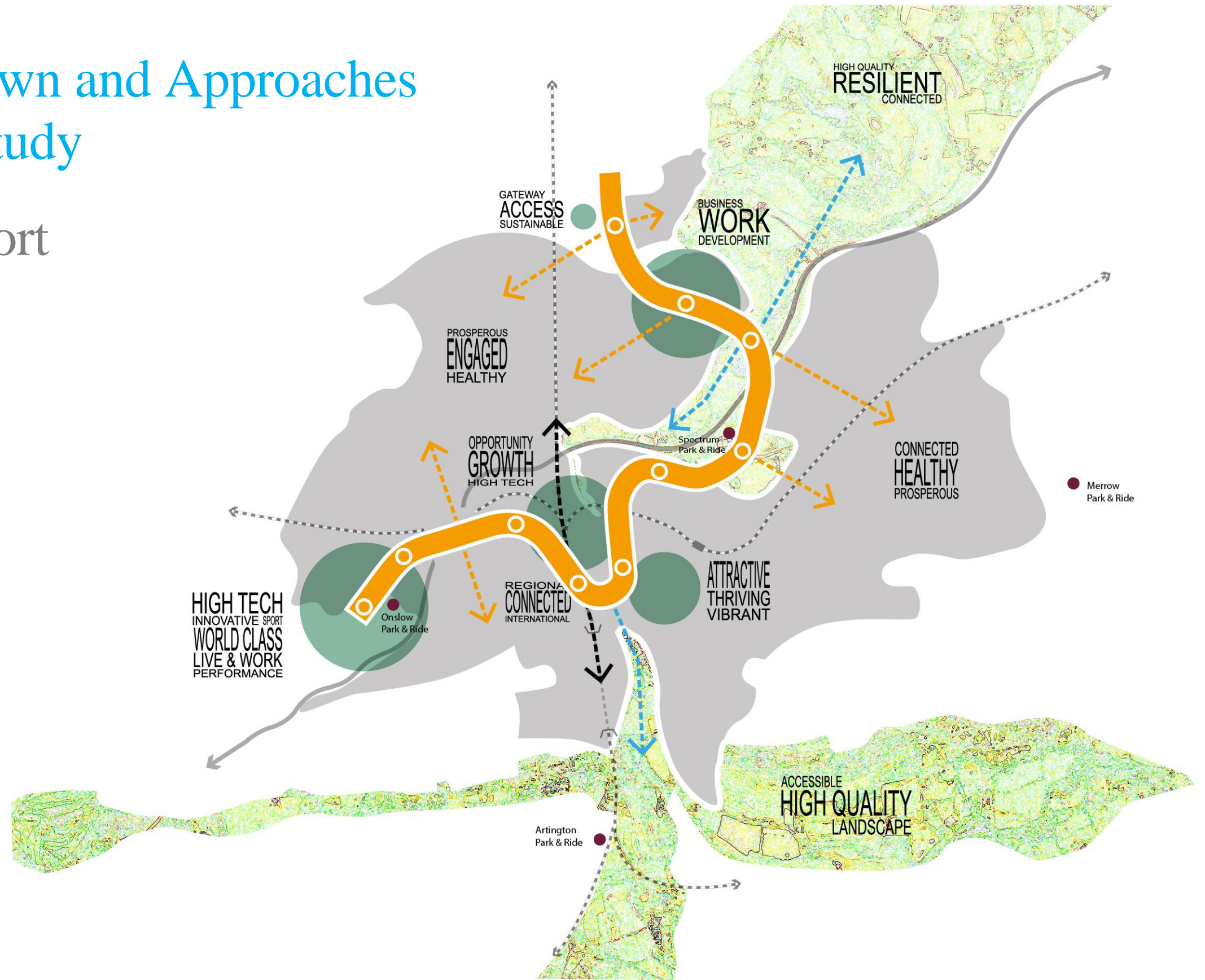


Guildford Borough Council

# Guildford Town and Approaches Movement Study

## Strategy Report



Guildford Borough Council

**Guildford Town and Approaches  
Movement Study**

Strategy Report

Final Updated | March 2015

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 232012-00

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# Document Verification



<b>Job title</b>		Guildford Town and Approaches Movement Study		<b>Job number</b>	
				232012-00	
<b>Document title</b>		Strategy Report		<b>File reference</b>	
<b>Document ref</b>					
<b>Revision</b>	<b>Date</b>	<b>Filename</b>	006-A-Guildford TAMS Strategy Report – Draft1.docx		
Draft	19 Feb 2014	<b>Description</b>	First draft		
			Prepared by	Checked by	Approved by
		Name	Stephen Bennett	Stephen Bennett	Susan Claris
		Signature			
Final	11 April 2014	<b>Filename</b>	006-A-Guildford TAMS Strategy Report - Draft2.docx		
		<b>Description</b>	Final		
			Prepared by	Checked by	Approved by
		Name	Stephen Bennett	Stephen Bennett	Susan Claris
	Signature				
Final Updated	Mar 2015	<b>Filename</b>	006-A-Guildford TAMS Strategy Report – Final Updated March 2015.docx		
		<b>Description</b>	Revised to provide clarifications and to correct errors		
			Prepared by	Checked by	Approved by
		Name	Stephen Bennett	Stephen Bennett	Susan Claris
	Signature				
<b>Issue Document Verification with Document</b>					
<input checked="" type="checkbox"/>					

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## Executive Summary

Arup was appointed by Guildford Borough Council in July 2013 to undertake the **Guildford Town and Approaches Movement Study (GTAMS)**. The aim of the study was to develop a recommended long term movement strategy to 2050 for the town of Guildford. This will inform the development of a new Local Plan for the borough for the period to 2031.

This report presents the findings of the final stage of the study, the **Strategy and Recommendations Stage**.

The study opened with the development of a headline vision for sustainable mobility in Guildford in 2050 and supporting objectives. The vision statement is:

**“The transport system in 2050 will sustain Guildford as a centre of excellence; with an attractive and thriving town centre; an innovative world-class high-tech employment sector; a high-quality resilient environment; an engaged, healthy and prosperous community; and excellent connections, locally, regionally, and internationally via airports and high speed rail links.”**

Metrics were developed to measure each of the objectives, and were used to describe the baseline position, the Business-As-Usual forecast for 2031 and 2050, and to appraise potential interventions and packages.

The **appraisal of interventions** and packages found that all of the sustainable transport intervention scenarios performed significantly better than other scenarios. Rail interventions serving more regional travel needs and new park and ride facilities also scored well. The appraisal resulted in a set of **preferred interventions** that support the 2050 vision for sustainable mobility in Guildford.

To be effective, the preferred interventions need to be developed and implemented through a consistently-applied framework. This framework is the **Movement Strategy for Guildford**. Four key principles have been identified for the movement strategy:

- Adaptability and flexibility
- Resilience and sustainability
- Incremental change
- Balance and choice

A **stakeholder workshop** was held on 31 January 2014 in Guildford. The aim of the workshop was to present the emerging movement strategy for Guildford and get feedback from stakeholders. There was clear support for the overall approach and the main interventions.

As sustainable transport is the main focus of the strategy, it is important to consider how and where this is best targeted to support the vision. **For movement within Guildford town, the priority modes are identified as walking, cycling and public transport.**

**For movement to and from the town, public transport, bus and rail, may be a viable alternative, but driving is sometimes the only reasonable option**, as people are coming from more diverse locations, and over longer distances.

The **key elements of the movement strategy** are presented in the report with details of recommended interventions in each area:

- Walking
- Cycling
- Public transport
- Traffic
- Public realm
- Regional movement

The indicative cost range and potential funding sources of each intervention are identified. It also includes consideration of how the strategy supports the 2050 vision for Guildford.

The **Implementation Plan** is a broad look at the potential timing of the implementation of interventions. It indicates the order in which interventions should be developed, rather than absolute timings, as the latter will be determined by external events throughout the strategy period, such as funding availability, political and economic cycles and the success of previous interventions.

The **Action Plan** identifies the short term ‘quick win’ interventions from the Implementation Plan and sets out an outline scope of work for each intervention in the form of actions for Guildford Borough Council and its partners, principally Surrey County Council as the Local Transport Authority and Local Highway Authority and the Highways Agency which is responsible for the A3 trunk road.

In addition to specific interventions, it also includes activities related to the preparation, approval and implementation of the *Guildford Borough Local Transport Strategy and Forward Programme*, into which the recommended strategy from the GTAMS study will feed. The *Guildford Borough Local Transport Strategy and Forward Programme* will become a module of Surrey County Council’s Local Transport Plan.

The Action Plan for Guildford Borough Council and partners identifies the following priorities:

- Feed the recommended strategy from GTAMS into the emerging *Guildford Borough Local Transport Strategy and Forward Programme* which is being developed under the auspices of the Guildford Local Committee, and will become a module of Surrey County Council’s Local Transport Plan;

- Programme manage the implementation of the *Guildford Borough Local Transport Strategy and Forward Programme*, including making funding bids;
- Coordinate the emerging *Guildford Borough Local Transport Strategy and Forward Programme* with the emerging Local Plan;
- Communicate the movement strategy to stakeholders and the general public;
- Develop the sustainable movement corridor concept, providing a priority pathway through the town for pedestrians, cyclists and public transport;
- Initiate walking and cycling improvements with local stakeholders;
- Start the ‘spring clean’ of the town centre public realm;
- Optimise the traffic control systems in the town centre;
- Address through traffic issues with Surrey County Council and the Highways Agency as lead partners;
- Address through traffic in Walnut Tree Close by developing a trial scheme to close Walnut Tree Close to through traffic;
- Review car park charges between town centre and park-and-ride as part of the future Surrey County Council/Guildford Borough Council Parking Plan for the borough to be developed under the auspices of the Guildford Local Committee; and
- Progress regional movement interventions with Surrey County Council as lead partner.

# 1 Introduction

---

Arup was appointed by Guildford Borough Council (GBC) in July 2013 to undertake the Guildford Town and Approaches Movement Study (GTAMS).

The aim of the study was to develop a recommended long term movement strategy to 2050 for the town of Guildford. This will inform the development of a new Local Plan for the Borough for the period to 2031. The recommended strategy will also feed into the emerging *Guildford Borough Local Transport Strategy and Forward Programme*, which is being developed under the auspices of the Guildford Local Committee, and will become a module of Surrey County Council's Local Transport Plan.

This report presents the findings of the final stage of the study, the Strategy and Recommendations Stage.

The report covers the following areas:

- Setting the Scene for a Strategy to 2050 (Chapter 2);
- Strategy Principles (Chapter 3);
- Appraisal Results and Preferred Interventions (Chapter 4);
- Stakeholder Strategy Workshop (Chapter 5);
- Developing a Movement Strategy for Guildford (Chapter 6);
- Key Elements of the Movement Strategy (Chapter 7);
- Implementation Plan (Chapter 8);
- Action Plan (Chapter 9); and
- Summary Remarks (Chapter 10).

## 2 Setting the Scene for a Strategy to 2050

*This chapter is written by Professor Glenn Lyons, Centre for Transport and Society, University of the West of England, Bristol. Professor Lyons is adviser to the Arup team on the study.*



### Introduction

2050 is 36 years away. It suggests a timescale within which Guildford can afford itself some ambition. It is looking to a society and transport system that will see the majority of those professionally involved into their retirement and beyond. For some it might appear too far removed from the realities we face, and need to confront, today.

A 36 year timescale can compare to, or be dwarfed by, the time it takes to debate and approve the go-ahead for some transport schemes (60 plus years in the case of Crossrail in London). A sobering thought perhaps. Any pathway to 2050 will envelop a number of cycles at work in the political sphere. Every day there is the possibility for new media headlines and shifting public opinion about transport. Every year, based on our track record nationally, there is the prospect of a new Secretary of State for Transport. In turn one could contemplate possible revisions to national transport policy on a cycle of two years. 36 years amounts to at least eight Guildford Borough Council elections and seven terms of parliament. This is quite a lot to contend with.

A strategy to 2050 for Guildford will face some significant unknowns and turbulence politically as well as economically in the journey of implementation. It is nevertheless a golden opportunity to be able to

contemplate shaping the county town of Surrey over the next three to four decades – a period of time that will pass more quickly than we might imagine. Before moving into the detail of that opportunity it seems appropriate to set out some food for thought that might help create a suitable frame of mind to approach the task in hand.

### Food for Thought

#### *Transport Shapes Society*

The mentality over past decades has been that transport serves society. A transport strategy was seen as something that should provide what people need in order to get about in their daily lives and secure economic prosperity. It has been about projecting how many people are wanting to get from A to B and ensuring a system is in place to allow this to be achieved as effectively as possible. However, the reality is different. Transport does not merely serve society; transport shapes society just as society shapes transport. As one changes it influences the other. What we do to the transport system in Guildford will, over time, influence the town's very character, its built environment and the people and activities that comprise its identity and sense of place. We should therefore adopt a mentality that transport should support the sort of society we wish to have or create, recognising that both will be in a continuous state of inter-dependent evolution.

#### *Resistance and Adaptability to Change*

There are two very powerful human traits in relation to how things change and evolve. The first is resistance to change. People are commonly creatures of habit, entrenched in particular routines and ways of going about their lives. They are inclined to feel uncomfortable at any prospect of change that might displace or disrupt such habit and



routines— especially that change seen to be imposed upon them by authority. They fear change as inevitably being for the worst. When presented with a proposed future scheme or policy, people try to superimpose their present day behaviour and that of others on the changed world brought about by the scheme and see that the two will not fit. Fear of change is then also fuelled by the media.

Yet in fact people can exhibit great adaptability to change when it is thrust upon them, as can be the case for all of us as we move through our life courses or face disruptions. People change jobs, move house, get married and perhaps divorced, have children, change interests, become grandparents, move into retirement and so on. As we adapt to change we realise that not only is change possible but that it can be for the better rather than inevitably for the worst.

As stakeholders in a strategy's development, it is important to try and rise above an instinctive resistance to change and place greater confidence in the capacity to adapt. This opportunity to set out a strategy to 2050 should be used to shape the sort of Guildford one wants to see, believing in the ability of people and businesses to adapt their behaviours to suit. This of course requires political courage and effective public engagement.

### *Stealthy Accumulation of Change Regardless of a Transport Strategy*

While some changes in society can be dramatic (for example a sudden energy crisis) most change can be subtle and slow and yet nevertheless profound. We have seen this with congestion in our towns and cities in past decades. From day to day, month to month and even year to year, the worsening of congestion is too modest to notice (not least because we adapt to it).

Yet the accumulation over longer time spans reveals significant change. Such 'stealthy' accumulation of change is taking place in many aspects of society: energy supply and storage; public health (and obesity), ageing, the makeup of the labour market, the technologies and practices of how we communicate in the digital age, and the propensity of young people to learn to drive. These are important dynamics that are conspiring to shape our society in ways that we must be alert to. Yet it can be easy to be blind to this when developing a strategy and to believe that we are designing a strategy for 2050 for the Guildford society of today rather than that which will unfold over the next 36 years.

Changes in retail are an important reminder of the importance of such matters. Campaigns to 'save our high streets' reflect the ravages, not only of out-of-town superstores, but the relentless growth in online retailing – further fuelled by the arrival of smartphones and tablet PCs. A 2050 transport strategy needs to place itself in the context of a changing society.

### *Future-Proofing in the Face of Uncertainty*

The one thing we can be certain of about the future on the 2050 horizon is that it is unpredictable. Some drivers of change are known and understood; some are not. We can be fairly confident about the projected changes to the age profile of our population – and yet we have much less understanding of the consequences of an ageing society in terms of where and how older people will live and what changes in transport demand that will create. A particular phenomenon that is currently creating intellectual debate in a number of countries is that of peak car. There are signs that society's consumption of automobility may be peaking or at least plateauing. Over the first decade of the new millennium, the number of trips per person per year by car fell; the proportion of young people with driving licences reduced. Of course

there may be recessionary effects at work but we must at least contemplate the possibility that over the next 36 years the dominance of the private car in society will dwindle as we move further from the motor age into the digital age. Guildford needs to seek a transport strategy that will best enable it to invest in future-proof developments. This may point towards developments that are sufficiently adaptable to the uncertainties that lie ahead. Beware flagship schemes that could turn into white elephants.

### *Deliverability is Paramount*

The Department for Transport now has a Business Case Approach for major investments. This places emphasis not only on the value for money of investment but also on whether a scheme is commercially viable, financially affordable and achievable. There may be a strong temptation within a strategy to 2050 to ‘think big’ and explore major schemes as an answer to Guildford’s future. However, there are countless examples of grand schemes in the making that take a very long time to materialise. Consider for instance the proposition of a road tunnel for Stonehenge. Numerous proposals have been considered for the stretch of road concerned over more than 20 years. From a 1995 proposal for a tunnel, it took some 19 years before investment was confirmed in late 2014, and a completion date is as yet unconfirmed. Major schemes are likely to face significantly greater challenges of deliverability and may also be more vulnerable when it comes to future-proofing and a need for adaptability. ‘Thinking big’ in terms of specific initiatives could come at the cost of development paralysis and lost investment opportunity.

### *The Importance of Consistency*

Political cycles can pose problems for strategic planning by potentially undermining the need for a long-term strategy that can remain in force

and be consistently taken forward in terms of implementation. Individuals and businesses make their own investments and long-term decisions based in part on the outlook for the location in question and the degree of confidence in the direction of travel of developments. For example, as uncertainty surrounding the policy for a third runway in the South East of England continues, it is reported to be very destabilising for business developments. There is a need for a vision for Guildford in 2050 and a planned development pathway that have broad support that can be maintained.

### *In Summary*

Producing, let alone implementing, a long-term strategy that is effective is unavoidably a difficult task. Many different futures for society could unfold and there may be degrees of divergence in the type of future for Guildford that is desired. The points made above are not designed to necessarily make the task any easier but are intended to promote a mind-set that can help shape a strategy that has the best prospects for success. In light of such considerations, a proposition to conclude with is a possible ‘strategy for the strategy’: aim to map out small, achievable steps forward within a strategy that can be consistently applied in a way that accumulates a significant change in the transport system and the related built environment of Guildford, allied to the recognised ability of the public and businesses to adapt and thus together shape and support the sort of society that is desired for the town. Finally, it is crucial to be mindful that the transport strategy cannot be devised in isolation from the spatial planning of the borough as it emerges through the Local Plan process.

### 3 Strategy Principles

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Given Professor Lyons's comments, four key principles have been identified for the movement strategy<sup>1</sup>:

#### **Adaptability and Flexibility**

**The strategy is intended to cover a long period of time (to 2050) and therefore it must be able to be modified to suit the external environment as conditions change around Guildford, and as the pace of change varies with social, technological, economic, environmental, and political cycles.**

#### **Incremental Change**

**The strategy should not rely on a major scheme solving all the problems; it should enable small steps to be taken through shorter-term independent projects. It should also develop long-term overarching integrating programmes. This approach builds confidence in results and provides feedback into on-going projects.**

#### **Resilience and Sustainability**

**The strategy should help the town deal with future shocks and events, such as fuel price hikes or major weather events, providing alternative and efficient ways to travel within and to the town.**

#### **Balance and Choice**

**The strategy is not forcing people to do anything, it is providing a balanced offer and a real choice about how they move around the town for different purposes in the future.**

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<sup>1</sup> Informed by 'Places of Connection: Utrecht 2012' Learning Cities Platform. <https://learningcitiesplatform.wordpress.com/2012/11/29/final-report-on-the-learningcitiesplatform-event-2012-is-out-now/> - accessed January 2014.

## 4 Appraisal Results and Preferred Interventions

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The appraisal of interventions and packages undertaken in the previous stage found that all of the sustainable transport intervention scenarios and the sustainable movement corridor performed significantly better than either the highway infrastructure or the other interventions. The other interventions, which are largely rail interventions serving more regional travel needs, scored well, and better than the highway infrastructure investment interventions.

The appraisal was supported by the statutory and non-statutory assessments undertaken for this study.

The Strategic Environmental Assessment (SEA) and Habitats Regulations Assessment (HRA) reports highlighted the ecological and biodiversity issues, particularly with road capacity interventions. For example, the A3 widening scheme is likely to result in habitat loss, and the A3 northern bypass would run through the Thames Basin Heaths Special Protection Area.

The Equality Impact Assessment (EqIA) report highlighted that sustainable transport interventions potentially benefit older people, children, and people with impaired mobility and vision, as these groups are less likely to own or use a car and would benefit from additional transport choices.

The process resulted in a list of preferred interventions. These preferred interventions can be categorised as follows:

- **Public transport** - new sustainable movement corridor, new services, new and expanded park-and-ride, enhanced bus services with priority, better integration;
- **Walking** - new and enhanced routes, development of a network, enhanced environment;
- **Cycling** - cycle superhighways with better facilities for cyclists in the town, including bike hire and sharing schemes;
- **Public realm improvements** - improved streetscape and wayfinding;
- **Demand management** - through car hire and sharing schemes, use of parking charges, encouragement of remote working, and a smarter choices programme to encourage use of more sustainable modes of travel; and
- **Regional links** - strengthening transport links to and from Guildford to other Surrey towns, to London, to Heathrow and Gatwick airports, and to other national and international connections.

To be effective, the preferred interventions need to be developed and implemented through a consistently-applied framework. This framework is the movement strategy for Guildford.

## 5 Stakeholder Strategy Workshop

### 5.1 Workshop Attendance and Objectives

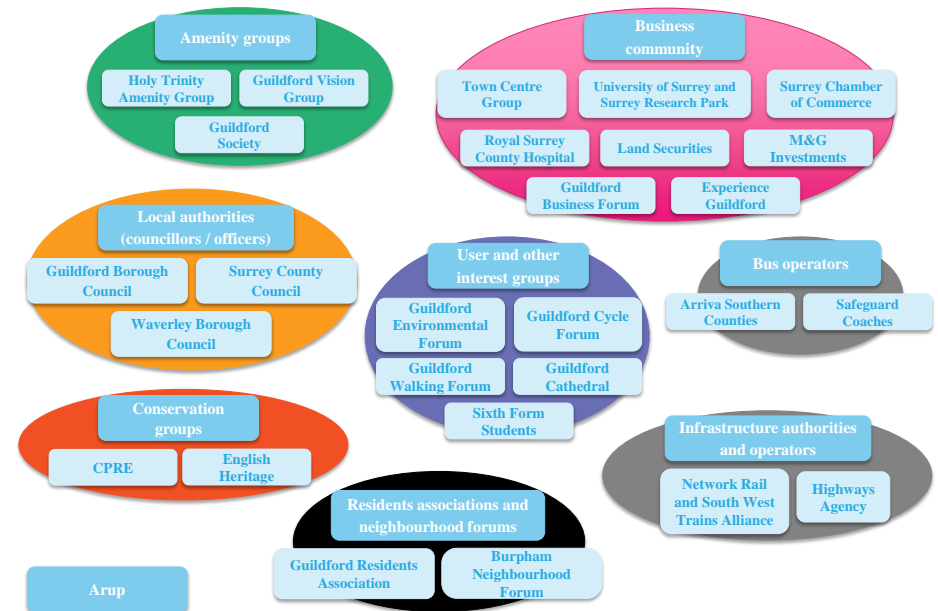
A stakeholder workshop was held on 31 January 2014 in Guildford. The aim of the workshop was to present the emerging movement strategy for Guildford and get feedback from stakeholders.

Among the delegates were representatives of Guildford Borough Council, Surrey County Council, the Highways Agency and a diverse range of stakeholders from the business and wider community, as shown in **Figure 1** and listed in Appendix A. Many participants had attended the previous Transport Futures Workshop in September 2013.

The objectives of the workshop were to:

- Present the emerging movement strategy to give an understanding of the approach and likely interventions;
- Get feedback from stakeholders on the strategy, including elements that they supported and elements that were missing or not supported; and
- Build consensus amongst Guildford stakeholders for the strategy.

**Figure 1: Workshop attendees**



## 5.2 Workshop Format

To achieve the above objectives the following workshop agenda was developed:

<b>09:30</b>	Introduction (Susan Claris, Arup)
<b>09:40</b>	Welcome (Councillor James Palmer, Deputy Leader of Guildford Borough Council)
<b>09:45</b>	Setting the Scene for a Strategy to 2050 (Prof. Glenn Lyons, UWE)
<b>10:10</b>	The Movement Strategy for Guildford (Stephen Bennett, Arup)
<b>10:50</b>	Questions and Clarification
<b>11:00</b>	Break
<b>11:15</b>	Breakout groups to discuss the movement strategy
<b>12:00</b>	Groups report back and final questions
<b>12:30</b>	Workshop close

After brief presentations to welcome stakeholders and provide the study context, a keynote presentation was given by Professor Glenn Lyons to set the scene for a strategy to 2050 and to identify some food for thought to help create a suitable frame of mind to approach strategy development (as outlined in Chapter 2). Arup then presented the draft movement strategy for Guildford. There were several questions of clarification.

Following that, attendees were divided into discussion groups of about eight people. Each group had a facilitator and a plan of Guildford to prompt discussion.

The groups were asked to discuss the following questions:

- What do you like best about this movement strategy?
- Are there aspects of the vision not addressed by the strategy?
- Is this the right level of change / ambition for Guildford's transport network?
- What would you like to see introduced first and where?

## 5.3 Outcomes of the Workshop

Following the group discussions, a representative from each group provided feedback of key points from the discussion. The main themes from the feedback are provided in Appendix B. These comments have been addressed and incorporated in the strategy presented in the next chapter.

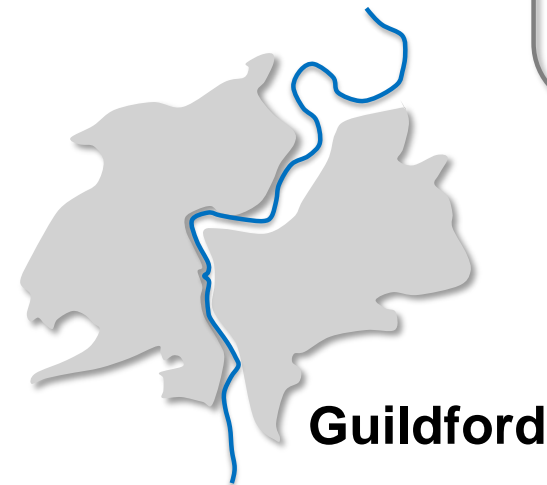
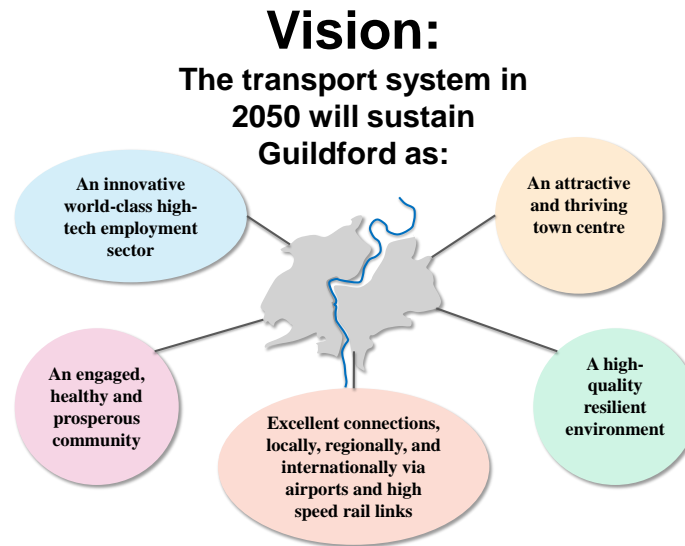
In summary, there was clear support for the overall approach and the main interventions. Dealing with through traffic was highlighted as a key issue.

## 6 Developing a Movement Strategy for Guildford

There are three key elements that provide the starting point for the development of the movement strategy for Guildford:

1. The 2050 vision for sustainable mobility in Guildford;
2. Guildford town itself and the movement networks that serve it; and
3. The list of preferred interventions.

A successful strategy for Guildford must bring these three elements together. This process is explained over the next few pages.



**Figure 2** illustrates how the vision is physically represented in the town. This graphic shows the key elements of the vision; the things that stakeholders indicated are important to the future of Guildford, together with key features of the town from a movement perspective.

It shows:

- the town centre;
- the key employment locations, particularly the Surrey Research Park, the University of Surrey and the Slyfield Industrial Estate;
- the main environmental assets – the river, the surrounding countryside, but also the green elements within the town, such as Stoke Park;
- some of the key community facilities, such as the Royal Surrey County Hospital, Guildford College and the Guildford Spectrum leisure complex;
- Park-and-ride sites; and
- Guildford rail station as the key point of departure and arrival for longer distance journeys on the rail network.

**Figure 2: The Vision in Guildford**



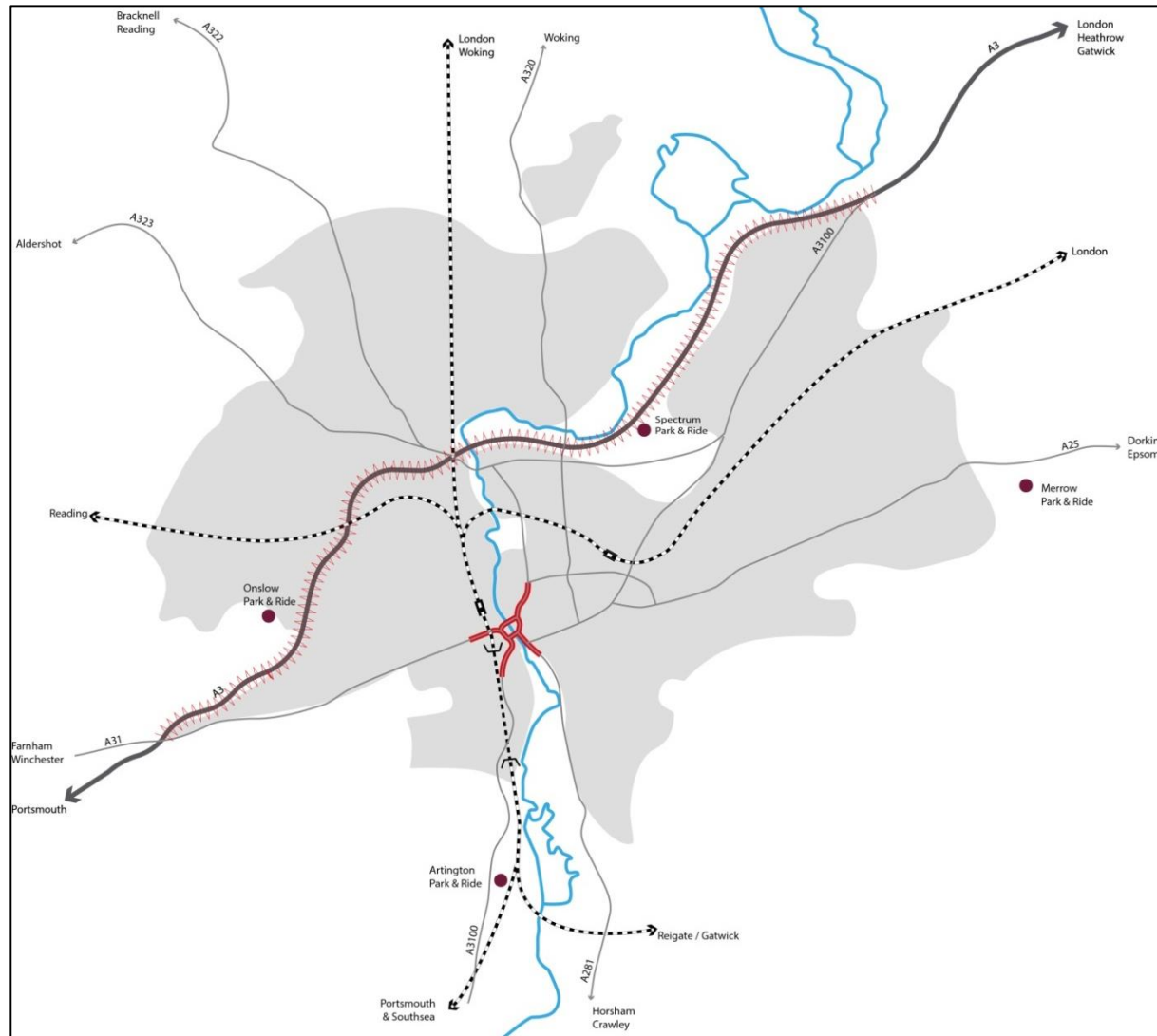


**Figure 3** illustrates the existing movement system in Guildford.

It shows:

- the main road network within the town, including the Gyratory in the centre and the A3 trunk road which bisects the urban area;
- the rail network including the Portsmouth-London line, the North Downs line and the New Guildford Line; and
- the four park-and-ride sites to the east, south and west of the town.

**Figure 3: The Existing Movement System**



*Note: Red zigzag represents extent of A3 trunk road in the urban area of Guildford*

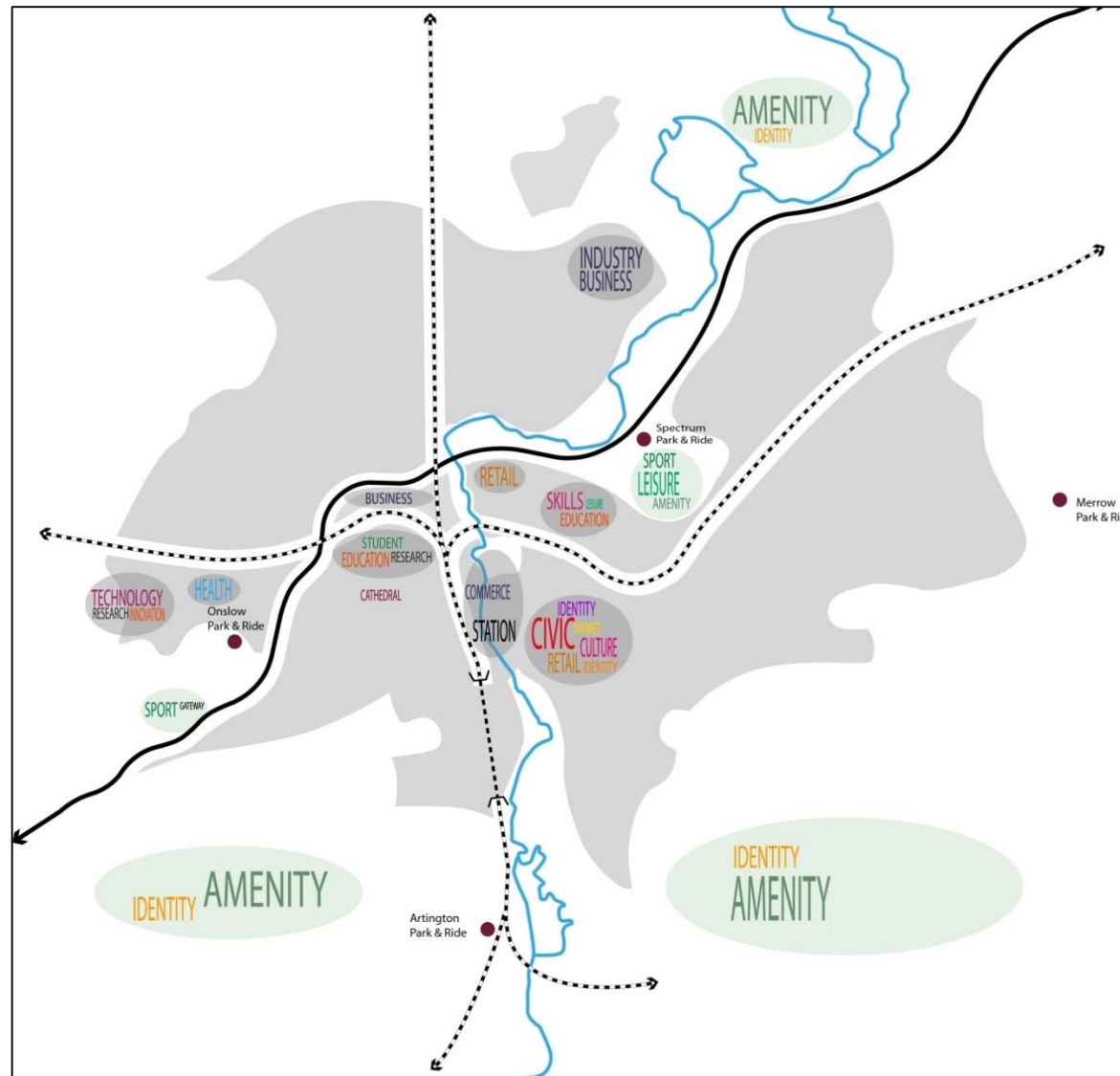
**Figure 4** shows the existing movement network overlaid on the key elements of the vision, together with features of the town from a movement perspective at a finer grain than shown in **Figure 2**.

What is clear from this image is the way the movement system segregates different areas of the town. For example:

- the Surrey Research Park and the Royal Surrey County Hospital are physically segregated from the rest of the town by the A3 and a railway line;
- the University of Surrey’s Stag Hill campus is separated from its Manor Park campus, the Surrey Research Park and Guildford town centre by the A3 and railway lines; and
- Slyfield and the residential communities to the north east of the town are separated by the A3 and, to some extent, the river.

The town is divided into many different segments, with the existing movement network often acting as both a physical and psychological barrier to movement, affecting accessibility and permeability.

**Figure 4: Impacts of the Existing Movement System**

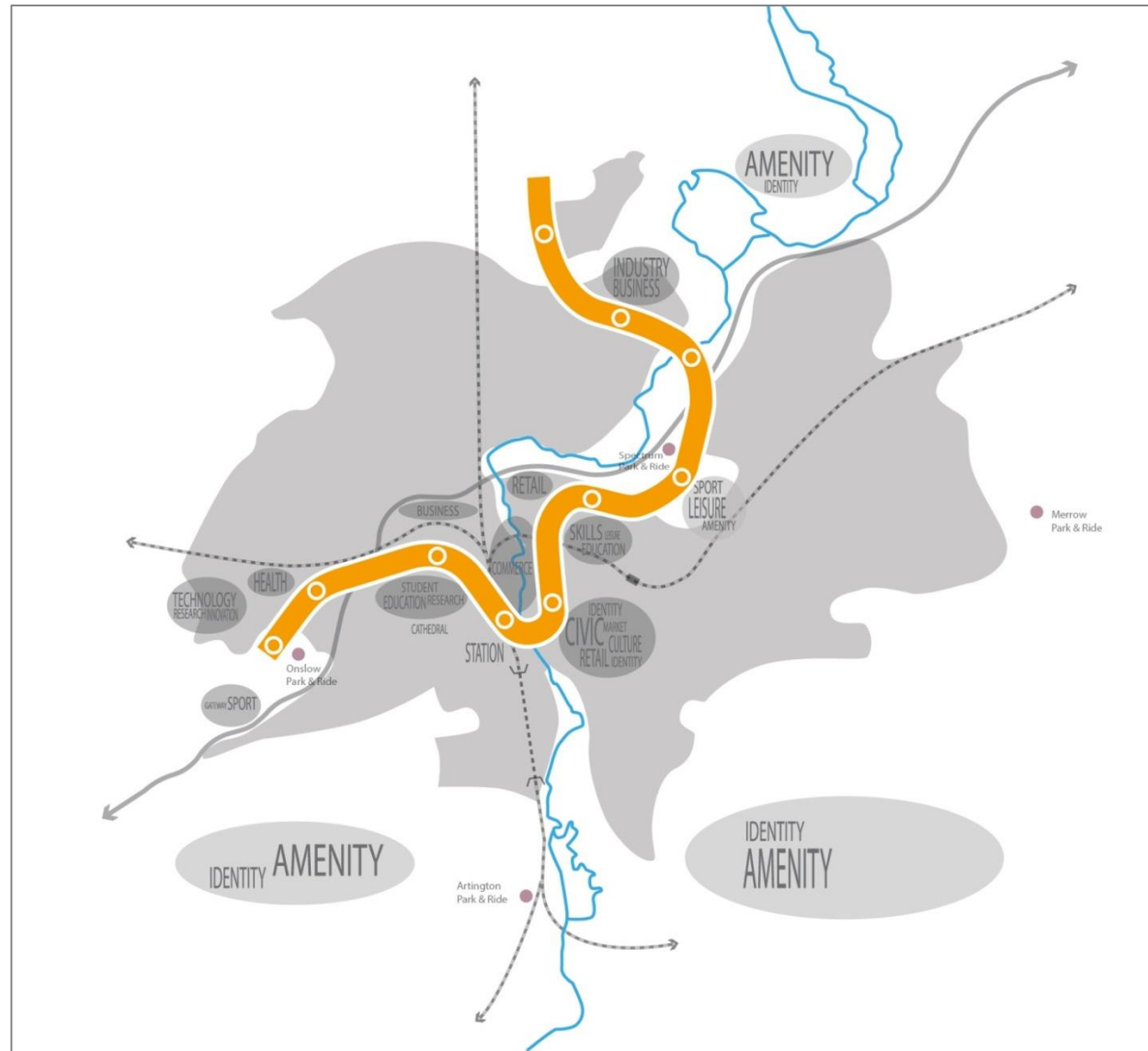


**Figure 5** shows the first stage in the development of a new sustainable movement corridor for Guildford that connects the key elements of the vision.

It identifies a route that links the town centre to the University of Surrey’s Stag Hill campus, and onwards to the Manor Park/Surrey Research Park/Royal Surrey County Hospital area to the west.

It also links the town centre to Guildford College, the Guildford Spectrum leisure complex and Slyfield Industrial Estate to the north.

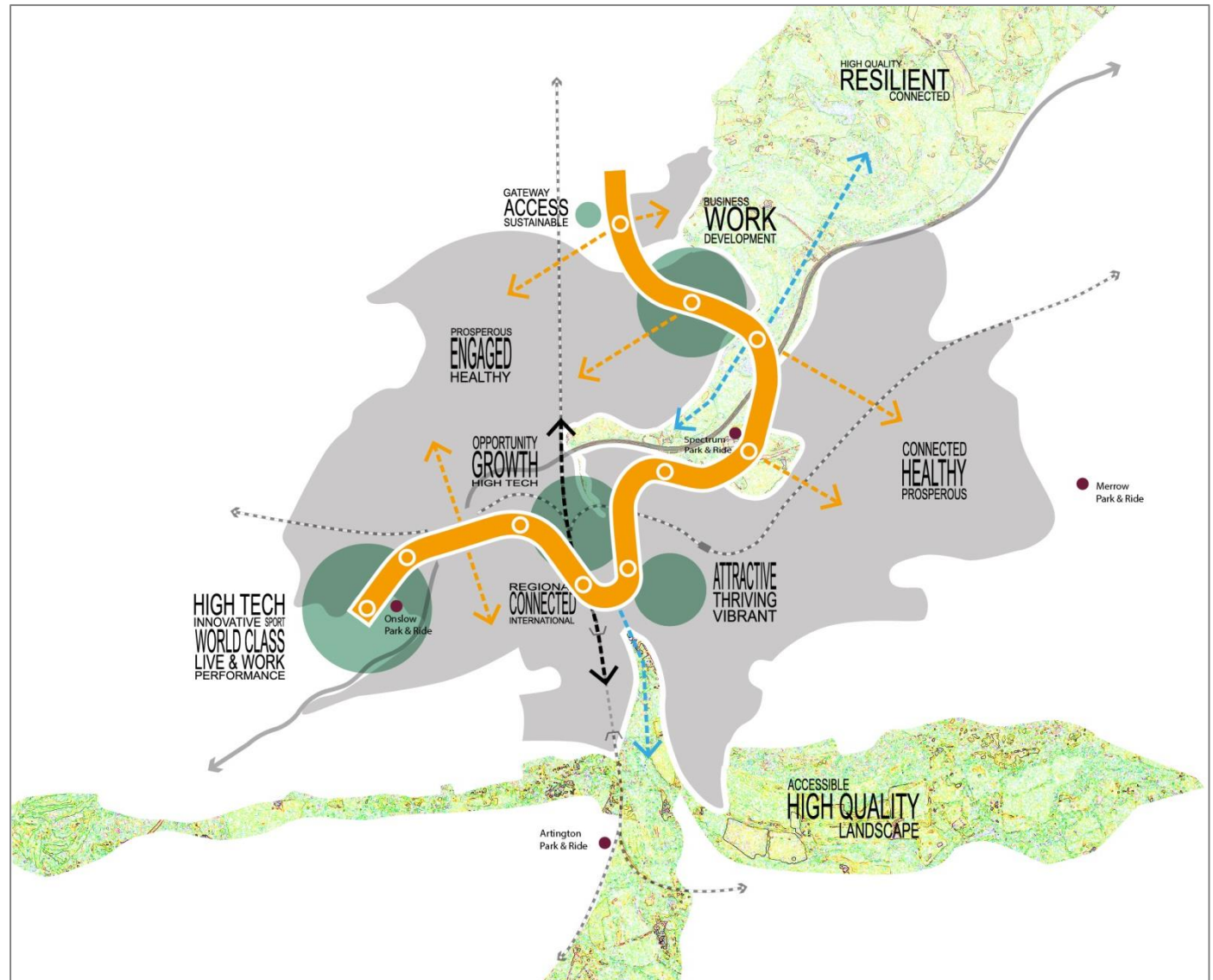
**Figure 5: Connecting the Key Elements of the Vision**



**Figure 6** develops the concept further. It shows:

- how the movement corridor could connect some of the key existing areas of the town that are drivers of growth for the future;
- potential opportunities for growth that could be supported by such a movement corridor, for example between the river and Woodbridge Road, or around the Slyfield Industrial Estate;
- how the movement corridor could provide opportunities for linkages to residential areas to the north (Park Barn) and to the east (Burpham); and
- how connections could be made between this movement corridor and the river and the countryside at key locations.

**Figure 6: A New Sustainable Movement Corridor for Guildford**



**Figure 7** provides further explanation of the concept for the sustainable movement corridor.

It is an attractive, landscaped pathway through the town for pedestrians and cyclists, accessible to all.

It is also a priority public transport route through the town that provides for fast and direct connections between key locations.

It can be used by existing bus services, but also by new services running only on this corridor, potentially Bus Rapid Transit (BRT) or even a tram system, if there is significant growth in demand in future to support this type of technology.

**What is Bus Rapid Transit?**

BRT is defined as ‘a flexible, high performance rapid public transport mode that combines a variety of physical, operating and system elements into a permanently integrated system with a quality image and unique identity.’<sup>2</sup>

<sup>2</sup> Levinson et al., Bus Rapid Transit - Implementation Guidelines, TCRP Report 90- Volume II quoted in US FTA / DOT (2004)

**Figure 7: Defining the Sustainable Movement Corridor**



*Characteristics of Bus Rapid Transit for Decision-Making - accessed March 2014.*

Whilst the sustainable movement corridor is the centrepiece of the strategy, there is a number of other interventions that are recommended as part of the strategy to support its implementation, as shown in **Figure 8**.

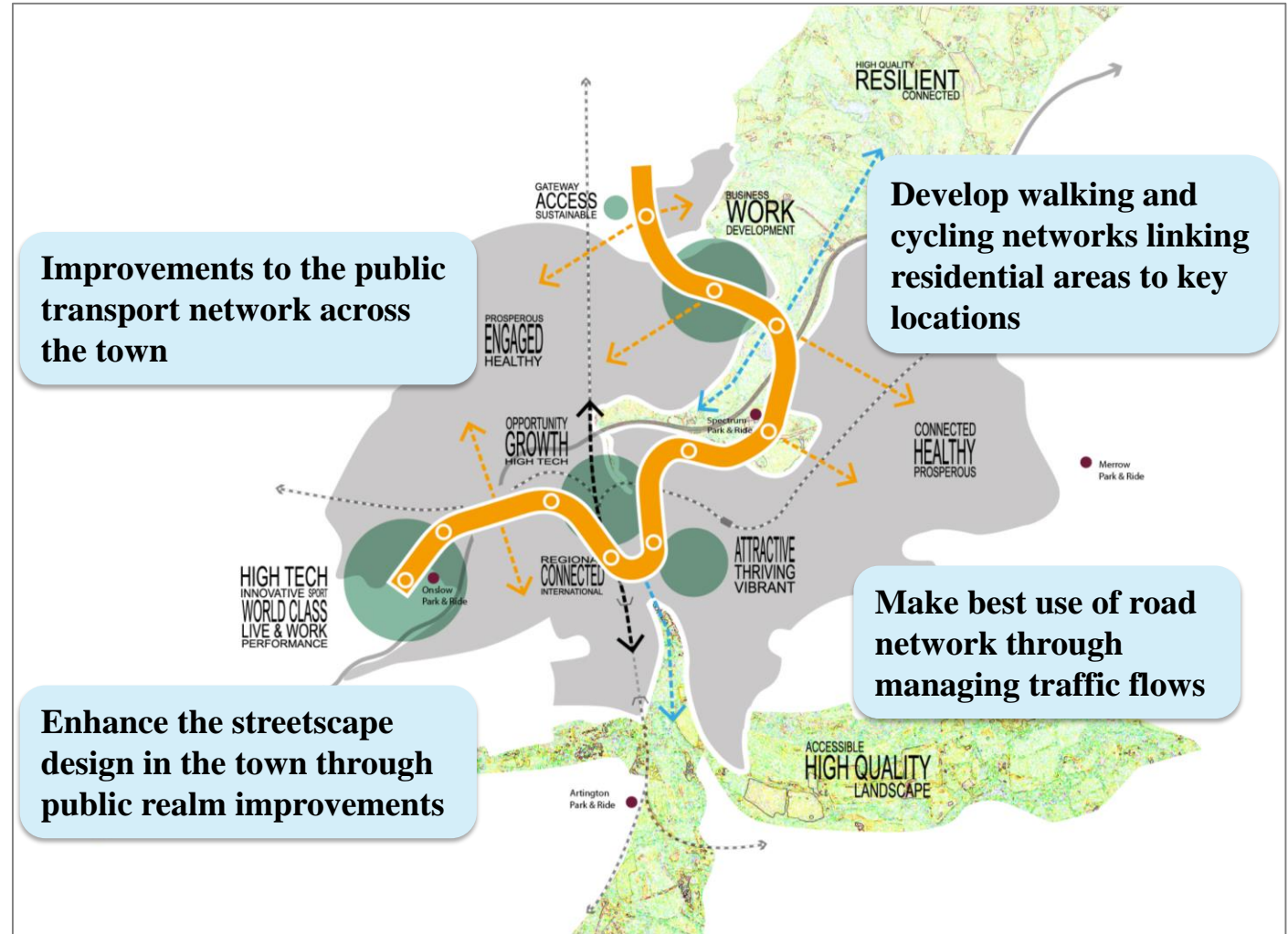
These interventions include:

- walking and cycling networks;
- public transport improvements;
- making best use of the road network; and
- enhancing the streetscape.

Regional connections are also a key element of the strategy.

More details about the elements of the strategy are presented in the following chapter.

**Figure 8: The Movement Strategy for Guildford**



## 7 Key Elements of the Movement Strategy

As sustainable transport is the main focus of the strategy, it is important to consider how and where this is best targeted to support the vision.

For movement within Guildford town, trips are short (typically less than five kilometres or three miles) and in a more dense land use environment. Use of a car is not necessary in many cases, as these trips are more suited to walking, cycling or using public transport<sup>3</sup>, as illustrated in **Figure 9**.



This not only benefits people in the town, but reduces congestion for those travelling to or from areas outside the town.

For movement to and from the town, people are coming from more diverse locations, and over longer distances. In this case, public transport (bus and rail) may be a viable option, but in many cases, it is just not economic to try and serve all of these trips. So driving is sometimes the only reasonable option.

The key elements of the movement strategy are presented in the following sections:

- Walking;
- Cycling;
- Public transport;
- Traffic;
- Public realm; and
- Regional movement.

**Figure 9: Priority Modes by Location**

Location	Priority Modes
Within the town 	Walking, cycling, public transport
To / from the town 	Public transport, driving

<sup>3</sup> Shorter trips are more suited to walking and cycling because walking and cycling do not require the same level of resources as cars (i.e. road space, parking space, and associated infrastructure, which are particularly limited in urban areas) and have much lower environmental impacts (e.g. vehicle emissions and noise), and because

they have health and well-being benefits for people. Public transport is more suited to shorter trips than car because it makes more efficient use of fuel and road space per person.

## 7.1 Walking

Walking is the fundamental mode of transport and this mode should be prioritised in the strategy, particularly for movement within the town for shorter trips. Guildford is a relatively small town, and the majority of journeys within the town are less than five kilometres long, but over one third of these trips are made by car.<sup>4</sup> With walking interventions, there is clearly scope for many of these trips to transfer from car.

The recommended interventions for walking are listed below:

- A comprehensive network of walking routes linking key trip attractors/generators such as employment areas, housing areas and education and leisure facilities;
- Improved wayfinding for pedestrians around the town – see box opposite;
- Pedestrian facilities including replacing overbridges/subways with at-grade crossing facilities, improving crossings/islands, widening pavements, creating shared surfaces, and improving personal security with lighting and safe pedestrian routes; and
- Widening of the pedestrian bridge linking Walnut Tree Close to the Bedford Road surface car park site, creating better pedestrian linkages between the rail station and the town centre.

Walking improvements should be prioritised where there are currently existing high pedestrian flows, and for links between residential areas and the town centre or employment sites. In the stakeholder workshop, it was suggested that a ‘blue’ movement corridor is developed along the River Wey, for walking and cycling.

<sup>4</sup> Calculations based on 2001 Census travel to work data indicate that 39.7% of trips within the Guildford urban area are made as (single occupancy) car trips.

## Wayfinding

A good wayfinding strategy becomes the backbone that enlivens towns. Wayfinding as a town-wide information system communicates through various channels and platforms and provides reassurance and open access to all groups of users of public space. It encourages walking and cycling, maximising sustainable transport modes and enables an understanding of places, distances and routes.

A Wayfinder signage system is being implemented in Guildford town centre through the LSTF<sup>5</sup> – see examples below. Locations have been identified for the new signage and a consistent design agreed. Initial waymarkers (25 of 71 locations identified) will be implemented in 2014/15.

It is recommended that this programme should be continued beyond 2015 completing the remaining locations identified, and then further expanded to include additional routes, focusing particularly on routes between residential areas and local centres and pedestrian routes to public transport nodes.



<sup>5</sup> Local Sustainable Transport Fund.



The total indicative cost of the walking interventions is expected to be in the £0.5-5 million range.

Funding for the walking interventions is expected to come from the local authorities, Guildford Borough Council and Surrey County Council, through initiatives such as the Local Sustainable Transport Fund (LSTF).

The benefits of the walking interventions are expected to be:

- Reduced single occupancy car trips within the town, reducing traffic levels if roadspace reallocated in parallel;
- Reduced noise and pollution; and
- Increased activity levels amongst the population which has significant health benefits.



## 7.2 Cycling

Cycling should be prioritised in the strategy, particularly for movement within the town for shorter trips. At an average speed of 15kph, a cyclist could get to most parts of Guildford town within 20 minutes with the appropriate infrastructure.

The recommended interventions for cycling are listed below:

- A network of dedicated and continuous ‘cycle superhighways’ on key routes – cycle lanes that are at least 1.5m wide and continue through junctions, with supporting features such as advanced stop lines at traffic lights, improved junction layouts, and contraflow bike lanes where appropriate;
- A well-signed comprehensive network of local cycling routes linking key trip attractors/generators such as employment areas, housing areas and education and leisure facilities;
- Safe and secure bike parking facilities in town centre, local centres, employment centres, public buildings etc.; and
- A bike-sharing or cycle hire scheme to enable visitors or occasional users to have access to bikes in the town, building on the Brompton Dock scheme at Guildford station.

The cycling improvements should be prioritised where there are currently existing heavy flows of cyclists, and for links between residential areas and the town centre or employment sites, and along the River Wey in the town. They can be based on existing cycle lanes and routes, but extending and improving these to make continuous routes and to introduce more segregation to encourage new users.

<sup>6</sup> The All Party Parliamentary Cycling Group’s report ‘Get Britain Cycling’ (2013) recommends a cycling budget of £10 per person per year increasing to £20 – for Guildford borough this equates to £1,371,830 rising to £2,743,660 per year.

Schemes should be developed in consultation with local cycle user groups.

The total indicative cost of the cycling interventions is expected to be in the lower end of the £1-5 million range per year. A figure of £1.4 million per year increasing to £2.8 million is recommended, based on an indicative budget per resident per year<sup>6</sup>.

Funding for the cycling interventions would be expected to come from the local authorities, Guildford Borough Council and Surrey County Council, through initiatives such as the Local Sustainable Transport Fund (LSTF), but given the wider benefits of cycling, funding could also come from health, education and sport budgets, as well as from the private sector, where businesses would benefit from specific improvements.

The benefits of the cycling interventions are expected to be as follows:

- Reduced single occupancy car trips within the town, reducing traffic levels if roadspace reallocated in parallel;
- Reduced noise and pollution;
- Increased accessibility to employment and community services in the town; and
- Increased activity levels amongst the population which has significant health benefits.



### 7.3 Public Transport

Within Guildford, the bus network already plays an important role in moving people around the town, bringing them to work and to the town centre for shopping and other activities. It is essential for the one-fifth of households in Guildford town that do not have access to a car<sup>7</sup>. But it also serves as an alternative to the private car for longer trips within the town, and for those who prefer not to, or are not able to, walk or cycle.

The recommended interventions for public transport are listed below:

- A new part-segregated public transport priority route linking key locations in the town – the sustainable movement corridor – including green land bridges at certain crossing points;
- Bus priority and corridor improvements – segregation, signalling priority and bus gates at pinch-points, customer information systems and other stop improvements;
- Integration of public transport – see box on following page;
- New and expanded park-and-ride facilities, including potentially on the northern edge of the town to attract car journeys on the A320, A322 and A323;
- Expansion of existing park-and-ride facilities where use is high and increases through this strategy; and
- Consider the business case for water transport services along the River Wey, to complement the ‘blue’ walking and cycling corridor.

It is envisaged that, in the short term, the public transport improvements in the strategy are based around the bus, building on the current network in the town. In the longer term, as patronage increases

<sup>7</sup> According to calculations based on Census 2011 data, 19.3% of households in Guildford town do not have access to a car.

and growth occurs around the town, the potential to upgrade to a tram system could be investigated, perhaps linked to a specific development that could contribute funding.

It is important to safeguard the sustainable movement corridor so that it is not obstructed by future development. This was considered as particularly important by stakeholders at the strategy workshop.

Infrastructure elements of the movement corridor are important, particularly where it crosses the A3, railway and river. Rather than a conventional road bridge, a green land bridge is proposed at certain crossing points, providing a wide landscaped bridge with provision for segregated public transport as well as walking and cycling paths. Some example images are shown below.



Bus services can run solely on the new movement corridor from end to end, but existing routes could also be diverted to use parts of the corridor. For example, services from the Surrey Research Park could use the corridor to the town centre and then run on-street as normal into the Merrow or Burpham areas.

This concept is similar to the system implemented in the Thames Gateway area, known as the Thames Gateway Fastrack service – further details are provided in the case study opposite.

The new park-and-ride would fill a gap in the network around the town to cover the northern approaches to Guildford, particularly traffic from Woking on the A320.

### Integration of Public Transport

If transfers between public transport services can be made easier, quicker and more convenient, more people are likely to use the system. It is therefore recommended that, wherever possible, interchange between services (e.g. bus-rail, or bus-bus) is co-located at an interchange hub. Where this is not possible or desirable, for example where bus operators prefer to have the bus station or potential replacement facilities in the town centre rather than at the rail station, pedestrian links should be direct, convenient and clearly signed. Other measures to improve integration are: coordinated timetabling of services, particularly where services are less frequent (but recognising the challenges of having different operators) and development of smartcard integrated ticketing for seamless use of services.



### Case Study – Thames Gateway Fastrack

Fastrack is the high quality transport system in the Thames Gateway area (Dartford and Gravesend), delivered in partnership between Kent County Council, Arriva and other Kent Thameside partners. It was part-funded by the private sector. It features:

- Segregated busways with priority over other traffic;
- High-tech bus stop stations featuring displays that show the actual times of the next bus;
- High-quality, air conditioned vehicles in a blue and grey colour scheme for ease of identification;
- CCTV security system for the security of both passengers and drivers;
- Dedicated drivers with Fastrack uniform for personalised service;
- Frequent and reliable 'turn up and go' service (usually 10 minutes headway);
- Real-time information;
- Fully-accessible vehicles with a low entrance and no steps inside the front half; and
- Well-spaced seats and extra legroom for extra comfort; and
- Free wifi capability on Fastrack buses.

In its first year the service carried over 3 million passengers, with 19% of passengers switching from using a car. The system has won a number of industry awards for this success.

The total indicative cost of the public transport interventions is expected to be in the £20+ million range. The full movement corridor is expected to cost in the region of £75-100 million, including infrastructure such as bridges over the railway and river. It is envisaged that this would be constructed in stages to spread the cost over the 36 year period to 2050. For example, in the strategy workshop a number of stakeholders expressed a desire to complete the University of Surrey - Town Centre section first.

Funding for the public transport interventions would be expected to come from a range of sources. The movement corridor could be funded through the Enterprise M3 Local Enterprise Partnership. Funding could also be sought from bus operators and businesses and organisations that might benefit from the scheme, such as the University of Surrey and local businesses. Guildford Borough Council and Surrey County Council could also contribute funds or develop funding bids to central Government.

There is a number of ways to obtain funding from the private sector and particularly from new developments identified through the Local Plan, for example:

- Section 106 – developer contributions for infrastructure secured through the planning process;
- Community Infrastructure Levy (CIL) – a charge by the local authority on new developments that can be used to fund infrastructure projects; and

- Business Improvement Districts – a defined area in which businesses pay a supplement on their business rates in order to fund projects, subject to agreement from the businesses.

The benefits of the public transport interventions have been quantified in the appraisal task as follows (compared to the 2031 Business-As-Usual situation – i.e. doing nothing)<sup>8</sup>:

- A reduction in vehicle distance across the borough of 10%;
- A reduction in congestion (highway delay) across the borough of 19%;
- Vehicle emissions down 10% and noise impacts down 8%;
- Town centre traffic volumes reduced by 32%; and
- Reduction in severance between areas of the town.

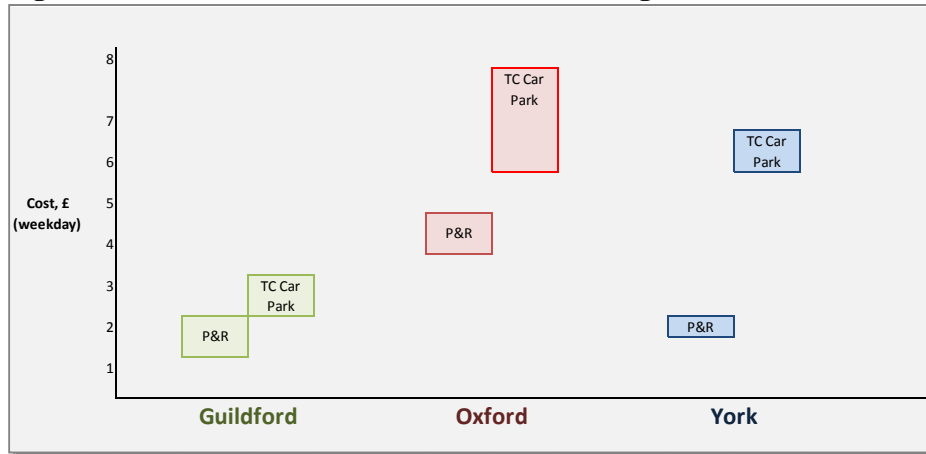
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<sup>8</sup> Results from SINTRAM modelling of ‘High’ sustainable transport scenario (which includes walking and cycling interventions) for 2031 compared to 2031 Business-As-Usual.

## 7.4 Traffic

Considering the demand on roads in Guildford town, it is relatively cheap to drive and park in the town centre. For example, it costs around £3 per vehicle to park for three hours in a town centre car park. The park-and-ride cost is about £2 per person. In other UK towns where town centre traffic is more effectively managed, such as Oxford and York, the differential is much greater, for example in York park-and-ride is about £2 per person and town centre parking is about £6-7 per vehicle, as shown in **Figure 10**.

**Figure 10: Town Centre vs. Park-and-Ride Parking Costs**



The strategy acknowledges that many people need to drive to Guildford town centre, but roads in the town centre are limited and the impacts of driving in the town centre, such as congestion, pollution, and accidents, have

significant costs to the town. Driving should therefore be managed effectively and parking priced appropriately.

The recommended interventions for making the best use of the road network are listed below:

- Optimise traffic control systems through technology and provision of improved travel information;
- Modifications to parking, e.g. gradually increasing charges for parking in the town centre whilst keeping park-and-ride charges stable;
- Reallocation of roads in the town centre, e.g. pedestrianisation of Bridge Street, closure of Walnut Tree Close to through traffic.
- Introduction of 20 mph zones in residential neighbourhoods and in the town centre;
- Promotion of home-working and flexible working hours through an information campaign to local businesses and council incentives for employers to acquire necessary equipment; and
- Comprehensive smarter choice programme for whole town (based on the Sustainable Travel Towns Project).

Traffic control systems<sup>9</sup> can be optimised to get more capacity out of the existing road network. For example, it is estimated that improvements to the traffic signal timings at the Gyratory could increase capacity by between 3% and 5%<sup>10</sup>. As part of the TravelSMART programme funded through the Local Sustainable Transport Fund, a review of the traffic management systems in Guildford has been started with a view to improve the control and management of traffic and address performance-related maintenance

<sup>9</sup> Defined as traffic signals and the systems that integrate and coordinate them.

<sup>10</sup> Based on discussions with Surrey County Council Environment and Infrastructure Directorate.

issues. This work will continue throughout 2014/2015. In future, as cars become more connected to the systems around them, it is expected that further capacity gains can be achieved without increasing physical capacity.

The reallocation of roadspace in the town centre would give the opportunity to create much more attractive environments for people in Guildford. A scheme that could be implemented almost immediately is the closure of Walnut Tree Close to through traffic. This road, which runs alongside the eastern side of the rail station, is a 'rat-run' for traffic and is often congested. Converting this to a walking, cycling and public transport only route could form part of the first section of the movement corridor, and create a better link to and from the town centre.

In the longer term, as other elements of the strategy begin to take effect, for example walking and cycling improvements, the conversion of Bridge Street to a pedestrian corridor (with cycling and public transport provision) could create a high-quality link between the rail station and the town centre, effectively extending the town centre towards the station. This would require conversion of the remaining sections of the Gyratory to two-way operation.

20 mph zones are recommended in the strategy to reduce traffic impacts and encourage walking and cycling. Traffic speeds are

discouraging parents from allowing their children to walk to school (and hence creating car trips within the town).

Lowering urban and residential speed limits to 20 mph has been found to decrease child pedestrian accidents by up to 70%, and it only increases urban journeys by a maximum of 40 seconds<sup>11</sup>.

A Smarter Choices programme involves a package of measures, applied over a sustained period in a comprehensive, intensive and strategic way. Measures include travel planning for workplaces, schools and individuals, car clubs and sharing, public transport information and marketing, cycling and walking information and marketing, training and events, and travel awareness, together with complementary infrastructure<sup>12</sup>.

## A3 Trunk Road

In the appraisal of interventions undertaken for this study, all potential interventions that increased road capacity, including A3 interventions (widening, northern bypass, tunnel) and additional road links in the town centre, resulted in increased traffic levels in the long term over and above business-as-usual changes (i.e. in 2031 compared to the 2031 Business-As-Usual).<sup>13</sup> Vehicle distance increased by up to 1% across the borough and highway delay increased by up to 16%, with associated deterioration in air quality, noise impacts, land use impacts and severance. These interventions are therefore not included in the strategy as they do not strongly support the multi-faceted headline

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<sup>11</sup> From evidence quoted in [http://www.20splentyforus.org.uk/rationale\\_for\\_20\\_mph.htm](http://www.20splentyforus.org.uk/rationale_for_20_mph.htm) - accessed January 2014.

<sup>12</sup> In Peterborough, Worcester and Darlington, Smarter Choices programmes reduced car driver trips and distance by around 10%, and increased walking, cycling and public transport use substantially (10-20%), for an estimated cost of £10 per head and with a cost-benefit ratio of about 4.5.

<sup>13</sup> For the purposes of this study, the potential land use development scenario used for the 2031 Business-As-Usual contained only developments which are committed i.e. the developments had received planning permission by April 2012. This decision was discussed and agreed with the modelling team at Surrey County Council and subsequently with the GTAMS Steering Group.

vision for sustainable mobility in the town of Guildford identified to guide the development of the strategy.<sup>14</sup>

In its Route-Based Strategy Evidence Report (2014), the Highways Agency has identified a number of challenges along the A3 corridor, in particular in the vicinity of Guildford. Stage One has established the necessary evidence base to help identify performance issues on this route and anticipated future challenges. It has taken into account the asset condition and operational requirements of the network, whilst gaining a better understanding of the local growth priorities associated with development.

In a second stage of work, the Highways Agency will use the evidence to take forward a programme of work to identify possible interventions to the challenges identified. This will feed into the Roads Investment Strategy for the period April 2015 – March 2021.

## Through Traffic

In the strategy workshop for GTAMS, many stakeholders raised concerns about through traffic in the town and how this can be dealt with. In this regard, through traffic is defined as traffic that has both an origin and destination outside of Guildford borough and does not stop in the town.

It is estimated that about 10% of traffic in the town centre is through traffic (this rises to 16% if you add trips within, or to/from, the borough

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<sup>14</sup> The GTAMS study used Surrey County Council's SINTRAM strategic model to assess interventions on the operation of both the Strategic and the Local Road Networks. The Highways Agency is currently using the SINTRAM strategic model to assist with economic appraisal of potential interventions to improve the effective operation of the A3 at Guildford. This data is being combined with a Highways Agency traffic simulation model, primarily designed to assess and test the more detailed operational traffic characteristics of the network. Due to the ability of the

but not stopping in the town, e.g. from Shalford to Ash Vale or from Shalford to Woking).

Through traffic is highest on the A281 Shalford Road, where 17% of all trips are through trips, with many travelling between areas such as Waverley, Woking and Outer London.

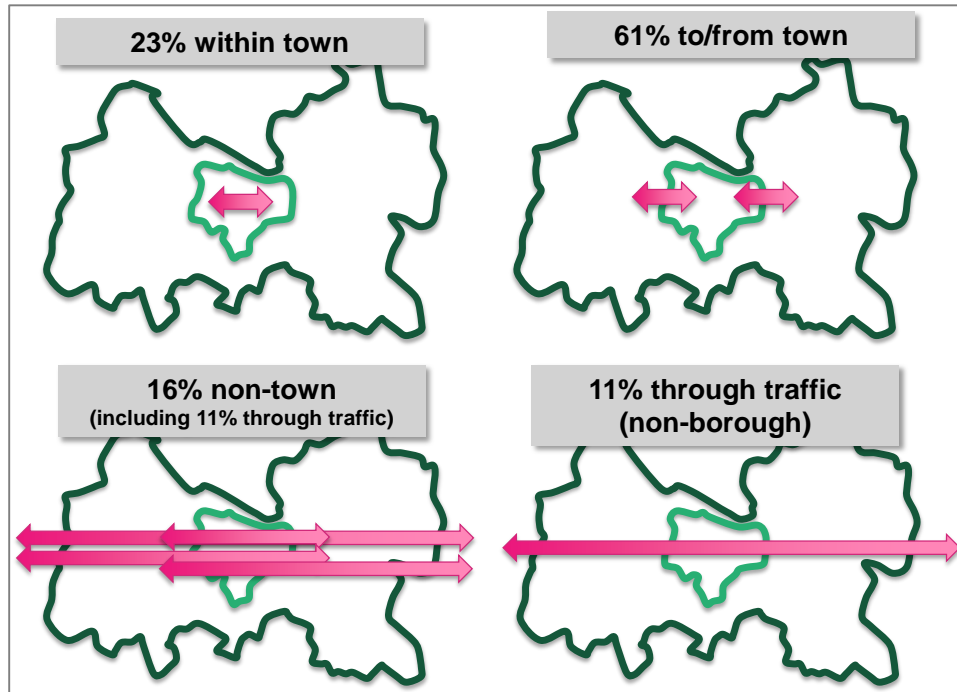
The proportions of through traffic in the town centre are shown in Figure 11.

The through traffic figures are from Surrey County Council's strategic transport model (SINTRAM), the best tool available at the time of undertaking the study. This model is validated and calibrated in the Guildford area on observed survey data from 2001. Surrey County Council is planning to update the 2001 data during 2014 to provide more up-to-date information. When this is available the through traffic issues can be reviewed to assess if travel patterns have changed and if any recommendations in this strategy need to be modified.

Highways Agency's model to examine specific locations in greater detail than a strategic model, it is more suited to demonstrate the potential benefits of targeted interventions including junction upgrades on the Strategic Road Network. This study work is continuing and will inform the Highways Agency's Route-Based Strategy for the corridor which will complete by March 2015. Route Based Strategies are a new approach to inform the future investment plans for the Government's comprehensive spending review in 2015 and beyond.



**Figure 11: Through Traffic in Guildford Town Centre**



Source: Estimated using SINTRAM 2009 Baseline AM peak period. Traffic on four main roads through the town centre: A281 Shalford Road, A31 Farnham Road, A3100 Portsmouth Road and A322 Onslow Street.

Note: ‘Through traffic (non-borough)’ is included in ‘Non-town’, hence total adds to more than 100%.

Resolving the problem of through traffic using Guildford’s Local Road Network, as opposed to travelling on the A3 trunk road (which is part of the Strategic Road Network), is to some extent a strategic issue beyond the scope of this study. However, there is interaction between the operation of the A3 trunk road and the Local Road Network. For example, local traffic uses the A3 trunk road through the Guildford urban area to travel on and bypass sections of the Local Road Network, adding to traffic volumes on the A3. In addition, queuing from local connections with the slip roads can extend back onto the A3 carriageway during peak periods. And when there is an incident on the A3 trunk road, traffic can spill onto the local roads.

This key interaction requires efficient operation of both the Strategic and Local Road Networks, to ensure that they are attracting their key target users, for example the A3 trunk road facilitating long distance travel and freight movement, and the Local Road Network accommodating shorter distance trips.

The following recommendations are made in respect of minimising the impact of through traffic on Guildford’s Local Road Network:

- Do not implement any interventions that encourage through traffic to use the Local Road Network, for example, road capacity increases in the town centre. Interventions in this strategy that reduce roadspace in the town centre should serve to deter through traffic in the town; they should also reduce short journeys on the A3 within the town that will free up capacity for longer distance trips on the A3 trunk road; and
- Guildford Borough Council should work with the Highways Agency to address challenges on the A3 trunk road and develop improvements that encourage traffic to use the A3 for through movements rather than travel through Guildford town centre.

In the strategy workshop, a small number of stakeholders suggested that the strategy should consider more radical solutions for managing traffic and creating funding streams. These included workplace charging or congestion charging.

These elements are not included in the strategy as there is currently not considered to be any national political appetite for local road pricing or charging. However, should there be any changes in approaches to national road pricing in the period of this strategy, the strategy should be reviewed.

### Funding the traffic interventions

The total indicative cost of the traffic interventions is expected to be in the £2-10 million range. The closure of Walnut Tree Close, with associated street improvements, is relatively low cost (£0.5-2 million). The Bridge Street pedestrianisation scheme will be more costly (£5-10 million) as the Gyratory will need reconfiguration.

The cost of the Smarter Choices programme could be in the region of £10 per head of population per annum (i.e. £1.4 million for the borough), but, as this overlaps with the walking and cycling interventions, this cost is expected to be lower.

Funding for the traffic interventions would be expected to come from Surrey County Council as the Local Highway Authority. Guildford Borough Council could also contribute, and some of the elements could be included in the packages submitted for funding by the Local Enterprise Partnership.

The benefits of the traffic interventions are expected to be as follows:

- increased roadspace for people, as opposed to vehicles, in Guildford;
- reduced car driver trips and distance;
- increased walking, cycling and public transport trips; and
- environmental benefits such as reductions in noise and air quality impacts.



## 7.5 Public Realm

The first impression of Guildford is an attractive town, particularly in the town centre. But on closer inspection there are many areas of poor public realm, as shown by the examples below. This needs to be improved to make the town more attractive, including to visitors, and to encourage walking and cycling.



**View from rail station**

Pedestrian railings, subway and concrete walls do not give a good first impression of the town to people arriving by rail.



**‘Wooden Bridge’ crossing of A3**

Main link between the Westborough and Stoughton residential areas and Woodbridge Meadows and onwards to the town centre is a narrow concrete trough with insufficient space for walking and cycling.

The recommended interventions for the public realm are listed below:

- Streetscape design involving the decluttering or ‘spring clean’ of streets (i.e. removal of unnecessary signs, railings, etc.) and improvement of the environment (e.g. through introduction of trees, landscaping, seating areas, etc.); and
- Improving the quality of pedestrian wayfinding building on existing wayfinding improvement plans (see section on walking for further details).

These improvements should be targeted in and around the town centre where the most people will benefit. They should also be focused along the main walking and cycling routes to support the sustainable transport initiatives.

The total indicative cost of the public realm interventions is expected to be in the £0.5-5 million range.

### Funding the public realm interventions

Funding for these interventions would be expected to come from the local authorities, Guildford Borough Council and Surrey County Council. These measures should be packaged with other interventions to secure maximum funding opportunities, for example as part of a Local Sustainable Transport Fund (LSTF) bid. Funding could also be sought from businesses and organisations that might benefit from the interventions.

The benefits of the public realm interventions are expected to be:

- Improved urban environment to encourage more walking;



- Increased footfall with economic benefits, particularly in the town centre; and
- An improved environment making the town more attractive for workers to live and businesses to locate.

## 7.6 Regional Movement

It is clear from the vision that connections to London, to Heathrow and Gatwick airports and to the wider region are important for Guildford to remain competitive. This is a key factor in the choice of many important businesses and headquarters to locate in the town.

Analysis shows that there is a significant commuting flow in and out of Guildford every day. For example, 45% of residents commute out of the borough and 47% of the workforce commutes into Guildford<sup>15</sup>.

Key locations for this movement include Waverley, Woking and the east of Hampshire locally and London. It should be noted that the figures for comparator areas show that Guildford borough is fairly typical of areas in the South East.

For movement to and from the town, people are coming from more diverse locations and over longer distances, so walking and cycling are not appropriate modes. Public transport (bus and rail) may be a viable option for some of these regional movements, but in many cases, it is just not economic to try and serve all of these trips. So driving is often the only reasonable alternative. Nevertheless, targeted improvements to the regional public transport network will help to reduce the impacts of car traffic on Guildford.

<sup>15</sup> Figures from Guildford Economic Development Study: Evidence Based – Final Report (University of Surrey for Guildford Borough Council and Guildford Business Forum, July 2009).

The recommended interventions for regional movement are:

- Increased capacity for services between Guildford and Waterloo;
- Additional rail services on the North Downs Line (Reading - Gatwick);
- Two trains per hour between Alton and Guildford;
- New rail station at Park Barn/Surrey Research Park;
- New rail station at Merrow;
- Improved rail access for Heathrow and Gatwick;
- Demand responsive public transport; and
- Development of remote working offices in local areas to reduce commute distance (alternative to working from home).

Potential improvements to the rail network in Surrey have already been studied and identified in the County Council’s Surrey Rail Strategy<sup>16</sup>. Many of the recommendations will directly benefit Guildford so they are only summarised in this report, but they form an important part of the recommended Guildford movement strategy.

The Surrey Rail Strategy sets out priorities for improving capacity to London Waterloo through improvements to the existing mainline and supporting the development of the Crossrail 2 project, both of which would have significant benefits to Guildford in terms of capacity into London.

More locally, another key recommendation of the Strategy is to enhance services along the North Downs Line, as a key orbital route through Surrey. This scheme has significant benefits for Guildford

<sup>16</sup> Undertaken by Arup in 2013. Full reports can be found at: <https://www.surreycc.gov.uk/environment-housing-and-planning/development-in-surrey/surrey-future/the-surrey-rail-strategy>.

providing improved connections to Reading and to Gatwick, as well as local towns within Surrey, and reinforcing Guildford’s position as a key interchange for other lines.

It also recommends running two direct trains per hour between Alton and Guildford (currently an interchange has to be made at Aldershot) to improve links between the two towns.

New rail stations at Park Barn to serve the Hospital and Research Park and at Merrow to serve potential new development are also recommended, although the latter is predicated on development occurring in the area.

There are also recommendations to improve bus connections to both Heathrow and Gatwick airports, possibly using demand-responsive, shared taxi type arrangements. Guildford was recommended as a trial location for these services, and the Borough Council should work with colleagues at the County to develop this concept further.<sup>17</sup>

### Funding the regional movement interventions

The total indicative cost of the regional movement interventions could be in the £20+ million range, as they include many high cost rail infrastructure projects.

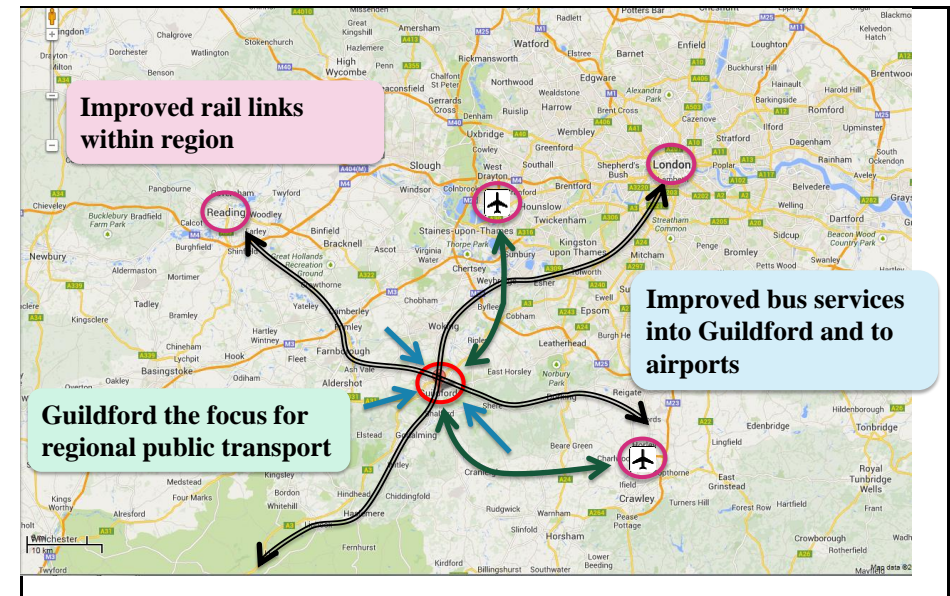
Funding for these interventions would be expected to come from rail industry sources, such as Network Rail and Train Operating Companies, with possibly some funding contributions from Surrey County Council and Guildford Borough Council. Guildford Borough Council should work with these partners to develop these regional

connections to put Guildford right at the heart of the transport network in the region, as illustrated in **Figure 12**.

The benefits of the regional interventions are expected to be:

- Increased accessibility to and from Heathrow and Gatwick airports;
- Reduced single occupancy car trips to and from the town; and
- Increased accessibility to and from the town by public transport.

**Figure 12: Regional Movement**



<sup>17</sup> Further details of these proposals are included in the County Council’s Surface Access to Airports Study located at: <https://www.surreycc.gov.uk/environment-housing-and-planning/development-in-surrey/surrey-future/airports>.

## 7.7 How the Strategy Supports the Vision

The recommended movement strategy described in the previous sections supports the 2050 vision for Guildford. It has many potential wider benefits for the town, which are identified below.

### Vibrant Guildford

With the movement strategy there will be **up to 32% less traffic in the town centre** and an **improved public realm in the urban area**.<sup>18</sup>

Research shows that:

- Improvements to public spaces can boost footfall and trading by up to 40%<sup>19</sup>; and
- People who visit towns by train will stay longer, spend more money and be more likely to return, particularly where links between the rail station and the town centre are improved<sup>20</sup>.



<sup>18</sup> Results from SINTRAM modelling of ‘High’ sustainable transport scenario for 2031 compared to 2031 Business-As-Usual.

<sup>19</sup> Living Streets (2013) *The Pedestrian Pound: The Business Case for Better Streets and Places*.

### Thriving Guildford

The movement strategy supports business and the economy. It **reduces traffic delay on public transport routes by up to 25%** and **improves accessibility to employment for all**.

Research shows that:

- Walkable places are becoming the preferred locations for start-ups and smaller firms<sup>21</sup>; and
- Hi-tech workers prefer to live in central locations, where they can use public transport or walk or cycle to work<sup>22</sup>.



<sup>20</sup> Campaign for Better Transport & Abellio (2013) *Fixing the Link: Making Good the Walking Route from Station to Town Centre*.

<sup>21</sup> Florida R (2012) *The Joys of Urban Tech*. Wall Street Journal, 31 August 2012.

<sup>22</sup> Ibid.

## Green Guildford

The environment will be enhanced with the recommended movement strategy. There will be **enhanced connections to the river and countryside** and **noise impacts in sensitive areas will be reduced**.

Research shows that:

- Green infrastructure investment attracts high value industry adding GVA to local economies<sup>23</sup>;
- Decluttering streets reduces capital and maintenance costs<sup>24</sup>; and
- Green infrastructure can mitigate flood risk by slowing and reducing stormwater discharges<sup>25</sup>.



<sup>23</sup> Forest Research (2010) *Benefits of Green Infrastructure*. Report to Defra and CLG.

<sup>24</sup> UK Department for Transport (2013) *Reducing Sign Clutter. Traffic Advisory leaflet 01/13*.

<sup>25</sup> US Environmental Protection Agency (2014) *Why Green Infrastructure?* USEPA website - accessed January 2014.

## Healthy Guildford

The strategy will help to make people in Guildford more active and healthy. This is particularly important for an ageing population. With the recommended movement strategy there will be **increased use of active travel modes (e.g. walking and cycling)** and the **streets will be safer as road accidents remain at current levels**, despite increased travel demand.

Research shows that:

- Increasing walking and cycling helps to reduce air pollution, create an environment that supports local economies, supports social inclusion and community cohesion<sup>26</sup>; and
- Active travel can reduce risk of premature death and major chronic diseases by up to 50%<sup>27</sup>.



<sup>26</sup> National Institute for Health and Care Excellence (2013) *Walking and Cycling*. Local Government Briefing.

<sup>27</sup> British Medical Association (2012) *Healthy Transport = Healthy Lives*.

## 7.8 Habitats Regulations Assessment Requirements

The GTAMS Habitats Regulations Assessment identified a series of requirements for the sustainable movement strategy related to potential impacts on habitats. These requirements should be taken into account in developing and implementing the strategy:

- Infrastructure interventions are to be located beyond 200m from the Thames Basin Heaths Special Protection Area (SPA) and the Thursley, Ash, Pirbright and Chobham Special Area for Conservation (SAC)<sup>28</sup> – hereafter called the Protected Areas. The selection criteria for location of infrastructure should include evidence that vehicle emissions on connecting A-roads would not increase nutrient loading within the protected areas above critical thresholds, nor increase noise levels from traffic on connecting A-roads to levels that would cause a significant increase in disturbance of nightjar, woodlark or Dartford warbler.
- No land is taken from within the boundaries of the Protected Areas and that buffer habitat will be created between the locations of interventions and the Protected Areas.
- Any increase in the number of visitors to the Protected Areas will require the provision of sufficient new facilities for the disposal of pet waste.
- Where relevant, walking and cycling is restricted to existing pathways and routes through the Protected Areas.

- Any part of the Strategy likely to result in increased visitor numbers to the Protected Areas should be developed in consultation with Natural England and provide for alternative recreational areas, where necessary.

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<sup>28</sup> Details of the location of the protected areas (SPA and SAC) can be found in the GTAMS Habitats Regulations Assessment Report.



## 8 Implementation Plan

The implementation plan is a broad look at the potential timing of the implementation of recommended interventions. It indicates the order in which interventions should be developed, rather than absolute timings, as the latter will be determined by external events throughout the strategy period, such as funding availability, political and economic cycles and the success of previous interventions.

The implementation plan is shown in **Figure 13**. The initial interventions to take forward in the short term are:

- Walking network and related facilities improvements;
- Cycling network and facilities improvements;
- Public transport network improvements, particularly the development of the public transport system along the sustainable movement corridor;
- The ‘spring clean’ of the public realm (i.e. decluttering of streets);
- Optimisation of traffic control systems; and
- Closure of Walnut Tree Close to through traffic.

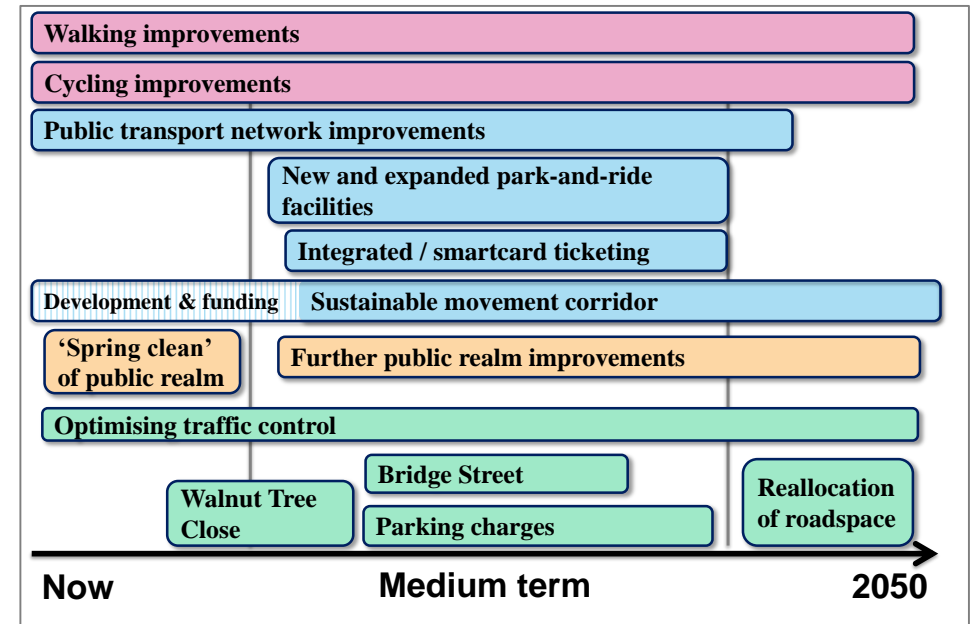
The optimisation of traffic control systems, the introduction of a Wayfinder signage system in the town centre and various improvements to the walking and cycling networks in the town, have, and will, take place through the TravelSMART programme which concludes at the end of 2014/15.

In the medium term, the above interventions should continue to be developed. In addition, new and expanded park-and-ride facilities (including potentially on a northern corridor) can be developed and

implemented, gradual increases in town centre parking charges can start to be implemented and the Bridge Street pedestrianisation scheme can be developed further.

In the longer term, all interventions should be further developed and expanded, and additional reallocation of roadspace can be implemented as traffic levels in the town centre first stabilise and then fall.

**Figure 13: Implementation Plan**



## 9 Action Plan

The Action Plan identifies the short term ‘quick win’ interventions from the Implementation Plan and sets out an outline scope of work for each intervention in the form of actions for Guildford Borough Council and its partners, principally Surrey County Council as the Local Transport Authority and Local Highway Authority and the Highways Agency which is responsible for the A3 trunk road.

In addition to specific interventions, it also includes activities related to the preparation, approval and implementation of the *Guildford Borough Local Transport Strategy and Forward Programme*, into which the recommended strategy from the GTAMS study will feed. The *Guildford Borough Local Transport Strategy and Forward Programme* will become a module of Surrey County Council’s Local Transport Plan.

The Action Plan is set out in **Table 1**. Actions are allocated to the appropriate party or parties, as agreed with Guildford Borough Council. Actions are broadly in order of activity, but this may be changed if required by circumstances. The actions assume that the recommended strategy from GTAMS will be incorporated in full in the emerging *Guildford Borough Local Transport Strategy and Forward Programme*.

**Table 1: Guildford Town and Approaches Movement Study Action Plan**

Action	Scope of Work
<b>Feed in recommended strategy from GTAMS into emerging <i>Guildford Borough Local Transport Strategy and Forward Programme</i></b>	Feed in the recommended strategy from GTAMS study into the emerging <i>Guildford Borough Local Transport Strategy and Forward Programme</i> , which is being developed under the auspices of the Guildford Local Committee, and will become a module of Surrey County Council’s Local Transport Plan.
<b>Programme manage the implementation of the <i>Guildford Borough Local Transport Strategy and Forward Programme</i>, including making funding bids</b>	<p>Agree roles of Guildford Local Committee and Guildford Surrey Board.</p> <p>Consider implications for Community Infrastructure Levy.</p> <p>Continue to engage with Enterprise M3 Local Enterprise Partnership, including with partners, and make funding bids.</p>
<b>Coordinate the <i>Guildford Borough Local Transport Strategy and Forward Programme</i> with the emerging Local Plan</b>	As Guildford Borough Council brings forward a new Local Plan which will include a spatial strategy, the <i>Guildford Borough Local Transport Strategy and Forward Programme</i> should be reviewed and amended by Surrey County Council and partners, as required, to support this.

Action	Scope of Work
<b>Communicate <i>Guildford Borough Local Transport Strategy and Forward Programme</i> to stakeholders and general public</b>	<p>Surrey County Council and Guildford Borough Council to:</p> <ul style="list-style-type: none"> <li>• Develop promotional strategy to inform stakeholders and the general public that the <i>Guildford Borough Local Transport Strategy and Forward Programme</i> has been approved and implementation is commencing. Encourage feedback and interaction.</li> </ul>
<b>Develop sustainable movement corridor concept</b>	<p>Surrey County Council and Guildford Borough Council to:</p> <ul style="list-style-type: none"> <li>• Initiate concept design of movement corridor to identify areas for safeguarding. Guildford Borough Council to safeguard these areas through new Local Plan so that future development has to take account of the corridor.</li> <li>• Initiate scheme design and business case for section from University of Surrey to town centre.</li> <li>• Undertake discussions with potential funding bodies to secure funding.</li> </ul>

Action	Scope of Work
<b>Initiate walking improvements</b>	<p>Surrey County Council and Guildford Borough Council to:</p> <ul style="list-style-type: none"> <li>• Develop detailed plans for initial walking improvements in coordination with stakeholders (e.g. Guildford Walking Forum).</li> <li>• Consider commissioning of expansion of Wayfinding system.</li> </ul>
<b>Initiate cycling improvements</b>	<p>Surrey County Council and Guildford Borough Council to:</p> <ul style="list-style-type: none"> <li>• Take forward through emerging <i>Guildford Borough Local Transport Strategy and Forward Programme</i>, which will fulfil the ambition for Surrey County Council to prepare a Local Cycling Strategy.</li> <li>• Develop detailed plans for initial cycling improvements, in coordination with stakeholders (e.g. Guildford Cycling Forum).</li> </ul>

Action	Scope of Work
<b>‘Spring clean’ of public realm</b>	<p>Surrey County Council and Guildford Borough Council to:</p> <ul style="list-style-type: none"> <li>• Agree process for decluttering in town centre, including removal of signs, barriers, etc. Build on previous Guildford Borough Council audit of town centre street furniture.</li> </ul>
<b>Optimisation of traffic control</b>	<p>Surrey County Council has initiated a review of the traffic management systems in Guildford with a view to improve the control and management of traffic and to address performance related maintenance issues. This work will continue throughout 2014/15.</p>
<b>Address through traffic issue</b>	<p>Surrey County Council will undertake a programme of travel surveys in 2014/15.</p> <p>Guildford Borough Council, Surrey County Council and the Highways Agency to develop strategic road network improvements to attract through traffic away from Guildford.</p> <p>Provide specific inputs to the Highways Agency Route Based Strategy covering the Guildford area.</p>

Action	Scope of Work
<b>Address through traffic in Walnut Tree Close</b>	<p>Surrey County Council to:</p> <ul style="list-style-type: none"> <li>• Develop trial scheme to close Walnut Tree Close to through traffic, assessing traffic impacts and mitigation as well as design for sustainable modes and public realm improvements.</li> <li>• Possibly link to event (e.g. car-free day).</li> </ul>
<b>Review car park charges</b>	<p>Surrey County Council and Guildford Borough Council to:</p> <ul style="list-style-type: none"> <li>• Review car park charges between town centre and park-and-ride as part of the future Surrey County Council/ Guildford Borough Council Parking Plan for the borough to be developed under the auspices of the Guildford Local Committee.</li> </ul>
<b>Progress regional movement interventions</b>	<p>Surrey County Council and Guildford Borough Council to:</p> <ul style="list-style-type: none"> <li>• Implement recommendations from Surrey Rail Strategy and Surrey Surface Access to Airports Study relevant to Guildford.</li> </ul>

## 10 Summary Remarks

Following the strategy workshop for this study, Professor Lyons was asked to provide further thoughts and summary remarks on implementing the strategy. These are provided below.



### Cause for optimism

I have been struck by the overwhelmingly constructive reaction from workshop participants to the recommended long term movement strategy for Guildford. This offers significant cause for optimism. Of course the constructive reaction is not without constructive criticism and a need for clarification and further examination of the devil in the detail. However, the workshop has suggested that Guildford’s stakeholders would be able to unite around the core principles of the strategy as proposed.

### Long run versus short run effects

There can be understandable frustration at what might appear to be an incompatibility between measures put in place and how people’s travel behaviour responds. Near empty bus lanes alongside lanes of queuing traffic is an obvious case in point. However, one needs to be aware that behavioural response to measures that comprise a strategy takes time to develop. People do not instantly become bus users because of a bus lane – their present circumstances may not allow it. The short run effect of the measure can therefore appear disappointing or even frustrating. However, as people change where they live and where they work and review their car ownership decisions, the signals given by the transport policy and by the behaviour of those around them (the ‘norms’) can

influence their travel decisions and see greater alignment with the intentions of the measure.

### Value for money

The movement strategy in some respects incorporates measures that are relatively low cost – indeed including the notion of a ‘spring clean’ for elements of the public realm. This is not to suggest that there are not more resource-hungry elements to the strategy alongside this. However, it is important that low cost measures are not taken to signal superficiality. It is cost effectiveness not cost itself that must be kept in mind. The incremental approach of the strategy is its bedrock of effectiveness over the period of delivery which can then be overlain with the more substantial infrastructural investments as these are secured and implemented.

### Means versus end

It can be easy to be drawn into the allure of engineering and technology advance as being emblematic of a visionary approach. Electric cars, autonomous vehicles, sensor technologies and intelligent information systems are symptomatic of this. However, they are very much more the ‘means’ rather than the ‘end’. The sense of vision should really concern itself with the urban vitality, quality of life and social and business practices of Guildford and how the movement strategy complements the townscape. Thus the presence of trees, the permeability of the urban environment and functional landmarks such as the land bridge are what should conjure the sense of vision within which transport and movement are situated.

### *Through traffic*

The workshop discussions were quick to raise the question of how the movement strategy was to address the issue of through traffic using the town centre, which is a characteristic of the town, unwelcome though it might be. However, this provokes an important question: should the strategy be solving, accommodating, or discouraging through traffic? Through traffic is of course a consideration at county level but through traffic by its own definition (at town or county level) signifies traffic that is not contributing economic activity and vitality. It might therefore be suggested that a movement strategy for 2050 should be shaped *in spite of* through traffic rather than because of a need to address it. As was pointed out at the workshop, not all traffic on the A3 is in fact through traffic. That which is not may be positively affected by the movement strategy such that overall pressure on the A3 is eased. Better data are needed to understand the determinants and makeup of traffic and such insight can then help inform the finer grain design of the movement strategy itself.

### *Sequential acceptance*

Human nature is that when faced with such a strategy, the urge to plunge into the detail proves irresistible. There were some signals of this at the workshop. However, it is important to remain firmly mindful that this is a *strategy* rather than a detailed prescription for implementation. Allied to this, the matter of public buy-in to the strategy was raised at the workshop. Taking these two points together, it is important that the custodians of the strategy subscribe to and apply a clear sequence of thinking and public acceptance: step 1 is to focus consideration and consensus building upon the vision for the type of Guildford that people want; with this in place, step 2 is to secure buy-in to the broad principles of the movement corridor approach; and only then should step 3 come into play which is the consideration of the

specific measures that need to be implemented to realise the movement corridor and in turn the vision for Guildford.

### *Representative democracy*

The presence of students from Guildford High School at the workshop was applauded. It is this generation that will come into its own and be an important driving force in the character of Guildford in 2050 and the years leading up to that. While younger people may lack some of the experience of age and professional expertise that others possess, they have a more incisive and hands-on experience of some of the winds of social and technological change in society. A telling moment in the workshop was someone from the High School giving a brief tutorial on Facebook to their older fellow workshop participants. Young people are known to be 'hard to reach' when it comes to public consultation and yet if democracy is to be representative of Guildford's citizens and if its movement strategy is to harness a rounded set of perspectives and insights then a concerted effort must be made to continue to engage young people in the journey towards 2050.

## **Appendix A**

Stakeholder Workshop  
Attendees

## A1 Stakeholder Workshop Attendees

*Grouped by discussion group.*

*GTAMS Steering Group members in **bold**.*

Name	Organisation
<b>Jan Haunton</b>	<b>Surrey County Council</b>
Ed Josey	Surrey County Council
Councillor Angela Gunning	Guildford Borough Council
Dr Malcolm Parry	Surrey Research Park & University of Surrey
Alistair Atkinson	Guildford Environmental Forum
Jim Allen	Burpham Neighbourhood Forum
Graham Maynard	Royal Surrey County Hospital
<b>Steve Howard</b>	<b>Surrey County Council</b>
<b>Councillor Monika Juneja</b>	<b>Guildford Borough Council</b>
Matthew Evans	Waverley Borough Council
Bill Stokoe	The Guildford Society
Ros Pollack	Burpham Neighbourhood Forum
David Ogilvie	Architect
Paula Haustead	Network Rail and South West Trains Alliance
<b>Neil Andrew</b>	<b>Highways Agency</b>
Amanda Masters	Experience Guildford

Name	Organisation
Lyndon Mendes	Surrey County Council
<b>Councillor James Palmer</b>	<b>Guildford Borough Council</b>
Paul Falconer	Waverley Borough Council
John Rigg	Guildford Vision Group
Angus McIntosh	Weymount Residents Association/GRA representative
Bibhas Neogi	Resident
Bob Bromham	Holy Trinity Amenity Group
<b>Donald Yell</b>	<b>Guildford Borough Council</b>
Dr Robin Hickman	University College of London
Chris Blow	Transport Group - The Guildford Society
Amanda Mullarkey	East Guildford Residents Association/GRA representative
Keith Chesterton	Guildford Walking Forum
Andrew Halliday	Safeguard Coaches Ltd
Riccardo Mai	Land Securities
<b>John Hilder</b>	<b>Surrey County Council</b>
Chris Mansfield	Guildford Borough Council
Derek Cordon	Transport and Property Group – Guildford Business Forum



Name	Organisation
Martin Taplin	Guildford Cycle Forum
Robert Patterson	Arriva Southern Counties
Jon Weymouth	M and G Investments
Louise Kenyon	Guildford Cathedral
<b>Councillor Mark Brett-Warburton</b>	<b>Surrey County Council</b>
David Stempfer	Surrey County Council
<b>Carol Humphrey</b>	<b>Guildford Borough Council</b>
Student 1	Guildford High School
Student 2	Guildford High School
Student 3	Guildford High School
Student 4	Guildford High School
Student 5	Guildford High School
Student 6	Guildford High School
<b>Susan Claris</b>	<b>Arup</b>
<b>Stephen Bennett</b>	<b>Arup</b>
Anne Clarke	Arup
Prof. Glenn Lyons	UWE

## **Appendix B**

**Strategy Workshop Outcomes:  
Themes from Discussion Groups**

## **B1 Strategy Workshop Outcomes: Themes from Discussion Groups**

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*Font size reflects the frequency that each item was mentioned, i.e. the larger the font, the more times the item was mentioned.*

### **What do you like best about this Movement Strategy?**

The focus on sustainable transport, e.g. public transport, walking and cycling

Development of smartcards for integrated public transport

The movement corridor

Development of rail services in Guildford

Social equity aspects of the strategy

Deliverability and incremental improvement

Multi-modal transport

Improvements to public realm and general liveability of the town

Linked employment areas

Reduced congestion

### **Are there aspects of the Vision not addressed by the Strategy?**

Personal security, lighting, safe pedestrian routes

Cost/time of travel: driving vs. public transport

Land use strategy

Travel information and technology

Through traffic problem

Solutions for the A3

Safeguarding of public transport routes and corridors

A blue movement corridor along the River Wey

Address complex multi-purpose journeys

### **Is this the right level of change / ambition for Guildford's transport network?**

Yes – gradual change is a good approach. This is a good start

Consider more radical solutions for funding, e.g. workplace or congestion charging

### **What would you like to see introduced first and where?**

Closure of Walnut Tree Close to through traffic

Safeguarding of public transport corridors

Development of movement corridor, University to Town Centre route

Design of expanded and high quality cycle network

Implementation of 20 mph zones

Optimisation of traffic control systems