

Surrey Transport Plan

Spelthorne Local Transport Strategy & Forward Programme



This page is intentionally left blank

Alternative formats

Surrey County Council has actively considered the needs of blind and partially sighted people in accessing this document.

We are happy to give information in either large print or in another language. If you want this service please call us on 03456 009 009.

If you have other needs in this regard please contact Surrey County Council in one of the following ways.

In writing

Surrey County Council
Transport Policy (Room 420)
Environment & Infrastructure Directorate
County Hall
Kingston upon Thames
Surrey KT1 2DN

By phone

03456 009 009 (8am-6pm weekdays)

By email

localtransport.strategiesinfo@surreycc.gov.uk

Surrey Transport Plan

Spelthorne Local Transport Strategy and Forward Programme

September 2014

Contents

1	Introduction	1
2	Objectives and delivery priorities	4
3	The Spelthorne Transport Network.....	8
4	Spelthorne Transport Trends.....	16
5	Future growth and its impact.....	23
6	Related work streams and projects.....	29
7	Places in Spelthorne.....	36
8	Forward Programme, Funding and Delivery	42
	Glossary.....	46
	Forward Programme.....	Annex

Executive Summary

The Surrey Transport Plan is the third Local Transport Plan (LTP)² 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 Spelthorne Local Transport Strategy and Forward Programme form 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 2-3 years whilst the Forward Programme (annex) will be updated yearly.

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. They also provide an evidence base for future funding bids.

The objectives of this strategy are to promote travel by foot and bicycle within the borough, to promote the use of public transport as an alternative to the private car, to manage current and future congestion throughout the borough, and to manage current and future congestion throughout the borough. 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 Spelthorne. 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 Spelthorne 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 Spelthorne Borough Council. Public consultation on the draft strategy took place during May-July 2014. The final version will take on board comments received during consultation and will be considered by the Spelthorne Local Committee and by Surrey County Council's Cabinet to be adopted as part of Surrey's Local Transport Plan (LTP3).

² http://www.surreycc.gov.uk/_data/assets/pdf_file/0010/842698/01-STP-Executive-summary-July-2014.pdf

1 Introduction

- 1.1 This transport strategy and forward programme is part of the [Surrey Transport Plan](#) (LTP3) and supports the 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
- 1.2 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.
- 1.3 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 highway network. Finally, the LTS is a mechanism to respond to and inform Community Infrastructure Levy (CIL) requirements.
- 1.4 The LTS is a 'live document' that it is intended will be updated every two 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.
- 1.5 The LTS sets out the short, medium and long-term approach by which Surrey County Council and Spelthorne Borough Council seek to encourage sustainable travel patterns and manage congestion in the borough.
- 1.6 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.
- 1.7 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

Spelthorne Transport Strategy & Forward programme.

September 2014

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

1.8 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

Structure of Document

1.9 The Spelthorne Borough Local Transport Strategy & Forward Programme is structured as follows:

Chapter 2	Chapter 3	Chapter 4	Chapter 5	Chapter 6	Chapter 7	Chapter 8
• Objectives and delivery priorities	• Spelthorne Transport Network	• Spelthorne Transport Trends	• Future Growth and its Impact	• Related work streams and projects	• Places in Spelthorne	• Forward Programme, Funding and Delivery

1.10 Chapter 2 'Objectives and delivery priorities' outlines the agreed objectives for the strategy, based on any issues on the transport network

1.11 Chapter 3 'Spelthorne Transport Network' describes the key highways, public transport, walking and cycling infrastructure in the Borough and describes overall issues experienced on the transport network.

1.12 Chapter 4 'Spelthorne Transport Trends' outlines the key trends on the Spelthorne transport network.

1.13 Chapter 5 'Future growth and its impact' outlines planned growth in the Borough.

1.14 Chapter 6 'Related work streams and projects' places this transport strategy in a wider context.

1.15 Chapter 7 'Places in Spelthorne' gives descriptions of the local transport networks in the borough's main settlements.

1.16 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.



2 Objectives and delivery priorities

- 2.1 This chapter sets out the objectives of the Spelthorne 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 Surrey County Council Directorate Priorities and the Spelthorne Borough Council Core Strategy and Policies Development Plan. These documents, and their visions and objectives, have been summarised below.

Vision and objectives of the 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

Vision: A leading economy and an attractive environment, with better roads and transport networks.

Theme 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.

Theme 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.

Theme 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.

Theme 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.

Spelthorne Core Strategy and Policies Development Plan

Vision

"...Use of non-car based travel will have increased and contributed to reducing congestion and resulted in improved air quality– which in Spelthorne is primarily traffic related."

Objectives

Objective 15: To ensure development contributes to sustainable transport choices and reduces the need to travel.

September 2014

Objective 21: To encourage development of a sustainable transport system that supports the spatial strategy and provides for the needs of all sections of the community in an environmentally acceptable way and further improve Staines' role as a public transport interchange.

2.2 Based on these visions and objectives⁴ the Spelthorne Local Transport Strategy and Forward programme has the following objectives and delivery priorities:

Spelthorne Local Transport Strategy Objectives

Objective 1

To promote travel by foot and bicycle within the borough:

- Cycle ways- introducing new routes to make a continuous network which connects the areas of Spelthorne together, in particular Staines-Upon-Thames and Ashford.
- Create more attractive, accessible and safe walkways throughout the Borough.
- Promote development which is close to the people it serves, reducing the need for car use.

Objective 2

To promote the use of public transport as an alternative to the private car:

- Improve bus links to Heathrow to make commuters less dependent on cars.
- Seek ways to improve the rail network in Spelthorne.

⁴ This document mainly addresses SCC E&I Directorate priorities 1,2 and 4.

Objective 3**To manage current and future congestion throughout the borough:**

- Improving accessibility and traffic flow at Staines Bridge.
- Reduce congestion in Staines-Upon-Thames town centre
- Manage traffic flows and provide sustainable travel options across the borough

Objective 4**To reduce NO₂ levels where they exceed recommended background levels:**

- Continue to monitor and analyse air pollutant levels in order to fully understand the nature of pollutants, flow and dispersion in the Borough.
- Action to reduce congestion and car use in the borough will contribute to the reduction of NO₂ levels.

2.3 The objectives outlined above have been considered in relation to specific areas across the borough.



3 The Spelthorne Transport Network

- 3.1 The following Chapter aims to give a description of the current transport network within the borough of Spelthorne. 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 the borough.

Surrey and its transport network

- 3.2 The county of Surrey is located within the South East region of Great Britain and contains 11 districts. Surrey has a population of 1.144 million and, with an area of some 1,670 square kilometres and 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.
- 3.3 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 the A3.
- 3.4 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, such as Spelthorne, are relatively well served by bus services.
- 3.5 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.

- 3.6 Spelthorne Borough is situated in the North of Surrey County. It is one of the most densely populated areas of Surrey and on the boundary of Heathrow Airport. The major built up settlements are Staines-upon-Thames, Ashford and Sunbury-on-Thames; smaller settlements are at Stanwell and Shepperton. The area comprises 65% Green Belt and 17%⁵ of the total area is reservoir. The River Thames forms much of the southern Borough boundary.

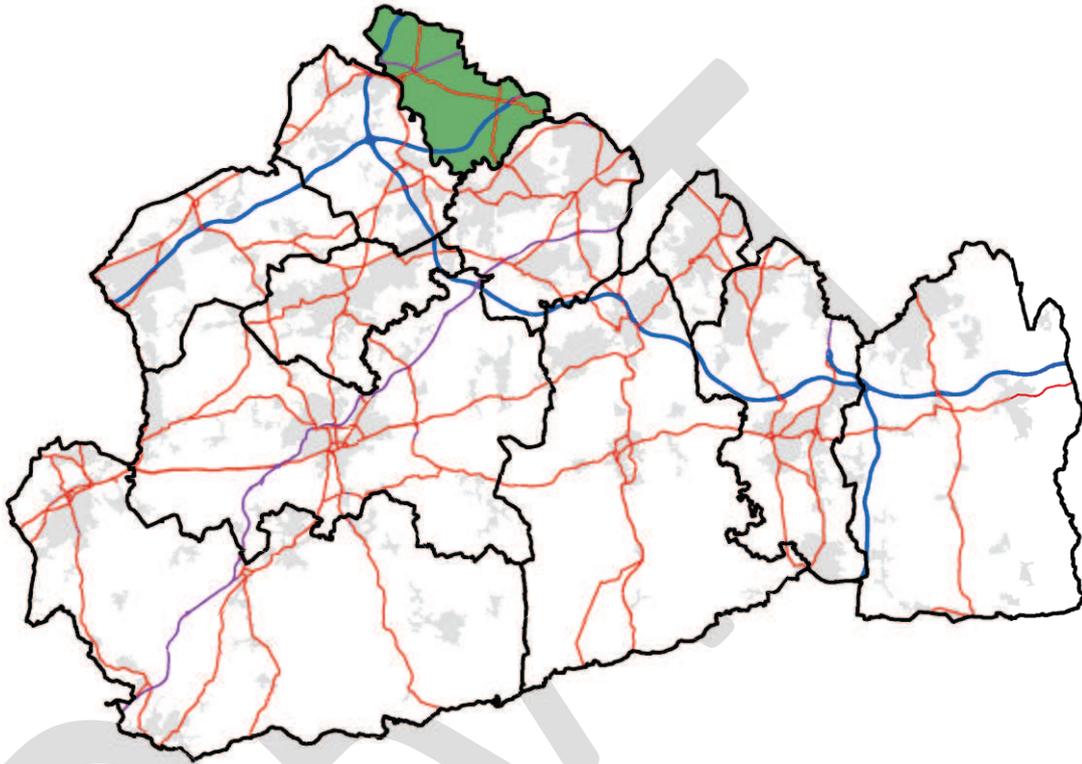


Figure 1 Location of Spelthorne in Surrey

⁵ Spelthorne Borough Council – Annual Monitoring Report 2012

Motorways and Principal Road Network (PRN)

- 3.7 The M25 runs through Spelthorne in the north-west of the Borough and has one junction with the A30. The M3 runs from the north-east to the south-east and has one junction with the A308 and A316 at the start of the motorway. The three other major roads in the borough are the A30 trunk road, the A244 and the A308.
- 3.8 The M3 Motorway begins in Spelthorne at the Sunbury Cross roundabout. At this roundabout the M3, A316 and A308 meet. The A308 connects London with Berkshire and runs through Spelthorne from east to west connecting Sunbury-on-Thames, Ashford and Staines-upon-Thames.
- 3.9 The A244 connects Feltham and Hershaw and crosses through Spelthorne from the north to the south. It passes through Sunbury-on-Thames and Upper Halliford. These roads are illustrated in the map below.



Figure 2 Key Transport Routes and urban areas in Spelthorne Borough.

- 3.10 Heathrow airport is a major generator of traffic and road journeys to and from the airport make up a significant contribution to the traffic on Spelthorne's roads. The airport employs over 72,000 people and has annual passenger numbers in excess of 66 million a year. Travel to and from the airport increases congestion on Spelthorne's roads and there is an increase in traffic during the

airport's peak summer period. Additionally the airport has a significant air freight function with many businesses located on the south side of the airport in Spelthorne which is closest to the Cargo terminal.

3.11 Challenges/issues on the Spelthorne's principle road network include:-

- Traffic related congestion is a major feature of the road transport network in Spelthorne. Traffic related congestion occurs in the AM and PM peak as a result of travel to work patterns in and out of the borough, travel to school both within and out of the borough and commercial/ industrial movements.
- Traffic related congestion occurs particularly in the major town centres of Spelthorne, in particular Staines-upon-Thames town centre and Sunbury Cross.
- Air Quality is proven to be worse around congested areas as stop start driving conditions resulting from congestion can lead to higher roadside pollutant concentrations, causing greater risks to pedestrians and adjacent residential properties. Road Transport is the highest source of Nitrogen Dioxide (NO₂) emissions in the UK and long term exposure can be detrimental to human health. Spelthorne Borough was declared an Air Quality Management Area (AQMA) for Nitrogen Dioxide (NO₂) in 2000.
- Flooding is an issue for parts of the Spelthorne road network and flood resilient interventions are needed in the future.
- Parking is an issue across the borough; a Parking Task Group has been set up by the Local Committee and will make recommendations on parking restrictions within Spelthorne.



Spelthorne Transport Strategy & Forward programme.

September 2014

Bus Provision

3.12 The bus services within the borough are run by both Transport for London (TfL) and external operators subsidised by Surrey County Council. The borough as a whole is considered to have a relatively good bus network providing frequent services to a number of destinations within and outside of the borough.

3.13 The borough is served well by bus frequency and number of destinations. However, bus services can be unreliable due to traffic congestion causing long journey times and unreliable timetables, making travelling by bus less attractive.

3.14 The table below shows the many bus services which serve the borough of Spelthorne and details of their routes.

71	Heathrow Airport Term 5, Staines, Egham, Englefield Green, Old Windsor, Windsor and Slough	461	Staines, Chertsey, St Peter's Hospital, Ottershaw, Addlestone, Weybridge, Walton, West Molesey, Hampton Court and Kingston
116	Hounslow, Bedfont Green and Ashford Hospital	500	Staines, Egham, Virginia Water, Sunningdale, Windlesham, Bagshot, Camberley and Frimley Park Hospital
117	West Middlesex Hospital, Isleworth, Hounslow, Feltham, Lower Feltham, Ashford and Staines	555	Heathrow Airport, Hatton Cross, Heathrow, Terminal 4, Stanwell, Ashford, Sunbury, Shepperton and Walton
203	Staines, Ashford Hospital, Stanwell, Hatton Cross and Hounslow	557	Heathrow Terminal 5, Stanwell Moor, Stanwell Village, Stanwell, Ashford, Sunbury, Shepperton, Chertsey, St Peter's Hospital and Woking
216	Kingston, Hampton Station, Sunbury Village, Sunbury Cross, Ashford and Staines	566/ 567	Staines, Egham, Thorpe/Stroude and Virginia Water
235	Sunbury Village, Sunbury Cross, Feltham, Hounslow and Brentford	570	Grovebarns, Wheatsheaf Lane and Staines/Ashford Tesco
290	Staines, Ashford, Sunbury Cross, Hanworth and Twickenham	571/ 572	Grange Farm/Sunbury Common, Sunbury, Ashford and Staines
305	Staines, Wraysbury, Horton, Colnbrook and Poyle	574	Royal Estate, Laleham, Shepperton Green, Charlton and Sunbury Tesco
400	-Stanwell Moor, Staines, Ashford Hospital, Ashford, Charlton, Shepperton and Walton	590/ 591	Stanwell Moor and Staines
438	Staines, Royal Estate, Laleham and Shepperton	593	Ottershaw, Lyne, Chertsey, Penton park and Staines
441	Heathrow Airport, Stanwell, Ashford Hospital, Staines, Pooley Green, Egham, Royal Holloway College and Englefield Green	635	- Brentford, Hounslow, Feltham, Sunbury and St Paul's School
446	Staines, Thorpe Park, Chertsey, St Peter's Hospital, Ottershaw, Coombelands, Addlestone, New Haw, West Byfleet, Sheerwater and Woking	655	Bishop Wand School, Ashford St Michael's School and Stanwell
458	Staines, Laleham, Shepperton, Walton, Hersham, Esher, Dittons and Kingston	656	Lower Sunbury, Sunbury Cross, Upper Halliford, Shepperton, Laleham and Egham (Strode's College)

Figure 3 Bus routes in Spelthorne

3.15 An expression of interest for potential funding for a transport package of sustainable measures has been submitted to the Enterprise M3 Local

Enterprise Partnership for consideration. Subject to funding, the package would include bus improvement measures on key corridors around Staines upon Thames. A further bid has been made for an Egham sustainable travel package which would also have benefits for the Spelthorne bus network.

Rail Provision

- 3.16 The Transport Assessment for Spelthorne (2007) indicates that there is a relatively high level of accessibility to passenger transport from most urban areas of the borough during the day.
- 3.17 Two railway lines pass through the borough, Waterloo to Staines and London to Shepperton. The line splits at Staines, providing services to Windsor, Reading and Weybridge. Railway Stations are located at Kempton Park, Sunbury, Upper Halliford, Shepperton, Ashford and Staines. Transport for London (TFL) is a major transport provider in Spelthorne, but the Oyster card is not currently used across the borough.
- 3.18 Staines station is the 5th busiest station in Surrey with 2.63m entries and exits in 2010/11⁶. The main destination for train users from Staines is London terminals and the rest of London (48% and 24% of passengers in 2012⁷ respectively) while only 19% were travelling to the rest of Surrey.
- 3.19 Current issues with the rail network in Spelthorne include:-
- There is scope to improve accessibility and frequency of rail services throughout the borough. Overall though the Transport Assessment (2007) concludes that the coverage of passenger transport provision provides an existing network offering non-car based travel choices to a large part of the Spelthorne population and there is therefore scope for a significant modal shift.
 - There is no direct rail link from Spelthorne to Heathrow airport. All services must go via London Paddington. This is particularly important because of the high percentage of Spelthorne residents who work in Heathrow (see section 4.14) and who do not have a viable option to commute by train.



⁶ http://www.surreycc.gov.uk/_data/assets/pdf_file/0018/571221/Surrey_Rail_Strategy_-_Issues_Paper_FINAL_1Mar13.Corrected.Part-2.pdf

⁷ http://www.surreycc.gov.uk/_data/assets/pdf_file/0018/571221/Surrey_Rail_Strategy_-_Issues_Paper_FINAL_1Mar13.Corrected.Part-2.pdf

- There is a planned new rail line between Slough and Heathrow which will be operational by 2021 although the exact service is not yet known. This is planned to give a direct link from Reading to Heathrow.

3.20 Airtrack-lite is another scheme which has been put forward to link Surrey with Heathrow by rail. This scheme, put forward by London borough of Wandsworth, proposes a rail service between Heathrow and Clapham Junction. This scheme was originally presented as Airtrack which was abandoned in 2011. Airtrack-lite has since been mooted as a lower cost option. This would introduce direct services from Ashford, Staines central and a new additional station in Staines providing a connection to Heathrow airport and is included as a recommended option in the Surrey Rail Strategy.

Walking and cycling provision

3.21 Although the River Thames can act as a barrier to movement in Spelthorne it also offers pleasant off road walking and cycling routes. The Thames Path cycle route passes through the South of Spelthorne and is a popular route for cyclists. The new Walton Bridge offers cyclists and pedestrians an improved safer route over the river Thames and reduces severance caused by the river.

3.22 Spelthorne forms part of the Sustrans National Cycle Network 4 (London to St Davids, South Wales via Kingston, Staines and Reading) and also the Thames Valley Cycle Route (London to Oxford via Staines and Reading). Spelthorne Borough Council and Surrey County Council work with Sustrans to ensure that our parts of these major routes are fully operational.

3.23 The borough has five reservoirs and the River Thames running to the south, as well as two motorways and a railway line passing through it. These can all act of barriers to walking and cycling across the borough and present challenges for creating sustainable transport routes to and from different areas.

Access to Airports

3.24 The borough of Spelthorne borders Heathrow to the north and the airport is a major employment centre for the area. The close proximity to the airport provides good accessibility to the airport via bus or car.



3.25 However there is no direct rail link from Spelthorne to Heathrow and cycling facilities are limited. The railway line which goes across the borough limits accessibility from north to south for pedestrians or cyclists.

3.26 Data from the Surrey County Council Surface Access to Airports Study⁸ shows that by car, the fastest weekday journey time to Heathrow from Staines and Ashford is 25 and 29 minutes respectively. In comparison, by rail, this journey time is 61 and 59 minutes respectively. This represents a clear disincentive for residents of Spelthorne to travel to Heathrow by rail.



3.27 Please see Chapter 6 for a description of Surrey Future's work stream 'surface access to airports' which considers how access to airports can be improved, both under existing conditions and in the event of extra capacity at Heathrow and/or Gatwick.

Access to Amenities

3.28 Hospital services in Spelthorne are split between Ashford and St. Peters, Chertsey and provision is determined by the Hospital Trust. There are five health centres in Ashford, Stanwell, Shepperton, Staines and Sunbury.

3.29 There is overall good provision for open space, sport and recreation in the Borough as a whole although there are areas of more limited provision in parts of Ashford and Staines.

3.30 Recreation is a significant land use in the Borough, including formal sporting sites such as Kempton Park racecourse, sailing on reservoirs and lakes, three golf courses and various parks and sports grounds as well as informal recreation including common land. The River Thames and its towpath define about 50% of the Borough boundary and attract people from a wider area as well as being an important environmental amenity.

⁸ http://www.surreycc.gov.uk/_data/assets/pdf_file/0007/728899/Surface_Access_to_Airports_Study-Data_Review_Working_Paper_-web.part-1.pdf

4 Spelthorne Transport Trends

4.1 This chapter describes the travel patterns within Spelthorne and the many trends which affect transport in the borough. It is split into four sections:

- demographic and socio economic trends
- environmental issues
- safety
- economic circumstance.

4.2 By looking at these four areas this chapter will give an understanding of the factors affecting transport in Spelthorne.

Demographic and socio economic trends

4.3 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.

4.4 Surrey's population density varies considerably across the county. Dense urban areas are located in the north 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.

4.5 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.

4.6 Spelthorne has a population of just over 95,000⁹ residents. The borough's population is slightly older and its average household size slightly smaller than the national average. Over the next 20 years the total population is projected to fall slightly and its composition will alter. The 0-14 age group will continue to fall as will the 24-44 age group¹⁰.

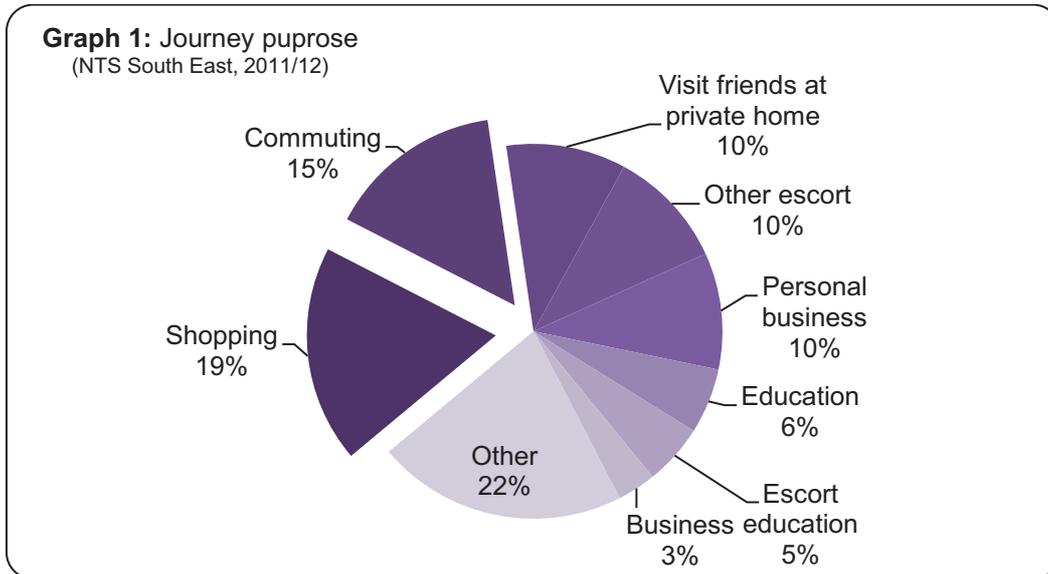
4.7 Graph 1 shows journey purpose (by number of trips made for all modes) in the South East region in 2011/12¹¹. This demonstrates the complex nature of travel patterns across the borough as the journey purpose is very split and commuting, shopping and 'other' are all large proportions of journeys in Spelthorne. Focus is often placed on those journeys that have peak weekday

⁹ Source: 2011 Census - usual resident population

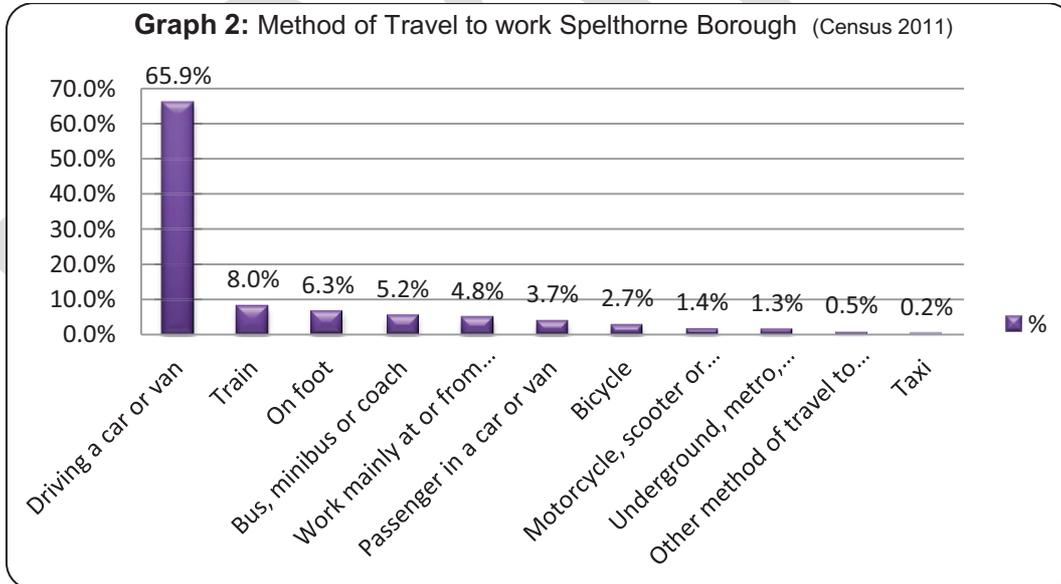
¹⁰ <http://www.spelthorne.gov.uk/CHttpHandler.ashx?id=1436&p=0>

¹¹ National Travel Survey dataset 'NTS9906 Average number of trips (trip rates) by purpose, region and area type: Great Britain, 2011/12'

flows during the morning and evening rush such as commuting and education (21% of all journeys).



4.8 Graph 2 represents the method of travel to work for residents of Spelthorne borough (excluding those not in work) in 2011¹². From the graph it is clear that the majority of residents in employment travel to work by car or van (65.9%).



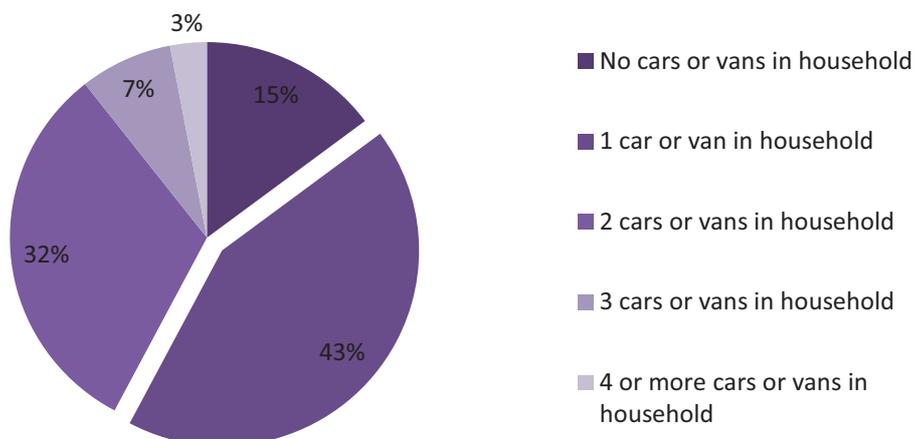
4.9 Car ownership is higher¹³ in Spelthorne than the South East average (81%) with 85.2% of households having access to a car. 42.3% of households in Spelthorne have access to two or more cars and only 14.8% of households do not have a car.

¹² Source:2011 Census

¹³ Source: 2011 Census: Car or van availability, local authorities in England and Wales

Spelthorne Transport Strategy & Forward programme.

September 2014

Graph 3: Car or Van Availability- Spelthorne (Census 2011)

4.10 Journeys less than 5km (approx. 3 miles) are considered to be most receptive to change given their shorter distance.

4.11 The 2011 Census found that, for short journeys to work (less than 5km) driving a car or van was the most common method of travel in Spelthorne. Walking and bus, minibus or coach were the second and third most common mode of transport respectively, however these methods are substantially less popular than driving a car or van. This represents scope for a modal shift in short term travel in Spelthorne.

Table 1 Mode of travel for journeys under 5km. Source: Census 2011

Mode	Distance travelled to work		
	< 2km	2km - < 5km	All journeys
On foot	2,071	325	2,807
Bicycle	364	389	1,319
Driving a car or van	3,530	7,059	31,599
Passenger in a car or van	315	547	1,801
Bus, minibus or coach	229	869	2,557
Train, underground, metro, light rail or tram	67	168	4,507

4.12 The Transport Statement produced by Spelthorne (2007)¹⁴ concluded that there was scope for a significant modal shift in Spelthorne due to the coverage of passenger transport provision for non car based travel. The number of

¹⁴ <http://www.spelthorne.gov.uk/CHttpHandler.ashx?id=3481&p=0>

journeys under 5Km (approx. 3 miles) which are taken by car in the borough further suggests that there is the opportunity to increase the number of foot, bicycle and public transport journeys and reduce the use of cars; this could lessen congestion and improve air quality in Spelthorne.

4.13 Origin and destination data sourced from the 2011 Census reveals the following:

- 43% of the working population of Spelthorne work within the borough.¹⁵
- A large number of the working population, 43%, commute from Spelthorne to Outer London and other Surrey districts.
- More people commute in to Spelthorne than commute out and again the majority, 42%, come into Spelthorne from Outer London and other Surrey Districts.
- 5% of the people commuting are coming into Spelthorne from outside of the South East of England.
- This indicates that these transport flows could be key in reducing car use in the Borough and encouraging alternative modes of transport for travel to and from work.

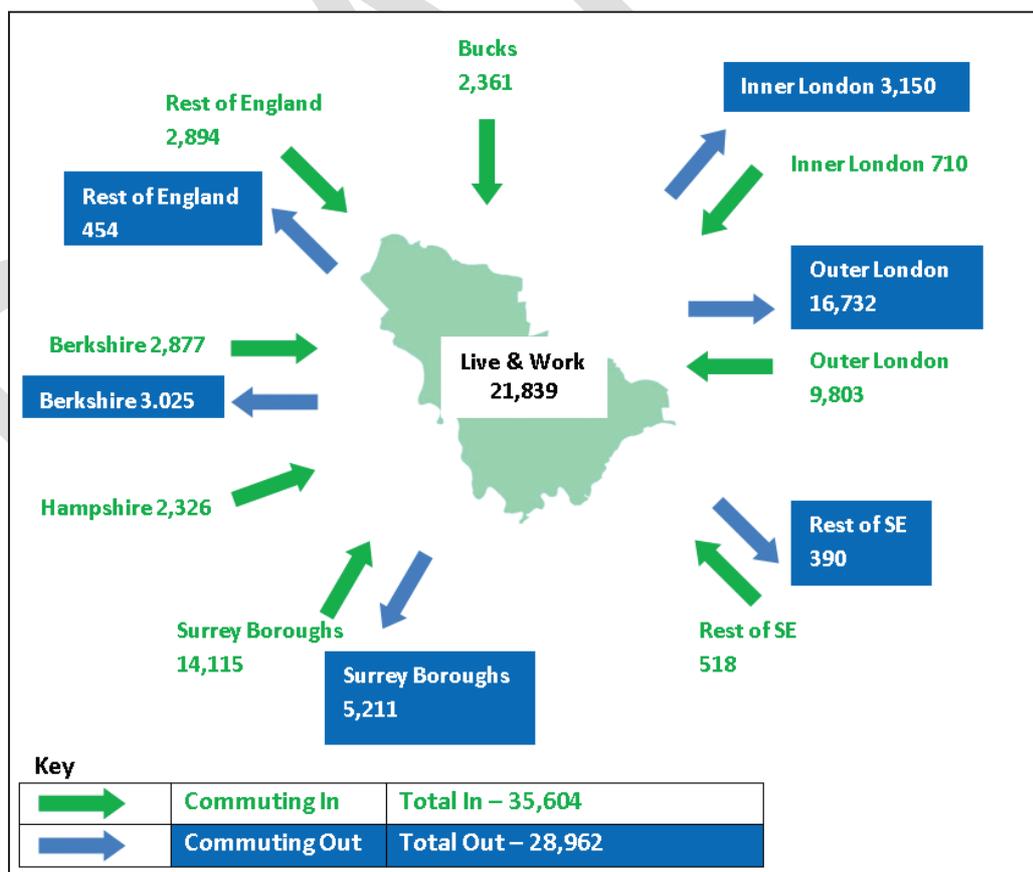


Figure 4 Origin and Destination Data (Census 2011)

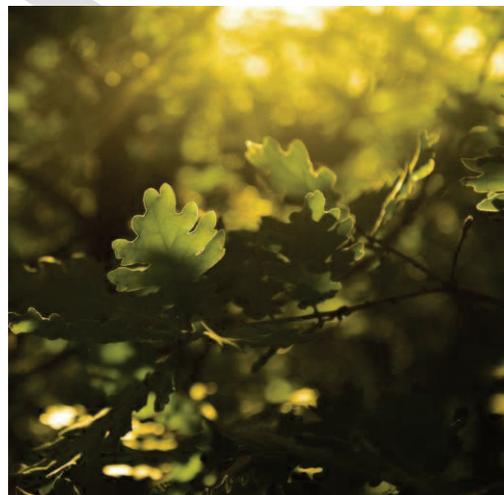
¹⁵ Spelthorne Borough Council – Transport Statement, January 2007

- 4.14 Heathrow Airport employs over 3916 Spelthorne residents (5.3% of the workforce) (BAA Heathrow Employment Survey 2008/9)¹⁶. Travel to and from the airport for both employment and travel places significant pressure on the borough's road network.

Environmental Issues

Climate Change

- 4.15 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.
- 4.16 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.
- 4.17 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.
- 4.18 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 kilotonnes 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.
- 4.19 Further information is available in the Climate Change strategy detail of which can be found in Chapter 6 of this document.



¹⁶ <http://www.heathrowairport.com/static/Heathrow/Downloads/PDF/Employment-survey.pdf>

Air Quality

- 4.20 Air pollution in the UK harms human health and the environment. Air pollution can have a long-term effect on people's health 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.
- 4.21 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. To date the entire borough of Spelthorne has been declared an Air Quality Management Area (AQMA).
- 4.22 In general, emissions of nitrogen dioxide and fine particulates are reducing partly due to improved EU vehicle engine standards. However, there are individual areas that can prove problematic to resolve. Further tightening of EU standards is proposed and will continue to push emissions of these pollutants down for the foreseeable future.
- 4.23 Further information is available in the Air Quality Strategy details of which can be found in Chapter 6 of this document.



Safety

- 4.24 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 [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.

4.25 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 policy can be viewed [here](#). The guidance is intended to help the council remove barriers to safe walking and cycling to school, promoting active travel and helping address congestion.

Economic Circumstance

- 4.26 Spelthorne has an extremely 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.
- 4.27 Congestion is a significant 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.
- 4.28 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.
- 4.29 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.
- 4.30 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.
- 4.31 Further information is available in the Parking strategy.

5 Future growth and its impact

- 5.1 The housing figures set out in Spelthorne's adopted Core Strategy and Policies DPD conformed to the approved South East Plan (now revoked) and requires 3320 dwellings to be provided in the period 1 April 2006 to March 2026. This equates to an annual average of 166 dwellings over the 20-year period. Table 2 sets out the situation at 1 April 2013 and the residual supply figure taking account of completions since April 2006.

Table 3 Spelthorne Housing Supply

Core Strategy and Policies DPD	Dwellings (net)
Requirement 2006 – 2026 (20 years)	3320
Net Completions 2006 – 2013	1230
Residual requirement April 2013 – March 2026 (13 years)	2090
Residual annual requirement (2090/13)	160

- 5.2 A Transport Assessment (2007)¹⁷ was prepared for Spelthorne BC as part of the evidence base to support the Core Strategy. This was a strategic study and concluded that, globally, there would not be an adverse impact on the highway network in Ashford, Staines, Sunbury-on-Thames and Shepperton. Although this was the case overall, individual development sites have a localised impact upon the network or specific junctions. They may also result in requirements for improvements to non-car modes of transport, which were not considered as part of the Strategic Assessment. The impact of each individual proposal will need to be assessed on its own merits through a Transport Assessment or Evaluation.



¹⁷ <http://www.spelthorne.gov.uk/CHttpHandler.ashx?id=3481&p=0>

- 5.3 The level of future development is not likely to be dependent on any new major highways or transport schemes, although, any additional development is likely to put additional pressure on the network. Congestion is an acute problem for Spelthorne, particularly in and around Staines. It generates significant social and economic costs in terms of delays incurred for the travelling public and for businesses.
- 5.4 The Spelthorne Core Strategy and Policies, specifically Policy CC2, identifies that future development with the potential to generate large amounts of traffic should be located in town and other centres and locations accessible by non-car based travel.
- 5.5 The borough will also seek to ensure that developments contribute to sustainable transport choices and reduce the need to travel.
- 5.6 The Spelthorne Allocations document has identified some key sites for housing development (where guidance on alternative uses was deemed helpful), one town centre development and one open space proposal. Housing Allocation sites only represent some 15.6% of all planned housing in the period 2006 to 2026. Future housing will be distributed across much of the urban area subject to policy restrictions.

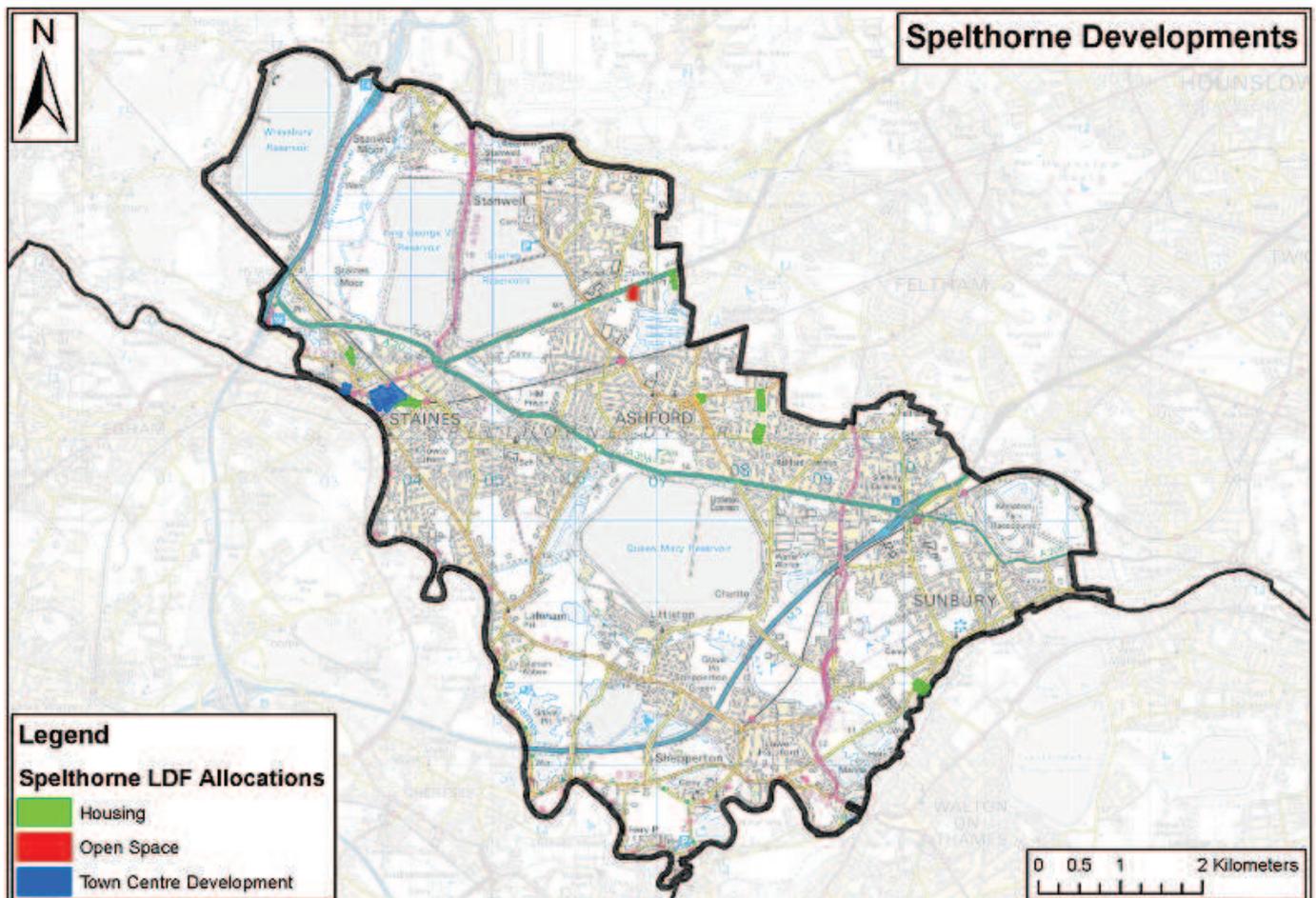


Figure 5 Map of Spelthorne Borough showing development allocations from the Core Strategy (2009)

Education

- 5.7 School expansions will be required in Spelthorne over the next five years in order to meet the future need for additional school places. Over the period September 2015 - Sept 2020 four additional forms of entry (30 places per form) are required at primary level; this equates to the creation of 840 more primary places by 2022. SCC also needs four forms of entry of additional places at secondary level; which creates 600 new 11-16 places by 2023. These projections are updated on a yearly basis.
- 5.8 Schools already identified for expansion are Ashford Park which expands by one form of entry in September 2015. Additional school expansions to meet the remaining places needed are still to be identified.
- 5.9 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.
- 5.10 For each school expansion a transport assessment is carried out which looks at the transport implications of the planned expansion and identifies appropriate mitigation measures. A school travel plan is also 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

- 5.11 Electric vehicles, or EVs, are cars or vans where the petrol or diesel engine is replaced or supplemented by battery powered electric motors.
- 5.12 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.
- 5.13 Surrey County Council has set an ambition to reduce its carbon footprint. One identified cost effective method of reducing the carbon footprint is through encouraging the use of electric vehicles.¹⁸
- 5.14 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.

¹⁸ Source: Surrey Transport Plan - Climate Change Strategy, April 2011

5.15 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

5.16 The Spelthorne Development Plan Allocations Development Plan Document contains proposals for allocating specific sites for particular types of development¹⁹.

5.17 There are a number of other developments that have come forward since the production of the site allocations document. These developments include:

- The EcoPark at Charlton Lane (waste)
- Extension to Shepperton Studios (commercial)
- The development of the London Irish training grounds site (residential)

5.18 The transport assessments undertaken on the development proposals mentioned suggest that there will be varying degrees of impact on the transport network. The transport assessments include various measures to mitigate the impact of the developments, to be funded through section 106 planning agreements.

5.19 These developments should not require any major highway schemes, however it is expected that they will have a localised effect on transport and this will have to be mitigated in the planning and development of any future schemes. Large scale commercial developments will inevitably increase the number of people coming in and out of the local area. The local transport network may need to be adapted to cope with this increased demand.

5.20 The development of the Elmsleigh shopping centre may contribute to greater congestion in Staines-upon-Thames town centre. A traffic impact assessment carried out indicates that the net effect of the proposal, on Staines town centre may be up to 109 extra movements.

5.21 The Ecopark at Charlton Lane has also been assessed. The Transport Assessment identified that there will be a slight²⁰ increase in HGV movements to and from the Charlton Lane site on weekdays and a slight reduction at weekends.

5.22 The development of the London Irish training grounds will affect the Staines Road East/The Avenue junction²¹. A mitigation improvement is to be implemented at the junction to mitigate any impact on traffic. All other roads

¹⁹ <http://www.spelthorne.gov.uk/article/3004/Spelthorne-Development-Plan-Allocations>

²⁰ [http://www.surreycc.gov.uk/environment-housing-and-planning/waste-and-recycling/charlton-lane-eco-park-and-other-site-developments/frequently-asked-questions-about-the-eco-park#Is traffic still reduced?](http://www.surreycc.gov.uk/environment-housing-and-planning/waste-and-recycling/charlton-lane-eco-park-and-other-site-developments/frequently-asked-questions-about-the-eco-park#Is%20traffic%20still%20reduced?)

²¹ London Irish Training Ground Transport Assessment, March 2012

assessed in the Transport Assessment would not have to work beyond capacity due to the development.

- 5.23 The Shepperton Studios Extension will increase the levels of traffic in the local area due to the increased commercial units. Studios Road will experience a 95.95% increase in traffic during the AM peak²². Improvements will be made at various junctions around the studios.

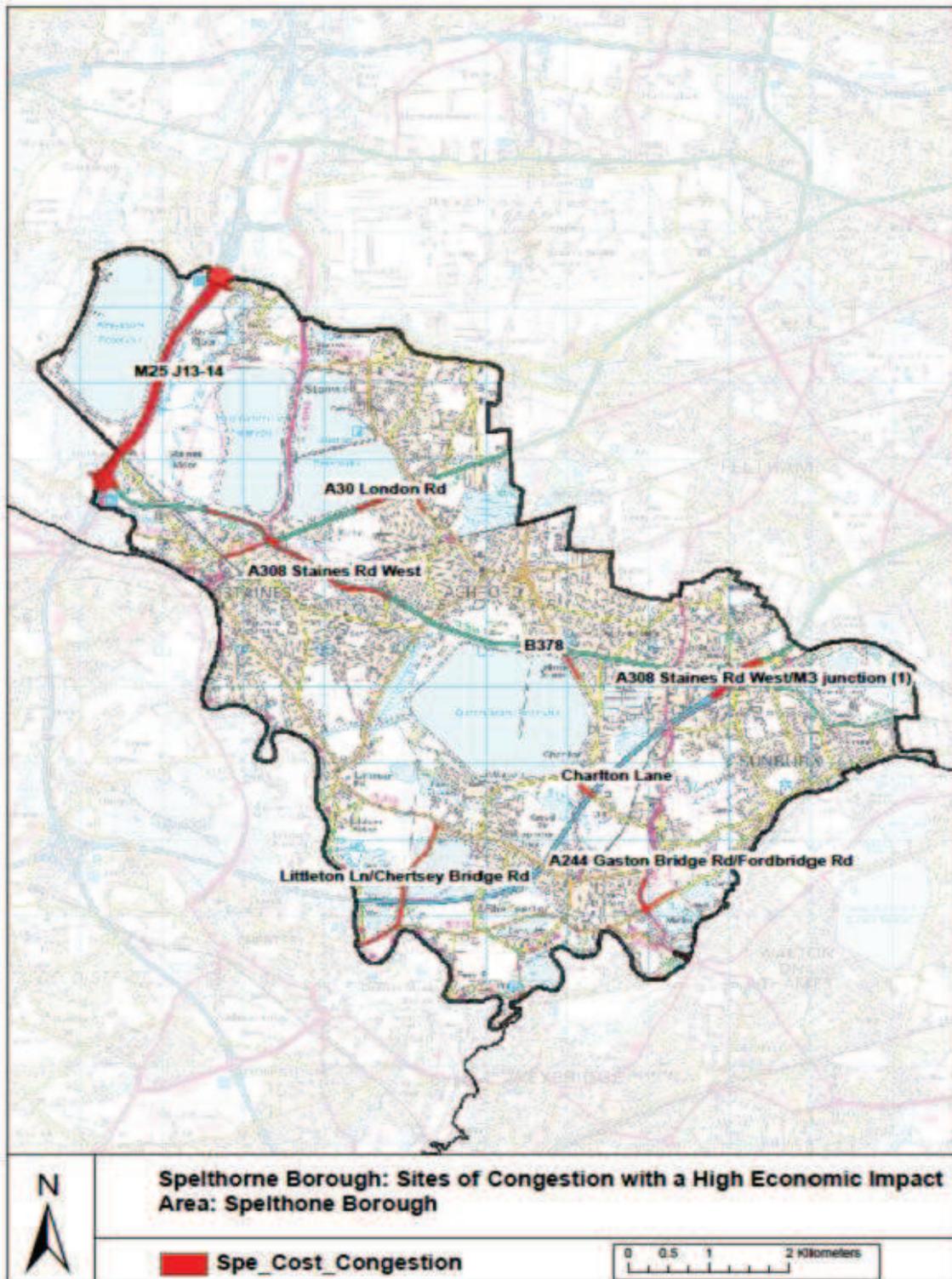
The cost of congestion

- 5.24 Traffic related congestion occurs within the major town centres of Spelthorne in particular Staines town centre. There are specific junctions on the Spelthorne road network that have been identified, through congestion mapping as being particularly congested.

Traffic related congestion can lead to delays, which have an impact for the local economy. Cost of congestion mapping (CJAMS) has been used to identify the areas in the borough where congestion is the highest (see map below). These areas are:

- Sunbury Cross (A308 Staines Road West/M3 J1) (see 7.5)
 - Staines Bridge/Staines Town Centre (see 7.5)
 - Approaches to Crooked Billet Roundabout (see 7.5)
 - 'Crooked Billet' roundabout to 'Bulldog' junction on the A30 (see 7.5)
 - A244 Gaston Bridge Road roundabout (see 7.34)
 - Chertsey Bridge Road/Littleton Lane (see 7.34)
 - M25 J13-14 (see 7.21)
 - Charlton Lane/Charlton Road (see 7.34)
- 5.25 Congestion in the local road network can lead to other transport related problems, such as delays to car drivers and public transport users. It can also act as a barrier to movement and can contribute to the potential risk of increased traffic collisions.
- 5.26 Congestion is also the key issue in relation to air quality. Stop start driving conditions and slower journey times, resulting from congestion can lead to higher roadside pollutant concentrations, causing greater risks to pedestrians and adjacent residential properties. This is of particular significance in Spelthorne as it was classified as an AQMA in 2000.

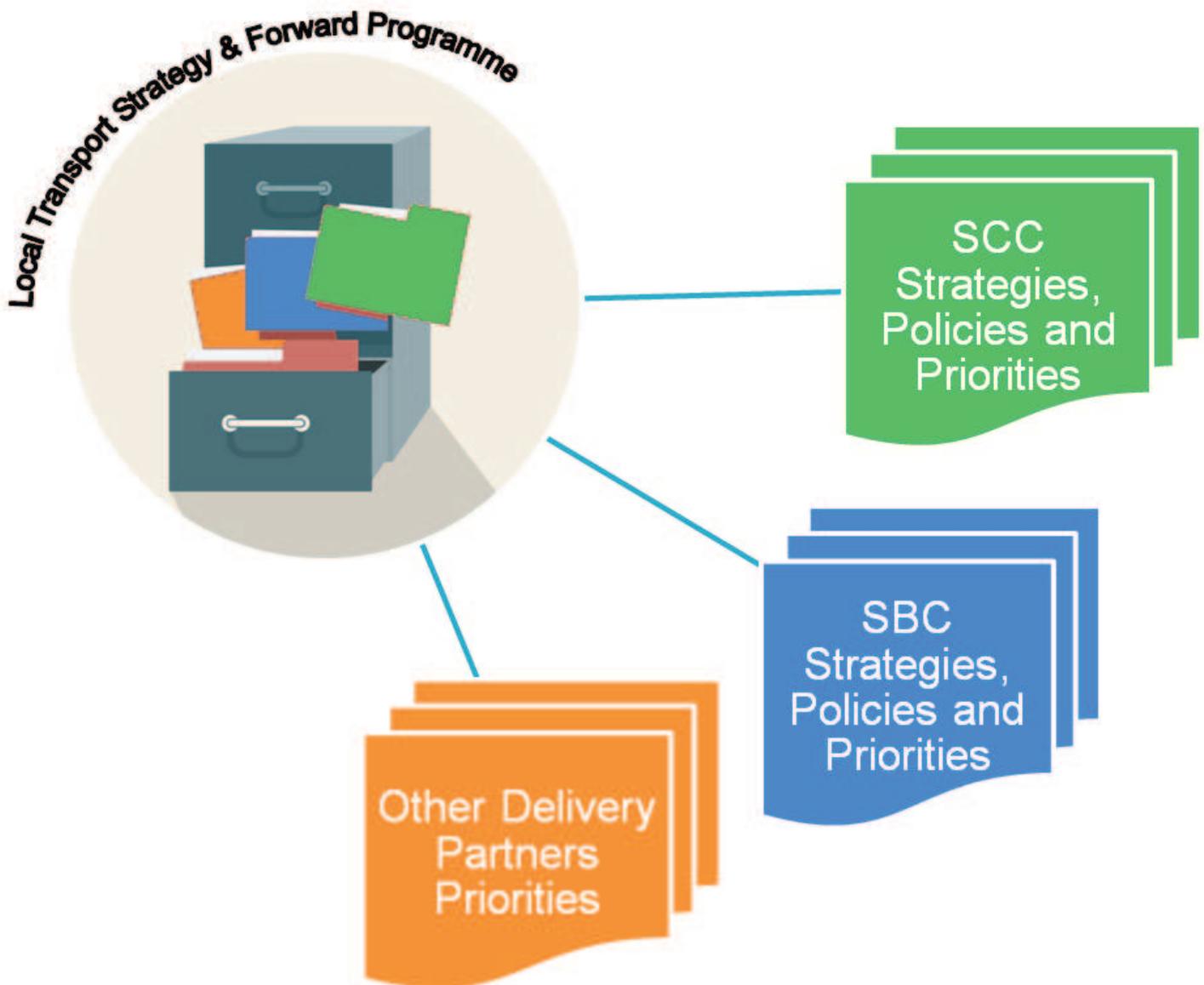
²² Shepperton Studios Extension Transport Assessment May 2004



5.27 It should be noted that where proposed developments are expected to have a significant impact on the road network mitigation will be required of them as part of the planning process, for example through Section 106 and Section 278 agreements. Exact impacts on the highway network will be dependent on the layout, quantum and other characteristics of proposed developments, all of which will be taken into account when considering appropriate mitigation measures and any developer contributions required.

6 Related work streams and projects

6.1 This chapter details the many related work streams being carried out by the county council, borough council and other external stakeholders such as the Highways Agency, Network Rail and the Environment Agency. The 'filing cabinet' analogy diagram below shows how transport elements of SCC and SBC strategies fit together in 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 both borough and county councils.



Surrey County Council work streams

Surrey Transport Plan Strategies

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

6.3 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

6.4 Below is a summary of the Surrey Transport Plan strategies.

Surrey Air Quality Strategy

6.5 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

6.6 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

6.7 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).

6.8 The Congestion Programme summarises the main transport challenges in Spelthorne Borough as;

- Traffic congestion within Staines upon Thames town centre
- Traffic congestion caused by traffic flows from south west London and Heathrow affecting Ashford, Stanwell and Sunbury
- Poorer air quality within parts of Staines upon Thames town centre, Sunbury and parts of Shepperton

6.9 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 year²³. Strategic congestion hotspots are identified²⁴ and a programme of interventions²⁵ is proposed for 2015-2019.

Surrey Cycling Strategy

"...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

6.10 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.

Surrey Freight Strategy

6.11 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 of 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

²³ Source: Congestion Programme Consultation Draft March 2013, Executive Summary

²⁴ Surrey Congestion Programme, Consultation Draft March 2013, Annex 2

²⁵ Source: Congestion Programme Consultation Draft March 2013, Table 1

the effective transportation of goods whilst minimising the impact of HGVs on the environment and residents.

Surrey Parking Strategy

6.12 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. Surrey County Council has produced a Parking Strategy to help shape, manage and deliver the county council's vision for parking. The county council vision is to "Provide parking where appropriate, control parking where necessary".

6.13 Guidance for the integration of Electric Vehicle charging points had been established for new developments. Guidance for the new charging points can be found [here](#).

6.14 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

6.15 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.

6.16 [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 Travel Planning Strategy

6.17 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

- 6.18 [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.

Surface Access to Airports Study

- 6.19 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.

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 partnership 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>

Schools Place Programme

- 6.20 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.
- 6.21 The Transport Strategy for Surrey's Schools Place Programme is currently in draft; it is intended to be adopted by the county council under the Surrey Transport Plan later in 2015.

Maintenance

- 6.22 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.
- 6.23 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.
- 6.24 For Spelthorne in particular, the [new programme](#) will result in £8m being invested in the local road network and will enable 35km of road (12% of local network) to be reconstructed.

Public Health

- 6.25 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 Spelthorne 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 population (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 environment¹.

- Noise pollution -can adversely affect mental health, the cardiovascular system and school performance in children.

Safety

- 6.26 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 [strategy](#) in 2011 which includes a number of measures or interventions by which Drive SMART seeks to address road safety issues in Surrey.
- 6.27 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 safety concerns and provides guidance on how the county council will respond to concerns.

Spelthorne work streams

- 6.28 The Spelthorne Borough Council Core Strategy and Policies Development Plan Document have been influential in developing the Local Transport Strategy and Forward Programme. The spatial plan, which sets out the needs in the borough and how they will be met, has helped to develop the Local Transport Strategy.
- 6.29 As part of this a 'Spelthorne Local Cycling Plan' will be developed. This will include a list of proposed cycling schemes for the borough. The main priorities will be to provide cycle routes that link neighbouring communities and communities to their local services. This will be a main driving force behind cycle improvements in the borough.
- 6.30 A Staines Movement Study Staines town centre - walking and Cycling Assessment has been produced (June 2014) by WSP for Surrey County Council and Spelthorne Borough Council. The purpose of the study is to support the Council's Local Development Framework and identify potential measure to contribute to Staines planned growth and continued success. While this study focuses only on a three mile 'buffer zone' from Staines-Upon Thames town centre, the study identifies issues and potential solutions that will overcome critical barriers to movement for pedestrians and cyclists.

External work streams

- 6.31 Any relevant external work streams will be added to this section as and when appropriate.

7 Places in Spelthorne

- 7.1 The section below outlines the different areas across the borough, presenting the key transport network at each location and identifying a number of problems which currently exist in these areas.
- 7.2 The borough of Spelthorne has several distinct settlement areas. Potential solutions will be based on the problems identified and/or will be related to any development coming forward in the area.
- 7.3 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.
- 7.4 More details of the schemes described here can be seen in the accompanying Annex, including indicative timeframes for potential start dates and anticipated costs and funding sources, where known.

Staines-upon-Thames

- 7.5 Staines-upon-Thames is situated to the East of Spelthorne. The town is a popular retail destination and has a pedestrianised area in the town centre which is home to many shops, cafes, restaurants and pubs as well as two shopping centres, the Elmsleigh centre and Two Rivers.
- 7.6 Staines-upon-Thames has a mainline rail station and a bus station, which is the focal point for a number of services in and out of the town centre. There is also a direct bus service from the train station to Thorpe Park. According to the 2013 ORR station usage data³³ Staines was the busiest station in Spelthorne with almost 3.2 million entries exits and interchanges during the year 2013.
- 7.7 National Cycle Route 4 follows the Thames towpath and is one of the main cycle routes in the borough
- 7.8 Current problems and issues in Staines-upon-Thames include:
- Congestion is very common in the town centre particularly during the AM and PM peak. The approaches to Staines Bridge and Staines town centre have been identified as congestion problem areas.



³³ ORR. (2013) Station usage data

- The 'Crooked Billet' roundabout to 'Bulldog' junction on the A30 suffers from peak time congestion.
- Severance caused by the railway line can act as a barrier to walking and cycling.
- Air quality issues related to traffic congestion.
- Significant flood risk (Spelthorne Borough Council have prepared a strategic flood risk assessment)

Potential solutions

7.9 There are a number of proposed schemes in Staines upon Thames and the surrounding area to address these issues. Details of the schemes can be found in the Annex.

- Staines Bridge widening to include a foot/cycle way and a wider carriage way for traffic to reduce congestion on this bottleneck. A scheme has been submitted to EM3 LEP for funding.
- A Wider Staines Sustainable Travel Package is being developed by SCC in partnership with SBC, including off carriage cycle ways and bus improvements. An expression of interest for this scheme was submitted to EM3 LEP for funding. A Task Group with Spelthorne Local Committee Members and officers from SCC and SBC is producing a list of interventions to be included in this package.

Ashford

7.10 Ashford lies in the centre of Spelthorne Borough and forms its largest residential area.

7.11 Ashford has a number of commercial areas, some close to housing and accessed through residential areas. The largest is at Littleton Road and contains a mix of industrial and office floor space.

7.12 The main road through Ashford is the A308. The B377 and B378 cross each other in the centre of Ashford.

7.13 Ashford railway station lies on the Waterloo to Reading Line; it is served and managed by South West Trains stopping services from London Waterloo (roughly every ten minutes on weekdays). Ashford station has 139 car parking spaces and 24 cycle storage



stands. Ashford station is the second busiest in the borough and had over 960,000 entries exits and interchanges during 2013³⁴.

- 7.14 The Allocations DPD adopted in December 2009, identifies four small residential allocations within Ashford.
- 7.15 Current problems and issues in Ashford include:
- 7.16 The A308 Staines Rd West and the associated junctions that connect into Ashford are extremely busy as this is the major east-west route across the borough. Ashford Hospital is a major employer and a contributor to road traffic within Ashford.
- 7.17 Access over the railway line is difficult for pedestrians and cyclists.

Potential solutions

- 7.18 There are a number of proposed schemes in Ashford; details of the schemes can be found in the Annex.
- 7.19 Clockhouse Lane footbridge would improve safety and accessibility for pedestrians.
- 7.20 Improvements to the A308 junction with Ashford Road and to Stanwell Road will reduce congestion in the area.

Stanwell and Stanwell Moor

- 7.21 Stanwell extends from Ashford to the boundary of Heathrow. It is split into North and South Stanwell with the historic centre in the North but the more modern development in the South.



- 7.22 Stanwell has the B378 and the A30 at its boundaries (as well as the Southern perimeter road of Heathrow Airport). The other roads in the area are smaller and predominantly residential roads.
- 7.23 Current problems and issues in and around Stanwell and Stanwell Moor include:
- There are no rail links within the village of Stanwell. The nearest railway station is Ashford which is roughly 2.5 miles from the village.

³⁴ ORR. (2013) Station usage data

- Heathrow has a substantial impact on Stanwell, particularly in the north due to noise disturbance and airport related development.
- M25 junction 13-14 congestion

Potential solutions

7.24 We have stated solutions 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.

Sunbury-on-Thames

7.25 Sunbury-on-Thames is a settlement which is split by the M3 and lies on the River Thames. It is mainly a residential area. There are some historic buildings and an undeveloped stretch of the River Thames which are covered by a conservation area.



7.26 Sunbury rail station is served by South West Trains which operate on the Shepperton Branch line. During the Monday to Friday AM peak four trains go to Waterloo via Twickenham and three evening trains make the reverse journey. The basic off peak service consists of two trains per hour to Waterloo via Kingston, Wimbledon and Clapham Junction and two trains per hour to Shepperton. Sunbury station had over 400,000 entries exits and interchanges during 2013)³⁵.

7.27 Several strategic routes converge on Sunbury Cross, including the M3. So congestion is particularly severe during peak commuting times with pressure in the morning from commuters travelling in a north easterly direction towards south west London. Conversely the evening traffic flow is predominantly towards the south west as commuters travel home.

7.28 Current problems and issues in and around Sunbury-on-Thames include:

- There is a particular concentration of poor air quality around the Sunbury Cross junction.
- Severance caused by the M3.

³⁵ ORR. (2013) Station usage data

Potential solutions

- 7.29 Details of proposed schemes in Sunbury-on-Thames can be found in the Annex.
- 7.30 Improvements to signalling at Sunbury Cross would relieve pressure on the roundabout and improve capacity on the surrounding road network. These signals are the responsibility of the Highways Agency and SCC currently are seeking funding to conduct a feasibility study, after which a potential solution could be brought forward.

Shepperton

- 7.31 Shepperton is a distinct settlement in the southern part of the Borough. It is primarily residential with a significant local shopping centre and a business park. Its major commercial site is Shepperton Studios, which lies in the north-western part of the built up area.
- 7.32 The main roads in Shepperton are the B3366, B376 and B375. The A244 goes through Shepperton from Hershams to Feltham.
- 7.33 Shepperton has a railway station which provides the same service as Sunbury Cross (detailed above). Shepperton station had over 420,000 entries exits and interchanges during 2013)³⁶.
- 7.34 The proposed redevelopment of Shepperton Studios has been shown to have a transport impact in studies carried out as part of the planning application. The planning permission for development has a legal agreement associated with it requiring the developer to secure various transport measures to mitigate the otherwise potential adverse traffic impacts.
- 7.35 To the south Shepperton is bounded by the River Thames at Desborough Island and is bisected by the M3 motorway.
- 7.36 Congestion at the A244 Gaston Bridge Road roundabout, Chertsey Bridge Road/Littleton Lane and Charlton Lane/Charlton Road.



Potential solutions

- 7.37 Details of proposed schemes in Shepperton can be found in the Annex.

³⁶ ORR. (2013) Station usage data

- 7.38 A roundabout at the junction of Charlton Lane and Charlton Road is proposed to reduce traffic congestion.
- 7.39 Solutions are stated where these are known, planned or aspired to. Where this has not always been possible, the issues and problems stated and future development will serve to guide future solutions for each area, acting as an evidence base.

DRAFT

8 Forward Programme, Funding and Delivery

- 8.1 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.
- 8.2 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)

- 8.3 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.
- 8.4 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:
- Borough wide - the principal road and rail networks
 - Settlement areas as defined through the borough's Settlement ID Plans
- 8.5 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.
- 8.6 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).
- 8.7 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.

8.8 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.

8.9 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.

8.10 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

8.11 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.

8.12 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.

8.13 Potential funding for schemes could be a combination of:

- Developer contributions through Section 106 agreements and the Community Infrastructure Levy (CIL)



September 2014

- 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 Spelthorne 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.

8.14 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

8.15 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.

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

8.17 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.

8.18 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.

8.19 We recognise that schemes in the Forward Programme may be subject to



the Environmental Impact Assessment (EIA)³⁷ or the Habitats Regulations process³⁸. This will be dependent on scheme specifics. At the appropriate stage of scheme feasibility we would seek to:

- Obtain EIA screening opinion from the relevant planning authority
- Clarify the planning position relevant to the scheme
- Consider the 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 any ecology impacts of the scheme by consulting the county ecologist
- Consider any landscape impacts of the scheme, by consulting the county landscape architect

³⁷ EU Directive (2011/92/EU); Town and Country Planning (EIA) Regulations 2011

³⁸ EU Habitats Directive (92/43/EEC)

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.
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 ⁴¹
Cycling Strategy (2014-2026)	The Surrey Cycling Strategy is a component strategy of the Local Transport Plan
Scheme delivery stages (see Annex): 1. Scheme Identification 2. Identification and assessment of options 3. Preferred route and statutory process	The need for a scheme is identified; initial drawings may have been produced. Outline design of scheme options has been/is being produced. Preliminary design of preferred option.

⁴¹ Ove Arup 'Surrey Rail Strategy Report' (September 2013)

Term	Description
4. Detailed design 5. Construction	Scheme is designed to allow and instruct construction. Scheme is fully designed and works have begun on site.
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 westernmost Surrey districts and boroughs are part. More information at: http://www.enterprisem3.org.uk/
Intermediate scheme	Infrastructure scheme estimated to cost between £250,000 and £2 million.
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 and outlines proposals for the future.
Local scheme	Scheme cost is less than £250,000
Major scheme	Infrastructure scheme estimated to cost in excess of £2 million

September 2014

Term	Description
Office of Rail Regulation	The Office of Rail Regulation is the independent safety and economic regulator for Britain's railways.
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.
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.
Scheme delivery timescales (see Annex) Short term Medium term Long term	Timescale for start of construction 0-2 years from now, see Annex for given years Timescale for start of construction between 3 and 6 years from now, see Annex for given years Timescale for start of construction 6+ years from now, see Annex for given years

Term	Description
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. More information at: http://www.surreycc.gov.uk/surreyfuture
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.

ⁱ <http://www.nice.org.uk/guidance/ph41>