Surrey Transport Plan: Surrey Health Local Transport Strategy

January 2015

SURREY
COUNTY COUNCIL

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About this document

This document version has had minor formatting alterations made to the originally published document to allow it to be read by screen-reader software. Version 1.1, September 2020.

Maps

Executive summary

The Surrey Transport Plan is the third Local Transport Plan (LTP3) for the county. It is a statutory plan (required by the Local Transport Act 2008 and Transport Act 2000), which replaced the second LTP on 1 April 2011. Like the previous Plans, the Surrey Transport Plan is partly an aspirational document. The Surrey Heath Local Transport Strategy and Forward Programme forms part of the LTP3. Local Transport Strategies and Forward Programmes will be produced for all districts and boroughs within Surrey and will be 'live' documents, updated every 2 to 3 years whilst the Forward Programme (annex) will be updated annually.

The purpose of the strategy is to support the growth set out within the borough Local Plan and provide a programme of transport infrastructure required to deliver this growth. The strategy also provides an evidence base for future funding bids.

The objectives of this strategy are to reduce the reliance on the private car in Surrey Heath by providing more attractive sustainable travel choices, to manage local bottlenecks and traffic congestion within the borough, and to encourage economic development and regeneration. These objectives are in accordance with Surrey's Environment and Infrastructure Priorities.

In order to achieve these objectives the strategy focuses on the current issues and problems on the transport network in Surrey Heath. The strategy considers potential solutions and mitigation and also seeks to take account of planned future growth in the borough and related work streams being carried out by the County and Borough Councils and by external stakeholders. A Forward Programme has been produced (see annex) which details the schemes identified to achieve the objectives set out in this strategy.

As such, the Forward Programme contains an aspirational list of transport infrastructure schemes which would achieve the objectives of the Surrey Heath Local Transport Strategy, subject to funding and feasibility. The programme seeks to address the problems identified in the main document of the strategy and mitigate the impact of future growth on the transport network.

The strategy has been produced by the County Council in partnership with Surrey Heath Borough Council. An online consultation on the draft strategy took place for 6 weeks between Sept-Oct 2014. The final version will take on board comments received during consultation and will be considered by the Surrey Heath Local Committee and by Surrey County Council's Cabinet to be adopted as part of Surrey's Local Transport Plan (LPT3).

Introduction

The Surrey Heath Local Transport Strategy and Forward Programme is part of the Surrey Transport Plan (LTP3) and supports the Surrey Heath Borough Local Plan. The LTP3 is the county's third Local Transport Plan and is a statutory document. The Surrey Transport Plan sets out the strategy to help people to meet their transport and travel needs effectively, reliably, safely and sustainably within Surrey, in order to promote economic vibrancy, protect and enhance the environment, improve the quality of life, and reduce carbon emissions.

Local Transport Strategies have been developed to take account of and provide a plan for addressing transport problems and opportunities in a geographical area. A Local Transport Strategy (LTS) has been produced for each district and borough in the county.

This LTS considers the Borough Local Plan and is a key document in informing the response to Central Government and the Enterprise M3 Local Enterprise Partnership (LEP) in terms of potential funding bids. The emerging Local Transport Strategies were used to respond to and inform the LEP Strategic Economic Plan which considers the ability of highway and transport interventions to achieve growth in terms of jobs, employment floor space and housing created. The LTS also considers interventions required to address existing problems on the transport network.

The LTS is a 'live document' that it is intended will be updated every 2 to 3 years. The LTS consists of two main parts:

- The main document, which provides a commentary on the characteristics, problems and opportunities in the area.
- An annex, consisting of a Forward Programme, detailing highway and transport interventions to address the problems identified.

The LTS sets out the short, medium and long-term approach by which Surrey County Council (SCC) and Surrey Heath Borough Council (SHBC) seek to encourage sustainable travel patterns and manage congestion in the borough.

The schemes outlined in the Forward Programme are intended to provide a cohesive package of measures to address all modes of transport and to work towards providing an effective choice of transport for all users.

The Forward Programme identifies a number of transport infrastructure schemes which could be implemented over the next 15 year period, subject to feasibility and funding. The status of each scheme has been defined as:

- Local schemes, at a cost less than £250,000
- Intermediate schemes, at a cost between £250,000 and less than £2m, or
- Major schemes, at a cost of £2m and above.

The Forward Programme only contains schemes of a value over £100,000 or schemes that will have significant strategic importance to the transport network.

The Forward Programme will help the county council and borough council to agree strategic infrastructure delivery priorities and guide future investment from a range of funding sources including:

- Major schemes funding via the EM3 Local Transport Body

- Potential funding via the Enterprise M3 Local Enterprise Partnership (LEP)
- Local Committee funding including the Integrated Transport Block
- Developer contributions including the Community Infrastructure Levy and Section 106 Agreements

Structure of Document

The Surrey Heath Borough Local Transport Strategy & Forward Programme is structured as follows:

- Chapter 2 ‘Objectives and Delivery Priorities’ outlines the agreed objectives for the strategy, based on any issues on the transport network.
- Chapter 3 ‘Surrey Heath Transport Network’ describes the key highways, public transport, walking and cycling infrastructure in the borough and describes overall issues experienced on the transport network.
- Chapter 4 ‘Surrey Heath Transport Trends’ outlines the key trends on the Surrey Heath transport network.
- Chapter 5 ‘Future Growth and its Impact’ outlines planned growth in the Borough.
- Chapter 6 ‘Related Work Streams and Projects’ places this Local Transport Strategy in a wider context.
- Chapter 7 ‘Places in Surrey Heath’ gives descriptions of the local transport network in the boroughs main towns and villages.
- Chapter 8 ‘Forward Programme, Funding and Delivery’ outlines the main funding sources which it is anticipated may be used to deliver the schemes included in the annex, in line with the objectives.

Objectives and Delivery Priorities

This chapter sets out the objectives of the Surrey Heath Local Transport Strategy and the visions and objectives of the documents which influence these objectives. The objectives of this strategy have been developed using the Local Transport Plan (LTP3), the SCC Environment and Infrastructure Directorate Priorities, and the Surrey Heath Borough Council Core Strategy. These documents, and their visions and objectives, have been summarised below.

Local Transport Plan (LTP3)

Vision

To help people to meet their transport and travel needs effectively, reliably, safely and sustainably within Surrey; in order to promote economic vibrancy, protect and enhance the environment and improve the quality of life.

Objectives

- Effective transport: To facilitate end-to-end journeys for residents, business and visitors by maintaining the road network, delivering public transport services and, where appropriate, providing enhancements.
- Reliable transport: To improve the journey time reliability of travel in Surrey.
- Safe transport: To improve road safety and the security of the travelling public in Surrey.
- Sustainable transport: To provide an integrated transport system that protects the environment, keeps people healthy and provides for lower carbon transport choices.

Surrey County Council Environment & Infrastructure Directorate priorities 2014/15

Priority 1: Maintain and improve highway and transport infrastructure to support economic growth

- Repair road defects within appropriate timescales.
- Deliver the county council priority to renew 100 km of the county's roads.
- Work with the Local Enterprise Partnerships (LEPs) to secure funding to enhance highways and transport infrastructure.
- Invest up to £10m to tackle damage to roads from severe weather and flooding.

Priority 2: Optimise the use of highway and transport infrastructure to support health, wellbeing and economic development

- Deliver the Travel SMART programme.
- Deliver the Surrey cycling strategy with Local Committees.
- Complete the passenger transport review.
- Develop business cases for major transport schemes to secure required funding.

Priority 3: Maintain and improve the county's attractive environment

- Ensure at least 90% of municipal waste is diverted from landfill through recycling, reuse and recovery.

- Work with partners to secure maximum value from waste.
- Ensure the Eco Park will be constructed by 2016.
- Work in partnership to deliver the Countryside Management Transformation Programme.
- Work in partnership to reduce energy costs and carbon impact for the council and schools and to deliver affordable warmth to vulnerable residents.

Priority 4: Enable and facilitate the sustainable development of key 'places' in Surrey

- Work with District and Boroughs to support investment in key places in Surrey.
- Support the county council priority to deliver the necessary additional school places through a robust and timely planning process.

Surrey Heath Core Strategy Spatial Vision (2012)

Vision

By 2028 residents will continue to enjoy a prosperous and high quality of life based around sustainable growth and a strong economy supporting a healthy, safe and diverse society... ...Rates of economic activity will remain high, the local community will be more active with improved access to leisure and recreational facilities and a network of green infrastructure... ...The town centre's growing role as a leisure and cultural destination will be supported. Accessibility will be enhanced through improvements to public transport.

Objectives

Improve travel choice and transport services to encourage sustainable travel patterns and, in particular, reduce reliance on the private car.

Ensure that new development contributes to environmental, infrastructure and service improvements and minimises impacts upon both the natural and built environment.

Surrey Heath Local Transport Strategy objectives

Based on these visions and objectives the Surrey Heath Local Transport Strategy and Forward Programme have the following objectives and strategic delivery priorities. These objectives have been considered in relation to specific areas across the borough.

Objective 1: Encourage economic development and regeneration by:

- Improving accessibility at Yorktown and Watchmoor business parks
- Supporting the economic regeneration of the A30 London Road frontage through transport infrastructure.
- Improving accessibility between residential areas and employment and retail centres
- Reducing community severance particularly between residential areas and employment and retail centres.
- Improving accessibility to Camberley town centre
- Improving surface access to Heathrow and Gatwick Airports
- Improving access to London (London Waterloo)

Objective 2: Maintain and encourage sustainable economic growth by:

- Providing a balanced and sustainable transport system through improvements to walking and cycling provisions
- Improving accessibility to public transport, including rail
- Reducing road casualties and the perception of road danger
- Developing Camberley Station as a public transport interchange hub by improving connections to other stations and providing station interchange facilities.

Objective 3: Manage congestion through the Blackwater Valley area and at other identified congestion hotspots through:

- Addressing congestion on the strategic road network, including the Toshiba Roundabout, Meadows Gyratory and A30 and A331 corridors.
- Encouraging more sustainable travel behaviour through improving the Environment for pedestrians and cyclists provision and through provision of network where people want to go.
- Improve traffic flow on the approach to the M3, junctions 3 and 4.

Surrey Heath transport network

The following Chapter aims to give a description of the current transport network within the borough of Surrey Heath. It describes the borough's context within the South East of England and Surrey; it then goes into further detail, focusing in on the modes of transport and the infrastructure available across Surrey Heath.

Surrey and its transport network

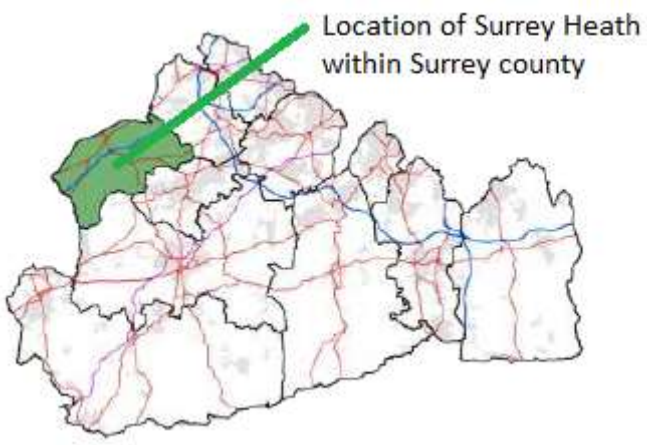
The county of Surrey is located within the South East region of Great Britain and contains 11 boroughs/districts. Surrey has a population of 1.144 million and, with an area of some 1,670 kilometers2, is one of the most densely populated counties in England. Much of the county is rural and is protected by the green belt. Surrey, however, also contains large urban areas, mostly concentrated in the north of the county, where it adjoins the London conurbation. Due to Surrey's location next to London, and the proximity of both Heathrow and Gatwick Airports, there is considerable demand for movement within, to, from, and through the county.

Surrey's road network has developed over many years to suit the prevailing movement demands. The strategic network, comprising motorways and trunk roads, has evolved principally to serve London, with several nationally important routes passing through the county, including the M3, M23, M25 and A3.

The local bus network is an integral part of the transport system in Surrey providing valuable transport provision to communities and supporting the economy. Some of the more urbanised areas of Surrey, and particularly those areas bordering London, are relatively well served by bus services.

There are currently 84 railway stations in Surrey and the county is served by an extensive rail network. Movements to and from central London are well catered for via the main London to Brighton line, London to Portsmouth / Southampton services and various secondary and branch line services. There is limited provision for orbital movement across the rest of Surrey, though the North Downs Line connecting Gatwick and Reading via Redhill and Guildford, the line from Redhill to Tonbridge, the Ascot-Aldershot line and the Virginia Water to Weybridge route offer opportunities to move from one part of Surrey to another without having to interchange closer towards London.

The borough of Surrey Heath is located in north-west Surrey approximately 30 miles from London.



The borough has mixed rural and urban land uses with a population of 86,200[1] and covers some 9,500 hectares.

The eastern part of the borough includes a number of heath land commons lying immediately east of Camberley, Frimley and Mytchett. These commons are part of the Thames Basin Heaths and restrict the expansion of the urban areas. They represent one of the most significant areas of heath land remaining in the south-east and are designated sites of European significance

The following section considers the principal route network, the local bus and rail networks and walking and cycling infrastructure in Surrey Heath.

It also looks more widely at access to London Heathrow and Gatwick airports from within the borough and access to amenities.

Motorways and Principal Route Network (PRN)

The main highways in the borough are:

- M3 – runs north/east-south/west dividing the borough into two. Two junctions of the M3 are located in Surrey Heath, junction 4 (Frimley) on the western border and junction 3 (Lightwater) located in the centre of the borough.
- A30 London Road – Egham to Basingstoke via Camberley and Bagshot
- A322 Bracknell Road – provides a link from the M3 to the M4 and runs from Bracknell to Woking via Lightwater, M3 (junction 3), West End and Bisley
- A331 Blackwater Valley Route - The Blackwater Valley Relief Road, runs from Camberley to Aldershot and Farnborough via Frimley, M3 (junction 4) and Mytchett
- A319 Bagshot Road - West End to Ottershaw via Chobham
- A325 Portsmouth Road - Farnham to Camberley via Frimley
- A3046 Station Road - Chobham to Woking
- B3411 Frimley Road Camberley – Ash

Additional key roads in the borough include:

- B3015 The Maultway – Old Dean to Deepcut
- B311 Red Road – Frimley to West End

M3 Smart Motorway

The Highways Agency is working to improve the M3 between junctions 2 to 4a to mitigate the high levels of congestion on the road as a result of the 130,000 vehicle use per day. The works aim to convert the hard shoulder into a running lane with smart technology, providing a 4rd lane to increase capacity and, allowing operators to manage the motorway lanes and traffic flow.

Motorway capacity will increase by a 3rd due to the additional lane, allowing for a 30% increase in the daily vehicle capacity. Whilst the total uptake of the increased capacity is not expected immediately, there is likely to be some immediate increase in demand that will grow.

The rise in the total number of vehicles per day on the M3 Motorway is likely to put additional pressure on some of the local road network around the M3 junctions 3 and 4. The Highways Agency

[1] Source: ONS Census 2011

has developed an extensive traffic model to study the impacts of the M3 Smart Motorway "Work done to date indicates that the M3 scheme offers some relief to the A30, with little change on the A331. However, the traffic model shows a slight increase to traffic flows on the A322 northbound approach to junction 3, particularly in the AM peak."[2]

Other concerns and mitigating measures include additional noise pollution, which will be addressed through noise attenuation barriers and low noise road surfacing.

Principal Route Network

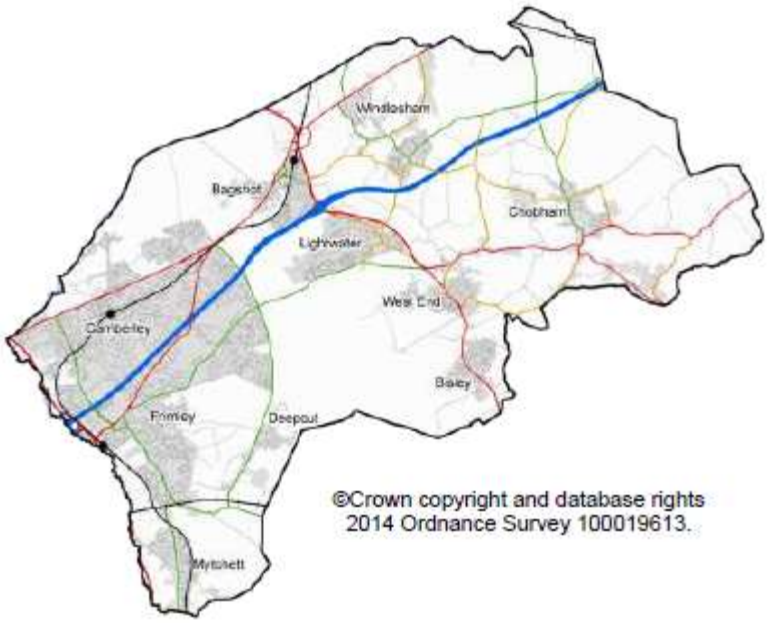
Good and reliable access between towns and villages is crucial to maintain a sustainable and prosperous community. Key routes including the A30 London Road, A322 Guildford Road, A319 Bagshot Road, A331 BWV corridor, A325 Portsmouth Road, and the B311 Red Road all play an important part of maintaining good transport links between the settlements within and outside the borough. Road users reply on these roads for access to amenities such as employment, railway stations, leisure facilities, shopping and education. Peak period congestion on these roads can debilitate the growth and prosperity of the community by increasing the journey times between each place.

Current Problems and Issues (highway)

- The M3 suffers from heavy peak time congestion which has lead to increasing congestion on the surrounding local roads.
- Congestion around the M3 junctions 3 and 4 impacts the local roads.
- Increased traffic around the M3 junctions on local roads, especially on the A322 and the A331, as a result of the M3 Smart Motorway increasing overall capacity by 30%.
- Congestion outside the borough has a knock on effect to the road network within Surrey Heath, increasing the level of congestion experienced, especially during peak periods.
- Poor HGV route management, resulting in HGVs travelling undesired roads.
- 'Rat running' through local roads to avoid congestion on the principle route network, resulting in high volumes of traffic and increased congestion in village centres and outside schools.

[2] Source: Highways Agency - M3 Start Motorway Consultation Response

- Congestion on key roads in the borough is a significant issue. The Surrey Congestion Programme identifies congestion bottlenecks on the local highway network within Surrey Heath Borough. These include:
    - A30 Corridor
    - A331 Corridor
    - A325 Corridor
    - A319-A3046 Chobham
    - A322 Corridor
    - B311 Red Road
    - B3015 The Maultway



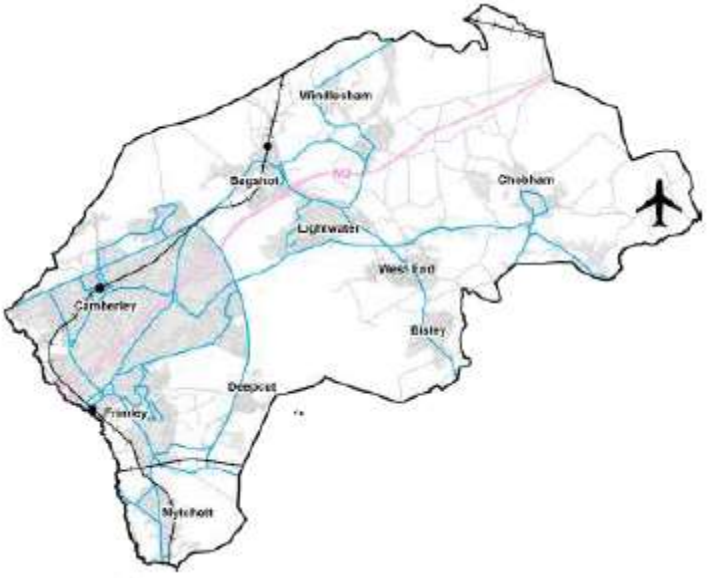
Potential solutions (highway)

- A30/A331/Meadows Gyratory corridor improvements
- Camberley town centre highway improvements
- Frimley transport network improvements
- M3 approach improvements
- Deepcut (Princess Royal Barracks) Highways Package

Bus Provision

The current bus network within the borough is served by the Blackwater Valley and Woking bus routes.

The Blackwater Valley routes focus on providing accessibility to Camberley and Frimley, with routes to Aldershot, Farnham, Farnborough, Yateley, and the surrounding areas.



The Stagecoach Gold Route 1, a strategic bus route, passes through Camberley and Frimley. Key stops along this route include Yorktown, Camberley Town Centre and Railway Station, Frimley Park Hospital, Frimley High Street, Frimley Railway Station and Farnborough Railway Station (main).

The Woking bus routes serve the eastern settlements within the borough, connecting with Woking, Brookwood, Guildford, Camberley, Frimley and other settlements within the wider area. Key bus routes in the area include bus services 34, 35 and 48 providing access to Guildford and Woking. The 557 bus route provides a service to Heathrow Airport Terminal 5 which can be boarded at Chertsey or Woking, and takes approximately 1 hour and 40 minutes from Woking with a 30 minute

reduction if boarded at Chertsey. Woking, with a train journey of 30 minutes to London Waterloo, is an important transport hub for the eastern villages in Surrey Heath.

Many bus routes rely on key roads such as the A30, A322 and A3046 for movement between towns and villages.

Annual patronage (pax/pa) 2013/14 by Surrey Boardings on the 3 main services along the A30 west of Camberley (Knoll Rd. junction) were:

- Stagecoach Route 1: Old Dean-Camberley-Aldershot: 950,000 pax/pa
- Stagecoach Route 3 Yateley-Camberley-Aldershot: 438,000 pax/pa
- First 194/X94: Camberley-Bracknell: 220,000 pax/pa

The Surrey Heath Core Strategy states that bus services are improving from centres like Camberley but are still poor in the villages. Implementing improvements to bus priority and corridors across the borough is one focus of delivering sustainable transport packages (STP) across the borough. Potential bus improvements are planned for the Blackwater Valley route; across the wider Camberley area; and between the Yorktown and Watchmoor business parks. More detail is given in the Forward Programme (Annex). In addition, as developments come forward we would seek contributions as appropriate to the development of additional bus facilities.

Routes and timetables are, in general, controlled by the bus operators. SCC will continue to work with these operators to deliver improved routes and timetables. Operators include: Arriva, Carlone, Courtney Buses, Dickson Travel, Edward Thomas, Fleet Buzz, First Group and Stage Coach.

Current Problems and Issues (bus)

- Limited evening and weekend services.
- Bus timetabling does not coincide with rail timetabling resulting in increased public transport journey times, reducing the attractiveness of public transport as a mode of transport.
- No bus service between Blackwater Railway Station and key residential and employment centres in the Camberley and Frimley area.
- Poor bus services in the villages and rural areas limiting accessibility of the local residents.
- Poor bus infrastructure in some of the more rural places and hinterlands.
- Disjointed bus priority routes in areas, including Stagecoach Gold Route 1, specifically along the A30 London Road and B3411 Frimley Road, resulting in decreased bus journey time reliability.
- Future growth will place increased stress on the current bus services from local villages to Camberley and other main centres.

Potential Solutions (bus)

- The Forward Programme contains a number of packaged schemes with bus infrastructure improvements including:
    - A30/A331/Meadows Gyratory Corridor Improvements which aims to provide additional bus priority measures on the A30 and Meadows Gyratory to improve bus journey times.

- Camberley Town Centre Highway Improvements aim to deliver improved bus facilities around Camberley town centre.
- The Camberley Sustainable Transport Package will aim to improve bus infrastructure around the Camberley area, improving access via bus to Camberley Town Centre.
- Business Centre Access Improvements will provide improved bus priority measures between Yorktown and Watchmoor Business Parks to Camberley town centre and railway station.
- The M3 Approach Improvements aims to improve bus facilities around the M3 approaches at junction 3 and 4.
- Camberley Railway Station Improvements will improve the interchange facilities at the railway station between all modes of transport including bus and rail.
- Frimley Transport Network Improvements will deliver improved bus infrastructure in the Frimley area.
- Real Time Passenger Information will be integrated into all bus infrastructure improvements.

- In line with the Surrey Passenger Strategy, part of the Surrey Transport Plan (refer to Section 6 for further detail), Surrey County Council will seek to implement improvements to bus infrastructure as and when funding becomes available. Improvement measures will include:
  - Improvements to bus stop infrastructure along bus corridors including destinations along route – raising kerbing to improve accessibility, provision of seating at bus stops, provision of bus shelters, standardising bus stop layout and alignment to increase reliability and other information and accessibility improvements
  - Real Time Passenger Information – equipping bus routes that are not yet on the Surrey RTPI system, installing displays at bus stops, providing information at bus stops on how to obtain RTPI on smart phones/mobile phones or internet
  - Surrey-wide smartcard ticketing system working in partnership with bus operators
  - Intelligent bus priority and other traffic management measures along bus routes
  - Accessibility/safety improvements at railway stations (working in partnership with train operating companies)
  - Provision of Community Transport in the area to assist with transport for those who may have mobility problems or other issues which may mean they cannot access public transport.

Rail provision

Surrey Heath is served by three railway stations, Camberley, Frimley and Bagshot, all located on the Ascot to Guildford Line.

Camberley railway station provides access to London Waterloo; weekday services operate every 5-20 minutes with journey times of approximately 1 hour 15 minutes, usually requiring at least one change (except some peak period trains) at either Ascot or Ash Vale onto the South West Main Line (SWML). Guildford is accessible via the Ascot to Guildford line, with journey times taking approximately 45 minutes, no changes are required.

Camberley has a peak hour only main line rail service to London. As a result many residents currently travel to Farnborough, Sunningdale or Brookwood railway stations for fast frequent rail services to London.10

Services from Camberley, Bagshot and Frimley are comparatively slow and usage by local residents is relatively low. In respect of rail passenger demand Camberley Station is under used compared to similar towns. In 2005/06 Camberley Station handled approximately 355,000 passengers, making it the 41st busiest station out of 83 in Surrey. In 2009/10 that had increased to 439,678 passengers and Camberley had risen to 39th busiest station in Surrey (See Table 1 for station usage). Yet this is well below Camberley's potential, as it is one of Surrey's six main town centres and ranked 26th among all town centres in the South East region.

Farnborough (main) railway station south of Frimley, just outside the borough and county, offers a direct service to London Waterloo with a journey time of 40 minutes, providing an alternate and more direct rail journey to London Waterloo. Brookwood railway station is located on the same line as Farnborough (main) with similar journey times.

Blackwater railway station (located just outside the borough and county border) is situated on the North Downs Line, providing good access to Reading with journey times approximately 20 minutes, requiring no changes. Additionally Blackwater railway station provides access to London Waterloo and Gatwick Airport with journey times at approximately 1 hour with one or no changes.

Table 1, below, descries station usage for Surrey Heath's railway stations on the Ascot –to Guildford line.

Station	Entries, exits and interchanges 2012/13 (Office of Rail Regulation statistics)
Camberley	466,450
Frimley	226,258
Bagshot	153,586

Crossrail 2

Consultation on two potential options for Crossrail 2 took place between May and August 2013. Of the two options presented, the metro option and the regional option, the latter could result in particular benefits for Surrey Heath through increased capacity on the South West Main Line.

North Downs Line

Improvements to the North Downs Line (NDL) include lengthening of the trains and electrification of the line. These improvements will open opportunities for more frequent services from Surrey Heath along the NDL. Electrification would also provide more flexibility by allowing existing services to extend onto the NDL to provide more direct services

Network Rail is undertaking an assessment of the North Downs Line as part of the Wessex Route Study. Options for journey time improvements and additional services between Guildford and Wokingham, including potential electrification benefits, are being investigated through the Long Term Planning Process. Surrey County Council is undertaking further engagement with Network Rail to influence the decision making on investment options, notably through the Wessex Route Study via the Surrey Rail Strategy.

Current Problems and Issues (rail)

> For more details, see Surrey Rail Strategy

- Access to London Waterloo from Camberley, Bagshot and Frimley railway stations is poor. Lengthy journey times with an average duration of 1 hour 15 minutes (from Camberley railway station) are the longest within the county, with only Camberley, Frimley and Bagshot having journey times to London Waterloo exceeding 1 hour. Long waiting times at Ascot and Ash Vale worsen journey times.
- Access to Guildford is limited; a large number of stations in Surrey are within 30 minutes travel from Guildford, with the exception of Camberley, Frimley and Bagshot. 13
- Growth of 24% is forecast on the South West Main Line over the period to 2031. Should no major capacity enhancements be planned, a capacity shortfall of 37% during the AM peak by 2031 is forecast.
- Passenger demand on the North Downs Line is expected to increase, with significant growth forecast in Guildford, Reading and Gatwick.

Potential solutions (rail)

- The Surrey Rail Strategy outlines a number of potential solutions to rail capacity and performance issues affecting the county. There is a committed scheme on the North Downs Line at Redhill for an additional platform (platform 0) between

2014-19, to enable two trains per hour (tph) to Gatwick. Further improvements may be defined by the Wessex Route Based Study.

- A committed scheme for a total of 108 extra carriages to provide capacity for an additional 8,000 peak time seats is to be implemented onto the South West Main Line between May 2013 and December 2014. The additional stock will be directed to services including Guildford, Aldershot, Portsmouth, Alton and Basingstoke.16
- A committed scheme of an increase from 24 tph to 28 tph to London Waterloo is to be implemented between 2014 and 2019 to address capacity issues.
- Opportunities to adjust the rail timetable, providing additional trains to London during the 5 year control period renewal. There are no committed schemes.
- Camberley Railway Station Improvements (see Forward Programme)
- Sturt Rail Chord Railway Link Re-introduction is the re-instatement of a length of railway track between the SWML and the Guildford-Ascot line to improve direct access Camberley, Frimley and Bagshot to London Waterloo. (see Forward Programme)

Walking provision

Outside of the Camberley/Frimley urban areas, the majority of the borough of Surrey Heath is rural with small urban settlements. A distance of two miles is considered to be the maximum distance a person would choose walking as a mode of transport.

All visitors to Camberley town centre are pedestrians for part of their journey and walking is a key component of the town centre transport strategy.

Areas within easy walking distance (20 minutes) of Camberley town centre include Camberley railway and bus station, the residential areas up to Frimley Road and Portsmouth Road.

Due to poor bus services from Blackwater Railway Station, many walk between Blackwater Railway Station and The Meadows Retail Park (bus stop) to change between bus and rail services. The walking route is from Station Road, through The Meadows Gyratory and into the Meadows Retail Park.

The Basingstoke Canal is a key walking route to the south west of the Borough is mainly used for leisure purposes. This route links the Frimley/Frimley Green area to Brookwood and Woking in the east and Ash Vale and South Farnborough to the south west.

The eastern villages are connected via footways, bridleways and rights of way paths. Bagshot, Windlesham, West End and Lightwater are located within 2-3 miles of each other and so present the opportunity for residents to walk between the villages. These routes also provide access to Camberley in the west and Woking in the south. Due to the characteristics of the surrounding area,

the majority of walking infrastructure is used for leisure purposes, providing access to natural spaces.

Key routes between the villages include; Windlesham to Lightwater, which crosses the A322 and the M3, connecting to Lightwater Country Park, Bagshot to Lightwater Country Park, which crosses the M3, and Bagshot to Windlesham, which crosses the A322 and links with Bagshot Railway Station.

Camberley has a reasonable level of walking infrastructure. Key routes around Camberley town centre are shown in Table 2 below, together with their Permeability Index. Permeability Index is the ratio of actual distance compared with straight line distance. A ratio of 1.0 is ideal (i.e. most direct), a ratio of 1.5 is considered the upper limit for permeability (i.e. over 1.5 is considered too indirect).

Pedestrian route	Permeability index
Camberley railway station and adjacent bus stops to Town Square	1.7
Camberley railway station and adjacent bus stops to library	1.7
Camberley railway station and adjacent bus stops to leisure centre	1.4
Knoll Road car park to Town Square	1.5
Main Square car park to Town Square	1.2
Knoll Road bus stop to Town Square	1.1

Current problems and issues (walking)

- A lack of pedestrian crossing facilities at many junctions and along some key pedestrian routes to Camberley town centre.
- A number of existing pedestrian crossing facilities are poorly located and do not line up with the desired pedestrian lines.
- Inaccessible pedestrian routes during certain hours. (E.g. night time closure of the shopping mall; no pedestrian access between the rear service areas east of the High Street and adjacent footpaths).
- Poor and unsafe crossing facilities for pedestrian on key footways that cross the A322 due to high speeds and poor line of sight/visibility.
- Side road junctions designed for motor vehicles.
- Indirect pedestrian routes around Camberley (see Table 2, Permeability Index)
- Lack of route direction signage and street names around Camberley.
- Poor walking infrastructure in village centres and connecting villages.

Potential Solutions (walking)

- Subject to funding, walking infrastructure could benefit from investment from the Enterprise M3 Local Growth Fund.
- Improvements to walking infrastructure are to be considered under the sustainable transport packages identified for Surrey Heath, including the Blackwater Valley Better Connectivity scheme and the Camberley Sustainable Transport Package.

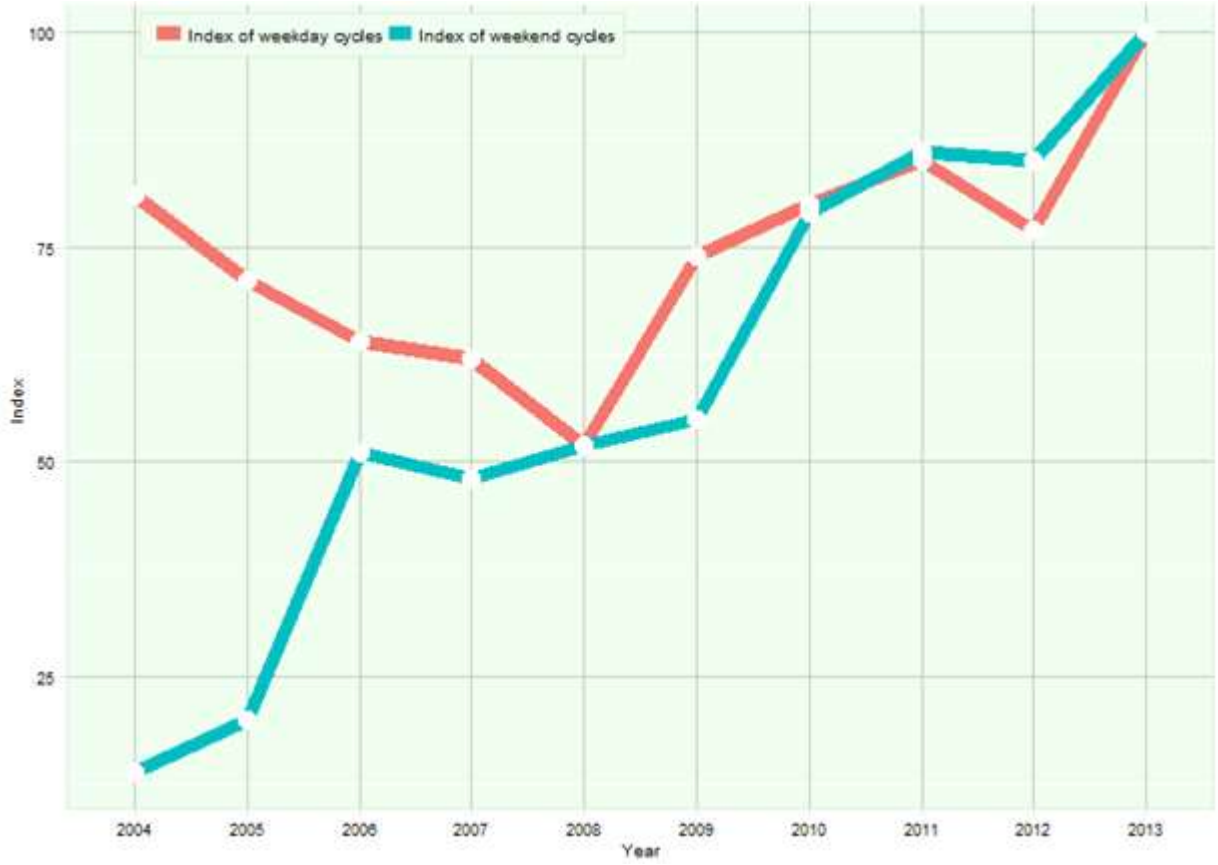
- In addition, a number of other packaged schemes provide walking infrastructure improvements (see Forward Programme).

Cycling provision

The latest available data (2011 census) reveals that 1.2% of those who travel to work in Surrey Heath do so by bicycle. Cycling's mode share within Surrey Heath for travel to work is low when compared to the South East average of 2% and Surrey average of 1.5% . However, anecdotal evidence suggests the figure for Surrey Heath will have increased due to an increase in cycling nationally.

Graph 1, below, shows the comparison of weekday to weekend cycles between 2004 and 2013. Whilst cycling has generally been increasing in popularity over the years there is a clear spike in cycling between 2012 and 2013 from the previous year. The 2012 London Olympics is expected to have generated a significant increase in cycling, encouraging the uptake in cycling for travel and recreation.

Graph 1 shows the trend in level of cycling, indexed to 2013 (=100). Data is for weekdays (red line) and weekends (blue line) in June and July 7am – 7pm.

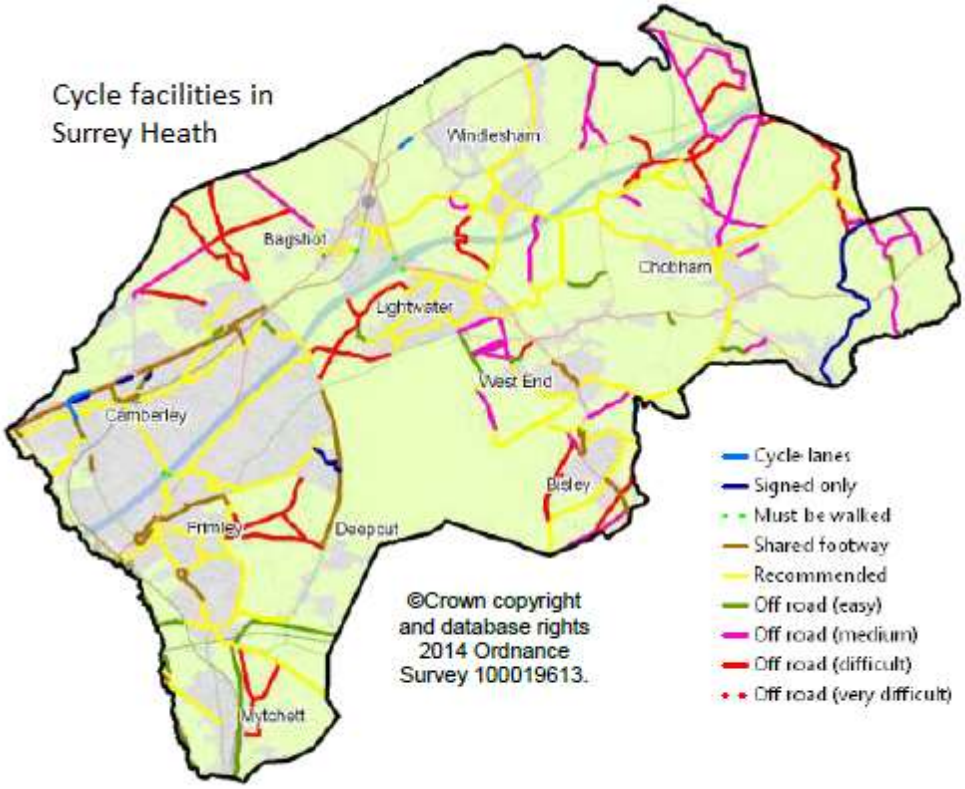


The majority of Surrey Heath's build up cycling infrastructure is focused within or on accessing the Camberley/Frimley area. Camberley town centre and railway station are the main destinations for cycle routes. Previous consultations with cycling stakeholders have identified a list of priority routes, with the top 10 routes connecting to Camberley town centre and railway station.

The Basingstoke Canal is a key cycling route in the south west of the Borough and links Mytchett/Depcut to Woking and Aldershot. The PRB development at Deepcut is expected to increase the levels of cycling on the Basingstoke Canal; measures have been put forward to improve sections of the towpath.

The cycle infrastructure around the villages is disjointed, with small sections that are not linked into a cohesive cycle network. A signed cycle route from Woking passes through the eastern tip of the borough and links with Virginia Water, however there is no additional that link this cycle route to the villages.

An off-road bridleway that runs parallel to the Red Road is well used; however sections require more experienced cyclists. Within the villages there is small sections linking residential, commercial and educational centres, many of these routes are shared footways and do not extend outside the village.



The remaining rural cycle network has an established base network that links the villages; significant proportions of these routes are on narrow rural main roads and therefore have reduced safety, putting off potential cyclists. Off road routes offer a safer option for cyclists; however in places these routes require more experienced cyclists. There is significant potential to improve Surrey Heaths cycle network, making it more accessible for cyclists of every level of experience.

Surrey County Council is currently developing the Surrey Heath Local Cycling Plan. Upon adoption, findings from the cycling plan will be reflected within the Local Transport Strategy.

Current problems and issues (cycling)

- A lack of cycle crossing facilities at many junctions and along some key cycle routes to Camberley town centre
- Disjointed cycle lanes and routes
- Poor segregation with motor vehicle traffic on high speed or congested roads
- Lack of cycle provisions resulting in cycling on non-shared footways
- Limited cycling access to business and industrial parks for employment
- Routes with opportunities for improvement in the Camberley and Frimley area.

Potential solutions (cycling)

- Subject to funding, cycling infrastructure could benefit from investment from the Enterprise M3 Local Growth Fund. (see Forward Programme and Expression of Interest submissions to Enterprise M3)
- Improvements to cycling infrastructure are to be considered under the sustainable transport packages identified for Surrey Heath, including the Blackwater Valley Better Connectivity scheme and the Camberley Sustainable Transport Package.
- The Camberley Access Strategy (cycling) identifies the following cycle routes, numbered in priority order through consultation with cycling stakeholders. These are shown in the table 3, below.

Priority rank	Cycle route
1	Camberley town centre to Deepcut
2	Camberley town centre to Tomlinscote (East Frimley)
3	Camberley town centre to Old Dean
4	Camberley town centre to Frimley
5	Camberley town centre to Mytchett and Frimley
6	Camberley town centre to Lightwater
7	Camberley town centre to Blackwater and Yateley

Access to airports

Surrey Heath has two main methods of travel to access London Gatwick or London Heathrow airports, by rail or road.

To access Heathrow Airport by rail takes approximately 2 hours 15 minutes and requires 3 changes. Access to Gatwick Airport takes approximately 2 hours and requires between 1-3 changes.

The road network provides good access to Heathrow Airport. With the journey distance just over 20 miles, journey times are between 30-50 minutes. Access to Gatwick on the road network is also good, with a journey distance of 45 miles and journey times between 50 minutes and 1 hour 10 minutes off peak.

The journey time difference between travelling by rail or road is significant. With up to 1 hour 45 minutes difference in journey times the attraction of travelling to Heathrow or Gatwick Airport via the rail network is lower than that of the road network.

Fairoaks Airport in the east of the borough provides business aviation services and is an important local employer. Farnborough Aerodrome is a civil airfield located just beyond the boundary of the borough; flight paths cross into the borough and have been a source of noise complaints.

Overview of the main transport challenges in Surrey Heath

The main transport problems in Surrey Heath borough which the Forward Programme seeks to address have been identified as:

- Peak hour congestion on the road network
    - Junction capacity issues
    - Highway capacity issues
    - Gyratory traffic management
    - Railway line and level crossing delays
    - Motorway (M3) junction congestion from junction 2 to 4.
- Community severance caused by:
    - High speeds and congestion on the road network
    - Railway line and level crossings
    - Cove Brook/Blackwater River
    - Motorway (M3) network
- Inadequate rail infrastructure
    - Limited access to major centres (e.g. London)
    - Capacity issues during peak hour services
- Environmental issues such as impacts of congestion, transport impacts on air quality and SANGS (Suitable Alternative Natural Green-space).
- Heavy reliance on the private car
- Limited bus infrastructure and services
    - Limited evening and weekend bus services
    - Infrequent and limited services in rural areas
    - Inadequate road layout on key bus routes
- Cycling and walking infrastructure
    - Accessibility between employment, commercial and residential centres
    - Road safety issues

Surrey Heath transport trends

This chapter describes the travel patterns within Surrey Heath and the many trends which affect transport in the borough. It is split into four sections; demographic and socio economic trends, environmental issues (including SANGS), safety and economic circumstance. By looking at these four areas this chapter will give an understanding of the factors affecting transport in Surrey Heath.

It is split into four sections;

- Demographic and Socio Economic Trends
- Environmental Issues
- Safety
- Economic Circumstance

Demographic and Socio Economic Trends

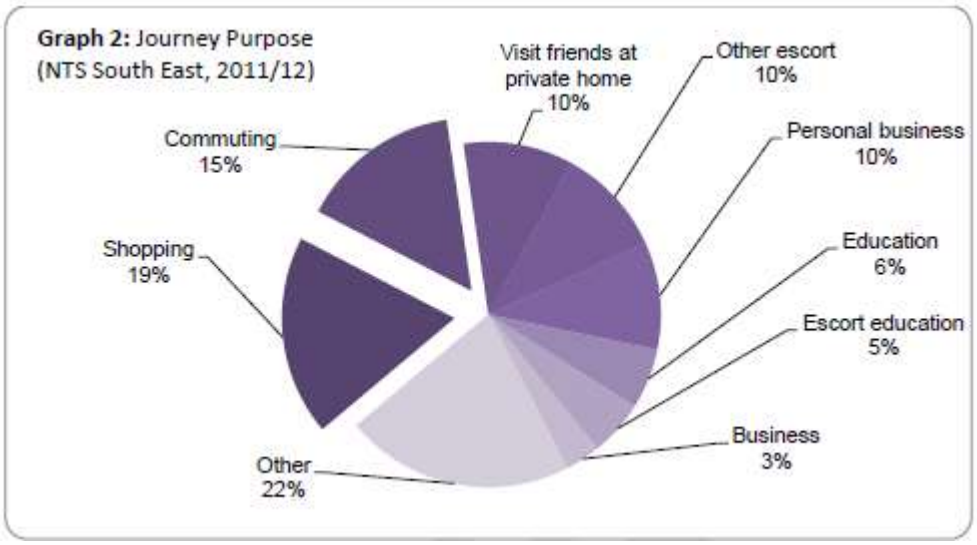
One of the most influential demographic factors upon the demand for travel is population; specifically the impacts of population growth and the desire for people to live in smaller sized households.

Surrey's population density varies considerably across the county. Dense urban areas are located in north Surrey within the M25 and in the large towns of Guildford, Woking, Reigate/Redhill and Farnham south of the M25. These dense urban areas are separated by low density rural areas. 83% of the population live in these urban areas which cover just 34% of the county.

Between 2008 and 2013, Surrey's population grew by 3.7%. This trend is projected to continue over the next 20 years at a rate of about 3.6% per year. Along with increases in population, the number of households has also increased over time, by 11.3% since 1991 and 21.6% since 1981. The number of households in Surrey in 2011 was 455,791. If trends in personal travel demand remain constant, then the growth in population together with the desire to live in smaller households will result in an increase in future travel demand.

Surrey Heath has a fast increasing population, increasing by approximately 6,000 people between 2001 and 2011. The population is also ageing. The proportion of over 85's is currently higher than for England and Surrey and is projected to increase by 60% by 2026. This will present a variety of challenges for housing provision, health and social support.

The latest Census data provides an overview of travel behaviour within Surrey Heath. National Travel Survey data provides a wider context. Graph 2 (below) shows journey purpose (by number of trips made) in the South East region in 2011/12. The source for this data is National Travel Survey (dataset NTS9906 Average number of trips (trip rates) by purpose, region and area type: Great Britain, 2011/12).

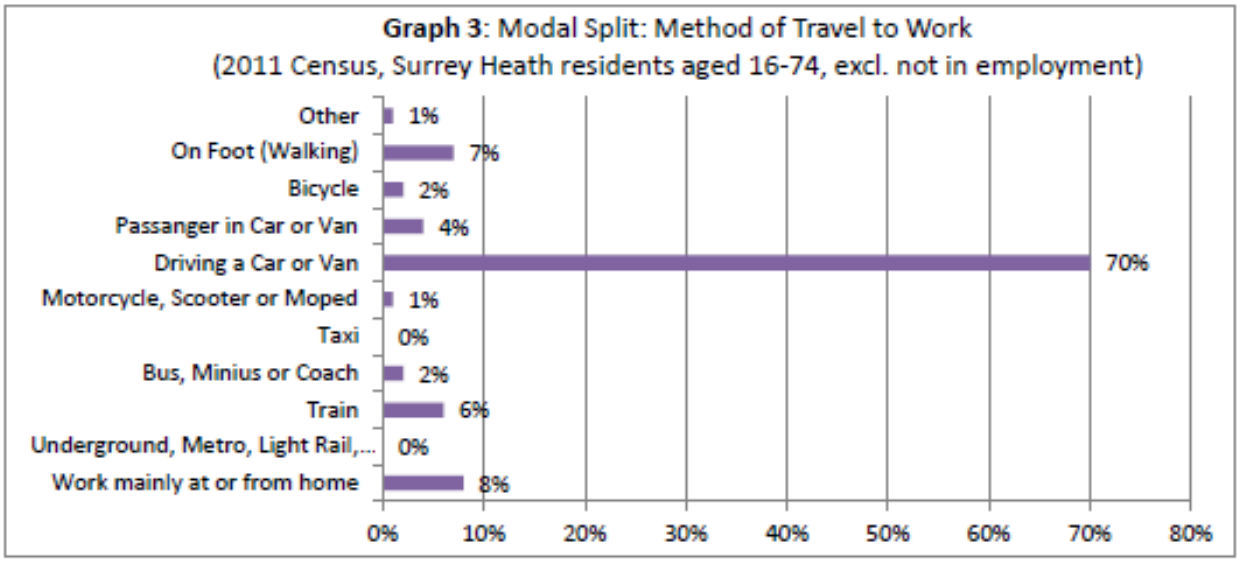


It is evident that economic activity such as employment (commuting) and shopping are significant reasons for travelling in the south east.

Journey purpose definitions:

- Commuting - trips between a usual place of work and home,
- Business - personal trips in course of work.
- Education - trips to school or college.
- Shopping - all trips to shops or from shops to home,
- Personal business - visits to services, e.g. hairdressers, solicitors, banks,estate agents, medical, eating and drinking.
- Visiting friends at private home – Social activities with friends or family in private locations.
- Escort trips - used when the traveller has no purpose of his or her own, other than to escort or accompany another person.
- Education Escort – to escort a person, usually a child to an educational establishment such as the morning school run.

Borough-specific data regarding travel to work patterns is available from the Census. ONS Census 2011: Modal split – method of travel to work in Surrey Heath is shown in Graph 3, below.



The car remains the predominant mode of choice with 70% of residents (age 16-74) travelling to work as a driver of a car or van.

Further observations regarding travel behaviour (modal split and distance travelled) can be made, also using Census data:

Car ownership is higher in Surrey Heath than the average in the Surrey (87%) at 90%. Only 10% of Surrey Heath households do not own a car or van, with the average number of cars per household at 1.68, higher than the Surrey average at 1.51 and the highest in the county.

In 2011 the car remains the predominant mode of transport for commuting to work over all distances with the exception of between 40km to 60km which was the train. This is expected to be due to those commuting to London.

In 2011 (census), travelling to work by mode of train was significantly low. Across Surrey, on average 14% of commuters travel by train, in the borough of Surrey Heath, only 6% of commuters travelled to work by train, the lowest across the County.

Journeys less than 5km are considered to be most receptive to change given their shorter distance. The modal split for journeys travelled to work by Surrey Heath residents that are less than 5km in distance has been sourced from the 2011 Census and is summarised in Table 4 below. Table 4 data is from ONS 2011 census (method of travel to work by distance dataset).

Distance travelled	Car or van, passenger or driver	Bus	Train	Walking	Bicycle	Other	Total
< 2km	52%	2%	1%	36%	5%	4%	100%
>2km <5km	83%	6%	1%	5%	3%	2%	100%
>5km	69%	1%	8%	1%	1%	20%	100%

It is evident that, especially for journeys that are between 2km and 5km, the reliance on the private car (driver or passenger) is high. An average of 68% of commuters in Surrey Heath travelling less that 5km rely on the private car.

Due to the short distance travelled to work (less than 5km), there is significant potential to encourage modal shift to more sustainable modes of transport including cycling, walking and public transport (bus).

The majority of journeys to employment are made by car, with limited use of public and sustainable modes of transport.

Origin and destination data (ONS census 2011 – Commuting patterns from the annual population survey) reveals the following:

- Of the residents in employment in the borough, 41% live and work in Surrey Heath.
- The remaining 59% of residents commuted to areas outside of the borough with 13% commuting into London.
- Approximately 11% of the working population commute to the other Surrey boroughs and districts.

The ratio of working population residents to jobs (in 2011) is 1 resident : 1.04 jobs, showing Surrey Heath borough provides 4% additional jobs.

Whilst 13% of the borough works in London, only 8% of the borough population use the train to travel greater than 5km to employment.

The travel patterns of borough residents and commuters travelling into the borough present the opportunity to encourage sustainable transport, especially for journeys less than 5 km in length, many of which could be cycled, walked or made by public transport.

Environmental Issues

In recent years there has been increasing concern at the increase in extreme weather events and the changes in climate that the county will face. The most recent government predictions have made it clear that over the next few decades Surrey will certainly be affected in many different ways. These changes will bring both threats and opportunities.

Increased intensity of rainfall will bring threats of flooding and subsidence, adversely affecting transport infrastructure including roads, bridges and the rail network, as will hotter and drier summers. At the same time a warmer climate will provide increased opportunities for tourism destinations and new crops for farmers. Consequently public services and infrastructure will need to change in response to a changing climate, which will be challenging.

Transport is a major contributor to global climate change. Carbon dioxide emissions from transport in the UK grew by 98% between 1971 and 2001 and transport's share of total emissions is predicted to increase from 24% in 2006 to 30% in 2022 according to the Committee on Climate Change. Acting on transport's role in mitigating against this is an increasing local and national priority.

Between 2005 and 2007 there was a 3% absolute reduction in CO2 emissions from transport in Surrey and a 5% per capita reduction. Research from 2008 shows an estimate of 2,029 kilo tonnes for total transport CO2 emissions and 1.84 tonnes CO2 per capita. This equates to a 7.8% reduction since 2005 in absolute figures and 10% per capita reduction.

Additional information is available in the Climate Change Strategy; further detail can be found in Chapter 6 of this document.

Sustainable Alternative Natural Green Space (SANGS)

One of the impediments to new development in Surrey Heath, particularly residential development, is the availability of Suitable Alternative Natural Green Space (SANGS) issue, and a significant proportion of the Strategic CIL receipts will be directed towards mitigating the impacts of new development upon the Thames Basin Heath Special Protection Area.

Air Quality Management Areas (AQMA)

Air pollution in the UK harms human health and the environment. Air pollution can have a long-term effect on people's heath associated in particular with premature mortality due to heart and lung effects. 143,200 Surrey residents (13.5%) have a long-term illness or health problems. People in Surrey have a high life expectancy and this is improving over time. In the short term, high pollution episodes can trigger increased admissions to hospital and contribute to the premature death of those people that are more vulnerable to daily changes in levels of air pollutants.

Road traffic is a key issue in relation to air quality. Stop start driving conditions and slower vehicle speeds resulting from congestion can lead to higher roadside pollutant concentrations, hence causing greater risks to pedestrians and adjacent residential properties.

Figure 5: Surrey Heath Air Quality Management Area

> 'Surrey Heath Borough Council (SHBC) has completed an Air Quality Review and Assessment. The conclusions of this indicated that exceedences of objectives for nitrogen dioxide (NO2) are likely along the M3 between the Frimley Road flyover and just North of the Ravenswood Roundabout (R.R) (A325). As a result of this air quality review and assessment, Surrey Heath Borough Council declared an Air Quality Management Area (AQMA) in 2002 (Figure 4) and undertook a review in the area in 2003 .... The review confirmed the likelihood of NO2 exceedences within the AQMA and also indicated that it should be extended in both directions along the M3.' (Source: Surrey Heath Air Quality Action Plan Progress Report 2007)

The designated Air Quality Management Area, located along the M3 Motorway, is owned by the Highways Agency. Surrey County Council, where possible, will continue to work with the Highways Agency to improve air quality along the M3.

The Highways Agency announced on the 8th of July 2014 that construction on the Smart Motorway M3 junction 2-4a would begin in Surrey County. The scheme purpose is to convert the hard shoulder into a running lane to boost capacity by a third. A 60mph speed restriction between 7am and 7pm was proposed as a means to address air quality on the M3 Motorway; however, the Transport Secretary rejected this proposal and asked the Highways Agency to investigate alternatives as work progresses on the scheme.

It is anticipated that general improvements to the journey times, motorway capacity and overall traffic speed will have positive impacts on the air quality.

Safety

In 2013, a total of 465 people were reported as injured in road collisions in Surrey Heath. Of these, 3 were killed but 34 were seriously injured. This compares with a total of 5,223 people reported as

injured in road collisions in the whole of Surrey; 18 of these were killed and 581 were seriously injured.

Over recent years there has been an increase in the number of cyclists seriously injured on Surrey's roads - from 50 in 2008 to 122 in 2012.

Economic Circumstance

Whilst the transport network serves to facilitate movement around the borough and includes key regional links, some of the characteristics of the network itself act as constraints to its performance. These include:

- A limited number of crossing points of physical barriers including; Railways, Motorways and Waterways (for all modes excluding rail).
- Limited road capacity at some of the key strategic locations in the borough, particularly during peak hours. Examples include the Toshiba Roundabout and the Meadows Gyratory.
- Poor traffic management on key junctions on the primary road network, leading to congestion.
- Overcrowding and lack of capacity on the existing rail infrastructure in the borough.
- Poor modal split with a heavy reliance on the private car.
- Gaps in the bus infrastructure.
- Accident hotspots resulting in a rapid increase in congestion.

Congestion and community severance are experienced as a result of these issues. This strategy seeks to promote schemes which help address these problems where feasible. The problems listed above contribute to congestion on the road network which results in unreliable journey times and related delay.

Travel behaviour and high dependency on the private car also contributes to congestion, particularly during peak travel times. This strategy seeks to address all modes in order to encourage travel by more sustainable means than the private car, supporting measures which encourage sustainable transport behaviour change.

Surrey Heath has a busy transport network, but does not suffer congestion to the degree that some metropolitan conurbations do. However, due to this busy nature, congestion does occur during the peak periods and at local hotspots, and rapidly arises when either incidents occur or traffic flow is disrupted. Congestion arises when the level of traffic flow on a road exceeds, or approaches, the available capacity.

Congestion is a significant issue and it can affect any route causing problems for drivers, pedestrians and public transport users. For Surrey as a whole, including motorways and trunk roads, the cost of congestion is estimated to amount to about £550 million per annum.

The Congestion Strategy sets out the overall approach to tackling congestion in Surrey further information on this is available in chapter 6 of this document.

Capacity issues and overcrowding on trains in Surrey have been identified in the Surrey Rail Strategy, particularly on routes into Waterloo and on the Brighton Main Line and North Downs Line. Further information is also available in Chapter 6 of this document.

Parking is seen to influence congestion in three main ways; firstly at a strategic level the availability of parking has a direct influence on modal choice, secondly, in places where there is a high demand for parking, congestion can be exacerbated by queuing at car park entrances and circulating traffic seeking on-street spaces, thirdly, both legal and illegal on-street parking leads to a reduction in the amount of road space available for through traffic, creates bottlenecks, reduces traffic flow and increases journey times. Further information is available in the Parking Strategy.

Future growth and its impact

This chapter will look at the future growth expected in the borough of Surrey Heath and the impact this may have on the transport network. It will then look at how these impacts can be mitigated against in the future.

The Surrey Heath Borough Core Strategy identifies a spatial strategy for Surrey Heath (2011-2028).

Camberley Town Centre Area Action Plan (CTCAAP) sets out a strategy and future development for Camberley town centre (2011-2028).

The Surrey Heath Infrastructure Delivery Plan (IDP) (2013-2023) provides an indication of transport and other infrastructure needed in the borough. Annexes 1 – 3 of the IDP outline what infrastructure has been delivered and is required to help meet the vision and objectives of the Surrey Heath Core Strategy and CTCAAP.

Housing

Surrey Heath Borough Council aims to deliver 3,240 (net) additional dwellings between 2011 and 2028.

Within the period of 2011 to 2025 the provision of 2,730 (net) additional dwellings will be delivered. These will generally be distributed as follows:

- Bagshot: 270 units (10%)
- Bisley: 45 units (2%)
- Camberley: 860 units (31%)
- Chobham, including allowance for rural exceptions: 55 units (2%)
- Deepcut, including the 1,200 units allocated to Princess Royal Barracks: 1,235 units (45%)
- Frimley: 120 units (4%)
- Frimley Green: 20 units (1%)
- Lightwater: 40 units (1%)
- Mytchett: 55 units (2%)
- West End: 20 units (1%)
- Windlesham: 20 units (1%)
- Total: 2,730 units

Princess Royal Barracks located in Deepcut (see location in graphic, right) is the proposed site of a large development to deliver 1,200 dwellings and a range of community facilities. It is anticipated that development on site will not commence until 2016 at its earliest.

Over the lifetime of the core strategy, the borough council will seek a target of 35% of all (net) additional housing as affordable, split

evenly between social, rented and intermediate accommodation.

Other significant housing developments that are likely to impact on Surrey Heath Borough include:

- Whitehill-Bordon Eco-Town located in East Hampshire is a proposed ‘green’ town based around the regeneration of Ministry of Defence (MoD) and Local Authority land. It will provide up to 4,000 new homes, employment provision (5,500 new jobs), new schools and a new town centre (with around 30,000 sq m of retail floor space) .
- Aldershot Urban Extension is located on military land to the north of Aldershot town centre in Rushmoor Borough and covers approximately 150 hectares. It is one of the largest brownfield regeneration sites in the south east of England. It will provide around 4000 homes including two new primary schools and community facilities. The first phases of development are anticipated in 2014.
- DERA Site - Longcross is a brownfield site covering 40 hectares. Originally military land, it is located in Longcross, Runnymede, to the east of Surrey Heath Borough. Plans for this site include a mix use development of several hundred homes, 79,000m^2 of office floor space, a village centre and publicly accessible open spaces. (final proposals yet to be determined)
- Land at Broadmoor, Crowthorne, has been allocated by Bracknell Forest County for mixed-use development including 210 new homes (inc. affordable housing), 60 retirement apartments, a small research park and a care home/nursing home.
- Land at Transport Research Lab, Crowthorne has been allocated by Bracknell Forest County for a mixed use development including 1,000 new homes (inc. affordable housing), a neighbourhood centre, primary school, multi-functional community hub, care home/nursing home and a depot site.

Employment

A 2009 Employment Land Review (ELR) states that there is sufficient office and industrial floor space to meet future requirements, though states a need for small industrial sites to meet future needs locally. Opportunities should be sought to upgrade the existing office stock, particularly in Camberley town centre.

The Surrey Heath Borough Core Strategy states the Borough Council will seek to make provisions of 7,500 new jobs in the period up to 2027, further anticipating that 41,000 sqm of gross retail floor space could be delivered in Camberley Town Centre by the period of 2028.

The Camberley Town Centre Area Action Plan (CTCAAP), adopted in July 2014, has set the targets of 39,500sqm of gross comparison floor space and 1,500sqm of gross convenience floor space by 2028.

A further target for 21,000sqm of comparison and convenience floor space has been set for the regeneration of the A30 London Road (London Road Block) by 2028.

Education

Based on projected future housing growth, pupil numbers are expected to rise in Surrey Heath Borough. A number of new classrooms will be required to accommodate rising pupil numbers. Such development would impact on the transport system. The potential effects on the transport system and traffic flows will need to be accounted for in the planning and implementation of any school development or expansion.

A relatively modest increase in applications means that minor school expansions will be required in Surrey Heath Borough over the next five years in order to meet the future need for additional school places. Over the period 2014-2019, it is estimated that 540 additional school places are required at primary level, however no additional secondary places will be required in this period because of capacity in existing schools. These projections are updated on a yearly basis and are subject to change.

Schools already identified for expansion are Connaught Junior School in Bagshot (additional 120 places). Additional school expansions to meet the remaining places needed are yet to be identified.

These expansions will impact on the local transport system and Surrey County Council is currently developing a Transport Strategy for the schools place programme in order to mitigate the transport impacts of school expansions.

For each school expansion a transport assessment will be carried out which looks at the transport implications of the planned expansion and identifies appropriate mitigation measures. A school travel plan will also be produced or updated to reduce the risk of casualties and encourage sustainable travel. Any identified mitigation measures need to be considered in the context of the Forward Programme laid out in the annex to this strategy. Similarly as schools are identified the Forward Programme will be updated to take account of needs arising from expansions and mitigation provided as part of expansions.

Electric Vehicles and Supporting Infrastructure

'Electric vehicles, or EVs, are cars or vans where the petrol or diesel engine is replaced or supplemented by battery powered electric motors'.

Surrey County Council is currently producing an Electric Vehicle Strategy, which is expected to be published mid 2015. More information on the strategy and SCC current guidance can be found in chapter 6.

Surrey County Council has set an ambition to reduce our carbon footprint. One identified cost effective method of reducing our carbon footprint is through encouraging the use of electric vehicles.

To encourage the use and increase the viability of electric vehicles, supporting infrastructure is required e.g. EV charge points.

The County Council will seek the provision of electric vehicle charging points with all new developments, as part of the authority's Parking Guidance, as well as look to provide charging points within existing infrastructure.

The Surrey Climate Change Strategy which forms part of the Surrey Transport Plan, identifies 'Infrastructure to support use of hybrid/electric vehicles' as a key measure to help address climate change.

Impact on the Highway Network

The Surrey Heath Core Strategy – Infrastructure Delivery and Implementation states 'The Borough Council will ensure that sufficient physical, social and community infrastructure is provided to support the development identified in this Core Strategy and subsequent DPDs through use of integrated demand and asset management or new infrastructure provision.'

The Surrey Heath Core Strategy – Traffic Management and Highway Safety states 'Development which would adversely impact the safe and efficient flow of traffic movement on the highway

network will not be permitted unless it can be demonstrated that measures to reduce and mitigate such impacts to acceptable levels can be implemented.'

The Surrey Congestion Programme – Housing Employment and Population Growth states 'there are a number of potential developments which will take place in neighbouring authorities that will impact upon the transport network within the county.' Developments affecting Surrey Heath Borough included in the Transport Assessment is the Aldershot Urban Extension within the Blackwater Valley, providing an additional 4,000 homes placing additional pressure on the A30/A331 corridor.

The county highway model has been used to assess the impact of housing developments set out in the Surrey Heath Core Strategy that may have an impact on the generation and distribution of traffic on the present-day highway network. The 2026 Scenario D takes into account all sites with or without planning permission, the Princess Royal Barracks (PRB) site and the Defence Evaluation and Research Agency (DERA) site, a significant housing development site located in the neighbouring borough of Runnymede. Scenario C excludes the DERA site.

Total network travel time (vehicle hours) is expected to increase by 15% as a result of the proposed growth. Minimal cross-borough boundary traffic impacts are generated from the DERA site, mainly effecting the east of the borough. The PRB development generates larger traffic impacts on the road network when compared with the DERA site impacts.

The areas projected to be affected most by the additional trips generated by the proposed developments are Yorktown, Bagshot and Deepcut/Mytchett.

The A322 Bracknell Road corridor that passes through the M3 junction 3 is expected to be the most heavily impacted road, experiencing the highest increase in traffic flow. The B3015 Deepcut Bridge Road is expected to have a significant increase in traffic flow generated by the PRB development.

Table 7, below, shows the top 5 zones with the largest increase (%) of additional trips generated by the proposed and planned growth of Surrey Heath (percent of total number of additional trips in each scenario – one scenario includes the DERA site and one excludes it).

Zone	Percentage of additional trips in this zone, in scenario excluding DERA site development	Percentage of additional trips in this zone, in scenario including DERA site development
Bagshot	11/7%	7.1%
Riverside and Watchetts	5.2%	n/a
Camberley	3.4%	n/a
Ottershaw	n/a	35.9%
Virginia Water	n/a	3.2%

It is expected that Deepcut and Mytchett will experience an increase in additional trips due to their close proximity to the Princess Royal Barracks development.

The additional trips generated to Yorktown and Camberley could generate increased traffic on strategic roads including the A331 Blackwater Valley Route, Meadows Gyratory and the A30 London Road.

Roads identified to experience the greatest increase in traffic flow are (source: Surrey Heath Core Strategy and development Management Policies Document DM11):

- A331 Blackwater Valley Route
- B3015 Deepcut Bridge Road
- A322 Bracknell Road
- B3029 Guildford Road

Junctions identified to experience the greatest increase in traffic flow are (source: transport evaluation for Surrey Heath Borough Council Core Strategy – Transport Assessment 2010):

- M3 Junction 3 (Lightwater)
- A30 London Road/B3015/A325 Portsmouth Road
- M3 Junction 4 (Frimley)
- A322 Bracknell Road/A30 London Road

Mitigating the Impact of development

The overall conclusions of both the county-wide and local transport assessments suggest that major additional highway capacity infrastructure investment such as further motorway widening, or local bypasses is not necessary to meet the demands of future development. However, other types of highway capital schemes for urban areas, at key junctions or other sensitive locations will be required in order to promote and manage the additional demand due to future development. These schemes will not necessarily create additional capacity but will assist in managing or improving journey time reliability.

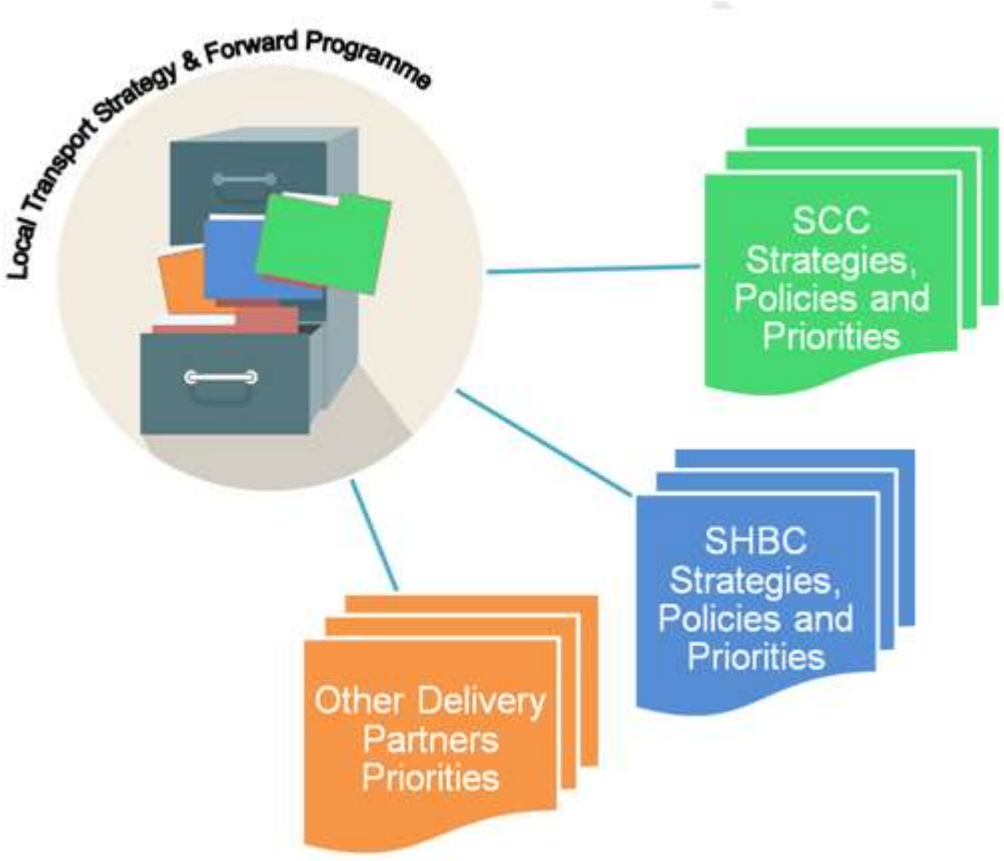
It is envisaged that the scale of impacts within these identified areas could be managed by implementing a combination of transport strategies and measures contained within Surrey's recently adopted third Local Transport Plan (Surrey County Council, April 2011, Surrey Transport Plan). The findings of the Surrey Heath Transport Assessment only consider the use of the highway network by private and commercial vehicles and do not consider other modes including buses, cycling and walking. They also assume that all development takes place without any improvements being implemented during the course of the plan.

Given the strategic nature of the assessment, modelling limitations and the uncertainty of the size, distribution and land-use of any future planned developments, the interpretation of the likely impacts on both the SRN and LRN within this assessment should be treated as broad strategic projections, and as such further work would be recommended (including complementary analysis using appropriate tools), to assist in the identification of additional transport provision at a more local and detailed level.

Surrey County Councils Transport Development Planning team sets out its core objective ‘To seek to influence the local planning authorities (the borough and district councils) in making decisions to ensure that the adverse traffic and transportation impacts of new developments are minimised, and to contribute to the delivery of county and national transport policies.’.

Related work streams and projects

This chapter details the many related work streams being carried out by the County Council (SCC), Surrey Heath Borough Council (SHBC) and other external stakeholders. The diagram below shows how transport elements of SCC and SHBC strategies fit together to influence the Local Transport Strategy. This in the future may help to provide a mechanism for jointly prioritising and delivering transport schemes to meet the aims and ambitions of the both SCC and SHBC.



Surrey Transport Plan and Other County Council Work Streams

The strategies are key components of the Surrey Transport Plan, setting out aims and objectives and identifying spending priories for each area. The strategies will be used to inform the development of programmes for the delivery of schemes on the ground.

There is a flexible web-based approach to the development and review of strategies. The following components have been produced:

- Air Quality
- Climate Change
- Congestion
- Cycling
- Freight
- Parking
- Passenger Transport (Local Bus and Information)

- Travel Planning
- Rail

Below is a summary of the Surrey Transport Plan and other Surrey strategies.

Surrey Air Quality Strategy

The Air Quality Strategy was published in 2011.The strategy covers the effect of the road network on air quality. Road traffic is a major contributor to air pollution in Surrey. The aim of the Air Quality Strategy is to improve air quality on and around the county road network.

Surrey Climate Change Strategy

The Climate Change Strategy was published in 2011.The strategy covers the carbon emissions arising from the transport network within Surrey. The aim of the strategy is to reduce carbon dioxide emissions from transport in Surrey and manage climate risks posed to transport infrastructure and transport services.

Surrey future Congestion Programme and the Congestion strategy

> What is Surrey Future? Surrey Future brings together Surrey's local authorities and business leaders to agree the investment priorities to support the county's economy. Surrey Future builds on existing and emerging local plans to manage planned growth sustainably, attract new businesses to the county and retain existing ones. The initiative supports the aims of the local enterprise partnerships covering Surrey: Enterprise M3 and Coast to Capital. More information at: http://www.surreycc.gov.uk/surreyfuture

The county council produced a Congestion Strategy as part of LTP3 in 2011. Building on from this Surrey Future has developed a Congestion Programme which sets out the strategic programme for managing traffic congestion on Surrey's road network in support of economic competitiveness and growth. It has been prepared in partnership with Surrey's districts and boroughs, and other stakeholders such as Surrey Connects representing business interests, to provide a shared and agreed vision for managing congestion on Surrey's road network. The programme builds on the Congestion Strategy in the Surrey Transport Plan (LTP3).

The Congestion Programme summarises the main transport challenges in Surrey Heath Borough as:

- Congestion in Camberley town centres, along the M3 corridor junction 2-4a, the A325 in Frimley, the A331 BVR corridor and the A319 in Chobham
- Constraints on traffic movements across the borough due to the boroughs long southern boundary with the river which is only crossed at 4 locations
- Poor bus services in rural areas.

The Congestion Programme highlights the huge economic impact of congestion on the economy; congestion on Surrey's road network has been calculated to cost the UK economy £550 million every year. Strategic congestion hotspots are identified and a programme of interventions is proposed for 2015-2019. The Congestion Programme identifies congestion bottlenecks within Surrey Heath Borough, including:

- A30 Blackwater-Bagshot

- A331 Corridor
- A325 Corridor
- A319-A3046 Chobham
- A322 Corridor
- B311 Red Road
- B3015 The Maultway

Where known, schemes addressing the identified congestion hotspots are detailed in the Forward Programme (Annex) accompanying this strategy.

Surrey Cycling Strategy

Surrey's Cycling Strategy was published in March 2014. The strategy covers cycling as a means of transport, leisure and as a sport, setting out our aim for cycling in Surrey for the period to 2026. One of the aims of the Cycling Strategy is to develop Local Cycling Plans for each district and borough as appropriate. These will be incorporated into future versions of each of the district/borough Local Transport Strategy and Forward Programmes.

> "...a true Olympic legacy would see every child in Surrey learning to ride a bike, and being able to do cycle safely to school. It would mean that many more of our residents cycle for transport and leisure, reducing congestion and reliance on cars and reaping the considerable health and economic benefits this brings. And it would mean that people without access to a car can travel safely and affordably around the county...." (Surrey Cycling Strategy Consultation Draft)

Surrey Freight Strategy

Surrey's Freight Strategy is another of the strategies in the Surrey Transport Plan. Due to the location of Surrey; bordering London, bordering counties with a European link like Kent and being in close proximity to Gatwick and Heathrow airports a large number Heavy Goods Vehicles (HGVs) pass through the county's roads. The relative affluence of the county also means that there is a demand from the residents for goods to be delivered also increasing the amount of HGVs within the county. The aim of the freight strategy is to assist the effective transportation of goods whilst minimising the impact of HGVs on the environment and residents.

Surrey Parking Strategy

The Parking Strategy has been developed by the county council. As a county Surrey has an above average level of car ownership coupled with severe congestion in several areas. This can be influenced by parking provisions and regulations.

Guidance for the integration of Electric Vehicle charging points had been established for new developments.

Surrey County Council are currently developing an Electric Vehicle Strategy which is expected to be published 2015. This strategy will outline how Surrey County Council and the 11 boroughs and districts will improve on electric vehicle infrastructure to promote and increase the use of more energy efficient modes of transport such as electrically powered private motor vehicles. It is expected that guidance on the integration of infrastructure for electric vehicles will change to reflect advances in technologies for fast and rapid charging points.

Surrey Passenger Transport Strategy

Surrey's Passenger Transport Strategy: Part 1- Local Bus was published in April 2011. The strategy covers local buses as a means of transport setting out the aims for bus travel in Surrey for the period to 2026. The main aim the Strategy is to deliver and maintain an effective, safe and sustainable bus network in Surrey.

Part 2- Information aims to promote a shift towards sustainable modes of travel, promote equality of opportunity by publicising passenger transport options, improve passenger transport information and improve confidence in passenger transport reliability.

Surrey County Council is currently developing a Local Transport Review (LTR), which subject to public consultation until early 2015. In Surrey 29 million passenger journeys are made on bus services each year, an average of 80,000 trips every day. Surrey provides approximately 200 bus services throughout the county, which are run by 22 different operators. Whilst some services are run commercially, i.e. are not funded by SCC, over half of all passenger transport services receive support funding from SCC.

Surrey's current budgeted spend on transport revision is £19.39 million (2014/15), of which £8.95 million is spent on local bus contracts, and £8.68 million on concessionary fares. The purpose of the LTR is to integrate services, find and optimise efficiencies and make revenue savings while maintaining the services that residents rely on most, services that get people to work, hospitals, schools and shops. Proposals for reviewing the passenger transport services are as follows:

- Renegotiate bus operator contracts – Renegotiate existing payments, inflation uplift and length of contracts
- Review all bus routes in Surrey - Optimise the efficiently of local bus services, support areas of economic growth and prioritise financial support for key services.
- Make use of developer contributions - Make wider use of developer contributions to support bus service improvements.
- Market research - To undertake a joint market study with Surrey University to increase patronage and profitability.
- Community alternative - Work with Parish Councils to develop a community-based alternative to more rural bus services.

Where services are not deemed viable, SCC will look to deliver alternate methods of transport to maintain accessibility where this is necessary. Community transport such as Dial-a-Ride, community bus schemes, demand responsive bus services and voluntary car schemes can be a viable alternative to bus services, especially in rural areas.

The county council is holding a public consultation on the Local Transport Review until January 2015 to engage with businesses and the public.

Surrey Travel Planning Strategy

The Travel Planning Strategy has the aim of providing travel-planning measures to schools and workplaces within Surrey to help them to make informed travel choices. The objectives set out to achieve the aims are based on the two aforementioned areas; schools and workplaces.

Surrey Rail Strategy

Surrey Future has also produced the Surrey Rail Strategy. The objective for the strategy was to ensure that the county has the rail infrastructure needed for sustainable economic growth and identify proposals that partners in Surrey can plan and deliver. These proposals have been identified in consultation with the rail industry, business, boroughs and districts and other partners.

Key issues and proposals identified in the Rail Strategy include:

- Enhancing capacity on the South West Main Line and North Downs Line.
- Access to and from stations is included under the scope of this strategy whilst proposals to increase rail capacity across Surrey will be considered specifically under the Surrey Future Rail Strategy.
- In addition to the schemes identified within the Forward Programme, the county council will also support smarter travel initiatives, such as improved provision of information, travel planning and marketing methods designed to encourage more sustainable travel behaviour.
- The Surrey Rail Strategy identifies adequacy issues on the rail network within Surrey Heath, specifically poor access to London from the Blackwater Valley area (e.g. Camberley and Frimley) due to their location off the South West Main Line. Journey times generally exceed 1 hour.
- Re-instatement of the Sturt Road Chord or an interchange station at Frimley was considered in the Surrey Rail Strategy as long term improvements (2019 onwards). Sturt Road Chord was identified as a potential option in the rail strategy. An interchange at Frimley Station was rejected due to the negative impacts on existing rail users.

Surface Access to Airports Study

Surrey Future is proactively engaging with the Airports Commission (also known as the Davies Commission) on future airport capacity. The Congestion Programme and Rail Strategy highlight surface access to airports as an issue. A further study was then undertaken (Surrey Rail Strategy: Surface Access to Airports Study) to consider transport infrastructure improvements needed to address both existing surface access issues and potential improvements needed in the event of additional runway capacity at Heathrow and/or Gatwick. The study highlights the overall key issues and challenges for surface access to Heathrow and Gatwick Airports from Surrey and identifies development objectives for surface access in Surrey.

Schools Place Programme

Surrey County Council's Schools Place Programme aims to meet the future need for additional school places across the county. More than 12,000 primary places are required between 2014 and 2018, while an additional 5,000 secondary places are being planned by 2018. It is essential to plan for this growth in school places in terms of transport in order to mitigate the impacts. The transport strategy aims to maximise the choices available to children as to how they travel and to minimise the impact of school growth on local residents and businesses.

The Transport Strategy for Surrey's Schools Place Programme is currently in draft, and is at public consultation stage at the time of producing this strategy; it is intended to be adopted by the county council under the Surrey Transport Plan late in 2015.

Maintenance

Surrey County Council has identified the worst 10% of its network and is currently delivering an innovative 5 year maintenance programme, Operation Horizon, which will ensure the Surrey network is fit for purpose.

In February 2013, SCC Cabinet approved the ambitious maintenance programme. Operation Horizon will deliver a programme with total investment of nearly £120m to replace the worst 500km (10%) of Surrey roads. The five year Horizon project (year one) commenced in April 2013.

Public Health

Surrey County Council is responsible for a number of public health functions. The Public Health service works across a number of key areas of health improvement and protection for the population of Surrey. Public health provides expert advice and evidence and has been consulted in the preparation of this strategy. Transport related aspects of health which have been considered in Surrey Heath are:-

- Air Quality - Most air pollution in Surrey is caused by motorised transport. Air pollution has an impact on health in many ways. Long term exposure to particulate air pollution affects mortality from cardiovascular and respiratory conditions, including lung cancer.
- Road Safety - In 2012, 49.2 residents in Surrey per 100,000 populations (crude rate) were killed or seriously injured on the roads. Unintentional injury is the leading cause of death for 0 -14 year old children in Surrey, almost half of these are due to transport injury.
- Physical Activity - Increasing opportunities for walking and cycling as a means of transport is one way to increase overall levels of physical activity and therefore increasing opportunities to elicit the health benefits associated to being physically active.
- Obesity - Active travel has a significant impact on physical activity, which in turn impacts on the prevalence of obesity and overweight. Over a quarter of Surrey's children are overweight or obese by the time they are 10-11 years old. More than 1 in 5 adults are obese.
- Community Cohesion - Transport has the ability to divide and isolate communities, as well as bring them together. Increasing the number of people of all ages who are out on the streets, through active travel makes public spaces seem more welcoming and providing opportunities for social interaction and provides an opportunity for everyone to participate in and enjoy the outdoor environment .
- Noise pollution - can adversely affect mental health, the cardiovascular system and school performance in children.

Safety

One of the aims of the Surrey Transport Plan is to improve road safety and the security of the travelling public in Surrey. In order to achieve this objective, Surrey County Council works with Surrey Police through the Drive SMART partnership with the aim to reduce road casualties, tackle anti-social driving and make the county's roads safer for everyone. The partnership produced a Road Safety and Anti-Social Driving Strategy in 2011 which includes a number of measures or interventions by which Drive SMART seek to address road safety issues in Surrey. These include

road safety engineering, police enforcement, driver rehabilitation courses, school speed watch and school crossing patrols, as well as school and workplace travel planning.

The county council adopted a Road Safety Outside Schools policy in June 2014, which recognises that safety of children outside schools is one of the most frequently expressed road safety concerns, identifying the high level of vehicle, pedestrian and cyclist activity outside schools at drop-off and pick-up times as a cause of congestion and provides guidance on how the county council will respond to complaints. The guidance is intended to help the council remove barriers to safe walking and cycling to school, promoting active travel and helping address congestion.

Rights of Way Improvement Plan

SCC have produced a Rights of Way Improvement Plan intended to be the main way in which the County Council identifies the changes that need to be made to the local rights of way network.

The Plan, which has been revised in 2014, forms part of the Surrey Transport Plan and is available on the SCC website.

It is important to stress that, whilst it contains a plan of action, the Rights of Way Improvement Plan is not intended to provide detailed solutions to access problems in every locality, but to take a strategic approach to managing public access.

Surrey Heath Borough Council Core Strategy (Local Plan) (Surrey Heath Borough Council)

Surrey Heath Borough Council Core Strategy (Local Plan): The SHBC Core Strategy was adopted in Feb 2012. SHBC adopted their Core Strategy to provide the overarching strategy for planning in Surrey Heath in the period up to 2028. It sets out the SHBC's approach on key local issues such as development of a new community at the Princess Royal Barracks at Deepcut, the protection of the heath land which is of European importance for biodiversity and rare species of birds, plants and animals that it supports and aspirations for Camberley Town Centre.

Within the SHBC Core Strategy Core Policies and Development Management Policies have been laid out. Core Policies set out what the borough will aim to achieve in the Core Strategy period up to 2028, topics include: sustainable development, housing development, Princess Royal Barracks – Deepcut, housing mix and type and employment and local economy. Development Management Policies address how SHBC will manage existing and new developments that fall within specific boundaries such as traffic management and highway safety, development and flood risk and the protection of green spaces and recreational facilities.

Camberley Town Centre Area Action Plan (Surrey Heath Borough Council)

The Camberley Town Centre Area Action Plan (CTCAAP) forms part of the Local Plan for Surrey Heath and will set out policies relating to the future development of Camberley Town Centre.

The Area Action Plan looks at: A vision of how Camberley Town Centre should evolve, the scale and location of new shopping facilities, managing the town centre to enable the full range of shopping facilities to be provided, the range of leisure, cultural and community facilities in the town centre, the level and location of employment uses such as offices in the town centre, the level and location of housing in the town centre, improving transportation to and around the town centre, and enhancing and protecting the environmental design quality of the town centre.

Highways Agency Route Based Strategy: M25 to Solent (A3 and M3)

The M25 to Solent route connects London with Southampton and Portsmouth, running within the counties of Surrey and Hampshire.

The M3 section is 59 miles long and runs, north to south, near the conurbations of Woking and Guildford. It intersects with two other roads of the SRN: M25 (the London Orbital) and M27 (Cadnam to Portsmouth).

The Strategy highlights the current bottlenecks on the M3.The M3 between junction 2 and 3 north and south bound is one of the sections which already suffer congestion, this is closely followed the section of the M3 between junction 3 and 4 southbound. The Strategy raises concerns over the route capacity to cope with the additional pressure from future developments in Surrey Heath, Rushmoor, Spelthorne and Woking which can threaten the economic growth of a significantly wider area.

Network Rail Wessex Route Study

Network Rail's Summary Route Plan for the Wessex Route document sets out the relevant outputs, activity and expenditure at route level to achieve the specified outputs for Control Period 5(CP5). The plan also forecasts the long-term activity and expenditure required to manage and maintain a sustainable network.

The existing CP4 recognises that flat junctions are causing capacity constraints and affecting performance, especially at Woking, limiting train timetable slots, single track sections restricting capacity and platform lengths limiting train length on other areas of the passenger network.

Places in Surrey Heath

The chapter outlines the different areas across Surrey Heath, presenting the key transport network at each location and identifying a number of problems which currently exist in these areas.

The main settlement within Surrey Heath Borough is Camberley, a secondary regional town centre. Significant redevelopment is planned for Camberley Town Centre and is set out in the Camberley Town Centre Area Action Plan (CTCAAP)

Frimley is located south of Camberley and is the next largest settlement in Surrey Heath Borough.

There are also a number of smaller settlements scattered between rural areas, including Bagshot, Bisley, Chobham, Deepcut, Lightwater, Mytchett, West End and Windlesham.

Deepcut is the location of the Princess Royal Barracks, a significant proposed housing development.

The majority of the population live in the urban settlements, with a significant portion population (86,144) live in Camberley/Frimley area.

The Surrey Heath Borough Local Plan sets out visions and objectives of Surrey Heath Borough for the Local Plan period (2012-2028):

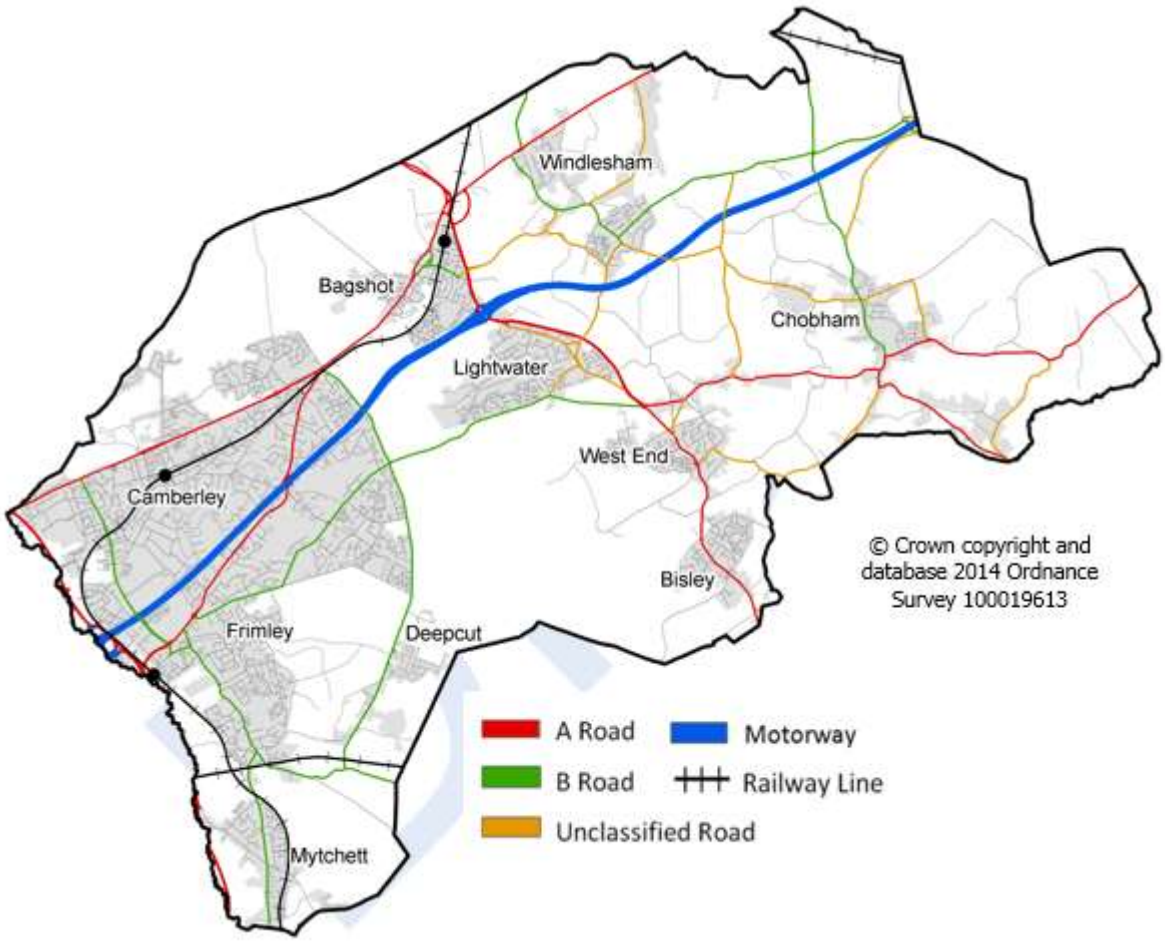
- ‘By 2028 residents will continue to enjoy a prosperous and high quality of life based around sustainable growth and a strong economy...’
- ‘To deliver continuing economic success and prosperity, the regeneration and enhancement of the core employment areas in Camberley and Frimley will be promoted and supported.’
- ‘Camberley town centre will remain the key retail and commercial centre within the Borough and a secondary regional town centre.’

The Camberley Town Centre Area Action Plan (CTCAAP) sets out the vision for Camberley Town Centre to ‘be a thriving centre offering a wide range of shops, excellent leisure facilities, high quality office premises and residential opportunities, and a full range of community services for the local and wider community.

The section below outlines the different places across the borough, presenting the key transport network at each location and identifying a number of problems which currently exist in these areas.

Solutions are stated where these are known, planned or aspired to. Where this has not always been possible, the issues and problems stated will serve to guide future solutions for each area, acting as an evidence base.

Further details, if known, of the schemes described here can be seen in the accompanying Forward Programme, including indicative timeframes for potential start dates and estimated costs and funding sources, where known.



Camberley

Population: 33,571

Located in the west of the borough, Camberley is the largest settlement in Surrey Heath.

Camberley Town Centre is an important local centre for retail and services. Out of the total employees working in the town centre, approximately 53% work in retail, whilst 41% work in offices . Camberley boasts two shopping centres, The Mall and the Atrium, both located in the town centre.

Camberley has been identified as a Secondary Regional Centre. After the 22 Primary Regional Centres, Camberley is ranked 4th (26th out of the top 50 Regional Centres).

Camberley has been identified by Enterprise M3 as a ‘step-up town’, an area planned for significant future growth.

Yorktown and Watchmoor business parks are key employment centres in Camberley. The Surrey Heath Core Strategy identifies Yorktown as the focus of large scale redevelopment.

Collingwood College is a large sixth form college located on the east of Camberley in Old Dean.

The M3 lies immediately south of Camberley and is accessed via junction 4, Frimley, on the M3. The motorway provides good road access to London, the international airports (Heathrow and Gatwick) and the port of Southampton.

The A30, London Road, runs east to west and is a key route to Camberley. The A331, Blackwater Valley Route is another key route into Camberley and provides access from the M3 junction 4. These two roads intersect (along with the A321) to the north west of Camberley at the Meadows

Gyratory, resulting in severe congestion during peak periods. Congestion on the Meadows Gyratory is a key issue on the transport network.

Camberley Railway Station is located on the edge of the town centre and is situated on the Ascot to Guildford Line. Access to London Waterloo is below average, with 1 change required. Rail travel to Heathrow is poor, with most journeys above 2 hours and requiring 3 changes. Blackwater Valley Railway Station is often used by those commuting to Yorktown and Watchmoor business parks and Farnborough (main) Railway Station for direct access to London Waterloo.

Camberley is served by the Blackwater Valley bus routes which provide good services to Frimley, Aldershot, Farnborough, Farnham Yateley and the surrounding areas. Camberley has a key bus station located on Pembroke Broadway just south of the town centre, and north of the railway station.

Continued joint working between Surrey County Council and Surrey Heath Borough Council under the banner of the Camberley Movement Study will ensure the effective delivery of both the Local Plan and the Camberley Town Centre Area Action Plan (CTCAAP). Including the A30/A331/Meadows Gyratory Corridor Improvement.

Current Problems and Issues

- Congestion experienced along the A30 London Road.
- Gaps in bus priority lanes along the A30 London Road.
- Poor parking management along the A30 London Road.
- Limited walking and cycling facilities along the A30 London Road, resulting in community severance.
- Tight left turn for buses from the A30 London Road to the B3411 Frimley Road which is a key bus route (Stagecoach Gold Route 1), resulting in reduced safety and additional congestion.
- Meadows Gyratory experiences congestion during peak periods due to the nature of the roundabout at the junction of 3 major roads and surrounded by significant infrastructure.
- No bus priority measures on the Meadows Gyratory.
- Poor cycling and walking infrastructure on the Meadows Gyratory along key routes, resulting in community severance.
- High speeds and vehicle dominance on the A331 BVR, resulting in community severance.
- Limited cycle facilities along the A331 BVR resulting in community severance and unsafe travel.
- Poor bus facilities along the B3411 Frimley Road, resulting in additional congestion.
- Rat running through Yorktown Industrial Estate.
- Poor cycle and walking access to Yorktown and Watchmoor business parks.
- Poor parking management in Yorktown and Watchmoor business parks.
- Town centre congestion, especially on the High Street.
- Poor public realm in parts of the town centre.
- Limited walking and cycling access to the town centre from key residential and employment centres including Yorktown and Watchmoor business parks.
- Incomplete cycle routes in the town centre.

- Incomplete bus priority routes in the town centre.
- Congestion experienced in the town centre at key junctions and roads.
- Poor signage to car parks, business centres and town centre.
- Poor rail access to other major centres Woking, Guildford, Aldershot, Farnborough and London (Waterloo)
- Poor interchange facilities to other modes of transport from Camberley Railway Station.
- M3 Motorway creates a barrier to movement, resulting in congestion pinch points along the B3411 Frimley Road, A331 BVR and Ravenswood Roundabout.
- Railway line creates a barrier to movement, resulting in congestion pinch points on the B3411 Frimley Road, Park Street and High Street.
- Poor rear servicing access to businesses in areas.
- High reliance on private car due to poor public transport infrastructure.
- A section of the M3 has been declared a AQMA directly south of Camberley.
- M3 noise impacts
- Accidents on the M3 creating a knock on effect, impacting the local road network.
- Park Road junction with the Rugby Club experiences congestion during peak periods, especially on Sunday as a result of rugby and church events coinciding.

Potential Solutions (please see the Forward Programme (Annex) for a more details of the proposed potential solutions, reflecting the SHBC and SCC joint access strategy (CTCAAP)):

- A30/A331/Meadows Gyratory Corridor Improvements
- cycle Improvements to priority routes
- Camberley Town Centre Highway Improvements
- Camberley Town Centre Public Realm Improvements
- Camberley Sustainable Transport Package
- Business Centre Access Improvements
- M3 Approach Improvements
- Camberley Railway Station Improvements
- Blackwater Valley Area Bus Partnership
- Blackwater Valley Better Connectivity
- Re-introduction of the Sturt Railway Chord
- Rear Servicing Access improvements
- Pedestrian refuge on Park Road

Frimley

> Population: 13,067

Situated in the west of the Borough, Frimley is located just south of Camberley and the M3 Motorway, and is the second largest settlement in Surrey Heath.

Frimley High Street is the main centre in Frimley, housing a number of restaurants, offices, public houses and shops, including a local supermarket.

The village has a number of business parks, including Lyon Way Industrial Estate, Frimley Business Park and Frimley Square, housing a number of international businesses.

Frimley is also the location of Frimley Park Hospital, a major sub-regional health facility with an Accident and Emergency department (A&E). This hospital is one of the largest employers in the borough, providing around 4,000 jobs.

The M3 lies immediately north of Frimley and is accessed via junction 4 on the M3. The motorway provides good road access to London, the international airports (Heathrow and Gatwick) and the port of Southampton.

The A331 Blackwater Valley Route (BVR) running north south in the west of Frimley is a strategic road connecting the Frimley/Camberley area to Farnborough and Aldershot in the south. The A325 is a key route passing east west through the area, providing access to Frimley Park Hospital, the High Street and the A331 BVR. The Toshiba Roundabout and Hospital Roundabout are located on the A325 and are key junctions in the area. The Toshiba Roundabout provides access to the B3411 Frimley road, which runs north, crossing the M3 and up through Camberley to the A30 London Road.

Frimley is served by Frimley Railway Station, located on the Ascot to Guildford Line. Access to London Waterloo is below average, with 1 change required. Rail travel to Heathrow is poor, with most journeys above 2 hours and requiring 3 changes. Residents drive out of the Borough to Farnborough (main) Railway Station for better, direct access to London Waterloo.

Frimley is served by the Blackwater Valley bus routes which provide good services to Camberley, Aldershot, Farnborough, Farnham Yateley and the surrounding areas.

Current Problems and Issues:

- High traffic resulting in congestion on the A325 Portsmouth Road
- ‘Toshiba’ Roundabout over capacity resulting in congestion.
- Limited pedestrian movements around the ‘Toshiba’ Roundabout
- Frimley Hospital Roundabout experiences a high traffic volume at peak period resulting in congestion.
- Poor pedestrian and cyclist movement around Frimley Hospital Roundabout, causing community severance and inadequate safety.
- Occasional congestion at peak periods on the A325 which impacts on access to the hospital for emergency services.
- High volume and traffic speeds result in community severance on the A325
- Frimley High Street experiences congestion, resulting in community severance.
- The M3 is a barrier to movement creating congestion pinch points on the 4 roads that allow travel across the M3. A331 BVR, B3411 Frimley Road, Ravenswood Roundabout and the B3015 The Maultway.
- The A331 BVR experiences heavy traffic flows as it is the main access road to the M3 Junction 4. Peak period congestion is experienced on the A331 BVR at the congestion pinch point of the M3 Junction 4.

- As a result of the congestion on the A331 BVR, knock on effects to the M3 Motorway can occur.
- Ravenswood Roundabout experiences occasional congestion at peak periods.
- Peak period congestion on the B3411 Frimley Road results in unreliable journey times.
- As a result of congestion on the B3411, bus routes including the Stagecoach Gold Route 1 experience unreliable journey times. This is exacerbated due to no bus priority measures along the B3411 Frimley Road.
- Poor access to off street parking, causing a knock on effect onto the local roads, resulting in congestion.
- The A331 BVR is a barrier to movements, with only 2 crossing points in Frimley, resulting in congestion pinch points, Frimley High Street and the A325 Farnborough Road. In addition to this, the railway runs parallel to the A331, a further barrier to movement.
- Frimley's Rail services have poor access to London and other key settlements in the borough including Woking and Guildford.
- High reliance on private car due to poor public transport infrastructure.

Potential Solutions (Please see the Forward Programme (Annex) for a more details of the proposed potential solutions.):

- Frimley Transport Network Improvements Package
- Blackwater Valley Area Bus Partnership
- Blackwater Valley Better Connectivity
- Widening of the A325 between the 'Toshiba' Roundabout and the Frimley Hospital Roundabout to provide an additional east bound lane and off road cycle and pedestrian facilities.
- M3 Approach Improvements (Junction 4 Frimley)

Frimley Green

> Population: 3,173

Frimley Green is situated in the south west Surrey Heath, directly south of Frimley.

Frimley Green is mostly residential with a small village centre; the majority of local shops are located along the B3411 Frimley Green Road. A local supermarket is located on Wharf Road (just off the B3411). The closest village centre for Frimley Green residents is Frimley, or Camberley.

The B3411 Frimley Green Road runs north south through the centre of the settlement and is the main access road for Frimley Green, the majority of Frimley Greens development is clustered around this road. The B3411 Provides access to Frimley and Camberley to the north and Mytchett to the south.

The B3012 Guildford Road runs east west, connecting the south of Frimley Green to Deepcut and Brookwood - Woking Borough.

Frimley Green has no railway station, with the closest railway stations being Frimley, Farnborough (Main and North), Camberley, Blackwater and Brookwood. Many of the residents in the Surrey

Heath Borough drive out to Brookwood Railway Station to catch a direct rail service to London Waterloo.

Bus services in Frimley Green are considered to be reasonable, being served by the Blackwater Valley bus routes, providing access to Camberley, Frimley, Aldershot, Farnborough, Farnham, Yateley and the surrounding areas.

Current Problems and Issues:

- The A331 BVR, railway line and water bodies in the west of the settlement are a barrier to movement, with no access across directly from Frimley Green.
- The North Downs Line is a barrier to movement in the south of the Frimley Green, with 2 roads allowing access south, B3012 Guildford Road heading east and the B3411 Sturt Road heading south.
- Localised congestion on the B3411and B3012.
- Frimley Green junction with Henley Drive experiences congestion due to high traffic flows and limited junction capacity.
- The B3411 can experience congestion at peak periods, resulting in unreliable journey times.
- Poor signage along Frimley Green Road in areas.
- Poor pedestrian and cycle routes between Frimley and Farnborough.

Potential Solutions (please see the Forward Programme (Annex) for a more details of the proposed potential solutions):

- Frimley Transport Network Improvements (including highway improvements to Frimley Green junction with Henley Drive)
- Deepcut (Royal Princess Barracks) Highways Mitigation Package
- Blackwater Valley Area Bus Partnership
- Blackwater Valley Better Connectivity
- Improved signage at the Frimley Green Road/Wharf Road roundabout.
- To improve the path between Farnborough North and Frimley Green (The Hatches)

Mytchett

> Population: 4,624

Mytchett is situated in the south west of the Borough, directly south of Frimley Green. Mytchett is served by a small range of local shops including a supermarket.

Mostly residential, Mytchett doesn’t have a village centre. The majority of the local shops are located along the B3411 Mytchett Road.

The B3411 runs from north to south through the centre of Mytchett and provides access to Frimley Green, Frimley and Camberley to the north and Ash Vale and Aldershot to the south.

At the centre of Mytchett, two roundabouts create a junction that connects Mytchett Place Road and Coleford Bridge Road to the B3411 Mytchett Road. Mytchett Bridge Road runs to the east, linking the village to Brookwood in Woking. Coleford Bridge Road runs to the north west to the A331 BVR, providing access onto the A331 BVR and into Farnborough.

Mytchett does not have a railway station, the closest railway stations are Frimley, North Camp, Ash Vale, Farnborough (Main and North) and Brookwood (Woking Borough).

Bus services in Mytchett are considered reasonable, being served by the Blackwater Valley bus routes, providing access to Camberley, Frimley, Aldershot, Farnborough, Farnham Yateley and the surrounding areas.

Current Problems and Issues:

- The railway line and Basingstoke Canal to the east are barriers to movement, with only two crossing points, Mytchett Place Road and Mytchett Lane Road.
- The two roundabout junctions of Mytchett Road, Coleford Bridge Road and Mytchett Place Road can experience congestion during peak periods.
- The A331 BVR and Blackwater River are barriers to movement to the west of the settlement, with only 1 crossing point on Coleford Bridge Road, creating a congestion pinch point.
- Hamesmoor Road junction with Coleford Bridge Road experiences congestion due to high traffic volumes at peak times.
- Limited access to the A331 BVR

Potential Solutions (please see the Forward Programme (Annex) for a more details of the proposed potential solutions):

- Blackwater Valley Area Bus Partnership
- Blackwater Valley Better Connectivity
- B3448 Coleford Bridge Road/Hamesmoor Road Junction Improvements
- Cycle route Improvements along the Basingstoke Canal (awaiting detailed information)
- Mytchett Road/Mytchett Lake Road junction road safety improvements

Deepcut

Population: 2,477

Deepcut is situated in the west of the borough, to the east of Frimley/Frimley Green. The settlement was developed to serve the military establishment.

Mainly residential, Deepcut has a local supermarket, and limited range of shops at the local shopping parade, which requires environmental improvements.

The Ministry of Defence (MoD) is a major land owner in Deepcut. The Princess Royal Barracks, part of the MoD’s training estate in Deepcut has been identified for disposal. Plans for a redevelopment have been proposed including the delivery of 1,200 new dwellings.

The B3015 Deepcut Bridge Road, is a key north south road connecting Deepcut to the Camberley/Frimley area to the north, the B3012 Guildford Road in the south. The B3012 Guildford Road, runs east west in south Deepcut and provides access to Frimley Green in the west and Brookwood (Woking Borough) to the east.

Deepcut does not have a railway station, although the North Downs Line passes just south of Deepcut. The closest railway stations for Deepcut residents are Brookwood, Farnborough (Main and North) and Frimley.

Deepcut is served by the Blackwater Valley bus routes, providing access to Camberley, Frimley, and Woking Borough.

Current Problems and Issues

- Basingstoke Canal is a barrier to movement in the south of the borough, with only 1 crossing point on the B3015 Deepcut Bridge Road.
- Transport network and infrastructure is not sufficient to support proposed developments.
- Limited bus infrastructure and routes
- Localised congestion on the B3015 Deepcut Bridge Road/Lake Road junction (roundabout)
- Through traffic movement restricted by on street parking and traffic calming measures.
- The PRB redevelopment is expected to increase congestion in Deepcut significantly. Junctions already experiencing peak period congestion are expected to worsen significantly, requiring significant new infrastructure to mitigate the impacts of the development.

Secured Transport Mitigation (please see the Forward Programme (Annex) for secured transport mitigation measures):

- Deepcut (Royal Princess Barracks) Highways Package
    - Surrey County Council as a highway authority had considered the Transport Assessment for the development proposals and has concluded the following transport mitigation as set out in the Forward Programme.
    - The transport mitigation as set out in the Forward Programme is to be included in the legal agreement, subject to the completion of these works and as such, the development will not adversely impact on the safe and efficient operation of the highway.

Bisley

> Population: 3,965

Bisley is situated in the south east of Surrey Heath, close to the boundary with Woking and Guildford boroughs.

Bisley has a small range of local shops, the majority of which are located along the A322 Guildford Road. Bisley does not have a village centre.

There are a number of small local businesses with Bisley, scattered around the residential area.

Bisley Shooting Ground is located to the south west of Bisley, and is a large land owner in the area. Bisley is the home of HM Coldingly Prison, a low security prison with a capacity of over 500 inmates.

Bisley falls within the Green Belt and therefore has limited capacity for development, with the majority of development being focused on redevelopment of existing sites.

The risk of flooding from the Mill Bourne and The Bourne is a problem in parts of Bisley.

The A322, Guildford Road, is a key north south road through Bisley, providing access from West End, Lightwater and the M3 junction 3 to the north and Brookwood, Woking and Guildford to the south.

Queens Road, just off the A322 allows access to Bisley Shooting Ground and south to Brookwood and Pirbright.

Bisley does not have a railway station, with the majority of the settlements residents travelling to Brookwood Railway Station for rail access.

Bus services in Bisley are provided by the Woking bus routes, with services to the eastern settlements of Surrey Heath, Woking (including Brookwood Railway Station) and Guildford.

Current Problems and Issues:

- Inadequate street lighting.
- Peak period congestion at the A322 Guildford Road junction with Queens Road.
- Limited bus infrastructure and routes.
- Movement between Bisley and Brookwood is insufficient along the A322.
- potential redevelopment at Brookwood will impact the local road network in Bisley, resulting in increased congestion.
- Poor cycle links between Bisley and Brookwood.

Potential Solutions (please see the Forward Programme (Annex) for a more details of the proposed potential solutions):

- A322 Street Lighting Improvements
- New Bridge (over The Bourne River) – A322 Guildofrd Road Maintenance Improvements
- Surrey County Council acknowledges that in the more rural areas of Surrey Heath, not all current and future problems and issues on the transport network have been addressed. If planned development takes place current issues such as congestion and rat-running would worsen and new issues may develop. To understand what and where these transport issues are, SCC, working in partnership with Surrey Heath Borough Council, will look to assess the transport network to identify potential issues.
- SCC will look to carry out feasibility studies on the local highway network. The studies will focus on the rural areas of Windlesham, Bagshot, Lightwater, Chobham, West End and Bisley. The purpose of the studies will be to identify existing transport issues and develop a range of different solutions to mitigate the identified transport issues. The feasibility studies will be subject to available funding via the Local Area Committees Integrated Transport Scheme allocation, prioritisation and funding mechanism.

Bagshot

Population: 5,592

Bagshot is situated in the north of the Borough, at the midpoint between the east and west boundaries, putting its location just north of the M3 Junction 3.

Bagshot is a very old village, parts of which still remain. Bagshot is the most self sustainable out of the rural settlements, boasting reasonable infrastructure including a supermarket and a good range of local shops, mainly located around the village centre on the High Street.

The main business area in Bagshot is Tanners Yard and the Deans, located on Bridge Road, just off the A30 London Road.

The A322, Bracknell Road, is a key road passing north south to the west of Bagshot. The A322 links the M3 (south) and the M4 (north), and is a key route for commuters. The A322 also provides Bagshot resident's access to Bracknell, Wokingham and Reading to the north and Brookwood, Woking, Lightwater, West End and Bisley to the south).

Running (south west to north east) through the centre of Bagshot, the A30, London Road, is a key road linking Bagshot to Camberley and the Blackwater Valley Area to the south, though also connects Bagshot to Sunningdale in the north.

The M3 is a key motorway in the county, and is a strategic route to London. Passing just south of the settlement, Junction 3 of the M3 connects Bagshot to the strategic road network.

New Road connects to the A322 and runs east linking Windlesham to Bagshot.

Bagshot Railway Station is located in north Bagshot and is situated on the Ascot to Guildford line. It can be reached by road from Station Road, via the A30 London Road. Access to London Waterloo is below average, with 1 change required. Rail travel to Heathrow is poor, with journeys above 2 hours and requiring 3 changes.

Bagshot is served by the Blackwater Valley bus routes, providing access to Camberley, Guildford, Woking, Knaphill and local settlements within Surrey Heath Borough.

Current Problems and Issues

- The A322 is a barrier to movement to the east of the settlement, with only 2 crossing points, the A30 London Road and the B3029 Guildford Road.
- The M3 is a barrier to movement to the south of the settlement, with only 1 crossing point on the A322.
- A30 London road experiences congestion during peak periods.
- The A30 London Road junction with A322 Bracknell Road is a junction of two strategic roads, and can experience congestion due to high traffic volumes.
- Poor services to London and other key destinations including Woking and Guildford via rail resulting in long journey times.
- Peak period congestion experiences on the B3029 High Street.
- Poor rear servicing access via Half Moon Street.
- The A322 experiences congestion during peak periods, especially towards Bracknell, resulting in increased journey times.
- The M3 Junction 3 with the A322 experiences congestion which can have a knock on effect with the local roads.
- Community severance is experienced from the A322 and the M3 Motorway.

Potential Solutions (please see the Forward Programme (Annex) for a more details of the proposed potential solutions):

- Improve rear service access to the land at the rear of Half Moon Street
- M3 Approach Improvements (Junction 3 Bagshot)
- Traffic congestion mitigation measures on the A30 London Road in Bagshot
- Pedestrian crossing facilities along a key walking route crossing over the A322 between Windlesham and Bagshot.

- Surrey County Council acknowledges that in the more rural areas of Surrey Heath, not all current and future problems and issues on the transport network have been addressed. If planned development takes place current issues such as congestion and rat-running would worsen and new issues may develop. To understand what and where these transport issues are, SCC, working in partnership with Surrey Heath Borough Council, will look to assess the transport network to identify potential issues.
- SCC will look to carry out feasibility studies on the local highway network. The studies will focus on the rural areas of Windlesham, Bagshot, Lightwater, Chobham, West End and Bisley. The purpose of the studies will be to identify existing transport issues and develop a range of different solutions to mitigate the identified transport issues. The feasibility studies will be subject to available funding via the Local Area Committees Integrated Transport Scheme allocation, prioritisation and funding mechanism.

Lightwater

Population: 6,791

Lightwater is situated in the centre of the borough, just south of the M3 Junction 3 and Bagshot.

Originally a farming village, Lightwater is a Victorian settlement, though very little of the original character remains.

Local facilities include a supermarket, post office, primary school and a number of local shops. The majority of Lightwater's facilities are located down Guildford Road. Lightwater is also boasts Lightwater Leisure Centre and Lightwater Country Park located off The Avenue in the north of the settlement.

Part of Lightwater is at risk of flooding caused in part by surface water runoff from the nearby heath land.

The A322 is a key road running north south providing access to Bagshot and the M3 Junction 3 to the north and West End, Brookwood and Woking to the south.

The B311 Red Road is another key access road running east west, connecting Lightwater to the Camberley and Frimley area in the west and Chobham in the east (via the A319 Bagshot Road).

The M3 is a key motorway in the county, and is a strategic route to London. Passing just north of the settlement, Junction 3 of the M3 connects Lightwater to the strategic road network.

Lightwater does not have a railway station. Many residents travel to Brookwood Railway Station for a fast train to London, or Bagshot Railway Station to join the Ascot to Guildford line.

Lightwater is served by the Woking bus routes, with services connecting Lightwater to Woking, Guildford, Slyfield, Camberley and other local settlements.

Current Problems and Issues:

- The M3 to the north is a barrier to movement, with only two crossing points, the A322 and Broadway Road.
- The A322 experiences congestion during peak periods.
- The B311 Red Road experiences congestion at peak periods, resulting increased journey times, community severance and poor road safety for all road users.

- The B311 Red Road/Macdonald Road and the B311 Red Road/Lightwater Road junctions offer poor road safety, especially for vehicles turning right onto Red Road.
- The M3 Junction 3 with the A322 suffers congestion which can have a knock on effect with the local roads in Bagshot and Lightwater.
- Community severance is experienced from the A322 and the M3 Motorway.
- Guildford Road is one of the main roads off the A322 to access Lightwater, experiencing higher traffic volumes resulting in some congestion and community severance.
- Poor lighting in areas resulting in reduced safety.
- Poor off-street parking facilities.
- Poor walking infrastructure between Lightwater and Windlesham.

Potential Solutions (please see the Forward Programme (Annex) for a more details of the proposed potential solutions):

- M3 Approach Improvements (Junction 3 Lightwater)
- B311 Red Road/Lightwater Road junction improvements for right hand turns.
- B311 Red Road/Macdonald Road junction improvements for right hand turns.
- Pedestrian crossing facilities on the B311 Red Road around West End Common.
- Pedestrian crossings facilities on a key walking route on the A322 between Lightwater and Windlesham.
- Lightwater By-Pass road safety improvements
- Surrey County Council acknowledges that in the more rural areas of Surrey Heath, not all current and future problems and issues on the transport network have been addressed. If planned development takes place current issues such as congestion and rat-running would worsen and new issues may develop. To understand what and where these transport issues are, SCC, working in partnership with Surrey Heath Borough Council, will look to assess the transport network to identify potential issues.
- SCC will look to carry out feasibility studies on the local highway network. The studies will focus on the rural areas of Windlesham, Bagshot, Lightwater, Chobham, West End and Bisley. The purpose of the studies will be to identify existing transport issues and develop a range of different solutions to mitigate the identified transport issues. The feasibility studies will be subject to available funding via the Local Area Committees Integrated Transport Scheme allocation, prioritisation and funding mechanism.

West End

> Population: 4,693

West End is situated around the south of the borough, just south of Lightwater and the M3.

West End is home to a limited range of local shops and a small commercial centre on Gosden Road. The majority of local shops are located around the A322 Guildford Road.

Donkey Town is a smaller settlement to the west of West End though geographically is visually read as one.

West End falls within the Green Belt and therefore has restricted capacity for development, with the majority of development being focused on the redevelopment of existing sites.

The risk of flooding from the Mill Bourne and The Bourne is a problem in parts of West End.

The A322 Guildford Road runs north south through the settlement, connecting West End to Lightwater and the M3 Junction 3 to the north and Bisley, Brookwood and Woking to the south.

The A319 Bagshot Road and Beldam Bridge Road link West End to Chobham in the east, from the north and the south of the settlement respectively.

West End does not have a railway station. Many residents travel to Brookwood Railway Station for a fast train to London, or Bagshot Railway Station to join the Ascot to Guildford line.

Bus services in West End are provided by the Woking bus service, with services connecting West End to Woking, Guildford, Slyfield, Camberley and other local settlements.

Current Problems and Issues:

- The Bourne is a barrier to movement to the south of the settlement.
- The A322 Guildford Road, Red Road and A319 Bagshot road junction roundabout can experience congestion during peak periods due to high traffic flow on these main roads.
- Community severance is experienced on the A322 Guildford that runs through the centre of West End, cutting the settlement into two.
- Accident hotspot at the pedestrian crossing outside ‘The Inn @ West End’ on Guildford Road.
- Narrow roads, especially on Lucas Green Road, lead to HGVs and PSV coaches, operated by businesses located in the area, posing safety concerns as large oncoming vehicles meet causing verge damage and dangerous reversing manoeuvres.
- Inadequate bus services and routes to key urban settlements.

Potential Solutions

- A survey and feasibility study has been commissioned to develop traffic control measures on Lucas Green Road.
- Guildford Road Phase 1 - Pedestrian refuge
- Guildford Road Phase 2 – Right hand turn ‘ghost’ lane and carriageway widening if required.
- Surrey County Council acknowledges that in the more rural areas of Surrey Heath, not all current and future problems and issues on the transport network have been addressed. If planned development takes place current issues such as congestion and rat-running would worsen and new issues may develop. To understand what and where these transport issues are, SCC, working in partnership with Surrey Heath Borough Council, will look to assess the transport network to identify potential issues.
- SCC will look to carry out feasibility studies on the local highway network. The studies will focus on the rural areas of Windlesham, Bagshot, Lightwater, Chobham, West End and Bisley. The purpose of the studies will be to identify existing transport issues and develop a range of different solutions to mitigate the identified transport issues. The feasibility studies will be subject to available funding via the Local Area Committees Integrated Transport Scheme allocation, prioritisation and funding mechanism.

Windlesham

Population: 4,392

Located in the north of Surrey Heath, Windlesham is situated to the east of Bagshot, north of the M3.

Windlesham has a limited range of local shops with a small commercial centre located on Updown Hill. A number of gardening centres are located in Windlesham.

Windlesham boasts the Windlesham Golf Club, at Grove End, co-located in Bagshot.

Windlesham falls within the Green Belt and therefore has restricted capacity for development, with the majority of development being focused on redevelopment of existing sites, however some developments on reserve sites are being brought forward.

The A30 London Road passes east west across the north of Windlesham, linking to Bagshot and the Camberley/Frimley area to the west and Sunningdale to the north. The B386 Chertsey Road runs east, connecting Windlesham to Longcross (Runnymede Borough) where a large housing development is proposed on the former DERA site. The M3 is only accessible via the A322, which is connected to Windlesham via New Road to the west or the A30 London Road to the north. Woodlands Lane and Broadway Road allow for movement south across the M3.

Windlesham does not have a railway; the closest railway is Bagshot, though residents travel outside the borough to Sunningdale for more direct rail access to London.

Bus services in Windlesham are served by the Blackwater Valley bus routes, though service is limited. Bus services provide access to Camberley, Staines-upon-Thames, Egham, Frimley (including Frimley Park Hospital) and Bagshot.

Current Problems and Issues:

- The M3 to the south of Windlesham is a barrier to movement.
- The A30 London Road experiences congestion during peak periods.
- Community severance is experiences along the A30 London Road.
- Peak period rat running from A30 London Road to M25.
- Poor walking infrastructure between Windlesham and Lightwater.
- No railway station at Windlesham and poor rail links from Bagshot, residents travel to Sunningdale for good rail access, increasing the demand on the A30 London Road and the B386 Chertsey Road.
- Poor pedestrian movements across Chertsey Road.
- Road users avoid congestion on the A30 London Road by using the B386 Chertsey Road, increasing congestion on Chertsey Road which has a lower maximum capacity.
- Poor HGV management through village.
- Poor off street parking facilities.

Potential Solutions (please see the Forward Programme (Annex) for a more details of the proposed potential solutions):

- M3 Approach Improvements (Junction 3 Windlesham)

- Weight restrictions and rerouting of HGV's on Chertsey Road, Updown Hill, Woodlands Lane and Heath Park Drive.
- Pedestrian crossing on Chertsey Road (outside 'The Sun' public house)
- Improve cycle routes through Windlesham that link with shops, schools and other village facilities.
- Traffic mitigation measures on the A30 London Road through Windlesham.
- Kennel Lane road safety improvements
- Surrey County Council acknowledges that in the more rural areas of Surrey Heath, not all current and future problems and issues on the transport network have been addressed. If planned development takes place current issues such as congestion and rat-running would worsen and new issues may develop. To understand what and where these transport issues are, SCC, working in partnership with Surrey Heath Borough Council, will look to assess the transport network to identify potential issues.
- SCC will look to carry out feasibility studies on the local highway network. The studies will focus on the rural areas of Windlesham, Bagshot, Lightwater, Chobham, West End and Bisley. The purpose of the studies will be to identify existing transport issues and develop a range of different solutions to mitigate the identified transport issues. The feasibility studies will be subject to available funding via the Local Area Committees Integrated Transport Scheme allocation, prioritisation and funding mechanism.

Chobham

Population: 3,144

Chobham is situated in the east of the borough close to the border with Woking Borough.

Chobham is an old settlement and retains many of its old buildings and character.

Chobham has a small range of local shops, centralised around the High Street.

Fairoaks Airport is located to the east of Chobham and is a small low traffic airport.

The risk of flooding from the Mill Bourne and The Bourne is a problem in parts of Chobham. Chobham Common is a National Nature Reserve and a Site of Special Interest.

Chobham falls within the Green Belt and therefore has restrictive capacity for development, with the majority of development being focused on redevelopment of existing sites.

The A3046 runs south east from Chobham and links the settlement to Woking Borough. The A319 passed east west through the centre of the settlement, linking to the A322 to the west and Addlestone and Chertsey (Runnymede Borough) to the east. This is the main route to access the M3 Junction 3 from Chobham.

Windsor Road runs north to Burrowhill and out of the borough. Castle Grove Road is a southern route out of Chobham providing access to Castle Green and Chobham Golf Club.

There is no railway station in Chobham, with the majority of the residents travelling to Woking for direct rail access to London.

Chobham is served by the Woking bus routes, and provides access to Collingwood College, West End, Bisley and Woking.

Current Problems and Issues:

- Chobham is located around major through roads to access the M3 from Woking Borough, as a result the village centre, especially the High Street experiences a high level of congestion.
- Congestion is experienced along the A3046 due to high traffic volume during peak periods.
- The Station Road roundabout junction with the A3046 suffers from severe congestion during peak periods.
- The A319 Chertsey Road and A319 Bagshot Road suffer from congestion during peak periods due to high traffic volumes.
- The Mill Bourne is a barrier to movement, creating a congestion pinch point on the High Street.
- The Bourne is a barrier to movements, resulting in a congestion pinch point on Castle Gove Road.
- Community severance is experienced on the High Street due to congestion.
- Limited bus facilities and routes in Chobham.
- Peak period rat running through village.
- Poor on street parking restrictions and management resulting in additional congestion in the village centre.

Potential Solutions (please see the Forward Programme (Annex) for a more details of the proposed potential solutions):

- A3046 Chobham High Street/Station Road Junction Improvements
- Improve footways and cycle ways linking the villages to Chobham.
- Reroute HGV satellite navigation away from Chobham.
- Pedestrian crossing on Bagshot Road near the school.
- Surrey County Council acknowledges that in the more rural areas of Surrey Heath, not all current and future problems and issues on the transport network have been addressed. If planned development takes place current issues such as congestion and rat-running would worsen and new issues may develop. To understand what and where these transport issues are, SCC, working in partnership with Surrey Heath Borough Council, will look to assess the transport network to identify potential issues.
- SCC will look to carry out feasibility studies on the local highway network. The studies will focus on the rural areas of Windlesham, Bagshot, Lightwater, Chobham, West End and Bisley. The purpose of the studies will be to identify existing transport issues and develop a range of different solutions to mitigate the identified transport issues. The feasibility studies will be subject to available funding via the Local Area Committees Integrated Transport Scheme allocation, prioritisation and funding mechanism.

Rural

The majority of the east of the borough is rural areas, with the exception of the scattered settlements. There are also some rural areas to the south of the borough.

The majority of development in these areas is restricted by the Green Belt.

The A322, A319 and A30 London Road are vital roads for providing access between the rural areas and urban settlements.

The rural areas of Surrey Heath are served by two bus services, the Woking and Blackwater Valley bus routes. Services are limited and the majority of residents living in rural areas rely on the private car for transport.

Current Problems and Issues

- Poor bus facilities and routes, reducing accessibility from rural areas.
- Long distances to urban settlements result in heavy reliance on the private car.

Potential Solutions

- Surrey County Council acknowledges that in the more rural areas of Surrey Heath, not all current and future problems and issues on the transport network have been addressed. If planned development takes place current issues such as congestion and rat-running would worsen and new issues may develop. To understand what and where these transport issues are, SCC, working in partnership with Surrey Heath Borough Council, will look to assess the transport network to identify potential issues.
- SCC will look to carry out feasibility studies on the local highway network. The studies will focus on the rural areas of Windlesham, Bagshot, Lightwater, Chobham, West End and Bisley. The purpose of the studies will be to identify existing transport issues and develop a range of different solutions to mitigate the identified transport issues. The feasibility studies will be subject to available funding via the Local Area Committees Integrated Transport Scheme allocation, prioritisation and funding mechanism.

Forward programme, funding and delivery

This chapter outlines the scope and purpose of the Forward Programme and the potential funding and delivery mechanisms that will be used should schemes from the programme be brought forward for implementation.

To allow provision of an effective, reliable, safe and sustainable transport network in support of economic growth and carbon reduction, a balanced programme of maintenance and integrated transport schemes is required. Additionally, the opportunity to secure alternative funding to the Surrey Transport Plan will be compromised, unless it provides a balanced strategy and programme that contains integrated transport schemes as well as maintenance schemes.

The Forward Programme (see annex)

The Forward Programme has been designed to meet the objectives of the Local Transport Strategy by including schemes to tackle existing problems, as well as schemes designed to mitigate the impact of new development. In this way, the opportunity to attract developer funding can be maximised.

The programme identifies short, medium and long term schemes and packages of measures which seek to deliver improvements in line with the objectives in section 2 and identified problems and issues. These are grouped at various spatial levels:

- Strategic Transport Network
- Settlements
- Strategic Approaches.

The value and status of schemes has been defined as:

- local schemes valued less than £250,000,
- intermediate schemes valued between £250,000 and £2 million;
- major schemes valued at £2 million or above.

The schemes included in the Forward Programme are largely schemes which require funding from different sources and hence will generally be beyond the scope of local committee capital funding. A full schedule of all local improvement schemes can be found in the relevant Local Committee report for the area (usually published for the December of each year).

In general, the schemes are not intended to provide additional network capacity but seek to manage the existing network and provide more sustainable transport choices. The overall mix and scale of schemes is considered necessary to support sustainable economic development and planned growth.

The Forward Programme includes the purposes of each scheme or package of measures, delivery stage, estimated costs, potential funding sources, estimated start dates, scheme status and how it meets the local and strategic objectives.

The delivery stages are defined as:

- Scheme identification – the need for a scheme is identified, initial drawings may have been produced

- identification and assessment of options – outline design of scheme options has been/is being produced
- Preferred route and statutory processes – preliminary design of preferred option
- Detailed design – scheme is designed to allow and instruct construction
- Construction – scheme is fully designed and works have begun on site.

The Forward Programme will be revised on a yearly basis by the Local Committee to take account of available funding and to ensure:

- There are no other more effective alternative options available which address the impacts of growth and policy objectives
- Delivery is on track with necessary feasibility design and design work progressing for priority schemes.

Funding

The estimated cost of schemes identified in the Forward Programme is provided in the annex. The actual future costs will depend on the precise schemes brought forward and each scheme will require a detailed feasibility study.

The availability of funding will also depend on a number of factors. Nevertheless the cost of the schemes identified is reasonably in line with potential funding over the first five years of the strategy. Beyond the first 5 years scheme costs and possible funding sources become increasingly difficult to estimate.

Potential funding for schemes could be a combination of:

- Developer contributions through Section 106 agreements and the Community Infrastructure Levy (CIL)
- Capital funding by the county council (government grants such as the Local Transport Plan (LTP) allocations, Local Sustainable Transport Fund (LSTF) and major schemes funding available from 2015 from designated Local Transport Bodies
- County council capital funding allocated for more strategic schemes by the Surrey Heath Local Committee
- Capital funding by the borough council
- Capital funding from the EM3 Local Enterprise Partnership. A number of schemes have been submitted by the county council to the LEP for consideration in their strategic economic plan.

Funding for the schemes identified/proposed in the strategy is likely to come from a combination of the sources described above. More detailed information on funding can be here.

Delivery

The Local Committee will use its capital programme and local knowledge to drive more local scheme delivery in the short term within the context of local objectives. The Local Committee will also drive priorities in the medium and longer term and consider contributing to more strategic intermediate schemes through funding feasibility work or even contributing to the overall cost, perhaps spread over a number of years.

Major schemes will be funded through bids to the local transport body and overseen by the Surrey Future partnership.

The delivery body will generally be the county council sometimes in partnership with others such as the Borough Council and private bus operators. The delivery body for the rail network and services will be Network Rail and relevant train operators.

Each scheme will require a detailed feasibility study and the actual costs will depend on the precise schemes brought forward. The availability of funding will also depend on a number of factors.

We recognise that schemes in Forward Programme may be subject to the Environmental Impact Assessment (EIA) or the Habitats Regulations process . This will be dependent on scheme specifics. At the appropriate stage of scheme feasibility we would seek to:

- Obtain EIA screening opinion from relevant planning authority
- Clarify the planning position relevant to the scheme
- Consider archaeological impacts of the scheme by consulting English Heritage and the county archaeologist
- Consider any flooding impact of the scheme by consulting the Environment Agency and the lead local flood authority
- Consider an ecology impacts of the scheme by consulting the county ecologist
- Consider any landscape impacts of the scheme, by consulting the county landscape architect

Glossary

Term	Description
Air Quality Management Area (AQMA)	An identified area where current, and likely future, air quality is unlikely to meet the Government's national air quality objectives.
Bus operator	Bus services are operated either commercially (without any external funding) or under contract to Surrey County Council. Some bus services in Mole Valley are operated on behalf of London Buses.
Community Infrastructure Levy (CIL)	The Community Infrastructure Levy is a new levy that local authorities can charge on new developments in their area. The charges are set by the local council based on the size and type of the new development. The money raised from the Community Infrastructure Levy can be used to support development by funding infrastructure that is needed to mitigate the impact of development.
Capital funding	Money spent on the purchase or improvement of fixed assets such as buildings, roads and equipment.
Coast to Capital (C2C)	The Local Enterprise Partnership of which the easternmost Surrey districts and boroughs are part. More information at: http://www.coast2capital.org.uk/
Congestion Programme	The Surrey Future Congestion Programme sets out a strategic programme for managing traffic congestion on Surrey's road network to support economic competitiveness and growth produced in partnership by the Surrey Future Partnership comprising of Surrey's local authorities and business leaders.
Control Period 4/5/6	5 year periods by which Network Rail is regulated by the Office of Rail Regulation CP4: 2009-2014; CP5: 2014-2019; CP6: 2019-2024[3]
Cycling Strategy (2014-2026)	The Surrey Cycling Strategy is a component strategy of the Local Transport Plan
Department for Transport (DfT)	Government department responsible for transport matters in England and those not devolved in Wales, and Northern Ireland.
Enterprise M3	The Local Enterprise Partnership of which the western most Surrey districts and boroughs (including Surrey Heath) are part. More information at: http://www.enterprisem3.org.uk/
Intermediate scheme	Infrastructure scheme estimated to cost between £250,000 and £2 million.

[3] Source: Surrey Rail Strategy

Term	Description
Local Enterprise Partnership (LEP)	A voluntary partnership between local authorities and businesses formed in 2011 by the Department for Business, Innovation and Skills to help determine local economic priorities and lead economic growth and job creation within its local area
Local Sustainable Transport Fund (LSTF)	A total of £560 million was originally made available through the Local Sustainable Transport Fund (LSTF) to enable the department to fund a number of high quality bids. Funding was topped up with a further £40 million to £600 million in 2012 to accommodate approval for a greater number of bids (with local contribution being provided by local authority partners). In total, the Department for Transport awarded funding to 96 packages to 77 authorities to deliver their schemes between 2011 and 2015.
Local Transport Body (LTB)	Local Transport Bodies are voluntary partnerships between Local Authorities (LAs), Local Enterprise Partnerships (LEPs) and other organisations if appropriate that are in charge of the devolved funding for local major transport schemes from the Department of Transport
Local Transport Plan (LTP3)	Under the Transport Acts 2000 and 2008, every local transport authority in the country has to publish a Local Transport Plan (more commonly known as the LTP). The LTP sets out an integrated transport strategy for the area ad outlines proposals for the future.
Minor scheme	Scheme cost is less than £250,000
Major scheme	Infrastructure scheme estimated to cost in excess of £2 million
Office of Rail Regulation	The Office of Rail Regulation is the independent safety and economic regulator for Britain's railways.
Pax/pa	Passengers per Annum
Primary Route Network	The primary route network (PRN) designates roads between places of traffic importance across the UK (known as primary destinations), with the aim of providing easily identifiable routes to access the whole of the country. The PRN consists of motorways, trunk roads and certain other A roads.
Quality Bus Corridor	A strategic bus route that is improved to encourage more people to use buses. This will include measures to make buses more reliable, and more convenient for users and non-users. These measures may include traffic signal priority for buses, high quality passenger facilities, electronic passenger information and strong marketing, together with safe pedestrian routes to the bus stops.

Term	Description
Real time passenger information (RTPI)	Real Time Passenger Information (RTPI) is a system that provides members of the public with live bus arrival information and enables bus operators to manage their daily operation and performance of bus services more effectively. RTPI complements other passenger transport initiatives and schemes to make travelling by bus a reliable and attractive alternative to less sustainable travel. The RTPI system in Surrey operates in partnership with bus operators to provide live bus information on electronic displays at bus stops, and with access to the information through the internet and mobile/smartphone channels.
Section 106 (S106)	Planning obligations are created under Section 106 of the Town and Country Planning Act 1990. They are legally binding obligations that are attached to a piece of land and are registered as local land charges against that piece of land. Planning obligations enable a council to secure contributions to services, infrastructure and amenities in order to support and facilitate a proposed development.
Surrey Future	A partnership overseeing how we can manage planned growth sustainably, both in Surrey and on our borders.
Surrey Rail Strategy	Document prepared by Ove Arup & Partners on behalf of the Surrey Future partnership to consider rail issues and options which could be supported by the council to produce benefits for Surrey.
Surrey Transport Plan	See ‘Local Transport Plan (LTP3)’
Travel SMART	A Surrey initiative designed to provide local people with more travel choices that help cut carbon, costs and increase fitness. The initiative aims to support economic growth.