

Local Transport Plan for **Kent** 2011-16



April 2011



Local Transport Plan for Kent 2011-16

Adopted by County Council on 6th April 2011



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Foreword

The preparation of Kent's third Local Transport Plan (LTP3) provides us with the opportunity not only to define our future transport priorities but also to celebrate the immense progress that has been made since the publication of LTP2 in 2006. The County now boasts Britain's first high speed domestic rail service, which has transformed journey times to London and significantly enhanced Kent's attractiveness as a place to live and work. Thousands of young people across Kent now use the bus for journeys to school and leisure activities thanks to the innovative Kent Freedom Pass scheme. And the County's road users suffer less congestion and delay following the launch of the County Council's Traffic Management Centre and England's first permitting scheme for roadworks.

The next five years will be very different. As we emerge from a period of recession and react to Pfizer's decision to withdraw from East Kent, our local and national priorities are to reduce the country's budget deficit and to promote lasting, privatesector led recovery. Our new 20 year Transport Delivery Plan for Kent, Growth without Gridlock, makes clear that ongoing investment in our roads, railways and sustainable transport networks - particularly the provision of additional road capacity across the Thames, a long-term solution to Operation Stack and improved rail connectivity to East Kent – must form a key part of this strategy to ensure that Kent maximises its potential as the UK's most significant location for job creation and housing growth. This will be done at a time of cuts in public spending and in response, this Plan proposes a new approach to prioritising investment in transport infrastructure in order to support housing and employment in Kent's Growth Areas and Growth Points, make Kent a safer and healthier county, improve access to jobs and services, especially in disadvantaged areas, and cut carbon emissions. This Plan is a sensible and reasonable response to the current financial situation and provides a clear and coherent framework to guide decision making during the next five years.

Bryan Sweetland

Cabinet Member for Environment, Highways and Waste



Introduction

This document is Kent's third Local Transport Plan (LTP3). Its purpose is to set out Kent County Council's (KCC) Strategy and Implementation Plans for local transport investment for the period 2011-16.

The Plan explains how we will prioritise our planned measures under five Themes based on the previous Government's five National Transport Goals as set out in the LTP3 Guidance, but made relevant to Kent:

- 1. Growth Without Gridlock
- 2. A Safer and Healthier County
- 3. Supporting Independence
- 4. Tackling a Changing Climate
- 5. Enjoying Life in Kent

The Plan is presented in fifteen chapters. We explain why transport is important to Kent and the transport related problems that currently exist. We then tell you about the aims and objectives of the County Council and its partners and how these have influenced our approach to developing our LTP3 Strategy. Our Implementation Plan is explained in detail in chapters 6 - 13 and we also identify possible funding sources. The final chapters propose indicators to monitor our performance and set out how we intend to improve our services during the LTP3 period.

This LTP was prepared by KCC's Planning and Environment Division in partnership with other KCC service providers and stakeholders. If you would like to discuss any aspect of the Plan, please contact us at:

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Executive Summary

Local Transport Plans (LTPs) are the method by which local authorities secure funding for local transport improvements. The preparation and adoption of an LTP is a statutory requirement under the Local Transport Act 2008. Kent County Council (KCC) has previously produced two LTPs covering the periods 2001-06 and 2006-11 respectively. This document is Kent's third LTP (LTP3) and sets out the County Council's current priorities for local transport investment for the period 2011-16.

Kent has one of the most extensive transport networks in the UK. As a local transport authority, the County Council is responsible for the management and maintenance of all local roads and public rights of way. KCC looks to promote and improve the social, economic and environmental wellbeing of the area and implements local transport schemes that support these long term objectives. The County Council also lobbies on behalf of the people of Kent for major transport infrastructure, such as a Lower Thames Crossing, a solution to Operation Stack and improvements to rail services.

During LTP2, the County has witnessed some significant changes to its transport network. In December 2009, high speed rail services commenced, reducing journey times to and from London, particularly from East Kent. Great progress has been made, in partnership with local bus operators and the district councils, to increase bus passenger journeys. Kent is an international gateway, with cross-Channel traffic through the Port of Dover and the Channel Tunnel continuing to increase. Kent's airports have plans to expand and are essential catalysts in regenerating their local areas.

Kent has been identified by the previous Government as an area for significant growth in housing and employment, containing two of the UK's four Growth Areas in Thames Gateway Kent and Ashford, along with the Growth Points of Dover and Maidstone. This planned growth alone is predicted to result in 250,000 extra journeys on Kent's roads by 2026. Coupled with the forecast increase in international traffic, tackling congestion is therefore one of the County Council's priorities. There are areas in Kent that suffer from disadvantage, especially in the East Kent coastal towns and the large number of rural communities in the County experience relatively poor accessibility to services.

Kent's population is ageing and this will put pressure on local community services. Providing access to these services for those without a car will continue to be a challenge. Kent has the largest carbon emissions of any local authority area in the UK and we have already experienced the impacts and disruption caused by severe winter weather. The total number of casualties on Kent's roads has reduced in the last 20 years but there were 61 people killed on Kent's roads in 2009 and 568 serious injuries; therefore reducing casualties further remains a key LTP3 objective.

Kent's approach to LTP3 has been based on the County Council's new Regeneration Framework, *Unlocking Kent's Potential*; a 25 year masterplan which identifies the opportunities and challenges facing the County over the coming decades. Supporting this is a Transport Delivery Plan for Kent, *Growth without Gridlock*, which highlights the key transport solutions needed over the next 20 years. The key elements of this delivery plan are securing a Lower Thames Crossing to support housing and employment growth in the Thames Gateway; delivering a long-term solution to Operation Stack; cutting congestion along the A21 corridor; improving rail journey times to East Kent; creating an integrated bus network; and linking new infrastructure more closely to local planning through the District Local Development Framework process.

The strategy approach for LTP3 has been to develop five Themes, based on the previous Government's five National Transport Goals as set out in the LTP3 Guidance, but made relevant to Kent:

- Growth Without Gridlock
- A Safer and Healthier County
- Supporting Independence
- Tackling a Changing Climate
- Enjoying Life in Kent

Using these Themes, a number of options were developed for how to prioritise the funding we expect for LTP3. These options, together with the draft LTP3, were subject to public consultation between October and December 2010. The preferred prioritisation methodology, as confirmed by the results of the consultation, allocates a proportion of the budget to each of the five Themes and, within these Themes, focusses the investment in the areas where the challenges associated with each theme are most acute. Schemes will then be prioritised using a value for money assessment. The methodology is depicted graphically in the figure below:

	-	-		
LTP3 Theme	Budget allocation	Spatial distribution	Scheme type	Value for money assessment
Growth Without Gridlock	45%	Growth Areas and Growth Points	Schemes that support housing and employment	1* - Access road 2 - Bus rapid transit 3 - Cycle route 4 - Traffic management
A Safer and Healthier County	15%	Problem sites	Schemes that tackle road casualties, air pollution, poor health etc.	 I - Safety schemes 2 - Safe routes to school 3 - Walking routes 4 - Bus route to hospital
Supporting Independence	15%	Disadvantaged areas (East Kent coastal towns)	Schemes that provide access to jobs and services for those without access to a private car	 I - Bus improvements 2 - Walking and cycling 3 - Community transport 4 - Public information
Tackling a Changing Climate	15%	Urban areas	Schemes that promote low emission travel	 Low emission vehicles Travel Plans Kent Freedom Pass Walking and cycling
Enjoying Life in Kent	U OX	Countywide	Schemes that improve access to opportunities and reduce impact of transport on Kent and it's communities	 Public rights of way improvements Public realm Lorry management Journey planner

Budget allocation/spatial distribution methodology

In light of the Government's Comprehensive Spending Review in October 2010, which confirmed that funding for local transport would be significantly reduced over the period 2011/12 to 2014/15, we have identified possible alternative funding streams to supplement LTP funding which could include developer contributions, Tax Increment Financing and a Foreign Lorry Road User Charge.

Following the Strategy, eight Implementation Plans are set out corresponding to the five LTP3 Themes and other priorities for Members during the Plan period.

The Implementation Plan for the Member Highway Fund provides details of the £25,000 allocation made to each Member of the County Council for the delivery of small-scale transport schemes in the communities they serve. The Fund is an example of localism in action and will serve as an important means of addressing locally important issues that may be excluded through the budget allocation and spatial distribution methodology outlined above.

The Implementation Plan for Crash Remedial Measures confirms that the prevention of deaths and serious injuries on Kent's highway network will remain a high priority for the County Council during the LTP3 period. Great progress has been made in this area over the past decade, which has been achieved in part by introducing physical measures on the highway as part of a programme of Crash Remedial Measures (CRMs). The Plan sets out the process that will be employed by KCC over the next five years for identifying and implementing further CRMs across the County.

The Implementation Plan for Growth without Gridlock is based on measures in Kent's Growth Areas and Growth Points that support housing and employment as well as the countywide management and maintenance of the local road network. It also identifies those major transport improvements that KCC will lobby for, including a Lower Thames Crossing, a Foreign Lorry Road User Charge and improvements on the classic rail network to maximise the benefits of high speed rail.

The Implementation Plan for a Safer and Healthier County will be delivered by a variety of partners working together through Kent's Local Strategic Partnership to reduce casualties on the County's roads, protect communities from pollution and other traffic impacts, improve accessibility to health, promote active travel and protect transport users from anti-social behaviour. These measures will be targeted at crash cluster sites and Air Quality Management Areas.

The Implementation Plan for Supporting Independence aims to improve accessibility for those people who do not have access to a car in the coastal towns of East Kent which suffer from high levels of disadvantage, and to tackle the barriers related to a lack of provision, physical access, affordability and information.

The Implementation Plan for Tackling a Changing Climate looks to reduce transport emissions in conjunction with the new Kent Environment Strategy. This will be achieved through a combination of promoting greener forms of transport, reducing the length of, and necessity to make, a journey and reducing the carbon footprint of KCC as the manager of the local road network.

The Implementation Plan for Enjoying Life in Kent recognises that transport can play a wider role in improving our quality of life and as such, pulls together initiatives from a wide range of partners across the County. Access to wider opportunities such as education, cultural experiences and the countryside are promoted, along with measures to make travelling in Kent more enjoyable, comfortable and less stressful. The contribution that sociable streets can make to strengthen communities, along with the need to reduce the impact of lorry traffic on Kent's towns and villages, are also highlighted.

The Implementation Plan for Highway Capital Maintenance sets out our approach to the maintenance of our highway assets over the next five years in line with the objectives of the County Council's Highways Asset Management Plan. We have not set formal targets for LTP3 but have chosen the following performance indicators which reflect our five LTP3 Themes.

- Journey time reliability in Kent's urban centres (Canterbury, Gravesend and Maidstone)
- Principal roads where maintenance should be considered
- People killed or seriously injured in road traffic accidents
- Local bus journeys originating in the authority area
- Per capita reduction in CO₂ emissions
- Children travelling to school mode of transport usually used
- Net satisfaction with the condition of roads, pavements and streetlights

During LTP3, the County Council will be making various business and service improvements to ensure that resources are used effectively and target those in need. These include the annual Highway Tracker Survey, the Kent Winter Service Review (in response to the recent severe winter weather), the re-tender of KCC's 10 year Highway Maintenance Contract (2011 to 2021) and the Kent Rail Summits which provide the County with a common voice on rail improvements.

Chapter 1 – Why Transport is important to Kent

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A Local Transport Plan for Kent

- 1.1 Kent County Council (KCC) is the democratically elected strategic authority for Kent and has the broad power under the Local Government Act 2000 to promote and improve the social, economic and environmental wellbeing of the area. The overarching role of the County Council is to improve the quality of life of the people of Kent by arranging the delivery of services, by providing clear and accountable community leadership, by championing the County's interests, supporting the local economy and consulting and involving Kent's residents in planning ahead and making decisions on their behalf.
- 1.2 The County Council has a statutory responsibility for the provision of a range of services including education, adult social services, trading standards and library services. Some of these statutory responsibilities relate to the local transport network since the County Council is also the local transport authority for Kent. This means that we are responsible for the management and maintenance of all non-strategic roads in the County receive funding from Central Government to carry out this responsibility. This system of securing funding is carried out through the production and submission of a Local Transport Plan (LTP), which is a requirement of all local transport authorities in England outside London under the Transport Act 2000 (as amended by the Local Transport Act 2008).
- 1.3 The five year LTP process, introduced in 2000, replaced the previous Transport Policies and Programmes (TPP) system. An LTP sets out the authority's policies and delivery plans for the management and improvement of the local transport network. In producing these Plans, authorities must have regard to statutory guidance, issued by the Department for Transport (DfT). In line with the Local Government White Paper 2006, which called for a rebalancing of the relationship between central, regional and local Government, the latest guidance, published in July 2009, places more emphasis than previously on LTPs achieving local objectives.¹
- 1.4 In contrast to the first and second round of LTPs (covering the periods 2001-06 and 2006-11 respectively), the third LTP will not be formally assessed by the DfT and there will be fewer mandatory targets on which to report. LTPs are no longer required to be renewed at least every five years but they must include a separate Strategy (setting out the authority's high level transport policies and objectives) and Implementation Plan (providing details of the specific schemes the authority intends to deliver in order to meet these

objectives, based on an indicative Government funding allocation). This new approach has been welcomed by KCC and the Local Government Association, which view the LTP as a vital tool to enable local transport authorities to work with their stakeholders to strengthen their place-shaping role.

1.5 Having recently published the Transport Delivery Plan for Kent, *Growth* without Gridlock², which sets out a 20 year transport vision for the County, we have chosen to continue with the practice of preparing a five year LTP. The third LTP for Kent (LTP3) consequently covers the period 2011-16. It is a more concise and focussed document than LTP2, providing Kent's residents and businesses with a clear picture of the County Council's transport priorities at a time of significant economic and environmental challenges.

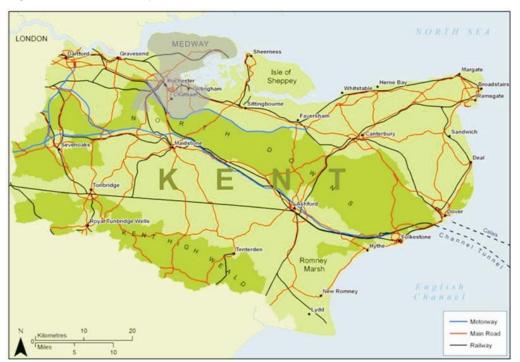


Figure 1.1: The County of Kent

Roles and Responsibilities

Kent County Council responsibilities

- 1.6 This Local Transport Plan covers the geographical area administered by Kent County Council. It excludes the unitary authority of Medway and the London Boroughs of Bromley and Bexley which were formerly part of the County of Kent; however we continually liaise with these authorities, as well as Essex, East Sussex and Surrey County Councils, over cross-boundary transport issues.
- 1.7 To the travelling public, the County Council's service is delivered through the Kent Highway Services (KHS) Alliance. KHS is a public-private partnership consisting of three private sector service providers together with KCC. This model enabled the Alliance to achieve savings of some £11.1 million in its first year of operation, against a 10 year savings target of £75 million. The respective roles and responsibilities of the County Council's private sector

delivery partners are outlined in Table 1.1. Each of these service providers holds a term contract with the County Council, which was awarded for an initial five year period in 2006, with possible annual extensions to 2016. At the time of writing (March 2011), KCC is in the process of procuring a new 10 year Term Maintenance Contract, to commence in August 2011 (see Chapter 15).

Contract	Provider	Services provided
Network Management Term Maintenance Contract	SRINGWAY	Reactive repairs and routine minor maintenance including potholes and patching, winter service, and street lighting.
Professional and Highway Consultancy Term Services Contract	JE [®] JACOBS	Specialist advice and top-up design support.
Intelligent Transport Systems Contract		Routine maintenance of traffic signals and intelligent traffic systems.

Table 1.1: Kent Highway Services Term Contracts (2006-2011)

1.8 Kent has one of the most extensive highway networks in the country. The County Council maintains over 5,000 miles of roads and 4,000 miles of pavements, as well as 4,200 miles of public rights of way. We are directly responsible for 2,700 bridges, 110,000 streetlights, 130,000 traffic signs and 400 miles of cycle routes. As well as conducting routine maintenance, our teams are on standby from mid October to mid April to



keep the roads open during periods of severe winter weather.

- 1.9 Under the Traffic Management Act 2004, all local transport authorities in England have a duty to: "secure the expeditious movement of traffic on the authority's road network". In carrying out this 'network management duty', KCC actively manages the road network in a number of the County's urban areas through its Urban Traffic Management and Control (UTMC) system. The system controls traffic signals and crossings to maximise the efficiency of the highway network throughout the day.
- 1.10 Whilst the maintenance of the County's existing highway assets is a key responsibility, KCC also plans and delivers local improvements to the network. Schemes costing less than £5 million are put into the County Council's annual Integrated Transport programme and include measures such as bus priority, junction improvements and pedestrian crossings. Schemes that cost more than £5 million are classed as Major Schemes and require specific approval from the DfT. Recent examples include the East Kent Access road and the Fastrack Bus Rapid Transit scheme.

1.11 The County Council actively promotes alternatives to car based travel as part of its work to improve the safety, sustainability and efficiency of the highway network. We part fund and manage the highly successful English National Concessionary Travel and Kent Freedom Pass schemes and work with the County's schools and businesses to develop Travel Plans aimed at reducing the number of single occupancy car journeys. We also seek to improve the quality and accessibility of bus and rail travel by providing information about timetables and routes through a variety of media. KCC plays a key role in improving road safety. We provide training programmes for pedestrians, cyclists, motorcyclists and drivers. We also deliver road safety awareness campaigns and traffic calming measures.

1.12 As the largest employer in Kent, the County Council has a responsibility to minimise its own impact on the transport network and to provide services that

are accessible to everyone. KCC, in its role of community leadership, carries out strategic lobbying on national and international transport issues such as the provision of a Lower Thames Crossing and maximising the benefits of High Speed 1. We also influence national and local planning policies as a statutory consultee on plans such as Local Development Frameworks (see Chapter 3).



Third party responsibilities

- 1.13 The management and maintenance of motorways and trunk roads in England is the responsibility of the **Highways Agency**, which is an executive agency of the Department for Transport (DfT). As part of our network management duty, we work in partnership with the Highways Agency (HA) to prevent incidents on the strategic road network which have an adverse impact on local roads. We also work closely with the HA to assess the impacts of major development and local transport improvements on both our road networks.
- 1.14 Kent's domestic rail services are operated by private Train Operating Companies (TOCs) on the basis of franchise contracts specified and let by the DfT. The 'Integrated Kent Franchise', which covers the majority of the County's rail services (including High Speed services), is currently held by **Southeastern**. Rail infrastructure, including all tracks, signals and stations, is owned, operated and maintained by **Network Rail**, a government created private company limited by guarantee that is non-profit making. KCC is closely involved in the specification of DfT franchise contracts and Network Rail Route Utilisation Strategies and frequently lobbies central Government, Network Rail and TOCs for improvements to rail infrastructure and services.
- 1.15 Approximately 80% of bus services in Kent are operated on a wholly commercial basis by private bus companies; principally **Arriva** in the West of the County and **Stagecoach** in the East. The County Council does not therefore play a direct role in their provision, although we are responsible for the installation and maintenance of bus stop



infrastructure, including bus stop poles and clearways. The remaining 20% of services are classified as 'socially necessary' and are procured by KCC at a

total annual (net) cost in 2010/11 of £6.5 million. We work closely with the County's commercial bus operators to improve the frequency, reliability and accessibility of bus services. We have signed five Quality Bus Partnerships (QBPs) with Stagecoach and two with Arriva which commit both parties, along with the relevant district council, to invest jointly in the quality of local bus services and supporting infrastructure.

- 1.16 Kent's **airports** and **seaports** are also owned and operated by third parties (see 'Kent's Transport Network', below). They nevertheless have a significant impact on the County's residents, both positive; such as the employment opportunities they generate, and negative; including the traffic congestion, noise and environmental pollution associated with their activities. KCC therefore works with port and airport operators and Central Government to ensure that these negative externalities are minimised whilst supporting managed expansion where it aligns with the County Council's economic growth and regeneration objectives.
- 1.17 Whilst KCC prepares the overall parking strategy for the County, Kent's **district councils** are responsible for Civil Parking Enforcement under the Traffic Management Act 2004. The district councils are also responsible for street cleaning, the licensing of taxis and private hire vehicles, the provision of bus shelters, monitoring of air quality and the preparation of Local Development Frameworks (see Chapter 3).

Kent's Transport Network

Highway Network

- 1.18 Kent's highway network consists of the following classes of routes:
 - Motorways and Trunk Roads which collectively form the strategic national highway network and are managed and maintained by the Highways Agency. The County's motorway and trunk road network is over 400km in length and includes the M25, M26, M20/A20, M2/A2, A21, A249 and A259/A2070;
 - **County Primary Routes** linking major urban centres, for which KCC is the highway authority. These include the A228/A26 between Medway and Tonbridge, the A229 between Medway and East Sussex, the A299 between Faversham and Thanet, the A28 between Thanet and East Sussex, the A256 between Dover and Thanet, the A26 between Tonbridge and Tunbridge Wells and the A25 between Wrotham and Sevenoaks;
 - **County Principal Routes** which are generally 'A' class roads with relatively high traffic flows, for which the County Council is responsible. Together with the motorway and trunk road and primary route networks, these form the key arterial routes across Kent. County principal routes include the A225 between Sevenoaks and Dartford and the A251 between Faversham and Ashford;
 - **Other Roads** covering the majority of the 'B' class road network and all other classified and unclassified roads which provide local access to rural settlements and urban estates, as well as convenient links between higher class roads.

• **Public Rights of Way and Cycle Routes** consisting of footpaths, bridleways and byways. At 4,200 miles (6,700 km), KCC manages the longest public rights of way network of any county in England and Wales, providing routes to shops, schools and workplaces, as well as leisure routes for gaining access to the County's countryside and coast. Kent has approximately 415 miles (670 km) of cycle routes, of which 96 miles (155 km) are off road.

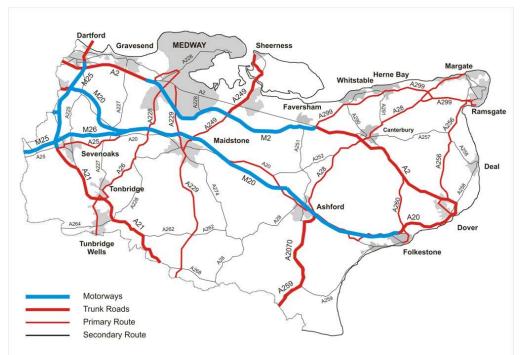


Figure 1.2: Kent's Highway Network

International Rail Network

- 1.19 International rail services, operated by Eurostar, call at Ebbsfleet and Ashford International stations en route from London to the Continent via High Speed 1 and the Channel Tunnel. Daily services operate at up to 186 mph (300 km/h) from St Pancras International to Lille, Paris and Brussels. There are also limited services from London to Marne-la-Vallee – Chessy (for Disneyland Paris) and to seasonal destinations in Provence and the French Alps.
- 1.20 Following the opening of Ebbsfleet International station in November 2007, Eurostar significantly reduced the number of services calling Ashford at International. However, following intense lobbying by KCC and other stakeholders, who cited the importance of international services to the growth rail and regeneration aspirations of Ashford and



the surrounding East Kent and East Sussex sub-regions, Eurostar reintroduced a single daily Ashford-Brussels service in February 2009.

1.21 The European Union (EU)'s liberalisation of international rail travel in 2010 seeks to break existing monopolies in order to stimulate competition for

services between EU Member States. Several train operating companies have expressed an interest in running services in competition with Eurostar between London and the Continent, although as yet only Deutsche Bahn has formally proposed and received permission to do so. Deutsche Bahn intends to operate services between London and Germany and could enter the market at the next timetable change, which is scheduled for December 2012. KCC's priority for international rail services is to ensure that Ebbsfleet and Ashford continue to benefit from frequent services to a range of northern European destinations. This will help to stimulate economic growth in Ashford and Thames Gateway Kent, as well as boosting tourism in other parts of the County.

Domestic Rail Network

1.22 Kent's extensive domestic rail network covers 100 stations. The network consists of a series of radial east-west routes connecting the County with London, along with branch lines linking Ashford and Hastings, Paddock Wood and Strood, Tonbridge and Redhill, and Sittingbourne and Sheerness. Commuting to and from central London accounts for a significant proportion of rail trips, although to



date these have largely originated from the west of the County, where journey times to the capital are generally under an hour. However, the commencement of high speed domestic rail services using the High Speed 1 line in December 2009 (following the operation of limited peak time preview services since June 2009) has made East Kent significantly more attractive to London commuters.

1.23 The current holder of the Integrated Kent Franchise, covering the majority of Kent's rail services, is Southeastern. Services between Ashford and Hastings, Redhill and Tonbridge, and London Bridge and Uckfield via Edenbridge are operated by Southern, whilst Thameslink services to Sevenoaks and Ashford International are operated by First Capital Connect. Southeastern took over



the Integrated Kent Franchise in April 2006. The franchise was let by the Department for Transport (DfT) for an initial six year period, with an additional two years dependent on service performance. Southeastern rail services call at the main London terminals of Blackfriars, Cannon Street, Charing Cross, London Bridge, St Pancras and Victoria. At

least two trains per hour operate between the capital and Dover, Folkestone, Tunbridge Wells, Ramsgate, Maidstone and Canterbury.

1.24 The launch of Southeastern High Speed services prompted the largest change to the County's rail services in 50 years. Services from London to Tonbridge were maintained at an off peak frequency of six trains per hour, with two trains per hour travelling on to Ashford and the East Kent coast and four per hour to Tunbridge Wells, providing the town with a significantly enhanced off peak frequency. Additionally, off peak Medway Valley Line services between Strood and Paddock Wood via Maidstone West were extended to Tonbridge.

- 1.25 However, some parts of the County have experienced reductions to mainline rail services in the wake of the December 2009 timetable changes. On the Maidstone East line, services from Ashford International to London Cannon Street and from Canterbury West to London Victoria were replaced by a half-hourly London Victoria to Ashford International service. This has led to the loss of direct rail services between the City of London, Maidstone and West Malling, prompting commuters from these areas to travel by road to Tonbridge, Hildenborough and Sevenoaks, which have retained their Cannon Street services. This has in turn added to existing overcrowding problems on rail services to and from Tonbridge. KCC is continuing to lobby the DfT and Southeastern for a satisfactory resolution of these issues; however the County Council welcomes the proposed introduction of direct rail services from Maidstone West to London St Pancras via Strood and High Speed 1 from May 2011.
- 1.26 The commencement of high speed rail services between much of North and East Kent and London has transformed the County's transport network. Journey times between the capital and Ashford, Canterbury and Folkestone have been reduced to less than an hour, providing a major boost to regeneration projects in the East Kent coastal towns and reinforcing Ashford's position as a focus of sub-regional economic growth. Early analysis by Southeastern suggests that 5,000 extra passenger journeys have been recorded since the implementation of the new timetable.³ The challenge now is to identify and progress improvements to the existing rail network in order to maximise the benefits of high speed rail.

Bus and Coach Network

1.27 Kent's bus network has experienced a renaissance in recent years, with the expansion of many urban and inter-urban routes, the planning and delivery of innovative Bus Rapid Transit (BRT) schemes in the County's Growth Areas, and the large scale roll out of fully accessible vehicles and supporting infrastructure. Approximately 80% of bus services in Kent are operated on a wholly commercial basis by private bus companies; principally Arriva in the West and Stagecoach in the East. KCC currently subsidises the remaining

20% of services at a total annual (net) cost in 2010/11 of £6.5 million. These services provide vital access to education, employment, shopping and healthcare, particularly for the 22% of households in Kent who do not have access to a car, but they do not receive sufficient patronage to cover their operating costs. They include many school and rural services, the local 'Kent



Karrier' dial-a-ride schemes, and evening and weekend journeys on otherwise commercial routes. Additionally, a number of express coach services operate in Kent, including daily scheduled services to London from Ramsgate, Dover and Hastings (via Tunbridge Wells), operated by National Express, and weekday commuter services from the North and West of the County to the capital.

1.28 Although KCC does not directly influence the provision of commercial bus services, the County Council works closely with private bus operators to

improve the quality of services and to ensure that the highway network is planned and managed in a manner that facilitates the passage of buses. This relationship has been formalised through the signing of voluntary Quality Bus Partnership (QBP) agreements in Ashford, Canterbury, Dover, Maidstone, Shepway, Thanet and Tunbridge Wells. The QBPs include commitments by the principal bus operator, the County Council and the relevant district council to work collectively to improve all aspects of bus travel and to increase passenger numbers. The success of Kent's bus partnership arrangements is reflected in the significant patronage growth recorded by the County's bus operators over the past 10 years, which has bucked the national trend outside London. Total passenger journeys increased from 38.3 million in 2000/01 to 58.8 million in 2009/10, representing growth of some 65%. This culminated in KCC being named Transport Authority of the Year at the 2007 UK Bus Awards.

1.29 One of KCC's most successful public transport initiatives in recent years has been the planning and delivery of the Fastrack BRT scheme in Dartford and Gravesham. Fastrack operates over an extensive network of bus priority measures in order to provide an attractive and sustainable alternative to car travel within the Thames Gateway Kent Growth Area. Patronage has



exceeded expectations, with 1.75 million passenger journeys recorded in the first year of service and Fastrack has won a number of awards, including being named joint runner-up in the 'Outstanding Innovation in Public Transport' category at the 2010 International Transport Forum, and winning the 'Infrastructure' and 'Innovation' Awards at the 2007 UK Bus Awards.

International Freight

1.30 Kent is a major gateway for the movement of international freight through the Channel Tunnel, the ports of Dover, Ramsgate and Sheerness, and Manston Airport. This sector is dominated by road haulage, with some 3.8 million lorries crossing the Channel in 2008. Dover handled 2.3 million of these



freiaht movements. representing approximately a quarter of the £330 billion value of the UK's seaborne trade.4 Sheerness is a deep water port and one of the UK's largest import points for fruit, timber, paper products and vehicles. Whilst Kent's gateway function is therefore vital to the country's economic prosperity, the high volume of freight traffic passing through the County is also

associated with poor air quality, road traffic accidents, and illegal and inappropriate parking. For this reason, KCC supports the expansion of international rail freight, although this will require the provision of appropriate freight handling facilities alongside the national motorway network, such as those under construction at Howbury Park near Erith.

Seaports

- 1.31 The Port of Dover and the Channel Tunnel are the UK's principal passenger seaports. In 2009, Dover handled 13 million passengers and almost 2.8 million cars. An additional 6.9 million passengers crossed the Channel using 'Le Shuttle' train services through the Channel Tunnel. The Port of Ramsgate also plays an important and growing role in Kent's roll-on roll-off (ro-ro) ferry market, handling 22,000 cars, 171,000 passengers and 127,000 lorries in 2009.⁵ Despite competition from low cost airlines, the cross-Channel market is expected to grow by 20% over the next 25 years.⁶
- 1.32 The Port of Dover is Europe's busiest ferry port and the second busiest UK cruise port after Southampton. Dover is currently served by three operators

from its Eastern Docks; P&O Ferries (Dover-Calais), Seafrance (Dover-Calais), and DFDS Seaways (Dover-Dunkerque). The port supports a total of 22,000 jobs, over 90% of which are in Kent. Dover is a trust port and is currently owned and operated by the Dover Harbour Board, an independent statutory body. The majority of Board members are appointees of the DfT.⁷



- 1.33 Car and freight shuttle services between Cheriton and Coquelles are operated by Eurotunnel, which manages and operates the Channel Tunnel under a 65 year concession agreement with the British and French Governments. The tunnel retains considerable capacity and potential to increase its market share of the UK's cross-Channel market and is well placed to continue to complement the Port of Dover as this market expands in the medium term.
- 1.34 Ferry services resumed from Ramsgate in 2004, following a six year absence, when TransEuropa Ferries commenced a cars-only service to Ostende. The Port of Ramsgate is owned and operated by Thanet District Council and has the potential to operate up to twice as many ferries without any additional infrastructure; further complementing the increased capacity planned for Dover (see Chapter 8).
- 1.35 The Port of Sheerness is owned by Peel Ports and operates a 24 hour ro-ro freight service importing cars, steel, food and forest products. The Port has plans for major development over the next 20 years, including a 40 hectare port expansion, 2,390 new dwellings, retail and leisure developments and a new marina.

Airports

1.36 Kent has two main airports; Manston Airport in Thanet and London Ashford Airport (LAA) at Lydd. Manston Airport was purchased by Infratil in August 2005. Significant passenger traffic has not resumed since the suspension of EUJet operations in 2005; however in 2010 Flybe commenced the operation of a daily service from Manston to Edinburgh and a six-days-a-week service to Manchester. Unfortunately, the Manchester service did not prove sustainable and was suspended in April 2011. This route will be replaced by a service to Belfast operating three days a week from May 2011. The airport also offers seasonal charter flights to a range of European destinations, including Croatia, Italy, Jersey and Portugal. Manston is a specialist freight handler, processing approximately 34,000 tonnes of freight per year. In

November 2009, Infratil published its Master Plan for Manston Airport, which sets out its proposals for the progressive expansion of the airport over the next 25 years in order to cater for a forecast 4.75 million passengers per annum by 2033.⁸

1.37 London Ashford Airport (LAA) caters for both scheduled passenger operations and private



flying. LyddAir provides scheduled flights to Le Touquet, in northern France, as well as charter flights to a range of other northern European destinations. The airport is currently owned by London Ashford Airport Ltd, which submitted a planning application for the expansion of existing activities at the site, including a new terminal building and the extension of the runway, in 2010. Although the plans were approved by Shepway District Council, the Government Office for the South East decided that a public inquiry must be held before a final decision on the application is made. The inquiry began in February 2011 and is scheduled to last until July.

Department for Transport (2009), Guidance on Local Transport Plans

² Kent County Council (2010) Growth Without Gridlock – A Transport Delivery Plan for Kent

³ New Transit (July 2010), 'Six months high speed for Kent's commuters'

⁴ KCC/Jacobs (2010), Delivering a Sustainable Transport System: London to Dover/Channel Tunnel

⁵ KCC (2010) Kent Travel Report 2009

⁶ DfT (2007) UK Port Demand Forecasts to 2030

⁷<u>http://www.doverport.co.uk/?page=AboutUs</u>

⁸ Kent International Airport (2009), Kent International Airport – Manston: Master Plan

Chapter 2 – Transport Related Problems

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Introduction

2.1 The purpose of this Local Transport Plan is to improve the quality of life for Kent's residents and visitors by tackling problems related to local transport. This chapter identifies and specifies these problems and quantifies them where measured. Data for the County is presented where available but for many indicators, these have only been collected at the national or regional level and a Kent breakdown is not available.

Growth without Gridlock

Tackling Congestion

- 2.2 For most of us, the delay and frustration caused by congestion on our transport network is the biggest transport problem. In a recent DfT study, 23% of adults said congestion was a problem most or all of the time on their general road journeys.¹ Between 1980 and 2009, total estimated road traffic increased by 82%, from 277 to 504 billion vehicle kilometres.² However, most of this growth occurred between 1980 and 1990. Since 1990, traffic has increased at a lower rate of 23% and between 2008 and 2009, total road traffic fell by 4.8 billion vehicle kilometres (0.95%), primarily due to the economic recession. The majority of the growth has been in car traffic, which has risen by 86% since 1980, from 215 to 401 billion vehicle kilometres.
- 2.3 In the South East, people travel further on average than in any other region, at over 8,300 miles per person per year.³ Correspondingly, the region has a larger proportion of the UK's road traffic than any other, at 16%.⁴ Kent's dispersed settlement pattern of 18 medium sized towns and one small city means that many journeys involve travelling through the countryside between these urban centres, making the



car the most suitable mode of transport. Kent's international traffic also has

an impact, though the County is well served by motorways and trunk roads. Nevertheless, it has been estimated that, based on current car usage, the housing growth planned for Kent could result in an extra 250,000 car journeys on the County's roads every day.

- 2.4 Congestion can be described in many ways but the most suitable measure for congestion is to benchmark average journey times between two points with the journey time when traffic is flowing freely. If this is calculated per unit length of the journey, it can easily be seen where on the network traffic speeds are slowest. The national congestion indicator (NI167) is measured in Kent by vehicle journey time per mile on all major 'A' roads. The three year figures for 2006-2009 show a reduction from 2 minutes 11 seconds to 2 minutes 8 seconds, which is roughly in line with the trend recorded by other English local authorities.
- 2.5 The RAC has reported that its members feel that "now it's the unnecessary and unexpected delays which cause anger...motorists want to know how long their journey is going to take, however long, so they can plan around it"⁵. Consequently, KCC measures average journey time on key radial routes in Maidstone in the morning peak.⁶ The ongoing traffic management



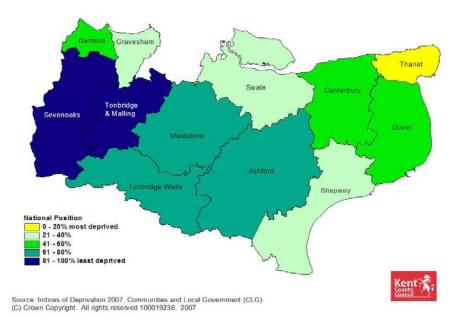
improvements in the town centre have resulted in a drop in average journey time from 4.39 minutes in March 2007 to 3.71 minutes in March 2010 (a 15% reduction).⁷ In addition, the County Council carries out a programme of traffic counts including 14 inner cordons encircling urban areas across Kent. From 2006 to 2009, the traffic at urban centres dropped by an average of 2.2% throughout the County. The maximum

growth over those three years has been at Dartford at 11%, while the biggest decrease has been at Ashford, at -14.9%.⁸ One of the mandatory indicators in LTP2 was Changes in Peak Period Traffic Flows to Urban Centres (Thanet), which is a national indicator applied to urban centres with a population of more than 100,000. Against a target to restrict growth to 2% per annum, there was an actual drop in traffic of 1.7% from 2006 to 2009.

Supporting regeneration and housing

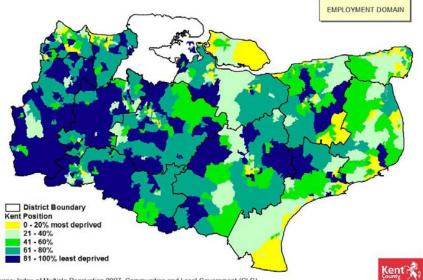
2.6 The Index of Multiple Deprivation (IMD) is an aggregate of indicators such as income, employment, education and health; each of which can be identified and measured separately. Each individual area is allocated a deprivation rank and score and in 2007, Kent ranked 104th out of 149 authorities in England (1st being the most deprived). Of the local authorities (excluding unitary authorities) in the South East region, Kent ranked as the second most deprived area after East Sussex. Within Kent, there is a marked east/west variation, with districts in East Kent being significantly more deprived overall than those in West Kent. Indeed, whilst Thanet is within England's 20% most deprived districts, Sevenoaks is within England's 20% least deprived. The only exception to this general trend is Dartford and Gravesham, which have levels of deprivation equivalent to districts in East Kent.

Figure 2.1: Multiple Deprivation in Kent



2.7 The unemployment rate for Kent in July 2010 was 3.0%, an increase from 2.8% in the previous month and above the South East regional average of 2.4%. However, the County's unemployment rate remains below the national average rate of 3.6%.⁹ A number of Kent's communities fall within England's 20% most employment deprived. These are concentrated on the Isle of Sheppey and in Thanet, with the remainder primarily situated around the coastal fringe, in Dartford and Gravesend, and in the former coalfield communities of East Kent. The unemployment rate in Thanet stands at 5%, compared to 1.7% in Sevenoaks.

Figure 2.2: Employment Levels in Kent at LSOA level



Source: Index of Multiple Deprivation 2007, Communities and Local Government (CLG) (C) Crown Copyright. All rights reserved, 100019238, 2007

Access to jobs and services

- 2.8 The 2001 Census Special Workplace Statistics (SWS) presents data on the area of residence and the place of work of all those in employment. This is summarised as a matrix or "origin and destination table", which can be read horizontally; to show where the residents of an area work, or vertically; to show the area of residence of workers within an area.
- 2.9 Table 2.1 summarises the matrix, which illustrates how self contained Kent is, with 82.9% of residents working in the County. It also shows how important London is as a workplace destination (13.5% of residents) and the relatively small percentage of people who work in other parts of the South East and beyond (3.6%). The matrix illustrates that the vast majority of workers in Kent (92.3%) live in Kent; that only 3.6% of all those who work in Kent live in London and that a slightly higher proportion of those who work in Kent (4.2%) live in other parts of South East England and beyond.

	No.	%
Those living and working in Kent	603,835	82.9
Those living in Kent and working in London	98,423	13.5
Those living in Kent and working elsewhere	26,406	3.6
All those living in Kent	728,664	100.0

Table 2.1: Journey to work summary for Kent

	No.	%
Those working and living in Kent	603,835	92.3
Those working in Kent and living in London	23,355	3.6
Those working in Kent and living elsewhere	27,187	4.2
All those working in Kent	654,377	100.0

Source: 2001 Census

A Resilient Network

- 2.10 A resilient network is one that can withstand and respond to disruption and incidents. This can be in reaction to a sudden event such as an accident or structural failure, long term changes due to climate change, or gradual deterioration of the network due to a lack of maintenance.
- 2.11 There is growing evidence that the world's changing climate will bring increased disruption to transport networks. The winter of 2009/10, for example, was the worst in the UK for over 30 years. There were 100 instances where passenger trains in Kent were significantly delayed due to ice on the conductor rail, with an average delay of 80 minutes, and between 6th and 8th January 2010, Southeastern ran a reduced service of 440 mainline trains compared to the usual 870. What has angered commuters has been the almost complete lack of accurate and up-to-date information about the delays and cancellations and this has caused the greatest complaints.

- 2.12 On the 18th and 19th December 2009, five Eurostar trains failed in the Channel Tunnel as a result of an ingress of snow, causing power failures which ultimately led to the closure of the Tunnel in both directions. Eurostar services were suspended until the resumption of a limited timetable on 22nd December. On 19th December, the Port of Calais was also closed due to the severe winter weather and this, combined with the closure of the Channel Tunnel, caused exceptionally long tailbacks on the M20 and A20 as far as Ashford, with Operation Stack brought into force for over 40 hours.
- 2.13 The combination of snow and freezing temperatures during the winter of 2009/10 also caused a significant increase in the number of potholes on local roads. Nationally, there was a 40% increase in road damage. In the first six months of 2010, Kent Highway Services repaired 100,000 potholes; double the number repaired in the first half of 2009. Another



indicator of the severity of the conditions experienced is the amount of salt needed to keep the road network open over the course of the winter. The average amount of salt used each season during 2005-2009 was 15,884 tonnes. In 2009/10, this increased to 28,000 tonnes.

- 2.14 There was a National Indicator (NI 168) which measures the percentage of principal roads (motorways and trunk roads) where maintenance should be considered. For 2008-09, 7% of Kent's principal roads qualified, against the national average of 5%. Results for other authorities in the South East range from 13% for East Sussex to 1% for West Sussex. The County Council estimates that at least £250m per annum is needed to keep roads in the County at a good standard.
- 2.15 Rail punctuality is another indicator of a resilient transport network. During 2010, Southeastern's punctuality record was that 82.04% of services operated within +5 minutes or -1 minute of scheduled time, meaning that the company had met the punctuality target of 82% set in their franchise and was therefore not obliged to make compensation payments for the disruption during the adverse winter weather. This has caused anger among commuters, especially since the performance of the High Speed services, which were largely unaffected by the winter weather, were included in Southeastern's figures, meaning services on mainline services have performed far worse than the target. This has been accompanied by a 12% rise in ticket prices from some Kent stations.

UK Gateway

2.16 The Port of Dover is Europe's busiest Roll-on Roll-off (Ro-Ro) ferry port for both freight and passenger traffic. Over the past two decades, the number of road haulage vehicles using the Port has more than doubled to over 2.3 million units.¹⁰ With 2.9 million tourist vehicles also passing through Dover each year and as the UK's second busiest cruise port, this equates to almost 14 million passengers per annum. Both the Port of Dover and the Government have forecast substantial growth in Ro-Ro freight traffic of up to 85% between 2005 and 2030.¹¹

2.17 At present, the majority of the traffic accessing the Port uses the A20 Townwall Street, which severs the town from the seafront and results in poor air quality. Additionally, the assembly areas at the Eastern Docks are vulnerable to pressure in the event of delays due to bad weather or other incidents, causing tailbacks on to the A2 and A20 which may result in the



imposition of Operation Stack. Research carried out by the Freight Transport Association shows that the delays and disruption associated with Operation Stack cost the UK economy £1 million for every day it is in operation. Stack also costs Kent Police £15,000 a day and takes up to 90 police officers away from their usual work.¹²

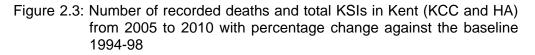
2.18 Manston Airport has significant potential to develop into a regional airport and become one of the largest single generators of economic activity in the County. The airport predicts that it will serve around 5 million passengers and cater for 400,000 tonnes of freight by 2033. This could generate over 2,800 jobs by 2018 and 6,000 jobs by 2033 in a range of employment sectors, offering a significant boost to the economy of East Kent.¹³ London Ashford Airport also has plans to extend its runway and build new terminal facilities with the ability to provide 500,000 passenger movements by 2015, capitalising on the growing passenger preference for using a regional airport and reducing surface transport times and costs.

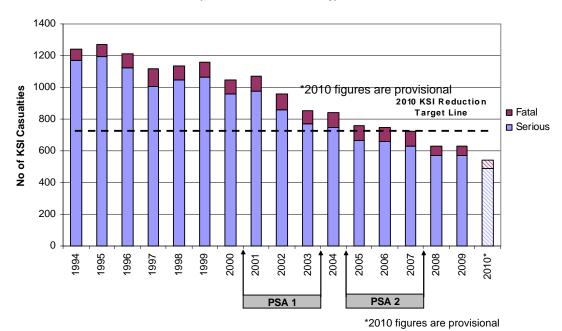
A Safer and Healthier County

Safer Roads

- 2.19 Across the European Union, road traffic accidents remain the leading cause of death in children and young people.¹⁴ However, the reported passenger fatality rate for cars, the most commonly used mode of transport, has more than halved since 1980 in Great Britain.¹⁵ In 2008, the reported fatality rate for pedestrians was 60% lower than the 1980 level and for pedal cyclists it was 59% lower. The highest fatality rate was for motorcyclists, which has remained relatively static since 1982.
- 2.20 During the period of LTP2 (2006-2011), there has been an overall reduction in road crashes and resultant casualties. Kent is on target to achieving the national casualty reduction targets for 2010 (see Figure 2.3) and provisional figures for 2010 show that KSIs (killed and seriously injured) fell to an all time low of 553, bettering the Government's 10 year national target of 40% reduction by 10%.







KSI's on Kent (KCC and HA exc Medway) roads 1994-2009

- 2.21 Speed is a major risk factor for road traffic collisions and the DfT has found that 50% of cars exceed the speed limit on 30mph roads. Kent Safety Camera Partnership has estimated that for each 1mph reduction in average speed, accident frequency is reduced by 5%. The cost to the community of a fatal crash is £1.9 million. Drivers who use a mobile phone are four times more likely to crash.
- 2.22 Perception is also important, since many people choose not to walk, cycle or use public transport due to safety fears. In Kent, perceived vulnerability when driving, as a car passenger, pedestrian, cyclist, motorcyclist and bus user has increased, although perceived vulnerability as a train user has decreased.¹⁶

Protecting Communities

- 2.23 There are significant health inequalities within Kent. Life expectancy for men living in the most disadvantaged areas of the County is around seven years lower than for men living in the least disadvantaged areas. For women, the gap is over four years¹⁷. The level of child poverty in Kent is better than the England average, but over 49,000 children currently live in low income households.
- 2.24 Road transport is a key source of many air pollutants, particularly in towns and cities. Air pollution can have a serious effect on people's health, triggering respiratory illness, lung disease and heart conditions. Traffic accounts for over half of the total emissions of nitrogen dioxide (NO₂) and particulates (PM₁₀) nationally. In Kent, carbon monoxide (CO) emissions over the last ten years have generally dropped due to the use of vehicles with clean burn engines and catalytic converters. High levels of ozone (O₃) have coincided with periods of long hot summers. For particulate matter (PM₁₀),

concentrations are particularly high in the west of the County as a result of the dense network of major roads with some local industrial sources.

- 2.25 Over the last ten years, the majority of monitoring sites have seen very little variation in nitrogen dioxide (NO₂) concentrations. In 2008, as with previous years, many of Kent's roadside sites failed to meet the annual mean NO₂ objective of 40µg/m³ (21ppb). The major sulphur dioxide (SO₂) sources in Kent are the power and other industrial activities in the northern part of the County as well as the shipping activities in the vicinity of Folkestone and Dover. In 2008, all air quality monitoring sites met each of the SO₂ objectives.
- 2.26 The previous Government's air quality strategy set health based ambient air quality objectives (emission levels) for nine main pollutants. Where it is found that these objectives are unlikely to be met, the local district council must designate an Air Quality Management Area (AQMA). Presently, 37 AQMAs have been declared in Kent for NO₂ and/or particulate PM₁₀ and SO₂.



2.27 In town centres and alongside busy roads, motor vehicles are responsible for most local pollution and noise. Noise can disrupt communication, disturb sleep and generally affect our quality of life. In addition to causing annoyance and sleep disturbance, persistent environmental noise can have negative impacts on health; contributing to heart disease, hearing impairment and poor mental health. It is estimated that 67 million Europeans are regularly exposed to road noise levels considered potentially harmful to health.

Active Transport

2.28 A lack of physical activity can lead to a wide range of health problems. Some 23.4% of Kent's residents are obese, which is higher than the national average, and 31% of the County's children are overweight¹⁸. Whilst 95% of respondents to the National Attitudes Survey agreed or strongly agreed that walking is a good way to stay healthy, the number of trips made by foot has declined by 24% between 1995 and 2008, from 292 to 221 trips per person per year. The average annual distance walked also fell by 4% to 193 miles per year. Moreover, the National Travel Survey shows that the South East recorded the lowest number of walking trips per person per year of any English region.

A Safe and Secure Network

2.29 One of the key reasons given for dissatisfaction with bus services in KCC's 2009 Highway Tracker Survey was a fear of safety due to 'gangs of youths' and 'general lack of security'¹⁹. Similar reasons were given for dissatisfaction with train services. Only 25% of recorded railway crime takes place on the train itself; the majority occurring at the station or in the station car park.²⁰

Supporting Independence

2.30 A significant proportion of Kent's residents are denied the opportunity to access jobs, services and leisure opportunities independently due to their age, location, income or disability. The Department for Transport (DfT)'s Transport Trends report (2009) also found that a significantly lower proportion



of women (65%) held a full driving license in 2008 than men (81%), although this gap is continuing to narrow over time. People in the highest income quintile made 25% more trips on average than people in the lowest income quintile, while 51% of houses in the lowest income quintile did not have access to a car in 2008. Only 51% of rural households are within a 13 minute walk of a

bus stop with at least an hourly service, compared with 96% of urban households, and approximately 20% of households in England without access to a car reported some difficulty in accessing doctors and supermarkets.²¹

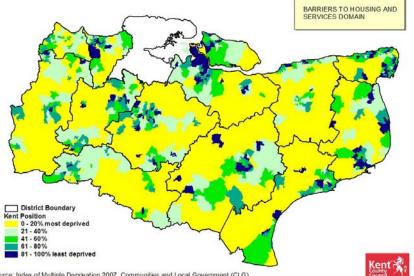


Figure 2.4: Deprivation in Kent

Source: Index of Multiple Deprivation 2007, Communities and Local Government (CLG) (C) Crown Copyright. All rights reserved, 100019238, 2007

2.31 The Barriers to Housing and Services Domain of the Index of Multiple Deprivation measures road distance to GP surgeries, food shops, primary schools and post offices. There are more Kent Lower Super Output Areas (LSOAs) within England's 20% most deprived in this domain than in any other, due to the rural character of the County.

Tackling a Changing Climate

Reducing Emissions

2.32 The Earth has warmed by nearly 0.8°C since the late nineteenth century and for the past 25 years temperatures have risen by approximately 0.2°C a decade. The South East Mean temperature rose by between 1.4 and 1.8°C in the period 1961 to 2006 and global temperatures are predicted to rise by a further 1.1 to 6.4°C by the end of the twenty first century. Globally, the ten

warmest years on record have all occurred since 1997, whilst in the UK, nine of the ten warmest years have been since 1990^{22.} Scientific climate models produced by the UK Climate Impacts Programme predict that by 2080, the South East is likely to experience 3°C hotter summers, 23% less summer rainfall, 3°C warmer winters, 22% more winter rainfall, more intense downpours, more frequent very hot days and longer periods of drought.

2.33 Growth in motorised transport has resulted in a 54% increase in carbon dioxide emissions from domestic transport sources since 1980²³, which now account for 24% of UK carbon dioxide emissions. Kent has the largest total carbon emissions of any County, with 11,879 kilotonnes of CO₂²⁴. 3,568 kilotonnes was due to transport though the emissions per head of population put Kent in the middle of the national table. CO₂ emissions per passenger for train and coach are six to eight times lower than car travel at average occupancy.²⁵ Without further policy action, emissions from transport could rise to 30% of UK emissions by 2022. With 140,000 new houses and 123,000 new jobs planned for Kent and Medway by 2026, up to 250,000 extra journeys per day could be made on the County's transport network.²⁶

Smarter Travel

2.34 Car travel is still the most popular form of transport, despite rising fuel costs and the increasing cost of insurance. A public attitudes survey carried out by the Commission for Integrated Transport (CfIT) found that those who travel to work by car do so mainly for convenience, whilst nearly one fifth of respondents believed there was no other option than to use a car.²⁷ Even those car users who understand the environmental impact of driving perceive the car to be essential to their lifestyle. However, SUSTRANS has demonstrated that 134 millions journeys on the SUSTRANS National Cycle Network were made by people who could have used a car, saving some 84 million car journeys on the UK's roads, or 11 months' worth of traffic on the M25.²⁸ Sixty percent of those surveyed for a recent study by the RAC said that financial incentives to encourage modal shift, such as the £5,000 electric car grant, along with more investment in public transport, would help.²⁹

Enjoying Life in Kent

Accessing Life's Opportunities

- 2.35 Relative disadvantage is the capacity to participate in or have access to the forms of employment, occupation, education, recreation, family and social activities which are enjoyed by the majority of the population. Poverty exists all over Kent and is not confined to specific areas. Nevertheless, it is most strongly associated with the County's coastal areas. There are significant pockets of disadvantage in the Kent Thameside boroughs of Dartford and Gravesham, as well as the East Kent coastal towns, interspersed with some localised areas of high affluence.³⁰
- 2.36 Nationally, it is estimated that between £1.4–2.7 billion and 180,000-245,000 jobs are generated by walking in the English countryside.³¹ Research has shown that one of the biggest barriers to walking is the lack of reliable and targeted information, while 39% of Kent's disabled residents had to rely on others to visit the countryside.

Enjoying the Journey

2.37 There is very little statistical evidence which measures the level of enjoyment experienced by Kent's travellers. There are a range of customer satisfaction surveys, many of which focus on issues considered elsewhere such as punctuality and personal safety; however there is some useful feedback available. In Kent, overall perceptions of public transport services have improved amongst residents, with service frequency and punctuality noted as positives³². The net satisfaction of the cleanliness and comfort of both buses and trains has increased for all four groups of respondents (residents, County councillors, Parish/Town councillors and District councillors). Other increases in net satisfaction have also been seen in the ease of getting on and off buses and trains, their safety and also the amount and accuracy of information.

Table 2.2: Extract from Kent Tracker	Survey 2009 – Net Satisfaction Scores –
public transport	

Base: all	Residents	Council Members	Parish/ Town Councils	District Members
	%	96	96	%
Satisfaction: public transport information	+39▲2	-19▲4	-33▲11	- 14▼ 3
Satisfaction: the amount of information	+41▲3	+43▲24	+29▲17	+22▲10
Satisfaction: the accuracy of information	+43▲7	+63▲36	+35▲10	+27▼2
Satisfaction: the local bus services (all)	+41▲9	+15▼2	-13▲11	-13▲11
Satisfaction: the local bus services (users)	+76▲11	e.	÷	
Satisfaction: bus frequency (users)	+60▲7	+3▲4	-36▲8	+1▲11
Satisfaction: the number of bus stops (users)	+79▲4	+73▲1	+43▲7	+40▶0
Satisfaction: the state of bus stops (users)	+77 ▲ 8	+39▶0	+24 16	+2▼2
Satisfaction: bus punctuality (users)	+67▲13	+55▲34	+17▲9	+17▲10
Satisfaction: the ease of getting on/off buses (users)	+86▲12	+75▲39	+50▲21	+41▼3
Satisfaction: the cost of using bus services (users)	+36▼7	+3▼2	-19▲5	-16 • 0

Protecting Kent's Natural and Man-Made Environment

2.38 In 2008, the Campaign to Protect Rural England (CPRE) published its Tomorrow's Kent report, which argued that the County's widely dispersed rural population is likely to be affected particularly acutely by change. The report warned that rural climate communities vulnerable to flood risk are unlikely to achieve a sufficiently high cost benefit ratio to justify government investment in mitigation measures (e.g. flood barriers). CPRE has also produced a series of 'tranquillity maps', which highlight that as more of Kent become urbanised and traffic levels have has increased, the number of tranquil areas have shrunk.



2.39 The Countryside Quality Counts (CQC) project has assessed the change in landscape character between 1999 and 2003. Ten of the 30 National Character Areas in the South East were found to be neglected or diverging

with many of the valued features that define the character of our landscapes being eroded by development pressures and agricultural change.

- 2.40 The 2005 reporting round for the UK Biodiversity Action Plan (BAP) found that only 35% of the BAP habitats in England are stable or increasing in area, while 39% are decreasing. Figures from the Department for Environment, Food and Rural Affairs (DEFRA) for farmland birds show dramatic declines in the South East which are greater than that for any other region. From 1994 to 2006, farmland birds showed a decrease of 21%, with 12 of the 19 species showing declines of over 10%. The populations of many characteristic woodland birds in the South East have also declined heavily in recent years. For the period 1994 to 2006, the regional population index for woodland birds has shown an overall decrease of 19%.
- 2.41 Flood risk is already a significant issue for Kent which may get worse with climate change. This includes coastal and river flood risk and also surface water flooding associated with run-off following heavy rain. In 2000, flooding cost Kent's homeowners £14.3 million when more than 500 homes were damaged in three floods over 30 days³³. Roads and highways are a key pathway for surface water flooding so it will be key to ensure that transport development is not located on the floodplain and it does not increase the risk of flooding to adjacent land and properties.

Sociable Streets

- 2.42 It is difficult to measure how 'sociable' our streets are but most of us agree on what makes a street pleasant and attractive. The Commission for Architecture and the Built Environment has measured street quality based on a wide range of criteria including obstruction free wide pavements, good lighting, no graffiti or litter and high standards of maintenance and then compared this to retail and residential prices. This confirmed that better streets result in higher market prices. An achievable improvement in street design quality can add an average of 4.9% to residential prices for the case study high streets in London and an average of 4.9% to retail rents.³⁴
- 2.43 Recently, the new Secretary of State for Communities and Local Government has called for unnecessary signs, railings and bollards to be removed in a bid to make streets tidier and safer, arguing that many traffic signs and railings are put up in the mistaken belief that they are legally required.

¹ DfT (2008) *Public attitudes to congestion and road pricing.*

² DfT (2009) *Transport Trends*

³ DfT (2007) National Travel Survey

⁴ DfT (2005) National Travel Survey

⁵ RAC (2010) RAC Report on Motoring 2010

- ⁶ Towards 2010 (2006) Target 34 Tackle urban congestion and reduce peak journey times between and within towns by 10% using methods such as intelligent traffic light management systems and congestion-busting teams
- ⁷ KCC (2010) EHW Towards 2010 Annual Report
- ⁸ KCC (2010) Kent Travel Report 2009
- ⁹ KCC (2010) Unemployment change in Kent UN07/10 August 2010
- ¹⁰ Dover Harbour Board (2010) Our Plan for the Next Generation Ferry Terminal 2
- ¹¹ DfT (2007) UK Port Demand Forecasts to 2030
- ¹² Federation of Small Businesses (2009) Complaint to the European Commission from the Federation for Small Businesses
- ¹³ Kent International Airport (2009), *Kent International Airport Manston: Master Plan*
- ¹⁴ South East Public Health Observatory (2008): Choosing Health in the South-East:
- ¹⁵ DfT (2009) *Transport Trends*
- ¹⁶ Kent Highway Services (KHS) (2009) Kent Tracker Survey
- ¹⁷ Kent and Medway Public Health Observatory (KMPHO) (2007) Public Health Annual Report
- ¹⁸ Kent and Medway Public Health Observatory (KMPHO) (2007) Public Health Annual Report
- ¹⁹ Kent Highway Services (KHS) (2007) Kent Tracker Survey
- ²⁰ DfT (2001) Crime and Disorder on Public Transport
- ²¹ DfT (2009) *Transport Trends*
- ²² KCC (2010) Climate Change A guide for Kent's decision makers
- ²³ DfT (2009) Transport Trends
- ²⁴ Department of Energy and Climate Change (2010), 2008 Carbon Dioxide emissions at Local Authority and Government Office Region level
- ²⁵ Sustrans (2007) Low Carbon Travel: Reducing the climate change impact of road transport.
- ²⁶ Kent Partnership (2009) Growth Without Gridlock An Integrated Transport Strategy for Kent (final draft)
- ²⁷ Commission for Integrated Transport (CfIT) (2002) Public Attitudes to Transport in England
- ²⁸ Sustrans (2008) The National Cycle Network Route User Monitoring Report
- ²⁹ RAC (2010) RÁC Report on Motoring 2010
- ³⁰ NHS (2010) Trends in health inequalities in Kent and Medway
- ³¹ KCC (2007) Countryside Access Improvement Plan 2007-2017
- ³² Kent Highway Services (2010) *Tracker Survey 2009*
- ³³ Environment Agency (2001) Southern Region Autumn 2000 Floods Review
- ³⁴ CABE (2007) Paved with Gold: The real value of good street design.

Chapter 3 – Existing Plans and Strategies

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National Policy

Delivering a Sustainable Transport System (2008)

- 3.1 The previous Government set out its proposed approach to strategic transport planning in Towards a Sustainable Transport Systems (TaSTS) in 2007¹, in response to the Eddington Transport Study² and the Stern Review on the Economics of Climate Change.³ This was followed by the publication of Delivering a Sustainable Transport System (DaSTS) in 2008, which outlined the previous Government's long term plan for putting this strategy into action.⁴
- 3.2 DaSTS established five National Goals for Transport, which were to:
 - **Support economic growth** by delivering reliable and efficient multimodal transport networks;
 - **Tackle climate change** by reducing transport's emissions of carbon dioxide and other greenhouse gases;
 - **Promote equality of opportunity** for all citizens, with the desired outcome of achieving a fairer society;
 - **Contribute to better safety, security and health** by reducing the risk of death, injury or illness arising from transport, and promoting the uptake of travel modes which are beneficial to health; and,
 - **Improve quality of life** for transport users and non-transport users, and promote a healthy natural environment.
- 3.3 The policies contained within this Local Transport Plan align closely with, and will make a significant contribution to, these cross-cutting goals. The LTP nevertheless recognises the potential tension between them and the need to prioritise the goals according to local priorities and challenges. In particular, the need to support economic growth in Kent's Growth Areas and Growth Points whilst reducing greenhouse gas emissions from transport are key strategic priorities for KCC and its stakeholders (see Chapter 4).
- 3.4 DaSTS followed the Eddington Study in proposing to focus investment on improving multi-modal transport links between cities and international gateways. The strategy placed an emphasis on encouraging modal shift to

sustainable modes of transport by upgrading intercity rail lines and planning mixed-use housing developments which reduce the need to travel. KCC broadly endorses this approach, which contributes to the twin objectives of supporting economic growth and reducing greenhouse gas emissions.

3.5 Within the overarching DaSTS policy framework, the Government commissioned a series of detailed studies which examined priority challenges within each English region and proposed packages of solutions, taking account of the National Goals for Transport. This included a 'London to Dover/Channel Tunnel' study, commissioned by KCC on behalf of the South East England Partnership Board (see County Policy, below). It is anticipated that the solutions identified will inform Government spending decisions from 2015 onwards.

Regional Policy

South East Plan (2009)

- 3.6 The Regional Spatial Strategy (RSS) for the South East of England, known as the South East Plan, set out the long term spatial planning framework for the region over the years 2006-2026.⁵ The Plan also incorporated the **Regional Transport Strategy**. The Plan provided the policy context within which Local Development Frameworks, produced by district and unitary authorities, and Local Transport Plans were to be prepared. It included policies for:
 - the scale and distribution of new housing;
 - priorities for new infrastructure and economic development;
 - protecting countryside, biodiversity, and the built and historic environment;
 - tackling climate change and safeguarding natural resources.
- 3.7 The South East Plan proposed the development of some 120,000 new homes in Kent between 2006 and 2026. This growth is to be concentrated in the subregions of East Kent and Ashford and Thames Gateway Kent (including Medway). Ashford and Thames Gateway Kent are each nationally designated Growth Areas, with Thames Gateway Kent forming part of the largest regeneration site in Europe. The South East Plan identified Ashford as a 'regional hub' on account of its high level of access to the strategic road and rail networks and interchange opportunities between international and local rail services. Similarly, Ebbsfleet Valley was identified as a key development node in Thames Gateway Kent with the potential to provide a new transport hub of regional significance.
- 3.8 Dover and Maidstone each received Government Growth Point status in 2006 and were also identified as regional hubs in the South East Plan. The Plan recognised Dover's international gateway function and the significant growth planned for the town's ferry port. It proposed the development of at least 10,100 homes (recently increased to 14,000 homes through the adoption of the Dover District Local Development Framework Core Strategy) to support the area's economic growth and regeneration aspirations. A further 11,080 homes were proposed for Maidstone. These regional hubs were intended to form the focus of housing, retail and employment growth in their respective sub-regions.

3.9 Following the election of the Coalition Government in May 2010, the Secretary of State for Communities and Local Government wrote to all English local authorities advising that Regional Spatial Strategies were to be abolished. Provision for this is made in the Localism and Decentralisation Bill, which is expected to be enacted in 2011. Whilst the full impact of the new Government's planning reforms is not yet clear, most of Kent's district planning authorities have chosen to retain the housing allocations set out in their adopted and emerging Local Development Framework Core Strategies (see Local Policy, below). For this reason, **KCC considers that many of the principles established by the South East Plan remain valid**. These include the need to prioritise infrastructure investment in the County's Growth Areas and Growth Points in order to further enhance their accessibility advantages and to generate increased local employment opportunities for their respective sub-regions. This will remain a core theme of this LTP.

South East England Health Strategy (2008)

- 3.10 The South East England Health Strategy⁶ aims to ensure that South East England becomes the healthiest region to live in the UK by:
 - improving the health and wellbeing of the whole population;
 - addressing the underlying causes of ill health in a sustainable way; and,
 - reducing the inequalities in health that exist between different geographical areas and population groups across the region.

The Strategy identifies that the South East has the third highest road transport per capita carbon dioxide emissions in England. People in the region make the lowest number of trips on foot and the second highest number of trips by car in the country; hence obesity and related issues are a significant issue, particularly in disadvantaged areas. One of the Strategy's objectives is therefore to increase levels of physical activity both during working hours and on the journey to work, which this LTP fully supports.

- 3.11 The Strategy notes that some 10% of journeys are health related. It therefore includes targets to ensure that all NHS organisations have a 'sustainability champion' on their Board, adopt a Travel Plan, and implement strategies for achieving progressive reductions in carbon emissions. KCC supports these targets and is pleased by the early progress made by Kent's NHS Trusts in putting the necessary measures into place, including the appointment of full-time Travel Plan Coordinators by the East Kent Hospitals and Maidstone and Tunbridge Wells NHS Trusts.
- 3.12 Coastal towns are expected to be disproportionately affected by an ageing population. The Strategy identifies that over 40% of the South East's population is projected to be over the age of 50 by 2030, which will place great strain on local services. It makes reference to the Social Exclusion Unit report, *Sure Start to Later Life*, which emphasises the importance of maintaining older people in their own home and includes an objective to work with planners and urban designers to support the development of communities which are sensitive to the needs of older people.⁷

County Policy

Bold Steps for Kent (2010)

- 3.13 Bold Steps for Kent is the County Council's Medium Term Plan to 2014/15.⁸ It sets out how KCC will deliver the reforms necessary to manage a significant reduction in public spending over the next four years whilst delivering a radical devolution of public services to the local level. In approaching these challenges, the Plan defines high level aims:
 - to help the Kent economy to grow, by building strong relationships with key business sectors in the Kent economy and delivering new housing and infrastructure whilst ensuring that the challenge of climate change is met;
 - **to put the citizen in control** so they are empowered to take responsibility for their own community and service needs, thereby reducing the role of the state;
 - to tackle disadvantage by fostering aspiration rather than dependency.
- 3.14 The LTP3 Strategy and Implementation Plan will make a full contribution to these objectives. The Integrated Transport budget allocation and spatial distribution methodology outlined in Chapter 4 confirms that funding will be targeted at those schemes which help to unlock sustainable economic and housing growth in the County's Growth Areas and Growth Points and which contribute towards independent living and reduced welfare dependency in its most disadvantaged communities. Localism and the 'Big Society' will also be fostered through the continued provision of the County Council's Member Highway Fund and support for community bus and rail schemes.

Vision for Kent (2010)

- 3.15 The Vision for Kent was launched by the County's Local Strategic Partnership, Kent Partnership, in April 2002.⁹ As Kent's Community Strategy, under the terms of the Local Government Act 2000, the Vision for Kent set out the County's high-level priorities for the next 20 years following extensive consultation with stakeholders and residents. The strategy was fully reviewed during 2005/06 to build on the Partnership's early achievements and to capture the changing nature of the key challenges and opportunities facing Kent.
- 3.16 A new Vision for Kent for 2011-2021 has been drafted and is expected to go out for formal consultation from April to July 2011. It identifies three countywide ambitions that all partners have agreed to prioritise to improve life in Kent over the next 10 years, which mirror the above high level aims contained within Bold Steps for Kent.
- 3.17 The new Vision for Kent is being developed by the Kent Forum, which replaces the Kent Partnership and aims to inject more democratic accountability into the strategic direction of the County. The Forum is made up of the County's democratically elected Leaders from Kent's 13 Councils (KCC and 12 District/Borough Councils), the Chairman of the Fire Authority and the County's Police Commissioner when elected. Supporting the Kent

Forum is the Joint Kent Chiefs which comprises the Chief Executives of Kent's Councils and Primary Care Trusts, the Chief Constable and the Chief Fire Officer. Ambition Boards, reporting to the Joint Kent Chiefs, will oversee the achievement of the three ambitions with Locality Boards delivering the ambitions at the local level. The final version of the new Vision for Kent will be approved by the Kent Forum during summer 2011.

Delivering a Sustainable Transport System: London to Dover /Channel Tunnel (2010)

- 3.18 The Delivering a Sustainable Transport System (DaSTS): London to Dover/Channel Tunnel study was commissioned by KCC on behalf of the former South East England Partnership Board (SEEPB) in 2009.¹⁰ The study was one of seven corridor studies identified by the SEEPB to examine priority transport- and growth-related challenges in the region within the broader DaSTS policy framework (see National Policy, above). The London to Dover/Channel Tunnel study identifies this corridor as of international, national and regional significance. It recognises that the efficient operation of the road and rail routes between London and the Kent Ports is critical to both economic growth at a national level and the realisation of the regional growth aspirations set out in the South East Plan. It also highlights the detrimental impacts that Kent's gateway function has on local residents, which are likely to be exacerbated by the forecast growth in international traffic unless robust measures are put in place to mitigate them.
- 3.19 The DaSTS study presents two priority challenges within the study area, which are to:
 - safeguard the sustainable, efficient and expeditious movement of international freight and passenger traffic via the strategic road and rail networks and through International Gateways; and,
 - deliver 140,000 new homes and 123,000 new jobs by 2026, including Growth Areas at Thames Gateway Kent and Ashford and at Growth Points at Dover and Maidstone.
- 3.20 The study presents a number of high level options for addressing these challenges in a sustainable and affordable manner. These include the bifurcation of traffic heading to Dover's Eastern and Western Docks and the Channel Tunnel to minimise conflict between international and regional traffic along this corridor, particularly in and around Dover. It is also recommended that the current pattern of dispersed development set out in the South East Plan be reconsidered with a view to further concentrating new housing at locations already well served by a choice of transport modes and where they directly support significant employment growth. Whilst this approach is clearly evident in Thames Gateway Kent and Ashford, which have the potential to become employment hubs for their respective sub-regions, the growth aspirations of Maidstone and Canterbury are questioned in terms of both their sustainability and affordability. Growth at Dover is considered to be important in order assist with tackling the town's declining population, broadening the range of housing that is currently on offer, supporting new employment opportunities and regenerating Dover town centre.
- 3.21 The conclusions and recommendations of the DaSTS study have informed the South East Regional Transport Board's advice to the Department for

Transport on regional investment priorities. The LTP and the Transport Delivery Plan for Kent (see below) have also taken full account of the study's recommendations.

Unlocking Kent's Potential: Kent County Council's framework for regeneration (2009)

- 3.22 Unlocking Kent's Potential is KCC's 25 year masterplan for the regeneration of the County (see Chapter 4).¹¹ It recognises that regeneration must encompass more than simply economic growth if it is to achieve lasting success; placing equal weight on improving education and skills, fostering a cultural renaissance, and providing an efficient transport system. In doing so, it identifies five key challenges:-
 - building a new relationship with business;
 - unlocking talent to support the Kent economy;
 - embracing a growing and changing population;
 - building homes and communities, not estates; and,
 - delivering growth without transport gridlock.
- 3.23 The Framework for Regeneration provides a baseline for a broad policy approach that will inform the development of a series of more detailed strategies and implementation plans. These will include strategies covering:-
 - Sectors;
 - Skills;
 - Integrated Transport;
 - Digital Economy;
 - Environment;
 - Later Life;
 - Economic Growth;
 - Housing; and,
 - Culture.
- 3.24 These strategies will become the collective evidence base to inform the County Council's next four year regeneration strategy and implementation plan.

21st Century Kent (2010)

3.25 21st Century Kent is a high level spatial vision for the County, produced by Sir Terry Farrell, which sets out KCC's aspirations for the future within the context of the Framework for Regeneration.¹² The strategy argues that Kent has the South East of England's greatest potential for successful economic growth, given its close proximity to London, its excellent connectivity to Europe and its large quantity of high quality affordable development land. In line with the LTP and the DaSTS Study, it places an emphasis on realising the growth aspirations of Kent's Growth Areas, identifying Ebbsfleet Valley as one of Thames Gateway Kent's 'key spatial transformers' and Ashford as a

'powerhouse' which will drive sub-regional growth. Their role has been reinforced by the commencement of high speed rail services to London and the Continent. This will encourage multi-national corporations to take advantage of Kent's unique access to a range of Northern European destinations, as well as the County's own beautiful countryside and coast.

- 3.26 21st Century Kent also recognises the importance of the ongoing regeneration of the County's coastal towns through investment in cultural attractions, water sports and recreation, and the development of appropriate training and skills in sectors such as coastal energy generation and aquaculture. It further identifies that Kent's rural sector already contributes more than £5bn to the local economy and that further growth may be fostered through investment in digital connectivity.
- 3.27 Whilst acknowledging that Kent has been the beneficiary of unprecedented levels of investment in transport infrastructure in recent years, 21st Century Kent calls for further improvements to the County's road and rail networks in order to reinforce its status as the most connected place in the UK. These include a new Lower Thames Crossing, improved rail journey times between Ashford and Thanet, and new parkway stations at Maidstone and Manston (for Manston Airport). These projects will be progressed within the framework set out by the Transport Delivery Plan for Kent and this LTP.

Growth without Gridlock: a Transport Delivery Plan for Kent (2010)

3.28 Growth without Gridlock responds to the economic and regeneration pressures outlined in the County Council's Framework for Regeneration and specifies how transport interventions can contribute to the alleviation of these pressures.¹³ The Plan requests greater transport funding and delivery powers for local transport authorities and calls on the Department for Transport (DfT) to progress those schemes of national importance, including a Lower Thames Crossing, a long-term solution to Operation Stack, dualling the A21 and a scheme of Foreign Lorry Road User Charging (see Chapter 8). The policies and objectives set out in Growth without Gridlock underpin the LTP3 Strategy and are therefore considered in detail in Chapter 4.

Rail Action Plan for Kent (2011)

- 3.29 The Rail Action Plan for Kent sets out the principal objectives of KCC to ensure that the new Integrated Kent Franchise, which is due to commence in April 2014, delivers a rail service that fully meets the needs of the County's commuters, residents and visitors.¹⁴ Whilst the Plan acknowledges the significant enhancement in rail connectivity to much of North and East Kent that has accompanied the commencement of high speed domestic services, it recommends that further improvements to several routes elsewhere in the County be included in the new franchise specification. It also recognises the need for the level of rail fares charged in Kent to offer better value for money, to encourage economic growth throughout the County. Major priorities for action include:-
 - Reinstatement of City services to Maidstone East and West Malling;
 - Extending high speed services from Dover via Deal and Sandwich to Ramsgate;

- Improving rail journey times between Ashford and Ramsgate via the proposed Thanet Parkway Station at Cliffsend;
- Improvements to the North Kent line;
- Investigating the feasibility of a direct Ashford-Gatwick service;
- Including Maidstone East as the principal Kent terminus for Thameslink services from 2018.
- 3.30 The Rail Action Plan for Kent fully takes into account the views expressed at KCC's bi-annual Rail Summits (see Chapter 8) and will inform the County Council's response to the DfT's draft Integrated Kent Franchise specification, which is expected to be published in 2012.

Living Later Life to the Full: a policy framework for later life (2009)

- 3.31 Living Later Life to the Full is KCC's response to the challenges and opportunities posed by an ageing population.¹⁵ It takes the themes identified in the Vision for Kent and scrutinises them from the perspective of older people. It aims to increase older people's involvement in community life and to encourage greater social interaction both within and between the generations. Following extensive consultation with Kent residents, businesses, care providers and public agencies, it sets out seven key priorities for supporting older people to get the most out of later life. Improving the quality, accessibility and affordability of transport is a prominent theme within a number of these priorities, including those to:
 - ensure communities are designed to be 'age proof', stronger, safer and sustainable;
 - improve transport and accessibility;
 - enable people to lead healthier lives and have better access to healthcare; and,
 - support people's citizenship, learning and participation in community life.
- 3.32 Living Later Life to the Full notes that the fear of falling is a major concern to older people. If neighbourhoods and transport services are perceived to be hazardous, this may lead to social exclusion. It also recognises that 67.9% of those over 85 do not have access to a car and that some parts of the County lack regular public transport services. In accordance with the objectives of this LTP, the County Council is committed to working with developers, bus and train operators, and older and disabled people's representative groups to ensure that pavements are accessible and free from trip hazards and that an increasing number of bus stops and train stations provide step-free access to services. It will also continue to subsidise rural bus services wherever possible and work with Kent's Primary Care Trusts to promote a more joined-up approach to transport provision.

Kent Environment Strategy (2010)

- 3.33 The latest Kent Environment Strategy has been written to complement the County Council's Framework for Regeneration (see above) and was agreed by the Kent Partnership in June 2010.¹⁶ It is now being approved by individual districts and partners across Kent, and a detailed delivery plan is being developed. The strategy has three key themes:
 - Theme 1: Living well within environmental limits doing things more efficiently and minimising the use of resources
 - Theme 2: Meeting the Climate Change Challenge being prepared for the risks and opportunities
 - Theme 3: Value from our natural and living environment maximising the benefits of the natural environment to deliver multiple outcomes for Kent.
- 3.34 The Strategy recognises the contribution that transport can make to reducing emissions through the promotion of home working, electric and hydrogen car infrastructure and the promotion of walking, cycling and public transport. The Strategy seeks to reduce carbon emissions from local transport year on year by 2.6%, leading to a 20% reduction by 2020, a 40% reduction by 2030 and an 80% reduction by 2050.

Countryside Access Improvement Plan 2007-2017 (2007)

- 3.35 Local transport authorities are required to produce and maintain a Rights of Way Improvement Plan (RoWIP) under the Countryside and Rights of Way Act 2000. KCC's RoWIP, the Countryside Access Improvement Plan (CAIP), sets out a 10 year strategy for the future management of public rights of way and access to public green space.¹⁷ In line with the Department for Transport's recommendation that authorities integrate their RoWIP with their LTP¹⁸, the County Council's Countryside Access Team has been closely involved in the preparation of this Plan.
- 3.36 If KCC is to achieve its aim of encouraging higher rates of walking and cycling to improve health and reduce congestion, it is vital that the County's Public Rights of Way network is legible, accessible and well maintained. The CAIP includes a commitment to raise the standard of furniture on paths and to significantly reduce the number of stiles where resources allow. It also recognises the need to install better signposting and waymarking to increase people's confidence in using the rights of way network for everyday journeys.
- 3.37 The CAIP is fully consistent with the LTP's emphasis on achieving sustainable development in Kent's Growth Areas. Indeed, this is recognised as one of the Plan's seven primary objectives. The Countryside Access Team will continue to work with Kent Highway Services, the district councils and developers to ensure that provision is made for sustainable transport systems and high quality green space within new developments. Opportunities will be taken to include facilities which reduce traffic congestion, improve safety and provide community recreational facilities.

Local Policy

Local Development Frameworks: Overview

- 3.38 Under the Planning and Compulsory Purchase Act 2004, each of Kent's 12 district planning authorities must produce a Local Development Framework (LDF) to replace their existing Local Plan. The LDF will provide the strategic context within which development can take place over the next 10-15 years. The LDF is essentially a portfolio of planning documents produced by the district council. The most important of these is the Core Strategy which sits at the heart of the LDF and provides the spatial vision and strategic policies for all other Development Plan Documents. The Core Strategy is submitted for examination by an independent Planning Inspector who must consider whether it is justified, effective and consistent with national policy before it may be adopted by the local planning authority.
- 3.39 It is vital that transport and spatial planning are closely integrated, particularly in Growth Areas such as Ashford and Thames Gateway Kent, in order to encourage more sustainable transport choices. The Government's *Guidance on Local Transport Plans* (July 2009)¹⁹ makes clear that LTPs should reflect and support LDFs and that, in two-tier areas, county councils should work closely with districts to ensure alignment between these documents. In Kent, this role is discharged by Kent Highway Services' Partnership Officers, who work closely with their respective district councils to ensure that the transport implications of development proposals are identified and mitigated at an early stage in the planning process.
- 3.40 Kent's district councils are at varying stages in the process of preparing their LDFs. However, in anticipation of the enactment of the Localism and Decentralisation Bill, which will revoke Regional Spatial Strategies, some planning authorities are reviewing elements of their LDFs, including the housing allocations imposed by the South East Plan. The district-by-district LDF summary below therefore represents the latest position prior to the commencement of this review process and it is acknowledged that the information presented here is likely to change.

Ashford

3.41 Ashford Borough Council's LDF Core Strategy was adopted in July 2008.²⁰ It proposes the development of 16,770 new dwellings and approximately 16,700 jobs in the Ashford Growth Area, and 1,180 new dwellings in the rest of the borough, for the period 2006 to 2021. The Core Strategy identifies seven major sites for



mixed-use development in Ashford which will supplement the ongoing regeneration of the town centre. Modelling by KCC has led to the identification of a number of major transport infrastructure schemes to accommodate this level of growth, several of which are currently under construction (see Chapter 8). A review of the Core Strategy will begin in 2011.

Canterbury

3.42 The Canterbury LDF Core Strategy is currently being prepared by Canterbury City Council. The South East Plan made provision for 10,200 new dwellings in Canterbury in the period 2006-2026. After taking account of completions, undeveloped Local Plan allocations and permissions granted since 2006, the



residual requirement for the district at April 2010 was 7,000 dwellings. The Core Strategy Options document (January 2010) focussed on accommodating 4,000 dwellings in the period 2016-2026, having taken account of the previously committed land supply.²¹

Dartford

3.43 In February 2011 Dartford Borough Council submitted its Core Strategy and accompanying Proposals Map to the Secretary of State for independent examination. Provision is made for 17,300 homes up to 2026, and 760,000 square metres of employment land with an expected net growth of up to 26,500



jobs.²² New housing will be focused in three areas on previously developed land (Dartford town centre, Ebbsfleet Valley, and the Thames Waterfront). The Kent Thameside multi-modal model has been used to assess the impact of the development proposed for Dartford and Gravesham. This has resulted in the identification of a package of strategic transport infrastructure improvements at key locations to enable the development to be realised whilst maintaining an acceptable level of performance across the transport network (see Chapter 8).

Dover

3.44 The Dover District LDF Core Strategy was adopted in February 2010.²³ It aims to provide for a significantly higher level of development than previously, on the premise that population and workforce growth has the potential to tackle many of Dover's key socio-economic challenges. The Core Strategy makes provision for 14,000 homes and 6,500 jobs, with the objective of delivering at least 10,100 new dwellings by 2026. Most of the housing development is to be concentrated within

DOVER

Dover town, principally in an urban extension at Whitfield (5,750 homes) with some 4,000 houses planned for Deal, Sandwich and the surrounding rural areas. The Whitfield development will incorporate sustainable transport links between Whitfield, the Port, and Dover Priory Station (see Chapter 8).

Gravesham

3.45 Gravesham Borough Council is currently preparing the Gravesham LDF Core Strategy. The Council's Preferred Option is the provision of 9,300 new homes up to 2026. The Borough Council's Economy and Employment Space Study further determined that it should plan for 10,000 additional jobs in the borough



should plan for 10,000 additional jobs in the borough up to 2026.²⁴ The housing allocation will be concentrated to the north of the A2, with the

exception of 100 which will serve the needs of the rural community. The majority of development will be focused at four sites within the existing urban area on previously developed land (Gravesend town centre, Ebbsfleet, Northfleet Embankment (East and West) and Gravesend Canal Basin). As in Dartford, the Kent Thameside multi-modal model has been used to assess the impact of the major development proposed for the borough (see above).

Maidstone

3.46 The Maidstone LDF Core Strategy is currently being prepared by Maidstone Borough Council. The South East Plan imposed a housing allocation of 11,080 new homes for the borough up to 2026 but, following extensive work to determine a local housing target for the plan period, the Borough Council has resolved to



consult on an option of 10,080 new homes through public participation in summer 2011. The Maidstone Economic Development Strategy sets a target of 10,000 new jobs in the period 2008-2026 on the basis of the Growth Point housing target of 10,080 dwellings.²⁵ Work is underway to determine the provision for new employment land that will be required to accommodate these jobs. The Borough Council will consult on the distribution of all land uses in its Core Strategy during public participation, including housing and employment development.

Sevenoaks

3.47 The Sevenoaks LDF Core Strategy was adopted in February 2011 following independent examination by the Planning Inspectorate. The Core Strategy proposes modest development of approximately 3,300 new homes over the period 2006-2026, which



is broadly consistent with the South East Plan allocation. Approximately 2,000 of these dwellings have already been constructed or have planning permission. The Core Strategy also allocates a supply of land totalling 86.1 hectares for employment use.²⁶ Development will be focused in the urban areas of Sevenoaks and Swanley. No strategic site allocations are proposed and no review of the Green Belt is envisaged. The Core Strategy complements the new Sevenoaks District Transport Strategy produced by KCC, which proposes the preparation of a Sevenoaks Cycling Strategy, the improvement of bus interchanges in Sevenoaks and Swanley town centres and the upgrading of Sevenoaks and Swanley rail stations, which is being progressed through Network Rail's National Station Improvement Programme.

Shepway

3.48 The Shepway LDF Core Strategy is currently being prepared by Shepway District Council. The Preferred Options is the provision of between 6,000 and 8,000 homes up to 2026, which is larger than the South East Plan allocation of 5,800, in order to support a



higher economically active population and to assist regeneration in the district. Development is to be concentrated at strategic sites at east and central Folkestone, Folkestone Seafront, Risborough and Napier Barracks

and West Hythe (Nickolls Quarry), together with expansion at Westenhanger, Sellindge, Lympne and New Romney.

Swale

3.49 Swale Borough Council is currently at an early stage in the development of the Swale LDF Core Strategy, following the adoption of the borough's Local Plan in 2008. In January 2011, the Borough Council issued its Issues and Strategic Spatial Options document for public consultation. Four options are considered for the



provision of new housing and employment land. These range from 13,500 to 18,500 new dwellings and from 403,839 to 959,039 square metres of employment land.²⁷ The Core Strategy process will test strategic options up to 2031 and beyond, including opportunities for regeneration and expansion at Sheerness Port, Kent Science Park and Sittingbourne. A multi-modal transport model has been commissioned to support the Core Strategy (see Chapter 8).

Thanet

3.50 The Thanet LDF Core Strategy is currently being prepared by Thanet District Council. The South East Plan imposed an allocation of 7,500 new homes up to 2026; however this figure will be reviewed as the LDF process progresses. It is anticipated that Manston Airport, Manston Business Park and Westwood Cross



will be the key locations for large scale job creating development, while central Margate will be the focus of regeneration efforts. A multi-modal transport model has recently been commissioned to provide a more detailed assessment of the traffic impact of various growth scenarios in Thanet and to inform the identification of solutions.

Tonbridge and Malling

3.51 The Tonbridge and Malling LDF Core Strategy was adopted in September 2007.²⁸ It provides for at least 6,375 new homes in the period 2006-2021, which are to be concentrated in the main urban areas; particularly the Medway Gap settlements and Tonbridge. No greenfield sites will be required for



housing development to meet strategic needs up to 2021. Employment opportunities are to be focussed around Kings Hill and in existing employment areas. There are four strategic brownfield sites in the Medway Valley where development has already received planning permission. These are Kings Hill – Phase 2, Leybourne Grange, Holborough Valley and Peters Village. Modelling work undertaken to inform the Medway Valley Sustainable Transport Strategy forecast that traffic in the area would increase by 46% between 2001 and 2016 as a result of these planned developments, requiring capacity enhancements at Junction 4 of the M20 and public transport improvements.

Tunbridge Wells

3.52 The Tunbridge Wells LDF Core Strategy was adopted in June 2010.²⁹ It provides for 6,000 new homes in the period 2006-2026, of which 75% are to be provided within Tunbridge Wells and Southborough, 19% in the borough's small rural towns (Paddock Wood, Cranbrook and Hawkhurst) and 6% in the villages and



rural areas. Tunbridge Wells Borough Council has however resolved to undertake an immediate review of the Core Strategy in light of the revocation of the South East Plan. KCC has commissioned a Tunbridge Wells Transport Strategy and a multi-modal transport model to support the Core Strategy.

- ⁸ KCC (2010), Bold Steps for Kent: The Medium Term Plan to 2014/15
- ⁹ Kent Partnership (2006), *Vision for Kent*

- ¹¹ KCC (2009), Unlocking Kent's Potential: Kent County Council's framework for regeneration
- ¹² KCC/Sir Terry Farrell (2010), 21st Century Kent: a blueprint for the County's future
- ¹³ KCC (2010) Growth without Gridlock A Transport Delivery Plan for Kent (final draft)
- ¹⁴ KCC (2011), Rail Action Plan for Kent
- ¹⁵ KCC (2009), Living Later Life to the Full: a policy framework for later life
- ¹⁶ KCC (2010), The Kent Environment Strategy 2010-13
- ¹⁷ KCC (2007), Countryside Access Improvement Plan 2007-2017
- ¹⁸ DfT (2009), Guidance on Local Transport Plans
- ¹⁹ DfT (2009), Guidance on Local Transport Plans
- ²⁰ Ashford Borough Council (2008), Ashford Local Development Framework: Core Strategy
- ²¹ Canterbury City Council (2010), Canterbury Local Development Framework: Core Strategy Options Report
- ²² Dartford Borough Council (2010), Dartford Local Development Framework: Pre-Submission Core Strategy
- ²³ Dover District Council (2010), Dover Local Development Framework: Core Strategy
- ²⁴ Gravesham Borough Council (2009), Gravesham Economy and Employment Space Study
- ²⁵ Maidstone Borough Council (2008), Maidstone Economic Development Strategy
- ²⁶ Sevenoaks District Council (2010), Core Strategy Draft for Submission
- ²⁷ Swale Borough Council (2011), *Pick your own: Issues and Strategic Spatial Options* Consultation
- ²⁸ Tonbridge and Malling Borough Council (2007), *Tonbridge and Malling Local Development Framework: Core Strategy*
- ²⁹ Tunbridge Wells Borough Council (2010), *Tunbridge Wells Local Development Framework: Core Strategy*

¹ DfT (2007), *Towards a Sustainable Transport System*

² Sir Rod Eddington (2006), *Eddington Transport Study*

³ Nicholas Stern (2006), The Economics of Climate Change: The Stern Review

⁴ DfT (2008), *Delivering a Sustainable Transport System: Main Report*

⁵ Government Office for the South East (2009), *The South East Plan*

⁶ Department of Health South East (2008), South East England Health Strategy

⁷ Social Exclusion Unit (2006), A Sure Start to Later Life: Ending Inequalities for Older People

¹⁰ KCC/Jacobs (2010), Delivering a Sustainable Transport System: London to Dover/Channel

Chapter 4 – The Strategy for LTP3

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A Regeneration Framework for Kent

4.1 In January 2009, Kent County Council (KCC) published the first draft of Unlocking Kent's Potential, its Framework for Regeneration¹. The Framework seeks to identify the opportunities and challenges facing the County over the coming decades, recognising in particular the challenges posed by:



- Housing growth, particularly in Thames Gateway Kent and Ashford;
- Changing demographics, especially the County's ageing population and the impacts that this will have on Kent's future workforce and the way in which KCC provides services;
- Increasing levels of congestion, and the need to provide efficient transport;
- The changing needs of business and the effects on future skills and infrastructure provision.
- 4.2 These challenges are grouped together within five key strategic themes:
 - Building a new relationship with Kent business
 - Unlocking talent to support the Kent economy
 - Embracing a growing and changing population
 - Building homes and communities, not estates
 - Delivering growth without transport gridlock
- 4.3 The Regeneration Framework redefines regeneration to include not only economic growth but also transformation in education and skills, the cultural

renaissance in the County, an efficient transport system, developing a strong civic spirit, tackling climate change and improving housing conditions. It sets a clear direction for achieving economic growth and diversifying Kent employment; particularly across the professional sector and establishes a series of priority areas for action by the County Council and its partners for the next 25 years.

- 4.4 The consultation process in 2009 found that the overall approach taken by the Regeneration Framework and its strategic priorities were generally welcomed and the final version was published in October 2009.
- 4.5 The Regeneration Framework identified the need for a longer term, visionary view of Kent and in 2009, the County Council commissioned Sir Terry Farrell to produce 21st Century Kent: A Blueprint for the County's Future, which was launched in January 2010.² The vision articulated in 21st Century Kent focuses on:
 - The development of Ebbsfleet, Ashford and Medway as centres of economic growth and innovation;
 - Regeneration of the Kent coast;
 - Investment in new infrastructure to reinforce Kent's strategic role in the national economy;
 - Achieving excellent digital infrastructure; and
 - Developing the '21st Century Garden of England' as a vibrant rural economy.

A Transport Delivery Plan for Kent

- 4.6 Unlocking Kent's Potential represents KCC's first step towards defining a spatial strategy for the County. It provides a baseline for a broad policy approach that will inform the development of a series of further strategies and implementation plans, including an Integrated Transport Strategy (ITS) for Kent, *Growth without Gridlock*. The ITS is the collective evidence base for road, rail, air and sea transport and addresses the key transport solutions that need to be implemented across the County over the next 20 years.³
- 4.7 Between March and November 2009, a draft ITS was prepared by the County Council's Transport Policy Team, overseen by the Kent Economic Board Transport Task Group, whose membership was drawn from the following organisations:
 - Kent County Council
 - Kent Economic Board
 - Eurostar
 - SEEDA
 - Southeastern Trains
 - Eurotunnel
 - Medway Council
 - Manston Airport

- Arriva Southern Counties
- Stagecoach in East Kent
- Dartford Borough Council
- Ashford Borough Council
- Dover District Council
- Tonbridge and Malling Borough Council
- London Ashford Airport

- 4.8 Consultation on the ITS was launched on 19th November 2009 and closed on 12th February 2010. The consultation generated over 150 responses and comments were generally favourable, with the overall vision of an integrated transport network particularly welcomed. The ITS was redrafted during early 2010 with a particular emphasis on ensuring consistency and alignment with the emerging Environment and Housing Strategies. During the summer of 2010, in response to the changing political and economic landscape and an increased emphasis on local decision making, the ITS was developed into a 20 year Transport Delivery Plan for Kent, *Growth without Gridlock*.
- 4.9 *Growth without Gridlock* outlines a high level vision for the transport network needed in Kent to support planned growth in employment and housing. As such, elements of the Strategy are aspirational and the precise delivery mechanisms and timescales for its constituent projects have yet to be determined. These will be progressed according to local and national political priorities and economic conditions, which will in turn dictate the pace of housing and commercial development over the next 10 to 15 years.
- 4.10 *Growth without Gridlock* was launched at a well attended media event on 1st December 2010.⁴ It has received national press coverage and the proposed schemes and the innovative methods of delivering them have already generated interest from private sector developers. The Plan has been presented formally to the Government by KCC, requesting greater transport funding and delivery powers and calling on the Department for Transport (DfT) to progress those schemes of national importance, including a Lower Thames Crossing, a long term solution to Operation Stack and a scheme of Foreign Lorry Road User Charging (see Chapter 8).
- 4.11 What is clear is that the actions will be delivered by many partners working together in two interlinked processes:-
 - Spatial Planning identifying where development is to be located and its form. This is led by the Local Development Frameworks (LDFs) for each district (see Chapter 3).
 - Transport Planning identifying which transport improvements are needed for delivery through the Local Transport Plan process and other funding mechanisms such as the Regional Growth fund.

LTP3 Framework

- 4.12 In July 2009, the Department for Transport (DfT) issued its *Guidance on Local Transport Plans.*⁵ The Guidance set out the statutory requirements for LTP3 along with the Government's national policy framework for transport, based around the five Delivering a Sustainable Transport System (DaSTS) goals to Support Economic Growth; Tackle Climate Change; Promote Equality of Opportunity; Contribute to Better Safety, Security and Health; and Improve Quality of Life. KCC strongly welcomed these goals and their relation to wider quality of life issues in its response to DfT on this matter.
- 4.13 During autumn 2009, it was decided to develop a framework for Kent's LTP3 based upon the five national transport goals. Taking the objectives of the Integrated Transport Strategy, the previous Local Transport Plan for Kent, the LTP3 Guidance and various other plans and strategies, a number of LTP3 Themes were developed, aligned to the national transport goals. The purpose

of these Themes was to provide a comprehensive framework for Kent's third LTP, illustrating how each measure and initiative supported national transport policy. However, the new Coalition Government has not adopted the previous administration's transport goals, or updated the LTP3 guidance. The national transport goals have been retained as the framework for Kent's LTP3, since they continue to provide a comprehensive overview of local transport issues and challenges but the wording of the Themes has been revised to more closely reflect Kent's objectives. The framework is presented in Table 4.1 opposite.

Table 4.1: LTP3 Themes/Objectives Framework

LTP3 Themes (National Transport Goals)	LTP3 Objectives	Transport Objectives
Growth Without Gridlock (Support Economic Growth)	Tackling Congestion	 reduce journey times for personal travel, business and freight improve journey time reliability reduce disruption to network caused by road works and other incidents
	Supporting Regeneration and Delivering Housing	 provide transport infrastructure to support regeneration and housing locate development near transport hubs
	Access to Jobs and Services	 improve access to jobs and services by efficient means of transport like public transport, walking and cycling provide transport infrastructure
	A Resilient Network	 maintain and improve the condition of the transport network ensure local transport networks are resistant and adaptable to sudden incidents and long term changes
	UK Gateway	support the function of the County's international gateways
A Safer and Healthier County	Safer Roads	reduce the number of casualties on the transport network
(Contribute to Better Safety, Security and Health)	Protecting Communities	reduce and reverse the impact of transport on public health
	Active Transport	encourage and enable more physically active travel
	A Safe and Secure Network	reduce crime, fear of crime and anti-social behaviour on the transport network
Supporting Independence (Promote Equality of Opportunity) Supporting Independence for All		 improve access by and integrate public transport, walking and cycling focus investment in disadvantaged areas reduce the barriers to transport of affordability, accessibility, availability, distance and lack of information
Tackling a Changing Climate (Tackle Climate Change)	Reducing Emissions	 reduce traffic levels improve carbon efficiency of current forms of transport reduce the need to travel and minimise the distance of journeys taken
	Smarter Travel	encourage the use of more sustainable transport like public transport, walking and cycling
Enjoying Life in Kent (Improve Quality of Life)	Accessing Life's Opportunities	• improve access to learning, culture, sporting events, social networks and the countryside
· · · · · ·	Enjoying the Journey	improve the journey experience of transport users
	Protecting Kent's Natural and Man- Made Environment	 reduce the number of people and dwellings exposed to high levels of noise reduce the level of pollution (noise, fumes, spillage, vibration etc) from traffic reduce and reverse the impact of new infrastructure on the natural environment minimise lorries on unsuitable routes
	Sociable Streets	enhance wellbeing and sense of community by creating more opportunities for social contact and interaction

Budget Allocation and Spatial Distribution Methodology

- 4.14 The most important part of any Plan is the method used to determine spending priorities. A Local Transport Plan is no exception and this has been a key element of Kent's previous LTPs. During LTP2, a prioritisation methodology was adopted to advise Members of the County Council on which local transport schemes should be funded from the Integrated Transport Block allocation (see Chapter 5). This methodology was known as PIPKIN (Prioritising Investment Programmes for the Kent Integrated Network) and took the form of a spreadsheet model in which individual schemes were assessed against a wide range of criteria, resulting in a score. This allowed comparison between one scheme and another, with the highest scoring schemes being those that contributed the most to national and local transport objectives. This methodology was later updated to reflect the importance of road safety schemes and was re-launched as SPS (Scheme Prioritisation System) in 2009.
- 4.15 Whilst the SPS methodology generally produces a balanced Integrated Transport programme in terms of the geographical spread of schemes across the County, there are concerns that this 'jam-spreading' approach does not always focus investment in areas where the economic, social and/or environmental challenges are greatest. This is particularly important in light of the public spending cuts being implemented by Government. It also fails to incentivise the design and delivery of complementary packages of schemes which can collectively deliver greater benefits than the sum of their constituent projects (e.g. bus priority measures, together with improved bus stop infrastructure and information). Therefore, for LTP3, a range of options has been considered to assess and prioritise local transport schemes that focus investment in the right places. The preferred option was the main focus of the stakeholder consultation on the draft LTP3 carried out between 4th October and 31st December 2010.
- 4.16 The preferred option consists of a two-stage process, combining the objectives-led approach of SPS with a spatial element. The first stage of the process allocates the annual Integrated Transport budget to the LTP3 Themes. The proposed allocation is illustrated in Table 4.2 below:

Kent LTP3 Themes	Allocation
Growth without Gridlock	45%
A Safer and Healthier County	15%
Supporting Independence	15%
Tackling a Changing Climate	15%
Enjoying Life in Kent	10%

Table 4.2: Proposed Budget Allocation to LTP3 Themes

4.17 Growth without Gridlock is given the largest allocation. This is primarily on account of the pressing economic challenges facing Kent, in common with the rest of the UK, as well as the local and sub-regional challenges associated

with substantial housing and employment growth in Thames Gateway Kent, Ashford, Dover and Maidstone. The smallest allocation to Enjoying Life in Kent reflects the fact that virtually all Integrated Transport schemes included in the other Themes already contribute to a better quality of life.

4.18 The second stage of the prioritisation process distributes the funding under each of the LTP3 Themes to different areas of the County, as proposed in Table 4.3 below. Whilst some of the Themes can be allocated at a local level based on problem sites such as road casualties and air pollution, others relating to housing, employment and deprivation, if considered on a ward by ward basis, would be spread across the County. Therefore, the spatial distribution under the LTP3 Themes of Growth Without Gridlock and Supporting Independence, focuses on larger areas where the delivery of complementary packages of schemes can collectively deliver greater benefits than the sum of their constituent projects.

Kent LTP objectives	Priority Area(s)
Growth Without Gridlock	Prioritise spending in the Growth Areas and Growth Points (Thames Gateway Kent, Ashford, Dover and Maidstone) which will be the focus of housing and employment growth during the LTP3 period
A Safer and Healthier County	Prioritise spending to tackle Countywide problem sites including Air Quality Management Areas, crash cluster sites, and areas with high levels of health deprivation
Supporting Independence	Prioritise spending in the East Kent coastal towns (from Herne Bay to the Romney Marsh) which exhibit high levels of unemployment, low car ownership and ageing populations
Tackling a Changing Climate	Prioritise spending in the County's urban areas , particularly those with Air Quality Management Areas and congestion hotspots (principally Canterbury, Dartford, Dover, Gravesend, Maidstone, Sevenoaks and Tunbridge Wells)
Enjoying Life in Kent	Mitigate the impact of motorised transport across the County in order to reduce the number of people exposed to heavy traffic, to enhance wellbeing and community cohesion and to improve access to the countryside and coast

Table 4.3: Proposed Spatial Distribution of Integrated Transport Block Funding

- 4.19 This budget allocation and spatial distribution methodology better enables KCC to prioritise investment in areas with the most acute transport challenges and where good value for money can be attained from the limited funding available. The methodology is presented graphically in Table 4.4 overleaf.
- 4.20 Please note that maintenance schemes are prioritised using criteria set out in the Transport Asset Management Plan and during LTP2, Major Schemes were prioritised at the regional level.

							È
odology	Value for money assessment	1* - Access road 2 - Bus rapid transit 3 - Cycle route 4 - Traffic management	 I - Safety schemes 2 - Safe routes to school 3 - Walking routes 4 - Bus route to hospital 	 Bus improvements Walking and cycling Community transport Public information 	 Low emission vehicles Travel Plans Kent Freedom Pass Walking and cycling 	 Public rights of way improvements Public realm Lorry management Journey planner 	* - Indicative scheme types for illustration only
ribution meth	Scheme type	Schemes that support housing and employment	Schemes that tackle road casualties, air pollution, poor health etc.	Schemes that provide access to jobs and services for those without access to a private car	Schemes that promote low emission travel	Schemes that improve access to opportunities and reduce impact of transport on Kent and it's communities	
Budget allocation/spatial distribution methodology	Spatial distribution	Growth Areas and Growth Points	Problem sites	Disadvantaged areas (East Kent coastal towns)	Urban areas	Countywide	
B udget alloca	Budget allocation	45%	15%	15%	I5%		
	LTP3 Theme	Growth Without Gridlock	A Safer and Healthier County	Supporting Independence	Tackling a Changing Climate	Enjoying Life in Kent	

Table 4.4: Proposed Integrated Transport Budget Allocation/Spatial Distribution Methodology

Value for Money Assessment

4.21 SPS currently prioritises Integrated Transport schemes purely on the basis of their alignment with policy objectives and there is a risk that high cost schemes that deliver against a number of policy objectives are able to achieve higher scores than smaller, lower cost schemes which may have important local impacts and deliver better value for money. The County Council will therefore subject Integrated Transport schemes to a Cost Benefit Analysis in place of the existing SPS assessment process.

Cost Benefit Analysis involves:

- identifying the costs of a scheme (incorporating build cost, maintenance cost and external funding);
- assessing the geographical extent of the scheme's impact, its distributional effects (i.e. which social groups are affected by the scheme), and its public acceptability; and,
- assigning the scheme a score based on relative costs and benefits (Cost Score + Impact Score = Cost Benefit Analysis Score).
- 4.22 It is not feasible to calculate a full Benefit Cost Ratio (BCR) for Integrated Transport schemes due to the cost and complexity of assigning monetary values to their wide ranging impacts on health levels and the environment. Instead, DfT guidance on the prioritisation of small transport schemes recommends the use of proxy measures for scheme benefits and costs, which places greater emphasis on professional judgement and debate.⁶ This will be applied through assigning a score between 1 and 3 to the following criteria:

Cost Score

- Build Cost based on total construction costs (including allowances for design work, contingency and, where necessary, land purchase) as a proportion of total integrated transport budget
- Maintenance Cost based on total maintenance costs over a tenyear period
- External Funding the magnitude of any third party contribution to their overall construction cost
- 4.23 The combined scores for build cost, maintenance and external funding will give the overall Cost Score.

Impact Score

- Geographical the geographical extent of the scheme's impact relating to street level, community level, district/ countywide
- Distributional impact impact on the County's most disadvantaged Lower Super Output Areas (LSOAs)
- Public acceptability scheme proposed/endorsed by Member of County/District/Parish Council or by Members of the Public
- 4.24 The Cost Benefit Analysis Score would be calculated by adding the Cost Score to the Impact Score.

LTP3 Consultation Response

- 4.25 KCC received 60 responses to the LTP3 consultation, the majority of which related to specific points of emphasis and a clearer reference to certain initiatives being pursued by third parties. There was also a recognition that the local transport planning landscape has shifted significantly in the interim, particularly in light of the launch of *Growth without Gridlock* in December 2010, which has necessitated a significant level of updating to the final LTP3.
- 4.26 The primary concern raised was the priority given to the Growth Areas and Growth Points under the LTP3 Theme of Growth without Gridlock, to which 45% of KCC's Integrated Transport Block funding is to be allocated. It was argued by a number of respondents that these areas already receive dedicated funding streams from Government and that this allocation does not provide adequate recognition of the high levels of development planned elsewhere in the County. The proposed spatial distribution for the Supporting Independence theme to the coastal urban areas of East Kent was also opposed by some respondents, who argued that it overlooked the needs of disadvantaged areas in Mid and West Kent, as well as rural areas.
- 4.27 Overall, however, there was a widespread acknowledgement that the unprecedented funding challenges facing local transport authorities required difficult decisions to be made about where to focus limited investment in the medium term and the preferred budget allocation/spatial distribution methodology was supported by the majority of respondents who expressed a view. It should also be noted that many of the Government funding streams to support development in the Growth Areas and Growth Points have been withdrawn in the wake of the Comprehensive Spending Review. Consequently, the preferred methodology will be adopted by the County Council for the period of LTP3 (2011-16).

Sustainability Appraisal

4.28 European legislation requires that a Sustainability Appraisal (SA) (incorporating a Strategic Environmental Assessment (SEA) and Habitats Regulations Assessment (HRA)) be undertaken of Local Transport Plans and that local authorities ensure that an SA of their LTP3 is an integral part of developing and delivering their LTP. An SA was carried out for LTP2 and KCC has updated this process for LTP3. SA aims to ensure that a plan is environmentally sound and promotes managed growth. SA comprises the following stages.

Scoping and Options Appraisal

- 4.29 The Scoping stage reviews evidence of relevance to the SA and involves developing the framework for undertaking the appraisal, together with the evidence base. The draft Scoping Report was subject to consultation during August 2010 and a Final Scoping Report was published in November 2010.
- 4.30 In November 2010, the SA/HRA Options Appraisal Report was published. The SA concluded that Kent's draft LTP3 was likely to result in positive impacts on the County, compared with what the situation would be if no Plan was being prepared. The SA also concluded that the strategy contained in the draft

LTP3 would also result in more positive effects compared with other options for allocating transport funding which had been considered by the Council.

4.31 The SA also highlighted some weaknesses in Kent's draft LTP3. The draft LTP3 did not mention flooding which is an important issue for the County. It also stated the importance that any new transport infrastructure within Kent is designed and built for tomorrow's climate. These omissions have been rectified in the final Plan.

Findings of the HRA Screening

4.32 Screening was undertaken in order to ascertain whether any aspects of the draft LTP3 were likely to lead to significant effects on Kent's Natura 2000 sites. The Screening exercise found that based upon the level of information available, only two possible aspects of the draft LTP3 could potentially lead to significant effects and therefore would have to be assessed in more detail. These two aspects are the Lower Thames Crossing and the High Speed Rail Extension to Thanet. However, in both cases, it is noted that the LTP3 merely states the County Council's support for these schemes rather than confirming that they will go ahead (a decision which is not currently in the control of the Council). It is acknowledged that there may be substantial environmental issues, such as possible adverse effects on the integrity of the Thames Estuary and Marshes Special Protection Area (SPA) and Ramsar site and Thanet Coast and Sandwich Bay SPA and Ramsar site, respectively, which will need to be addressed before these schemes could be delivered.

Interim SA Report

- 4.33 The key finding of the Interim SA Report at this stage (which focuses on plans for implementing the LTP3 Strategy) relates to the way in which climate change is addressed. The Implementation Plan for Tackling a Changing Climate includes a range of important proposals that will support climate change mitigation objectives. These are set out as schemes under the following headings: Smarter Travel, Walking, Cycling and Buses.
- 4.34 Furthermore, it noted that schemes set out within Implementation Plans for other LTP3 Themes will also lead to benefits in terms of climate change mitigation. For example:
 - the Implementation Plan for Delivering Growth without Gridlock will ensure numerous schemes are brought forward that will support access to key destinations by bus and cycle;
 - the Implementation Plan for a Safer and Healthier County supports walking and cycling from a perspective of encouraging 'active transport';
 - the Implementation Plan for Supporting Independence commits significant resources to the East Kent Quality Bus Partnerships as well as for station access improvements at the High Speed stations in East Kent; and
 - the Implementation Plan for Enjoying Life in Kent commits funds to key cycle routes (i.e. routes that can expect good patronage), subsidised home-to-school public transport, and public realm improvements that will encourage walking.

- 4.35 The Interim SA Report recognises that the Implementation Plan for Tackling a Changing Climate does not lend direct support for road user charging (other than for foreign lorries), or the installation of electric vehicle technology. Both types of scheme are potentially important elements of any ambitious strategy for mitigating climate change, but the reasons for not supporting these schemes through the LTP3 are clear and there is little to suggest that a change to the Plan is warranted.
- 4.36 The Interim SA Report does make some recommendations to ensure that climate change mitigation and adaptation is more fully reflected through LTP3 Implementation Plans. These are set out below.

Recommendations: Climate Change Mitigation

- 4.37 The County Council could:
 - encourage a transfer to lower carbon vehicles, particularly through policy to guide the procurement of vehicles for public transport;
 - allocate funding specifically to support the increased roll-out of high quality Travel Plans amongst business; and
 - consider whether there is a need for a greater focus on sustainable movement of freight across the County, including the transfer of freight from road to rail (or barge).

Recommendations: Climate Change Adaptation

- 4.38 The County Council could:
 - Explore the highway network's vulnerabilities to weather and climate, both now and in the future, and identify adaptation responses.
 - A strategy for adapting to climate change will involve undertaking a range of activities to ensure that bridges and other structures; drainage; grass verges; highway network materials; carriageway surfacing; trees and hedges; and winter maintenance activities can all withstand the effects of climate change.
- 4.39 In response to mitigation measures, annual targets have been set for the number of Travel Plans in place and for the projected membership of *Kentjourneyshare* and KCC intends to submit a bid to the Government's Local Sustainable Transport Fund for measures that will reduce carbon emissions. The County Council will also work with bus operators and district councils through Quality Bus Partnerships to introduce more low emission vehicles. The County Council has also worked with partners for a long time to promote the transfer of freight from road to rail/short sea shipping but has had limited success since these are run on a commercial basis and KCC has little influence on the decision making of the operators.
- 4.40 The final Plan now includes the work that will be carried out under Kent's Adaptation Action Plan, which contains actions to address the impacts of climate change in relation to the activities of Kent Highway Services see Chapter 11. These actions include a review of current materials and processes taking into account the implications of climate change, proactive management of flood risk and the use of water harvesting and recycling.

Equalities and Diversity

- 4.41 KCC is committed to providing the best level of service to all its customers which means that everyone in Kent, regardless of their ethnicity, gender, gender identity, sexual orientation, age, religious belief or disability, should be able to get what they want from the services they need and take advantage of the opportunities and life chances on offer. To ensure this happens, in April 2009, KCC adopted a Customer Impact Assessment (CIA) of the likely impact of its work on the diverse communities that live within Kent and make up KCC's workforce.
- 4.42 This problem solving tool enables the County Council to understand how the policies and services it is designing could affect Kent residents and employees from all communities. An assessment of this LTP has been undertaken covering age, disability, gender, gender identity, race, religion and sexual orientation. It has been carried out by the Service Manager responsible for Kent's LTP3 and a critical friend who has knowledge of local transport issues. Much of the evidence to inform the CIA has been taken from progress against the performance indicators used for LTP2.
- 4.43 The screening has shown that the impact of LTP3 on age, disability and gender is positive through its goals to support independence which will positively impact on younger and older residents, on those with disabilities and on 'home makers' who do not have access to a private car and tend to be female. There will be a negligible impact on gender identity, race, religion and sexual orientation. However, it should be noted that this screening has not covered local transport measures funded by non-LTP funding, such as financial support to socially necessary bus services and community transport.

The Implementation Plan for LTP3

- 4.44 The Local Transport Act 2008 requires that LTPs contain a separate Strategy and Implementation Plan. KCC's Strategy for LTP3 is effectively the Integrated Transport budget allocation/spatial distribution approach set out previously, which determines the priority LTP3 Themes and the areas in which Integrated Transport Block funding will be focussed. This has informed the development of Implementation Plans for each of the LTP3 Themes, which set out the proposals for the delivery of the objectives contained in the Strategy, and are presented in Chapters 6-13.
- 4.45 Following the LTP3 consultation, the County Council's Cabinet Member for Environment, Highways and Waste took the decision to continue to make provision for the successful Members Highway Fund, which will be funded from the LTP3 Integrated Transport Block allocation. There was also agreement amongst Members that KCC should continue to attach priority to Crash Remedial Measures. The LTP3 Implementation Plans are therefore structured as follows and set out in Chapters 6 -13:
 - **Members Highway Fund** allocated to each of Kent's 84 County Councillors to fund schemes which solve local transport issues.
 - Crash Remedial Measures capital measures at sites with a history of fatalities and/or serious injuries due to road accidents.

- **Growth Without Gridlock** schemes which support economic growth and regeneration in the County's Growth Areas and Growth Points.
- Safer and Healthier County measures to reduce the number of casualties on the highway network and promote active travel.
- **Supporting Independence** schemes which improve access to employment and services by sustainable modes of transport in East Kent's coastal towns
- Tackling a Changing Climate interventions to reduce emissions from transport and improve the carbon efficiency of existing travel patterns in Kent's major urban areas.
- Enjoying Life in Kent schemes which improve the journey experience of transport users and promote access to cultural and leisure opportunities.
- **Highway Maintenance** Highway Maintenance Block funding allocated to meet the priorities and objectives of KCC's Transport Asset Management Plan.

A2 Slip Road, Canterbury

- 4.46 The A2 around Canterbury has limited junction movements at Harbledown, A28 Wincheap and at Bridge. This has led to increased traffic which drives into Canterbury, follows the ring road and then drives out of the city to access areas located near the A2. Therefore, during LTP2, work started on designing a London bound on-slip where the A28 Thanington Road crosses over the A2. The scheme involves a new traffic signal controlled junction on the A28 and a new slip road sloping down to join the A2 in advance of the bridge over the River Stour. Planning consent for the scheme was granted by KCC Planning Applications Committee on 21 December 2009 and the Secretary of State published an Order relating to the creation of the new Slip Road in spring 2010.
- 4.47 Work started in 2010/11, with a commitment of £983,000 but the scheme and its costs will run over into the first year of LTP3. Therefore, Members have made a commitment to continue to fund this scheme out of the Integrated Programme from Years 1 & 2 of LTP3 (2011/13) and its allocation is therefore ringfenced, lies outside the Budget Allocation and Spatial Distribution methodology and is not included in the LTP3 Implementation Plans.

¹ KCC (2009), Unlocking Kent's Potential: Kent County Council's framework for regeneration

² KCC/Sir Terry Farrell (2010), 21st Century Kent: a blueprint for the County's future

³ KCC (2010), Growth Without Gridlock – A Transport Delivery Plan for Kent (final draft)

⁴ KPMG (2010), The Lower Thames Crossing – KPMG Regeneration and Funding Report

⁵ Department for Transport (2009), *Guidance on Local Transport Plans*

⁶ DfT/Atkins (2008), Advice on the prioritisation of small transport schemes

Chapter 5 – Use of Resources

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Funding for Local Transport

- 5.1 The 2010 Comprehensive Spending Review confirmed that public sector funding for transport will be significantly reduced over the next four years, meaning that local authorities cannot continue to rely on existing funding streams. Nevertheless, KCC is committed to securing the timely delivery of planned housing and employment growth which will kick-start the economic recovery in Kent. The County Council has therefore taken bold and innovative steps to identify alternative sources of funding which, taken collectively, could generate over £600 million per year. It is hoped that these funding sources will facilitate the timely delivery of many of the major transport infrastructure schemes identified in KCC's Transport Delivery Plan for Kent, *Growth without Gridlock* and the County Council is working closely with Government to unlock these opportunities.
- 5.2 The smaller scale local transport schemes which form the focus of the Implementation Plan for LTP3 will continue to be delivered with capital and revenue funding from Government. Here, the County Council, in conjunction with Kent's district planning authorities, is seeking to exploit new and innovative funding mechanisms. These include Tax Increment Financing, residential planning tariffs and port landing charges. The principal funding sources available for the delivery of local transport schemes are documented in detail below. These may be cross-referenced with the Implementation Plan for LTP3 (Chapters 6 to 13), which identifies the anticipated funding source(s) for each scheme type in the five year programme.

Major Scheme Funding

- 5.3 Under the previous Government, the Regional Funding Allocation (RFA) was the mechanism by which local authorities bid for Department for Transport (DfT) funding for transport schemes costing in excess of £5 million. These 'Major Schemes' included new roads, such as the Sittingbourne Northern Relief Road, and Bus Rapid Transit (BRT) schemes such as Fastrack. In order to secure funding, schemes were assessed and ranked by the Regional Authority (the South East England Partnership Board) according to their alignment with the objectives of the Regional Spatial Strategy (see Chapter 3). Periodically, the Government asked each Regional Authority for advice on its priority schemes for the next ten years, within an indicative RFA. The Government's response to this advice included a list for each region of the schemes that it expected to fund, pending a Major Scheme Business Case submission to the DfT.
- 5.4 In June 2010, the Coalition Government announced that the RFA process was to be suspended with immediate effect pending the Comprehensive Spending Review. The Spending Review confirmed that £1.5 billion will be made available for Major Schemes over the period 2011/12 to 2014/15, of which £600 million will be for existing committed schemes and £900 million will be for previously submitted schemes awaiting full DfT appraisal. This compares to an RFA allocation of £517 million in 2010/11 and £601 million in 2009/10.
- 5.5 Unfortunately, KCC was not in a position to submit a Major Scheme Business Case for the Ashford Smartlink BRT scheme until October 2010, meaning that it will not now be considered for funding until 2015/16 at the earliest. The timely delivery of Smartlink is crucial to the growth aspirations of the Ashford and East Kent sub-region; therefore KCC and Ashford Borough Council will seek to progress the key elements of the scheme by drawing upon alternative funding sources in the medium term and reducing scheme costs wherever possible.
- 5.6 The DfT is currently undertaking a review of the strategic framework for the funding and prioritisation of local authority Major Schemes. Given the reduced role for the regional tier of government envisaged by the new administration, it is likely that the RFA process will be replaced with a sub-regional system of scheme prioritisation and funding. This may be linked to the role of the public-private Local Enterprise Partnerships (LEPs), including the new Kent, Greater Essex and East Sussex LEP, which are to replace Regional Development Agencies (RDAs) in promoting local economic development from April 2012.

Integrated Transport Block Funding

- 5.7 The Integrated Transport (IT) block is a capital funding allocation paid to KCC on an annual basis by the DfT. It is the mechanism by which the majority of measures in the LTP Implementation Plan have traditionally been funded. Nationally, IT Block funding will fall from £450 million in 2010/11 to £300 million in 2011/12. It will remain at this level until 2014/15, when it will return to £450 million.
- 5.2 The IT block supports investment in small scale (i.e. under £5 million) transport infrastructure projects, including crash remedial measures, traffic

management schemes, bus priority measures and improvements to walking and cycling routes. IT schemes have made a strong contribution to many of the County Council's corporate objectives by improving road safety, reducing congestion, enhancing access to services and enabling managed growth. A recent study commissioned by the DfT found that they represent high or very high value for money, with the majority of scheme types analysed recording Benefit-to-Cost Ratios (BCRs) of well over 2:1.¹ This reflects their relatively low cost relative to their economic, environmental and health benefits. Kent's IT schemes have been particularly successful at attracting match-funding from third parties, such as developers and bus operators, which has further increased their value for money to the tax payer.

- 5.3 Following the Comprehensive Spending Review, the Local Transport Settlement was announced on 13th December 2010. This provided each local authority with its local transport block capital allocations for Integrated Transport and Highways Capital Maintenance. The allocations for 2011-13 are final while the allocations for 2013-15 are indicative. Both are shown for Integrated Transport in Table 5.1 below. In response, the County Council set a budget for Integrated Transport in its Medium Term Financial Plan 2011-13 which is also shown in Table 5.1.
- 5.4 During the draft LTP3 consultation period, the Cabinet Member for Environment, Highways and Waste decided to continue with the successful Members Highway Fund during LTP3 and he was also keen that Crash Remedial Measures continue to be funded as a priority. In addition, the A2 Slip Road at Canterbury which has already commenced on site requires funding from the first two years of LTP3. Therefore, this expenditure is shown in detail in Table 5.1.

	2011-12 £'000	2012-13 £'000	2013-14 £'000	2014-15 £'000	2015-16 £'000
IT Allocation					
DfT Final Allocation	8,199	8,746			
DfT Indicative Allocation			8,746	12,299	
Estimated DfT Allocation					12,299
KCC Allocation*	5,848	5,222	5,024		
Estimated KCC Allocation				5,258	5,258
IT Investment Plan					
Members Highway Fund	2,200	2,200	2,200	2,200	2,200
Crash Remedial Measures	500	500	500	500	500
A2 Slip Road, Canterbury	670	56			
Integrated Transport Schemes < £1m	2,478	2,466	2,324	2,558	2,558

Table 5.1: Integrated Transport Block Funding Summary Table

*taken from KCC Medium Term Financial Plan 2011-13 page 149

5.5 As outlined in Chapter 4, KCC's strategy for integrated transport schemes is a prioritisation methodology which splits funding between the five LTP3 Themes (budget allocation) and then focuses the investment under each

Theme to those areas and locations where the challenges are most acute (spatial distribution). Table 5.2 shows the breakdown per year for each LTP3 Theme based on KCC's Investment Plan in Table 5.1.

	2011-12 £'000	2012-13 £'000	2013-14 £'000	2014-15 £'000	2015-16 £'000	Total* £'000
Integrated Transport Schemes <£1m	2,478	2,466	2,324	2,558	2,558	12,384
Growth without Gridlock @ 45%	1,114	1,110	1,046	1,150	1,150	5,570
A Safer and Healthier County @ 15%	372	370	349	384	384	1,859
Supporting Independence @ 15%	372	370	349	384	384	1,859
Tackling a Changing Climate @ 15%	372	370	349	384	384	1,859
Enjoying Life in Kent @ 10%	248	246	231	256	256	1,237

Table 5.2: Integrated Transport Schemes <£1m Indicative Funding Summary

5.6 One of the challenges with preparing an Implementation Plan of schemes for five years is the uncertainty over funding in later years, changing local needs and the low number of local transport schemes sufficiently developed and ready for assessment and prioritisation. Therefore, for the purposes of this LTP3, while the budget for each Theme per year is shown in Table 5.2, the distribution of funding to specific scheme types and areas within each Theme is only specified for the total five year period. This enables flexibility within individual years on the type of schemes actually implemented under each Theme and allows local decision making to respond to changing needs during the five year period. This is shown in Table 5.3 overleaf. Further details on the areas and schemes shown in Table 5.3 are set out in the LTP3 Implementation Plans in Chapters 8-12.

Highway Maintenance Block Funding

- 5.7 The Highway Maintenance (HM) block is a DfT capital funding allocation paid to KCC on an annual basis. It is allocated according to a needs-based formula taking into account factors such as road length, number of bridges and tunnels, and extent of rurality. HM block is used by local transport authorities to support structural local road maintenance, including resurfacing and maintenance of bridges and tunnels.
- 5.8 The Government has allocated £3 billion for local highway maintenance in England for the period 2011/12 to 2014/15. Annual spending will fall from £871 million in 2010/11 to £707 million in 2014/15. However, the DfT has subsequently announced that an additional £100 million will be made available in 2011/12 to support local authorities in repairing the damage caused by the severe winter weather in November and December 2010.

LTP3 Theme	Total £'000
Growth without Gridlock (Growth Areas and Growth Points)*	
Ashford	1,270
Thames Gateway Kent	2,710
Dover	1,010
Maidstone	580
	5,570
A Safer and Healthier County (Problem Sites)	
Road Safety Schemes	959
Safer Routes to School	650
Air Quality Management	250
	1,859
Supporting Independence (East Kent Coast)	
Quality Bus Partnerships	1,000
Access Improvements	859
	1,859
Tackling a Changing Climate (Urban Areas)	
Smarter Travel	180
Walking	300
Cycling	779
Buses	600
	1,859
Enjoying Life in Kent (Countywide)	
Cycle Routes	300
Public Realm and Accessibility	750
Lorry Route Maps and Signing	187
	1,237

Table 5.3: Indicative Allocation of Integrated Transport Schemes within LTP3 Themes

*Indicative allocation based on Annual Planned Housing Levels

5.9 The highway network is a highly visible asset and its effective maintenance is vital to the Kent economy. Consequently, the County Council took the decision during the LTP2 period to augment the Highway Maintenance block allocation with capital funding vired from the Integrated Transport block, as well as KCC's own capital budget. In 2010/11, for example, £5.35 million of Kent's £16.41 million IT block allocation was transferred to the HM block, contributing to a total highway maintenance budget of £40.5 million. This additional funding was used to support the high profile 'find and fix' campaign to repair the extensive damage to the County's roads caused by the severe winter weather of 2009/10. During the LTP2 period, KCC added over £30 million to Government allocations for highway maintenance.

5.10 Current spending pressures call for a continued emphasis on the maintenance of existing assets in the short term. However, a step-change is required in the way in which the annual maintenance programme is executed, including the adoption of asset management principles which move beyond short term, reactive works towards a more strategic, programmed approach which has the potential to deliver significantly higher value for money. These practices will be embedded through the County Council's Transport Asset Management Plan (see Chapter 13).

Revenue Funding

- 5.11 Whilst capital funding is used by local authorities to construct and maintain highway assets, revenue funding is used to cover continuous costs, such as concessionary fares and socially necessary bus services. KCC receives most of its revenue funding for transport through the wider Formula Grant paid to local authorities by the Department for Communities and Local Government (DCLG) and through council tax. The Formula Grant covers all areas of local authority spending and is not 'ring-fenced' to specific policy areas, providing authorities with the flexibility to distribute the grant according to local priorities.
- 5.12 Revenue funding, like capital, will come under significant pressure over the next five years. The Comprehensive Spending Review confirmed that DCLG's Formula Grant will be reduced by 28% over the period 2011/12 to 2014/15. The County Council must therefore seek to minimise the ongoing revenue liability of its activities during this period. This can be achieved through investment in assets with low maintenance requirements and strengthened partnerships with transport operators aimed at improving the commercial viability of services and hence reducing revenue subsidies. KCC will also continue to work closely with the County's district planning authorities to ensure that developers make a fair contribution to the cost of providing transport infrastructure and services to new developments.

Kent Thameside Strategic Transport Investment Package

- 5.13 The Kent Thameside Strategic Transport Investment Package (STIP) has been developed through a partnership between Kent County Council, Dartford and Gravesham Borough Councils, the DfT, the Homes and Communities Agency (HCA) and the Highways Agency. The STIP is a programme of 11 schemes, currently estimated at approximately £200 million, providing key transport improvements across Kent Thameside that would enable a significant level of new development and bring regeneration and employment opportunities to the area.
- 5.14 The STIP would include improvements to both the strategic and local road network encompassing highway, public transport and traffic management schemes. The programme would be funded through a combination of public sector grants and private sector contributions; the latter including a £40 million contribution from Land Securities relating to planned major development at Eastern Quarry. The public sector funding for the STIP was subject to the Government's Comprehensive Spending Review, which confirmed that £13 million of HCA funding which had been allocated to the programme up to the end of March 2011 had been safeguarded. However, the remaining £10 million funding commitment to the programme by the HCA

is subject to further review and is unlikely to be made available before 2014. Similarly, the DfT's £26 million funding commitment is unlikely to be made available before 2018.

- 5.15 An Initial Delivery Programme (IDP) has been agreed with the HCA that will utilise £13 million of the Agency's funding in conjunction with developer contributions to implement transport improvements focused on the existing town centres of Dartford and Gravesend. This is viewed as an initial stage of the STIP that will help to bring forward development in the town centres, providing regeneration and employment benefits. Whilst the IDP is being implemented, the public sector partners will continue to review the STIP in terms of the timing of its implementation in relation to development in Kent Thameside and future funding opportunities.
- 5.16 At the programme level, an economic appraisal has been carried out in the course of securing the funding commitment from the HCA. As individual schemes contained within the programme are developed, further detailed appraisal will be carried out. Governance arrangements for the programme will also enable the partners to regularly review its progress.

Regional Growth Fund

- 5.17 In June 2010, the Coalition Government announced the creation of a three year, £1.4bn Regional Growth Fund for England from 2011/12. The Fund will have two main objectives:
 - to encourage private sector enterprise by providing support for projects with significant potential for economic growth and which create sustainable private sector employment; and,
 - to support in particular those areas and communities that are currently dependent on the public sector make the transition to sustainable private sector led growth and prosperity.
- 5.18 Part of the Fund will be bid-based, providing local authorities and businesses with the opportunity to submit proposals for packages of schemes which will have a transformational impact on disadvantaged areas. It will be used by the Government as a means of consolidating many of the existing funding streams designed to support sub-national economic growth, enabling more effective coordination and prioritisation of funding.
- 5.19 In January 2011, KCC and Infratil, the owners of Manston Airport, with support from Thanet District Council, Network Rail and Southeastern, submitted a first-round bid to the Regional Growth Fund titled 'Access to East Kent'. The RGF bid is for a contribution to the capital cost of a new Thanet Parkway Station on the Ashford to Ramsgate line, along with pump prime funding for a proposed daily air service between Manston Airport and a major European hub (see Chapter 8). The Government has indicated that successful RGF bids will be provided with conditional offers of funding within 50 days of the first-round submission date, and that RGF funding must be spent within three years. The urgent need for this scheme has been exacerbated by Pfizer's recent announcement to withdraw from East Kent.
- 5.20 The County Council has a strong record of securing Government funding to support managed housing and employment growth and is committed to

working with its partners in the public and private sectors to develop and submit further RGF bids throughout the three year period of the Fund.

Local Sustainable Transport Fund

- 5.21 The Comprehensive Spending Review confirmed the creation of a new, bidbased, Local Sustainable Transport Fund (LSTF). The LSTF will complement the IT Block by funding packages of low cost, high value measures promoted by English local authorities that support economic growth and reduce carbon emissions, as well as improving air quality, enhancing safety and reducing congestion. The total value of the Fund is £560 million over the period 2011/12 to 2014/15, consisting of £350 million revenue and £210 million capital funding.
- 5.22 At the time of writing (March 2011), KCC, together with local stakeholders, is preparing a first-round bid for LSTF funding which focuses on the following key priorities:
 - providing sustainable access to jobs and education opportunities in order to drive economic growth in the County;
 - unlocking urban congestion to improve the flow of goods and services and attract investment; and
 - providing sustainable access to key transport nodes (e.g. High Speed rail stations and key commercial bus corridors).
- 5.23 The schemes contained within the bid will seek to complement existing projects being promoted by the County Council's private- and voluntary-sector partners, including the National Station Improvement Programme, involving Southeastern, and the Kent Community Rail Partnership, managed by Action for Communities in Rural Kent.
- 5.24 KCC's LSTF bid will be submitted in April 2011 and it is anticipated that the DfT will announce the successful authorities in June. The County Council has a strong track record of delivery in this area, including projects such as the KM Walk to School Initiative, the Ashford Station Travel Plan, Quality Bus Partnerships and Bike IT, and is therefore considered well placed to attract significant funding through the LSTF.

Community Transport Fund

5.25 The £10 million Community Transport Fund was launched by the DfT in March 2011. The funding complements the Local Sustainable Transport Fund (see above) and will be distributed to rural local transport authorities throughout England to stimulate the development of community transport schemes. KCC warmly welcomes the creation of the Fund, which will enable it to minimise the impact of the public spending reductions on rural bus services. The County Council has been allocated £409,439 and will work with bus operators, the voluntary sector and local communities to identify and implement an appropriate package of measures once full details of the Fund are made available.

Developer Contributions

- 5.26 Section 106 of the Town and Country Planning Act 1990 gives local planning authorities the power to enter into a legally binding agreement with a landowner in association with the granting of planning permission. This is referred to as a Section 106 Agreement. In Kent, these powers lie with the 12 district planning authorities. Section 106 Agreements are a means of delivering measures that are necessary to make a development acceptable in planning terms, such as the funding of additional places in local schools to support major new housing developments and securing the objectives of Air Quality Action Plans. They are increasingly used to support the provision of services and infrastructure, such as roads, health and recreational facilities, and affordable housing. Government guidelines state that measures agreed as part of a Section 106 Agreement must be:
 - relevant to planning;
 - directly related to the proposed development;
 - fairly and reasonably related in scale and kind to the proposed development; and
 - grounded in evidence based policy.
- 5.27 Kent's district planning authorities have been particularly successful at securing Section 106 Agreements which have improved the quality and sustainability of new housing and commercial developments. This reflects the County's generally excellent connectivity and quality of life attributes, which have made it highly attractive to developers. From a transport perspective, these contributions have included revenue subsidies for new and/or existing bus services, the construction of cycling and walking routes and improvements to local road capacity.
- 5.28 One of the most high profile examples in recent years was the launch of Fastrack Route A, connecting Dartford and Bluewater, in June 2007. The route is entirely funded by the developer of The Bridge; a major new mixed-use development to the north of Dartford. In order to minimise the traffic impacts of the development on the surrounding highway network, which includes a number of roads which are operating at capacity, along with several Air Quality Management Areas (AQMAs), the planning agreement between the developer and Dartford Borough Council required that:-
 - Fastrack be fully operational before any homes were occupied;
 - residents of The Bridge enjoy free use of the service; and,
 - information screens be provided in every home, displaying live arrival times.
- 5.2 In April 2010, a new planning charge the Community Infrastructure Levy (CIL) came into force. CIL is a tariff-based approach which will be charged per square metre of additional floorspace, providing developers with greater certainty as to what they will be expected to contribute. It will eventually replace the existing system of planning obligations, which often causes delay as a result of lengthy negotiations. The Levy will create a fairer system, with all but the smallest projects making a contribution towards the additional infrastructure that is needed as a result of their development. This contrasts

with the present situation, in which only 6% of all planning permissions make any contribution to the cost of supporting infrastructure.²

5.3 As major development resumes following the economic downturn, KCC will continue to work closely with the district planning authorities and transport operators to ensure that developers make reasonable and effective contributions to transport infrastructure and services. The County Council and district councils currently hold (at March 2011) approximately £5.4m from Section 106 agreements to be spent on transport measures associated with development over the life of LTP3 and it is expected that further contributions will become available during this time.

Alternative Funding Streams

Tax Increment Financing

- 5.4 One of the key difficulties faced by local planning and highway authorities is the ability to 'forward fund' community infrastructure in advance of housing development taking place. The provision of this infrastructure; including schools, roads and rail stations, often proves a catalyst for the regeneration of an area. However, in the absence of developer contributions and other sources of capital funding, local authorities often lack the resources to carry out these works.
- 5.5 Tax Increment Financing (TIF) is a funding method used for infrastructure investment in a number of countries, including the United States. TIF uses forecast future gains in taxation to finance infrastructure improvements. These improvements serve to increase the value of surrounding land and hence promote further inward investment. This in turn generates greater tax revenues, enabling public delivery authorities to recoup their initial investment. TIF has significant potential to provide a sustainable funding model to support Kent's growth aspirations. The County Council therefore welcomes the recent announcement that the Coalition Government will give local authorities the power to fund new infrastructure using TIF.

Foreign Lorry Road User Charge

- 5.6 Kent has suffered significant economic and environmental harm in recent years as a result of the high and growing volumes of lorry traffic travelling through the County via the Channel Tunnel and the Ports of Dover and Ramsgate. In 2007, some 4 million HGVs passed through Kent via these ports (an average of 11,000 per day) and although the recession has temporarily reduced lorry flows to 3.75 million, lorry traffic through Dover is expected to almost double over the next 30 years. The negative effects of these traffic flows are compounded when Operation Stack is in force.
- 5.7 KCC has lobbied successive governments for the introduction of a Foreign Lorry Road User Charge as part of a targeted package of measures aimed at providing a long term solution to these pressing issues. The basis for this charge is quite simple. Currently, some 80% of lorries crossing the Channel are foreign registered, many of which enter the UK with full fuel tanks, having taken advantage of the lower rates of fuel duty on the Continent. They therefore make no contribution to the costs they incur in this country through damage to roads, the release of emissions and the exacerbation of

congestion problems. This also places them at an unfair advantage over UK hauliers, who are subject to road pricing in most EU Member States.

5.8 The County Council is therefore delighted at the Coalition Government's commitment to introduce a scheme of Foreign Lorry Road User Charging by 2014. The Government has listened to the evidence presented by KCC and will implement a vignette imposing a standard charge on all foreign lorries entering the UK. This will provide an important new revenue stream of up to £40 million a year with which to part-fund a Lower Thames Crossing and a lorry park adjacent to the M20 to accommodate Operation Stack traffic (see Chapter 8), as well as levelling the playing field for UK hauliers vis-à-vis their foreign counterparts.

Dartford Crossing and Lower Thames Crossing

5.9 The total capital cost of the proposed Lower Thames Crossing has been estimated as being in the region of £1 billion, with the necessary link roads into the motorway network north and south of the Thames costing up to a further £2 billion (see Chapter 8). Over a 20 year period, toll revenues from the new crossing, together with those from the existing Dartford Crossing, could support around half of these costs, and Foreign Lorry Road User Charging and a Community Infrastructure Levy in Thames Gateway Kent could provide the remaining funding. Given that the capital cost of the Queen Elizabeth II Bridge has been paid for, there is a strong case for using the net operating surplus to support infrastructure investment that encourages economic development in the area that feels the impact of the toll most acutely.

Banning of HGV 'belly tanks'

5.10 KCC and the Freight Transport Association (FTA) are deeply concerned by the practice followed by many foreign hauliers of carrying large secondary 'belly tanks' of up to 1,000 litres of diesel. These give drivers the capacity to make a return journey from Luxembourg to Aberdeen without the need to fill up their fuel tanks, and thus further enhance their ability to avoid paying UK fuel duty. It has been calculated that the UK Treasury loses approximately £475 million a year in potential tax revenue as a result. This practice also presents a significant health and safety hazard on cross-Channel rail and ferry journeys and we will work with the FTA and Government to outlaw it during the period of LTP3. If this is achieved, up to £9.5 billion of additional revenue could be captured over a 20 year period, which could have a transformational impact on transport infrastructure investment in Kent, including the delivery of the proposed Operation Stack lorry park between Junctions 10 and 11 of the M20 and the upgrading of the A2 corridor in East Kent (see Chapter 8).

Port Landing Charge (cars and coaches)

5.11 The practice of levying a small development charge on international passengers is already well established at a number of UK airports. The charge is used to fund improvements to the airport environment, including parking areas and access roads. The County Council believes that this practice should also be adopted by the UK's major ports, including Dover, Ramsgate and the Channel Tunnel, in order that international car and coach passengers make a reasonable contribution to the economic and environmental burdens they place on Kent's residents, businesses and infrastructure. The charge would not be levied on HGVs, given that hauliers would be asked to make a separate contribution through the proposed Foreign Lorry Road User Charge (see above). A charge of just £5 for each car and coach entering the UK would generate some £12.5 million a year for investment in local transport schemes.

¹ See: http://www.its.leeds.ac.uk/aoss/

² DCLG (2010), The Community Infrastructure Levy: an overview

Chapter 6 - The Implementation Plan for the Member Highway Fund

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Introduction

- 6.1 The Member Highway Fund was set up during LTP2 to allow local County Councillors the opportunity to resolve local transport problems. It passes power to local members by allocating a proportion of the IT block to each County Councillor for local transport improvements that have local support and reflect local circumstances. This strongly aligns with the Coalition Government's localism agenda, as laid out in the Localism Bill which was introduced in the House of Commons in December 2010 and is based on the principle of community empowerment by giving local councils, neighbourhoods and communities greater control over local decisions.
- 6.2 The Member Highway Fund was piloted during LTP2 between June 2009 and March 2011 and due to its success, will be continued during LTP3.

Funding allocation

6.3 Each Member of the Council is allocated £25,000 per year. With 84 Members, plus the £100,000 required to administer the programme, this equates to £2.2 million per annum. Members have the option to pool funds in order to pay for schemes costing more than £25,000. If costs overrun, this will be rolled forward to be the first call on the following year's allocation. There may be opportunities for money from other sources to extend the scope of works (such as parish councils or the Members Community Grant) which may require working to a specific deadline or funding can also be used to support the inclusion of a scheme in the IT Programme.

Procedure

6.4 Each Member of the Council identifies their local transport problems and asks Kent Highway Services (KHS) to investigate and suggest a range of solutions. An investigation fee will be charged after the first four requests. Members then decide which of the solutions they want to put forward for funding up to a total cost of £25,000 and apply to the Cabinet Member for funding from the Members Highway Fund. Each proposal has to demonstrate how it benefits the community as a whole, rather than benefitting an individual and spending is approved in line with the KCC Constitution and is subject to the usual rules of scrutiny. Every Member is also personally responsible for declaring any prejudicial or personal interest that they may have in the scheme they are putting forward.

- 6.5 Priority will be given to schemes that support one or more of these corporate strategies:
 - Local Transport Plan 3 priorities Growth without Gridlock, A Safer Healthier County, Supporting Independence, Tackling a Changing Climate, and Enjoying Life in Kent;
 - Growth without Gridlock, the 20 year Transport Delivery Plan for Kent;
 - Bold Steps for Kent with its three objectives of helping the Kent economy to grow, putting the citizen in control and tackling disadvantage;
 - 21st Century Kent A Blueprint for the County's Future;
 - Unlocking Kent's Potential KCC's framework for regeneration; and
 - Vision for Kent and the Public Service Agreement.

Schemes

- 6.6 Schemes can be funded from revenue or capital expenditure. Revenue funded schemes can include additional routine work such as grass cutting, road safety education or staff time. Capital funded schemes cover small highway schemes (including design costs) such as resurfacing, traffic management or street lighting.
- 6.7 Schemes will be decided on an annual basis and examples of measures implemented to date, which are indicative of the schemes that would be implemented during LTP3 are shown below, grouped under the LTP3 Themes they support:

LTP3 Theme	Scheme Type
Growth without Gridlock	 One-way systems Parking restrictions HGV weight restrictions including installation of illuminated signs CCTV cameras for the Traffic Management Centre (TMC) Contribution to a VISUM multi-modal transport model Provision of salt bins with refills Small sections of carriageway resurfacing
A Safer and Healthier County	 New zebra crossings High friction surfacing on approaches to zebra crossings Upgrading zebra crossings to traffic signal controlled crossings Interactive speed signs Speed indication devices (SIDs)

Table 1.6: Indicative MHF Schemes

	Speed limit changes including 20mph zoning
	Village 'gateway' signage to reduce traffic speeds
	New signage and carriageway markings to reduce traffic speeds
	Kerb build outs and reflective bollards for traffic calming
	Hedge relocation to improve sight lines
	 Pedestrian safety measures including pedestrian refuges and pedestrian guard railing
	 Fencing around a play park next to the highway
	Road safety presentations in schools
	School walking bus
Supporting Independence	 Dropped kerbs to improve access for wheelchair users and children in pushchairs and prams
	Small sections of new footway, footway widening and repair
	 Installation of bollards to prevent parking on the footway which restricts pedestrian access
	Contribution to a new riverside path surface
	Taxi service to replace the Post Bus
Tackling a Changing	New bus shelters
Climate	 Extended bus services – Sundays and Bank Holidays
	Cycle parking
	School minibus
	School Travel Plan schemes
	Tree planting
Enjoying Life in Kent	Streetscape and pedestrian improvements
	New lighting columns and removal of old parish lighting columns
	Street furniture
	Fingerpost signs
	Parish map
	Information leaflets for walks
	Tourist signs

Chapter 7 - The Implementation Plan for Crash Remedial Measures

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Introduction

7.1 Saving lives and preventing injuries on Kent's highways is a high priority for the County Council. While the provisional crash data for 2010 is at an all-time low, each of these casualties is a tragedy for the victims and their families and more can and will be done to reduce the number of casualties further. KCC's previous success has been achieved in part through introducing physical measures on the highway as part of a programme of Crash Remedial Measures (CRMs), otherwise known as Local Safety Schemes. This programme of CRMs will continue over the next five years, with measures targeted at those locations where the maximum reduction can be achieved for the lowest cost.

Types of Crash Remedial Measures

7.2 The minimum requirement for a scheme to qualify as a "CRM" is three similar crashes in three years. There are three types of CRM. A site specific CRM is known as a 'cluster site' CRM while those along a length of road are known as a route length CRM. The third type is mass action CRM where a specific remedial measure is applied to a number of locations in one area.

Crash Cluster Sites

- 7.3 Crash Cluster Sites are locations which have a number of crashes within a small area. Kent Highway Services (KHS) carries out an annual cluster site review, with a 'cluster' defined as six or more crashes within a 50 metre radius on roads with 40mph or lower speed limits; or four or more crashes within a 50m radius on roads with 50mph to 70mph speed limits. Cluster sites that exceed these levels of crashes are investigated for potential CRMs and monitored annually.
- 7.4 In 2010 there were 192 crash cluster sites being monitored across the County. The 20 sites with the highest number of crashes in the period 2007-2010 are listed in Table 7.1 overleaf.
- 7.5 All crash cluster sites are monitored annually for changes to the crash patterns and for evaluating any CRMs that may have been implemented.

Road	Location	Crashes 2007-10
A254	Westwood Cross Roundabout, Margate Road Junction, Ramsgate	32
A229	Running Horse Roundabout, Maidstone	29
B2260	High Street / Vale Road, Tonbridge	18
A20	A20 Seven Mile Lane / A20, Wrotham Heath	17
A229	Mill Street/Palace Avenue, Maidstone	16
A229	Royal Engineers Road Roundabout, Maidstone	15
A299	A299 New Thanet Way / A28 Canterbury Road, St Nicholas at Wade	15
A20	A20 Broadway (North of St Peters St), Maidstone	14
A226	Old Road East / Brown Road, Gravesend	14
A20	A20 Maidstone Road / Simone Weil Avenue, Ashford	14
A20	A20 Ashford Road / Kings Street, Maidstone	12
A2050	A257 St George's Place jnc. west of Lower Chantry Lane, Canterbury	12
C4	Parrock Street / Lord Street, Gravesend	11
A28	Marine Terrace / Marine Drive, Margate	11
A28	A28 Rhodaus Town, jw Watling Street, Canterbury	11
A226	A226 Milton Road, jw Harrmer Street, Gravesend	11
A26	A26 Maidstone Road jw Tonbridge Road	11
A226	B255 St Clements Way / London Road, Greenhithe	11
A28	Broad Street jw Lady Wootons Green, Canterbury	11
A257	Roundabout linking A256 with A257, Sandwich	11

Table 7.1: Crashes at 20 crash cluster sites 2007 to 2010

Crash Route Lengths

- 7.6 Crash Route Lengths refer to a specified length of road over which the crash rate per million vehicle kilometres (vkm) has been calculated. Where the number of people who are killed or seriously injured (KSI) per million vkm is higher than the expected rate for that type of road, this warrants investigation as a potential CRM.
- 7.7 Crash rate per million vehicle kilometre (vkm) is the 3 year injury crash total divided by the million vehicle kilometres travelled in 3 years on that stretch of road.

Crash rate =

3 year injury crash total x 1,000,000

3 x 365 x average annual daily (24hr) traffic flow (AADT) x length of road (km)

7.8 The current short list of crash route lengths from recent studies of A and B roads is shown below. This is based on the annual average daily traffic flow and the three year rolling average crashes from 2004 to 2008. The countywide average crash rate is 55 crashes per million vkm. Route lengths

with more than two KSI casualties throughout the entire route length were put forward for further investigation and inclusion in the CRM programme.

Table 7.2:	Crash route	lengths
------------	-------------	---------

Road / Site Name	District
A252 Canterbury Road – Stocker's Head	Ashford
A274 Biddenden Road, Headcorn	Ashford
A28 Ashford Road, Durrent Green	Ashford
A28 Thanington Road, Canterbury	Canterbury
Bramble Lane, Wye	Canterbury/ Ashford
A226 London Road, Knockhall	Dartford
A20 Gorse Hill nr Scratcher's Lane	Sevenoaks
B2026 Hartfield Road nr The Paddocks	Sevenoaks
B2042 Four Elms Road (North of 30 Zone)	Sevenoaks
B260 Longfield Road	Sevenoaks
B2068 Stone Street, Stelling Minnis	Shepway
B2071 Littlestone Road, New Romney	Shepway
A251 Faversham Road, Challock	Swale
A254 Ramsgate Road, Westwood	Thanet
A26 Maidstone Road, Hadlow	Tonbridge & Malling

7.9 All crash route lengths are monitored annually for changes to the crash rates and for evaluating any CRMs that may have been implemented.

Crash Mass Action

7.10 Crash Mass Action is where the same remedial treatment is applied to a number of locations in a wider area. The crash saving is obtained from the total number of crashes for all the sites that are to be similarly treated.

Identifying Solutions

- 7.11 Crash patterns at locations are identified using individual stick diagrams which show the main features of each crash (date, time, day of week, light or dark conditions, road surface conditions, severity and a pictorial diagram of how the crash happened). The cause of the crash is determined and three similar types of crash, such as loss of control, right turn movement or a shunt, indicates that there are potential treatable factors that could be addressed through a CRM.
- 7.12 The results of the annual cluster site review and route study analysis are then used to select the sites, route lengths or mass action locations where CRMs could be implemented. If a simple solution is identified such as refreshing carriageway lines and markings, this is done through routine maintenance. A more complex solution will need to go through prioritisation.

CRM Prioritisation

- 7.13 The system used to assess the benefit of a particular CRM is based on two concepts. The first is that a particular highway layout will have an expected number of crashes, so changing the current road layout to a new layout with a lower expected crash rate should result in a casualty saving. The second concept is that a monetary value can be applied to different severities of injury based on the cost to society, which allows a "**rate of return**" to be calculated for each CRM proposed.
- 7.14 Some examples of expected crash rates are given below:
 - traffic signal controlled junctions between 4 and 6 crashes in a three year period
 - roundabout 4 crashes in a three year period
 - three armed mini roundabout 3 crashes in a three year period
 - pelican and zebra crossings under 3 crashes in a three year period
- 7.15 It is generally expected that 26% to 30% of the total crashes at any given site will occur when there is a wet road surface. If in excess of 40%, this could indicate a drainage problem or surface defect. Generally, 30% of crashes at any given site will occur during the hours of darkness. If this is in excess of 45% then the solution could be improved reflectivity of signs, cats-eyes or improved street lighting.
- 7.16 The cost of an injury is the combination of the direct costs like medical treatment costs, lost output due to absence from work, associated police and insurer's costs and damage to property; and indirect cost which is the "human" cost that represents the pain, grief and suffering to the casualty, relatives and friends and is worked out on a "willingness to pay" basis. These costs are shown below for different types of injury, taken from Department for Transport's Transport Appraisal Guidance (TAG) Unit 3.4.1.

Injury Severity	Lost Output (£)	Human Cost (£)	Medical and Ambulance (£)	TOTAL (£)*
Fatal	556,660	1,080,760	970	1,638,390
Serious	21,830	150,180	13,230	185,220
Slight	2,310	10,990	980	14,280
Average, all casualties	11,200	39,300	2,350	52,850

Table 7.3: Average value of prevention per casualty by severity and e	element
of cost (Table 1 from TAG Unit 3.4.1)	

*all prices index 2007

- 7.17 The CRM Priority Rating is based on the first year rate of return of a scheme, expressed as the yearly crash saving (£) divided by the scheme cost and is written as a percentage. Based on an average of 50 cluster site CRM schemes, the average crash saving is 30% (pro rata for casualty saving based on an approximation of 1.5 casualties per crash).
- 7.18 The effectiveness of a CRM scheme may range from eliminating all crashes by closing the road to merely reducing the severity of the crashes from injury to damage only. For example, on a junction where turning movements cannot

be altered to remove the potential conflicts, by adding a High Friction Surface this may prevent actual physical contact with vehicles and therefore reduce the risk of injury.

CRM Programme

7.19 The CRM programme will be reassessed every year, based on the annual crash cluster site reviews and route studies to allocate funding to those CRMs with the highest CRM Priority Rating. Unfunded schemes will be re-submitted the following year. The provisional CRM programme for 2011-12 is shown below :

Dist	Location	Crash Saving per annum	Scheme Cost (£)	Weighted Priority
тw	A26 London Road/A267 Frant Road, TW	0.3	1,000	2251
тw	Upper Grosvenor Rd/Silverdale Rd/Dynevor Rd, TW	0.3	4,500	504
SEV	A224 Polhill Bridge over M25	0.3	5,000	451
MAI	A229 Sheals Crescent, Maidstone	0.6	17,000	269
тw	Golford Rd/Chapel Lane, Cranbrook	0.6	17,000	269
THA	Ethelbert Terrace/Dalby Square, Margate	0.66	20,000	249
SEV	Gracious Lane/Weald Road, Sevenoaks	0.3	10,000	225
ΤW	A229 Angley Rd/Waterloo Rd, Cranbrook	0.3	11,000	208
тw	A25 London Rd/A264 Mount Ephraim/Mount Ephraim Rd, TW	0.6	27,000	171
ΤW	B2244 Hastings Road/Conghurst Lane, Hawkhurst	0.3	14,000	165
SEV	A25 Bradbourne Vale Rd/A225 Otford Rd Sevenoaks	0.3	17,000	136
THA	Dane Road/Wilderness Hill, Margate	0.6	35,000	136
SEV	A233 Westerham Hill/Pilgrims Way, Westerham	0.3	17,000	133
THA	Dane Road/Wilderness Hill, Margate	1.0	100,000	85
ТМ	A20/Seven Mile Lane, Addington	2.0	187,000	81
Total			482,500	

Table 7.4: Provisional CRM Programme for 2011-12

Chapter 8 – The Implementation Plan for Growth without Gridlock

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The Plan

- 8.1 Notwithstanding the present economic climate, substantial housing and employment growth is planned for Kent. The County contains two of the country's four Growth Areas at Thames Gateway Kent and Ashford and two Growth Points at Dover and Maidstone. The South East Plan included a target to provide 138,420 new homes in Kent by 2026¹ and the County Council estimates that, if delivered, this growth could result in an extra 250,000 car journeys on Kent's roads every day. The challenge is therefore to support these new jobs and houses without causing the transport network to grind to a halt.
- 8.2 The strategy for achieving this is contained in Unlocking Kent's Potential Kent County Council's Framework for Regeneration, which seeks to define a long-term spatial vision for the County.² This document will in turn inform the development of a series of further strategies and implementation plans. The County Council's 20 year transport delivery plan titled *Growth without Gridlock*, which supports the Regeneration Framework, identifies the necessary transport infrastructure needed to accommodate the level of economic growth and regeneration planned for Kent.³
- 8.3 KCC will also continue to manage the existing local road network to facilitate the movement of people and goods, which supports the Kent and national economies. As the local transport authority for Kent, the County Council

carries out this network management duty under the Traffic Management Act 2004 and was one of the first authorities to prepare a Network Management Plan. This has been updated for LTP3 and continues the successes achieved under the previous Plan, including the Kent Permit Scheme, the Maidstone Traffic Management Centre and the Kent Traffic and Travel website.

Ashford

8.4 Ashford is located in the south of Kent, and is the largest borough in the County. The population of Ashford town has more than trebled in the last 40 years to around 70,000 residents, reflecting its excellent multi-modal transport links. It is situated on the M20 between London and Dover, as well as the High Speed 1 (HS1) international rail link between London St



Pancras and the Continent. The commencement of Southeastern High Speed services in 2009 reduced journey times between Ashford and London from 84 minutes to 37 minutes, which has made the area considerably more attractive to commuters and businesses. Ashford also enjoys direct local rail services to Canterbury, Dover, Folkestone, Hastings, Maidstone, Thanet and Tonbridge.

Spatial Planning

- 8.5 In 2003, Ashford was designated as one of four South East Growth Areas in the Government's Sustainable Communities Plan.⁴ A multi-million pound investment programme is currently underway which will effectively double the size of the town. The Local Development Framework (LDF) Core Strategy was adopted by Ashford Borough Council in July 2008.⁵ The main strategic objective of the LDF is to facilitate this large scale housing and business development, which will see the town become the focus of employment growth in the Ashford and East Kent sub-region. The key proposals include:-
 - new development concentrated to the south of Ashford, running in an arc from the M20 in the east to the A28 in the west. The main development sites in this area will be Waterbrook, Cheesemans Green and Chilmington;
 - further large developments at Repton Park and Hunter Avenue and future brownfield sites at Newtown and Victoria Way;
 - an emphasis on sustainability, mixed-use and high quality design in all new developments;
 - the development of a strong commercial market to support the extensive housing growth, taking advantage of Ashford's strong accessibility advantages. A locally available, skilled workforce is a key element of this strategy;
 - ongoing regeneration projects aimed at integrating the town centre with the neighbouring Station Quarter, Elwick Place and Commercial Quarter districts.

Transport Planning and Strategy

- 8.6 Following the release of 'Ashford's Future: The Overarching Report'⁶ in December 2002, which identified that significant growth could be accommodated in and around Ashford, a number of studies have been undertaken by KCC, Ashford Borough Council and the Ashford's Future regeneration partnership to capture the transport planning implications of the town's expansion. These include the Ashford Highways and Transport Study (AHTS)⁷ and the Ashford Transport Strategy,⁸ which were published in 2006. As part of the AHTS, which supports the delivery of the LDF Core Strategy, a transport model was commissioned to assess the impact of a number of development proposals. The model identified that highway trips could increase by over 50% by 2031 over the 2003 base year, with several areas of the road network requiring increased capacity.
- 8.7 In response to the AHTS, a number of projects have been initiated to provide the necessary capacity enhancements to the town's highway and public transport networks. Given their scale and strategic significance, the majority of these schemes are funded directly by Central Government through mechanisms such as the Regional Infrastructure Fund, with local contributions from the County Council and developers.



Integrated Transport Programme

- 8.8 In order to complement these major projects, KCC's five year Integrated Transport Programme will prioritise schemes which help to unlock the major development sites identified in the LDF, as well as those which improve the operation of the highway network and promote sustainable transport.
- 8.9 The County Council's successful Urban Traffic Management and Control (UTMC) system will be expanded to cover the Ashford area, including the use of Automatic Number Plate Recognition (ANPR) technology to measure network performance. This will enable KCC to make targeted interventions to reduce congestion as the town expands, including the alteration of timings at signal controlled junctions and the use of Variable Message Signs (VMS) to provide road users with real-time information about incidents. The use of this technology in Maidstone has reduced journey times by over 10% to date. The Integrated Transport Programme will also focus on schemes which improve local bus services as a prelude to the successful implementation of the Smartlink bus service after 2015 (see Table 8.3). These will include bus priority measures in the town centre and improved access and information.

Funding Source	Scheme Title and Description	Est. Cost £'000s			
Major Transport Schemes					
Developer Cont.	 M20 Junction 10A New junction on M20 to provide the necessary highway capacity to serve and support the new development sites to the south and east of Ashford. The new M20 Junction 10a is considered in the National Roads programme and the outcome from the DfT announcement is that the scheme has been deferred until at least post 2015. The DfT stated that work should continue on the design and the 'value for money case' to ensure that 'the design is the best possible and to see if there are better ways to sequence the work'. 	76,000			
Developer Cont.	Ashford International Station Improvements New station forecourt and public space to complement the recently completed works to the ticket hall. The scheme will include a revitalised bus and taxi interchange, extensive cycle parking, the provision of additional seating and landscaping. It is planned to let a contract for the work by the end of March 2011 and be complete by autumn 2011.	2,600			
Major Scheme Bid (LTP)	Smartlink Bus Rapid Transit (BRT) scheme which will provide fast, frequent, high quality bus services for Ashford's residents and commuters. The service will benefit from dedicated bus priority measures and will link the town centre to the new development and park and ride sites, as well as existing communities. The Department for Transport has confirmed that this major scheme will not be considered for funding until 2015 at the earliest.	tbd			
LIP forward fund Developer/ Tariff	A28 Chart Road Phases 1-3 Proposed dualling of the existing road	15,000			

Table 8.1: Ashford Major Transport Proposals

Lobbying

8.10 KCC will continue to lobby the Department for Transport (DfT), Network Rail and the Train Operating Companies to make further improvements to rail services from Ashford. A key aspiration is the introduction of direct services between Ashford and Gatwick Airport. Kent currently lacks a direct link to Gatwick following the cessation of services from Tunbridge Wells and Tonbridge via Redhill in 2008. However the recent sale of the Airport by BAA has enabled the County Council to reopen discussions with Southern, the operator of the Tonbridge to Redhill route, and the Airport's new owner, about the possible reinstatement of the service and its extension to Ashford. The full support of the DfT and Network Rail would be essential to its successful implementation.

- 8.11 The present Southern franchise agreement expires in 2015. A new service would therefore need to be demonstrated as viable and economical for it to be included in the train specification for the post-2015 franchise. The allocation of rolling stock would also be a key consideration, as it would involve a sacrifice of equivalent capacity elsewhere on the network. Funding for the service could potentially be derived from four sources:-
 - Gatwick Airport Ltd's public transport budget;
 - KCC, which could provide support as a key stakeholder;
 - the South Central franchise holder, insofar as the new service, if included in its bid for the post-2015 franchise, would be subject to franchisee support from the DfT;
 - Section 106 developer contributions from planning applications for new airport related employment in the vicinity of Gatwick Airport.
- 8.12 KCC is committed to securing the provision of this vital rail connection, which would boost the growth aspirations of both Ashford and the Gatwick/Crawley area of West Sussex. It would significantly improve Ashford's ability to attract major employers to the town and would facilitate interchange between domestic air and international rail services.

Thames Gateway Kent

8.13 Thames Gateway Kent incorporates those parts of the districts of Dartford and Gravesham which lie to the north of the A2, (Kent Thameside) along with the western part of Swale (including the Isle of Sheppey). The main urban areas are Dartford, Gravesend, Northfleet, Sittingbourne and Sheerness, with

smaller villages in the rural hinterland. The area enjoys generally good road and rail links, being located on the M2/A2 corridor and having benefitted from the commencement of Southeastern High Speed services to London in December 2009. North-South links are less well developed however. which results in congestion on the main inter-urban routes to Maidstone and Tonbridge/Tunbridge Wells.



8.14 The economy of Thames Gateway Kent has undergone a structural shift over the past 20 years, reflecting the decline of the traditional local industries of manufacturing, engineering, quarrying and power generation. Although this has been partially offset by growth in employment in construction and finance, there remain significant pockets of unemployment and disadvantage in each of the sub-region's constituent districts. Thames Gateway Kent nonetheless exhibits great potential for growth and regeneration given its proximity to London and the wide availability of brownfield development sites.

Spatial Planning

- 8.15 The Thames Gateway; incorporating Thames Gateway Kent, Medway, South Essex and parts of East London, was designated a Growth Area in 2003. The South East Plan set a target of 52,340 new homes and 58,000 jobs for Thames Gateway Kent and Medway over the period 2006-2026, which will require sustained investment in new infrastructure. In Kent Thameside, the new housing and employment will be focussed around Ebbsfleet International Station, with sustainable communities planned for the Ebbsfleet Valley, including Eastern Quarry.
- 8.16 New housing and employment in Swale will be focused around Sittingbourne and Sheppey. Swale Borough Council is proposing the development of between 13,500 and 18,500 new homes up to 2031. The Port of Sheerness has plans for major expansion which also incorporate new housing. The Port is the largest employer in Sheerness and the scheme offers significant benefits for the town, which currently has the highest level of unemployment in the borough. Improved highway and rail access will be provided as part of the development which will have wider benefits for Sheppey.
- 8.17 As in Ashford, the need to conserve and enhance the natural environment has been fully considered in the spatial strategies for Thames Gateway Kent. The Green Grid project has been developed during the LTP2 period, which brings together local authorities, developers and environmental stakeholders to deliver a functional and attractive open space network throughout the sub-region. The project complements the Greening the Gateway Strategy⁹, supported by KCC and Medway Council, which provides the strategic framework for the improvement of green infrastructure in urban areas and the restoration of the quality and accessibility of the adjacent natural environment.

Thames Gateway Kent: progress to date

- 8.18 Although the recent economic downturn has slowed the pace of development in Thames Gateway Kent, significant investment in transport infrastructure has already been made in the sub-region by KCC and its regeneration partners. The most high profile example is the successful Fastrack BRT scheme in Dartford and Gravesham, which has been funded through an innovative combination of Government Major Scheme funding and developer contributions. Two Fastrack routes are currently in operation; Route A, linking Dartford and Bluewater, and Route B between Dartford and Gravesend via Ebbsfleet International Station. Further phases of Fastrack are proposed, which will continue to provide cost effective and sustainable links between new developments, the town centres of Dartford and Gravesend, employment sites and transport interchanges. Additionally, the Highways Agency has recently completed capacity improvements to the A2 at its junction with the M25, and further east between Cobham and Pepper Hill to accommodate the projected levels of demand resulting from population and employment growth in Thames Gateway Kent.
- 8.19 In Swale, the new Sheppey Crossing has improved journey times to and from the Island and will shortly be complemented by the Rushenden Relief Road, which will provide a catalyst for the wider regeneration of Queenborough and Rushenden. The relief road will serve a major development of up to 2,000 homes on a waterfront brownfield site, as well as the new Neats Corner

Business Park, which has recently welcomed its first employers. The second phase of the Sittingbourne Northern Relief Road is currently under construction to provide direct access from the Eurolink Business Park to the A249. This scheme will greatly reduce journey times for freight traffic and reduce congestion within Sittingbourne town centre. It will also improve access to adjacent business parks and enable their expansion.

Dartford and Gravesham: Transport Planning and Strategy

- A draft Kent Thameside Transport Strategy was produced by KCC, in 8.20 consultation with Dartford and Gravesham Borough Councils, in 2008.¹⁰ The Strategy incorporates the key findings of the Kent Thameside multi-modal transport model, which was commissioned to assess the impact of the major development proposed for the area over the next two decades. The model showed that, even when a number of committed and funded transport schemes are taken into account, and despite generally good public transport provision, the level of development planned for Dartford and Gravesham would significantly affect the operation of the highway network. A number of strategic locations were identified where infrastructure improvements were needed to enable the planned level of development to be achieved and to mitigate its impact. These formed the basis of the Strategic Transport Investment Package (STIP - see Table 8.2), which will primarily be funded through grants from the Department for Transport, the Homes and Communities Agency and developers (see Chapter 5). The Kent Thameside transport model suggests that if all of the STIP schemes could be implemented, they would help to reduce congestion at over-capacity junctions by approximately 21% in the evening peak by 2025 and reduce journey times by 3% or more. The STIP will be regularly reviewed as development in Kent Thameside proceeds to ensure that the most appropriate interventions are implemented.
- 8.21 Significant growth in public transport patronage is predicted by the Kent Thameside multi-modal transport model, with rail and bus use expected to account for some 27% of journeys to work by 2025, compared to 18% in 2008. This modal shift will be the product of the continued expansion of the Fastrack network and improvement to local bus routes, high speed rail services from Ebbsfleet and Gravesend and increased highway network costs relative to public transport fares.

Dartford and Gravesham: Integrated Transport Programme

8.22 As in Ashford, KCC's five year Integrated Transport Programme will make a full contribution to the delivery of Dartford and Gravesham's growth aspirations. The County Council's Urban Traffic Management and Control (UTMC) system will be expanded to cover Dartford and Gravesend town centres. This will enable KCC to maximise the efficiency of the local highway network as traffic levels increase in line with development. It will also support measures implemented by Dartford and Gravesham Borough Councils to reduce traffic pollution in designated Air Quality Management Areas (AQMAs). There are four AQMAs in Dartford and seven in Gravesham. The introduction of UTMC tools will help to create smoother traffic flows, thereby reducing pollution levels. Targeted bus priority measures will also be introduced to improve journey time reliability for Fastrack passengers and further enhance the attractiveness of the service vis-à-vis the private car.

These will initially be focused around Junction 1B of the M25, where Fastrack is frequently delayed by peak-time traffic congestion.

8.23 KCC will investigate the feasibility of a coach-based Park and Ride site for London commuters on the A2 to the south of Gravesend and the development of a dedicated pedestrian link between Northfleet and Ebbsfleet stations to improve interchange between local and international rail services. The County Council will also contribute to the upgrading of the Kent Thameside transport model to inform future scheme development.

Funding Source	Scheme Title and Description	Est. Cost £'000s
STIP	A2 Bean Junction Improvements Improve access between A2 and Eastern Quarry and Bluewater	
STIP	A2 Demand Management Variable speed limits, access management, Variable Messaging Signs, vehicle priority lanes etc	30,700
STIP	A2 Ebbsfleet Junction Improvements Improve access between A2 and Ebbsfleet, Eastern Quarry etc	29,800
STIP	A226 Thames Way Dualling To improve access to Ebbsfleet	12,600
STIP	Rathmore Road Link, Gravesend New section of one-way system to support new public transport interchange north of Gravesend's railway station	9,300
STIP	Fastrack: Northfleet to Garrick Street, Gravesend Provision of dedicated Fastrack route from new development area	12,600
STIP	A226 London Rd/B255 St Clements Way Junction Improvements Junction capacity improvement	7,500
STIP	Dartford Town Centre Improvements Revise traffic circulation on ring road and improve bus access, to support development proposals	10,100
STIP	Urban Traffic Management & Control (UTMC) Introduction of traffic signal control system with traffic flow monitoring using CCTV, additional signalised junctions, Variable Messaging Systems, real time information	7,100
STIP	A206 Bob Dunn Way junction Improvement Convert Marsh St roundabout to signalised junction	3,000

Table 8.2: Dartford and Gravesham Major Transport Proposals

STIP	B262 Hall Rd junction improvement	3,000
	Junction capacity improvement and traffic calming on Springhead Rd	

Dartford and Gravesham: Lobbying

8.24 KCC fully supports the London Crossrail scheme, which offers the longer term prospect of direct rail links between North Kent and the Docklands, central London and Heathrow Airport. Whilst the initial Crossrail route, which is due for completion in 2017, will extend only as far as Abbey Wood, a further extension to Gravesend has been safeguarded for future development.

Swale: Transport Planning and Strategy

- 8.25 The Swale Transport Strategy, published in 2006, aims to deliver an integrated transport network capable of supporting a growing population and increased economic opportunity.¹¹ This vision is reinforced by the Swale Borough Local Plan, which seeks to ensure that transport provision is better linked to developments, both through location and early implementation.¹² As part of the process of preparing the Swale Local Development Framework, a multi-modal transport model has been commissioned. The model will focus on the western part of the borough where the majority of new development is envisaged. The LDF options which are to be tested by the model include:
 - the redevelopment of Sittingbourne town centre;
 - the expansion and diversification of Sheerness Port, including residential development;
 - the expansion of Kent Science Park to the south of Sittingbourne, incorporating new housing and employment
- 8.26 This modelling work will enable Swale Borough Council, KCC and the Highways Agency to assess the potential impact of these development options on existing transport infrastructure. The outcome will inform the identification of preferred sites for development along with any necessary transport improvements.

Swale: Integrated Transport Programme

8.27 KCC's five year Integrated Transport Programme for Swale will focus on improving the quality of local bus services to maximise the efficiency of the highway network as planned development This will be achieved commences. through the establishment of a multioperator Quality Bus Partnership (QBP), utilisina powers under the Local Transport Act 2008. The QBP will bring



together the County and Borough Councils and the several bus operators in Swale to develop all aspects of bus travel and to increase passenger numbers. KCC will use the framework of the QBP to invest in new and improved bus stop infrastructure, including raised kerbs to provide easy access for parents with buggies and the disabled. It is anticipated that this will be matched by investment by the bus operators in fully accessible, low emission vehicles and by the Borough Council in bus shelters and clearways.

8.28 KCC, in partnership with Swale Borough Council, also intends to develop a new public transport network for Swale during the period of this LTP (2011-2016). The borough has a relatively high level of publicly subsidised bus services and a mix of bus operators which are not sufficiently integrated at present. Travel demands in Swale will be identified and the new network, known as 'SwaleNet' will then be developed based on the level of subsidy support that the County Council currently provides. The network will be branded and accompanied by publicity, improvements to bus stop infrastructure, a new SwaleNet website (providing real-time information, timetables, and news on fares and promotions), and improved integration between bus and rail services. New ticketing options will be introduced, including a Travelcard product that can be used on all services in the borough, as well as through ticketing between bus and rail services. KCC will also trial new subsidised bus service contracts in which part of the additional revenue generated through growth will be reinvested in the network.

Swale: Lobbying

8.29 Notwithstanding the commencement of Southeastern High Speed services from Ebbsfleet, Gravesend and Sittingbourne to London St Pancras in December 2009, KCC recognises that there are now fewer services and longer journey times from stations east of the Medway Towns to London Victoria, Charing Cross and Cannon Street via the North Kent Line. This matter will be progressed through the bi-annual Kent Rail Summits, which bring together representatives of Southeastern, Network Rail, Passenger Focus and local rail user groups.

Dover

8.30 The town of Dover is situated in the south east of Kent at the narrowest point of the English Channel. Dover's internationally strategic location has enabled it to become home to one of the world's busiest and most successful ports for



Roll-on Roll-off (Ro-Ro) freight and passenger traffic, cruise liners and private yachts. Although this attracts many millions of people to Dover each year, only a very small proportion choose to visit the town. Dover is served by the M20/A20 to the west and M2/A2 to the north. The popularity of the Port results in traffic congestion along the A20 Townwall Street, causing pollution and severance

between the town and the seafront. Traffic congestion is exacerbated when ferry disruption causes Operation Stack to be implemented. Dover is well served by mainline rail services, including high speed services to London, which provide new commuting opportunities. In the past 20 years, the introduction of Eurotunnel services, changes in EU regulations on international freight movement and the closure of the nearby East Kent coalfields have all resulted in large-scale job losses against a trend of growth in the rest of the region. This has been further exacerbated by Pfizer's recent decision to withdraw from its Sandwich site, with the loss of 2,400 direct jobs and significant indirect job losses.

Spatial Planning

8.31 The main strategic objective for the Dover area is to focus growth and regeneration efforts on Dover town, which has the greatest need for action and the greatest potential. The Dover District Local Development Framework Core Strategy was adopted in February 2010 and makes provision for 14,000 new homes in and around the town over the period 2006-2026,



to meet its Growth Point ambitions and secure investment in infrastructure.¹³ Much of the housing allocation is concentrated in the Whitfield urban extension, with more modest sized development at Dover Waterfront and the former Connaught Barracks. This will be driven by the expansion of the Port of Dover, which will create additional jobs and enable the relocation of the marina, freeing up the Wellington Dock area for further development. The Dover Town Investment Zone is located in the St James area and looks to turn the run down town centre into a large retail-led, mixed use development. Greater and more varied jobs will be created with the planned expansion of the White Cliffs Business Park at Whitfield.

Transport Planning and Strategy

8.32 The key transport challenges for Dover will be accommodating the expansion of the Port, including a proposed new ferry terminal at the Western Docks; implementing a system of bifurcation for port traffic between the M2/A2 and

M20 corridors; and providing sustainable transport solutions for the planned expansion of Whitfield. Delays at the Port can cause significant traffic problems throughout the County and these will be exacerbated by the forecast increases in freight traffic over the next 30 years. Mainline rail services connect Dover to Ashford, Ramsgate and Canterbury and the introduction of high speed services in December 2009 has reduced journey times to London from 116 minutes to 69 minutes. Dover district is already served by regular bus connections to the main settlements and adjacent towns, and a step change in public transport provision is proposed to support the Whitfield expansion. Better accessibility to the town centre and railway station are key issues to be addressed.

- 8.33 A number of Transport Assessments in association with new developments have been prepared for Dover. The most recent transport strategy for Dover was commissioned by Dover District Council in association with KCC and other stakeholders and used multi-modal modelling to test transport solutions to the potential developments in the Local Development Framework.
- 8.34 The Dover Bus Rapid Transit (BRT) scheme is a proposed service connecting Whitfield to Dover Town Centre and is part of the masterplan for 5,750 new homes at Whitfield. It is planned to run through the various development sites in Whitfield and the Connaught Barracks, linking to the town centre, Dover Priory railway station and the St James regeneration area, with a possible extension to a Park and Ride site at Farthingloe. It is planned as a two tier system, offering a peak time express route for commuters from Whitfield to Priory Station and a daytime service to cater for daily needs, the school run, shopping and tourism. KCC and Dover District Council are currently preparing a detailed business case for the scheme and identifying suitable funding options.

Dover: Integrated Transport Programme

8.35 Integrated Transport schemes proposed for Dover during the period of this LTP include ongoing improvements to local bus services, building on the success of the existing Dover Quality Bus Partnership. These will include bus priority measures at key junctions, and the provision of clearways, bus boarders, and hardstanding. Further sustainable transport measures will include access improvements to Dover Priory railway station, a walking link between the town centre and the Western Docks, public realm improvements and various cycling facilities identified by the Dover Cycling Strategy. Some of these measures are mentioned elsewhere in the Implementation Plans of other LTP3 Themes.

Dover: Lobbying

8.36 Dover Harbour Board operates Europe's biggest Ro-Ro ferry port for both freight and passenger traffic. It handled 13.8 million passengers, 2.8 million cars and 2.3 million HGVs in 2008¹⁴, with the UK strongly dependent on the capacity provided at Dover. Government forecasts suggest an 85% growth in cross-Channel (Ramsgate, Dover, Channel Tunnel)



freight between 2005 and 2030, with a short term forecast of 2% per annum¹⁵. This represents an increase in HGVs from 3.8 million in 2005 to 7.1 million in 2030. This growth needs to be largely shared by the Port of Dover and the Channel Tunnel, as these offer the shortest and most attractive cross-Channel routes.

- 8.37 The Government believes that there is a compelling need for substantial additional port capacity over the next 30 years. In response, Dover Harbour Board undertook a comprehensive master planning exercise to understand how best to cope with this increased demand.¹⁶ This identified the Western Docks as providing the strongest opportunities for expanding Dover's ferry operations and proposed a second Terminal (T2) at this location. This will provide four additional berths to handle Ro-Ro ferries carrying passenger and freight cargoes, whilst retaining the cruise and marina functions.
- 8.38 Access will be made to T2 from the A20 west of Townwall Street. T2 will also provide additional storage capacity for HGVs prior to boarding ferries. The operation of the two sites for ferry operations will also support a system of bifurcation where traffic for the Eastern Docks uses the M2/A2 linked to a new Lower Thames Crossing east of Gravesend and traffic to the Western Docks uses the M20/A20, reducing the impact of international traffic on the A20 Townwall Street and the town centre. The £380m investment in T2 is expected to bring £14m of annual benefits to the local economy, as well as accommodating a greater volume of imports and exports.
- 8.39 Dover Harbour Board submitted a Harbour Revision Order (HRO) to implement T2 at the Western Docks in December 2009. The HRO does not include a new rail connection, although future rail links to the Western Docks are not ruled out. At the time of writing (March 2011), a decision from the Secretary of State for Transport is still to be made.
- 8.40 Another important issue for Dover is to reduce HS1 journey times from Dover Priory to London to under an hour, making the town more attractive to rail commuters and employers. Connectivity at Dover Priory between Mainline from Sandwich / Deal and High Speed to St Pancras must be improved from the present 49 minute wait during off-peak periods. The extension of High Speed from Dover Priory to Ramsgate via Deal/Sandwich should also be included in the new franchise specification as this can be delivered within existing rolling-stock resources;

Maidstone

8.41 Maidstone is the County Town of Kent, with a population of some 70,000. The town's main function is as a centre for business, retail and administration, with a net inflow of commuters from a wide catchment area spanning Kent, East



Sussex and South East London. Maidstone also has a thriving evening economy, with a wide selection of bars and restaurants. The town enjoys good strategic road links, being located close to the M20 and M2 motorways and at the intersection of a number of County Primary Routes. These provide connections to much of Thames Gateway Kent, the Medway Towns, Ashford, Tonbridge and Tunbridge Wells.

- 8.42 However, Maidstone's rail links are relatively poor. The town has not yet benefitted from the launch of Southeastern High Speed rail services and hence the average journey time from Maidstone East to Central London is approximately 20 minutes longer than that from Ashford International, which is located some 20 miles to the south east. The principal rail route serving Maidstone is the Ashford International to London Victoria line. The Medway Valley line also passes through the town, linking Strood in the Medway Towns to Paddock Wood and Tonbridge.
- 8.43 Maidstone suffers from significant congestion problems during peak periods. These are a function of the town's status as a major employment and service centre and the convergence of four key inter-urban roads (the A20, A249, A229 and A26) within the town centre. The principal constraints are certain congestion hotspots at key junctions and links and in particular, the single crossing point of the River Medway where east-west movements meet those going from north to south. Additionally, there are no appropriate alternative routes to the A229 primary route to take traffic from south of the town to and from the M20. The launch of the County Council's Traffic Management Centre has improved the operation of Maidstone's highway network, reducing average journey times by over 10% since 2006 through the active management of traffic signals, the use of car park guidance systems, and the provision of live traffic information to road users. Traffic congestion nevertheless continues to reduce the attractiveness of the town as a place to do business.
- 8.44 The current employment situation is relatively prosperous, with a considerable employment base and a low unemployment rate and GVA per head is high compared to other districts and boroughs. However, the Borough has a low wage economy, which leads to out-commuting for higher paid work. A key objective of Maidstone's emerging LDF Core Strategy is therefore to improve the viability of the town centre, including enhancement of the office, rotail



including enhancement of the office, retail, education, leisure and tourism functions.

Spatial Planning

- 8.45 The Maidstone LDF Core Strategy is currently being prepared by Maidstone Borough Council. The South East Plan imposed a housing allocation of 11,080 new homes for the borough up to 2026 but, following extensive work to determine a local housing target for the plan period, the Borough Council has resolved to consult on an option of 10,080 new homes through public participation in summer 2011; the total for which its Growth Point status was originally awarded. The Maidstone Economic Development Strategy sets a target of 10,000 new jobs in the period 2008-2026 on the basis of the Growth Point housing target. Work is also underway to determine the provision for new employment land that will be required for up to 2026.
- 8.46 Of the 10,080 new dwellings proposed, over 2,000 have already been built and there are existing planning permissions for 3,000 more. Additional

allocations are therefore likely to come forward further into the LDF period. The Borough Council will consult on the distribution of all land uses in its Core Strategy during public participation, including housing and employment development.

Transport Planning and Strategy

8.47 KCC is currently working with Maidstone Borough Council on a draft integrated transport strategy for the borough to complement the LDF Core Strategy. This will be subject to public consultation alongside the Core Strategy in summer 2011.

Integrated Transport Programme

8.48 The Maidstone Transport Strategy, and hence the County Council's Integrated Transport Programme for 2011-2016, will be driven by the desire to preserve and enhance the accessibility of Maidstone town centre by sustainable means. The proposed level of development will be underpinned by a package containing a number of traffic management measures including the enhanced provision and priority of bus services through the Maidstone Quality Bus Partnership involving the County and Borough Councils along with the town's principal bus operator, Arriva. These priorities will drive scheme delivery irrespective of the future development scenario, with the detail and phasing dependent on the specific sites that come forward through the LDF.

Lobbying

- 8.49 The major timetable change that accompanied the launch of Southeastern High Speed rail services from much of North and East Kent to London St Pancras in December 2009 resulted in the removal of direct services between Maidstone East and the City of London (Cannon Street). This has significantly disrupted the journey patterns of many hundreds of commuters from the Maidstone area, requiring them to drive to Tonbridge, Hildenborough or Sevenoaks to connect with direct rail services to Cannon Street or to endure a lengthy diversion via London Victoria. KCC, along with district councils and local rail user groups, organised an intensive lobbying campaign in opposition to the loss of Maidstone East to Cannon Street services in advance of the December 2009 timetable change. This campaign continued into 2010 and has included a meeting between the County Council's Cabinet Member for Environment, Highways and Waste and the Coalition Government's Minister of State for Transport to raise the profile of the issue. Both the Department for Transport and Southeastern have stated that services between Maidstone and the City of London are unlikely to be reinstated before the end of the current franchise period, which is expected to run until 2014. KCC will nevertheless continue to engage proactively with Southeastern, Network Rail, Passenger Focus and local rail user groups through the bi-annual Kent Rail Summits.
- 8.50 The County Council strongly supports the Thameslink programme, which would provide an all-day direct link between Maidstone East and stations adjacent to the City of London (Blackfriars, City Thameslink and Farringdon) from 2018. KCC and Maidstone Borough Council also welcome the proposed introduction of direct rail services from Maidstone West to London St Pancras

via Strood and High Speed 1 from May 2011 and will also consider the potential for a Maidstone Parkway Station.

- 8.51 The potential South East Maidstone Strategic Link (SEMSL), as identified in a preliminary version of the Maidstone LDF and the South East Plan, looked to provide a direct link from a strategic development area on the south-eastern edge of the town to Junction 8 of the M20. Maidstone Borough Council has now adopted a more widely distributed development strategy, therefore the SEMSL proposal is unlikely to be pursued further.
- 8.52 The A228 Colts Hill bypass scheme is required to complete a high standard and safe route between the M20 and the A21 trunk road. The A228 at Colts Hill currently suffers from poor visibility and many concealed accesses which contribute to its poor accident record and severe peak time congestion. The proposed bypass would address these issues, whilst also enhancing access to the new Pembury Hospital from Maidstone. This is particularly important given the planned transfer of a number of medical units to Pembury from Maidstone Hospital when the site becomes fully operational in 2011. KCC has submitted the scheme for Central Government funding on a number of occasions since 2003. However, it was not included in the South East Regional Transport Board's priority list for start of construction during the LTP2 period (2006-2011) and has so far been unsuccessful.

Network Management Plan

8.53 In addition to the Integrated Transport measures outlined above, KCC also carries out its Network Management Duty to ensure the 'expeditious movement of traffic' on Kent's highway network. The County Council aims to provide a safe and reliable highway network, combined with accurate and widely available information to ensure that people can make informed choices about how and when to travel. It is vital that the network is able to meet the challenges of a growing economy and the increasing demand for travel. However, its environmental impact must also be minimised.

Tackling Congestion

8.54 Roads tend to be congested in places that are attractive to people and that enjoy economic prosperity. As a result, some degree of congestion is inevitable. Nevertheless, KCC will still work to minimise the delay to Kent's travellers and make journey times more reliable. In tackling congestion, an active and co-ordinated approach will be taken to network management. The network will be reviewed annually to identify where traffic growth could cause future congestion and to develop and implement solutions. The County Council will also work with the Highways Agency to develop strategies to address congestion at junctions on the motorway and trunk road network that has an impact on local roads.

Roadworks

8.55 On 25th January 2010, KCC introduced the Kent Permit Scheme (KPS) which improves the County Council's ability to reduce disruption from roadworks. Under the KPS, anyone intending to carry out works on the highway must apply for permission in advance of the works and KCC may choose to grant a

permit, apply conditions, or decline permission for work. This system will be refined and improved during the LTP3 period.

8.56 As part of the Traffic Management Act 2004, there is a requirement to maintain a register which will record all skip and scaffolding licences, such that their effect can be co-ordinated through the Street Works Register. KCC has already developed a GIS based register to co-ordinate roadworks. This information is made available via the internet and is in a format that can be used by adjoining local transport authorities, utility companies, and national agencies. The County Council will widen the scope of this register to incorporate planned events and other activities on the highway, including skips and scaffolding.

Events and Incidents

8.57 Kent has a number of large venues which operate regular events, including Brands Hatch, the County Showground and Leeds Castle. Multi-agency coordinating groups are in place to manage the impacts of these events on the transport network and this practice has also been applied to larger events such as the Tour de France and the Open Golf Championship. The Olympic Route Network will have a major impact on the routes into London through the introduction of VIP lanes, Games Lanes, temporary traffic signals and possible alterations to junction layouts. KCC's Roadworks Teams will work with utility companies to prevent disruption to these routes.

Managing Traffic Regulations and Enforcement

8.58 Traffic Regulation Orders (TROs) are used to regulate, restrict or prohibit the use of a road. KCC has conducted a countywide review to ensure that the information contained in each TRO matches the markings and signing in place and during the LTP3 period, KCC will develop a TRO management system so that TRO information may be shared with other stakeholders and partners. KCC will shortly carry out a study into the operational and financial implications of the County and district councils jointly carrying out the civil enforcement of moving traffic offences. Future powers obtained under the Traffic Management Act 2004 will allow the civil enforcement of further moving traffic offences, such as stopping inside box junctions, stopping in a restricted area and failing to comply with a mandatory direction sign. Other measures include a comprehensive system of car park management as resources permit and a web based record of objects within the highway.

Freight

- 8.59 KCC intends to work with the freight industry through a new Freight Quality Partnership for Kent. The Partnership will seek to provide for the needs of goods vehicles in the management of the highway network whilst ensuring that good practice is followed by the industry and that congestion and disruption are reduced. Various initiatives are proposed during the LTP3 period which will support the movement of freight around the County.
 - Establish a Freight Quality Partnership for Kent.
 - 24-hour lorry route network and map;
 - zoning system in urban areas with signage to direct HGVs to industrial estates and town centres by the most suitable routes;

- definition and enforcement of delivery times in town centres;
- enforcement of parking restrictions to protect delivery access for lorries and HGVs;
- review of parking and loading restrictions to address problems for delivery vehicles;
- exploration of the possibility of developing an urban area 'consolidation centre' for the transfer of goods from HGVs to smaller vehicles for final distribution.

Intelligent Transport Systems

- 8.60 Intelligent Transport Systems (ITS) are tools that enable management of the road network by providing intelligence on performance, incidents and ensure that informed decisions are disseminated to road users to ensure that the maximum efficiency of the network is achieved. KCC is one of the leading authorities in the UK deploying ITS across Kent and during LTP2, has developed a fully functioning Urban Traffic Management and Control system (UTMC) located within the Traffic Management Centre (TMC). The County Council has linked the direct management of the road network with key performance indicators measuring journey times in urban areas in the county. This has enabled the TMC to improve these areas by monitoring and intervening as incidents occur. The data has also enabled the direct correlation between roadwork's and the introduction of the Kent Permit scheme. This is demonstrated by the understanding the impact that roadwork's have in reducing journey time reliability.
- 8.61 A new ITS Strategy 2011–16 has been prepared which provides the short, medium and long term plan for continuing the deployment of ITS across Kent and within the Traffic Management Centre (TMC). Many of the measures and initiatives arising from this Strategy are contained within LTP3 Implementation Plans where they support interventions like real time bus information, pedestrian crossings, enforcement of moving traffic offences and interactive speed signs but some additional proposals for LTP3 include:
 - Development of Traffic Management Centres (UTMC) to include Ashford, Dartford and Gravesend
 - expansion of CCTV coverage to monitor the road network using Automatic Number Plate Recognition (ANPR)
 - variable message signing and car park guidance
 - signal installation improvements
 - travel information through satellite navigation devices, mobile devices and web based services

Lower Thames Crossing

8.62 The Dartford Crossing is one of the country's most important strategic connections but also one of its worst bottlenecks. Delays at the Crossing cost

the UK economy £40 million per year and the absence of viable alternative routes exacerbates the disruption. This is compounded by the number of times the bridge, tunnel or their approach roads are severely restricted or closed, with up to 15 major incidents 'expected' annually, causing stationary traffic in excess of 20 miles in each direction. The situation will only get



worse as traffic volumes increase in line with the delivery of over 200,000 new homes in the Thames Gateway and growing cross-Channel freight. Poor connectivity across the estuary also means that the eastern Thames Gateway fails to operate as a coherent economic area, denying jobs and business opportunities to those on both sides of the river.

- Kent and Essex County Councils have identified a clear and pressing need 8.63 for a new Lower Thames Crossing. As well as being a beneficial sub-regional piece of infrastructure supporting growth and regeneration in the Thames Gateway, it will open up a major new link to the national motorway network at the M11 and, crucially, act as a simultaneous catalyst for the bifurcation of traffic to and from Dover. In early 2010, KCC commissioned consultants to prepare an economic business case and to look at ways in which the new crossing could be funded and delivered. The consultants undertook a high level assessment based on three crossing options and scoped potential funding, financing and procurement opportunities. The study found that the overall GVA impacts of the east of Gravesend to Chadwell option could be around £334m per annum in 2021 through the unlocking of substantial regeneration opportunities. The new crossing could make a contribution to local GVA of £12.7bn through the creation of around 6.000 jobs in North Kent and South Essex alone. For an estimated capital investment of around £1bn, this represents an outstanding rate of return.
- 8.64 The changes in connectivity brought about by the different crossing options indicates that a crossing to the east of Dartford would have a significantly larger impact on the connectivity of North Kent and South Essex, where aspirations for future economic growth are high. If access to potential employees and other businesses does affect the attractiveness of locations as places to do business, then the impacts on local employment could be up to eight times larger if new crossing capacity is provided to the east of the existing crossing. It is recognised that this proposal will impact on the internationally designated sites on both sides of the River Thames and any plans put forward will need to be the subject of an Appropriate Assessment.
- 8.65 The total capital costs of the Lower Thames Crossing have been estimated as being in the region of £1bn (excluding approach roads). Given that the capital cost of the Queen Elizabeth II Bridge at Dartford has been paid for, there is a strong case for using the net operating surplus to support infrastructure investment in the area that feels the impact of the toll most acutely; for example, through contributing to the cost of a new Thames Crossing. In this case, the revenues from the existing crossing could support around half of the

debt required to pay for the capital costs of a new bridge. This figure assumes that existing toll levels are maintained, and is based on current traffic and revenue estimates. A further possible source of funding for a new crossing is Foreign Lorry Road User Charging.

- 8.66 The Government's Comprehensive Spending Review announcement on 20 October 2010 set out a number of proposals and decisions relating to the Dartford Crossing. In summary they are as follows:
 - Subject to consultation, charges for the Dartford Crossing will increase from £1.50 to £2.00 in 2011 for cars, rising to £2.50 in 2012. Prices for other vehicles will also increase.
 - Introduce free flow charging from 2012 and with immediately effect, lift the charges at times of severe congestion to aid flow through the charging plaza.
 - Given its strategic importance, the Department for Transport (DfT) has decided not to sell the Dartford Crossing at the present time.
- 8.67 The DfT will therefore re-start the Lower Thames Crossing Study, looking into future capacity of the crossing in light of the expected growth in traffic, and shall be considering the three potential options identified in their earlier work¹⁷. These are:
 - Option A a crossing adjacent to the existing bridge.
 - Option B a crossing from a point between the Swanscombe Peninsula west of Gravesend and the A1089 at Tilbury.
 - Option C a crossing from a point east of Gravesend on to a route passing Chadwell St. Mary, Orsett and then west to a new junction on the M25 between the existing junctions 29 and 30.
- 8.68 Other options considered in the initial study work are no longer being considered by the DfT. When the Lower Thames Crossing Study is re-started it would involve consultations with Local Authorities and the public as well as further development of the three options together with economic assessments and a comparable assessment of the benefits and impacts between the three. However, at this stage, the DfT are unable to provide any further details of the proposed work or timelines. As part of the initial study work the DfT set up a Stakeholder Advisory Panel and the Panel's Terms of Reference stated that:

"The purpose of the Stakeholder Advisory Panel is to ensure the DfT and Highways Agency (HA) is made aware of the views of regional and local stakeholders in taking forward the Lower Thames Crossing Capacity Study. The Panel are to provide the cross-regional and local perspectives in which the Study is taking place, and to act as a conduit between the DfT and HA and the relevant regional and local bodies represented".

8.69 The DfT has advised that the Stakeholder Advisory Panel would reconvene with the re-start of the Study process. Kent County Council would expect to be a member of the Stakeholder's Panel.

Operation Stack

- 8.70 The County Council recently requested the Government to allow recourse to government funding in the provision of Motorway Service Areas to allow the authority to support development of a 3,000 space lorry park to be used to free up traffic on M20 and A20. In its response to this request under the Sustainable Communities Act, the Government confirmed that whilst the Highways Agency has no objection to the lorry park being promoted, government funding is not available for this project¹⁸.
- 8.71 In response to an invitation by the Leader of the County Council for alternative locations for a lorry park, Protect Kent has recently suggested that a lorry park be built as part of the expansion of the Dover Western Docks on land reclaimed from the sea. The County Council is currently considering this proposal.
- 8.72 The County Council is delighted that the Coalition Government has committed to work towards the introduction of Foreign Lorry Road User Charging and will continue to work provision of a lorry park adjacent to the M20 to accommodate Operation Stack traffic (see below).
- 8.73 However, there remains no resolution to the equally pressing issue of Stack's long term funding and management. There is currently no legal requirement for either Kent Police or the Highways Agency to manage Operation Stack to the extent that is now expected of them and the current arrangement is not sustainable given existing resource constraints. Legislation defining the position of all the relevant authorities is urgently required, along with the necessary funding to enable their respective roles to be fulfilled effectively.

Lorry Parking

8.74 The *Kent Overnight Lorry Parking Study* (2005) found that there was demand for approximately 1,000 HGV overnight parking spaces across the County, compared to a supply of 450 official and 220 unofficial parking spaces¹⁹. This



produced a shortfall of approximately 330 spaces and pressure may increase in the future since Kent's largest overnight lorry parking facility, Ashford Truck Stop, has been earmarked for future housing development the Ashford in Local Development Framework. The Study predicted that growth in cross-Channel freight will exacerbate the shortfall of HGV overnight parking spaces, which could

exceed 1,000 spaces by 2025 unless additional parking is provided. This is likely to result in further use of unsuitable or illegal locations for overnight parking, both in Kent and elsewhere.

8.75 Robust action is required by Central Government to ensure that overnight lorry parking is safeguarded where demand outstrips supply. The Coalition Government must review the previous government's policy that lorry parking facilities should be provided by the private sector, given the small margins that lorry park owners operate under and the sizeable repayments required to cover the large capital costs of providing such facilities. There is also a poor level of signing to truck stops located on motorways and trunk roads, meaning that those drivers not on regular routes often overlook potential rest areas due to a lack of local knowledge. These drivers are far more likely to look for unsuitable facilities on or adjacent to their route so as to reduce the risk of getting lost. HGV drivers surveyed as part of the Kent Overnight Lorry Parking Study also complained more generally that the County's official lorry parking areas were too expensive, had a limited number of parking spaces, lacked facilities and were insufficient in number.

Kent Rail Summits and Rail Action Plan for Kent

- 8.76 KCC introduced a series of Rail Summits in 2010. These bi-annual Rail Summits bring together the Department for Transport, Network Rail, Southeastern and Passenger Focus, local rail user groups, MPs and local councillors to provide a powerful collective voice in discussing the problems that the county's commuters are suffering as a result of recent timetable changes, as well as the benefits of the high speed services and future aspirations. The first rail summit, on 25 March 2010, invited representatives to develop a common approach across Kent to the forthcoming renewal process for the Integrated Kent Franchise. The second summit, on 21 October, focused in greater detail on the service changes needed across the county, and led to the drafting of the Rail Action Plan for Kent.
- 8.77 The Rail Action Plan for Kent sets out the principal objectives of KCC to ensure that the new Integrated Kent Franchise (IKF) which is due to commence in April 2014 delivers a rail service for Kent that meets the needs of the county's residents and visitors. It is not concerned with changing the existing franchise operated by Southeastern, although KCC will continue to press for improvements in its current operation. The Plan lists in detail the rail routes which need addressing in today's network, and recommends improvements to be incorporated in the new franchise specification. It also recognises the need for the level of rail fares charged in Kent to offer better value for money, so as to encourage economic growth throughout the county.

Access to East Kent (Thanet Parkway)

- 8.78 In January 2011, KCC, with support from Thanet District Council, Network Rail, Southeastern Trains and Infratil, the owners of Manston Airport, submitted a bid to the Regional Growth Fund titled "Access to East Kent". The RGF bid is for a contribution to the capital cost of a new Thanet Parkway Station on the Ashford to Ramsgate line, along with pump prime funding for the proposed daily air service between Manston Airport and a major European hub. Steer Davies Gleave prepared the detailed business case underlying the bid, building on the earlier feasibility analysis, including all necessary demand modelling and appraisal work.
- 8.79 The preferred location of the Parkway Station is to the south of Manston Airport and to the west of the village of Cliffsend. Access would be provided from the new East Kent Access road, which borders the site to the west, north and east, thereby minimising its potential impacts on local residents. It is proposed that, once operational, a dedicated shuttle bus would link the station with Manston Airport, with a journey time of approximately 8 minutes. The bid has been co-sponsored by Infratil Airports Europe Ltd, the owners of Manston Airport who have confirmed that a successful bid would directly lead to the

appointment of additional staff including new fire and rescue crew at the Airport, which would strengthen its capacity to handle larger volumes of flights, and has agreed in principle to provide a capital contribution of approximately £500,000 to the proposed Thanet Parkway Station. This represents a strong vote of confidence in the bid from the private sector and the urgent need for this scheme has been exacerbated by Pfizer's recent announcement to withdraw from East Kent.

8.80 The Government has indicated that successful RGF bids will be provided with conditional offers of funding within 50 days of the first-round submission date, and that RGF funding must be spent within three years.

High Speed Rail Extension to Thanet

- 8.81 In 2010, KCC commissioned consultants to investigate the potential for a new rail line linking Thanet with High Speed 1. Several options were evaluated, ranging from a relatively minor scheme to bypass Ashford International Station, to a new high speed direct connection between the proposed Thanet Parkway and the High Speed 1 line north of Maidstone. It was concluded that a short bypass of Ashford Station would cost some £680 million and would achieve an additional time saving of seven minutes, giving a journey time between a Thanet Parkway Station adjacent to Manston Airport and London of around 56 minutes. Other high speed line options looked at were much costlier, with a direct link from Thanet Parkway to HS1 to the north of Maidstone costing £2.9 billion and reducing journey times to London to around 43 minutes. Neither of these schemes is considered viable in the present economic climate.
- 8.82 KCC is therefore working with Network Rail to investigate ways in which journey times on the existing Ashford to Ramsgate line could be reduced. A preliminary study found that there is the potential to reduce current journey times by up to 10 minutes. More detailed work to prepare a full business case for the scheme will shortly commence, with an expected completion date of summer 2011.

A21 Tonbridge-Pembury Dualling

8.83 The Kent economy has suffered repeatedly from delays to Highways Agency projects, including the dualling of the A21 between Tonbridge and Pembury. Although work was finally due to start on this scheme in 2011, it has now been delayed once more beyond 2015 pending further consideration by the Department for Transport and will therefore not be completed in time for the opening of the new Pembury Hospital. We believe that the scheme can be delivered for less than half its current cost through local project management and procurement. The Coalition Government has agreed to work with us to investigate the benefits of this approach and we will progress these discussions immediately. We also want to see further improvements to the A21 to support the regeneration of Hastings in East Sussex.

Table 8.3: An Implementation	Plan for LTP3	Theme Growth	without Gridlock
(2011-16)			

Funding Source	Scheme Title and Description	Est. Cost £000s
Ashford		
Integrated Block	Urban Traffic Management Control (UTMC) Extension of urban traffic management control to Ashford urban area to provide better management of the highway network.	1,270
	Ashford Quality Bus Partnership (QBP) Implementation of schemes and measures which improve the provision of reliable, accessible and public transport in Ashford as set out in the Ashford QBP.	
	Ashford Cycling Strategy Upgrade, improve and extend the existing Ashford Cycling Network including measures in the Blue Green Grid as identified in the recently adopted Ashford Cycling Strategy.	
Thames Gate	eway Kent	
Integrated Block	UTMC for Dartford and Gravesham Extension of urban traffic management control (UTMC) capability to the urban area.	2,710
	Bus Priority Measures Measures to existing bus routes to improve journey times and reliability.	
	Pedestrian/Cycle Access Improvements Measures to improve access to schools, railway stations and other key destinations.	
Integrated Block	SwaleNet Bus Improvements - Sittingbourne town centre To facilitate easy access by all bus passengers, especially parents with buggies, the disabled and those with limited mobility; to improve the provision of reliable and accessible public transport.	
	Swale Cycle Routes Implementation of various cycle routes linking housing and development areas with key destinations focused in the urban areas of Sittingbourne and Sheerness. Cycle Route linking Highsted Road, Sittingbourne Hospital and Sittingbourne Rail Station.	

Dover		
Integrated Bloc	Dover Quality Bus Partnership Bus stop improvements (clearways, bus borders, hard standings), bus priority measures and signal controlled junctions.	1,010
	Walking and Cycling Measures Cycle and pedestrian routes to link the town centre with the port, employment centres, the railway station and residential areas; and from the town centre to proposed terminal 2.	
Maidstone		
Integrated Block	Quality Bus Partnership Route Improvements Modifications to existing carriageway, additional Real Time Information Signs, Smart Ticketing Initiative etc.	580
	Maidstone Cycle Network Extension of cycle network between town centre and key employment areas.	
	Total	5,570

Government Office for the South East (2009), The South East Plan

² KCC (2009), Unlocking Kent's Potential: Kent County Council's framework for regeneration

³ KCC (2009) Growth Without Gridlock – a transport delivery plan for Kent

⁴ Office of the Deputy Prime Minister (2003), Sustainable Communities: Building for the Future

⁵ Ashford Borough Council (2008), Ashford Local Development Framework: Core Strategy

⁶ Ashford Borough Council/Halcrow (2002), Ashford's Future: The Overarching Report

⁷ Highways Agency (2006), Ashford Highways and Transport Study

⁸ Kent County Council (2006), Ashford Transport Strategy

⁹ Department for Environment, Food and Rural Affairs/Office of the Deputy Prime Minister (2004), Greening the Gateway Strategy ¹⁰ Kent County Council (2008), Kent Thameside Transport Strategy

¹¹ Swale Borough Council (2006), *Swale Transport Strategy 2006-11* ¹² Swale Borough Council (2008), *Swale Borough Local Plan*

 ¹³ Dover District Council (2010), Dover Local Development Framework: Core Strategy
 ¹⁴ Dover Harbour Board (2008): Annual Traffic Statistics

¹⁵ DfT (2007): UK Port Demand Forecasts to 2030

¹⁶ Dover Harbour Board (2010), Our Plan for the Next Generation – Ferry Terminal 2

¹⁷ Parsons Brinckerhoff/DfT (2009), Dartford Crossing Capacity Study Report

¹⁸ Communities and Local Government (2010), Sustainable Communities Act 2007, Decisions on proposals submitted following the 2008 invitation

¹⁹ AECOM (2005), Kent Overnight Lorry Parking Study for Kent County Council

Chapter 9 - The Implementation Plan for a Safer and Healthier County

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The Plan

- 9.1 The approach to a safer and healthier Kent is through partnership working. The key service providers in Kent are brought together through Kent Partnership, the County's Local Strategic Partnership, and their collective vision and objectives are outlined in Kent's community strategy, the Vision for Kent (2006). The Vision for Kent is broken down into eight themes, including three which are directly relevant to the LTP:
 - improved health, care and wellbeing;
 - stronger and safer communities; and
 - keeping Kent moving
- 9.2 Members of Kent Partnership include Kent Police, Kent Fire and Rescue Service, the County's Primary Care Trusts, the district councils and the Kent Public Health Board. Since the publication of the Vision for Kent, these organisations have worked together to improve the health and wellbeing of Kent's residents.
- 9.3 Being safe and healthy is a priority for most of Kent's residents. Those living and working in the vicinity of the transport network are subjected to noise, pollution and vibration caused by traffic, while for others the fear of crime and personal safety discourages them from using it. Strong links between local transport authorities and healthcare providers are required to improve access to health facilities and to promote increased physical activity. This area of work will be problem-led, with measures targeted at those locations where the impact on the public is greatest, whether this is at a known crash site, Air Quality Management Area (AQMA), a community exposed to noise or where people experience poor health or crime.

Safer Roads

9.4 Over the period of Kent's second LTP (2006-2011), excellent progress has been made towards reducing road casualties through intelligence-led engineering measures and educational campaigns. However, there are those who remain particularly vulnerable, including children, young drivers, the elderly and those living in disadvantaged communities. KCC is therefore committed to further reducing casualties and the approach for LTP3 will be to build on the learning gained during the last decade, using both quantitative and qualitative research to inform key projects and programmes of work. Across Kent, road safety issues are tackled by several organisations who work together as the Kent and Medway Casualty Reduction Group (CaRe Group). The Group's membership includes the County Council, Kent Police, Kent Fire and Rescue, Medway Council and the Highways Agency.

The Road Network

- 9.5 Drawing on a successful track record, KCC will continue to identify and develop programmes of Crash Remedial Measures (CRMs). These will be driven by crash and casualty data and guided by local insight and research into other factors depending on the identified issues and proposed interventions. The County Council will continue its priority weighting approach to scheme approval; however given the limited funding available it is likely that the number of schemes will reduce in the future (see Chapter 7).
- 9.6 Intelligent Transport tools are used to reduce casualties by employing technology to assist with reducing speeds. The County Council has implemented a number of initiatives, including Vehicle Actuated Signs and Speed Indicator Devices, which are operated by Kent Highway Services. KCC is also the lead partner in the Kent and Medway Safety Camera Partnership. The Partnership operates speed cameras to tackle sites that meet the County Council's criteria for casualty reduction.
- 9.7 KCC will consider how to further develop the use of permanently sited interactive signs over the next five years. Over 100 of these signs have been used throughout Kent where there has been a speed issue and they have proven a highly successful and very popular intervention. Nevertheless, the County Council recognises that the use of these signs should not be so extensive that this proves counter productive to their effectiveness. The scope to use interactive signs to replace other interventions will be investigated; for example fixed camera sites where a minimal crash record has been achieved and maintained. KCC will also continue to promote established policies and good practice with developers and promoters of new road schemes, using Road Safety Audits to avoid the creation of injury crash sites in the future.

Road User Behaviour

9.8 Since the vast majority of road accidents result from the actions of one or more road users, improving road user behaviour continues to be the main priority within KCC's approach to further reducing crash casualties. The priority concerns and challenges that have been identified through the analysis of crash and casualty data and wider research findings are:

- speed
- road user impairment
- anti-social values
- 9.9 For the period 2010-2020, KCC will prepare a three year rolling programme of activities that uses the individual and combined effects of education, training and publicity in an intelligence-led manner. Accident data and research findings will be used to guide priorities, to identify key target groups and to determine the most effective ways of communicating with them.
- 9.10 The majority of road users responsible for accidents are termed 'error makers', who are prone to making genuine mistakes or errors of judgement due to ignorance, low skill levels and/or indifference. These issues can be addressed through educational activity, as these people are likely to be susceptible to reasoned argument. Once they are made aware of their errors, they are likely to change their future behaviour. KCC uses this rationale as the basis of its approach to addressing the key target audience sectors of:
 - young drivers (17-24 yrs)
 - motorcyclists
 - adult drivers (25+ yrs)
 - business drivers
 - pedestrians
- 9.11 The County Council will lead collective partnership working through the CaRe Group to improve road user behaviour through public education activities including publicity campaigns, public engagement projects and public relations strategies. Consistent messages will be developed and delivered to promote and sustain positive behavioural change. KCC's activities will engage with key



audiences to create a higher level of awareness and understanding of the underlying challenges.

9.12 People are deterred from cycling as a result of safety concerns associated with speeding traffic and busy, hostile road conditions. In addition to activities and interventions aimed at tackling these issues, cycle training can improve confidence and skills to enable people to cycle safely. Cycle instruction in Kent is formed of two separate courses – Kent Rider and Bikeability – both of which provide school pupils with valuable cycle training. Over the next five years, a common set of processes will be developed to deliver a standard programme of cycle training across the County, to include adult cycle training programmes.

Safer Routes to School

9.13 During the period of this LTP, KCC will continue to implement a programme of Safer Routes to School engineering improvements. These will be based on information taken from the annual School Travel Plan reviews. During LTP2, a number of innovative pilot schemes were undertaken and these will be

progressed during LTP3. They include the 'zigzag banner' scheme, which

highlights the dangers of parking on School Keep Clear markings to encourage safer crossing opportunities. The campaign is promoted by the school pupils themselves who are encouraged to educate their parents about the dangers. Other projects have included Theatre in Education productions for selected secondary schools, and a pilot programme in Thanet to support vulnerable students to stay safe while travelling on public transport.



- 9.14 The County Council supports the SUSTRANS-managed 'Bike It' project in Ashford and Canterbury, which has achieved a marked increase in the rate of cycling to school. The Bike It officer works intensively with 16 schools and the local community to enable more children to cycle safely. Bike It aims to provide National Standard cycle training, improved cycle storage, and parental involvement. Cycling is encouraged through a number of events and activities including lessons linking to the National Curriculum. The officer's post is part-funded by KCC and Sustrans and further partnerships will be sought to enable the Bike It project to continue and expand in Kent.
- 9.15 Safe cycling also stems from well designed and audited routes. An improved cycle route audit process following all stages of route development from design, construction and post construction will assist with the development of routes that are both safe and functional to use by all. KCC's Countryside Access Improvement Plan seeks to develop 'behind the hedge' public rights of way that provide safe walking and/or cycling routes adjacent to country lanes to safely connect communities and services.¹

Protecting Communities

- 9.16 Levels of noise, fumes, light pollution and disturbance have increased significantly in recent decades. Increasing traffic has meant that more people are exposed to higher levels of noise, emissions and dust for longer periods and there is greater light pollution as more roads are built which are designed to safer standards. Busy roads can also lead to the severance of neighbourhoods and the risk of localised flooding due to carriageway run-off.
- 9.17 LTP2 recognised the impacts of transport emissions on public health and was integrated with the Air Quality Action Plans prepared by Kent's district councils in those areas where emissions exceeded the Government's prescribed limit (see below). Work has also been undertaken to reduce road noise and consideration is being given to dimming or reducing the hours of street lighting along certain routes where it is deemed safe to do so. KCC actively promotes the use of low emission vehicles and works with the district authorities to re-schedule the movement of certain vehicles at times that are better suited to the local area. Whilst these methods can be employed to mitigate the problem, the ultimate solution is to reduce traffic levels on Kent's network by promoting modes that have little impact on their surrounding areas such as public transport, walking and cycling. This policy has been facilitated by the launch of the Government's new Local Sustainable Transport Fund (see Chapter 5).

Air Quality in Kent

- 9.18 KCC's approach to air quality during the period of this LTP will be to continue to work with Kent's district councils and other partners under the existing Local Air Quality Management framework set down in the Environment Act 1995 and LTP2 Guidance. Kent's district councils have statutory duties for local air quality management, including the conduct of regular reviews and assessments. Where it is found that the objectives set out in the national Air Quality Strategy²¹ are unlikely to be met, authorities must designate an Air Quality Management Area (AQMA) to tackle the problem and produce Air Quality Action Plans (AQAPs) setting out the measures that will be taken to reduce pollution levels. Air quality is also managed by local authorities through their responsibilities for land use planning, local transport and controlling industrial pollution sources.
- 9.19 There are currently 37 AQMAs in Kent, which have been declared primarily due to exceedences of Nitrogen Dioxide (NO₂) and/or particulates (PM₁₀) as a result of road traffic. The AQMAs are located along sections of the motorway and trunk road network, as well as parts of Canterbury, Dartford, Dover, Gravesend, Maidstone, Ramsgate, Tonbridge and Tunbridge Wells town centres. AQMAs have also been declared at Dover Eastern Docks from shipping emissions of SO₂ and Northfleet Industrial Area due to fugitive PM₁₀.
- 9.20 The Kent and Medway Air Quality Partnership (KMAQP), which involves KCC, the district councils, health authorities, the Highways Agency, the Environment Agency and various consultants and research partners, supports the work of the district councils in undertaking their Local Air Quality Management duties. The aim of the Partnership is to develop a consistent approach to tackling air pollution across the County, sharing knowledge and information between the partners and increasing public awareness of the issues.
- 9.21 Through the KMAQP a countywide monitoring network including 31 continuous monitoring sites and 400 diffusion tubes supports the work of the district councils. It also provides a useful resource for research bodies and for developers when producing environmental statements in support of a planning application. All data can be found on the website: www.kentair.org.uk. Annual reports are produced to evaluate air pollution levels across the region and to enable trend analysis. Traffic counts are also undertaken within each of Kent's Air Quality Management Areas (AQMAs) on an annual basis to determine whether traffic levels are reducing in response to the actions included within the Air Quality Action Plans.
- 9.22 The KMAQP is currently consulting on an air quality and planning guidance document led by KCC, which is aimed at local authorities, developers, and consultants, to assist in developing a consistent approach towards air quality and planning across Kent. It provides technical advice on how to deal with planning applications that could have an impact on air quality and consists of a series of checklists to help ensure that the impacts on air quality are fully understood.

- 9.23 The County Council, on behalf of the KMAQP, has also acquired an air quality model which can be used for strategic planning applications that are potentially polluting, and enables cumulative impacts to be considered. This could be used to consider infrastructure identified in the Local Development Framework (LDF) process to ensure that the aims of the AQAPs are not undermined. Included within the model are emission inventories for large industrial processes and traffic data for all major roads.
- 9.24 KCC will continue to work with the districts to assist in the development of Air Quality Action Plans (AQAPs) and consider appropriate mitigation measures which will then be put forward for inclusion in the annual Integrated Transport Programme. Measures implemented in LTP2 include the Traffic Management Centre in Maidstone, which co-ordinates traffic signals to minimise congestion, and the Fastrack Bus Rapid Transit System, which supports the growth of sustainable housing and employment in Kent Thameside. Whilst the level of funding available from conventional sources will be significantly reduced during the LTP3 period, KCC will seek to identify further opportunities to build upon this progress, including the Department for Transport's Local Sustainable Transport Fund (see Chapter 5).

Accessibility to Health

- 9.25 To improve access to hospitals and other health facilities, a Transport for Health Working Group (THWG) is in place. This is a multi-agency approach between KCC, Kent and Medway's Primary Care Trusts, voluntary organisations, health and non-health transport providers, and patients' representatives. The main focus of the group is to improve communication about services available and to commission and contract patient transport services, with a regular performance management of providers. A service specification is currently in development with patient and public input. This will identify improvement opportunities, review patient eligibility criteria for services based on medical need and address any gaps in services using feedback from patient, public and stakeholder events.
- 9.26 KCC will work with the Maidstone and Tunbridge Wells NHS Trust and local operators during the period of this LTP to develop an improved network of bus services for the new Pembury Hospital. There will be a particular focus on improving services to Maidstone, Tonbridge and Sevenoaks given the anticipated transfer of a number of medical units from Maidstone Hospital to Pembury during 2011.

Active Transport

9.27 Almost a quarter of Kent's residents are obese and the proportion of adults and children who are obese is increasing. Obesity leads to coronary heart disease, diabetes, stroke and other serious conditions. One of the reasons for the growing levels of obesity is that the car is often best suited to the demands of modern life. This has been aided by the nature of the built environment, which is designed around the use of the car. As a consequence, levels of walking and cycling have declined over the past few decades. However, making a journey by walking and cycling instead of by car can be easily incorporated into most people's lives, meaning that they do not need to take prescribed exercise. Walking for just 30 minutes a day during the working week is sufficient to meet the Government's recommended level of daily activity needed to maintain good health.

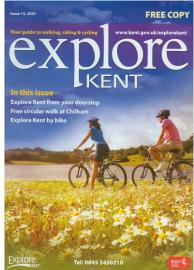
9.28 Evidence from the first round of the Government's Cycling Demonstration Towns suggests that for every £1 invested in cycling, the saving in relation to decreased mortality alone is £2.59.³ A 15 minute cycle ride to and from work would meet the Government's recommended daily level of physical activity. Approximately 2% of children currently cycle to school; however evidence from surveys suggests that some 30% would like to.

School Travel Plans

9.29 In 2007, the Government placed a new statutory duty on local authorities through the Education and Inspections Act to develop a strategy to encourage greater levels of active travel to schools and to review it annually. KCC's Sustainable Travel to School Strategy sets out the County Council's action plan for achieving this objective.⁴ School Travel Plan Advisors work closely with health colleagues to ensure that all schools are engaged in the Government's Healthy Schools campaign. A range of walking initiatives, including Walk on Wednesday, the Walking Bug and the Walking Bus have proved effective in encouraging healthy, active travel to school and staff have noticed that children walking to school are more receptive and ready to learn. These initiatives will be extended to other schools during the period of this LTP.

Access to the Countryside

9.30 KCC promotes access to the countryside under the 'Explore Kent' brand, which aims to become the definitive source of information about countryside recreation in Kent. Explore Kent seeks to increase participation in healthy outdoor recreation for people of all abilities, and enhance the level of understanding of what can be discovered in the County. Awareness of Kent's recreational resources will be raised at local. national and international levels and recreational business opportunities will be promoted. Over 9,000 guided health walks take place in Kent every year, using the public rights of way network. In partnership with local health bodies, a guided walk database can be accessed through the 'Explore Kent' website.



Cycling

9.31 The provision of cycle infrastructure currently varies across the County. KCC aims to provide a comprehensive cycle network for residents and visitors to Kent and will establish links to recreational areas and other leisure destinations to encourage physical activity. The County Council will form 'Active Travel' working parties with partners in at least three districts throughout the LTP3 period and will work with local healthcare commissioners and providers to ensure that the recommendations outlined in the 2009 Chief

Medical Officers report and NICE Guidelines on increasing physical activity are central to KCC transport policy and practice.

- 9.32 A partnership is in place between KCC, NHS Eastern and Coastal Kent Primary Care Trust and Ashford Borough Council to deliver a workplace cycle challenge. A Workplace Cycle Challenge is a behavioural change programme that has proven to be highly successful at:
 - Getting 'non-cyclists' to take up cycling;
 - Getting 'occasional cyclists' to start cycling regularly;
 - Getting more people to cycle for transport; and
 - Increasing people's level of physical activity
- 9.33 The Challenge includes competitions to encourage employees to ride a bike for at least 10 minutes over the three week challenge period. According to research, a 'good' behaviour change takes most people anywhere from 65 to 256 days to become a habit. Although the Workplace Cycle Challenge currently runs for three weeks, there are opportunities to expand this as the project develops and gains momentum.

A Safe and Secure Network

9.34 Transport users are vulnerable to crime, especially when using public transport with few other passengers. Even when there is little crime taking place, the fear of crime discourages people from using public transport. This is also true for some of Kent's streets, where a lack of natural surveillance or street lighting can make pedestrians feel vulnerable. For the operators of international transport systems, potential terrorism is a particular concern,

since trains, shipping and planes are vulnerable to attack, with the risk of significant loss of life. These operators are also responsible for the health and safety of passengers, ensuring that adequate safeguards are in place to ensure that passengers are not put at risk through the operation of the service and that staff have the training to respond to an incident when it happens.



9.35 KCC works in partnership with Kent Police, transport operators and other organisations to tackle crime and security concerns on the transport network through security improvements and measures such as the Automatic Number Plate Recognition system across north Kent. The County Council also has powers to influence safety on supported bus services.

Anti-social Behaviour on Public Transport

9.36 KCC recognises that with such a large number of passengers using the public transport network, and a significant proportion of these being young people taking advantage of the Kent Freedom Pass scheme, measures should be taken to tackle anti-social behaviour on buses and ultimately to ensure the safety and comfort of all passengers.

9.37 The Department for Children, Schools and Families (DCSF) believes that a whole community approach is the best way of tackling bullying, requiring all service providers to work together to change the culture and make bullying unacceptable. As a result, the DCSF has recently published guidance on tackling bullying in several different environments. 'Safe from Bullying on Journeys' focuses on the issue of bullying on transport (particularly to and from school), including public buses and other modes of transport including cycling and walking. KCC plans to work closely with the Kent Safe Schools Partnership as well as with schools, bus operators and Kent Police in developing a 'Safer Travel Policy' that not only complements the Kent Freedom Pass initiative, but also creates the opportunity for further partnership working.

Cycle Parking

- 9.38 Since 2007, the County Council has conducted over 11,000 surveys of new residential sites in Kent. Surveys include data about cycle ownership. Recently, follow-up surveys have collected data about cycle use and the factors that either encourage or discourage people from using their bikes. An important finding was that there was a strong negative correlation between cycling to the station and a lack of destination facilities.
- 9.39 An increase in cycle parking provision will encourage more people to cycle more often. Approximately 60% of the population live within a fifteen minute cycle ride of a railway station, making cycling a viable means of transport.⁵ Therefore, cycle parking at a number of key destinations including town centres, major employers, hospitals, shopping centres and railway stations will be installed. The location and design of this parking will ensure that it is safe and secure and that security marking for bicycles is promoted to discourage theft and aid bicycle recovery.

Rail Interchange

9.40 KCC will work closely with partners to deliver physical improvements to aid interchange at rail stations and encourage people to travel to the station by



sustainable modes. This will include improvements to bus access and infrastructure, cycle parking, walking and cycling routes and signage. The County Council is currently working with Network Rail to deliver significant interchange improvements at Sevenoaks station and with Gravesham Borough Council and Network Rail to deliver a new 'Transport

Quarter' close to Gravesend station as part of the Town Centre regeneration project. The use of CCTV and Real Time Information reduces the fear of crime by enabling reduced waiting times when bus frequencies reduce.

Table 9.1: The Implementation	Plan for LTP3	Theme A Safe	r and Healthier
County (2011-16)			

Funding Source	Scheme Title and Description	Est. Cost £'000s
Road Safety		
Integrated Block	Pedestrian Crossings Provision of new and upgraded crossings to provide safe, direct and convenient walking and cycling routes to key destinations.	959
	Junction Realignment and Traffic Calming Highway modifications to improve visibility and reduce traffic speed.	
Revenue	Road User Behaviour Rolling programme of education, training and publicity measures to promote and sustain positive behavioural change amongst road users.	TBD
Revenue	Bikeability Training Providing school pupils across the County with the skills to cycle safely.	TBD
Safer Routes	s to School	
Integrated Block	Safer Routes to School Capital Measures Provision of new and upgraded crossings, footways and cycleways to provide safe, direct and convenient walking and cycling routes to schools.	650
Revenue	Bike IT Project Part funding of the Sustrans Bike IT officer to enable more children to cycle safely to school.	TBD
Air Quality N	lanagement	
Integrated Block	Capital Measures to support Air Quality Action Plans Provision of bus priority and traffic management measures to reduce congestion and improve traffic flow in Air Quality Management Areas.	100
	Total	1,859

 ¹ KCC (2007), Countryside Access Improvement Plan 2007-2017
 ² Department for Environment, Food and Rural Affairs (2007), An Air Quality Strategy for England, Scotland, Wales and Northern Ireland
 ³ Sloman et al (2009), Analysis and synthesis of evidence on the effects of investment in six Cycling Demonstration Towns
 ⁴ KCC (2009), Kent's Sustainable Travel to School Strategy
 ⁵ Department for Transport (2009), Low Carbon Transport Strategy

Chapter 10 – The Implementation Plan for Supporting Independence

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The Plan

10.1 Nobody likes to be dependent on others and people expect to be able to access a wide range of services to allow them to lead a full and interesting life. A lack of access can be the cause of social exclusion, leading to lower educational attainment, higher offending rates, substance abuse, health problems and generally poorer social and life skills. The reasons for this lack of access include affordability, disability, poor service provision and limited information on the transport services available. This can lead to people putting off necessary health care until transport is available. KCC has a major countywide project called the Supporting Independence Programme aimed at tackling the dependency culture which currently sees £1.5 billion a year spent on welfare in Kent; more than the total expenditure on health and education combined. This LTP will look to address the reasons for social exclusion and tackle the barriers, through better public transport provision, wider information on local services and measures to facilitate walking and cycling.

East Kent Profile

10.2 The East Kent coastal strip is home to Europe's busiest ferry port at Dover, along with the large towns of Folkestone, Ramsgate and Margate. It also encompasses the smaller settlements of Hythe, Deal, Sandwich, Broadstairs, Herne Bay and Whitstable. Whilst each of these towns has its own unique character and attractions, they have all been affected to a greater or lesser



degree by the twin challenges of a declining seasonal tourist trade and an ageing population. East Kent also suffers from its relatively peripheral location, which discourages major private sector employers from locating in the area. The situation has recently been exacerbated by Pfizer's announcement of its intention to withdraw from its Research and Development facility at Sandwich, which could result in the loss of up to 2,400 jobs.

10.3 East Kent has a number of pockets of social disadvantage. These are concentrated in Thanet, which is one of England's 20% most disadvantaged districts and includes the most disadvantaged Lower Super Output Area (LSOA) in Kent, Margate Central ward. The indices for health, disability and employment disadvantage illustrate a particularly marked variation between East and West Kent. Addressing these issues requires multi-agency interventions which balance the need to provide improved access to employment and key services by low-cost and sustainable forms of transport with the attainment of value for money objectives. These interventions should also contribute to the wider objective of enabling East Kent's growing population of residents aged 75 or over to remain in their own home and to access services independently wherever possible. Evidence suggests that older people who are physically active experience less falls, increased selfconfidence, reduced social exclusion and mild depression, and an enhanced ability to continue to take part in the activities of daily life.

Progress to date

10.4 Considerable progress has been made in terms of improving accessibility to jobs and services in East Kent over the past five years. The commencement of Southeastern High Speed rail services in December 2009 has dramatically reduced journey times between much of the region and London, as well as



the new employment sites at Ashford and Ebbsfleet, while Quality Bus Partnerships (QBPs) in Shepway, Dover, Thanet and Canterbury have achieved marked improvements to the quality and frequency of local bus services. Additionally, the opening of the East Kent Access scheme in 2012 will complete a high standard and safe route between the Ports of Dover and Ramsgate

and Manston Airport. These advances are likely to make the East Kent coastal towns significantly more attractive to commuters, which will in turn improve the viability of local shops and services and provide new employment opportunities. However, further progress is needed in order to tackle some of the more deep seated social and economic problems in East Kent, particularly now Pfizer has decided to withdraw from the area.

Quality Bus Partnerships

- 10.5 KCC intends to further enhance the effectiveness of its QBPs during the period of this LTP through continued investment in bus route infrastructure to improve the speed and reliability of services and to ensure easy access for all. Although bus stop infrastructure in East Kent is typically well maintained and of a higher quality than that in West Kent, bus stops served only by the KCC subsidised network are often in a poor state of repair, with no timetable case and flags that display outdated information. The County Council therefore intends to continue to invest in delivering improvements to bus stop infrastructure, including:-
 - the installation of clearways where appropriate, with a focus on urban areas where parking at bus stops is a particular issue;

- raised boarders with tactile paving and a dropped kerb in the vicinity to allow disabled people and those with impaired mobility to access the footway; and,
- new, high quality bus stops where budgets allow, although the focus will be on ensuring that all bus stops have a pole, flag and timetable case in good condition.
- 10.6 In July 2010, KCC appointed a new Roadside Infrastructure Unit (RIU) contractor to maintain bus stop infrastructure and information and to compile a comprehensive database of all bus stops in Kent. The database will provide the County Council with a detailed knowledge of the attributes and state of repair of infrastructure that is currently on the ground, which will guide future investment. The RIU will also ensure that bus stop infrastructure is maintained in a clean and attractive state and will enable KCC to react more quickly to complaints and enquiries from members of the public.
- 10.7 KCC will encourage public transport operators to develop new and improved services that are commercially viable in the medium term. Where resources allow, the County Council will consider pump-priming new or improved services, particularly those which will help to deliver the integrated bus network proposed in KCC's Transport Delivery Plan for Kent¹ (see Chapter 4), as part of a 'Kent Kickstart' initiative. The County Council will also continue to work with the district and borough councils to secure developer contributions for new or enhanced bus services to cope with the additional travel demands generated by new developments.

Supported Bus Services

10.8 Access to key services and employment is a significant issue for older people, the disabled, residents of rural areas and those who do not have access to a private car. KCC seeks to provide this access through the provision of subsidised bus services, the support of community rail and minibus schemes, and the funding and administration of concessionary travel. The County Council has a clearly established policy for the financial support of socially necessary public transport services which cannot be operated on a commercial basis. This states that the service should provide access to education, employment, health care, or essential food shopping which could

not otherwise be attained and that the cost of the service should not exceed £3 per passenger journey. Around 20% of the scheduled bus services in Kent are operated with revenue support from KCC, representing an estimated 4 million passenger journeys a year. In 2009/10, revenue support for these services totalled £7.3 million. KCC's new 'County Links' branding is to be applied to services which are entirely subsidised by the



County Council and meet certain service and vehicle specification during the period of LTP3. The intention of the brand is to increase the profile of KCC supported services whilst developing an identity that is trusted by passengers.

- 10.9 Due to the significant financial constraints facing the County Council, as well as rising tender prices, KCC has identified approximately 30 supported bus services which are considered too expensive to sustain and will be discontinued from January 2012 unless alternative funding can be found. Members of the County Council have been invited to consider using their Member Highway Fund, or other community based solutions, to meet the shortfall in funding for these mainly rural services (see Chapter 6).
- 10.10 In addition to conventional bus routes, the County Council also supports 'Kent Karrier' services throughout the County which provide a combination of demand responsive and fixed routes for disabled people and those who live more than 500 metres from an established bus route. These services require a very high level of revenue support per passenger journey; however it is intended that the Kent Karrier network will be sustained to provide access to those who are less mobile.

Community Transport and Taxis

- 10.11 Action with Communities in Rural Kent has recently developed a comprehensive directory of community transport schemes which are currently operating in the County. This is a major step forward, although it is acknowledged that further work is needed to enhance access to key services for rural residents. KCC has ambitions to deliver a 'Comprehensive Community Transport Network', with a single point of access for Kent residents. This concept accords well with the Coalition Government's emphasis on localism and the 'Big Society' and its feasibility will be investigated during the period of this LTP.
- 10.12 Taxis and Private Hire Vehicles (PHVs) can also play an important role in providing access to services for rural residents and those who are unable to use conventional bus services. They assist in reducing congestion and encourage sustainable travel by reducing the need for car ownership. KCC will therefore seek to enhance integration between taxis and sustainable modes and explore the possibility of taxis and PHVs playing a larger role in providing transport to and from rural areas to support independent living. This will be progressed through the Comprehensive Community Transport Network project.

Concessionary Travel Schemes

10.13 The Kent Freedom Pass was rolled out countywide during 2009 and now provides free travel on almost all public bus services in the County for an annual fee of £100 for young people living in Kent and in academic years 7 to 11. The Freedom Pass is available for special rates of £50 or for free for certain groups of school pupils. This innovative scheme has resulted in a significant increase in bus passenger journeys by young people. KCC issued over 25,000 passes during the 2009/10 academic year, with an average of 600,000 trips made per school term month. There is evidence of a 2.6% improvement in journey times outside schools with a high take-up of passes, through modal shift from car to bus, and there are clear social inclusion benefits for young people. The scheme receives substantial revenue support from KCC, which is likely to amount to over £10 million net in 2010/11. Options are under consideration for the continuing support of the scheme during the period of this LTP.

10.14 During the LTP2 period, KCC provided additional funding to support the Kent and Medway Concessionary Travel Scheme for disabled people, their companions and those aged over 60. This enabled pass holders to travel from 0900 instead of the statutory 0930 on which the Government's funding is based. However, from April 2011, concessionary passes will be valid between 0930 and 2300 on Monday to Friday, and at any time on Saturdays, Sundays and public holidays, as KCC is no longer in a position to fund the additional cost of availability from 0900. The Scheme has significantly improved access to essential services for older people and the disabled and supports independent living for those who might otherwise be unable to access the public transport network. The County Council will assume responsibility for the administration and funding of the scheme from Kent's district councils from April 2011.

Table 10.1: The Implementation Plan for LTP3 Theme Supporting Independence (2011-16)

Funding Source	Scheme Title and Description	Est. Cost £'000s
Quality Bus	Partnerships	
Integrated Block	Bus Route Infrastructure Provision of bus stop improvements (clearways, bus boarders, hard standings) to support the East Kent Quality Bus Partnerships.	1,000
Revenue	Roadside Infrastructure Unit Countywide maintenance of bus stop infrastructure and information.	TBD
Supported B	us Services	
Revenue	Socially Necessary Bus Services Financial support of non-commercial bus services that provide access to education, employment, health care and/or essential food shopping.	TBD
Concessiona	ary Travel Schemes	
Revenue	Kent Freedom Pass Financial support of the Freedom Pass scheme to continue to provide free travel on almost all public bus services in Kent for an annual fee of £100.	TBD
Revenue	English National Concessionary Travel Scheme Administration and funding of the ENCTS to provide free travel on all public bus services in Kent for disabled people, their companions and those aged over 60.	TBD
Access Impr	ovements	
Integrated Block	Pedestrian and Cycle Route Corridor ImprovementsProvision of upgraded crossing points and new mobility dropped crossings between residential areas and key destinations throughout East Kent.Station Access Improvements Provision of pedestrian crossings, enhanced bus interchange facilities, cycle parking, signage and	859
	information at High Speed stations in East Kent. Total	1,859

 $[\]overline{^{1}}$ KCC (2010) Growth Without Gridlock – A Transport Delivery Plan for Kent (final draft)

Chapter 11 – The Implementation Plan for Tackling a Changing Climate

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The Plan

11.1 A new Kent Environment Strategy has been developed by KCC to achieve a high quality environment that is low carbon, resilient to climate change and has a thriving green economy at its heart. The Strategy will act as a framework to prioritise action by key public agencies, business and commerce in Kent. The longer term objectives are to proactively support the development of home working and the use of ICT to reduce the need to travel. Indeed, the Strategy has identified that 57% of all car and van journeys are less than 8 km, a distance suitable for cycling or electric vehicles.

Reducing Emissions

- 11.2 KCC is keen to encourage teleworking, whereby employees connect to their workplace through telecommunications from their home or local café, rather than commute. The County Council also promotes the use video conferencing and audio conferencing, which enable staff to interact without the need to make a long business journey. In the present economic climate, businesses are increasingly concerned with avoiding the overheads associated with accommodation and staff travel; therefore methods of enabling employees to work remotely are likely to increase in relevance and attract investment.
- 11.3 In Kent, there are some 9,000 properties that cannot obtain any form of broadband and more than 100,000 homes that cannot achieve 2Mbps download speed. The County Council is currently updating its Digital Strategy in response to the new Government's digital policy "Britain's Superfast Broadband Future". KCC has made grants available to parish councils to help fund suppliers' setup costs and will continue to support improved broadband access across the County. KCC is also providing £1.6m to work with Kent's employers on solutions specific to their business needs.

Kent County Council's Carbon Footprint

11.4 KCC is committed to reducing its carbon footprint as a local service provider. Overall, the County Council achieved a business miles reduction of 3.5% between 2009 and 2010 with savings of £277,000. As part of its recently adopted Street Lighting Strategy, KCC is committed to the reduction of energy consumption and CO₂ emissions from



street lighting. This will be achieved by replacing ageing lights with modern, efficient lighting which consumes less energy and reduces light pollution. The County Council is also considering whether de-illumination, part-night lighting, light dimming or removal of certain lights is appropriate. On all new developments, KCC will offer advice to the district planning authority as to whether the areas to be adopted require lighting. If lighting is deemed to be required, lighting classes will be specified, together with switching criteria which may include dimming and part-night lighting.

11.5 Delivery of KCC services is being modernised to provide improved access and choice for Kent's residents. This strategy favours sustainable transport by providing town centre 'Gateways' bringing together public and voluntary services under one roof. Mobile Gateways offer similar services in market towns, while the development of internet-based solutions such as selfassessment and Telehealth enable services to be accessed from home, thereby avoiding the need to travel. Further measures that the County Council is implementing to reduce its carbon footprint include the use of GPS technology and route optimisation tools to improve the planning of highway works and reduce wasted travel mileage between jobs.

Road User Charging and Low Emission Zones

- 11.6 The County Council is opposed to road user charging on local roads and considers such a scheme would be detrimental to the Kent economy if implemented in isolation. KCC supports the charging of foreign lorries and is pleased with the Government's proposal for a foreign lorry road user charging scheme which could provide up to £40m per annum for infrastructure improvements (see Chapter 8).
- 11.7 Charging policy at car parks has a key role to play in decreasing the use of the private car in peak periods, whilst encouraging shoppers and others to visit towns in the off-peak. The County Council will continue to work closely with Kent's district councils to this end whilst ensuring the economic vitality of shopping centres is maintained.
- 11.8 A low emission zone (LEZ) is an area where restrictions are in place to reduce the level of high polluting vehicles using the road network. In the UK, LEZs have been introduced in London, Norwich and Oxford. The London LEZ uses Automatic Number Plate Reading Cameras (ANPR) to check vehicles against the records of the DVLA and charges accordingly; where the Norwich and Oxford schemes work with local bus operators to ensure that all buses meet Euro 3 emissions standard. There is little conclusive evidence on their effectiveness so while the County Council will explore ways and means of

reducing emissions in town centres, it has no firm plans at present to introduce LEZs in urban areas. KCC supports the promotion of electric vehicle technology but feels that the lead on installing the necessary infrastructure should come from the private sector, working with KCC as the Local Transport Authority.

New Development

11.9 All of the spatial plans for Kent recognise the need to tackle climate change through the design of new developments and to ensure that associated



transport infrastructure embraces sustainability. Some of Kent's coastal areas are particularly vulnerable to rising sea levels including Swale, Canterbury, Thanet, Dover and Shepway, while other areas such as Maidstone and Tonbridge and Malling are prone to river flooding. KCC works closely with the district authorities to encourage sustainable

transport by locating development near existing transport hubs and providing facilities for walking, cycling and public transport. Mixed-use developments, where housing and employment sites are located in close proximity, also encourage shorter commuting journeys. This work will be supported by the Kent Design Guide which specifies the high standards of design and construction needed to create these sustainable communities.¹

Smarter Travel

11.10 With an increasing demand for travel and limited capacity on the transport network, the inevitable result is increasing congestion and delay for all journeys. Whilst the car is often the most convenient form of transport, it occupies a large amount of road space per passenger. Around 91% of car commuting journeys and 87% of work-related car journeys are single occupancy, which means much road space is taken up by empty seats. KCC is therefore exploring ways of encouraging journeys by more efficient modes of transport and reducing the distance travelled. With increasing technology, teleworking is becoming more popular with staff working from home or a nearby satellite office rather than their headquarters. For example, British Gas has closed its 380 depots and with one distribution centre, now uses the Royal Mail as a distribution network to its field service engineers through Royal Mail's local delivery offices. Through the promotion of car sharing and encouraging the use of public transport, walking and cycling, capacity can be released on the transport network which will allow more people to reach their destination on time.

Walking

11.11 Increasing the number of people choosing to walk, instead of drive, is one of the key outcomes needed if the UK is to achieve the carbon reduction target required by the Climate Change Act 2008. KCC is committed to the development of a pedestrian-friendly transport network and this will form the foundation of the planned Walking Strategy for Kent, to be produced by January 2012. It will be an inclusive network, considering the quality of the walking environment, its suitability for all types of pedestrians, personal safety

and security, signage and information, and the directness of the route. It will also integrate the objectives of the Countryside Access Improvement Plan in providing an enhanced public rights of way network.

11.12 KCC will continue to make use of pedestrian reviews and access audits in order to provide well designed pedestrian networks connecting key services, employment and trip generators such as health centres, retail areas, town centres, and public transport interchanges. For new developments, the County Council and partners will produce an Inclusive Design and Place-making Technical Appendix to the Kent Design Guide (2005)² to ensure that the principles of inclusive design are enshrined in the planning and delivery of all new developments, which should be fully accessible to all.

Cycling

11.13 Undertaking a four mile commute to and from work by bicycle rather than by car saves half a tonne of CO₂ a year. In order to maximise the full range of benefits that cycling can provide, an overarching Kent Cycle Strategy will be drafted by mid-2011. The strategy will be developed by a multi-agency

'Cycling Working Group' with a number of key stakeholders representing health, education, sport, tourism and countryside access. It will overlay district cycle strategies which will focus on the development and delivery of cycle routes at a local level and other measures that support cycling like safe and secure parking, shower facilities etc. Each district cycling strategy will contain a plan for



how the network will be developed and how the network will link with other districts. Cycling strategies have already been developed and published for Ashford, Canterbury, Dover, Shepway, Thanet and Tonbridge and Malling and Sevenoaks is currently in development. The objective is for each district to have a cycling strategy by 2012 and for these to be updated every five years.

11.14 Currently, the provision of cycle infrastructure varies across the County. However, KCC is committed to the provision of a comprehensive cycle network for residents and visitors to Kent. Based on the evidence summarised in Chapter 9, there needs to be a mixture of dedicated cycle routes to enable people to become more confident cyclists along with measures to provide safer cycle routes on the highway. Importantly, cycle routes should be continuous and direct. Therefore, priority will be given to providing a comprehensive urban cycle network that enables people to cycle continuously to schools, work places, shops and leisure opportunities.

Buses

11.15 Alongside walking and cycling, buses are also delivering lower CO₂ emissions per mile, and partnership working between local authorities and bus operators has seen continued improvement in bus passenger journeys, delivering modal shift from car to bus and reducing overall emissions. Under this Theme, bus measures will be implemented where there is the greatest potential to achieve modal shift, encouraging car users to take the bus for their journey. This has already proved successful for schemes like Fastrack in Kent Thameside, which has enjoyed a 19% modal shift from car to bus travel

and 26% of passengers had a car available for the journey but chose to travel by Fastrack.

Workplace Travel Planning and Smarter Choices

- 11.16 A Travel Plan for a site or organisation is a plan of measures and initiatives aimed at encouraging more sustainable travel, with an emphasis on reducing single occupancy car use. These are especially suitable for large employers with high levels of car commuting, where reducing car parking provision and supporting modes like walking and cycling can reduce their overheads. Smarter Choices are measures to provide improved travel choices to enable people to make more efficient and effective use of the transport system. Examples include the Kentjourneyshare.com scheme and Car Clubs.
- 11.17 KCC, together with Kent's district councils, has a strong track record in securing Travel Plans for new developments and provides clear guidelines to



developers on the scope and requirements of Travel Plans.³⁴ Whilst the role of enforcing planning conditions and obligations lies with the district planning authorities, the County Council recognises that it has a policy lead in this area and has therefore taken steps to improve liaison with the district councils and to support developers in fulfilling

their obligations. This includes implementing the iTRACE Travel Plan survey tool and facilitating links with service providers, including public transport operators and car club/car share networks. KCC is committed through this LTP to consolidate this approach and to lock-in the benefits of sustainable development for years to come.

- 11.18 In addition to Travel Plans for schools, workplaces, residential developments and leisure venues, KCC has been actively participating in the national Rail Station Travel Plan pilot led by the Association of Train Operating Companies on behalf of the Department for Transport. The work at Ashford International station has seen the development of a strong partnership between the County Council, Southeastern, Stagecoach, Ashford's Future and SUSTRANS with a view to addressing the environmental impact of the whole rail journey, including the trips to and from the station. KCC and its partners are seeking to expand this initiative to other key stations across Kent during LTP3.
- 11.19 During the lifetime of LTP3, the County Council will seek to expand the number of Travel Plans against the 2010/11 baseline, as illustrated in Table 11.1 (overleaf).

	2010/11	2011/12	2012/13	2013/14	2015/16
Travel Plans secured by planning	212	232	252	272	292
Voluntary Travel Plans	27	32	37	42	47
% of 'Live'* Travel Plans actively engaged	60%	70%	72%	75%	75%
Travel Plan Networks and Forums	4	8	10	12	15
School Travel Plans	95%	100%	100%	100%	100%
Station Travel Plans	1	3	5	7	10

Table 11.1: Projected Number of Travel Plans 2011-16

* Live Travel Plans are those where the trigger for implementation has been reached e.g. commencement of works on site or occupation of the agreed number of units/dwellings and within the agreed monitoring period.

- 11.20 There is currently a good range of initiatives and incentives available to assist companies wishing to pursue a Travel Plan. Some of these are delivered by KCC, including Kentjourneyshare.com and the iTRACE Travel Plan survey tool. Others are available at the national level, including tax breaks for cycle purchase and other green travel initiatives. Clear opportunities exist, therefore, for a more formalised partnership between local authorities, other public bodies including healthcare and education providers, and the private sector to draw on economies of scale and the shared objectives of tackling congestion and improving the health and wellbeing of individuals.
- 11.21 During the period of this LTP, the County Council will establish a New Ways 2 Work Partnership with public and private bodies, initially on a voluntary and informal basis, with a view to a formal partnership as work becomes more established. The Partnership will aim to assist employers in delivering quality workplace Travel



Plans that are good for businesses, good for their employees and good for the environment through practical solutions, aimed at resolving the real and perceived obstacles to sustainable commuting.

- 11.22 KCC already offers free diagnostic advice and exploratory meetings with any company or organisation interested in developing Travel Plans. Through its iTRACE system, the County Council also provides free web-based site audits and surveys which generate a series of reports highlighting current travel patterns and opportunities to bring about modal shift. During the LTP3 period, it is planned to undertake these surveys on a more organised annual basis to track the success of New Ways 2 Work interventions. Postcode mapping will continue to be offered to employers utilising either Microsoft MapPoint[™] or Accession software, linking postcode data with public transport availability.
- 11.23 Kentjourneyshare, run by KCC, is a free web-based service which links drivers, passengers, walkers, cyclists and taxi users who make similar journeys and encourages them to share their trip. In July 2010, there were 3,400 members equating to an approximate saving of 360 tonnes of CO₂ per annum. An annual increase of 25% is proposed during LTP3, as outlined in Table 11.2 below.

Table 11.2: *Kentjourneyshare* projected membership

	2010/11	2011/12	2012/13	2013/14	2014/15
Kentjourneyshare projected membership	3,400	4,400	5,400	6,800	8,500

- 11.24 A specific EU funded project entitled 'Low Carbon Futures' will develop and pilot an online carbon reduction tool to assist small and medium enterprises (SMEs) in Kent to measure and reduce carbon emissions. The project (funded to 2013) has committed to the following targets:-
 - 1,000 businesses as members of the South East Business Carbon Hub;
 - 500 of these businesses to have achieved accreditation (equivalent to Phase 3 of BS 8555);
 - 150 businesses to be implementing sustainable travel strategies.

Adaptation

- 11.25 KCC is committed to preparing for the impacts of climate change and to working with partners to identify appropriate responses. Severe weather events in the past have had serious impacts on the County's transport network. Kent's Local Climate Impacts Profile, which assessed these impacts over a 10-year period, found that they cost Kent Highway Services some £6 million in total. They have also resulted in buckling rails and train service disruption, road closures and the implementation of Operation Stack, with significant knock-on effects to service delivery, businesses and communities.
- 11.26 Kent's Adaptation Action Plan, developed in response to the Kent Environment Strategy, contains actions to address the impacts of climate change in relation to the activities of Kent Highway Services (KHS). These include:
 - a review of current materials and processes for all KHS assets, taking into account the implications of climate change and identification of replacements where necessary;
 - the development and maintenance of a climate change risk register for KHS, with risks incorporated into stand risk management processes as appropriate;
 - monitoring of the impacts of severe weather on KHS assets and using this information to inform assessments of maintenance and repair priorities;
 - requiring KHS suppliers to demonstrate how they will plan for and proactively manage the impacts of climate change;
 - proactive management of flood risk across KHS, building on recommendations from the strategic flood risk review and in line with KCC's responsibilities under the Flood and Water Management Act (2010);
 - ensuring that the impacts of climate change are appropriately addressed with KHS's Transport Asset Management Plan;

- the use of water harvesting and recycling where possible as part of gully waste management;
- monitoring and reviewing of the grass cutting season in light of longer growing seasons, taking appropriate actions if and when required.
- 11.27 Additionally, KCC is working with its partners across a number of priority sectors, such as business and health and social care, to consider how climate change and severe weather could impact them, including the indirect effects from loss of transport infrastructure.

Table 11.3: The Implementation Plan for LTP3 Theme Tackli	ng a Changing
Climate (2011-16)	

Funding Source	Scheme Title and Description	Est. Cost £'000s	
Smarter Travel			
Integrated Block	"Take a Stand" Cycle Parking Match funding grants to businesses and other organisations.	180	
	Capital Measures to Support Kentjourneyshare and Car Clubs Signing, lining, TROs etc.		
	Station Travel Plans Accessibility and interchange at key stations.		
Revenue	New Ways to Work Partnership	tbd	
Walking			
Revenue	Walking Strategy for Kent Including an Inclusive Design and Place-making Technical Appendix.	tbd	
Integrated Block Developer Conts.	New Footways Various new footways and missing links in urban areas to provide safe, direct and convenient walking routes to key destinations.	300	
Cycling			
Revenue	Cycling Strategy for Kent/District Cycling Strategies	tbd	
Integrated Block Developer Conts.	Cycle Networks Provision of cycle routes in urban areas linking key destinations.	779	
	Cycle Parking Provision of secure cycle parking at key destinations.		

Buses		
Integrated Block Developer Conts.	Bus Priority Measures A range of measures designed to make bus travel more attractive by offering quicker journey times through measures including bus lanes, bus priority at signals and bus stop improvements.	600
	Total	1,859

¹ Kent County Council (2005), *Kent Design Guide* ² Kent County Council (2005), *Kent Design Guide* ³ Kent County Council (2008), *Guidance on Transport Assessments and Travel Plans in Kent* ⁴ Kent County Council (2010), *New Ways 2 Work – Best Practice Guide for Preparing Travel* Plans in Kent

Chapter 12 – The Implementation Plan for Enjoying Life in Kent

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The Plan

12.1 Alongside the previous four LTP themes, there are a variety of ways in which transport and accessibility improve quality of life. Transport opens up new opportunities to learn and to develop, and to experience new places and cultures. People spend approximately 376 hours a year travelling,¹ so the comfort and enjoyment of the journey is very important and can be the determining factor in choosing which form of transport to take, when the journey is taken or indeed whether the journey is taken at all. Most of Kent's residents value the County's attractive countryside, its coastline and its historic towns and villages but transport has a negative impact on the natural and built environment, putting pressure on wildlife and habitats and eroding people's enjoyment of these places. The work under this strategy will be undertaken by a wide variety of partners, from countryside access and mobile libraries to 'Explore Kent' and Kent's rail and bus operators.

Accessing Life's Opportunities

12.2 Alongside access to goods and essential services, transport plays a role in improving our lives by giving us access to valuable opportunities. These cover a wide variety of destinations including cultural and sporting events, social networks, historical sites and monuments, the countryside and schools and colleges.

Home to School Transport

12.3 KCC wants all children to receive a high quality education and where transport to school is a barrier, the County Council aims to help pupils get to school safely, easily and on time. In the first instance, this is achieved through offering advice on getting to and from school, but where transport is necessary, KCC provides free or subsidised transport to school if the child is eligible under Section 509 of the Education Act 1996. Home to school transport is available for children who attend the 'nearest appropriate school for transport purposes', live more than two miles from the school using the shortest available walking route (if they are under eight years old); or live more than three miles from the school using the shortest available walking route (if they are over eight years old). The County Council makes further

provision, such as escorts, if this is necessary to ensure school attendance. The statutory home to school transport service will continue during the period of this LTP and KCC will continue to ensure that this service is integrated with rural and social services transport wherever possible.

Kent Freedom Pass

12.4 The Kent Freedom Pass scheme was rolled out countywide during 2009. It now provides free travel on almost all public bus routes for an annual fee of £100 for young people living in Kent and in academic years 7 to 11. This

innovative approach has achieved a significant increase in bus passenger journeys by young people. There are currently over 25,000 passes on issue, with an average of 600,000 trips made per school term month. There is evidence of a 2.6% improvement in journey times outside schools with a high take up of passes, through modal shift from car to bus, and there are



clear social inclusion benefits for young people. The Freedom Pass can also be used outside of school hours, providing young people with access to and from extra curricular activities, cultural events and the countryside. The scheme will continue to require substantial revenue support from KCC, which is likely to amount to over £10 million net in 2010/11.

Access to Green Spaces and the Countryside

- 12.5 Most of Kent's residents live in urban areas; however with the County's extensive coastline, most also live within close proximity of the coast and countryside. Initiatives such as the National Cycle Network, which passes through many of Kent's towns, has provided green links between where people live and their local open spaces. Where development is being planned, green spaces are included, such as the 'Green Grid' proposals for Ashford and Thames Gateway Kent (see Chapter 8). During the LTP3 period, improved cycling and walking links to these green spaces will be implemented and in existing urban areas, access to recreational areas such as local seafronts and harbours, country parks and the North Downs will be introduced.
- 12.6 Being able to access and enjoy Kent's countryside is important to health and wellbeing and many people use the County's footpaths, bridleways and byways to do this. This Public Rights of Way (PRoW) network accounts for 42% of the highway network by length and is managed by KCC's Countryside Access Service. In 2007, the County Council published its Countryside Access Improvement Plan (CAIP), a ten year strategy which sets out KCC's proposed approach to accommodating the present and future demands on the PRoW network.² The CAIP is linked to the Local Transport Plan and sets out the priorities and aspirations for the PROW network in the period 2007-2017. Amongst the priorities identified within the CAIP is improved maintenance of the PRoW network, greater off-road access for equestrians and cyclists, and the removal of limitations such as stiles; all of which contribute to the core objectives of LTP3.

12.7 Rights of way are maintainable public highways. There is a statutory requirement not only to maintain the network in a safe condition but also to provide signposts and to contribute to the costs incurred by land managers in maintaining gates and stiles, many of which have a shared liability. The minimum level of maintenance should be such that rights of way are capable of meeting the use that is made of them by ordinary traffic throughout the year. The Countryside Access Service adopted an asset management approach in 2007 and operates in line with the objectives of KCC's Transport Asset Management Plan (see Chapter 13).

Enjoying the Journey

12.8 Whilst the majority of people normally choose the quickest way to travel from A to B, the quality of the journey experience is still important. In some cases, overcrowding, poor ventilation, a lack of toilet facilities and refreshments, and dirty and vandalised vehicles can make the car a more attractive means of travel than public transport. Therefore it is important to improve the comfort of passengers using Kent's buses and trains. Whilst KCC does not directly operate bus and rail services, the County Council supports the operators and owners in making public transport easier and more comfortable to use. Some people travel purely for pleasure, whether walking and cycling along Kent's footpaths and bridleways or taking a slow drive through attractive countryside. Yet these journeys are often an important source of income for rural businesses.

Transport Information

12.9 The standard of bus timetable information in Kent currently varies depending on whether the bus stop is served by a commercial operator (Arriva in West Kent, Stagecoach in East Kent) or a KCC subsidised service. Arriva and

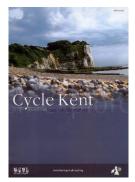
Stagecoach maintain their own roadside information to a high standard. However, for KCC supported services there is often outdated or no roadside information. It is intended that the County Council's recently appointed Roadside Infrastructure Unit contractor will deliver a substantial improvement to the standard of roadside information on KCC supported services, with a target to display up-to-date timetable information at all marked bus stops in Kent by July 2011. In July 2010, the County Council took



on the role of producing roadside timetable displays for all KCC subsidised services. This is produced in a consistent and high quality format and delivers a substantial improvement compared to previous displays.

12.10 KCC also produces public transport maps and timetable leaflets for supported services and arranges for the distribution of the information to public-facing outlets across the County. Additionally, the County Council maintains web pages on its corporate website, providing public transport information and links to other relevant sites. KCC intends to undertake a full review of the type and availability of public transport information during the LTP3 period, with a view to improving publicity, distribution channels and its public transport web pages, and to ensure that public transport publicity is available in all towns and villages with a population in excess of 3,000 people.

- 12.11 As part of KCC's SwaleNet project, a new website dedicated to public transport in Swale will be launched, incorporating real-time bus and rail information, timetables, maps, fares and special offers. The effect of the website will be monitored and if the concept proves successful, it will be rolled out across the County. The County Council has recently completed a trial project to install information about local bus services at selected stations. It is intended that by the end of the LTP3 period, all rail stations in Kent will display such information and also hold a stock of local bus timetables for customers.
- 12.12 KCC intends to develop a Kent Quality Rail Partnership (KQRP) with Network Rail, Southeastern and Southern during the LTP3 period. A KQRP board will meet quarterly and will co-ordinate all rail projects and improvements in Kent. The KQRP will bid for capital funding to improve station facilities and improve integration with other modes.
- 12.13 Since 2009, KCC has produced cycle maps for Ashford and Kent Thameside. Cycle maps are planned for each of the major urban areas of the County. These will include standard symbols, allowing for easy recognition regardless of which area the map covers. Cycle maps for the major urban areas will help promote the routes for both leisure and utility purposes. Where funding allows, the cycle maps will be distributed to employers, schools, railway stations, libraries and health centres to promote the cycle network.
- 12.14 The County Council will continue to develop web-based resources to improve the availability of information relating to cycling in Kent. This will include information about cycle routes, tips for safe cycling and, subject to funding, the development of an online Cycle Journey Planner. The journey planner will promote cycle routes to both new and returning cyclists, as well as tourists unfamiliar with cycle routes in the area. Users will be able to choose the quietest, quickest, or most recreational route depending on their journey purpose.



12.15 The 2012 Olympics in London will not only raise the profile of cycling but that of sport as a whole. KCC is hopeful that the Olympics will inspire people to take up cycling and increase their physical activity. The County Council will continue to support cycling events in Bike Week, subject to resources, and will promote these and other related events via the Explore Kent website, social media resources such as Facebook and Twitter, and posters and media campaigns.

Smartcard

12.16 KCC is working in partnership with Kent's bus operators to roll out new Electronic Ticket Machines (ETMs) with Smartcard readers and GPS transmitters linked to the County Council's Real Time Information (RTI) system on all service vehicles. This project will generate significant benefits to passengers and bus operators, including reduced bus stop dwell times, more effective delivery and administration of concessionary travel schemes, and enhanced information on patronage and network performance. An improved system of RTI at bus stops is replacing existing displays in those parts of the County which have RTI installed at present, and it is planned to expand RTI

coverage when resources allow. A pilot Smartcard scheme will be launched for Freedom Pass holders attending schools in Swale and Thanet during the 2010/11 academic year, subject to the roll out of the new ETMs by operators. In addition to the present concessionary travel schemes, KCC has the potential to use the Smartcards for multi-operator commercial season tickets (with operators' cooperation) as well as for non-transport uses, such as school meals and library cards.

Protecting Kent's Natural and Man-Made Environment

- 12.17 Whilst the ability to travel greatly benefits people's lives, it has a negative impact on the environment. Increasing traffic levels have created more pollution, noise and vibration; damaging buildings and wildlife. The visual impact of new infrastructure and signing erodes the character and quality of the countryside; displacing wildlife, affecting water levels due to localised runoff, and disrupting the ancient patterns of the countryside. New road corridors also bring pressure for greenfield development.
- 12.18 It is vitally important that Kent's natural environment and heritage are protected, as they provide a sense of identity, allowing people to take a break from the pressures and pace of modern life. This protection includes limiting and mitigating the impact of traffic but also identifying opportunities to enhance the environment through urban fringe green infrastructure, habitat



connectivity and using local materials and design sympathetic to the local area. The County Council and its partners have published various guides for developers and planners including the Kent Design Guide³, Rural Streets and Lanes: A Design Handbook by the Kent Downs AONB⁴ and the design standards in KCC's Countryside Access Improvement Plan.⁵

Lorries on Unsuitable Routes

12.19 As part of the emerging Kent Freight Strategy, KCC will work with the freight industry to establish a Freight Quality Partnership for Kent. Through the Partnership, the County Council will develop a defined and agreed 24-hour lorry route network, which will be promoted throughout the road haulage industry. KCC will also seek to establish a zoning system in each urban area so that signage can be introduced to direct HGVs to industrial estates and town centres via the most suitable routes. This will help to control HGV movements through or near residential and environmentally sensitive areas and will be supported by the enforcement of delivery times in town centres.

Development Management

12.20 KCC, along with the County's district planning authorities, work to ensure that major transport infrastructure has a minimal impact on Kent's residents and environment. A recent example was the application to build Kent International



Gateway (KIG), a Strategic Rail Freight Interchange covering an area of 300,000 square metres near Junction 8 of the M20. KIG was designed to intercept road and rail traffic from the Continent and to transfer a small proportion of this traffic to the North of England by rail. Both KCC and Maidstone Borough Council opposed this application on the grounds that it would have had detrimental impacts on the adjacent North

Downs Area of Outstanding Natural Beauty and on traffic movements to the south-east of Maidstone. The applicant's case for the benefits of the transfer of freight from road to rail was also questioned by the County and Borough Councils. Following a public inquiry that closed in December 2009, the Secretary of State for Communities and Local Government rejected the proposal on 5th August 2010. KCC will continue to represent the interests of the people and the environment of Kent in assessing transport infrastructure proposals.

Sociable Streets

- 12.21 Kent's streets are not only used for travel. They are also places where people meet their neighbours, where they sit and relax, where they eat and drink and watch the world go by. Bringing the 'life' back into areas has long been seen as a way of regenerating local communities, by supporting businesses and retailers, viewing the high street not simply as a market place but also as a meeting place and acknowledging that attractive shopping spaces are needed in response to the increasing popularity of internet shopping.
- 12.22 One of the most important ways of making streets more sociable is to reduce the dominance of vehicles. This can be achieved by restricting traffic, slowing

it down and making drivers more aware of other road users by changing the carriageway/pavement distinction to a 'shared space' – such as that in Ashford town centre – where no user has priority. Ideally, people should be able to walk wherever they want to, by the most direct route, with as little



conflict with traffic as possible. A network designed for pedestrians should be inclusive, providing for all people regardless of age or ability. It is widely acknowledged that there is a need to de-clutter but also to offer space and opportunities to socialise and sit down.

12.23 KCC's approach to 'placemaking' is through the Kent Design Guide, which promotes the development of interesting and pleasurable streets, squares, parks and other public spaces that will attract people.⁶ The quality, design and layout of this environment can also influence opportunities to be

physically active as part of everyday life. Transport is a key element in how a place functions; its quality, its identity, its distinctiveness and the impact it has on residents, visitors and investors alike. Transport will therefore play a major enabling role in the 'placemaking' agenda.

Table 12.1: The Implementation Plan for LTP3 Theme Enjoying Life in Kent (2011-16)

Funding Source	Scheme Title and Description	Est. Cost £'000s
Cycle Routes	S	
Integrated Block Developer	Coastal/Rural Cycle Routes Provision of cycle route links from urban areas to the coast and countryside	300
Cont.		
Revenue	District Cycle Maps Production and distribution of cycle maps for each of the County's principal urban areas	TBD
Home to Sch	ool Transport	
Revenue	Home to School Transport Provision of free or subsidised transport for children who live more than two miles (if they are under eight years old) or more than three miles (if they are over eight years old) from their nearest appropriate school	TBD
Public Realm	n and Accessibility Improvements	
Integrated Block	Public Realm Improvements Surfacing and signing improvements and reallocation of road space to pedestrians and cyclists to promote sociable streets and inclusive access	750
Lorry Route	Management	
Integrated Block Revenue	Lorry Route Maps and Signing Provision of information in paper and electronic format, along with signing where appropriate, to highlight HGV restrictions and suitable routes	187
Smartcard		
Integrated Block Revenue	Development of Kent Smartcard Scheme Countywide roll-out of Smartcards to all Kent Freedom Pass holders and feasibility study to investigate the potential for multi-operator Smartcards and incorporation of non-transport applications (e.g. library cards)	TBD
	Total	1,237

 ¹ DfT (2009), Transport Trends
 ² KCC (2007), Countryside Access Improvement Plan 2007-2017
 ³ KCC (2005), Kent Design Guide
 ⁴ KCC (2009), Rural Streets and Lanes: A Design Handbook
 ⁵ KCC (2007), Countryside Access Improvement Plan 2007-2017
 ⁶ KCC (2005), Kent Design Guide

Chapter 13 - The Implementation Plan for Highway Maintenance

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Introduction

- 13.1 Kent County Council (KCC) is responsible for the maintenance of over 5,000 miles of roads and associated footways (see Chapter 1). The highway¹ network is often taken for granted; however the damage and disruption caused by the severe winter weather of 2009/10 and 2010/11 underlined the extent to which Kent's residents, businesses and visitors rely on the network every day to access essential services and opportunities. The safety and reliability of the highway network will therefore continue to be a key priority for the County Council over the next five years. KCC will deliver these objectives effectively within an asset management framework that recognises the expectations of highway users and acknowledges local priorities.
- 13.2 Funding allocated for the purpose of highway maintenance will be targeted where the overall impact will be greatest, in economic, social and environmental terms. Maintenance of the highway and associated assets will be carried out with the aims of proactively preserving and improving the condition of the network and will be coordinated and programmed to ensure minimal disruption to the travelling public. This Chapter describes the process that will be used during the LTP3 period to develop the approach to highway maintenance.

¹ For the purposes of this Chapter, the term "Highway" includes the carriageway, footway, verges, drainage, bridges and other structures, street lighting, street furniture, signing and lining etc.

Powers and Duties for Highway Maintenance

- 13.3 As the local transport authority for Kent, KCC has a duty to maintain the highway network in a safe condition under the Highways Act 1980. Additionally, the Land Drainage Act 1991 provides local authorities with a number of powers and responsibilities in relation to flood prevention and the clearance of water courses. More recently, the Traffic Management Act 2004 includes a duty for transport authorities to actively manage their road networks with a view to achieving, as far as possible, the 'expeditious movement of traffic'.
- 13.4 Whilst it is essential that KCC acknowledges and responds to its legal obligations and statutory responsibilities, the approach taken will also include pragmatic decision making and common sense to ensure optimised service delivery that maximises the benefit realised by the people of Kent.

Highway Maintenance Activities

- 13.5 KCC recognises the importance of not only delivering a high standard of service for today but also being prepared for the challenges of the future. Over the next five years, the delivery of maintenance services will shift from being largely reactive to become long term, proactive and programmed. To ensure that this aim is successfully achieved the following actions will be key:
 - Considering a variety of traditional and more innovative approaches to maintenance and assessing the long and short term implications of each option in the context of Countywide and localised priorities.
 - Having a clear understanding of the network including its condition, value and the maintenance activities required to ensure optimal benefit for highway users.
 - Undertaking a coordinated countywide approach to service delivery, minimising disruption and maximising value for money.
 - Monitoring performance and using experience and lessons learned to inform future policies, strategy and actions.
- 13.6 The highway maintenance service delivered by KCC can be broken down into four main activities:
 - **Cyclic Maintenance** activities such as gully emptying, sign cleaning, refreshing road markings, grass cutting and street light lamp replacement which are undertaken as part of a rolling programme.
 - **Reactive Maintenance** activities are carried out in response to occurrences which present a hazard to the travelling public such as pothole repairs, clearance of local flooding and fallen trees and the removal/making safe of damaged street furniture.
 - **Planned Maintenance** such as resurfacing and street lighting replacements is carried out in order to keep the highway network in its optimal operational condition. This covers the majority of work that is carried out by KCC.
 - **Emergency Response** is provided 24 hours a day for emergency situations that may affect the safety of the travelling public. Specific

crews are dispatched to deal with the emergency in the first instance, primarily to make safe. This is often then followed up by planned maintenance work to make a permanent repair

- 13.7 There are a number of related functions of the Local Transport Authority which could affect, or be affected by, highway maintenance activity. Examples of these include:
 - Asset management a strategic approach for the management, operation, preservation and enhancement of the highway infrastructure.
 - **Network management** the development and maintenance of the highway network and the traffic on it.
 - **Highway development control** the assessment of the impacts of land use changes on the transport system and the identification of measures to mitigate these impacts.
 - Operation of public transport services
- 13.8 When maintenance activities are being planned and programmed the potential for joint working and co-ordination with partners and other agencies will be explored. Examples of how this is already being undertaken include the high speed road maintenance programme and the joint venture between KCC and some District Councils to coordinate the delivery of street cleaning and gully cleansing activities.

Highway Inspection and Survey Regime

- 13.9 In accordance with the good practice provided within 'Well-maintained Highways Code of Practice for Highway Maintenance Management' produced by the Road Liaison Group, Kent County Council has in place an inspection and survey regime to establish the condition of the highway network. The regime incorporates both manual inspections and machine based surveys and the data collected is then utilised to inform the identification and prioritisation of schemes and programmed maintenance work.
- 13.10 In addition to formal inspections and surveys, a team of Highway Stewards will undertake inspections of the network in response to customer enquiries and carry out ad-hoc checks to ensure programmes of cyclic maintenance are being delivered to schedule.

Safety Inspections

- 13.11 A dedicated team will undertake safety inspections of the highway at regular intervals in accordance with the KCC Highway Inspectors Manual. They will identify defects that present a hazard to the travelling public and assess the need and urgency of repair. The faults reported will be used to inform reactive and routine maintenance programmes and in extreme circumstances trigger emergency response. Problems reported as part of these inspections will include defects such as potholes, broken manhole and gully covers, worn and faded road markings. The defects reported inform both reactive and routine maintenance programmes
- 13.12 The frequency of inspections related to the network hierarchy is as follows:

- High speed dual carriageways: weekly
- Major strategic and other strategic routes: monthly
- Local important and minor roads: twice a year

Condition Surveys

13.13 Condition surveys are undertaken in a number ways to provide detailed information about the condition of the network. Example of condition surveys range from CCTV surveys to establish the condition of the highway drainage system to legally required structural and electrical testing regimes and finally mechanical surveys of the carriageway condition that must conform to defined national standards. The information collected is used to inform short and long term maintenance programmes and support strategic decision making about budget allocations, service approach and policy.

Fault Reporting

- 13.14 In addition to the inspections and surveys undertaken by KCC, maintenance programmes and schemes of work are also informed by reports from County Members, District and Parish Councils and the general public. Reports of defects come into KCC via the Contact Centre and Online Fault Reporting system and are subsequently passed to the appropriate team for investigation and, where appropriate, action.
- 13.15 KCC will continue to develop the channels through which highway users can report faults and are committed to engaging with communities to ensure that maintenance programmes reflect local needs and priorities.

Carriageways and Footways

13.16 Carriageways, footways and cycleways represent the largest proportion of the highway asset making up around 80% of total value. The condition of the carriageway will be measured on a 2 year cycle for classified roads and a 4 year cycle for unclassified roads. Schemes will be prioritised based on a balance of safety criteria; value for money and local needs. Use is also made of data, such as crash records. Works are then programmed at the most appropriate point in the life of the asset. With the current reductions in funding, asset preservation and the needs of the community must be achieved.

Planned Carriageway and Maintenance Programme

- 13.17 Whilst the safety of the highway network is generally managed through routine maintenance, such as patching and pot hole filling, the annual planned carriageway maintenance programme will be the key factor in both preserving and improving the condition of the highway network in Kent.
- 13.18 Sites will be identified through surveys, inspections and community input. Proposals will be considered and prioritised within an asset management framework that balances the needs of the network against those of the community. The optimisation tool used to support this framework will continue to be reviewed to reflect changing circumstances.

Minor and Major Patching

- 13.19 For minor repairs, works will be identified through regular highway inspections and information supplied from the local and traveling public. Works will be programmed by local District based teams and carried out by crews from local depots.
- 13.20 After the severe winter of 2009/10, the County Council launched an intensive 'find and fix' pothole campaign where local specialist tarmac contractors located and repaired pot holes on the County's minor and rural roads. The total estimated cost of the campaign was £6.5 million, including £2.4 million Kent County Council received in the 2010 March government budget. In addition, KCC's own crews were fixing potholes on the county's main A and B network. Over the first six months of 2010, this collaborative working resulted in 100,000 potholes being fixed, double the total number repaired in the first half of 2009.
- 13.21 Following the success of the 'find and fix' campaign in 2010, the government has identified funding for a similar process to be carried out in 2011. With input from local communities and roads identified through highway inspections, a programme of works for local contractors will be developed.

Footway Maintenance

13.22 An annual footway maintenance programme will be developed on the basis of community priorities. Priorities will be developed based on the location and usage of the footway together with the condition and risk to users. Footways will be resurfaced with a range of materials based on the local needs and existing environment.

Bridges and other Structures

- 13.23 There are over 4,000 structures across Kent, these consist of mainly bridges but also include subways, culverts, gantries, tunnels, viaducts, retaining walls and footbridges. The County Council owns 2,800 of these structures with the remainder falling under the ownership and responsibility of other agencies including Network Rail, the Highways Agency, Channel Tunnel Rail Link and private companies such as the Port of Dover.
- 13.24 KCC will carry out inspections of all structures falling under their responsibility, organise and supervise necessary maintenance works to ensure the safety of the travelling public, condition of the structure and the preservation of intrinsic parts of the Kent heritage.

Inspections

13.25 In general terms KCC undertakes two types of inspections. General inspections of all structures are carried out every two years, although in special circumstances, such as for cast-iron or weight-restricted bridges, inspections are carried out more often. Principal inspections are very detailed inspections of all parts of a structure and are carried out every 6 to 12 years, depending on the type of structure. In addition, bridges will often be examined during the more frequent highways safety inspections.

13.26 Further inspection work will be carried out to ensure appropriate weight limits are applied where necessary. A structural weight limit means the bridge cannot carry permitted traffic (currently 40 tonnes) and vehicles whose plated weight is over that limit should not be driven over the bridge. An environmental limit is used to discourage heavy goods vehicles from using the route as a through route, either for social or environmental reasons, or because the lane is too narrow.

Types of Maintenance

- 13.27 Routine inspections and maintenance enable KCC to estimate the deterioration of the structure stock and ascertain the condition of the overall stock and individual structures. A scoring system and condition indicators will be utilised to prioritise reactive/essential maintenance with weighting given to safety and structural stability.
 - **Operational maintenance** is essential for the safety and operation of a structure and includes clearing drainage systems, providing lighting in subways, putting up height and weight restriction signs and responding to accidental damage.
 - **Routine maintenance** is needed for normal wear and tear and protects the structure over time. Typical measures that are carried out are repainting, repointing, rewaterproofing, minor concrete repairs and resurfacing.
 - Structural maintenance and upgrading is needed because of exposure to extreme conditions, old age, change in use or a change in standards. This includes strengthening, partial or full reconstruction, major repairs, underpinning and widening.

Highway Drainage

13.28 As the Highway Authority, KCC holds certain powers under the Land Drainage Act 1991 in relation to flood prevention and the maintenance of flows in watercourses. KCC will inspect, maintain and enhance existing drainage systems and install new infrastructure to remedy incidents of highway flooding. Maintaining the drainage system is essential both to ensure the safety of the highway for its users and for the preservation of the carriageway and footway condition.

Maintenance

- 13.29 With 345,000 gullies, an estimated 15,000 soakaways and numerous culverts, ditches, ponds, lagoons and catch pits across the county, cleansing of the drainage system forms an intrinsic part of the maintenance regime. A programme of cyclic maintenance will be derived on an annual basis which will take into account known flooding hotspots and locally important routes. Ten cleansing crews will systematically deliver the programme, which will cover the county over the course of two years.
- 13.30 In addition to cyclic cleansing, crews will attend specific locations on a reactive basis and, where there is believed to be a need, undertake additional investigation work, either by jetting the system with high powered water jets or by carrying out CCTV surveys.

- 13.31 As KCC continues to expand its knowledge about the vast drainage infrastructure across the county, cleansing programmes will be developed further so that each road or section of road is attended on the basis of its perceived need.
- 13.32 In addition to cleansing the drainage system, KCC will also undertake additional maintenance activities such as grip cutting, highway ditch and channel clearance and replacing and repairing broken gully and manhole covers.

Drainage Repairs

- 13.33 Problems of flooding occur despite drainage systems being cleansed and well maintained. Such problems may be caused or exacerbated by rainfall of high intensity washing mud and other debris from nearby fields, saturated land increasing run-off, highway drainage systems of inadequate capacity and changes in land drainage patterns including run-off from front gardens which have been paved for vehicle parking.
- 13.34 When drainage systems prove to be inadequate, KCC will propose drainage schemes that will either enhance the existing system or provide new drainage in an area vulnerable to flooding. All schemes will be prioritised according to the impact on highway user safety, the threat to property and the disruption caused to key transport routes.

Winter Service

- 13.35 The winter of 2009/10 was the most severe in Kent for 30 years. From a transport perspective, the freezing conditions and heavy snowfall had both an immediate impact, in terms of the closure of roads and the cancellation of rail services, and a longer term impact on the condition of the County's highway network.
- 13.36 From mid-October to mid-April each year, KCC will be prepared to deal with the effects of winter weather on Kent's roads, ensuring that the highway network is kept as free from snow and ice as is practicable. Work will be undertaken throughout the year to ensure strong partnership arrangements with district councils, local farmers and the NHS with the aim of ensuring the delivery of a coordinated, optimal service.

Salting

- 13.37 In normal winter conditions, the first priority is to keep the main roads open to traffic. Salt will be laid on A and B class roads, busy commuter routes and danger spots which form our 'primary' salting routes and cover about a third of roads in Kent. This will go on as long as snow and or ice conditions prevail.
- 13.38 In the event of heavy frost, widespread ice or snow, precautionary salting will be carried out on secondary routes which comprise other locally important roads on the Kent network. When snow is deemed to be severe (a snow emergency) local plans will be used to identify specific areas that will be cleared. These will include hospitals, fire stations and other important facilities to ensure that these can be reached and stay open. There will be more than

65 winter service vehicles on standby and it takes about two hours to put salt on the main roads.

- 13.39 Salt bins are an important community resource and there are currently about 2000 in place across the county. The County Council currently pays for salt bins which will be located according to defined safety criteria, usually away from the main roads near danger spots such as steep hills.
- 13.40 In an average year, the County Council would expect to use approximately 13,000 tonnes of salt but at the beginning of the 2010 winter season, it had 23,000 tonnes of salt in stock, which is the maximum that that can be accommodated in KCC's depots. When there are problems with national salt distribution, arrangements will be in place for receiving salt from abroad as was the case during January and February 2010.

Snow Clearing

- 13.41 When snow falls across Kent, the winter service vehicles can all be quickly fitted with snow ploughs, which means that salting and ploughing can happen at the same time. In addition, KCC has 12 snowblowers and can hire extra machinery as required.
- 13.42 During prolonged periods of severe and persistent icing, or significant snow fall, delegated officers may declare an ice or snow emergency covering all or part of the County. When salt stocks run low and to cope better with icy conditions, sharp sand will be added in a 50/50 mix. This will then be used on the carriageway and sand only in salt bins and to treat footways in town centres.
- 13.43 In December 2010 there were two snow emergencies declared in Kent. Following the experiences of the previous winter, arrangements had been made during the summer with district councils across the county to assist in the clearance of town centre footways using their labour and a salt sand mix provided by KCC This proved to be very successful and resulted in many town centres being kept reasonably clear.

Street Lighting

13.44 KCC is responsible for the maintenance of approximately 128,000 street lights and 27,000 lit signs and bollards across the county. Lighting is provided to enable safe use of the highway for road users and pedestrians and promote strong and safe communities. It can also be a key element in successful regeneration projects and can provide an area with a strong visual identity.

Maintenance

13.45 Where street lighting is provided, KCC is under a duty of care to ensure that it is maintained in accordance with all its legal obligations and in accordance with the principles set out in 'Well-lit Highways – Code of Practice for Highway Lighting Management' and Institution of Lighting Engineers Technical Reports and good industry practice.

- 13.46 KCC is required to maintain any street lighting it does provide in a safe condition for the benefit of the community it serves. Faults are reported to KCC via the Contact Centre, direct calls to the street lighting team, calls from County Councillors or online reporting via the KCC website. Reports are also recorded by the night patrol which patrols twice a month in the winter and once a month in the summer. Following the report, all faults will be assessed, prioritised and programmed. It is always the priority to repair faults on the first visit, however if specialist parts are needed or the electricity supply is faulty this may not be possible.
- 13.47 All new schemes will take account of maintenance requirements and will reduce the maintenance risks and liabilities. These measures may include reducing the amount of new street lighting needed or new lit signs, use of high reflectivity bollards, unlit bollards and use of low energy, white light for all new installations.

Energy and Carbon Emissions

- 13.48 KCC recognises that lighting consumes a great deal of energy and therefore contributes to carbon emissions. Whilst a street lighting strategy and policy has been developed to maintain and deliver a quality service for the residents of Kent and road users, the strategy also promotes the reduction of CO₂ emissions and supports the aims and objectives of other Kent County Council strategies and initiatives. This will be achieved by replacing ageing lights with modern, efficient lighting which consumes less energy and also reduces 'light spill'. Emerging technology, including LED lighting, is attempting to reduce energy consumption and improve lighting output and colour and KCC endeavours to be a part of technological advances while proving efficiency and value for money.
- 13.49 By assessing existing lit streets KCC will consider if de-illumination, part night lighting, light dimming or switch off and removal of certain lights is appropriate. On all new developments KCC will offer advice to the planning authorities as to whether the areas to be adopted require lighting.

Traffic Systems

- 13.50 Traffic systems are key assets that enable safe and controlled movement on the highway network. They will be installed to improve safety, reduce severance or minimise congestion. Safety inspections will be carried out regularly to ensure that all the equipment is functioning correctly, including an assessment of site conditions.
- 13.51 All programmes and schemes will be measured with a reduction in the impact of failure to the road user, safety assessments based upon location types and usage, the age and condition of existing equipment and the strategic importance of particular locations in mind. Examples of traffic signal maintenance include structural and electrical testing, signal replacements and response to technical faults.

Trees and Soft Estate

13.52 Trees, grass verges and landscaping on the County Council's highways contribute to both safe travel and a high quality environment. The soft estate includes areas of land having various functions, for example habitat, nature conservation interests, screening, planting, and wild flower diversity. The verge serves a safety and refuge function and to a lesser extent and in certain situations an amenity. Current estimates indicate that KCC is responsible for managing 3.8 million square metres of amenity grass and 7.5 million square metres of swathe and visibility splay grass.

Highway Safety

- 13.53 Requirements for highway safety are paramount. Vegetation either on verges, other parts of the soft estate or on private land, should not restrict visibility at junctions, access points and bends. Sight lines and minimum stopping distances should be kept clear and signs, lights, and marker posts should not be obstructed.
- 13.54 In rural areas the condition standards and frequency of grass cutting will be determined locally from risk assessment, but by default, embankment and cutting slopes and verges, except visibility areas, will not normally be cut. On all other roads, visibility areas, and to provide a pedestrian refuge, the first swathe from the edge of the carriageway will be cut. Frequency of mowing will depend on the rate of growth but will normally be twice per year. Special requirements may be necessary in Sites of Special Scientific Interest or Nature Conservation.
- 13.55 Public preference in urban areas is for shorter, well-clipped grass, which has less capacity than longer grass to offer ecological benefits but which evokes a sense of a safe, well-maintained environment where people want to live. Using the standards for rural roads would deliver safe standards from a visibility perspective, but length of grass, possible concealed debris and the potential for grass cuttings to block gullies, suggests there is a need for a higher frequency of cutting in urban areas.
- 13.56 Grass cutting regimes and arrangements vary significantly across the UK. In Kent the arrangements will reflect this mix with private contractors working direct to KCC in some areas and district councils providing some or all services through existing contracts with the private sector or using direct labour forces. The current standards for amenity cuts vary between 8 and 21 times a year depending on the local arrangements.

Weeds

13.57 The growth of weeds can cause structural damage and are a source of significant community interest and service requests. Weed treatment will therefore be undertaken according to traffic and pedestrian usage and to a standard that takes account of local concerns. In view of changing attitudes to the use of pesticides and to potential changes in legislation, KCC will review weed control techniques and the availability of alternatives to the use of pesticides. Noxious weeds will be dealt with on an ad-hoc basis and KCC will

take action to inhibit the growth and spread of injurious weeds growing within the highway like Ragwort and Japanese Knotweed.

Trees

13.58 All trees within falling distance of the highway are collectively termed 'highway trees' and KCC is responsible for ensuring that trees outside the highway boundary, but within falling distance, are safe. Section 154 of the Highways Act 1980 empowers the authority to deal, by notice, with hedges, trees and shrubs growing on adjacent land which overhang the highway, and to recover costs. Safety inspections will take note of any encroachment or visibility obstruction and any obvious damage, ill health or trip hazards. Due to their size and susceptibility to disease and damage, all highway trees will be inspected at least every five years. In addition to the programmed safety inspections, KCC will undertake reactive tree inspections in response to concerns following weather events, accidents or enquiries raised by members of the public.

Hedges and Shrubs

13.59 The majority of hedges adjacent to the highway are privately owned. KCC highway inspectors will liaise with the owners where hedges require trimming back and if necessary, enforcement action taken. Any trimming will, as far as possible, be done in late winter, to avoid the bird-nesting season and to allow birds and mammals the maximum opportunity to take advantage of any fruits or seed present. Landscaping plots particularly on new developments are composed predominantly of shrub species. Many of the plots form services strips allowing utility companies access to their underground services. Shrubs will be trimmed back once a year to ensure they do not encroach onto the highway or obstruct visibility or signs.

Signs, Lines, Bollards and Barriers

13.60 KCC has a statutory responsibility to maintain signs, road markings, bollards and barriers. They assist with movement on the highway network and are placed to provide information and protection to all road users.

Signs

- 13.61 Signs are the primary source of information for road users and are used to indicate mandatory or regulatory requirements, warn of hazards and provide directional information. Signs will be replaced when either damaged, stolen or at the end of their life as this is a more cost effective course of action than trying to undertake repair work. A number of standard signs including 'give way' and speed limits signs will be held in stock to enable timely replacement whereas direction signs need to be manufactured and therefore replacement may take longer.
- 13.62 Sign cleaning will be carried out in response to inspections/public enquiries however it is KCC's intention to introduce a cyclic sign cleaning regime to ensure a safer environment for all highway users and offer better value for money.

13.63 KCC recognises that in some locations, there is an abundance of signs, some of which are unnecessary and others which can be consolidated onto one sign face. The introduction of new destinations, changes to road hierarchy and changing traffic movement means that signing can become obsolete or does not offer a continuous route to enable road users to reach their destination by the most direct route. During the next five years, KCC will carry out a signing review and remedial works to ensure that the right sign, with the right information is in the right location. When installing signing, consideration will be given to the local environment, especially in conservation areas and other special areas so that its location, size and materials are sympathetic to the local area.

Road markings

13.64 Road markings and reflective cat's eyes are used to define features on the highway such as give way lines, road edges and traffic lanes. Again, KCC intends to adopt a programmed approach to replacing lining and markings on the carriageways and other surfaces, moving from a responsive to a cyclical approach.

Bollards

13.65 Bollards and hazard markers are used to warn the public of hazards and road edges and protect the footways from pavement parking. They consist of white and black banded posts in rural areas and plain or ornamental bollards are for use in urban areas. Colour contrasting bands and panels will applied to make them conspicuous to partially sighted highway users and drivers. They can cause a barrier to pavement users, particularly mobility scooters and buggies and therefore all sites will be assessed to consider the safety and needs of all users.

Barriers

13.66 There is an increasing emphasis on improving the streetscape by removing street clutter and providing better pedestrian accessibility whilst still maintaining road safety. It is recognised that where pedestrian guardrailing is badly sited or over installed it not only alienates pedestrians but also looks unsightly and easily becomes damaged which in turn leads to increased maintenance costs and complaints. Inappropriate barriers have started to be removed in Maidstone and the County Council will be working with other district councils to establish sites where these can be removed. No barrier will be removed without a safety assessment having been undertaken. Where there is a hazard to pedestrians and other vulnerable users, barriers will still be erected for their protection. Crash barriers will be inspected annually and replaced and repaired when damaged.

Public Rights of Way

13.67 The Public Rights of Way network accounts for 42% of the highway network by length and is managed by the Countryside Access Service. There is a statutory requirement not only to maintain the network in a safe condition but also to provide signposts and to contribute to the costs of land managers in maintaining gates and stiles. The asset it self is complex with a number of asset groups: surfaced routes, trees & soft estate, drainage, signs, structures, limitations such as stiles, gates and barriers. The picture is further complicated in that the majority of the network passes over land in private ownership and some of the asset, limitations such as gates and stiles have a shared liability.

- 13.68 The Service adopted an asset management approach in 2007 and operates in line with the objectives of the asset management plan. The minimum level of maintenance should be such that ways are capable of meeting the use that is made of them by ordinary traffic at all times of the year taking account of the needs of those with disabilities. Although not required to conform to an arbitrary standard, it is anticipated that work carried out should reflect the general landscape character of the area. The Countryside Access Service has published standards and specifications for principal asset groups that reflect British Standards, good practice and sound asset management principles.
- 13.69 The forward works programme is developed to include schemes that are of a remedial nature but have been prioritised on the basis that they provide greater benefits than simply statutory compliance. Schemes are prioritised on the following basis:
 - **Public safety** the scheme rectifies a safety issue that carries a risk of injury.
 - **Countryside Access Improvement Plan compliance** this plan sets out the priorities and aspirations for the PRoW network for 2007-17. Priorities identified within the plan are the provision of better maintained countryside access, greater off road access for equestrians and cyclists and the removal of limitations such as stiles
 - Asset management the scheme contributes to the maintenance of the public rights of way asset in an optimum condition, reducing long term maintenance costs to the authority.
 - Adaptive change schemes are prioritised on the basis that they make the PRoW infrastructure more resilient to weather extremes, for instance the anchoring of small bridges in areas vulnerable to flooding

Chapter 14 – Performance and Monitoring

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LTPs and Performance Monitoring

One of the key reasons for preparing Kent's first and second Local Transport Plans was to secure funding from Central Government for local transport improvements. Performance indicators and associated targets were agreed between each local transport authority and the regional Government Office and progress against these targets determined the level of future LTP funding. During the LTP2 period (2006-2011), some of these indicators were mandatory and therefore allowed a comparison of progress between authorities, whilst some were local indicators which reflected the local authority's priorities.

The previous Government introduced a new National Indicator Set for local authorities and their partners as the single means of measuring performance against national priorities. The number of national indicators that authorities reported on was radically reduced, from around 1,200 to 198, with ten of these relating to transport. When the Government's latest *Guidance on Local Transport Plans* was published in July 2009, it announced that LTP funding would no longer be directly linked to the quality or delivery of an authority's LTP but that Plans would be assessed indirectly through the wider Comprehensive Area Assessment (CAA) of local authority performance.¹ In June 2010 however, the Coalition Government abolished CAA with the focus shifting to making local authorities accountable to their residents through local targets and performance monitoring. In October 2010, the Government scrapped the National Indicator set, which means that there is currently no formal requirement placed on local authorities to report on performance to national Government.

LTP3 Performance Indicators

In response to the new Government's emphasis on local accountability and the loss of the LTP3's role as a method of securing reward funding, this LTP3 moves away from setting targets against nationally adopted transport indicators and instead sets out a range of local performance indicators, including public attitude surveys, against which progress will be reported annually. These are set out in Table 14.1 overleaf.

Table 14.1: LTP3	Performance	Indicators
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Indicator	Methodology	Definition
maleator	inclinedology	Target/Desired Change
Journey time reliability in Kent's urban centres (Canterbury, Gravesend and Maidstone) (Growth without Gridlock)	Data is collected using Automatic Number Plate Recognition (ANPR) cameras located on key routes into and out of Maidstone, Canterbury and Gravesend. Number plates are recorded and this data is used to calculate the time taken to travel between cameras.	average journey time per vehicle mile in am/pm peak in minutes compared to monthly average direction of travel ▼
Principal roads where maintenance should be considered (Growth without Gridlock)	Derived from a survey of the surface condition of the local authority's classified carriageway network, using survey vehicles that are accredited as conforming to the SCANNER (Surface Condition Assessment for the National Network of Roads) specification.	length of carriageway identified as having a condition indicator greater or equal to 100, as a percentage of the total length surveyed direction of travel ▼
People killed or seriously injured in road traffic accidents (A Safer and	Data extracted from local authority/Kent Police comprehensive database of STATS19 accident and casualty records.	% change in the number of people killed or seriously injured based on a three year rolling average direction of travel ▼
Healthier County) Local bus journeys originating in the authority area (Supporting Independence)	All passengers travelling on registered local bus services and light rail services are counted including school bus services available to the general public, and passengers travelling on flexibly routed bus services other than Dial-a-Ride services.	total number of local bus passenger journeys originating in the authority area in a given year direction of travel
NI 186: Per capita reduction in CO ₂ emissions in the Local Authority area (Tackling a Changing Climate)	This data is collected by the Department for Energy and Climate Change using centrally produced statistics to measure end user CO_2 emissions from road transport, as well as the industry and commercial sector and domestic housing. The statistics are published annually in the autumn (with a 21 month time lag) and 2005 figures are used as the baseline.	carbon emissions in tonnes per capita reduce carbon emissions year on year by 2.6%, leading to a 20% reduction by 2020, a 40% reduction by 2030 and an 80% reduction by 2050 ▼
Children travelling to school - mode of transport usually used (Tackling a Changing Climate)	Data is collected via the annual School Census, which contains a specific question on usual mode-share for the journey to school. This is collated by central government and then released to local authorities	% of journeys by car (including vans and taxis) for children aged 5-16 years (separate indicator for 5-10 year olds and 11-16 year olds) direction of travel ▼
Net satisfaction with the condition of roads, pavements and streetlights (Enjoying Life in Kent)	Collected through the annual Highway Tracker Survey of county, district and parish councillors and 100 residents in each of Kent's 12 districts.	Net satisfaction score (aggregate of satisfaction responses) direction of travel

Monitoring the LTP3's Wider Contribution

Chapter 3 sets out the plans and strategies that have been considered in the preparation of this LTP. For simplicity, the linkages between LTP3 and other County Council objectives including their means of measurement are shown below through the various headings in KCC's Bold Steps for Kent - Medium Term Plan to 2014/15.

Bold Steps for Residents

The County Council's aim is for residents to be able to choose how they receive their entitlement to public services. For example, parents of children entitled to Special Educational Needs (SEN) transport could be offered a cash alternative rather than KCC choosing how that transport entitlement will be provided. The introduction of smartcard technology will allow residents to access a range of services, including libraries and electronic ticketing for local bus and rail services. Accessibility to key destinations will include the Gateway offices, making it easier for residents to access the services and help they need. Localism and the 'Big Society' will also be fostered through the continued provision of the County Council's Member Highway Fund and support for new and existing community bus and rail schemes.

Means of measurement: Delivery of new Gateway offices (stand-alone and within libraries) Roll-out of smartcards to all Kent Freedom Pass holders Establishment of Big Society Fund for Kent Bold Steps for Education

Many of the measures in this Plan will make it easier for all residents to access opportunities, especially for those without access to a private car. The success of the Kent Freedom Pass will be built upon, making transport affordable not only for school journeys but also for other activities.

Means of measurement:

Take-up of Kent Freedom Pass

Children travelling to school – mode of transport usually used

Pupil attendance and attainment

Bold Steps for Health

Access to hospitals and GP surgeries was a key objective of Kent's second Local Transport Plan and access to health services will continue to be targeted, especially for the vulnerable and elderly who rely on public transport to attend their appointments.

Means of measurement:

People killed or seriously injured in road traffic accidents

Children travelling to school - mode of transport usually used

Levels of obesity

Bold Steps for Business and Economy

Many of the measures set out in the Implementation Plans are those which help to unlock sustainable economic and housing growth, especially in the County's Growth Areas and Growth Points and give businesses better access to their supply chains and workforce.

Means of measurement:

Rate of residential development

Change in industrial and business floor space

GVA per capita

Bold Steps for Employment and Skills

This Plan looks to overcome many of the barriers associated with accessing employment and skills by providing a wider choice of affordable transport modes to training and learning opportunities. Improving access to jobs, particularly from East Kent where there are high levels of unemployment, is a priority in this Plan.

Means of measurement:

Rate of unemployment

Number of graduates in Kent

Bold Steps to Tackle Disadvantage

This Plan supports KCC's approach of providing opportunity by helping the unemployed to find work and lift themselves out of the poverty trap.

Means of measurement:

Rate of unemployment

Percentage of residents of working age claiming one or more key Department for Work and Pensions benefits

Bold Steps to Support the Vulnerable

An improved transport network allows better and more effective care, support and monitoring to those who are vulnerable, making them feel less isolated and also making access easier, especially for those with a learning disability, physical disability or mental health issues.

Means of measurement:

Access to hospitals and GP surgeries by public transport

Bold Steps for Housing

It is vital that new housing has the sustainable transport links in place that new residents need. While much of this is secured through developer contributions, this Plan identifies the necessary measures to deal with an increasing demand for access to goods, services and opportunities.

Means of measurement:

Rate of residential development

Access to key services (schools, retail centres, hospitals and GP surgeries) by public transport

Bold Steps for Social Enterprise, Community and Voluntary Groups

The voluntary and community sector already plays an important role in providing access to vital services, especially in rural areas. This Plan supports empowering local people to decide on, develop and operate local transport projects and KCC will work with local community groups through initiatives like the Big Society Fund for Kent to maximise the level of service for Kent residents.

Means of measurement: Establishment of Big Society Fund for Kent Number of Community Transport Schemes in Kent

¹ Department for Transport (2009), *Guidance on Local Transport Plans*

Chapter 15 – Service Improvement

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Enterprise and Environment Risk Register

15.1 In line with good programme management practice, KCC's Enterprise and Environment (E&E) Directorate, which encompasses its Kent Highway Services, Commercial Operations and Planning and Environment divisions, maintains a comprehensive risk register. This ensures that potential risks which may prevent the Directorate from achieving its objectives and/or reduce the value for money of certain projects are identified and controlled. Each risk is rated using a standard 5x5 matrix which assesses the likelihood of occurrence and expected impact (see Table 15.1).

Very Likely	5	5 Low	10 Medium	15 Medium	20 High	25 High
Likely	4	4 Low	8 Medium	12 Medium	16 High	20 High
Possible	3	3 Low	6 Low	9 Medium	12 Medium	15 Medium
Unlikely	2	2 Low	4 Low	6 Low	8 Medium	10 Medium
Very Unlikely	1	1 Low	2 Low	3 Low	4 Low	5 Low
		1	2	3	4	5
		Minor	Moderate	Significant	Serious	Major

Table 15.1: E&E Risk Matrix

15.2 The preparation and updating of the Directorate risk register, along with those for each of its constituent divisions, is closely aligned with the annual business planning process. The controls identified for each specified risk are reviewed periodically by a cross-directorate group in order of significance, and new actions monitored. Risk Management Plans are developed for every risk within the Directorate rated as 'High' (i.e. with a score of 16 and above) and, where cross-cutting themes are identified, these risks are incorporated into the County Council's Strategic Risk Register. The risk register is considered by the EHW Policy Overview and Scrutiny Committee in January of each year before being reported to the County Council's Governance and Audit Committee.

Highway Tracker Survey

- 15.3 In carrying out its duties as the local transport authority, KCC is guided strongly by the views and priorities of the County's residents and businesses. The County Council has commissioned annual satisfaction surveys to gauge public perceptions of the highway service since 1987. The survey is conducted by an independent market research company and seeks views from residents, County Members, Parish/Town Councils and, more recently, District Members. The results are used by Kent Highway Services to identify suitable actions to improve service delivery.
- 15.4 The latest survey, carried out in 2009, included a total of 1,209 face-to-face interviews with a representative sample of Kent residents. Approximately 100 interviews were carried out in each of the 12 districts. The results of the survey are reported in terms of 'net satisfaction'. This figure is calculated by subtracting the percentage of people who are dissatisfied with the service from the percentage who are satisfied, providing a true reflection of KCC's overall performance.
- 15.5 The 2009 survey recorded a continuing improvement in residents' perception of pavements and streetlights, set against a slight increase in dissatisfaction with roads; particularly the condition of country lanes and residential roads. However, for the fourth successive year, more residents were satisfied than dissatisfied with KCC's performance. An extract of the survey is provided in Table 15.2.

		Percentage of residents who are						
	Satisfied		Satisfied Neither satisfied or dissatisfied		Dissatisfied		Net satisfaction	
	2008	2009	2008	2009	2008	2009	2008	2009
Condition of roads	54%	53%	21%	16%	25%	32%	+29%	+21%
Condition of pavements	51%	53%	21%	18%	28%	27%	+23%	+26%
Quality of Streetlights	63%	67%	19%	15%	18%	16%	+45%	+51%

Table 15.2: KCC Highway Tracker Survey Extract

- 15.6 Respondents to the survey rated road repairs and reducing congestion as the most important County Council services and stated that repairing roads and pavements were the services most in need of improvement. The survey found that 31% of residents felt they were affected by peak time congestion on a daily basis, representing a slight decrease on the 2008 survey. When asked for suggestions of ways to reduce congestion, the most popular responses were greater restrictions on roadworks and staggering school opening times. It is hoped that the introduction of the Kent Permit Scheme in January 2010 will have a positive effect in this area over the period of LTP3.
- 15.7 Overall, 60% of residents reported that they used a car to travel to work, with 48% using one on a daily basis. With regard to public transport, 53% had made use of local bus services in the past and 59% had travelled by train. Of these, 80% and 79% respectively were satisfied with the level of service provided. Cost, cleanliness, punctuality and frequency were the main reasons cited for dissatisfaction.
- 15.8 Whilst KCC is pleased with the continuing improvement in public perception of the highway service, it is acknowledged that further progress is needed in certain areas. The challenge over the next five years will be to sustain this high level of public satisfaction against a background of significant funding pressures. This will require further improvements in communication between KCC and its stakeholders, along with investment in those aspects of the service identified as most important to the County's residents.

Kent Winter Service Review and Consultation 2009/10

- 15.9 The winter of 2009/10 was the most severe in Kent for 30 years. From a transport perspective, the freezing conditions and heavy snowfall had both an immediate impact, in terms of the closure of roads and the cancellation of rail services, and a longer term impact on the condition of the County's highway network. KCC declared snow emergencies, according to the criteria specified in its Winter Service Policy and Plan, on three separate occasions between December 2009 and February 2010. There were also many nights when temperatures fell below zero, which required primary and secondary routes to be gritted. This placed an unprecedented demand on the County's salt supplies; however unlike other local transport authorities, KCC maintained adequate salt stocks throughout the period. This was the result of a number of strategic decisions taken by KCC both before and during each of the snow emergencies.
- 15.10 At the beginning of the 2009/10 winter season, 20,000 tonnes of salt were in stock, which is the maximum that that can be accommodated in KCC's depots. In an average year, the County Council would expect to use approximately 13,000 tonnes; therefore Kent was well placed to cope with the additional demands of a severe winter. Problems with national salt distribution became apparent early in the New Year and salt supplies from KCC's main supplier, Salt Union, were reduced. However, existing arrangements were in place for receiving salt from abroad and these were drawn upon during January and February 2010, enabling adequate supplies to be maintained. In order to conserve salt for the remainder of the season, the decision was taken in January 2010 to mix salt with sharp sand. It was also decided that only sand would be used to treat footways in town centres.

- 15.11 The County Council received over 5,000 weather-related enquiries to its Contact Centre during December and January. KCC officers held regular meetings with Contact Centre operatives to ensure that members of the public could be provided with accurate and up-to-date information. KCC's Traffic Management Centre was also kept informed of actions being taken to clear the snow and ice and this information was released on an hourly basis through a variety of media.
- 15.12 The County Council commissioned a thorough review of the effectiveness of its Winter Service Policy in 2010. The review sought to assess KCC's response to the exceptional conditions experienced during the winter of 2009/10 and to draw out the key lessons learned. A number of recommendations were made and these were incorporated within a revised KCC Winter Service Policy. These included:-
 - the strengthening of partnership arrangements with Kent's district councils and the NHS to formalise the arrangements for snow and ice clearance in agreed areas (particularly footways); and,
 - the implementation of a 'snow desk' as soon as snow conditions are experienced to improve communication with the public and coordinate the activities of the emergency services, district councils and other KCC departments, including Children, Families and Education.
- 15.13 The County Council also chairs the newly-formed South East Authorities Service Improvement Group (SEASIG) Winter Service Group, which acts as a valuable forum for the sharing of good practice between local authorities. The Group aims to establish practical arrangements for providing mutual aid across the region, as well as joint procurement agreements, in order to improve both the effectiveness and value for money of local transport authorities' response to severe winter weather.

'Future of Highways' Highway Maintenance Contract Re-tender

- 15.14 In April 2010, the County Council announced that it was to procure a new 10 year highway maintenance contract, to commence in August 2011. This procurement exercise provides KCC with the opportunity to further improve both the quality and value for money of the highway maintenance service. The core contract will cover routine maintenance of carriageways and footways, structural repairs, winter service, and emergency and out-of-hours response.
- 15.15 A 'competitive dialogue' process will be held with each of the shortlisted bidders to determine whether any additional services should be included within the core contract to generate greater economies of scale and/or deliverability resilience. These services include drainage and gully emptying; signs and lines maintenance; street lighting; traffic systems; and highway surfacing. If potential suppliers are unable to demonstrate the benefit of combining these services within the core maintenance contract, then any or all of the services listed above will be procured separately. The County Council firmly believes that it is for the market to provide evidence of the benefits of aggregation, as this runs counter to KCC's favoured approach of disaggregation and market competition.

Sustainability and Climate Change

- 15.16 KCC's Environment Policy seeks to progressively reduce the County Council's environmental footprint and its carbon dioxide emissions and to ensure that its estate and services are adapted for the future impacts of climate change.¹ Significant progress has been made in this area during the period of the LTP2 (2006-2011), including the achievement of the International Environmental Management Standard, ISO 14001 in 2009. This recognises KCC's ongoing commitment to reducing its environmental impact, to implementing sound environmental best practice and ensuring its environmental policy is taken into account when making decisions and delivering council projects.
- 15.17 The County Council's Environment Report, published in 2009, detailed KCC's progress against the targets set out in its Environment Policy.² This is summarised in Table 15.3 below.

Target	RAG* rating	Description
To reduce energy use to meet carbon reduction targets of 10% by 2010 and 20% by 2015	*	KCC will not achieve its overall 2010 target due to the growth in the County Council's estate over the last four years
To reduce water use by 7.5% by 2010		Some progress has been made with water efficiency measures and there are plans to improve water efficiency in schools
To reduce waste across KCC's estate by 10% and increase the proportion of the County Council's waste that is reused or recycled to 50% by 2010		Improvements are ongoing that will improve the accuracy of the information KCC gathers about the amount of waste it produces
To reduce business miles in 2009/10 in each of KCC's five directorates		There was a reduction of 3.5% in business mileage in 2009/10, saving £277,000

Table 15.3: Progress towards key targets in KCC's Environment Policy (2009)

*RAG = Red, Amber, Green

- 15.18 Travel to and from work, along with business travel, represents some 40% of KCC's carbon footprint. A number of initiatives have been introduced by the County Council's Sustainable Transport and Sustainability and Climate Change Teams to mitigate this, including:-
 - the use of new technology to help to reduce travel and to increase efficiency, such as logistics planning and teleconferencing;
 - the provision of Touch Down Zones in KCC offices so that staff attending meetings can work conveniently without having to travel back to their main office;
 - the preparation of Travel Plans for all major KCC offices;
 - the encouragement of flexible working practices; and,

• active involvement in the Kent Journey Share initiative, which has led to a reduction in the number of miles driven by KCC staff commuting to and from work.

Additionally, all KCC fleet vehicles now run on a fuel mixture of 5% biodiesel, while the introduction of Light Emitting Diode (LED) traffic lights by Kent Highway Services has reduced their energy consumption by 70%.

- 15.19 Measures such as these not only contribute to a reduction in carbon emissions but have also delivered some significant cost savings for the County Council. The Environment Policy achieved total savings of over £1 million in its first year (2008/09). A further £277,000 was saved in 2009/10 as a result of a 3.5% reduction in business miles, while an estimated £45,000 was saved by the use of the BT MeetMe teleconferencing service instead of face-to-face meetings.
- 15.20 Whilst the progress made against KCC's Environment Policy is pleasing, it is fully acknowledged that the County Council must take bolder action if it is to demonstrate the leadership required to promote more environmentally sustainable behaviour by a wider spectrum of Kent's residents and businesses. With this in mind, KCC will shortly be publishing a new Environment Strategy which will provide the necessary policy framework for these activities to take place.

Kent Highway Services School Liaison Project

- 15.21 KCC is committed to providing opportunities for young people to develop the necessary skills to transfer successfully from education into work. Kent Highway Services offers a number of training and work experience opportunities for 16-24 year olds. These include the Kent Success Apprenticeship Scheme, which offers salaried placements of between 9 and 15 months, and the Kent Graduate Programme Transport and Development Stream, which provides a two year training programme for graduates seeking a career in transport planning and strategy.
- 15.22 In 2008, KCC commissioned a School Liaison Project which sought to raise young people's awareness of the wide range of career opportunities available in the transport and engineering sectors. Its key aim is to address the acute shortage of young transport planning professionals. As part of the project, KCC works closely with the Kent Education Business Partnership and Kent and Medway Science, Technology, Engineering and Mathematics Network (STEMNET) to deliver informative and engaging careers workshops in secondary schools throughout the County.

¹ KCC (2008), Kent County Council Environment Policy

² KCC (2009), Environment Report 2009

Glossary

ANPR	Automatic Number Plate Recognition
AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
BCR	Benefit-to-Cost Ratio
Bikeability	The national standard for cycle instruction
Britdisc	KCC's proposed charging scheme for Heavy Goods Vehicles
BRT	Bus Rapid Transit (e.g. Fastrack in Dartford and Gravesham)
Bus boarder	A raised kerb to provide level access to buses.
Capital funding	Funding for one-off items such as new road infrastructure
Car Club	A group that shares the use of a communal car(s)
Bus stop clearway	An area of road space reserved for buses serving bus stops
СО	Carbon Monoxide
CO ₂	Carbon Dioxide
CRM	Crash Remedial Measure
Crossrail	A new cross-London railway, due for completion in 2017
DEFRA	Department for Environment, Food and Rural Affairs
DCLG	Department for Communities and Local Government
DfE	Department for Education
DfT	Department for Transport
Explore Kent	KCC resource providing information about rural recreation.
GIS	Geographic Information System, computer mapping software
Growth Area	Four designated UK regions delivering major housing growth
Growth Point	Areas delivering 20% more housing than regional targets
НА	Highways Agency
HGV	Heavy Goods Vehicle weighing over 7.5 tonnes

HRO	Harbour Revision Order
HS1	High Speed 1 rail line linking London and the Channel Tunnel
IMD	Index of Multiple Deprivation
IT Schemes	Integrated Transport Schemes costing less than £5 million
ITS	Integrated Transport Strategy
ITSS	Intelligent Transport Systems Strategy
Kent Design	KCC project promoting high-quality design of new communities
Kent Karrier	A KCC-supported demand-responsive bus service
Kent Partnership	Local Strategic Partnership of public and private organisations
Kent Thameside	Development area covering Dartford and Gravesham
KHS	Kent Highway Services
KMAQP	Kent and Medway Air Quality Partnership
KSI	Killed or Seriously Injured in a road traffic accident
LDF	Local Development Framework
LSOA	Lower Super Output Area, used for small area statistics
ΜΑΑ	Multi Area Agreement, setting out local strategic priorities
Major Scheme	Transport schemes costing in excess of £5 million
Medway	Unitary authority covering the Medway Towns
Network Rail	Company that owns and operates Britain's rail infrastructure
NI	National Indicators measured and reported by local authorities
NO ₂	Nitrogen Dioxide
Parkway Station	An out-of-town railway station that facilitates Park and Ride
Passenger Focus	Britain's independent rail consumer watchdog
РСТ	NHS Primary Care Trust
Permit Scheme	KCC's statutory power to regulate the planning of roadworks
PM ₁₀	Particulate Matter
ppb	Parts per billion

PRoW	Public Rights of Way (e.g. footpaths and bridleways)
QBP	Quality Bus Partnership between KCC and bus operators
Revenue funding	Money for ongoing expenses such as bus service subsidies
Ro-Ro	Roll-on Roll-off ferry services (e.g. Dover-Calais)
RSS	Regional Spatial Strategy (e.g. the South East Plan)
RTI	Real Time Information relating to bus and rail services
RUS	Route Utilisation Strategy, produced by Network Rail
SEA	Strategic Environmental Assessment
Smarter Travel	Promoting appropriate and sustainable travel choices
SO ₂	Sulphur Dioxide
STIPS	Strategic Transport Infrastructure Package Schemes
SUSTRANS	National charity which promotes sustainable transport
T2	Terminal 2, proposed expansion of Dover Western Docks
ТАМР	Transport Asset Management Plan
Teleworking	Working from home, a local office or café
Thameslink	Programme to increase the capacity of cross-London rail links
TIF	Tax Increment Financing
ТМС	Traffic Management Centre
тос	Train Operating Company
Travel Plan	Package of measures to encourage sustainable travel to work
TRO	Traffic Regulation Order
UTMC	Urban Traffic Management and Control
VMS	Variable Message Sign
Walking Bus	Group of children walking to school aided by adults







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