

**Maidstone Borough Council**  
**Draft Integrated Transport Strategy**  
**2011-2031**

# **1. Executive Summary**

***(To follow)***

## **2. Scope of the Draft Integrated Transport Strategy**

- 2.1 The Draft Integrated Transport Strategy (DITS) covers the area of Maidstone Borough which includes the urban area of Maidstone; Rural Service Centres and villages.
- 2.2 Maidstone Borough faces a number of transport challenges and the DITS is needed to provide a framework for transport planning and decision making in the Borough which places an emphasis on addressing these issues through long term sustainable development of the transport network. This should ensure that future development can be accommodated without significant detriment to existing conditions whilst seeking to enhance economic, social and environmental well-being.
- 2.3 The DITS assesses the principal existing and future challenges affecting the transport network, including taking account of jobs and housing growth, and recognises that the populations of the urban area and dispersed villages bring different challenges and solutions. The DITS provides a framework and programme of schemes and interventions to support the Maidstone Borough Local Plan, taking account of the committed and predicted levels of growth in homes and jobs and detailing the transport infrastructure and services necessary to support and deliver this growth. It considers all modes of transport used for trips on main routes and the rail network. It sets out a vision and identifies a detailed programme of interventions consistent with national and local transport and planning policies to help achieve the vision by 2031.
- 2.4 The DITS provides the overview and justification for the detailed transport infrastructure requirements for the Local Plan which are identified in the Infrastructure Delivery Plan (IDP).

## **3. What is the consultation draft strategy?**

- 3.1 The consultation draft strategy is a starting point in the journey towards an adopted strategy. There are a number of important steps to take before the strategy can be completed.
- 3.2 Further work has been commissioned to update the VISUM model. This information, when available, will test the impact of the objectively assessed needs for new development and the key transport interventions set out in the draft strategy.

- 3.3 As part of the consultation process, the council will seek close engagement with key stakeholders and partners involved in delivering improvements to the borough's transport provision. The council will also seek views from local communities and parish councils.

## **4. Transport Challenges**

- 4.1 Maidstone is a dynamic borough, set within both an urban and a rural context, which has a vital role to play in the significant growth expected in the South East over the next two decades. The borough currently has a population of 155,143<sup>1</sup>, which is evenly split between the County Town and its rural hinterland, including the six Rural Service Centres (RSCs) of Coxheath, Harrietsham, Headcorn, Lenham, Marden and Staplehurst. Whilst the town's main function is as a centre for business, retail and administration; the rural economy is characterised by pockets of manufacturing, horticulture and farming. The Maidstone Borough Local Plan seeks to meet in full the identified objectively assessed need of 18,560 dwellings and the creation of almost 14,500 jobs in the plan period from 2011 -2031.
- 4.2 Maidstone's transport network has come under increasing strain in recent years, principally on account of the configuration of its road and rail networks and the growing demand for travel generally. In order for the borough to have an emphasis on sustainable transport access in line with national priorities and to accommodate the level of housing and employment growth envisaged by the Local Plan, a comprehensive and deliverable transport strategy must be in place to address these challenges.
- 4.3 The geography of the borough means that sustainable modes are a more feasible option in some locations and for some journeys than for others. The benefits of shifting trips from single occupancy car use to sustainable modes are manifold and recognised and promoted by Central Government. Examples of these include improved air quality; a healthier population and attractive, safe and secure public spaces.
- 4.4 Specific issues for action are identified for each mode below.

### **Highways**

#### **Overview**

- 4.5 Maidstone has an extensive highway network which provides direct links both within the borough and to neighbouring areas including Ashford, the Medway Towns, Tunbridge Wells and London. Four north-south and east-

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<sup>1</sup> Usual resident population as per 2011 Census

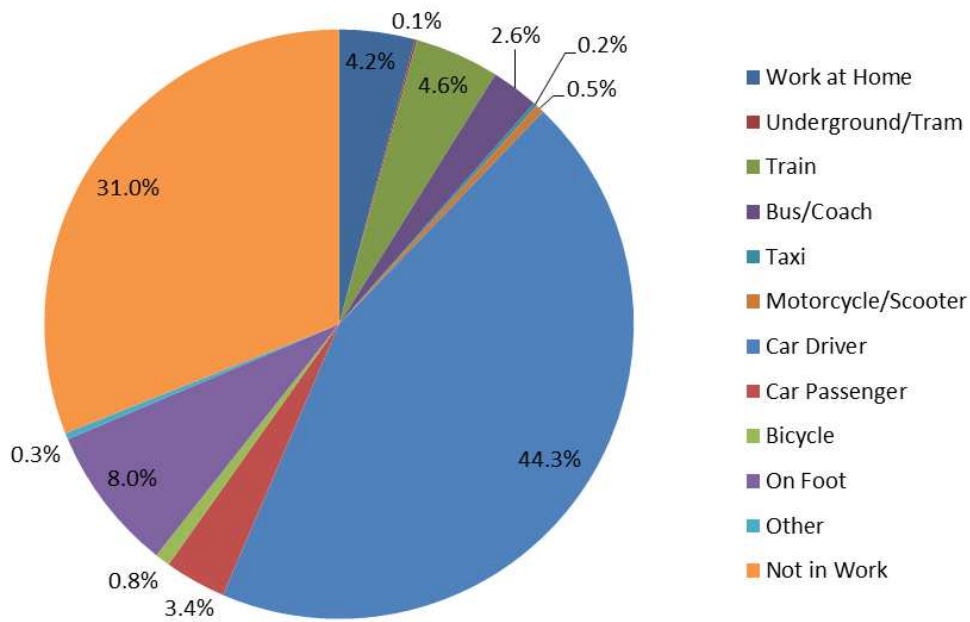
west 'A' roads pass through the town centre and numerous 'B' roads run in concentric rings around the town, providing local links to the rural parts of the Borough. Maidstone also enjoys good connections to the motorway network, including direct access to four junctions of the M20, (junctions 5, 6, 7 & 8).

- 4.6 In peak periods, parts of the road network operate at or near capacity<sup>2</sup> and, especially to the south of the Borough; people find it difficult to access the services they need due to the lack of transport options available to them. Congestion is caused by road traffic outgrowing capacity. The amount of road traffic is a consequence of the reliance placed on the private car and population and job growth (and their relative locations).
- 4.7 In terms of the reliance placed on the private car, a summary of Journey to Work Census data is shown below:

<b>MODE</b>	<b>COUNT</b>	<b>%</b>
Work at Home	<b>4,705</b>	<b>4.2%</b>
Underground/Tram	<b>120</b>	<b>0.1%</b>
Train	<b>5,257</b>	<b>4.6%</b>
Bus/Coach	<b>2,945</b>	<b>2.6%</b>
Taxi	<b>222</b>	<b>0.2%</b>
Motorcycle/Scooter	<b>538</b>	<b>0.5%</b>
Car Driver	<b>50,131</b>	<b>44.3%</b>
Car Passenger	<b>3,819</b>	<b>3.4%</b>
Bicycle	<b>935</b>	<b>0.8%</b>
On Foot	<b>9,023</b>	<b>8.0%</b>
Other	<b>395</b>	<b>0.3%</b>
Not in Work	<b>35,141</b>	<b>31.0%</b>

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<sup>2</sup> A20/ Coldharbour Lane Junction  
A249/Bearsted Road roundabout  
Bearsted Road/New Cut junction  
Dual carriageway between A249 and New Cut junctions  
A20 Ashford Road/Willington Street  
A229/A274 Wheatsheaf Junction  
A274/Wallis Avenue Junction  
A26 Fountain Lane Junction



4.8 In terms of growth in the period from 2011-2031, the Maidstone Borough Local Plan provides for 18,560 new homes together with employment growth of almost 14,500 jobs within the Borough. The impact on the transport network of these developments needs careful and considered management ensuring the transport systems in place are appropriate, and additional mitigation measures are implemented where required.

4.9 The implications of growth and the DITS on the Borough's highway network have been tested by using the Maidstone VISUM strategic highway network model to assess alternative transport infrastructure scenarios and their impacts in terms of travel time and distance. The VISUM model is a strategic highways model in which increases in walking and cycling are reflected in an estimation of the number of car trips which may be removed from the road network due to changes in modal share across these areas. Although VISUM can model bus service changes, in assessing the attractiveness of these services it does not take into account bus capacity issues, nor can it model bus priority measures. As a strategic model it is unsuited to assessing individual junction capacity, or to assess the impacts of proposed infrastructure improvements at those junctions and more detailed modelling is required for such junctions.

4.10 Through the development of the Local Plan a number of modelling scenarios and transport interventions have been evolved and tested (see Appendix 1)

4.11 Congestion presents a cost to the economy in terms of lost time and environmental degradation and associated health costs resulting from poor

air quality and inactivity. However it is widely acknowledged across the industry that this problem cannot be solved by simply providing more road capacity as in the absence of alternative choices and demand restricting measures, traffic is expected to outgrow capacity.<sup>3</sup>

- 4.12 High traffic levels and congestion are also associated with poor air quality. Maidstone Borough Council operates two automatic monitoring stations, one situated at a roadside site, and one at a rural background location. The station at the A229 Bridge Gyratory measures NO<sub>2</sub> and PM<sub>10</sub> and is next to a main road, within the Air Quality Management Area. The rural background site in Detling is outside the AQMA and measures NO<sub>x</sub>, PM<sub>10</sub>, sulphur dioxide (SO<sub>2</sub>) and ozone (O<sub>3</sub>). Maidstone Borough Council also monitors annual mean NO<sub>2</sub> concentrations through some 65 passive diffusion tubes located across the Borough. The most recent 2012 data shows the Bridge Gyratory town centre automatic monitoring site exceeding the annual objectives for NO<sub>2</sub> but not the hourly NO<sub>2</sub> objective. The 2012 results from the passive diffusion tubes also show nine sites exceeding the annual mean objective of 40µg/m<sup>3</sup> (Well Road; Boxley Road; Tonbridge Road; A229/A274 Wheatsheaf PH Junction; Pilgrims Way; Upper Stone Street; Wheeler Street; The Pilot PH). There are three sites in Upper Stone Street exceeding 60µg/m<sup>3</sup>, which is an indication of a potential exceedance of the 1-hour mean NO<sub>2</sub> objective. The Maidstone urban area is designated as an Air Quality Management Area.
- 4.13 There are points on the highways network where there are safety issues and a poor record of accidents. Plans identifying pedestrian and cycle collisions in Maidstone town and the Borough as a whole are included at Appendix 2.

#### The Issues:

- Maidstone has very high levels of car ownership and usage. 84% of households in the borough have at least 1 car, compared with 80% across Kent and 74% in England
- Low average vehicle occupancy figures
- Heavy reliance on a small number of key junctions; in particular the singular river crossing point in Maidstone's town centre where the A20, A26 and A229 all meet
- Congestion on the network, particularly at peak periods
- Accident blackspots
- Poor air quality in particular areas

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<sup>3</sup> Goodwin, P (2004) *The Economic Costs of Road Traffic Congestion*. A Discussion Paper Published by the Rail Freight Group. ESRC Transport Studies Unit, University College London

- The vulnerability of the M20 Motorway during cross-Channel disruption (“Operation Stack”)
- High-demand schools with very large catchment areas resulting in high car use for the ‘school-run’

## **Walking**

### **Overview**

4.14 The benefits of walking are numerous, but often under-appreciated – increased physical activity, improved health, livelier town centres, a more vibrant economy are just some of the varied benefits active lifestyles can bring. Above all a shift to walking has the potential of addressing (peak hour) congestion in the borough.

4.15 The 2011 Census shows that 15% of trips to work in Maidstone are 2km or less in distance, and yet walking as a mode share is less than 8%, which offers great potential for increasing walking, provided the infrastructure and environment is right. Similarly, walking trips to school at peak times offer opportunities to reduce car travel.

### The Issues:

- Relatively low levels of walking trips to work and school.
- Busy roads act as barriers around the town centre, segregating the residential areas from the core (known as severance). The current gyratory system to cross the River Medway is complicated for pedestrians to navigate, acting as a barrier for direct and convenient walking trips. Furthermore, the subways provided are unpleasant and poorly maintained.
- Provision of safe, convenient, pleasant pedestrian routes is not universally available given the dominance of the car in most of the built up parts of Borough.

## **Cycling**

### **Overview**

4.16 Undertaking a four mile commute to and from work by bicycle rather than by car reduces congestion, brings numerous health benefits and saves half a tonne of Carbon Dioxide a year.

4.17 The borough currently has a number of cycle routes that link the town centre to the suburban areas including National Cycle Network Route (NCR17) which provides an 11 mile commuter link between Maidstone and the Medway towns; however connections within the town and further afield

are incomplete and limited and there is a lack of cycle parking at key destinations.

#### The Issues:

- Low cycle mode share - 0.8% of Maidstone residents cycle to work according to the Office for National Statistics
- Limited and disjointed cycle routes into the town centre, with very few off-road options.
- Limited cycle parking at key locations
- Provision of safe cycle routes to schools, colleges, employment and retail areas.

## **Public Transport**

### **Overview**

4.18 Experience across the UK has shown that bus services of sufficient quality and frequency have the potential to capture a significant proportion of short- and medium-distance trips and to make a strong contribution to the alleviation of peak-time congestion in urban areas. Maidstone has a well-established bus network provided principally by Arriva, together with a number of smaller independent operators. The network is centred on Maidstone town centre and combines high frequency routes serving the suburban estates and longer distance services providing connections to many of the outlying villages and neighbouring towns.

4.19 Three railway lines cross Maidstone Borough, serving a total of 14 stations. The operator of the vast majority of rail services in the area is the South Eastern Franchise holder, Southeastern. The franchise was let by the Department for Transport in 2006 for an initial six year period, which has subsequently been extended to 2018. The principal rail route serving Maidstone town is the London Victoria to Ashford International line (also referred to as the Maidstone East Line), which includes stations at Maidstone East, Bearsted, Hollingbourne, Harrietsham and Lenham, with an average journey time to London of an hour. Headcorn, Staplehurst and Marden have frequent services to London with similar journey times.

#### The Issues:

- Maidstone has three town centre rail stations, but poor inter-urban connections, especially compared with nearby towns in Kent.
- The town's rail stations and bus station are not generally well connected to each other, making for a poor interchange experience.



- Very few bus priority measures – such as bus lanes – exist within the Borough, providing no advantage for bus journeys.
- Lack of payment options. Most buses only accept cash payment, and in some cases it is not possible to buy a return before 9am.
- Lack of live departure board information at most bus stops, and limited use of effective smartphone applications including ticket purchasing.
- Service frequencies beyond the urban core are not convenient for most users.
- The town's main bus interchange located at the Mall Chequers Shopping Centre is neither fit-for purpose nor user-friendly. It is not well lit or ventilated and is threatening in character being essentially a tunnel under the Centre linking King Street and Romney Place.

## **Parking**

### **Overview**

4.20 The provision of an adequate supply of well-located and reasonably priced car parking is essential to support the borough's retail economy, to provide a means of access to areas where alternative travel modes are limited or unavailable, and to ensure that mobility impaired persons are able to access key education, employment and leisure opportunities. The supply of car parking also drives demand for limited road space and can therefore contribute to traffic congestion and poor air quality, as well as making more sustainable modes of travel less attractive. Therefore it is crucial that an overprovision of parking is avoided, particularly in and around Maidstone town centre.

### The Issues:

- Only a very small portion of parking available in Maidstone is under direct Council control. As a consequence, it is difficult to apply a uniform parking policy when the vast majority of spaces are under private ownership.
- Parking is relatively cheap and plentiful compared with similar sized towns elsewhere.
- Many of the town's car parks have limited capacity (50 or less spaces), meaning that they fill up quickly and create additional circulatory traffic of vehicles searching for alternative spaces.

## 5. Policy Context

5.1 This section briefly outlines the current policy context within which the DITS has been developed and identifies how it can contribute to the delivery of the key objectives.

### National policy context

5.2 The Department for Transport (DfT)'s stated vision is for:

*"A transport system that is an engine for economic growth, but one that is also greener and safer and improves quality of life in our communities."*<sup>4</sup>

5.3 The Department is working towards delivering a number of priorities in line with this vision, which includes the following;

*"Encourage sustainable local travel. Encourage sustainable local travel and economic growth by making public transport (including light rail) and cycling and walking more attractive and effective, promoting lower carbon transport and tackling local road congestion."*

5.4 This vision has been carried forward into the Government's National Planning Policy Framework (NPPF) published in 2012, which replaced the previous suite of Planning Policy Statements, Planning Policy Guidance notes and certain Circular Guidance. The NPPF emphasises the importance of rebalancing the transport system in favour of sustainable transport modes, whilst encouraging local authorities to plan proactively for the transport infrastructure necessary to support the growth of ports, airports and other major generators of travel demand.

5.5 The NPPF recommends that Transport Assessments and Travel Plans should accompany applications for developments that generate significant amounts of movement, although it recognises that the opportunities to maximise sustainable transport solutions will vary from urban to rural areas.

5.6 This advice is reinforced in the National Planning Practice Guidance published in 2014, which gives more detailed guidance on how to approach the assessment of the transport implications in the preparation of new local plans.

#### *How the DITS contributes:*

- Implementing strategies to rebalance the transport system in favour of sustainable transport modes
- Clear transport requirements to be considered to support growth

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<sup>4</sup> <http://www.civilservice.gov.uk/networks/ges/assistant/what-we-do/df> (accessed 16th Oct 2015)

## **Kent County Council**

*Vision for Kent 2012-2022 (2012)*<sup>5</sup>

5.7 The Vision for Kent is a countywide strategy for the social, economic and environmental wellbeing of Kent's communities. It has been written around three major ambitions, which are to:-

- 1) Grow the economy by supporting businesses to be successful, including improvements to the transport network and the provision of high-speed broadband;
- 2) Tackle disadvantage by fostering aspiration rather than dependency, including the provision of comprehensive, reliable and affordable public transport services providing access to education and employment opportunities; and
- 3) Put the citizen in control by involving people in making decisions and working with them to design services that meet their needs and suit them, including the continued provision of KCC's Member Highway Fund and support for community bus and rail schemes.

*How the DITS contributes:*

- Implementing strategies to rebalance the transport system in favour of sustainable transport modes
- Clear transport requirements to be considered to support growth

*Growth without Gridlock: a Transport Delivery Plan for Kent 2010*<sup>6</sup>

5.8 *Growth without Gridlock* outlines KCC's high level vision for the transport network needed in Kent to support planned growth in housing and employment over the next 20 years. It responds to the economic and regeneration pressures outlined in the County Council's Framework for Regeneration and identifies how transport interventions can contribute to their alleviation. The strategy seeks greater transport funding and delivery powers for local transport authorities and calls upon the Government to progress those schemes of regional and national importance, including a Lower Thames Crossing, a long-term solution to Operation Stack and a scheme of Foreign Lorry Road User Charging.

*How the DITS contributes:*

- Implementing strategies to address congestion on the network
- Supporting the need to find a long term solution to Operation Stack

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<sup>5</sup> Kent Forum (2012), *Vision for Kent 2012-2022*

<sup>6</sup> KCC (2010), *Growth without Gridlock – A Transport Delivery Plan for Kent*

*Local Transport Plan (LTP) for Kent 2011-2016 (2011)*<sup>7</sup>

5.9 KCC's strategic approach for Kent's third Local Transport Plan (LTP3), covering the period 2011 to 2016, was to develop five LTP3 themes aligned to the previous government's national transport goals. These themes are:-

- a) Growth Without Gridlock
- b) A Safer and Healthier County
- c) Supporting Independence
- d) Tackling a Changing Climate
- e) Enjoying Life in Kent

5.10 The LTP makes specific reference to Maidstone (Chapter 8 – The Implementation Plan for Growth without Gridlock): “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 underlined by a package containing a number of traffic 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.”

*How the DITS contributes:*

- Implementing strategies to address congestion on the network, improve safety, improve air quality and encourage sustainable transport; all of which can contribute to a better, healthier lifestyles for the Borough's population

**Maidstone Borough Council**

*Maidstone Sustainable Community Strategy 2009-2020 (2013)*<sup>8</sup>

5.11 MBC's Sustainable Community Strategy (SCS) sets the overall strategic direction and long-term vision for Maidstone in a way which respects the need for sustainable development. The SCS acknowledges that congestion in the borough has become an increasing problem and that the overriding aim of an integrated transport strategy must be to provide genuine transport choice to the area's residents, businesses and visitors. These driving principles are reflected in the three priorities for Maidstone outlined in the SCS:-

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<sup>7</sup> KCC (2011), *Local Transport Plan for Kent 2011-16*

<sup>8</sup> MBC (2009; Refreshed July 2013), *The Sustainable Community Strategy for Maidstone Borough 2009-2020*

- a) For Maidstone to have a growing economy;
- b) For Maidstone to be a decent place to live; and
- c) Corporate and customer excellence.

*Strategic Plan 2015-2020:*

5.12 The Strategic Plan updates the Sustainable Community Strategy and restates "Our Vision" as "That our residents live in decent houses, enjoy good health and a pleasant environment with a successful economy that is supported by reliable transport networks": and "Our Mission" as "Putting People First". This leads to two priorities as follows:

- PRIORITY 1 - Keeping Maidstone Borough an attractive place for all
- PRIORITY 2 - Securing a successful economy for Maidstone Borough

*How the DITS contributes:*

- All the actions of the ITS support the priorities outlined above through improvements to the transport network

### **Other Plans and Policies**

5.13 The DITS is also aligned to a number of other plans and policies including:

#### ***KCC's Countryside Access Improvement Plan<sup>9</sup>***

5.14 The Countryside Access Improvement Plan sets a number of objectives especially for sustainable transport:

Priority walking objectives include:

- Make promoted routes as accessible as possible and promote them to a wide audience.
- Ensure new developments encourage and provide for walking and cycling, including links to the wider countryside.
- Widen the audience for walking, including under-represented groups.
- Officers will proactively seek opportunities to improve the accessibility of the network, following consultation with local landowners and parishes.

Priority cycling objectives include:

- Support increasing cycling for everyday journeys, including seeking improvements to routes serving transport hubs, large employers and schools, and connecting cycling networks.

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<sup>9</sup> KCC (2007), *Countryside Access Improvement Plan 2007-2017*

- Deliver a continued increase of traffic-free routes and a better connected network to support the development of tourism, family and recreational cycling.

Priority equestrian objectives include:

- Continue to improve equestrian infrastructure and develop new routes in target areas identified by riders.

### ***Rail Action Plan for Kent<sup>10</sup>***

5.15 The Rail Action Plan for Kent (RAPK) was to form the basis of KCC's response to the DfT's consultation on the new Integrated Kent Franchise (IKF) in 2014.

### ***MBC's Air Quality Action Plan<sup>11</sup>***

5.16 Initially the Council considered declaring AQMAs at the Fountain Lane/Tonbridge Road junction, the Well Road/Boxley Road junction and at the Loose Road/Sutton Road junction in Maidstone town based on the potential exceedances. Following extensive consultation, the Council decided to declare an urban area wide AQMA. The Council adopted the Maidstone Air Quality Action Plan in December 2010 setting out the measures it intends to put in place in pursuit of the objectives. The Borough Council regularly reviews and assesses air quality in the Borough to determine whether or not the air quality objectives are likely to be achieved.

### ***Low Emissions Strategy***

5.17 The Borough Council is also preparing a Low Emissions Strategy (LES) jointly with Tonbridge and Malling BC which is currently subject to initial public consultation<sup>12</sup>.

5.18 Air quality is a key issue in the Maidstone urban area and the DITS will contribute towards reducing pollution and emissions in terms of the promotion of sustainable transport measures. Similarly the future LES, is likely to link to propose the possible introduction of emission control standards for public transport vehicles and taxis and the promotion of low

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<sup>10</sup> KCC (2011), *Rail Action Plan for Kent*

<sup>11</sup> MBC (2010), *Maidstone Town Air Quality Action Plan*

<sup>12</sup> MBC (2015) *Low Emissions Strategy* <http://www.maidstone.gov.uk/council/have-your-say/current-consultations/draft-low-emission-strategy-2015>

emission vehicles and infrastructure and identify the increasing potential for electrically powered vehicles for possible inclusion in Council policy.

5.19 The DITS will also contribute to the future preparation of an Active Travel Plan for the Borough. The Active Travel Plan will seek to promote active travel (walking, cycling and the use of Public Transport) as a means of increasing physical activity across the life-course and to achieve the positive health benefits that will accrue. KCC is coordinating and promoting Active Travel initiatives across the County as part of its work-stream.

### ***Neighbourhood Plans***

5.20 Neighbourhood Plans are developed by parish councils in working partnership with MBC. These set out planning policies for development and the use of land in a local area. Once adopted, a neighbourhood plan becomes part of the development plan for the area. This means that the plan has weight when decisions are made on planning applications. Transport matters can form part of these plans.

## **6. Transport Vision for Maidstone Borough**

6.1 In the context of the transport challenges for Maidstone Borough and national and local transport policies, the following vision has been developed.

6.2 In brief the vision is *Realising Maidstone's sustainable future; connecting communities and supporting a growing economy.*

By 2031, Maidstone town and its surrounding area will be well known for its efficient, sustainable and accessible transport system which will support a thriving and attractive county town, and provide efficient and effective links with the surrounding villages, countryside and beyond. More and more people will walk, cycle and use public transport and this will help reduce car traffic on radial routes from the town and support the continued growth of the area while protecting its distinctive character and environment.

New routes will be developed for walking, cycling and public transport which will link up communities, employment, services and facilities and alternatives to the private car will be promoted. Information about sustainable transport options will be readily available and new technology will make this easy to access.

New and improved high quality bus routes will link Maidstone town centre with community and local transport hubs which will become the location for local enterprise centres where services will be supplemented with high speed broadband. Enhanced railway services will link the Borough with the capital and surrounding urban areas, offering a wide range of employment, commercial and leisure opportunities for residents, businesses and visitors.

## Strategic Objectives

6.3 In order to achieve this vision, five key objectives have been developed which may be summarised as:

**Objective 1:** Enhancing and Encouraging sustainable travel choices including:

**A:** The development, maintenance and enhancement of walking and cycling provision, through network improvements and encouraging uptake amongst the population;

**B:** The development, maintenance and enhancement of public transport provision, including Park and Ride, encouraging uptake amongst the population;

**C:** Promotion and education regarding walking, cycling and public transport travel options;

**D:** Ensuring that the provision of parking is fair and proportionate, considering the needs of all users, whilst also encouraging sustainable travel choices; and

**E:** Place sustainable travel options at the heart of all new developments within Maidstone, to ensure a fully integrated network that puts pedestrians, cyclists and public transport users at the centre of any transport proposals.

**Objective 2:** The enhancement of strategic transport links to, from and within Maidstone town.

**Objective 3:** Ensure the transport system supports the growth projected by Maidstone's Local Plan.

**Objective 4:** Reducing the air quality impacts of transport.

**Objective 5:** Ensure the transport network considers the needs of all users, providing equal accessibility by removing barriers to use.



## **7. Strategic Priorities**

- 7.1 In order to achieve these objectives, it will be necessary to focus on a number of key inter-related strategic priorities which will lead to specific interventions in all modes of transport.

### **Reduce demand for travel**

- 7.2 In order to allow an improved transport network to accommodate existing and proposed development, and play its part in seeking to reduce the air quality impacts, a key priority for the strategy is to reduce the need to travel where possible, especially by private vehicle. The creation of sustainable communities, where people can live, work and access facilities without needing to travel long distances, is an overarching aim of the strategy and this will be pursued through the Maidstone Borough Local Plan and land use planning policies.
- 7.3 Significant advances in technology mean that the opportunities to work from home are increasing so that people may not need to travel to a workplace on a regular basis in the future with benefits in reducing congestion. This may be encouraged by the provision of superfast broadband, especially to rural communities and this should be a priority for partnerships between public agencies, providers and local businesses. This provision may be supplemented by the establishment of local enterprise hubs which offer the opportunity for local small businesses to support each other and provide complementary activities and services.

### **Changing travel behaviour**

- 7.4 The objective of enhancing and encouraging sustainable travel choices will assist in changing travel behaviour. The inexorable increase in car usage leading to congestion and the further deterioration in environmental conditions are not sustainable and require changes in behaviour by individuals and institutions. A holistic approach is needed to promote alternatives to private car usage and the encouragement of walking, cycling and the use of public transport.

### **Promote modal shift**

- 7.5 The implications of changing behaviour are that people shift from using the private car for the majority of towards using more sustainable modes of transport where possible and appropriate. The private car continues to be the primary means of transport in the rural areas but relatively minor shifts in mode can make a significant difference in terms of congestion particularly with regard to trips to the urban area for work and leisure.
- 7.6 Experience elsewhere has demonstrated that significant changes to behaviour can be achieved where bus and rail services are enhanced by

additional routes, real time information and new and improved interchange facilities.

- 7.7 In Poole, the number of journeys by bus has almost doubled from 5.3 million in 2004/2005 to 10.2 million in 2014/2015<sup>13</sup>. The key to this success has been the Quality Bus Partnership comprising the major operators and the authorities of Poole, Bournemouth and Dorset. The authorities have, with Department for Transport funding, invested in infrastructure (high quality shelters, real-time passenger information and bus priority) whilst the bus operators have increased frequencies and invested £2.7 million in new low floor buses with luxury seating, CCTV and smartcard ticketing. These improvements have attracted new passengers for whom the bus is a mode of choice, and has led to a flourishing commercial bus network.
- 7.8 Similar changes to travel behaviour have been seen in Brighton & Hove, where a package of measures including flexible multi-trip ticketing, network simplification/branding, extensive bus priority, increased frequencies on busy routes and improvements to passenger facilities saw bus patronage increase from 30.2 million journeys in 2001 to 41.1million in 2009/10.
- 7.9 Darlington, Peterborough and Worcester were designated by the Department for Transport as Sustainable Travel Towns where a programme of measures was implemented between 2004 and 2009, intended to reduce car use. These are medium-sized (all with populations of 140,000 or smaller) free-standing towns, comparable with Maidstone. Detailed before/after travel surveys of over 4,000 residents in each town gave the following key results<sup>14</sup>:
- Car driver trips fell by 9% per person, and car driver distance by 5-7%, compared with a fall of about 1% in medium-sized urban areas nationally during the same period;
  - Bus trips per person grew by between 10% and 22% in the three towns, compared with a national fall of 0.5% in medium-sized towns;
  - Cycling trips per person grew by between 26% and 30% in the three towns, compared to a decline elsewhere; and
  - Walking trips per person grew by between 10% and 13% in the three towns compared to a national decline.

7.10 During the same period, six Cycling Demonstration Towns were also designated (Aylesbury, Brighton & Hove, Darlington, Derby, Exeter and

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<sup>13</sup> Eurotransport Magazine, Volume 13, Issue 5 (2015), *Increasing bus patronage through partnership working and RTP*

<sup>14</sup> Sloman, L. et al (2010), *The Effects of Smarter Choice Programmes in the Sustainable Travel Towns: Summary Report for Department for Transport.*

Lancaster with Morecambe). Evaluation indicated a 27% increase in cycling across all six towns between 2005 and 2009, with the proportion of adults undertaking any cycling increasing by 14%. In schools involved in the 'Bike It' programme, the proportion of pupils cycling to school on a regular basis increased by 126%<sup>15</sup>.

### **Improve network efficiency**

7.11 In order to achieve the objectives of enhancing strategic transport links to, from and within Maidstone town and ensuring the transport system supports the growth projected by Maidstone's Local Plan, improvements should also be made to the existing transport network, including major new investment on links where appropriate. The strategy incorporates a programme of road and junction improvements.

## **8. Achieving the Strategy**

8.1 Key to improving transport conditions in Maidstone Borough is the full involvement of all the stakeholders in providing and utilising transport modes and services. As well as the highway authority (KCC) and the Borough Council, key players include the bus operators, the rail company, interest groups promoting walking and cycling, Parish Councils and community groups.

### **Roles and Responsibilities**

#### **Kent County Council**

8.2 Kent County Council (KCC) is the local highway authority for Kent and is responsible for the management and maintenance of all adopted roads in the county other than motorways and trunk roads. KCC is also the local transport authority for Kent and actively promotes alternatives to car-based travel to improve the accessibility, sustainability and efficiency of the highway network. Motorways and trunk roads in England are the responsibility of the Highways England (formerly the Highways Agency).

8.3 KCC's third Local Transport Plan (LTP3) covers the period 2011 to 2016 and further Local Transport Plans will be produced over the period of the DITS. It is the intention that the Local Transport Plan will assist the implementation of the Integrated Transport Strategy.

#### **Maidstone Borough Council**

8.4 Maidstone Borough Council (MBC) is the Local Planning Authority for the borough and is responsible for producing an up to date Local Plan which

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<sup>15</sup> Department for Transport/Cycling England (2010). Lift Off for Cycling: Headline Results. <http://webarchive.nationalarchives.gov.uk/20110407094607/http://www.dft.gov.uk/cyclingengland/cycling-cities-towns/results/>

meets objectively assessed needs for new development in the period to 2031.

- 8.5 The Borough Council also has delegated responsibility for Civil Parking Enforcement under the Traffic Management Act 2004, Park and Ride services, street cleaning, the licensing of taxis and private hire vehicles, the provision of bus shelters and the monitoring of air quality and implementation of an Air Quality Action Plan.

### **Bus Operators**

- 8.6 Approximately 80% of bus services in Kent are operated on a wholly commercial basis by local operators and neither the Borough nor the County Council plays a direct role in their provision. However, MBC and KCC have signed a Quality Bus Partnership Agreement with the borough's principal commercial bus operator, Arriva, which commits all parties to invest jointly in local bus services and supporting infrastructure. The remaining 20% of services are classified as 'socially necessary' and are procured by KCC to provide access to essential services.
- 8.7 Discussions with the significant bus operators in Maidstone are identifying future service enhancements, new routes and operating improvements which will increase the attractiveness of bus travel in both the urban and rural areas. The strategy anticipates the rail service improvements which are planned for Maidstone, including Thameslink, and the introduction of policies in the Local Plan to promote walking and cycling and alternatives to the use of the private car.

### **Rail Operator**

- 8.8 Maidstone's rail services are operated as part of the Integrated Kent Franchise, which is specified and led by the Department for Transport (DfT). The franchise is currently held by Southeastern, and this was recently extended until 2018.

### **Funding Sources**

- 8.9 A key challenge for the DITS will be to ensure that its actions are achievable within the funding that is likely to be available over time. Anticipated funding sources include:
- **Funding from development** – the DITS supports committed and planned growth and so funding from development will be critically important to help deliver the strategy. Section 106 funding will be used to deliver site specific infrastructure and to improve and mitigate the impacts of growth proposals. In the medium to longer term, the Community Infrastructure Levy (CIL) will be used to fund more generally the key infrastructure related to growth.

- **Single Local Growth Fund (SLGF)** – established in 2015/16, transport funding for the SLGF has been top sliced from central government Local Transport Plan funding for small schemes and from local major scheme funding. Local Enterprise Partnerships are required to submit bids for SLGF funding for schemes across all areas related to growth, including education and skills, community infrastructure and drainage, in addition to transport.
- **Local Transport Plan (LTP) funding** – KCC receives LTP funding for small scale transport improvements. However, the level of funding has reduced as money has been top sliced into the SLGF. For 2015/16 to 2017/18, the available Integrated Transport block funding will total £6.8 million per annum for the entire county.

## **Prioritisation and Delivery**

8.10 The Local Plan seeks to deliver 18,560 homes. Transport interventions should be scheduled in line with the anticipated development of the Local Plan. Current work on junction improvements serves to evidence that with some 9000 homes delivered or in the pipeline, the impacts can and will be mitigated, and that MBC and KCC are already working together and delivering schemes.

8.11 Coupled with some 3000 units planned for broad locations in the Borough at the end of the plan period, and potentially 1000 units as 'windfalls', this leaves a total of approximately 5000 remaining units requiring infrastructure in the short to medium term.

## **9. Action Plans and Phasing**

9.1 The strategy leads to action plans for all modes of transport which will be reviewed and rolled forward on a regular basis. It is important that the interventions are aligned with the sequence of development proposed in the Maidstone Borough Local Plan.

9.2 The Action Plans to achieve the strategic objectives and priorities are set out below.

9.3 The proposed delivery of the necessary transport infrastructure to support the Local Plan in line with this strategy is indicated in the Infrastructure Delivery Plan (IDP). The IDP also indicates the sources of funding which will include S106, CIL when it is introduced, and other funding sources such as the LEP Growth Fund.

9.4 S106 funds are triggered at various stages of the development process and are largely controlled by the proposed developers' construction schedules,

within the time constraints of the planning permission granted. Specific infrastructure provision may be financed in advance of development from other sources and the DITS identifies local highways, walking and cycling provision and public transport actions which may attract funds from various sources.

- 9.5 The chart below outlines the actions to be taken in order to deliver the objectives of this strategy. These actions have been categorised by mode, but an integrated approach is required to tackle Maidstone’s transport issues with success reliant on the actions being implemented in conjunction with each other.
- 9.6 Actions will be phased so that they will be implemented over the short, medium or long term. These actions will be crucial to ensuring that Maidstone functions effectively both as the County Town of Kent and as a regionally important transport hub.
- 9.7 The DITS actions are summarised below, followed by full details of each action:

<b>No.</b>	<b>Area</b>	<b>Action description</b>
W1	Walking	Provision of accessible pedestrian routes for all users.
W2	Walking	Improve pedestrian accessibility across the River Medway in Maidstone town centre.
W3	Walking	Implement public realm improvement schemes within the town centre, such that pedestrian access is the primary mode within the central core of Maidstone.
W4	Walking	Identify priority areas for implementation of safety improvements to reduce road traffic collisions involving pedestrians and cyclists.
W5	Walking	Actively encourage and promote walk-to-school initiatives.
W6	Walking	Improve street signage with better pedestrian wayfinding and a reduction in footway clutter.
C1	Cycling	Maintain and further develop a strategic cycle network, connecting the town centre to key facilities and residential areas.
C2	Cycling	Maintain and further develop cycle routes in rural service centres, connecting local amenities and transport hubs (rail stations and bus stops) to housing.
C3	Cycling	MBC and KCC to work with partners to ensure the regular maintenance of all cycle tracks within the Borough.
C4	Cycling	(a) All Year 6 children will have access to Level 1 and 2 Bikeability training, and children in Year 6 will have access to Level 3 training. (b) Adult cycle training will continue to be offered, through initiatives including workplace travel planning.

C5	Cycling	Support the Maidstone Cycling Forum as a group to promote the cycling cause in the Borough.
C6	Cycling	Improve cycle security and parking at all key transport hubs and public amenities (including schools, healthcare facilities and retail locations).
C7	Cycling	Encourage employers to incorporate cycling into Workplace Travel Plans.
C8	Cycling	Promote cycling in schools through School Travel Plans.
C9	Cycling	Ensure all cycle routes are fully advertised and signposted within the Borough.
C10	Cycling	Revise and update the "Explore Maidstone Walking and Cycling Map" to extend coverage to the wider Borough and indicate destinations in neighbouring local authorities. Map to be available both electronically and in paper format.
C11	Cycling	Standardise and clarify the requirements of planning applications with respect to the provision of walking and cycling facilities, to promote the use of these active travel modes.
C12	Cycling	MBC, KCC and the Maidstone Cycle Forum to identify opportunities to establish local cycling events.
C13	Cycling	MBC and KCC to identify locations throughout the cycle network where new automatic cycle counters should be installed to enable a detailed analysis of usage. Installation to proceed as resources allow, but each new cycle infrastructure proposal will be assessed to see if an additional counter should be added to augment the data gathering process.
PT1	Public Transport	Provide bus priority measures on strategic routes linking the town centre to residential developments and key local amenities.
PT2	Public Transport	Facilitate an improvement of bus services to ensure a good frequency of service is provided on all radial routes to the town centre within the Maidstone Urban Area.
PT3	Public Transport	Increase the proportion of schoolchildren using the bus to get to school.
PT4	Public Transport	Continue to engage with and facilitate Statutory Quality Bus Partnership Schemes in Maidstone.
PT5	Public Transport	Improve rail station access for pedestrians and cyclists.
PT6	Public Transport	Improve the frequency and quality of bus services between Maidstone town centre, M20 Junction 7 and Sittingbourne/Faversham
PT7	Public Transport	Provision of a North West Maidstone Bus Loop
PT8	Public Transport	Promote the provision of high quality bus services from the rural service centres and investigate using rail stations for interchange

		facilities
PT9	Public Transport	Lobby Government and train operating companies (TOCs) for improved rail services to Maidstone including the restoration of direct services to London Bridge and Canon Streets
PT10	Public Transport	Investigate the potential for further rail halts at Tovil, Teston and Allington
PT11	Public Transport	Improve bus facilities at Maidstone East and Maidstone West train stations to maximise interchange capabilities.
PT12	Public Transport	Work towards an improved bus station in Maidstone town centre.
PT13	Public Transport	Better Public Transport Information/Marketing including on-line/mobile ticketing, journey planning apps and signage.
P1	Parking	Introduce and adhere to Parking Standards.
P2	Parking	Optimise long stay parking charges to extract maximum value from parking charges, whilst controlling demand.
P3	Parking	Maintain the current level of parking space provision in the town centre.
P4	Parking	Improve parking enforcement on highways to reduce the impact of obstruction on bus reliability
UL/Zero Emissions <sup>1</sup>	Ultra-Low and Zero Emissions Vehicles	Encourage the provision of suitable infrastructure for Ultra-low and Zero emissions vehicles throughout the Borough
H1	Highways	Targeted implementation of highway improvements at key strategic locations to relieve congestion and to aid public transport.
H2	Highways	Maintain and develop Maidstone's Intelligent Transport Systems and the proactive sharing of real time traffic and transport information with road users to manage congestion.
H3	Highways	Facilitate and promote the expansion of the County Hall Car-Club service to meet any identified increase in demand on an annual basis.
H4	Highways	Actively promote and encourage car sharing initiatives
H5	Highways	Ensure road safety education continues to be provided for across the borough.
H6	Highways	Installation of additional electric charging points and the promotion of electric car use.
H7	Highways	Working with Kent County Council in assessing the need and justification for a Leeds-Langley Bypass with a view to identifying the potential and possible timescales for such a scheme at the first review of the Maidstone Borough Local Plan.



## **Walking**

### The Actions:

9.8 More detailed treatment of the walking and cycling actions are presented in the Walking and Cycling Strategy at Appendix 3.

### **Action W1:** Provision of accessible pedestrian routes for all users

9.9 The pedestrian network should provide equal access for all users. Achieving this outcome will require the removal of physical obstacles and the introduction of more accessible elements to the pedestrian environment including dropped kerbs, tactile paving and wide footways. Step free access should be provided for all key routes, making use of ramps and lifts as appropriate.

### **Action W2:** Improve pedestrian access across the River Medway in Maidstone town centre

9.10 The provision of better pedestrian routes across the Medway would encourage walking between the different areas of the town centre and local housing developments. Enhancing the ability for pedestrians to easily traverse the river improves the connectivity of the town centre, not only encouraging walking but contributing to economic benefits through better accessibility between businesses and retail outlets on either side of the river. The Council is working with KCC on the Bridges Gyratory scheme to ensure that pedestrian (and cycle) access across the river is not compromised.

9.11 The pedestrian bridge connecting Maidstone East and Maidstone Barracks Station has recently undergone refurbishment to improve the pedestrian environment. Further areas for improvement include:

- continuing to develop the River Medway towpath to improve both the pedestrian and cyclist experience; and
- investigation of the benefits of building a pedestrian bridge to improve connectivity over the River Medway between Earl Street and St Peter's Street.

### **Action W3:** Implement public realm improvement schemes within the town centre, such that pedestrian access is the primary mode within the central core of Maidstone

9.12 One of the most important ways of making streets more attractive 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', 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.

9.13 Accessible and attractive town centre streets not only enhance the pedestrian experience, but through encouraging pedestrian movement, public realm improvements can make a vital contribution to the regeneration of the commercial centre. MBC has recently successfully completed its High Street Public Realm Scheme, which has revitalised the High Street and now supports future growth in nearby businesses. Building on this success, MBC also has aspirations to upgrade the upper half of Week Street (further towards Maidstone East Station) and Gabriel's Hill.

**Action W4:** Identify priority areas for implementation of safety improvements to reduce traffic collisions involving pedestrians and cyclists

9.14 Personal injury collision data will be reviewed to identify significant clusters of collisions involving pedestrians and cyclists and to analyse the main causes of these collisions. This review will be used to develop a priority list of locations (e.g. road junctions, pedestrian crossing locations) where the upgrading of pedestrian facilities is required.

**Action W5:** Actively encourage and promote walk to school initiatives

9.15 MBC is a sponsor of the KM Charity Group 'Walk to School' which seeks to encourage more parents and children to walk to school. Across the County since its inception, the Charity has resulted in:

- 40,000 children and families being involved;
- 600,000 green journeys annually; and
- 250,000 school run car journeys removed.

9.16 As school induced traffic has a significant impact on the road network during peak times, schemes such as these contribute greatly to managing traffic congestion.

9.17 MBC will appoint a school travel plan champion to support the County Council initiatives locally and work directly with schools in investigating the potential scope and functions of School Travel Plans which would seek amongst other issues to reduce the number of car trips undertaking the "school run".

**Action W6:** Improve street signage with better pedestrian wayfinding and a reduction in footway clutter

9.18 Numerous columns for street signs and street furniture can prevent the free flow of pedestrian movement and create hazards and unnecessary barriers. There is scope to rationalise street signage and street furniture to reduce

the number of columns and general street clutter to provide more footway space.

9.19 Efficient wayfinding can encourage walking and cycling through providing people with the information they need to navigate the town successfully, and understand the journey times between locations. Having clearly branded, consistent, wayfinding throughout the town not only provides information and reassurance to those less familiar with the area, but also adds to the overall experience of the public realm.

## **Cycling**

### The Actions:

9.20 Detailed treatment of the walking and cycling actions are presented in the Walking and Cycling Strategy at Appendix 3.

**Action C1:** Maintain and further develop a strategic cycle network, connecting the town centre to key facilities and residential areas

9.21 Maidstone should have a comprehensive, safe, cycle network in order to facilitate and encourage cycle journeys. At present the borough has a number of cycle routes focused on the urban area, however these are often disjointed with limited off road options. Delivering a strong strategic cycle network requires:

- Maintenance and enhancement of existing cycle infrastructure. Reviewing cycle routes and links already in place ensuring:
- Existing gaps in the network are addressed, providing safe and continuous linkages to known destinations e.g. The Oakwood Park Education Campus.
- Routes unimpeded by street furniture, pavement parking and other obstructions are de-cluttered
- Routes are well maintained clearing cycle ways of hazardous defects and overgrown vegetation
- Appropriate signage is in place to clearly identify cycle routes
- Development of new strategic cycle routes to and from the town centre from key residential and employment sites encouraging cycling as a commuting option. Key strategic links required to further enhance Maidstone's cycle network include:
  - The South East Cycle Link, developing a route into Maidstone from Langley along the Loose valley to connect with the Loose Greenway Scheme that is being progressed.

- The River Medway Towpath Scheme from Barming Bridge to Allington (together with links at key points along this route form either side of the River Medway)
- B2246 Hermitage Lane Cycle Lane.
- A route linking Kings Hill to Maidstone Town Centre along North Pole Road, North Street, South Street Barming, through to Rectory Lane and Fant Farm to Upper Fant Road Maidstone.
- Reviewing Traffic Regulation Orders to examine whether cycles can be better accommodated on parts of the existing highway network; e.g. across Barming and Tovil footbridges and along Week Street (out of shopping hours).

9.22 Enhancement of leisure cycle facilities and routes, to further encourage cycling as a leisure pursuit. Providing appropriate cycle facilities at key recreation areas, including a Pump Track in a cycle accessible location or other recreational cycle facility including Mote Park, with a specific focus on improving the riverside paths and routes along the Medway. Longer term possibilities include;

- extension of the Medway Towpath Scheme from Barming Bridge to Yalding;
- a signposted route from Lenham to Headcorn, Staplehurst, Marden, Laddingford and Yalding across the southern part of the Borough;
- a signposted route across the North Downs from the Stockbury valley/Hucking to Wichling/Otterden with connections to Swale and Lenham.

**Action C2:** Maintain and further develop cycle routes in rural service centres, connecting local amenities and transport hubs (rail stations and bus stops) to housing

9.23 The borough has six rural service centres, and cycling facilities within these are variable. Local communities should have the following facilities in place to encourage cycling for short localised trips;

- Cycle routes to schools
- Cycle routes to railway stations
- Cycle parking provision at schools, railway stations and bus stops (where frequent interurban services are available/planned)

- Cycle parking provision at key local amenities (eg. health care, retail and recreation sites)

The following specific local cycle improvements have been identified to be addressed:

- Harrietsham: implementation of a cycle route between the primary school and rail station;
- Staplehurst: implementation of a cycle route connecting the rail station to the residential area to the south of the Lodge Road Industrial Estate;
- Staplehurst: provision of cycle parking at the village shops;
- Headcorn: shelter for cycle parking provided at the railway station;
- Hollingbourne: provision of cycle parking at the station;
- Marden: additional cycle parking provision at the railway station;
- Bearsted: additional cycle parking provision at the railway station;
- Maidstone Hospital: additional cycle parking; and
- Maidstone West: additional cycle parking provision at the railway station.
- Cycle parking should be provided in urban shopping parades e.g. Beverley Road, Queens Road crossroads, Barming and Loose Road shopping parade.

**Action C3:** MBC and KCC to work with partners to ensure the regular maintenance of all cycle tracks within the Borough.

**Action C4:**

**(a)** All Year 6 children will have access to Level 1 and 2 Bikeability training, and children in Years 67-9 will have access to Level 3 training.

**(b)** Adult cycle training will continue to be offered, through initiatives including workplace travel planning.

**Action C5:** Support the Maidstone Cycling Forum as a group to promote the cycling cause in the Borough.

9.24 In January 2015 the Maidstone Cycling Forum was re-launched providing an arena to discuss local cycling issues. Continued support and involvement in the forum provides valuable insight into local cyclist's perspectives and issues, which can feed into making informed decisions regarding the development of Maidstone's cycle infrastructure.

9.25 The forum also actively promotes cycling through building a strong cycling community hosting regular events that encourage cycling across the borough, and raising awareness of the existing and emerging cycle facilities.

**Action C6:** Improved cycle security and parking at all key transport hubs and public amenities (including schools, healthcare facilities and retail locations)

9.26 Sufficient secure cycle parking is essential if people are to be motivated to cycle. The type of parking provided should be considered in relation to the user profiles; in short stay locations simple Sheffield stands can provide a convenient means for cyclist to park up, however in locations where it is likely cycles will be left for long time periods more sheltered parking or lockers can be more appropriate.

**Action C7:** Encourage employers to incorporate cycling into Workplace Travel Plans

9.27 Currently 0.8% of Maidstone residents cycle to work according to the Office for National Statistics. Travel plans provide an opportunity to improve levels of cycling by improving cycling facilities at employment locations. KCC currently offers advice and support to business, schools and other organisations on travel planning advocating, not just the wider transportation, but also the business benefits of implementing travel plans. Such plans are encouraged as they can include commitment to improving cycling facilities including secure parking, bike lockers and shower facilities; all of which help make cycling a realistic commuting option for employees.

**Action C8:** Promote Cycling in Schools through School Travel Plans.

9.28 Getting children involved in cycling and providing education on safe cycling is important in developing a longer term cycling culture within the borough.

9.29 The council will look to encourage and promote cycle education in schools including, Bikeability, a national cycle training course provided at a local level by KCC at primary and secondary schools across Kent. Aimed at children in year 6 and above, the courses give children the skills to make safer choices when cycling and to enjoy the freedom of riding a bike. Bikeability courses are also available for adults. Nationally, over 1.7million people have benefited from the training.

**Action C9:** Ensure all cycle routes are fully advertised and signposted within the Borough.

**Action C10:** Revise and update the "Explore Maidstone Walking and Cycling Map" to extend coverage to the wider Borough and indicate

destinations in neighbouring local authorities. Map to be available both electronically and in paper format.

**Action C11:** Standardise and clarify the requirements of planning applications with respect to the provision of walking and cycling facilities, to promote the use of these active travel modes

**Action C12:** MBC, KCC and the Maidstone Cycle Forum to identify opportunities to establish local cycling events

**Action C13:** MBC and KCC to identify locations throughout the cycle network where new automatic cycle counters should be installed to enable a detailed analysis of usage. Installation to proceed as resources allow, but each new cycle infrastructure proposal will be assessed to see if an additional counter should be added to augment the data gathering process.

## **Public Transport**

The Actions:

**Action PT1:** Provide bus priority measures on strategic routes linking the town centre to residential developments and key local amenities

9.30 Bus priority measures are vital to delivering a network that encourages public transport use, through ensuring journey times can compete with private car use. Allowing buses to bypass key areas of congestion through the use of junction priority measures, provides passengers with a clear advantage, while also contributing to improved air quality through less congested bus journey times. Key areas identified for bus priorities measure include:

- Sutton Road, Northbound, between Willington Street and Wheatsheaf Junction: This would make a significant contribution to improving the speed and reliability of buses operating on this busy corridor and would directly serve the South East Maidstone strategic housing allocation proposed in the Local Plan. Proposals include:
  - i. The incorporation of bus priority measures into the capacity improvement schemes for the junction of Willington Street/Wallis Avenue and the A274 Sutton Road
  - ii. Limited widening at the St Saviours Road junction by lengthening the left turn flare lane and a relocation of the bus stop and making it left turn only with an exception for buses going straight ahead
  - iii. Relocation of the bus stops at the end of Mangravet Avenue as these are not well related to pedestrian crossing movements or the existing population at Grove/Road Mangravet Avenue.

iv. Bus pre-signal on the in-bound approach to the Wheatsheaf junction on Sutton Road.

- Romney Place bus lane: Romney Place is not designed as a major through route and its heavy use during peak periods causes significant congestion on Lower Stone Street delaying buses seeking to access The Mall Chequers Bus Station. It also causes hazards to pedestrians seeking to cross Romney Place at its junction with Lower Stone Street. The implementation of an eastbound bus lane, in place of the existing carriageway lane, will ease congestion and improve access times for buses routing along this road to the bus station, while also positively impacting on air quality.

**Action PT2:** Facilitate an improvement of bus services to ensure a good frequency of service provided by high quality buses is provided on all radial routes to the town centre within the Maidstone Urban Area

9.31 Ensuring a frequent bus service encourages public transport use, improving passenger perceptions of the convenience and robustness of using buses, through essentially allowing more flexibility in their use of the service. The frequency needs to be regular enough to prevent the timetabling acting as a deterrent to passenger use. The improvements in passenger numbers driven through frequency improvements has been seen on existing bus routes in Maidstone which have seen patronage increase with frequency enhancements. The following routes and frequencies should be provided (at a minimum in the peak hours):

- A20 London Road – 7-8 minute frequency (Currently at this frequency).
- A274 Sutton Road – 6-7 minute frequency; Currently 8 minutes on part; to be expanded when housing schemes progress and to be combined with the bus priority measures outlined in PT1.
- A229 Royal Engineers Way (to and from the Medway Towns) - 10 minute frequency (currently Service 101 (Sapphire standard) is on a 12 minute frequency).
- A26 Tonbridge Road – 7-8 minute frequency (currently 10 minutes. Work with service providers to upgrade service to Sapphire standard (or equivalent) and explore the possibility of extending the 6X service (Maidstone-Pembury Hospital Route) into Maidstone Town Centre.
- A229 Loose Road – 10 minute frequency Potential to increase frequency of 89 service from Coxheath from every 20 to every 15 mins. Potential to increase service 5 from Staplehurst to a half-hour frequency.



- A249 Sittingbourne Road (to and from Sittingbourne/Faversham) – 15 minute frequency coupled with the promotion and an increase in frequency of services 333 and 334 from Sittingbourne and Faversham. Work with the service providers to upgrade service to Sapphire standard (or equivalent).
- A20 Ashford Road – 20 minute frequency

**Action PT3:** Increase the proportion of schoolchildren using the bus to get to school

9.32 Travel to and from schools creates significant pressure on the highway network, which requires intervention to encourage alternative travel arrangements to car drop-off and pick-up. KCC currently provides the following bus passes, to encourage and promote bus travel among young people:

- Young Persons Travel Pass - provides travel on almost all public bus services in Kent for an annual fee of up to £250 for young people living in the county who are in academic years 7 to 11.
- 16+ Travel Card - provides subsidised bus travel for 16-19 year olds continuing with education or vocational training. The card costs up to £400 per annum.

9.33 These need to remain in place to continue to manage school travel patterns, reducing the congestion caused by travel to and from schools.

**Action PT4:** Continue to engage with and facilitate statutory Quality Bus Partnership (QBP) schemes in Maidstone

9.34 The QBP was set up to improve and facilitate communication and decision making regarding bus service provision in the Maidstone area. Attendance by representatives from KCC, HE, MBC and Bus operators allows collaborative discussion of any bus related matters and MBC will continue to engage with this group. The promotion of the use of S106 agreements for bus service improvements, including subsidisation of services, improvements to signage and the provision of bus shelters will be a key input into this group as will ensuring that operators continue to upgrade fleets to less polluting and fuel efficient models.

**Action PT5:** Improve rail station access for pedestrians and cyclists

9.35 Rail stations need to be accessible by all modes of transport, including suitable walking and cycling routes between local housing and local stations. The stations themselves require sufficient parking to meet demand without actively encouraging car access over more sustainable modes. Basic cycle parking should be provided as a minimum, with significant secure provision

at key strategic rail stations. The following locations have been identified as priorities for station access improvements:

- Barming Station – Enhanced Pedestrian and Cycle access required to link the station with existing and proposed development in the local area and hospital. In particular the provision of the pedestrian crossing near the station is required to ensure a safe pedestrian route across the busy Hermitage Lane to the station and a direct pedestrian and cycle access from Hermitage Land and Allington to the London-bound platform.
- Staplehurst - A new pedestrian and cycling link between the railway station and the residential area to the south of the Lodge Road Industrial Estate, with improvements to the ease and quality of bus/rail interchange within the vicinity of the railway station.
- Harrietsham Station - New pedestrian and cycling link between Harrietsham Primary School and Harrietsham railway station.

**Action PT6:** Improve the frequency and quality of bus services between Maidstone town centre, M20 Junction 7 and Sittingbourne/Faversham

9.36 The Council will seek through appropriate s106 obligations to secure improved frequency and quality of bus services between Maidstone Town Centre and M20 Junction 7 area and to Sittingbourne/Faversham and vice versa. This will require the provision of three additional buses/drivers to ensure a minimum 15 minute service frequency between the M20 junction 7 area and the Town Centre thus increasing frequency of service to Faversham and Sittingbourne to every 30min respectively.

9.37 Funding for the enhancement should be provided for five years. The Council will work with and encourage the bus operator to upgrade the service between Sittingbourne and Faversham to a 'Sapphire' standard of service or equivalent (which should include dedicated drivers, upgraded seating, the availability of free Wi-Fi and at-seat charging facilities). Improvement to the existing signalised junctions at New Cut Road/A20 Ashford Road and A20 Ashford Road/Square Hill by upgrading signals and/or their control systems will also be secured.

**Action PT7:** Provision of a North West Maidstone Bus Loop

9.38 The Council will seek through appropriate s106 obligations to secure funding for 5 years for the operation of a 'bus-loop' service in north west Maidstone connecting Maidstone Hospital and the new housing sites on or adjacent to Hermitage Lane and London Road to Maidstone Town Centre along London Road via a bus gate on Howard Drive

Allington. This is likely to be achieved by the extension of existing service 79 from London Road/Allington westwards and/or service 85 northwards beyond Maidstone Hospital where it currently terminates or the re-routing of service 60 which currently runs along London Road to Hermitage Lane via Coldharbour.

**Action PT8:** Promote the provision of high quality bus services from the rural service centres including interchange facilities at rail stations.

9.39 A key objective for the strategy is the promotion of alternatives to private vehicle commuting into Maidstone through the provision of high quality fast bus services from the rural service centres and major villages. Opportunities for bus facilities should be provided at village railway stations to increase interchange capability.

**Action PT9:** Lobby Government and train operating companies (TOCs) for improved rail services to Maidstone

9.40 South-eastern operates train services in the Kent region including Maidstone. At the end of 2014 South-eastern had their existing rail franchise extended to June 2018. This extension included the provision of better services to Maidstone by the addition of direct Maidstone East to London Blackfriars services. Whilst a small improvement, previous connections to Cannon Street and London Bridge have still been lost, and the frequency of service to Blackfriars is poor.

9.41 High Speed 1, where Southeastern serves many Kent towns into and out of St Pancras via Ebbsfleet, in most cases does not benefit Maidstone. It is now possible to travel from Ashford to London in less than 40 minutes, whereas Maidstone East to Victoria still generally takes more than 1 hour, even though Ashford is many miles further from London than Maidstone.

9.42 To correct this imbalance, in the run up to the refranchising MBC will review rail services and in conjunction with KCC and passenger groups lobby the government for enhancements to Maidstone services in the new franchise timetable, including the restoration of direct Charing Cross, Canon Street and London Bridge services. The extensive upgrade work, as part of the Thameslink programme, also provides an opportunity to lobby for improved connections to the capital via Blackfriars and St Pancras.

9.43 The possibility of the re-introduction of a direct Maidstone to Gatwick Airport service which ceased some years ago should also be assessed.

**Action PT10:** Investigate the potential for further rail halts at Tovil, Teston and Allington

9.44 In line with the increase in rail traffic, the potential for the provision of extra rail halts should be investigated. Discussions with rail operators and

user groups should identify how such provision may be made, and how it can be funded.

**Action PT11:** Improve bus facilities at Maidstone East and Maidstone West train stations to maximise interchange capabilities

9.45 Improvements are necessary to improve the bus interchange capabilities at both Maidstone East and Maidstone West stations to provide for new or enhanced bus services from outside the Maidstone urban area can terminate. Bus facilities should be incorporated into redevelopment plans for these major town centre locations.

**Action PT12:** Work towards an improved bus station in Maidstone town centre

9.46 In the short term (1-2years), the Council will work with the landowners of the Mall Chequers Shopping Centre and service providers to secure significant improvements to the existing bus station to improve its attractiveness and ease of use.

9.47 In the medium term, the Mall Chequers Shopping Centre and adjoining land, where the current bus interchange facility is located is earmarked for potential redevelopment towards the latter end of the Local Plan period. As part of the regeneration of the site and area, the Borough Council will work with the Centre's owners (and other land owners that may be affected) together with the public transport operators to secure the provision of a new bus interchange facility that is more accessible, user-friendly and fit-for purpose in the light of the desire for improved bus service provision and patronage across the Borough.

**Action PT13:** Better information and marketing of public transport options and improved signage

9.48 Work with KCC, neighbouring authorities and bus operators to implement an integrated, cohesive approach to the provision of information and mobile ticketing, including:

- Real time bus information
- Journey planning apps
- Maintaining informative, up to date websites
- Improved signage between train stations in Maidstone

9.49 Improving the availability and ease of use of on-line/mobile app ticket purchasing.

## Parking

### The Actions:

**Action P1:** Introduce Parking Standards to ensure a means by which development can ensure an appropriate amount of parking is provided and reduce the overall demand for car parking

9.50 The new Parking Standards will ensure that the needs of car users are adequately met but also that the agreed level of provision does not undermine more sustainable modes of travel where these are readily available. However, where there is no alternative to use of the private car, the Standards will enable a fair and appropriate amount of parking to be provided. The Standards will also provide for developments' cycle parking requirements, as well as ensuring that they incorporate electric vehicle charging infrastructure where appropriate.

**Action P2:** Optimise long stay parking charges to extract maximum value from parking charges, whilst controlling demand

9.51 This action will look to review the pricing structure for car-parks in Maidstone town centre through the introduction of dynamic car-park charging and the use of improved information to assist drivers.

9.52 A key problem with the current situation is that the town centre has a number of relatively small car parks in the inner town centre core and relatively little information (other than the King Street car-park which is just identified as open or closed) as to whether they are at capacity. This is in contrast to the Fremlin Walk car-park, the two Mall car-parks and Lockmeadow car-park which are included on electronic boards on key radial routes into the town centre and their remaining capacity displayed.

9.53 This leads to traffic circulating the town centre in the search for parking spaces adding to overall congestion and general issues with air quality.

9.54 The town centre parking and pricing strategy moving forward will therefore, seek to encourage long-stay parking into the larger car-parks on the edge of the Town Centre (e.g. Sittingbourne Road/Vinters Road and Mote Road) and to improve the provision and reliability of roadside driver information (including routing) showing available capacity in all publicly accessible off-street town centre car-parks. This will require additional technology in each of the car-parks to more closely monitor patronage to enable roadside information to be updated.

9.55 As part of this overall strategy the impact of the impending closure of the Sittingbourne Road Park & Ride site in early 2016 will need to be monitored closely.

9.56 The pricing strategy should be flexible enough to promote and support a corresponding increase in bus service frequencies to respond and to assist

in encouraging modal shift towards public transport, cycling and walking to further reduce reliance on the use of the private car by 2031.

**Action P3:** Maintain the current level of parking space provision in the town centre.

9.57 There is currently a very high level of parking provision within Maidstone. It is proposed that there should be no net increase in the quantum of parking available in the town over the period of this strategy as a means of discouraging car use from current and new developments.

**Action P4:** Improve parking enforcement on highways to reduce the impact of obstruction on bus reliability

9.58 Recent discussions with Arriva the largest operator in the Borough have highlighted the significant impact of highway obstruction on bus operations and reliability. This applies to the other operating companies as well. Enhanced enforcement of parking restrictions on bus routes by MBC will assist all bus operators to maintain timetable schedules.

### **Ultra-Low/Zero Emissions Vehicles**

**Action UL/Zero Emissions1:** Encourage the provision of suitable infrastructure for Ultra-low and Zero emissions vehicles throughout the Borough

9.59 In relation to the encouragement of the use of vehicles with zero or ultra-low emissions a two pronged process will be required. Firstly adopted parking standards for new development will require appropriate charging points to be made available or for pre-wiring to be put in place to enable easier and less costly retro-fitting. Secondly, incentives such as discounted or free parking can be introduced to encourage the use of ultra-low or zero emissions vehicles for journeys into the town centre.

9.60 On 17 December 2015, the Government announced an extension to the existing plug-in car-grant beyond the existing notified February 2016 date, to at least the end of March 2018. The maximum subsidy has been lowered from £5000 to £4500 and two grant rates will be introduced from 1 March 2016 to focus financial support on the 'greenest' vehicles:

- Category 1 vehicles with a zero emission range of over 70 miles will benefit from the maximum £4500 grant.
- Category 2 and 3 vehicles with a shorter zero emission range (petrol/diesel hybrid vehicles) will benefit from a grant of £2500.
- A price-cap of £60,000 has also been introduced for category 2 and 3 vehicles; vehicles priced above this level will not receive a grant whereas Category 1 vehicles above this level will remain eligible for the full £4500 grant.

9.61 Importantly, the Government has also announced it will continue to provide a £500 grant to Ultra Low Emission Vehicle (ULEV) users towards having a

charging point installed at their home (estimated to be approximately 50% of the cost).

9.62 During the life of the ITS and Local Plan the technology surrounding vehicles will change, for example, the current limited use of Hydrogen fuel-cell powered vehicles is likely to increase as more models come to the market.

9.63 Technology already exists to enable the manufacture of hydrogen through electrolysis (and power can be provided by renewable sources) to service fuel-cell cars for a reduced cost compared to a conventional hydrogen filling station to which fuel is delivered. An example of this approach constructed by Honda opened in 2014 and is also used to fuel some of the Local Authority's vehicles.

9.64 The Council should seek to accommodate in an appropriate location the provision of a hydrogen filling station within the Borough.

## Highways

### The Actions:

**Action H1:** Targeted implementation of highway improvements at key strategic locations to relieve congestion

9.65 Through the identification and enhancement of key strategic junctions, congestion on the road network can be reduced. Regardless of development a number of the town's junctions are subject to high levels of congestion in the morning and evening peaks.

9.66 The key junctions and proposed interventions are set out in the table below. The funding sources are also referenced in the Infrastructure Delivery Plan and Maidstone Borough Council and Kent County Council will work together to secure the early delivery of these improvements within the next three years, primarily through S106 agreements and potential Growth Fund applications.

<b>Junction</b>	<b>Aim</b>	<b>Intervention</b>	<b>IDP ref:</b>
<b>Maidstone Town Centre</b>			
Town Centre Bridges Gyratory A229/A20/A26	Capacity improvements.	New northbound link to bypass the gyratory.	LEP Local Growth Fund and MBC Contribution (New Homes Bonus)
<b>Maidstone Urban Area – M20 Junction 7 Strategic Area</b>			
A249 Bearsted Road roundabout and Bearsted Road/New Cut	Capacity improvements.	Signalisation of New Cut roundabout. Provision of a new	Provided under 13/1163.

Junction		signal pedestrian crossing and combined foot/cycle way between New Cut & Bearsted roundabouts.	
Dual carriageway between A249 and New Cut Junctions	Capacity improvements.	Additional carriageway/revised junction arrangements.	Provided in connection with Newnham Court.
M20/Junction7	Capacity improvements.	Signalisation of roundabout, widening of coast bound off-slip and creation of new signal controlled pedestrian route through junction.	Provided under 13/1163.
M2 Junction 5 Improvement	Capacity improvements.		13/1163 - £44.7k
<b>Maidstone Urban Area – South East Maidstone Strategic Area</b>			
A229/A274 Wheatsheaf junction	Capacity improvements.	Works to improve capacity at the junction	14/503167 - Proportion of £108k also split between Loose Rd/Boughton Lane & approaches to TC.
A229/Armstrong Road	Capacity improvements.	Works on the approaches to the Town Centre between the Wheatsheaf junction and the bridge gyratory traffic signal junctions.	14/503167 - Proportion of £108k also split between Loose Rd/Boughton Lane & approaches to TC.
A274 Willington Street junction	Junction capacity improvements.		13/1149 - £180k 13/1523 - £30k
A274 Wallis Avenue junction	Junction capacity improvements.		13/0951 - £55.8k
A274 Corridor	Bus journey time reliability.	Bus priority measures: Incorporating measures from the Willington Street junction to the Wheatsheaf junction, together with bus infrastructure improvements	13/1149 - £1.8m 13/1523 - £300k 13/0951 - £558k
<b>Maidstone Urban Area – North West Strategic Area</b>			
A20/Coldharbour Lane junction	Capacity improvements.	Junction capacity and signals/left	13/1702 - £338K split



		hand turn lane off A20 to M20 junction 5 link road.	between A20/Coldharbour & A26/Fountain Lane. 13/1749 - £676K. 14/501209 - £189k 14/500412 - £29.4k split between A26/Fountain Lane & Coldharbour
A20/M20 Junction 5	Junction capacity and signals		14/501209 £12k (Towards J5 improvements on the M20)
A20/M20 Junction 5	Capacity improvements.	Interim improvement to M20 J5 roundabout including white lining scheme	13/1702 - £21.5k 13/1749 - £43K
A20/B2246 Hermitage Lane junction	Junction capacity improvements		
A26/Fountain Lane /Hermitage Lane junctions	Capacity improvements.	Changes to accommodate right turn vehicles within the junction introduction of MOVA and pedestrian sensing.	13/1702 - £338K split between A20/Coldharbour & A26/Fountain Lane. 13/1702 - £96.2k 13/1749 - £200k 14/500412 - £29.4k split between A26/Fountain Lane & Coldharbour
<b>Rural Areas</b>			
A229 Linton Crossroads	Capacity improvements.	Works on junction approaches.	14/0566 - £108k
A20 Harrietsham	Works to improve safety and pedestrian/cycle access		14/0828 - £399k
A274 North Street/Kings Road Headcorn	Capacity improvements.	Signalisation	
Junction of Oak Lane and Wheeler Street Headcorn	Safety improvements.		S278 under 13/1943
Highway schemes	Capacity/safety	TBC	

associated with Lenham area	improvements.		
A229 Station Road/High St/Headcorn Rd and Marden Rd Staplehurst	Junction capacity improvements.		
Hampstead Lane/Maidstone Rd Junction	Capacity improvements.	Provision of right turn lane on Hampstead Lane.	

**Action H2:** Maintain and develop Maidstone's Intelligent Transport Systems and the proactive sharing of real time traffic and transport information with road users to manage congestion

9.67 KCC is committed to building on the success of the Maidstone Urban Traffic Management and Control (UTMC) system to continue enabling the County and Borough Councils to maximise the capacity of the existing road network and to respond proactively to incidents. In doing so, both Councils will seek to make use of new and emerging technology to share real-time traffic and travel information with road users and facilitate informed journey choices. KCC will also continue to work closely with Highways England to ensure that the management of the strategic and local road networks is fully integrated.

**Action H3:** Facilitate and promote the expansion of the County Hall Car Club service to encourage an increase in demand on an annual basis

9.68 MBC currently includes two pool cars and two pool bikes – which can be reserved for use by any member of staff. Usage of these vehicles is low relative to similar schemes elsewhere in the UK. However, utilisation of Zipcar amongst KCC staff is encouraging, and recent acquisition of electric vehicles has proven popular. KCC are looking to procure additional contract services to enhance this scheme in due course.

**Action H4:** Actively promote and encourage car sharing initiatives

9.69 Maidstone has one of the highest rates of single occupancy car use in the county with 52% of vehicle trips having only single occupants. In order to lower this rate and to incentivise higher car occupancy KCC manages 'kentjourneyshare'; 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.

9.70 Additionally, KCC manages the 'New Ways 2 Work' scheme (of which MBC is a founding member) which is a collaborative partnership of Kent businesses, local authorities, transport providers and other organisations for encouraging sustainable travel choices. This scheme essentially promotes

sensible and efficient use of vehicles and road space to enable traffic to keep moving. This will be maintained indefinitely and can be accessed at <http://newways2work.org.uk>

**Action H5:** Ensure road safety education continues to be provided for across the borough

9.71 Improving road user behaviour continues to be the main priority within KCC's approach to further reducing road accident 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, and anti-social values.

9.72 For the period 2010-2020, KCC has therefore committed to preparing 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.

9.73 Kent County Council will lead collective partnership working through the Kent and Medway Casualty Reduction Group (CaRe Group) to improve road user behaviour through public education activities including publicity campaigns, public engagement projects and public relations strategies.

**Action H6:** Installation of additional electric charging points and the promotion of electric car use

9.74 There are 2 units currently installed outside Sessions House (one is serving the car club, one is available for public use), 2 units in Invicta House car park available to the public at weekends, one unit at Maidstone Leisure Centre and two units have been installed in the MBC car park. In addition, there is also one charging point installed at the KCC Aylesford Highway Depot, although this is mainly for use by KCC employees.

9.75 There are also several additional points on or close to the motorway network (including a model specific fast-charge facility at Eclipse Park close to M20 Junction 7) and at some local hotels, but KCC/MBC have not been involved in these installations. MBC will work closely with KCC to expand the number of electric charging points across the Borough through the life of this Strategy.

**Action H7:** Leeds Langley Relief Road

9.76 With regard to a potential Leeds-Langley Relief Road scheme, Kent County Council will establish the justification for and delivery of such a project and it is considered that although further assessment is required, delivery of such a project may be feasible post 2031. There is no approved scheme,

highway design or funding at this stage and it is therefore not possible to include the scheme in the Local Plan. The Borough Council will work with the County Council in identifying the potential as well as possible timescales for such a scheme at the first review of the Maidstone Borough Local Plan and determine then whether the project should move forward as a specific Local Plan policy.

## 10. Monitoring and Review

10.1 The purpose of any strategy is to have a means of achieving desired results. However, given the complexities and scale of the issues this strategy deals with it is often difficult to identify if the desired results are being achieved.

10.2 The table below identifies targets to monitor the progress of the DITS in achieving its objective. In setting these targets, every effort has been made to ensure they are both realistic but also ambitious, ensuring the best possible level of service is provided to those living within the borough with the indicative funding levels.

Target	Description
1	To increase walking mode share in Maidstone from 8% of all work trips to more than 10% of all work trips by 2021 and 12% by 2031.
2	To increase cycling mode share in Maidstone from 0.8% to more than 2% of all work trips by 2021 and 3% by 2031.
3	To increase public transport mode share in Maidstone from 7.3% to more than 10% of all work trips by 2021 and 12% by 2031.
4	To decrease car driver mode share in Maidstone from 44.3% of all work trips to below 40% by 2021 and below 37% by 2031.
5	To undertake a full and independent review of Maidstone's Park and Ride Provision, issue and act upon recommendations by 2017.
6	To double the number of electric charging points in Maidstone by 2021 and to double again by 2031.

10.3 Data to monitor the above will be sourced from traffic management updates; school and workplace travel plans; future census data; and bus patronage data from bus operators. Future footfall and traffic surveys conducted by KCC will also provide important interim data to monitor how progress is being made towards the general aims and objectives of the DITS.

10.4 The Borough and County Councils will also need to assess whether there are any implications for the Borough's transport network arising from

projects with wider impacts such as the new Integrated Kent Franchise (IKF) in 2018 or the potential Lower Thames Crossing project. This is still at a relatively early stage. Highways England is, however, currently evaluating two potential route corridors (the area adjacent to the existing Dartford crossings and to the east of Gravesend). Formal public consultation on the potential route options will take place in early 2016. If accepted as a scheme, subject to funding and the necessary consents (as a significant piece of National Infrastructure), works may commence in 2020/2021 with a potential opening in 2025.

- 10.5 At this stage, major road network projects such as village relief and other road works have not been justified taking account of the implementation of sustainable transport policies but may be considered at the first review of the ITS.
- 10.6 The DITS is designed to be a living strategy, one that is flexible and can adapt to changing circumstances. To this end, it will be subject to monitoring and review which will align with the work to monitor and review the Local Plan once that is adopted. The first major review is therefore scheduled to commence in 2022, although the monitoring work will clearly commence prior to then to inform the review process.

## **APPENDICES**

### The Modelling Context

- A.1 The implications of the ITS on the Borough's highway network have been tested by using the Maidstone VISUM strategic highway network model to assess alternative transport infrastructure scenarios and their impacts in terms of travel time and distance.
- A.2 However, the VISUM model is a strategic highways model in which increases in walking and cycling can only be reflected in an estimation of the number of car trips which may be removed from the road network due to changes in modal share across these areas. Although VISUM can model bus service changes, in assessing the attractiveness of these services it does not take into account bus capacity issues, nor can it model bus priority measures. Furthermore, as a strategic model it is unsuited to assessing individual junction capacity, or to assess the impacts of proposed infrastructure improvements at those junctions.

#### Modelling scenarios

- A.3 The VISUM model was first developed by JMP Consultants Ltd for MBC in 2007/8 to help assess the impact of the Kent International Gateway proposal and the previous Core Strategy preferred option for new development. It was updated in 2011 for a previous version of the ITS and a report prepared in April 2012 which assessed the current and future demand for travel in the Maidstone Core Strategy.
- A.4 Just over 10,000 new houses were input into the model (significantly fewer than the objectively assessed need) and four options were tested; Option 1 being the reference case, Options 2 and 3 including various road and public transport assumptions, and Option 4 modelling the provision of the South East Maidstone Strategic Link (SEMSL). The results are presented in the JMP Report dated 12 April 2012 (Maidstone Integrated Parking Strategy Research) and it was concluded that, although SEMSL had strong potential for handling traffic from the south and east of Maidstone, there was overcapacity on key routes and it was unlikely to reduce traffic congestion on the scale that was initially anticipated and offered lower value for money than Options 2 and 3.
- A.5 The present version of the VISUM model was updated in 2014 to take account of revised proposals for the Local Plan and to update baseline conditions.

Certain ITS actions have been tested in various new Do Something (DS) scenarios which identify the changes in impact on the highway network which may be achieved if the actions are implemented during the plan-

period. A final DS scenario has been run with the objectively assessed need for housing numbers and an agreed programme of highway and transport improvements with two variants (DS4a) and (DS4b) to reflect the potential inclusion of a Leeds-Langley Relief Road.

A.5 Both scenarios incorporate the provision of the housing, commercial and retail activity proposed in the Local Plan for the plan-period to 2031 as follows:

- 18,560 residential units
- 151,000 m<sup>2</sup> of employment space
- 12,100 m<sup>2</sup> of retail space

#### 2031 Do Minimum (DM)

A.6 A base case scenario known as Do Minimum (DM) provides the benchmark for understanding the predicted overall impact of the ITS on travel demand and network conditions in Maidstone in the plan period (to 2031) from a base case established in 2014 without any significant highways interventions, except the proposed bridge gyratory scheme in Maidstone town centre or other transport interventions. This scenario has not been run with the objectively assessed need for housing included and this will be required for a true reflection of the DM impacts.

#### 2031 Do Something (DS4)

A.7 A series of Do Something (DS) scenarios (DS1-DS4) model a range of highway improvements agreed with KCC and certain sustainable transport initiatives in the ITS, although it was not possible to model all of these initiatives in VISUM. The agreed highway junction mitigations incorporated in the model runs, in addition to the Bridges Gyratory scheme are:

- A20/ Coldharbour Lane Junction
- A249/Bearsted Road roundabout
- Bearsted Road/New Cut junction
- Dual carriageway between A249 and New Cut junctions
- A20 Ashford Road/Willington Street
- A229/A274 Wheatsheaf Junction
- A274/Wallis Avenue Junction
- A26 Fountain Lane Junction



A.8 For DS4a and DS4b different modelling assumptions from DS2 and DS3 were included for the sustainable transport assumptions as follows:

- typical 10 minute bus frequency on radial corridors;
- discounting of walk/cycle trips to be based on a distance threshold of 5km within the town centre; and
- 50% increase in long-stay parking charges.

### **Strategic modelling results**

A.9 Previous scenarios tested by VISUM were a highways based option (DS1), a sustainable transport option (DS2) and a hybrid scenario (DS3), and KCC provided a summary of the VISUM model results for Ds1 to DS4a/b based on two network performance indicators for the AM peak period:

- Travel distance (vehicle km)
- Travel time (vehicle hours)

A.10 It should be noted that the previous DS scenarios (1 – 3) did not model the emerging Local Plan objectively assessed need for housing and so the above must be stressed that these indicators cannot provide a full understanding of the modelling results for the DS options. Other indicators, including the number of person trips and vehicle trips as well as traffic flows and travel times on individual links, must be considered also. It is understood that further details on the model outputs will be forthcoming, but the following paragraphs summarise the information made available to date. The final runs of the VISUM model (DS4) simply indicate the changes in travel distance and time as the result of the agreed highways improvements included in previous runs and the sustainable transport assumptions noted in A.7 above from the DM scenario.

A.11 The results for the DM scenario indicate an increase in network travel time during the AM peak of 38% in 2031 relative to the 2014 baseline, from 8,300 to 11,400 hours. However, the DM scenario was based on the original housing allocation of 17,381 units. With an allocation of 18,560 housing units, a slightly larger increase than 38% could be expected.

A.12 For scenario DS4a (with the Leeds-Langley Relief Road), the network travel time during the AM peak is increased to 9,300 hours in 2031. This represents an increase of 6% relative to the 2014 baseline, but a reduction of 18% relative to the 2031 DM scenario.

- A.13 For scenario DS4b (without the Leeds-Langley Relief Road), the network travel time during the AM peak is increased to 9,800 hours in 2031, a reduction of 14% relative to the 2031 DM scenario. These journey time reductions are relatively modest in terms of the impact over the whole road network, and it should further be noted that the impacts of junctions improvements outside the Maidstone urban area cordon for the VISUM model are not included in the scenarios, thereby further reducing the relevance of the VISUM results.

### **Localised junction modelling**

- A.14 As noted above, VISUM is a strategic highway model and as such is unsuited to the assessment of individual junction capacity. Accordingly, more useful modelling relating to additional junction capacity assessments have been undertaken using the Linsig, ARCADY and PICADY modelling software packages for specific locations around the Borough which have been identified as being potentially sensitive to future traffic flow changes.

#### A274 Sutton Road

- A.15 The A274 Sutton Road and A229 Loose Road already experience traffic congestion, particularly at peak times, largely due to the capacity of the signalised junctions. Linsig models have been built for the four signalised junctions on the A274/A229 corridor, namely:
- A229/Armstrong Road/Park Way;
  - A229/A274/Cranbourne Avenue;
  - A274/St Saviour's Road; and
  - A274/Wallis Avenue/Willington Street.
- A.16 With no changes to the existing highway infrastructure, background growth in traffic flows combined with additional traffic associated with new developments on the corridor will make congestion worse, both in duration and intensity (i.e. longer periods of queuing and much longer queues).
- A.17 The package of priority highway capacity improvements referred to in paragraph A.7 above has been developed to mitigate the impacts of increased traffic flows arising from planned development in the emerging Local Plan. To complement these capacity improvements for general traffic, bus priority proposals have been developed (described in paragraph 12.25 below) which will protect buses from residual queues and delays, contributing to quick and reliable bus services toward Maidstone town centre, with largely continuous bus priority between Wallis Avenue and Armstrong Road.

A.18 The impacts of the highway capacity improvements, together with the bus priority proposals, have been tested using the Linsig models. The model outputs confirm that the bus priority proposals will not affect capacity for general traffic, nor increase queues or delays for other road users.

RSC junction modelling

**[to follow...]**