this particular indicator.**
- **KCC will work with partners to seek a reduction in traffic pollution on the local road network.**
- **KCC will work with partners to reduce congestion through better management of Kent's highways.**

PUBLIC TRANSPORT MAP



Source: KCC

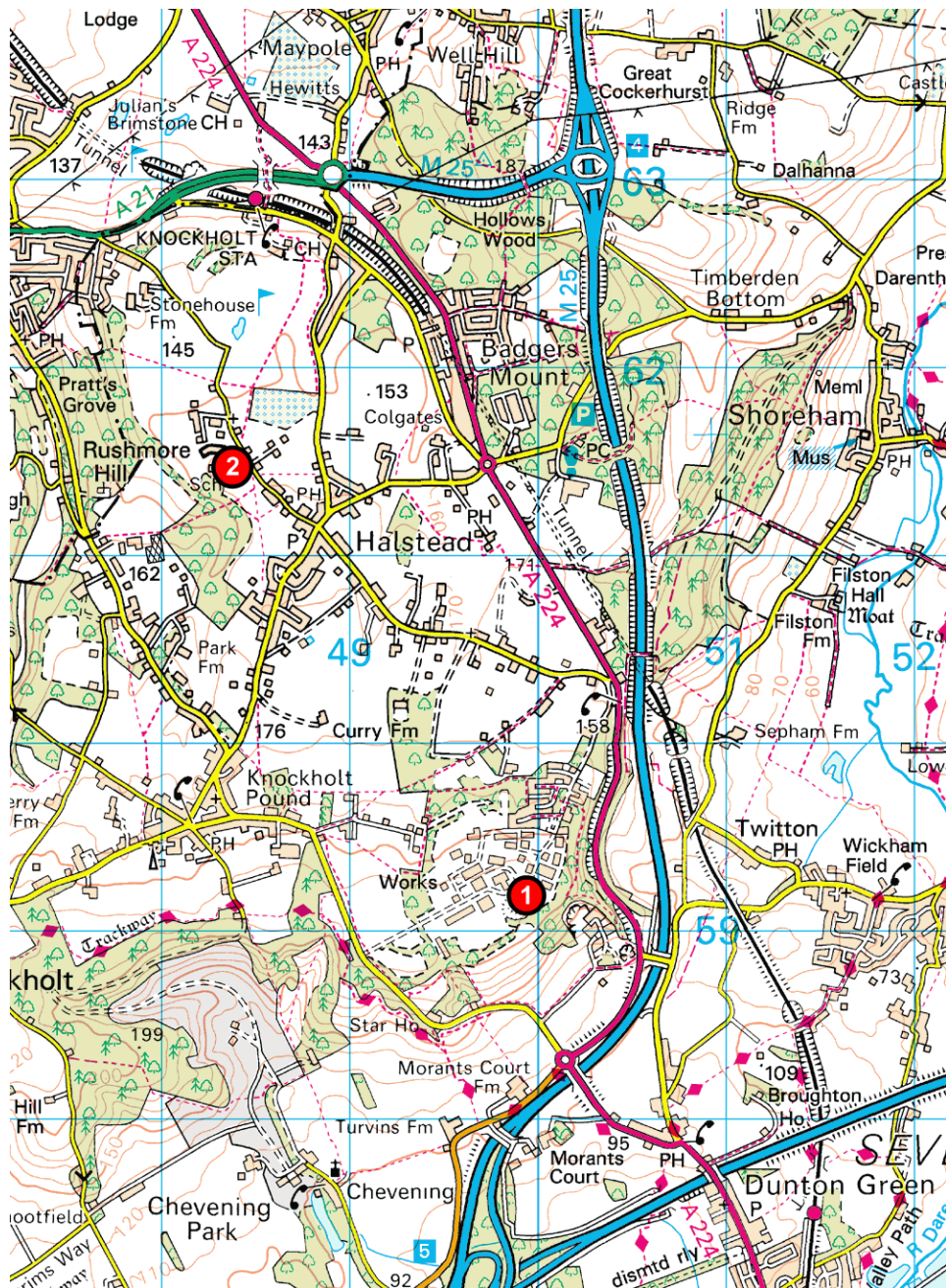
PROPOSED DEVELOPMENTS IN EDENBRIDGE



- | | |
|---|---|
| <p>1 Penlee, Hawthorns & Eden Lodge, Station Road</p> <p>2 Land West of Enterprise Way</p> <p>3 Former Edenbridge Secondary School Site</p> <p>4 Former Tekram Factory Site</p> | <p>Development of 34 dwellings permitted under SE/07/03881.</p> <p>Safeguarded for future development in the Local Plan. SHLAA identifies the potential for the development of 260 dwellings. The emerging Core Strategy supports the release of this land after 2016</p> <p>Application (SE/07/01932) submitted for the development of 40 dwellings and a community centre</p> <p>Development of 34 dwellings permitted under SE/07/03881.</p> |
|---|---|

Source: Sevenoaks DC

PROPOSED DEVELOPMENTS IN HALSTEAD



- 1 Fort Halstead

- 2 Halstead Place School, Church Road, Halstead

A proposal has been put forward for a major redevelopment to provide a mixed use scheme to accommodate up to 1000 dwellings, employment provision and other uses. No planning application has been submitted. The Core Strategy: Preferred Options does not support the allocation of this site for residential redevelopment

Development of 33 dwellings permitted under SE/08/01915 (place dot at 548300,161520).

Source: Sevenoaks DC

PROPOSED DEVELOPMENTS IN HORTON KIRBY

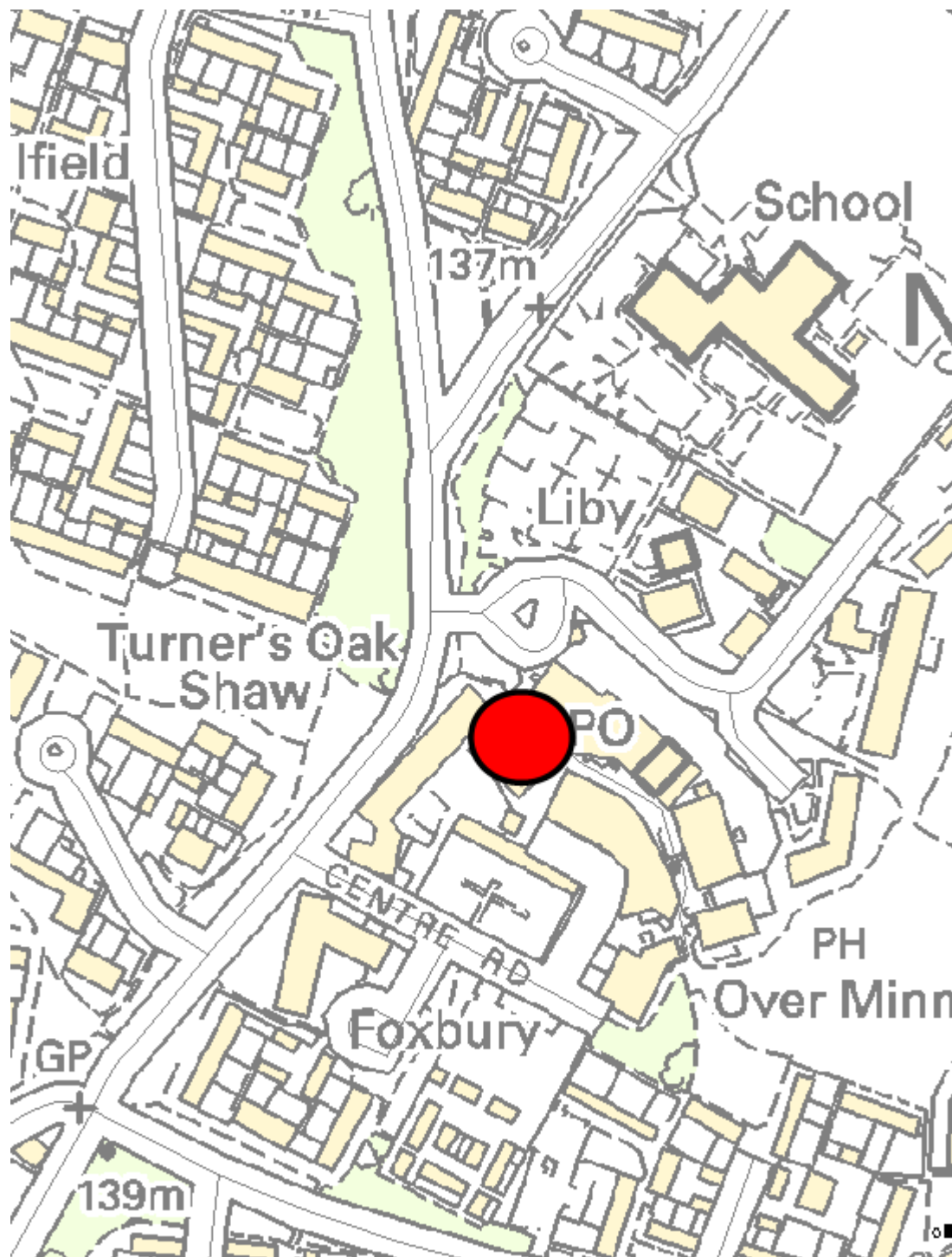


Horton Kirby Paper Mills,
South Darent

Site has planning permission for the development of 210 dwellings

Source: Sevenoaks DC

PROPOSED DEVELOPMENTS IN NEW ASH GREEN

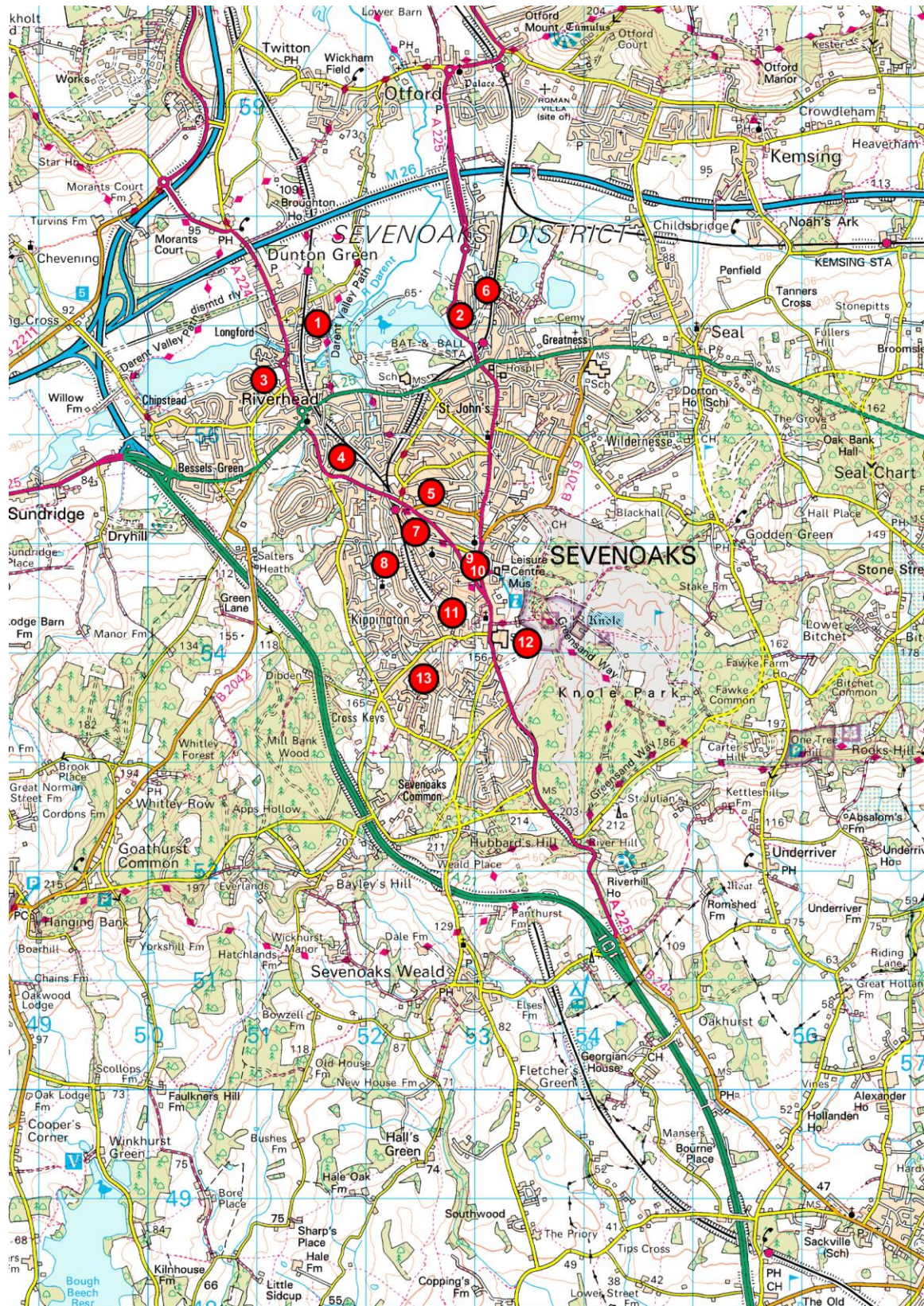


New Ash Green Village Centre

Regeneration of New Ash Green Village Centre is supported by the emerging Core Strategy.

Source: Sevenoaks DC

PROPOSED DEVELOPMENTS IN SEVENOAKS



Key to development map above

1	West Kent Cold Store	Site has planning permission for the development of 500 dwellings, commercial and community/medical floorspace.
2	National Grid Site	The SHLAA identifies the potential for development of 24 dwellings.
3	Tesco Expansion	Expansion of store to provide an additional 3552 sq m of net retail floorspace permitted under SE/07/03724.
4	Sevenoaks Police Station	Application 09/00650 submitted for the development of 52 units and redevelopment of 1,228 sq m of office floorspace.
5	The Farmers Site, London Road	Development of 23 dwellings permitted under SE/04/00526.
6	Business Area 21 – Cramptons Road	The SHLAA identifies the potential for development of 57 dwellings.
7	Railway and Bicycle Public House, London Road, Sevenoaks	Development of 24 dwellings permitted under SE/06/02156.
8	Oak Hill Road	The SHLAA identifies the potential for development of 39 dwellings.
9	Bligh's Meadow Redevelopment	The SHLAA identifies the potential for development of 44 dwellings.
10	Retail Development at Sevenoaks Town Centre	The emerging Core Strategy supports the development of additional retail floorspace at Sevenoaks Town Centre after 2016.
11	Valley Drive	The SHLAA identifies the potential for development of 32 dwellings.
12	Sevenoaks School	The SHLAA identifies the potential for development of 65 dwellings.
13	Land between Oak Lane and Hopgarden Lane	The SHLAA identifies the potential for development of 61 dwellings.

Source: Sevenoaks DC

PROPOSED DEVELOPMENTS IN SWANLEY & CROCKENHILL



Key to development map above

1	Swanley Town Centre	The SHLAA identifies the potential for development of 128 dwellings.
2	Bevan Place	The SHLAA identifies the potential for development of 71 dwellings.
3	Former Laundry Site, Bonney Way	The SHLAA identifies the potential for development of 48 dwellings.
4	Keston and the Beeches	Development of 25 units permitted under SE/04/00248.
5	Old Bus Garage	Allocated for development in the Local Plan. The SHLAA identifies the potential for development of 20 dwellings.
6	The Old Highway Depot, London Road	Development of 24 dwellings permitted under SE/05/00598.
7	Broomhill	The emerging Core Strategy supports the development of 12ha of employment land at Broomhill.
8	Cherry Avenue	The SHLAA identifies the potential for development of 55 dwellings.
9	United House	The SHLAA identifies the potential for development of 116 dwellings.
10	Cray Road, Crockenhill	Allocated for development in the Local Plan. The SHLAA identifies the potential for development of 20 units.

Source: Sevenoaks DC