

# Local Transport Plan 2012 - 2026



July 2012

Transport Policy Team  
Royal Borough of Windsor & Maidenhead  
Town Hall  
St Ives Road  
Maidenhead  
Berkshire  
SL6 1RF





# CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>1. INTRODUCTION.....</b>	<b>6</b>
<b>2. GUIDING PRINCIPLES .....</b>	<b>9</b>
<b>3. STRATEGIC FRAMEWORK .....</b>	<b>11</b>
<b>4. IMPROVING ACCESS TO EVERYDAY SERVICES &amp; FACILITIES .....</b>	<b>22</b>
<b>5. IMPROVING SAFETY &amp; SECURITY.....</b>	<b>42</b>
<b>6. SUPPORTING SUSTAINABLE ECONOMIC GROWTH.....</b>	<b>55</b>
<b>7. IMPROVING QUALITY OF LIFE .....</b>	<b>76</b>
<b>8. SUPPORTING DOCUMENTS .....</b>	<b>89</b>
<b>9. LOCAL TRANSPORT PLAN FUNDING .....</b>	<b>95</b>
<b>GLOSSARY .....</b>	<b>97</b>
<b>APPENDIX 1: ACCESSIBILITY MAPS .....</b>	<b>101</b>



# EXECUTIVE SUMMARY

## Introduction

This is the third Local Transport Plan (LTP3) for the Royal Borough of Windsor and Maidenhead. It comprises a long-term strategy to 2026 covering all forms of transport in the borough.

The Local Transport Plan sets out a range of policies that will determine how transport is provided within the borough as a whole. It is intended that further detail will be provided by a range of supporting documents covering specific topics, such as air quality, noise and parking, as well as a series of Neighbourhood Plans, which are being developed in partnership with local communities as part of the Localism Act.

We will also be preparing a series of short-term delivery plans which will identify how funding will be allocated to transport schemes and initiatives across the borough. The intention is to provide one year's firm allocation, with a provisional allocation for the following year. This allows for reserve schemes to be identified and brought forward in the event that the first choice cannot be implemented for whatever reason.

This Plan has been produced in accordance with the Local Transport Plan Guidance issued by the Department for Transport in 2009 and takes into account national and local policies and plans.

This LTP was subject to a period of public consultation and comments received have been considered and taken into account when preparing the final version for adoption.

## The Strategy

### Guiding Principles

The Local Transport Plan reflects the Council's core values as set out in the Corporate Strategy, namely:

- Putting our residents first
- Providing value for money
- Equipping ourselves for the future
- Working in partnership

### Over-Arching Objectives

The Local Transport Plan has five overarching aims, which reflect both local priorities and Central Government's over-arching principles. These are:

- To improve access to everyday services and facilities for everyone
- To improve road safety and personal security for all transport users
- To support sustainable economic growth
- To improve quality of life and minimise the social, health and environmental impacts of transport
- To mitigate and adapt to the effects of climate change.

## Key Challenges

### Access to Everyday Services and Facilities:

Transport improvements are necessary to ensure that all residents can take advantage of employment, education, healthcare and leisure opportunities in the borough. The availability, affordability and physical accessibility of local transport networks need to be improved, with better integration between different forms of transport. In particular, the Council and its partners will need to respond to the accessibility challenges posed by an ageing population to ensure that older people do not face social exclusion issues.



1.75 million bus passenger trips per year

**Safety and Security:** While significant progress has been made in reducing the number and severity of casualties on our roads, maintaining this reduction will be challenging, requiring a multi-agency approach to target high-risk road user groups and locations with poor casualty records. Similar progress has been made in recent years to reduce instances of vehicle crime and the challenge will be to maintain this reduction. Also, further progress is required to address anti-social behaviour, since surveys show that some residents still feel this to be an issue.



Zebra crossing helps to improve safety

**Sustainable Economic Growth:** Transport improvements are an integral part of plans to rejuvenate Maidenhead Town Centre. In order to support economic growth, there is a clear need to address existing congestion associated with commuting trips and the school run, as well as mitigating the impact of new development. As a major UK tourist destination, we also need to manage the impact of visitor travel and improve public transport access to Heathrow Airport.



Royal Ascot attracts 300,000 people

**Quality of Life:** The borough has three existing Air Quality Management Areas (AQMAs) triggered by pollutants from vehicle exhaust emissions, with elevated levels in other areas making it likely that further AQMAs will need to be designated. Emissions in these areas must be reduced if we are to achieve air quality objectives. The Royal Borough also has 37 areas where road traffic noise is at levels where intervention should be considered. Although the health of local residents is generally good, levels of physical activity amongst both adults and children are relatively low, with walking and cycling levels



Clarence Road roundabout scheme has helped to improve air quality



below regional and national averages. There are also challenges associated with safeguarding the natural and built environment, in particular minimising the impacts on bird life in the Thames Basin Heath Special Protection Area and minimising the impact of traffic in our historic town centres and conservation areas.

**Climate Change:** The Royal Borough is committed to reducing carbon emissions associated with local transport networks in order to help mitigate future increases in global temperatures. Road transport accounts for just over 37.5% of local emissions, which is higher than the industry / commercial and domestic sector emissions. The other challenge is ensuring that local transport infrastructure is designed to cope with extreme weather events, including flooding and high temperatures.



**Better drainage helps prevent flooding**

## **Thematic Strategies and Neighbourhood Plans**

We have developed four borough-wide thematic strategies, one for each of the strategic aims of the LTP, with the fifth, Climate Change, being the 'golden thread' that runs through the other strategies. Together, these describe how our strategic approach will be delivered through a series of policy interventions. These strategies provide a borough-wide policy framework for how we will deliver improved travel and transport. They also provide the context for the neighbourhood plans and the implementation plans.

Because the Royal Borough is such a diverse area, the emphasis of the borough-wide policies will therefore vary. Neighbourhood Plans are being developed, which will describe the particular needs and aspirations of each area and the policies and interventions that will be applied to address these. In order to ensure a joined up approach to planning for sustainable development, the Neighbourhood Plans are being prepared as joint transport and land use planning documents.

In line with the Royal Borough's commitment to engaging local communities in decisions that affect them, these plans are being prepared by local residents with guidance and support from officers and technical experts.

In total, seven Neighbourhood Plans are being prepared, based on the existing parish areas:

- Hurley and the Walthams
- Bisham and Cookham
- Maidenhead and Cox Green
- Bray
- Windsor and Eton, with Eton Wick
- Datchet, Horton and Wraysbury, and Old Windsor
- Ascot and Cheapside, Sunninghill and South Ascot, and Ascot and Cheapside

## **Supporting Documents**

The Local Transport Plan has a number of supporting plans and strategies covering particular topics that demand coverage in greater depth due to their complexity, have particular requirements covered by specific legislation, or which operate to different

timescales. Supporting documents that already exist or which are currently being prepared include:

- Air Quality Action Plan
- Equalities Impact Assessment
- Habitats Regulations Assessment
- Highways Maintenance Management Plan
- Neighbourhood Plans
- Noise Action Plan
- Parking Strategy
- Public Rights of Way Improvement Plan
- Strategic Environmental Assessment

## **Implementation**

The strategy will be delivered by a series of short-term implementation plans, which will reflect the 'forward look' period for which the Council's own investment programmes are developed. The implementation plans will be published as separate volumes to enable them to be refreshed and updated without the need to republish the strategy document.





# 1. INTRODUCTION

## 1.1 About the Royal Borough of Windsor and Maidenhead

**1.1.1** The Royal Borough of Windsor and Maidenhead is set in the heart of the Thames Valley, less than 30 miles to the west of central London. It enjoys a predominantly rural setting, with 83% of the Borough falling within the Metropolitan Green Belt. Over half of its 138,000 population is concentrated in the main towns of Maidenhead and Windsor. The rest are scattered around smaller rural towns and villages, each with a population of less than 6,000.

**1.1.2** The age structure of the Borough's population is similar to the national average, apart from having relatively fewer young people aged 15 to 24 years. This is partly due to a lack of universities within the immediate vicinity, which means that many students live away from home, but also high house prices represent a barrier to young people setting up home in the Borough. The proportion of the Borough's population aged 65 years or over is in line with the national age structure, but is higher than the rest of Berkshire, and is forecast to rise significantly in the medium to long term.

**1.1.3** The health of people in Windsor and Maidenhead is generally better than the England average, with life expectancy and levels of obesity better than the national and regional averages. Although the proportion of the Borough's residents who have a limiting long-term illness has increased in line with the general ageing of the local population, the rate is still much lower than nationally

**1.1.4** Windsor and Maidenhead is an affluent area, enjoying high levels of income and low levels of unemployment. There are no areas within the Royal Borough that are classified as falling within the lowest 20% (or quintile) for deprivation, and less than 5% of residents live in neighbourhoods classified as being in the next lowest quintile. Average house prices are over 50% higher than the regional average and nearly twice the UK average, while levels of car ownership and usage are also higher than the regional and UK averages.

**1.1.5** The Thames Valley has been described as 'the engine of the South East economy', Its economic output is measured at £30 billion, which represents 19% of total output in the region, and puts it second only to London in terms of contribution to the UK economy. The Royal Borough plays a key role within this dynamic regional economy. Employment is concentrated in the service and office-based sectors, with many hi-tech and pharmaceutical companies located here. Several multi-national corporations have their headquarters or major corporate presences in the Borough including '3', Adobe, Centrica, Computer Associates, GlaxoSmithKline, Hitachi, Johnson & Johnson, Seiko and Symantec.

**1.1.6** Tourism is also crucial to the local economy, with over 7 million people visiting the Royal Borough each year. Windsor itself is home to two of the UK's top 20 visitor attractions, Legoland and Windsor Castle. The Borough also hosts a number of world class events, such as Royal Ascot, the Windsor Royal Horse Show and Windsor Royal Tattoo, as well as numerous other major events throughout the year.

**1.1.7** The above factors all combine to create a unique set of circumstances and challenges, which affect the movement of people and goods to, through and around the Royal Borough.

## 1.2 Local Transport Networks

**1.2.1** The Royal Borough enjoys enviable levels of connectivity to London and to key regional and national destinations via the strategic road and rail networks. The M4 runs east-west through the middle of the Borough, serving Windsor (via Junction 6) and Maidenhead (via Junctions 8/9), while the M3, M25 and M40 are all within easy reach.

**1.2.2** The Borough also benefits from having 10 rail stations, served by a combination of main line and branch lines services. Maidenhead is on the Great Western Main Line, which connects London Paddington with South West England and Wales, incorporating branch lines to Marlow and to Windsor and Eton Central. Windsor and Eton Riverside is the western terminus for services from London Waterloo, while Ascot lies on the junction of the Waterloo to Reading and the Ascot to Guildford lines.

**1.2.3** The Borough is also in close proximity to Heathrow, which is the UK's primary international airport, providing connections to 180 destinations in 90 countries.

**1.2.4** This excellent connectivity coupled with the area's pleasant natural and historic setting makes the Thames Valley an attractive place to live, work and visit, and has helped to fuel historically high economic, population and visitor growth across the sub-region. It has also helped to create a highly mobile population - the Royal Borough experiences particularly high levels of inbound and outbound commuting, with many local residents commuting to jobs in London. A high proportion of everyday journeys are made by car and rail, while levels of walking, cycling and particularly bus use are significantly lower than the national and regional average.

**1.2.5** Transport networks in the area are under pressure, giving rise to a number of issues affecting local residents and businesses, including:

- Congestion on strategic road and rail networks during peak travel times;
- Peak hour congestion on local roads, particularly in urban areas;
- Congestion associated with tourist attractions and major events;
- Poor air quality linked to traffic emissions, with Air Quality Management Areas declared for parts of Maidenhead, Windsor, and Holyport;
- An increasing road maintenance requirement;
- Perceived road safety risks, particularly for pedestrians and cyclists;
- A higher than average per capita contribution to global climate change;
- Difficulty in accessing everyday services, particularly for residents in rural areas without access to a car.

**1.2.6** Significant economic and housing growth is proposed across the Thames Valley and the South East over the period to 2026. This will place an additional burden on local infrastructure and on transport networks in particular. This will bring new challenges in the planning, management and maintenance of our local transport networks. This Local Transport Plan sets out how the Council and its partners will respond to these challenges, providing a framework within which transport improvements will take place.

## 1.3 About the Local Transport Plan

**1.3.1** As a unitary authority, the Royal Borough of Windsor and Maidenhead has responsibility for all local authority functions within its area, including transport planning. This differs from the majority of other local authorities which operate in a two-tier system, with

local government functions divided between counties and districts and where transport planning is carried out at the county level.

**1.3.2** Transport is a vital public service that is essential to our everyday lives. However improving transport is rarely an end in itself, but instead it is a demand that arises from other activities and needs, such as the movement of goods, getting to school or work, accessing healthcare services, going shopping and making use of leisure facilities. In this Local Transport Plan, transport is seen in the context of the 'bigger picture', helping to deliver essential services, supporting sustainable economic growth, protecting and enhancing our unique environment and improving our quality of life. The LTP has been developed with input from officers across the Council's various service areas, as well as from external partners and service providers.

**1.3.3** We also need to be mindful of the wider geographical context. The Thames Valley is home to several key centres of population and economic activity, which are in close proximity with each other. As a result, travel patterns are more complex and varied than in other parts of the UK, and it is therefore critical to consider through journeys and trips that start and end in the Borough, as well as travel that takes place entirely within our boundaries. We have therefore worked with colleagues from neighbouring authorities, the Highways agency and other partners through the Berkshire Strategic Transport Forum.

**1.3.4** Our previous two Local Transport Plans have been prepared on the basis of a 5-year horizon. However, for LTP3, we are taking advantage of new flexibilities permitted under the Transport Act 2008 to develop a long-term strategy to 2026, which coincides with the timescales for the Local Transport Plans for neighbouring local authorities and for our own Borough Local Plan. The strategy will be kept under review within this period to ensure that it remains current, responding to changes in circumstances, and taking account of the latest guidance and best practice.

**1.3.5** The strategy will be delivered by a series of short-term implementation plans which will reflect the 'forward look' period for which the Council's own investment programmes are developed. The implementation plans will be published as separate volumes to enable them to be refreshed and updated without the need to republish the strategy document.

## **2. GUIDING PRINCIPLES**

### **2.1 Introduction**

**2.1.1** This section provides a summary of the important guiding principles that we are using in developing and managing our LTP strategies and delivery programmes. These reflect the Council's core values as set out in our Corporate Strategy.

### **2.2 Putting Our Residents First**

**2.2.1** We continually put residents and customers first by offering them flexibility in how they access and use our services, and by providing opportunities to tell us what they want and influence service provision. This creates greater satisfaction within our local community and promotes social responsibility. In planning and monitoring our services we focus on outcomes, to ensure that the services we deliver make a real difference to residents. We will do this by collecting and analysing various data sets to get an objective view of what is happening as well as listening to residents and acting on feedback received to provide the services that local people want and need.

### **2.3 Providing Value for Money**

**2.3.1** Whilst the council always seeks to make the best use of the funds available, present economic predictions for the public sector mean that difficult decisions have to be made about how we use resources. We continually seek to identify new sources of income, create efficiencies and work with our partners to deliver high quality, joined up services at the lowest cost. We require all of our employees to consider how they do their jobs in order to minimise waste and unnecessary bureaucracy, while maximising efficiencies and value for money.

### **2.4 Equipping Ourselves for the Future**

**2.4.1** We recognise that investing in the development of the people that make up the organisation is a key strategy in helping us to achieve our desired results. We are committed to developing our teams and creating a robust workforce that is highly skilled, flexible and fit for purpose. This is essential if we are to achieve our ambitions.

**2.4.2** We also seek to adopt, adapt and improve on initiatives in place in the private, public and third sectors, to ensure that we learn from the best, are at the forefront of cutting edge developments and are well placed to meet any future challenges.

### **2.5 Working in Partnership**

**2.5.1** We fully recognise the importance and potential of partnership working in terms of ensuring support for the local transport plan and in helping to deliver shared priorities. Partnership working happens at all levels of the Local Transport Plan, from the strategic integration of policies and investment, to the co-ordinated delivery of specific initiatives.

## **2.6 Cross-Boundary Working**

**2.6.1** Transport issues by their nature do not respect local authority boundaries. The Thames Valley is a relatively densely populated area with numerous towns and villages, leading to high numbers of inter-urban trips for a wide range of journey purposes. We also have several strategic road and rail corridors running through the Borough, which connect us to London and the rest of the UK. These networks carry large numbers of through movements as well as catering for more local trips. We are working with neighbouring local authorities, through the Berkshire Strategic Transport Forum, to study and address sub-regional issues.

## **3. STRATEGIC FRAMEWORK**

### **3.1 Introduction**

**3.1.1** This chapter sets the strategic framework for the Local Transport Plan. It covers:

- The local and national policy context within which the LTP has been prepared.
- The vision, which sets out where we want to be by the year 2026.
- The aims and objectives, which describe what we are trying to achieve in working towards the vision.
- The outcomes, which describe the desired results from delivering the strategy. These have helped us to identify relevant performance indicators that will enable us to measure how successful we are in delivering the strategy.
- The overall strategic approach, which has been used to guide the more detailed policy development.

### **3.2 National Framework**

#### **Creating Growth, Cutting Carbon: Making Sustainable Transport Happen**

**3.2.1** This White Paper sets out the Government's vision for how transport can contribute to supporting the national economy and delivering the UK's carbon reduction targets. These are the over-arching principles that will shape all investment decisions within the transport sector.

**3.2.2** The paper represents a marked shift away from the historic top-down approach of centralised targets and guidance towards a focus on local solutions that reflect the specific needs and behaviour patterns of local areas.

**3.2.3** The White Paper also signals a shift away from investment in major infrastructure schemes towards packages of small-scale measures, which have been shown to offer superior value for money. There is a focus on 'smarter choices' measures that are designed to help and encourage people to make more sustainable decisions about how and when they travel.

**3.2.4** However, there is a recognition that the car will continue to play a significant role in meeting travel demand, particularly for people living in rural communities. The Government has therefore made a commitment to making car travel greener by supporting the development of the emerging market in electric vehicles and other low-emission technologies.

**3.2.5** The Paper also sets out how the Government will cater for long-distance journeys, with investment in the rail network including Crossrail and High-Speed Rail.

**3.2.6** Funding for local transport investment has been simplified, with four main funding streams:

- i. Highway Maintenance Block – grant funding for local highway maintenance
- ii. Integrated Transport Block – grant funding for local capital investment in transport
- iii. Major Scheme Capital Programme – for schemes costing £5 million or more
- iv. Local Sustainable Transport Fund – bid-based grant funding for packages of capital and revenue schemes, with a focus on Smarter Choices measures.



## Local Transport Act (2008)

**3.2.7** The Act retains the statutory requirement on local transport authorities to produce and review Local Transport Plans and requires that LTPs contain both policies and implementation plans.

**3.2.8** Previously, plans were required to be renewed at least every five years. The new legislation means that local transport authorities may replace their plans as they see fit. If authorities decide that policy and implementation should be dealt with in separate documents, they can renew the different parts on different timescales, providing they have regard to the requirements of the legislation in doing so.

**3.2.9** The Act contains important changes to give local authorities improved powers to influence the provision of bus services in their area. These powers widen opportunities for local authorities to work with operators, to improve local bus services.

**3.2.10** In addition, new provisions mean that local authorities, as well as bus operators, can be held to account by the Traffic Commissioners for their contribution to the punctuality of local bus services. Where there is a problem with bus punctuality, local traffic authorities should work with bus operators to formulate and implement improvement plans, including Punctuality Improvement Partnerships.

**3.2.11** The Transport Act 2000 (as amended) requires local transport authorities to have regard to Government guidance and policies on the environment when formulating Local Transport Plans and policies. The Act makes particular reference to climate change mitigation and adaptation, but authorities should consider how their strategies and implementation plans relate to all relevant environmental issues, including air quality, noise, landscape and biodiversity.

**3.2.12** Local transport legislation contains an obligation for local transport authorities to have regard to the transport needs of older people and people with mobility difficulties when developing transport plans and policies. The Act adds a new requirement to have regard to the needs of disabled people, both in developing and implementing plans, thereby broadening the scope of the legislation to bring it in line with the Disability Discrimination Act.

## 3.3 Local Context

**3.3.1** Improving transport is not a goal in itself, since we rarely travel for the sake of travelling, but rather it helps us to achieve other priorities. This means that transport is an enabler and improving our transport networks supports a wide range of other priorities. As such, the Local Transport Plan supports a wide range of other strategies and delivery programmes.

**3.3.2 Sustainable Community Strategy** - The Royal Borough's Sustainable Community Strategy (SCS) has been developed by the Local Strategic Partnership (LSP), which comprises representatives from the council and other public service providers, business interests and the community and voluntary sector. The SCS sits above all other local plans and sets a shared vision for the future, responding directly to local needs. Our SCS seeks to tackle seven key challenges:

- Improving community safety
- Strengthening local communities
- Reducing health inequalities
- Safeguarding the vulnerable

- Raising education and skills attainment
- Promoting sustainable economic growth
- Tackling climate change

**3.3.3** The Local Transport Plan has a key role to play in helping to address each of the above challenges, for example:

- It can improve road safety and personal security.
- It can improve access for all sectors of society to everyday services and facilities.
- It can promote more active forms of transport such as walking and cycling.
- It can ensure that our transport networks meet the needs of all sectors in society, including the young, the elderly, the disabled and those on low incomes.
- It can maximise the educational opportunities available to our residents by providing suitable transport links.
- It can support local businesses by tackling congestion on our transport networks and by improving access to key destinations such as Heathrow Airport.
- It can help to tackle climate change by minimising the need to travel and enabling a greater proportion of trips to be made by sustainable transport modes.

**3.3.4 Corporate Plan** – The Borough’s Corporate Plan is based around the guiding principles identified in Chapter 2. It sets out the Council’s priorities and outlines what we expect to achieve within the short, medium and long terms.

**3.3.5** In the short-term, the focus will be on reducing costs and delivering value for money, while providing opportunities for local residents and organisations to get involved in all aspects of community life.

**3.3.6** In the medium-term, the Council will continue to focus on personalising services and increasing choice for residents, as well as empowering community groups and other service providers to deliver services traditionally provided by the Council. There will also be a focus on improving delivery of online services and improving the links with other public and third sector organisations, with better sharing of information to improve the customer experience. The Council will also take over responsibility for public health from the Primary Care Trusts.

**3.3.7** The long-term aspiration is for choices about which, when and how services are delivered, to be devolved to the very local level. The Council will empower residents to shape the borough in the way they see fit, through taking advantage of new planning frameworks and expanding the democratic process at the local level.

**3.3.8 Borough Local Plan** - The Local Borough Local Plan sets out the council's planning strategy, which will guide planning and development in the Royal Borough over the period to 2026. It is vital that transport and land use planning are considered together in order to ensure that development is sustainable. By shaping the pattern of development and influencing the location, scale, density, design and mix of land uses, planning can help to reduce the need to travel, reduce the length of journeys and make it safer and easier for people to access jobs, shopping, leisure facilities and other services by public transport, walking, and cycling. Similarly, when planning future transport investment, account must be taken of the needs and impacts of new development so that the necessary infrastructure and services are implemented in a timely fashion.

**3.3.9** The Borough Local Plan is seeking to accommodate the vast majority of new development within the existing urban areas, since these are the most sustainable in transport terms, being accessible by public transport, cycling and walking networks. It is proposed that Maidenhead town centre will be a particular focus for new development. The

Maidenhead Town Centre Area Action Plan (AAP) provides a detailed planning strategy for the town centre, ensuring coordinated development of an appropriate scale, mix and quality. It covers not only the shopping core but also the surrounding leisure facilities, offices and major roads. Improvements to transport services and infrastructure are vital to enable this development can take place.

### **3.4 LTP Aims and Objectives**

**3.4.1** The Borough's local transport plan has been broken down into 5 overarching aims, which reflect local priorities and the Government's over-arching principles:

- To improve access to everyday services and facilities for everyone
- To improve road safety and personal security for all transport users
- To support sustainable economic growth
- To improve quality of life and minimise the social, health and environmental impacts of transport.
- To mitigate and adapt to the effects of climate change.

**3.4.2** For each of these overarching aims, we have sought to link:

- A vision setting out the desired future that we are working towards
- The key issues that we currently face and are seeking to address
- The objectives (specific changes) that are we aiming to bring about
- The outcomes that will be delivered as we work towards the vision and objectives.

**3.4.3** These are summarised in the table below and have been used to guide the preparation of the various detailed policies and measures that make up the LTP Strategy and Implementation Plan.

Vision	General Issues	Local Transport Issues	Objectives	Outcomes
<p><b>Improving access to everyday services and facilities</b></p> <p>Local residents, business people and visitors have straightforward access to everyday services and facilities.</p>	<ul style="list-style-type: none"> <li>Isolated pockets of social deprivation</li> <li>An ageing population</li> <li>A dispersed rural population</li> <li>Some services provided in remote locations</li> </ul>	<ul style="list-style-type: none"> <li>Lack of direct public transport routes for some journeys</li> <li>Low frequency of bus services</li> <li>Slow / indirect inter-urban bus routes</li> <li>Cost of travel for young people and those on low incomes</li> <li>Missing links in pedestrian / cycle networks</li> <li>Poor integration between different forms of transport</li> </ul>	<ul style="list-style-type: none"> <li>Improve access to everyday services and facilities for everyone</li> <li>Improve the availability, accessibility and affordability of transport</li> <li>Improve integration between different forms of transport</li> </ul>	<ul style="list-style-type: none"> <li>Reduced levels of social exclusion</li> <li>Local residents can readily access key services / facilities</li> <li>People have a genuine choice as to how they travel</li> <li>Increased levels of walking, cycling and public transport use</li> <li>Improved public satisfaction with transport services</li> </ul>
<p><b>Improving safety and security</b></p> <p>People feel safe and secure when travelling in the Royal Borough and have a reduced risk of being involved in a road traffic accident, or being a victim of crime.</p>	<ul style="list-style-type: none"> <li>Social and economic costs of road traffic casualties and crime</li> </ul>	<ul style="list-style-type: none"> <li>Halting of downward trend in casualties from road traffic collisions</li> <li>High levels of vehicle crime and cycle theft relative to other crimes</li> <li>Anti-social behaviour perceived to be a significant problem</li> <li>Concerns about road safety and personal security is discouraging some people from walking, cycling and using public transport</li> </ul>	<ul style="list-style-type: none"> <li>Promote safe behaviours and mutual respect by all road users</li> <li>Reduce the number and severity of casualties on our roads, particularly amongst motorcyclists, cyclists and young drivers</li> <li>Reduce instances of vehicle crime and cycle theft</li> <li>Improve security for everyone travelling in the borough</li> </ul>	<ul style="list-style-type: none"> <li>People are and feel safer when travelling in the Royal Borough</li> <li>Fewer people are killed or injured in road traffic collisions</li> <li>Crime levels reduce</li> <li>Fewer people experience security concerns and more people travel on foot, by bike or public transport</li> </ul>

Vision	General Issues	Local Transport Issues	Objectives	Outcomes	
<p><b>Supporting sustainable economic growth</b></p>	<p>The Royal Borough has a thriving local economy supported by efficient, well-designed and well-managed transport networks, providing reliable and sustainable connectivity for the movement of people and goods to local, regional and national economic centres and international gateways such as Heathrow Airport.</p>	<ul style="list-style-type: none"> <li>• Strong local visitor / service economy</li> <li>• An affluent, highly mobile population</li> <li>• Under-performing retail economy in Maidenhead</li> <li>• Economic and housing growth placing pressure on local / strategic infrastructure</li> <li>• Mis-match between jobs and housing</li> <li>• Increasing levels of globalisation in business</li> </ul>	<ul style="list-style-type: none"> <li>• Overcrowding on peak hour rail services</li> <li>• Peak hour congestion on the motorway and trunk road network</li> <li>• Peak hour congestion in urban areas</li> <li>• High levels of car use for commuting trips</li> <li>• High levels of car use for the school run</li> <li>• Maidenhead residents travel to neighbouring towns to shop</li> <li>• Congestion from attractions and events</li> <li>• Transport pressures from new development</li> <li>• High levels of car/ taxi use for travel to Heathrow Airport</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce the need to travel and increase the proportion of trips made by public transport, cycling and walking</li> <li>• Improve traffic flow in congested areas and improve journey time reliability for all forms of transport</li> <li>• Ensure that new development is focussed in sustainable locations well served by public transport, walking and cycling networks</li> <li>• Improve public transport access to Heathrow Airport</li> </ul>	<ul style="list-style-type: none"> <li>• Less congestion and fewer delays reduces costs to businesses</li> <li>• More people choose to shop in our town / local centres</li> <li>• Visitors have a positive experience of the Borough</li> <li>• Improved access to Heathrow Airport benefits residents, businesses and visitors</li> </ul>
<p><b>Improving quality of life</b></p>	<p>Transport networks and services enhance the quality of life for residents of the Royal Borough, who experience minimal adverse impacts from transport operations.</p>	<ul style="list-style-type: none"> <li>• Nuisance and health risks of traffic noise</li> <li>• Public health risk from poor air quality</li> <li>• Health risks of sedentary lifestyles</li> <li>• Impacts of traffic on the natural and built environment</li> </ul>	<ul style="list-style-type: none"> <li>• Minimise the impacts of transport on our local communities and on the natural and historic environment</li> <li>• Minimise the adverse impacts of transport on the health and well-being of local residents</li> </ul>	<ul style="list-style-type: none"> <li>• Fewer residents bothered by traffic noise</li> <li>• Improved health and fitness levels of local residents</li> <li>• The natural and historic environment are safeguarded</li> </ul>	

Vision	General Issues	Local Transport Issues	Objectives	Outcomes
		Basin Heath Special Protection Area <ul style="list-style-type: none"> <li>• Thames Basin water courses affected by run-off from roads.</li> <li>• Traffic affecting the character of Historic Centres / Conservation areas and damaging historic structures.</li> </ul>		
<b>Mitigating and adapting to climate change</b>				
Carbon emissions from the transport sector will be considerably reduced.	<ul style="list-style-type: none"> <li>• Adverse social, economic and environmental impacts of any global climate change</li> <li>• More extreme weather events (e.g. heavy rainfall, higher temperatures)</li> </ul>	<ul style="list-style-type: none"> <li>• RBWM is an affluent area with high levels of car ownership and use, resulting in high levels of carbon emissions</li> <li>• Legacy of older, inefficient street-lights</li> <li>• Flooding on roads after heavy rainfall</li> <li>• Potential melting of road surfaces in high temperatures</li> <li>• Potential increased winter maintenance</li> </ul>	<ul style="list-style-type: none"> <li>• Mitigate climate change by reducing carbon emissions from road transport</li> <li>• Ensure that both new and existing transport networks are designed to cope with extreme weather events</li> </ul>	<ul style="list-style-type: none"> <li>• Less CO<sub>2</sub> is emitted by transport in the Borough</li> <li>• The Borough's transport networks will be adapted to cope with the effects of climate change</li> </ul>
The Borough's transport networks will be resilient to the effects of climate change.				

## **3.5 Thematic and Neighbourhood Strategies**

**3.5.1** We have developed four borough-wide thematic strategies, one for each of the strategic aims of the LTP, with Climate Change running through the others as a 'golden thread'. Together, these describe how our strategic approach will be delivered through a series of policy interventions. These thematic strategies provide a borough-wide policy framework for how we will deliver improved travel and transport. They also provide the context for the area transport strategies and the implementation programmes.

**3.5.2** For each of the thematic strategies we:

- Examined the policy context to understand how each strategy needs to fit in with the bigger picture at local, regional and national levels. From this, we ensured that our policies built on this wider existing policy framework to define a way forward for interpretation and application in the Royal Borough.
- Analysed available data and feedback from consultations with residents and key stakeholders to identify both current and emerging issues. This has enabled us to develop a strong evidence-based approach to determining the priorities and policies.
- Set objectives and targets that clearly articulate what we are looking to achieve.
- Developed policies that, when implemented, will meet our objectives and targets by building on our strengths, addressing our weaknesses, capitalising on opportunities, and neutralising any threats.

**3.5.3** For each Thematic Strategy, we have undertaken a SWOT analysis to identify:

- Current strengths that we need to build on;
- Weaknesses that we need to address;
- Future opportunities that we can take advantage of; and
- Potential threats that need to be neutralised.

**3.5.4** The SWOT analysis identifies elements that could help and hinder us in our efforts to achieve our aims and objectives. The SWOT analysis has been informed by our evidence based approach and takes account of external influences as well as factors that purely related to transport.

**3.5.5** The thematic strategies describe the policy framework that will apply across the local authority as a whole. However, the Royal Borough is a very diverse area with varying needs, problems and solutions. The emphasis of the borough-wide policies will therefore vary and so Neighbourhood Plans are being developed, which will describe the particular needs and aspirations of each area and the policies and interventions that will be applied to address these. In order to ensure a joined up approach to planning for sustainable development, the Neighbourhood Plans are being prepared as joint transport and land use planning documents.

**3.5.6** In line with the Royal Borough's commitment to engaging local communities in decisions that affect them, these strategies are being prepared by local residents with guidance and support from officers and technical experts.

**3.5.7** In total, seven Neighbourhood Plans are being prepared, based on the existing parish areas:

- Hurley and the Walthams
- Bisham and Cookham
- Maidenhead and Cox Green



- Bray
- Windsor and Eton, with Eton Wick
- Datchet, Horton and Wraysbury, and Old Windsor
- Ascot and Cheapside, Sunninghill and South Ascot, and Ascot and Cheapside

## 3.6 Consultation

**3.6.1** In developing this Local Transport Plan, we have undertaken a thorough and effective consultation process, making reference to existing consultation results where appropriate in order to avoid unnecessary duplication and ensure that value for money is achieved.

**3.6.2 LTP Issues and Options Survey** - Local residents were consulted on 'issues and options' for the Local Transport Plan via a questionnaire, distributed with the October 2009 edition of 'Around the Royal Borough'. 3,258 residents responded, representing around 5% of households in the Borough. A separate stakeholder consultation exercise was undertaken between January and March 2010 via a questionnaire similar to that used with residents, prompting 33 responses. In addition, local interest groups and key sectors were consulted through local forums and events.

**3.6.3** When asked to rank the proposed LTP aims in order of importance, 'improving access to everyday services and facilities' was the top priority for both residents and stakeholders. For each of the LTP aims, respondents were asked how important they felt a range of related issues to be. The issues that were rated as very high or high priority by more than 70% of respondents are shown below.

LTP Aim	Resident Priority	Stakeholder Priority
Tackling peak hour congestion	✓	✓
Tackling problems associated with the school run	✓	
Improving access to town centres	✓	
Accommodating the transport needs of an ageing population	✓	
Improving walking and cycling facilities	✓	
Improving connections between public transport services	✓	
Reducing the number and severity of road traffic casualties	✓	
Reducing incidents of vehicle crime and cycle theft	✓	✓
Reducing incidents of anti-social behaviour	✓	✓
Fixing potholes and improving roads and pavements	✓	✓

**3.6.4** Residents were given the opportunity to highlight particular issues that they wished to be addressed by the next LTP. For the purposes of analysis, comments have been grouped into generic categories. The top 5 issues were:

1. More cycle routes
2. New / revised bus routes
3. Remove existing road humps
4. More effective speed limit enforcement
5. Better transport interchange

**3.6.5** There is a range of possible measures that could be used to address the transport issues affecting the Royal Borough. While all options will undergo rigorous testing and appraisal, before being considered for inclusion in the LTP, we also need to understand whether they have public support, since this will affect their likelihood of success. The relative priorities for each of the options is summarised below.

LTP Strategy Options	Resident Ranking	Stakeholder Ranking
Network management (measures to improve traffic flow)	1	2
Sustainable transport (walking, cycling, public transport network improvements)	2	1
Road widening / construction	3	4
Smarter choices (measures to influence travel behaviour)	4	3
Demand management (measures to discourage private car use)	5	5

**3.6.6 Residents Survey** - The Windsor and Maidenhead Residents' Survey 2011/12 received nearly 1,000 responses from residents aged 18 or over living in all parts of the borough. The survey showed that respondents considered 'road and pavement repairs' and 'the level of traffic congestion' as the aspects of local life that are most in need of improvement. The majority of residents considered that the situation with both these aspects had deteriorated in the last three years, although the percentage of carriageways deemed in need of repair and traffic volumes have both fallen during this period. The survey also showed that satisfaction levels with local bus services and local transport information were amongst the lowest of all Council services considered, with satisfaction levels of 35% and 37% respectively.

**3.6.7 LTP Consultation** – Public consultation on the draft Local Transport Plan took place during the Spring of 2012. During this period, the document was made available on line, with printed copies made available in libraries and council offices. The consultation was promoted in the local media, on the Council's website and social media sites and through the Resident's Panel. Key stakeholders were contacted directly, including statutory consultees, partner organisations and local interest groups. A variety of communication channels were available for residents and stakeholders to provide feedback. A total of 23 responses were received, many of which provide detailed comments, which have been carefully considered and where appropriate changes have been made to address concerns raised.

**3.6.8 Neighbourhood Plan Consultation** – Each of the Neighbourhood Plans starts with a workshop where issues and ideas are gathered from local people about their area. People from this workshop can then volunteer to be on the steering group that will oversee development of the plan. The first few workshops will be led by Council officers, but after this it is expected that the local steering group members will guide discussions and make decisions about how to progress the plan. Surveys will be created by the steering groups to seek the views of local residents and other stakeholders and ensure that the plan is addressing the correct issues and is considering options that are considered to be acceptable and appropriate by the local community. Once prepared, draft plans will be issued for consultation. The Neighbourhood Plans are in various stages of development, but it is envisaged that these will be adopted over the next couple of years.

**3.6.9 Implementation Consultation** - We will continue to undertake detailed consultations on individual schemes in the implementation programme as they are being developed. The scale and reach of these consultations varies according to the scheme being looked at, ranging from more localised consultation on, for example smaller traffic management schemes to wider consultation on major schemes.

## **4. IMPROVING ACCESS TO EVERYDAY SERVICES & FACILITIES**

### **4.1 Introduction**

**4.1.1** Ensuring that we can access the services and facilities that they need is essential to everyday life and is therefore at the heart of this Local Transport Plan.

**4.1.2** Our economy is reliant upon employees being able to travel to work and upon customers being able to get to shops and businesses. Being able to access education opportunities is important for adults as well as children, enabling residents to make the most of their lives and improving their long-term prospects in the job market. Ensuring straightforward access to healthcare advice and treatment is critical for the wellbeing of our residents. Enabling people to visit friends and family, get out to the shops and access leisure opportunities is important in terms of improving quality of life.

**4.1.3** When looking at access to these everyday services and facilities, we need to be mindful that there is no one-size-fits-all solution. We need to ensure that, where practical, people have a genuine choice as to how, when and where they access the services that they require. In terms of transport provision, there needs to be a balance between access by car and access by other forms of transport, such as walking, cycling and public transport. Transport should be designed so as to be available, accessible and affordable to as many people as possible.

**4.1.4** It is also important to remember that improving accessibility is as much about the design of the services themselves as it is about improving transport. Consideration therefore needs to be given to the locations, times and ways in which services are provided, requiring a joined-up approach to service provision and effective use of information and communications technology.

**4.1.5** In addition, we need to ensure that our transport networks are resilient and remain accessible in the event of extreme weather events, such as river and flash flooding, snow and ice, and heat waves, which are likely to occur more frequently in future as a result of Climate Change.

## 4.2 Policy Context

4.2.1 The following table summarises the main policies relating to sustainable accessibility at the international, national, regional and local levels.

Strategy	Key Objectives & Priorities
<b>Local</b>	
Sustainable Community Strategy	<ul style="list-style-type: none"> <li>• Priorities under the 'Reducing Health Inequalities' challenge include:               <ul style="list-style-type: none"> <li>○ Services are better matched to needs</li> </ul> </li> <li>• Priorities under 'Safeguarding the vulnerable' include:               <ul style="list-style-type: none"> <li>○ Families provided with support to secure better outcomes for their children; and</li> <li>○ Increased quality of life for older people and vulnerable adults</li> </ul> </li> <li>• Priorities under 'Raising Education and Skills Attainment' challenge include:               <ul style="list-style-type: none"> <li>○ Improved life chances for all children and young people</li> </ul> </li> <li>• Priorities under 'Promoting Sustainable Economic Growth' challenge include:               <ul style="list-style-type: none"> <li>○ More people working and shopping locally</li> </ul> </li> <li>• Priorities under 'Tackling Climate Change' include:               <ul style="list-style-type: none"> <li>○ Reduced need for people on low incomes to travel into or out of the Borough for work</li> </ul> </li> </ul>
<b>National</b>	
Transport White Paper: Creating Growth, Cutting Carbon	<ul style="list-style-type: none"> <li>• Continue to work with key industry representatives to improve the end-to-end journey.</li> <li>• Committed to delivering, with operators and public sector bodies, the infrastructure to enable most public transport journeys to be undertaken using smart ticketing.</li> <li>• Concessionary travel to be protected.</li> <li>• Local Sustainable Transport Fund includes funding for local authority partnerships with community transport providers.</li> </ul>
National Planning Policy Framework	<ul style="list-style-type: none"> <li>• Protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Developments should be located and designed to :               <ul style="list-style-type: none"> <li>- accommodate the efficient delivery of goods and supplies;</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>- give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;</li> <li>- create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;</li> <li>- incorporate facilities for charging plug-in and other ultra-low emission vehicles; and</li> <li>- consider the needs of people with disabilities by all modes of transport</li> </ul> <ul style="list-style-type: none"> <li>• Planning policies should aim for a balance of land uses within their area so that people can be encouraged to minimise journey lengths for employment, shopping, leisure, education and other activities.</li> <li>• Where practical, particularly within large-scale developments, key facilities such as primary schools and local shops should be located within walking distance of most properties.</li> </ul>
--	---

## 4.3 Supporting Evidence

### Accessibility

**4.3.1** There are a number of tools available for measuring accessibility to services and facilities. Accession is an accessibility mapping tool, which measures travel time to defined locations by public transport and walking. Appendix 1 contains Accession plots for a variety of everyday services and facilities, including:

- Key employment areas
- Education facilities (i.e. primary / secondary schools and further education colleges)
- Healthcare facilities (i.e. GP surgeries and hospitals)
- Town and local centres

**4.3.2** The results suggest that access is poorest to the area's main hospitals at Heatherwood and Wexham Park, which provide medical, surgical and outpatient services. Wexham Park is located to the north of Slough and there are few direct bus services to the site from the Royal Borough, with most journeys requiring a change at Slough, which adds to the journey time. Heatherwood Hospital is located in Ascot – again there are few direct bus routes, with journeys from Maidenhead and surrounding villages being particularly onerous.

**4.3.3** Secondary schools are also noticeably less accessible than most other facilities. There are relatively few secondary schools and they tend to be clustered in the main urban areas, so accessibility from smaller rural settlements can be poor. However, the council provides free home to school transport for around 1,000 pupils who live beyond the statutory walking distance from school, or whose walking route is considered to be unsafe or unsuitable. Travel arrangements are made using rail and bus season tickets, contract coaches, minibuses, and taxis where necessary.

## Rail Travel

**4.3.4** The railway is used extensively for commuting, education, business and leisure travel, catering predominantly for inter-urban and long-distance travel, particularly trips to and from London. The 2001 Census showed that London was the most popular external commuting destination for Royal Borough residents.

**4.3.5** The borough has excellent access to the national rail network, with 10 stations serving our local communities. The Great Western Main Line runs east-west through Maidenhead, linking London Paddington with South-West England and South Wales. The Marlow branch line runs from Maidenhead, calling at Furze Platt and Cookham, with a separate branch line linking Slough with Windsor and Eton Central.

**4.3.6** Maidenhead will also be the western terminus for Crossrail, which will provide direct train services to central London and the financial district. It is expected that Crossrail services will commence on the central section by late 2018, followed by a phased introduction of services along the rest of the route over several months.

**4.3.7** The south of the borough is served by trains out of London Waterloo. Services to Windsor and Eton Riverside call at Wraysbury, Sunnymeads and Datchet, while services to Reading call at Sunningdale and Ascot. Ascot is also an interchange for services to Guildford.

**4.3.8** Rail usage at borough stations declined for the first time in 2009/10 after a sustained period of significant growth, but was still up by 14% from 2005/06 levels. Figures for each of the stations in the Royal Borough are shown in Table 4.1 below.

**4.3.9** The Government forecasts that, as a result of proposed fare increases, there could be up to 4% fewer trips by rail than there would otherwise have been<sup>1</sup>, suggesting that rail fares will represent a barrier to accessibility for some people.

	2005/06	2006/07	2007/08	2008/09	2009/10
Ascot	789,039	1,008,215	1,045,853	1,081,070	1,014,440
Cookham	186,701	195,044	189,804	194,764	190,238
Datchet	254,661	263,030	319,733	321,436	311,462
Furze Platt	170,757	154,163	146,176	143,292	137,054
Maidenhead	3,380,173	3,609,303	3,681,827	3,654,592	3,600,428
Sunningdale	569,347	621,218	697,761	734,290	659,460
Sunnymeads	18,581	20,647	22,936	28,204	30,030
Windsor & Eton Central	1,309,356	1,423,329	1,508,501	1,557,536	1,607,992
Windsor & Eton Riverside	1,045,253	1,113,646	1,257,388	1,254,290	1,226,096
Wraysbury	47,813	55,919	71,915	91,288	91,382
<b>TOTAL</b>	<b>7,771,681</b>	<b>8,464,514</b>	<b>8,941,894</b>	<b>9,060,762</b>	<b>8,868,582</b>

**Table 4.1: Number of Passengers Boarding & Alighting at Local Stations**

<sup>1</sup> Hansard, 10 November 2010, c335W



## Bus Travel

**4.3.10** The Royal Borough has a good bus network with most of our towns and villages served by at least one route (see figure 4.1 below), linking residential areas with employment and retail centres and hospitals.

**4.3.11** Buses cater predominantly for local journeys, although there are also regular cross-boundary bus and coach services that serve neighbouring towns such as Bracknell, High Wycombe, Slough, Staines and Egham as well as key destinations such as Wexham Park Hospital and Heathrow Airport. There are also express coach services to London with a limited service from the Maidenhead area and a regular service from Windsor. Further, a number of business park shuttle services operate in Maidenhead.

**4.3.12** The LTP Issues and Options consultation and local area workshops highlighted some cross-boundary journeys that cannot be made by bus (e.g. travel to Twyford from Shurlock Row and the Walthams, and travel to Woking from Ascot and the Sunnings).

**4.3.13** Another key outcome from the consultation was the relative lack of coordination between bus and rail networks, particularly in Maidenhead, where there is no central interchange point. Despite this, Maidenhead is one of the most popular destinations on the Great Western rail franchise in terms of PlusBus add-on ticket sales.

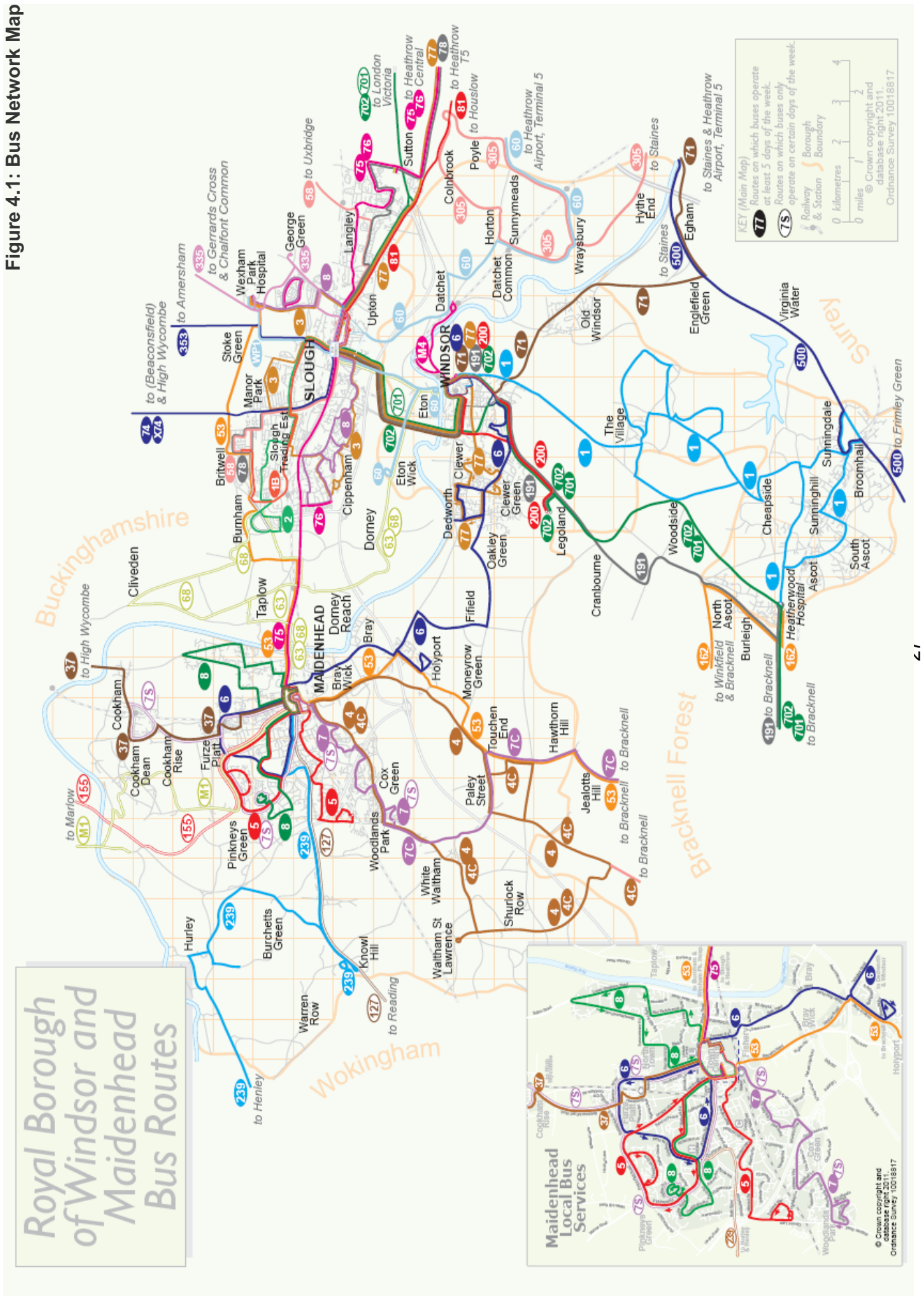
**4.3.14** As would be expected, urban areas have the best bus network coverage and tend to have higher frequencies of between 20 minutes and 1 hour. Rural services tend to have lower frequencies, with some routes only operating a limited service on certain days, which makes some of them unsuitable for regular journeys such as travel to work or school.

**4.3.15** The cost of travel can be a problem for people on low incomes who tend to be more reliant upon public transport. Figure 4.2 shows the index of income deprivation. Although the Royal Borough is a relatively affluent area, the map shows that pockets of deprivation do still exist in Oldfield, Clewer North and South, South Ascot, Horton and Wraysbury, Hurley and the Walthams and Datchet. The general high standard of living can mask these and their isolated nature can make it difficult to serve these communities with public transport.

**4.3.16** The council operates a concessionary fares scheme that delivers benefits over and above the statutory requirements. This allows elderly and disabled residents to travel for free on journeys starting in the borough. The Council offers free travel to companions of those who cannot use bus services unless they are accompanied, again for journeys starting in the borough. For eligible residents, there is a Travel Assistance Payment Scheme, whereby residents are issued with pre-paid credits for local journeys by community transport. The council also offers a Student Reduced Fares Card, which provides half price bus travel for young people aged 16-18, who are in full time education.

**4.3.17** Although almost all buses operating within the Royal Borough are low floor models with space for wheelchair passengers, physical access can still be a barrier for some passengers, with many bus stops lacking raised kerbs to ensure level access. The borough's Access Advisory Forum has also highlighted issues with boarding vehicles and with wheelchair spaces being taken up with luggage. It should be noted that all buses must be low-floor by 2017 with suitable modifications to bus stops to enable level boarding. A further issue has been identified with conflict between wheelchair users, parents with pushchairs and other passengers over storage space and additional delay required for boarding / alighting.

Figure 4.1: Bus Network Map



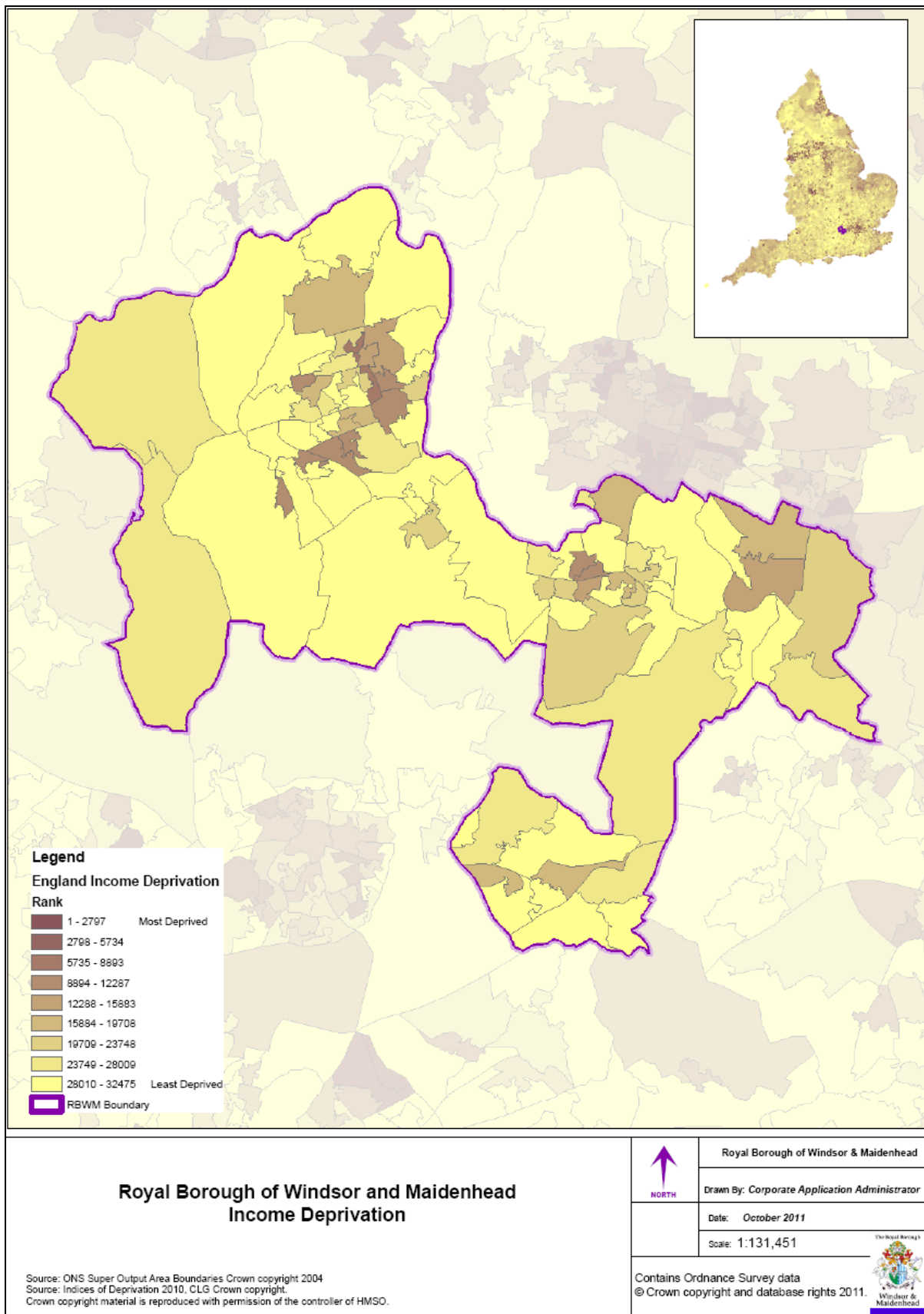


Figure 4.2: Index of Income Deprivation

**4.3.18** Public transport information is a key factor affecting accessibility. Significant improvements to information provision have been made in recent years, including:

- real-time information at key stops,
- improved static information displays at an increased number of stops, with the aim of posting timetable information at each stop in the Borough,
- provision of printed timetable leaflets,
- SMS and online travel information services.

**4.3.19** Despite these improvements, the LTP Issues and Options consultation showed that resident satisfaction levels remain low.

**4.3.20** Although bus patronage has increased by over 40% since 2003, passenger numbers in the Royal Borough are still low relative to other local authority areas – as a result there are few commercial services. Most local bus services are subsidised, with the council spending around £850,000 in 2010/11 to ensure that local residents have access to a bus service.

**4.3.21** Table 4.2 below shows residents’ satisfaction with various aspects of local bus service provision as identified through the LTP Issues and Options consultation. The elements with the lowest satisfaction ratings were: service frequency; information provision; and cost.

Aspect of Local Public Bus Provision	% Satisfied or Very Satisfied
Frequency	37%
Cost	40%
Punctuality	46%
Ease of boarding and alighting	60%
Information	37%
Bus service overall	37%

**Table 4.2: Residents’ Satisfaction with Local Public Bus Provision**

### **Voluntary and Community Transport**

**4.3.22** There are several community and voluntary transport services that operate locally, including Ascot Volunteer Bureau, Maidenhead Care, People to Places and Windsor Voluntary Car Service. These services provide an alternative transport service for residents with limited mobility who have problems using public transport or taxis, and cater for a wide variety of trips. This includes a broad spectrum of users from those who are formally recognised as being disabled to those who are simply too frail or lacking in confidence to be able to travel independently.

**4.3.23** The LTP Issues and Options Consultation showed that transport to hospital is a key issue, particular for elderly residents and the lack of direct bus routes from many communities. Voluntary and community transport together with the NHS non-emergency patient transport service, play a vital role in catering for this demand. However, there is some anecdotal evidence to suggest that satisfaction with the non-emergency patient transport service is poor, with users citing problems with reliability, punctuality and long journey times.

**4.3.24** The Shopmobility service, which operates in Maidenhead and Windsor town centre is the last link in the Borough’s integrated transport system. This service enables residents and visitors with impaired mobility to hire mobility scooters and wheelchairs in order to

access local services and facilities. Shopmobility also attends local events and provide outreach activities such as rambles. The service was used 7,648 times in 2010/11.

**4.3.25** The Borough has an ageing population. The 2001 Census showed that, 15.4% of the local population were aged 65 or over, with 1.9% aged 85 years or over. The Office for National Statistics (ONS) projections for 2010 suggest that 22.6% of borough residents are over 65 and over and 3.1% are 85 years or over.

**4.3.26** This ageing population trend is expected to continue for the foreseeable future, and will bring additional challenges. For example, the number of people aged 65 or over with mobility issues is likely to increase by 43% by 2025<sup>2</sup>. This suggests that the demand for voluntary and community transport and patient transport services is likely to increase significantly over time. However, the current downturn in the economy is likely to make securing donations more challenging in the short to medium term.

### **Taxis and Private Hire**

**4.3.27** Taxis cater for a wide variety of journeys, including as part of commuting trips, business trips and for leisure trips, particularly in the evenings. They are used extensively by visitors, especially for travel to and from major events.

**4.3.28** They can also be a lifeline for people living in more remote areas who do not have access to a car, although the cost of travel can be an issue for those on low incomes. In addition, taxis are widely used for certain home to school transport trips.

**4.3.29** Although disabled people are reported to travel a third less often than the public in general, they use taxis and PHVs on average 67% more often. Around 30% of Hackney Carriages are wheelchair accessible and can carry passengers while sitting in a manual wheelchair.

**4.3.30** Only Hackney Carriages can pick up customers from taxi ranks or can be flagged down by customers in the street. Private hire vehicles must be pre-booked through the operator. There is some confusion amongst members of the public as to the differences between Hackney Carriages and private hire vehicles.

**4.3.31** Within the Royal Borough, there are around 1,000 Private Hire Licenses<sup>3</sup> and 96 Hackney Carriage (taxi) licenses. The Council recently agreed to issue five additional taxi licences per month.

**4.3.32** There are several full and part-time ranks, including:

#### **Maidenhead:**

- High Street
- King Street
- Maidenhead Station
- Queen Street (x2)
- Shoppenhangar's Road

#### **Windsor:**

- Farm Yard
- Goswell Hill

---

<sup>2</sup> Source: Projecting Older People Population Information System based on Living in Britain Survey 2001 with prevalence rates applied to ONS population projections

<sup>3</sup> Figures correct as of December 2011.

- Thames Street

**Other:**

- Ascot Station
- Brocas Street, Eton

**4.3.33** Some of these ranks are well used, while others are hardly used at all. There is pressure from the taxi trade to expand facilities at Maidenhead Station and at Goswell Hill and Thames Street in Windsor. The rank at Maidenhead Station is of a poor design, with taxis parking at right angles to the kerb rather than being in line.

## **Cycling and Walking**

**4.3.34** Residents and visitors benefit from an extensive cycle network, which includes the following legs of the National Cycle Network:

- Route 4 – Thames Valley Cycle Route (Reading to London)
- Route 50 – Maidenhead to Cookham
- Route 61 – Maidenhead to Rye House Station, Hertfordshire

**4.3.35** Cyclists also benefit from numerous local routes, including on and off-carriageway routes, toucan crossings and advanced stop lines, as well as cycle parking facilities at key public destinations. In addition, cyclists benefit from access to much of the public rights of way network, including bridleways and byways, and Crown Estates make many of the roads within Windsor Great Park available to cyclists during daylight hours.

**4.3.36** A common complaint amongst cyclists is the lack of continuous cycle routes along key corridors and through the town centres. Also, there is limited cycling provision for inter-urban journeys, notably for travel between Ascot and Windsor, since routes through the Great Park are not open to cyclists after nightfall.

**4.3.37** There is a strong local demand for information on cycling opportunities. The council has worked in conjunction with local cyclists to publish a map of the Royal Borough which grades all publically accessible roads according to traffic conditions and the level of skill and experience needed for cycling. This serves to highlight routes along quieter roads as well as dedicated cycling infrastructure, thus helping to cater for a wider range of trips. Maps are also available for routes along the Jubilee River and through Windsor Great Park.

**4.3.38** The Royal Borough has an excellent pedestrian network with most towns and villages having footways, supplemented by the public rights of way network as well as routes through parks and open spaces. However, in some rural communities, continuous pedestrian routes may not be available (e.g. roads may have narrow or missing sections of footway), which can discourage people from walking for local journeys. The LTP Issues and Options Consultation highlighted a number of locations where new footways were requested.

**4.3.39** The pedestrian network and local destinations also need to be accessible for people with visual or mobility impairments. The council recently completed a Destination Access Audit of Maidenhead and Windsor, which highlighted where improvements were required (e.g. ramps, dropped kerbs, tactile paving, tactile devices at signal controlled crossings, etc).



## 4.4 SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Most communities are served by at least one local bus route</li> <li>• Strong 'Borough Bus' brand has been instrumental in delivering strong growth in bus patronage</li> <li>• Rising levels of satisfaction with public transport and public transport information</li> <li>• Excellent main line rail links to London and Reading, with branch lines serving many local communities</li> <li>• All areas are covered by community / voluntary transport services</li> <li>• The main town centres and visitor events are covered by Shopmobility services</li> <li>• Comprehensive concessionary fare scheme, with companion passes to help residents who are unable to travel without assistance</li> <li>• The Borough is well served by taxis / private hire</li> <li>• The borough is served by local and national cycle networks, which cater for both utility and recreational trips</li> </ul>	<ul style="list-style-type: none"> <li>• Some bus services have low frequencies</li> <li>• There are pockets of social deprivation with particular transport challenges</li> <li>• The dispersed rural population is difficult to serve by public transport</li> <li>• High levels of car ownership and use make commercial bus service operation difficult</li> <li>• Long journey times for rural and inter-urban bus travel compared to car travel</li> <li>• Poor interchange between public transport, particularly in Maidenhead</li> <li>• Poor penetration of public transport services into Windsor and Maidenhead town centres</li> <li>• Some key gaps in the cycle network, with few routes in the south of the Borough</li> <li>• Some missing links / difficult major road crossings on public rights of way particularly for equestrians</li> <li>• Poor walking or cycling access to some schools</li> <li>• No higher education facilities within the borough – presents transport challenge</li> <li>• The main hospitals are located away from the borough's main centres of population</li> <li>• Limited information at some bus stops outside local / town centres</li> <li>• Some disabled people experience difficulties using public transport / taxis</li> <li>• Much of the Borough is vulnerable to river flooding</li> </ul>



Opportunities	Threats
<ul style="list-style-type: none"> <li>• Potential for more localised healthcare provision through GP surgeries</li> <li>• Crossrail will improve rail access between Maidenhead and Central London</li> <li>• Local Sustainable Transport Fund could enable a step change in the promotion of walking, cycling and public transport</li> <li>• There may be a review of legislation affecting the taxi trade that could simplify the licensing regime</li> </ul>	<ul style="list-style-type: none"> <li>• Rising cost of fuel and insurance leading to increased costs for public transport and home to school contract costs</li> <li>• Much of the borough is already at risk of flooding – this area may change / increase in size due to the effects of climate change</li> <li>• Increased likelihood of transport infrastructure being affected by extreme weather events as a result of Climate Change</li> <li>• Extensive funding and resources required to deliver required mitigation and adaptation measures</li> </ul>

## 4.5 Objectives

4.5.1 The objectives for the Improving Access Strategy are:

- To improve access to everyday services and facilities for everyone
- To improve the availability, accessibility and affordability of transport
- To improve integration between different forms of transport
- To adapt to the effects of climate change by ensuring that both new and existing transport networks are designed to remain accessible during extreme weather events

## 4.6 Policies

### Partnership Working

4.6.1 Access arrangements need to be considered from the outset when planning any new or revised public service. If people experience difficulties in accessing a particular service, then the service has failed. Considerations should include how, where and when a service is provided as well as the means of transport and access for the users. This requires a joined up approach involving both service and transport providers.

### **Policy ASF1: Partnership Working**

The Council will work in partnership with service providers, developers, public transport operators, and neighbouring local transport authorities to improve access for residents and visitors to key services and facilities within and around the Royal Borough.

### Information and Communication Technologies

4.6.2 Modern information and communication technologies mean that it is possible to access a wide range of everyday services online, reducing the need for travel and improving choice. For example, many businesses have introduced home or remote working for their employees, most supermarkets offer online ordering with home delivery, local libraries offer downloads of e-books and audio books, and NHS Direct offers online medical advice. All of

these services can help to overcome barriers associated with travel and gives residents choices as how they access these services.

## **Policy ASF2: Information and Communications Technologies**

The Council will seek to take advantage of developments in information and communication technologies to improve and extend the range of information and online services available to residents, businesses and visitors.

### Walking and Cycling

**4.6.3** Almost a quarter of car trips are under 2 miles and over 40% are less than 5 miles. Such trips can easily be made by walking and cycling. Research<sup>4</sup> suggests that the measures that would be most likely to encourage increased walking and cycling are:

- Removal of barriers / obstacles on pedestrian networks, including vehicles parked on the footway and assistance in crossing busy roads.
- Better maintenance of footways to remove trip and slip hazards (including fallen leaves in autumn and snow / ice in winter).
- A high quality and continuous, segregated cycle network along main roads
- Appropriate conditions for cycling on roads away from main roads, with measures to limit traffic speeds and flows.
- High quality, secure cycle parking provision at destinations.

## **Policy ASF3: Walking and Cycling Networks**

High quality and continuous local walking and cycling networks will be developed with appropriate levels of segregation or priority over motor traffic on busy roads. Elsewhere, the will seek to create traffic conditions that are appropriate for walking and cycling.

## **Policy ASF4: Cycle Parking**

The Council will work with partner organisations to provide cycle parking at key destinations such as retail centres, schools, colleges, centres of employment, rail stations and leisure facilities.

There will be a particular focus on improving walking and cycling access to and through town centres and to key destinations such as schools, employment areas and leisure facilities and the needs of pedestrians and cyclists will be fully integrated into new development.

### Public Rights of Way

**4.6.4** Public rights of way have a key role in catering for local journeys, including utility trips as well as leisure trips. They can provide valuable traffic free routes for pedestrians, cyclists and equestrians within urban areas as well as in the countryside.

**4.6.5** This network is supported and enhanced by a network of private paths where the landowner has granted permissive access rights for one of more user groups.

---

<sup>4</sup> Understanding Walking and Cycling: Interim findings from a multi-method approach to investigate household decision making in relation to short journeys in urban areas, Oxford Brookes University, 2010

**4.6.6** It is important to ensure that the Public Rights of Way network is physically accessible by cutting back vegetation and removing unnecessary or unlawful barriers and obstructions and by ensuring that the surfacing is maintained to a suitable standard.

**4.6.7** The council's strategy for the management and improvement of the public rights of way network is set out in detail within the Public Rights of Way Improvement Plan.

#### **Policy ASF5: Public Rights of Way**

The Council will continue to manage and improve the Royal Borough's Public Rights of Way network in order to attain better provision for walkers, cyclists, equestrians and people with mobility impairments.

#### **Policy ASF6: Access to the Countryside**

The Council will work with the Local Access Forum and other partners to promote access to the countryside and open spaces for all types of users.

**4.6.8** The Local Access Forum is a partnership to promote and develop sustainable access for the growing benefit of the environment and all in our community. The forum was set up in 2003 to advise the Council and other bodies on improvements to public rights of way, and promote sustainable access for the benefit of the environment and all in our community.

**4.6.9** The Council also operates a Parish Paths Initiative (PPI) involving all parish councils and Eton Town Council. Partnership projects are carried out under the PPI and two parishes (Cookham and Old Windsor) undertake the vegetation maintenance role on the Borough's behalf. The Council also supports other initiatives and improvement schemes led by the Parish Councils.

#### Public Transport Networks

**4.6.10** Buses play a key role in enabling people to access local services and facilities. They are particularly valued by residents who do not have access to a car, particularly the young, the elderly, disabled people and people on low incomes. However, it is important that they have a wider appeal in order to build patronage to commercially viable levels. In order for to be considered a viable travel option, buses need to be:

- Available when and where needed
- Punctual and reliable
- Frequent
- Be competitive in terms of journey time
- Affordable
- Accessible

**4.6.11** We have a good track record of working with local bus operators to improve our bus services and together we have delivered significant increases in bus patronage. We need to build on our successes and work towards commercial operation on as many services as possible, since this will allow levels of subsidy to be reduced, freeing up funds to be spend elsewhere. The council will only subsidise bus services where:

- there is a significant identified need
- they represent better value for money than alternative transport provision, or
- where there are clear network benefits in doing so.

**4.6.12** The council will continue to work with partners to identify additional funding sources and innovative ways to provide and procure public transport and home to school transport to meet local needs. Where appropriate, we will also seek developer contributions towards supporting bus services for new developments.

**4.6.13** We will seek where feasible, and considering the needs of all road users, to improve highway access for bus services, including the provision of bus priority measures and route choices that both minimise bus mileage and delay, while getting passengers to where they want to go.

#### **Policy ASF7: Public Transport Network**

In partnership with bus operators and neighbouring local transport authorities, the Council will work towards a commercially viable public transport network that links communities within and beyond the Royal Borough, enabling residents and visitors to access key destinations such as town centres, business parks, schools, hospitals, leisure facilities, visitor attractions and events.

#### Taxis and Private Hire

**4.6.14** Taxis and private hire vehicles are valued for providing door-to-door transport at a time that suits the customer. They are particularly valued where passengers are travelling with luggage, where alternative modes of transport are not available, or where they present an unattractive option.

**4.6.15** The Department for Transport recommends that where there are restrictions on the numbers of licenses that local authorities keep the numbers the situation under review and regularly undertake capacity studies to ensure that supply is sufficient to meet passenger demand.

**4.6.16** Approximately a third of Hackney Carriages within the Royal Borough are currently accessible for wheelchair users.

#### **Policy ASF8: Taxi and Private Hire Licenses**

The number of Hackney Carriage and Private Hire licenses will be kept under review to ensure that supply is sufficient in order to meet the level of demand from passengers with at least 30% of vehicles suitably modified so as to be accessible to disabled users.

#### **Policy ASF9: Taxi Ranks**

The provision of taxi ranks within the Borough will be regularly reviewed, seeking to provide, extend or remove facilities so as to reasonably accommodate demand from passengers and the trade, while striking an appropriate balance with competing needs, such as parking and loading bays.

#### Interchange

**4.6.17** Interchange is the transfer between different legs of a journey (e.g. changing trains, or changing from car to bus at a park and ride). It can be a source of delay and stress and it can deter people from making certain journeys. Passengers travelling with children, heavy luggage or who have long waits between journey stages experience particular problems with interchange. Making interchange quicker, easier and more convenient helps public transport to cater for the widest possible range of journeys.

**4.6.18** Interchange can take place within and between different forms of transport and may take place within a purpose built facility, or across a wider area where transport networks happen to be in close proximity.

**4.6.19** Transfer between rail and other modes of travel is the most common type of interchange. Research<sup>5</sup> suggests that in order to encourage people to interchange between bus and train, the following requirements must be met:

- Transfer between modes is quick and easy.
- Information about routes, timetables and fares needs to be easily understood and readily accessible;
- Multi modal ticketing needs to be made available and promoted.

**4.6.20** In order to convince people that cycling is a viable option for travel to stations, there needs to be adequate provision of secure cycle parking at stations, which should in turn be connected to surrounding areas by high quality cycle routes. Where passenger capacity is at a premium, cycle carriage on trains will continue to be an issue, increasing the importance of providing cycle parking at stations.

**4.6.21** In terms of walking to station, distance is the primary factor. Another key factor is perception of security – 61% of women and 26% of men feel unsafe walking home from the station<sup>6</sup>. For those who are new to an area, direction signing to and from the interchange is important.

**4.6.22** Facilities at interchanges are also important, particularly where passengers have a significant wait. Our Issue and Options Consultation highlighted that shelters and seating were particularly valued by elderly residents.

**4.6.23** The National Passenger Survey 2011 (NPS) showed that across South East England as a whole, 60% of passengers are satisfied with the available connections with other forms of transport. This figure is lower than in any other region of the UK. In relation to parking at stations in the South East, 58% of passengers were satisfied. This implies that there is room for significant improvement.

**4.6.24** The NPS also found that 16% of passengers in South East England had identified an alternative mode of transport that they would like to use if circumstances were different. Of these, most passengers (40%) expressed a preference for bus or coach, followed by driving and parking at the station (13%) and walking (13%).

**4.6.25** Transfer between buses is also important, particularly for inter-urban and cross-town trips. Coordination of timetables can facilitate this.

### **Policy ASF10: Interchange**

The Council will work with public transport operators and the rail industry to deliver improved interchange between transport modes through the creation of new / enhanced facilities, particularly within town centre locations and at rail stations.

<sup>5</sup> The challenge of getting to the station passenger experiences, Passenger Focus, 2011

<sup>6</sup> Passengers' perceptions of personal security on public transport – Qualitative research report, Independent Social Research, April 2009

**4.6.26** Key elements of the strategy to improve interchange will include:

- *Pedestrian and Cycle Facilities* – We will seek to improve the accessibility, safety and security of access routes to and from local stations, and work with train operators and the rail industry to enhance on-site facilities such as cycle parking.
- *Crossrail* – The Council will continue to work with Crossrail, Network Rail and other partners to coordinate the development of Maidenhead Station as the western terminus of Crossrail, improving passenger facilities, creating a multi-modal interchange and improving links between the station and the town centre. We will also seek the re-provision of any parking lost as part of the development within a suitable alternative site in the vicinity of the station, seeking enhancements to capacity as appropriate.
- *Bus Interchange* – Where possible, we will actively seek to remove barriers to interchange between services through mechanisms such as coordination of timetables, clustering of bus stops and provision of information on interchange opportunities.

Travel Information

**4.6.27** Transport users need access to high quality travel information at all stages of their journey, including pre-trip and in-trip information in order to be able to make the best decisions about when and how to travel and what route to take.

**4.6.28** In order to maximise effectiveness, this information needs to be provided in a wide variety of formats, making use of both conventional and digital media.

**4.6.29** Also, there is a need to ensure that information is accessible to all transport users, including people with sensory impairments, people with learning difficulties and foreign visitors.

**Policy ASF11: Travel Information**

Working in partnership with public transport providers, the Council will improve the quality, timeliness and accessibility of travel information to enable people to make the best travel choices for their particular journey, making use of new and emerging technologies where these add value for the end user.

**4.6.30** Delivering this policy will be achieved by providing or enhancing the following:

Public Transport:

- Timetable displays, incorporating route and network maps
- Real-time information displays at interchanges and other key sites
- On-line timetables, real-time information and journey planners
- Real-time information via SMS
- Printed pocket timetables and maps

Walking / Cycling / Equestrians:

- Maps and leaflets showing utility and recreational routes
- On-line journey planners
- Wayfinding maps and signs

#### Motor Traffic:

- On-line journey planners
- Real-time congestion information
- On-line and roadside information about current and planned road works and diversionary routes
- Improved on-street directional signing, including rationalisation and decluttering where appropriate
- Roadside variable message signs to provide information on traffic congestion, recommended routes and car park availability (including park and ride).

#### Accessibility and Affordability

**4.6.31** If local transport services are to meet the access needs of our local communities, we need to ensure that as far as possible, services are available and accessible to all potential user groups and that any barriers to travel are addressed.

**4.6.32** Given that the number of people with mobility and visual impairments is increasing as a result of our ageing population, it is more important than ever that our public spaces, street layouts, car parks and public transport services are designed to accommodate the particular needs of these users. Inevitably, there will be people who are unable to use conventional transport services and infrastructure, even where accessibility features are included. It is therefore important that alternatives are available, including voluntary / community transport, non-emergency patient transport, taxis and Shopmobility.

**4.6.33** Features to overcome level difference are valued by those with physical impairments, while tactile and audio information are vital cues for people with visual impairments. Also, hearing loops and visual cues are valued by people with hearing impairments.

**4.6.34** In order to be effective, public transport must be affordable to users, particularly to those on low incomes. Travel concessions help to expand people's travel horizons and enable residents to make use of services that they would otherwise be unable to access.

**4.6.35** We will work with bus operators to introduce smartcards as a means of simplifying payment for bus services, looking at options such as e-purses replacing cash for single or occasional journeys, as well as Smart purchase of season ticket products, or facilitating carnet products for part-time commuters.

**4.6.36** We will seek where feasible, and considering the needs of all road users, to improve highway access for bus services through the provision of bus priority measures and better routes to and through town centres that both minimise bus mileages and delays, while getting passengers to where they want to go.

**4.6.37** Communication difficulties can also present a barrier to accessibility for people with speech or hearing impairments and those with learning difficulties. Also, with so many foreign visitors, we need to be mindful of the needs of people whose first language is not English, particularly with the additional visitor influx anticipated for the London 2012 Olympic and Paralympic Games. We need to ensure that our towns and transport networks are legible, with wayfinding systems that are understandable to all and that taxi drivers and bus drivers are given appropriate training.



## Policy ASF12: Access for All

The Council will seek to improve access to everyday services and facilities in a way that considers the needs of all transport users, particularly the young, the elderly, people with mobility impairments, and those on low incomes.

### Climate Change Adaptation

**4.6.38** It is important that we plan our transport networks to be resilient to the effects of Climate Change, such as extreme weather events, in order to maintain accessibility.

**4.6.39** Much of the Borough is vulnerable to river flooding. Major flooding from the River Thames has occurred 9 times in the last 100 years affecting adjacent communities. The frequency of flooding is forecast to increase.

**4.6.40** Transport routes are deemed 'essential infrastructure' when dealing with flood events, particularly in relation to mass evacuation of affected properties and providing access for emergency service vehicles. Development within the flood plain is restricted by the planning system and a safe means of escape must be provided for any new development.

**4.6.41** The Borough's Flood Plan sets out how the Council and its partners will prepare for, respond to and recover from major flooding events. This includes actions such as:

- Providing information and advice
- Protecting and clearing affected highways
- Implementing road closures and diversions
- Establishing alternative routes for affected public transport services
- Organising emergency transport
- Undertaking appropriate maintenance and repair

## Policy ASF13: River Flooding

The Council and its partners will put in place appropriate policies and procedures to prepare for, respond to and recover from major river flooding events.

**4.6.42** Drainage is an important feature of highway construction. New roads include designed drainage systems intended to remove water efficiently from the surface of the highway to provide a safe passage for all vehicles and pedestrians. Older roads may have less sophisticated drainage, but all have features designed to take the water away from the road surface. It is necessary to clean and maintain these drainage systems so they work properly.

**4.6.43** Problems can still occur even when drainage systems are clean and well maintained. Flooded and waterlogged roads result when the amount of water arriving on the road is greater than the capacity of the drainage facilities that take it away. Exceptional rainfall, a road being in a low lying area, changes in 'run off' from adjacent fields and rivers overflowing can lead to flooding. Highway verges play an important role in storm water attenuation, providing a permeable layer to slow down and reduce run-off.

**4.6.44** Material carried into the drains by floods can also lead to them becoming blocked. Drainage grills and gratings can become blocked very quickly when materials like mud are deposited on the road or when there is a heavy fall of leaves. The Borough undertakes regular maintenance to ensure that drainage systems are kept clear.



**4.6.45** The Royal Borough was badly affected by the floods of July 2007 when over four inches of rain fell in just over an hour and a half, which saw several locations where roads were closed and adjacent residential and commercial properties were flooded. A number of priority drainage improvement scheme were identified as a result of the flooding, which were progressed as a matter of urgency.

#### **Policy ASF14: Flash Flooding**

The Council will undertake appropriate maintenance and improvement works to highway drainage systems in order to cope with periods of increased rainfall.

**4.6.46** Highway structures will need to be able to withstand the changes in weather and temperature that will occur as a result of climate change. It is predicted that we will have milder, wetter winters and hotter summers. Our transport infrastructure will need to be designed to cope with higher water tables. This could potentially require deeper construction to minimise the effects of subsidence. Stiffer asphalt mixes may also have to be considered, to prevent road surfaces melting during heat waves. The Council will keep up to date with and act upon relevant government guidance and best practice notes.

#### **Policy ASF15: Highway Construction**

The Council will keep under review construction and maintenance design criteria in line with national guidance to ensure that highway constructions are resilient to the effects of our changing climate.

## **4.7 Performance Indicators**

**4.7.1** The following performance indicators will be used to measure progress towards objectives:

- Accessibility to town centres by public transport (Accession modelling)
- Walking levels (annual snapshot survey)
- Cycling levels (annual snapshot survey)
- Bus patronage (figures supplied by bus operators)
- Bus punctuality (figures supplied by operators and quarterly surveys)
- Rail patronage (station usage spreadsheet)
- Residents' satisfaction with local bus services (residents' survey)
- Residents' satisfaction with local transport information (residents' survey)
- Public rights of way that are accessible (half-yearly condition survey)

## **5. IMPROVING SAFETY & SECURITY**

### **5.1 Introduction**

**5.1.1** Road traffic crashes can have a devastating impact, both in terms of the injuries sustained by those directly involved and also the effects on their families and friends. They also have a financial impact in terms of the costs of the emergency services attending the scene, subsequent medical care, repair works, insurance claims, legal action, and lost productivity for employers.

**5.1.2** While good progress has been made in reducing the number of people killed and injured on our roads, many of the incidents that do occur are potentially preventable. Even where we are not able to prevent crashes, there are still opportunities to reduce the impacts and severity of the injuries sustained.

**5.1.3** Clearly, some road users such as pedestrians, cyclists and motorcyclists are more vulnerable than others in the event of a crash and there are significant variations in casualty rates between different forms of transport. These inequalities need to be addressed through appropriate interventions, particularly if travel by these forms of transport is to be encouraged to deliver environmental and social objectives as well as improving road safety.

**5.1.4** Even where the additional risks of travelling by certain forms of transport are taken into account, the perceived risks of being involved in a collision whilst walking and cycling are often disproportionate when compared with the actual situation.

**5.1.5** Levels of crime and the fear of crime are also key factors that affect personal safety and individuals' perceptions of their safety whilst travelling. Concerns may relate to crimes involving violence, theft of possessions, anti-social behaviour, hate crimes, and vehicle / cycle crime.

**5.1.6** As with road safety, concerns about personal security vary according to road user type, with those travelling as pedestrians or cyclists, or on public transport are more likely to have concerns than motorists. Again, there is often a gap between perceived and actual risk.

**5.1.7** Concerns about both road safety and security can deter some people from making journeys by certain forms of transport, from travelling alone, or from travelling at certain times of day. This can limit options for individuals in terms of where, when and how they travel.

**5.1.8** The policies set out later in this chapter have been developed to ensure that the safety and security needs of all road users are considered when developing local transport schemes and initiatives. This will help to ensure that residents and visitors are generally more confident about travelling to and through the borough and that the needs of one category of road user are not compromised by catering for another.

## 5.2 Policy Context

5.2.1 The following table summarises the main policies relating to road safety and personal security at the international, national, regional and local levels.

Strategy	Key Objectives & Priorities
<b>Local</b>	
Sustainable Community Strategy	<p>Improving Community Safety is one of the seven challenges identified in the strategy, which seeks to:</p> <ul style="list-style-type: none"> <li>• Reduce drug and alcohol related abuse and related crime through initiatives such as offender agreements, alcohol exclusion zones, taxi marshalling schemes, activities for teenagers and drug treatment monitoring.</li> <li>• Increase public confidence by communicating successes and falling crime statistics, increasing the presence of community wardens and tackling low level crime and anti-social behaviour.</li> <li>• Improve safety by reducing deaths or serious injury from road traffic accidents through engineering, enforcement, education and publicity measures.</li> </ul>
Community Safety Strategy	<p>Current Priorities</p> <ul style="list-style-type: none"> <li>• Continue to strive to reduce crime and disorder</li> <li>• Authorising Community Wardens to issue fines for dog fouling</li> <li>• Carry out more Community Payback projects</li> <li>• Work with partners to raise awareness of hate crime</li> <li>• Run a major bike theft initiative</li> <li>• Prepare for the introduction of Police and Crime Commissioners in 2012</li> <li>• Introduce Community Safety Awards to recognise the contribution made to improving Community Safety by private individuals and groups.</li> <li>• Refocus drug and alcohol treatment services on recovery and abstinence, so that people will leave the treatment system free from drugs and alcohol.</li> </ul>
<b>National</b>	
Strategic Framework for Road Safety	<p>Key themes are:</p> <ul style="list-style-type: none"> <li>• Making it easier for road users to do the right thing and going</li> </ul>

	<p>with the grain of human behaviour</p> <ul style="list-style-type: none"> <li>• Better education and training for children and learner and inexperienced drivers</li> <li>• Remedial education for those who make mistakes and for low level offences where this is more effective than financial penalties and penalty points</li> <li>• Tougher enforcement for the small minority of motorists who deliberately choose to drive dangerously</li> <li>• Extending this approach to cover all dangerous and careless offences, not just focusing upon speeding</li> <li>• Taking action based upon cost benefit analysis, including assessing the impact on business</li> <li>• More local and community decision making from decentralisation and providing local information to citizens to enable them to challenge priorities; and</li> <li>• Supporting and building capability by working with the road safety community on better tools to support road safety professionals.</li> </ul>
<p>A New Approach to Fighting Crime</p>	<p>The approach is focused on the following areas:</p> <ul style="list-style-type: none"> <li>• <i>Street level crime and anti-social behaviour data</i> – giving residents information about what goes on in their neighbourhood, enabling them to hold the police to account and get involved in tackling crime in their area.</li> <li>• <i>New tools to tackle anti-social behaviour</i> - replacing the range of powers available to professionals with a simplified toolkit backed up by meaningful penalties to provide a real deterrent to breach, and giving communities control over how anti-social behaviour is handled in their area.</li> <li>• <i>Youth crime and violence</i> – nipping bad behaviour in the bud with more disciplinary powers for head teachers, and better prevention projects to reduce knife and gang violence</li> <li>• <i>Serious and organised crime</i> – establishing the National Crime Agency to coordinate crime fighting activity.</li> <li>• <i>Drugs</i> – increased efforts to prevent drugs from entering the country, increased efforts to prevent drugs misuse and more support for addicted offenders to recover.</li> <li>• <i>Alcohol</i> – giving residents more powers to challenge licensing of problem premises, boosting local authorities’ powers to refuse / revoke licences, a late night levy on businesses to pay</li> </ul>

	for additional policing, restrictions on the minimum price of alcohol and tougher penalties for persistent underage sales.
<b>International</b>	
UN's Decade of Action on Road Safety	<ul style="list-style-type: none"> <li>• Sets a goal to stabilize and then reduce the forecast level of road traffic fatalities around the world by increasing activities conducted at the national, regional and global levels.</li> <li>• This will be achieved by raising helmet and seat belt use, promoting safer road infrastructure and protecting vulnerable road users, such as pedestrians and cyclists.</li> </ul>

### 5.3 Supporting Evidence

#### Road Safety

**5.3.1** Casualty data relating to road traffic accidents is captured by the police using Stats 19 forms. Casualty rates per billion vehicle miles for the Royal Borough of Windsor and Maidenhead are relatively low putting us amongst the best 25% of local authorities in Great Britain<sup>7</sup>.

**5.3.2** The number of casualties sustained in road traffic collision within the borough has shown a sustained annual reduction. There were 456 casualties in 2010 (including motorways and trunk roads), which represents an overall decrease of 32% from levels recorded in 2000<sup>8</sup>.

**5.3.3** There has also been a significant downward trend in child casualties, from a peak of 63 in 2001 to 26 in 2010<sup>8</sup>. The decrease in the number of children killed or seriously injured on our roads has been even more significant, falling 75% from eight in 2001 to two in 2010.



**Figure 5.1: All casualties on roads in the borough**

<sup>7</sup> Strategic Framework for Road Safety, Department for Transport, 2011

<sup>8</sup> Area Profiles for Royal Borough of Windsor and Maidenhead, Safer Roads, 2011



**Figure 5.2: Child casualties on roads in the borough**

**5.3.4** There are significant differences between casualty rates for different forms of transport. For example, national figures show that motor-cyclists account for 21% of all fatalities in road traffic crashes, but represent just 1% of traffic. Similarly, casualty rates for cycling and walking are also much higher than for occupants of motor vehicles.

Casualty rates: killed or seriously injured casualties per billion passenger miles (2009) <sup>9</sup>	
Motorcyclists	1,659
Cyclists	880
Pedestrians	514
Car occupants	27

**5.3.5** The number of motorcycle riders and pillion passengers injured on the roads in the borough has dropped from 80-90 per year in the early 2000s to 57 in 2010. However, figures have fluctuated significantly over the last 6 years, with no clear trend. Casualty rates are similar to the Berkshire and national averages and remain high compared to other road users<sup>10</sup>.

**5.3.6** Levels of cyclist casualties on local roads increased during the mid-2000s from around 40 per year to between 54 and 58 per year in 2006-2008, but are now back to previous levels. Casualty rates for local residents who cycle are similar to those for other parts of Berkshire, but are slightly higher than for England and Wales as a whole<sup>10</sup>.

**5.3.7** There is good evidence to suggest that cycling casualty rates improve as the number of cyclists increases<sup>11</sup>. For example, while London has seen a 14% increase in cyclist casualties between 2000 and 2010, this increase is less than a tenth of the overall increase in cycling, which is up by 150% over the same period<sup>12</sup>.

**5.3.8** Pedestrian casualty rates amongst Windsor and Maidenhead residents are significantly below both the Berkshire and national averages. There were 41 pedestrian casualties in 2010, with a downward trend from 63 casualties in 2000 and 2002<sup>10</sup>.

**5.3.9** The borough has a higher level of young drivers involved in crashes than the county and national averages. While numbers of casualties have reduced from around 180 in the

<sup>9</sup> Strategic Framework for Road Safety, Department for Transport, 2011

<sup>10</sup> Area Profiles for Royal Borough of Windsor and Maidenhead, Safer Roads, 2011

<sup>11</sup> Safety in Numbers, CTC, 2009

<sup>12</sup> Cycle Safety Action Plan End of Year Review 2011, Transport for London, 2011

early 2000s to 121 in 2010, the incidence of young drivers involved in injury collisions remains high. The rate is currently 110 per 10,000 population of 16-24 year olds which is twice the rate for all drivers, illustrating that young drivers are significantly more likely to be involved in collisions<sup>13</sup>.

**5.3.10** In terms of contributory factors for road traffic crashes in the borough, speed related factors and driving whilst impaired by alcohol and drugs were more prevalent than in other parts of Berkshire<sup>13</sup> and would be areas where education, training and publicity measures may be effective.

**5.3.11** The LTP Issues and Options Survey showed that of the five core aims of the LTP 'improving road safety and personal security' was ranked second most important by residents and third most important by stakeholders. Reducing the number and severity of road traffic casualties was considered to be a high or very high priority for nearly 80% of residents.

**5.3.12** The Windsor and Maidenhead Residents' Survey 2010 showed that 43% of local residents considered that vehicles speeding on the public highway was a "fairly big problem" or a "very big problem".

## **Security and Crime**

**5.3.13** Thames Valley Police maintain a database of all reported crimes. However, it should be recognised that a significant proportion of crimes go unreported. For example, comparison of reported crime statistics and data from the British Crime Survey indicated that for thefts of pedal cycles, as many as four out of five bike thefts go unreported<sup>14</sup>.

**5.3.14** Within the Royal Borough, there has been a significant reduction in serious acquisitive crime which is 21% down in 2010/11<sup>15</sup>. In particular, theft from vehicles has decreased by 34%, resulting in 800 fewer people having their cars broken into<sup>15</sup>. The number of vehicles stolen increased by 8%, but this figure is still lower than in 2008/09 and should be seen in the context that in the previous six years, theft of vehicles has reduced dramatically<sup>15</sup>. Incidents of cycle theft increased by 7% between 2009/10 and 2010/11<sup>15</sup>. Outside of London, the Thames Valley has the most cycle thefts of any police authority area<sup>14</sup>.

**5.3.15** The borough has relatively few violent offences. Violence against the person with injury has also dropped by 19% (from 974 offences to 748 offences in 2010/11), including a 5% drop in the most serious violence, making our streets and in particular our night-time economies even safer<sup>15</sup>.

**5.3.16** Between 1 April 2010 and 31 March 2011, hate crime has increased by 4% and racist incidents by 3%. However, incident levels are low and this equates to an increase of only five and three cases respectively<sup>15</sup>.

**5.3.17** Based on incidents reported to the police, anti-social behaviour reduced by 14% in 2010/11. Twelve of our 13 police neighbourhoods had fewer incidents than in the previous year. Looking at incident types, street drinking was down by 48% and there has been a 31% reduction in vehicle nuisance and inappropriate vehicle use<sup>15</sup>.

---

<sup>13</sup> Area Profiles for Royal Borough of Windsor and Maidenhead, Safer Roads, 2011

<sup>14</sup> "Police stats reveal the UK's recorded bike crime hotspots - how does your area fare?", Road.CC, June 2011

<sup>15</sup> RBWM Community Safety Partnership Annual Report, 2011

**5.3.18** In the LTP Issues and Options Survey, 'reducing incidents of anti-social behaviour' was considered to be a high or very high priority for over 85% of residents, while the figure for 'reducing incidents of vehicle crime and cycle theft' was 80%.

**5.3.19** The Windsor and Maidenhead Residents' Survey 2010 found that More than nine in ten residents feel safe in their local area during the day and more than half feel safe after dark. Of a given list of anti-social behaviour issues, vehicles speeding on the public highway, teenagers hanging around the streets and people parking illegally on single and double yellow lines are most likely to be seen as problems.

**5.3.20** The TellUs Survey was used to gather children and young people's views on various aspects of their life, their school and their local area, with input from pupils in years 6, 8 and 10. Generally children and young people feel safe in their local area. The most recent TellUs survey indicated that the percentage of children and young people who feel very safe in the area where they live and on their journeys to and from school is the same as the national average. Also, 17% of the children and young people who use public transport indicated that they feel very safe compared to 15% nationally. However the percentage who feel a bit unsafe is slightly higher than the national average (26% compared to 23%).



## 5.4 SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Effective partnership approach to improving road safety (Safer Roads Partnership) and to tackling crime / improving security (Community Safety Partnership).</li> <li>• Good progress made in reducing the number and severity of casualties from road traffic crashes.</li> <li>• Very good progress made in reducing the number and severity of child casualties from road traffic crashes.</li> <li>• Implemented schemes to effectively tackle road traffic casualty 'hot spots'.</li> <li>• Good progress in tackling vehicle crime.</li> <li>• Levels of violent crime have reduced.</li> <li>• Fewer instances of anti-social behaviour</li> </ul>	<ul style="list-style-type: none"> <li>• Casualty rates for vulnerable road users remain significantly higher than for occupants of motor vehicles.</li> <li>• The borough has a higher level of young drivers involved in crashes than the county and national averages.</li> <li>• Rising levels of cycle theft.</li> <li>• Some minor anti-social behaviour issues</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Improving safety standards and equipment in new motor vehicles.</li> <li>• Making use of new communications technology and social networks to target / spread road safety messages more effectively.</li> </ul>	<ul style="list-style-type: none"> <li>• Fewer road traffic crash 'hot spots' remain, so it will be harder to sustain progress.</li> <li>• Absolute numbers of casualties are relatively low, so a major incident could have a disproportionate effect on the figures.</li> <li>• Incidents on motorways and trunk roads appear on RBWM stats, but the council does not have control over these roads.</li> </ul>

## 5.5 Objectives

5.5.1 The objectives for the Improving Safety and Security Strategy are:

- **To reduce the number and severity of casualties on our roads, particularly amongst motorcyclists, cyclists and young drivers**
- **To promote safe behaviours and mutual respect by all road users**
- **To improve security for everyone travelling around the borough**
- **To reduce instances of vehicle crime and cycle theft**

## 5.6 Policies

### Partnership Working

5.6.1 Improving road safety and personal security requires a multi-agency approach. We will seek to build on the successful working relationships established through the Safer Roads Partnership and the Community Safety Partnership, while seeking to get communities to play a more active role in reporting inappropriate behaviour and in designing the solutions.

#### **Policy ISS1: Partnership Working**

The Royal Borough of Windsor and Maidenhead will work in partnership with the emergency services, neighbouring local authorities, and local communities to improve road safety and security, using an intelligence-led approach to target our efforts effectively.

### Road Safety Education, Training and Publicity

5.6.2 Road safety publicity, education and training initiatives are important in terms of raising awareness about key road safety messages and providing road users with the necessary knowledge and skills to be able to travel safely using particular forms of transport, under a range of conditions. In order to be most effective, education, training and publicity measures need to be appropriately targeted to the intended audience. Sustained programmes are important in bringing about a cultural change in attitudes towards road safety issues such as that achieved by the seat-belt and drink-driving campaigns of the 1980s and 1990s.

#### **Policy ISS2: Road Safety Education, Training and Publicity**

The Council and its partners will promote and encourage safe behaviours amongst all road users through targeted education, training and publicity campaigns.

5.6.3 Initiatives will include the following:

- Advice to help parents with babies and young children choose the correct car seats
- Provision of safety resources to schools, nurseries and pre-school groups
- Pedestrian safety training for infant, junior and primary school pupils
- Bikeability training to provide children and adults with the skills and confidence to be able to ride safely in modern traffic conditions
- Campaigns to tackle cycling on footways / in pedestrianised areas.
- Independent travel training for children / young people with special educational needs
- Promoting pre-driver education for young people in Years 11-12 and Pass-Plus for new drivers
- Supporting 'Think!' national road safety campaigns targeted at key road user groups
- Workplace initiatives aimed at driving down risk associated with business trips.

### Road Safety Enforcement

5.6.4 Enforcement of road traffic laws targets those people who deliberately decide to undertake antisocial and dangerous behaviour on our transport networks. Nationally, more than half of road deaths have one or more of the following as contributory factors:

- Driving whilst under the influence of drink / drugs
- Speeding
- Careless driving.

### Policy ISS3: Road Safety Enforcement:

The Council and its partners will seek to ensure high levels of compliance with road traffic law amongst all road users through targeted enforcement action.

**5.6.5** While the police have to take the lead in enforcing road traffic law, the council and other key partners play a key supporting role, particularly with respect to the enforcement of speed limits. Enforcement activities within the Royal Borough will include the following:

- *Safety Cameras* - The Royal Borough has a number of safety cameras, which have been deployed at locations with a history of speed related casualties. These will remain a core element of the local speed enforcement strategy for the foreseeable future, with operation carried out by Thames Valley Police. In addition, the police will continue to use mobile roadside camera units as a means of ensuring compliance with speed limits at priority sites.
- *Community Speed Watch* - Traffic speed is often a key issue for many local residents, particularly those in smaller, more rural communities with busy main roads. We have seen an increased desire for community action to address these issues. We will work with the Police to make Community Speed Watch available to Neighbourhood Action Groups across the Royal Borough to enable volunteers to raise awareness of the dangers of speeding and help to control the problem under the supervision of road safety professionals.
- *Speed Indicator Devices* - The Royal Borough will continue to make use of mobile speed indicator devices, which are vehicle activated signs that measure and display real-time vehicle speeds. They represent a cost effective means of speed management. Research has shown that these devices significantly reduce the proportion of drivers exceeding the speed limit at the location deployed<sup>16</sup>. However, the novelty effect wears off over time, so to combat this, units are rotated around various locations, targeting high risk sites.

### Road Safety Engineering

**5.6.6** It is important to ensure that the road network is designed in such a manner that motorists and other road users receive the right information and visual cues to promote behaviour that is appropriate to the location and the prevailing conditions, and which minimises the risk of collision and injury.

### Policy ISS4: Road Safety Engineering:

The Council will deliver engineering based solutions to address identified threats to road safety for both new and existing transport infrastructure.

**5.6.7** Our road safety engineering programmes will include:

- *Speed Limits* – As the traffic authority for the area, the Council has responsibility for setting and reviewing speed limits on roads within the Royal Borough. Speed limits are determined in consultation with the police, and wherever possible, road layouts are designed so as to ensure that speed limits are respected and observed by the majority of motorists with the minimum of enforcement.

---

<sup>16</sup> Effectiveness of Speed Indicator Devices on reducing vehicle speeds in London, TRL, 2008

- *20 mph Zones* – Outside schools, lesser residential roads, town centres
- *Local Road Safety Schemes* – Traditionally, road safety engineering resources have been prioritised for sites with the highest casualty risk, identified with reference to road traffic casualty data. Cluster sites are locations where there have been several recorded injury accidents in the most recent three year period and where there is a clear pattern in terms of contributory factors.
- *Area Safety Schemes* - While cluster sites will remain a focus for capital expenditure in future, the number of sites that remain untreated is reducing in number and remedial measures are becoming increasingly difficult to identify. Instead, the focus is moving to consider longer stretches of road or even road networks across a local area to see if there are common factors that could be addressed by road safety engineering measures.
- *Safety Audits* – A safety audit is an evaluation of highway improvement schemes during design and at the end of construction. The audits are carried out on Council and developer promoted schemes, the latter as part of the planning control process. They ensure that adequate levels of safety are maintained, and that problems identified at similar sites are avoided in new works.
- *Maintenance* – Maintenance is important not only to preserve the value of our highways assets, but also to ensure that the network remains safe to use. Planned maintenance includes replacement of infrastructure that has reached the end of its design life, where performance is at or approaching intervention levels (e.g. road surfaces with low levels of skid resistance). Reactive maintenance responds to critical incidents that arise as a result of a particular event (e.g. a road traffic crash that damages street furniture, or damage to road surfaces due to severe winter weather). Regular routine maintenance is required to address issues such as encroachment of vegetation, which may impair sight lines or obstruct passage for road users. Finally, winter maintenance helps to address safety risks associated with snow and ice.

### Community Safety

**5.6.8** As with casualty reduction, improving community safety requires a multi-strand approach with elements of education, enforcement and engineering.

#### **Policy ISS5: Community Safety:**

The Council and its partners will implement targeted measures designed to reduce instances of vehicle crime and cycle theft and to improve security and confidence amongst members of the public when travelling around the Royal Borough.

**5.6.9** Measures will include:

- *Education* – Motorists will be targeted at car parks with reminders not to leave items on view within their cars that may be attractive to thieves, including laptops, satellite navigation devices and stereos. Cyclists will be targeted with information and advice on where to park and how best to secure their bikes. They will also be encouraged to security mark their cycles and register their details on national security databases to assist with tracing the owner in the event that the bike is stolen and recovered.

- *Enforcement* – We will continue to make effective use of CCTV to monitor car parks and cycle parking locations to deter and catch those involved in vehicle crime. All of the Council's car parks have received the Park Mark award in recognition of the security measures that are in place and we will work with rail operators to encourage them to seek Secure Stations status at local facilities to improve the safety and confidence of rail passengers. Our Community Wardens will continue to complement the efforts of Thames Valley Police, providing a reassuring presence on the street within designated patrol areas.
- *Engineering* – We will consider improvements to street lighting and CCTV where these are likely to have a beneficial impact in terms of preventing crime and catching criminals. We will request or provide secure cycle parking at key destinations such as shopping centres, schools, workplaces, leisure centres and transport interchanges. We will also consider measures such as alley gating where appropriate. Wherever possible, we will seek to 'design out crime' with appropriate improvements to the public highway, public rights of way, public spaces and new developments.

### Street Lighting

**5.6.10** Street lighting can bring significant benefits in terms of improved road safety and reduced levels of crime. However, the associated financial and environmental costs are significant.

**5.6.11** Street lighting accounts for approx 19% of the Council's total energy costs and 11% of energy usage. Although there are no direct carbon emissions from street lighting, much of the electricity used is generated by burning fossil fuels, which is responsible for releasing carbon into the atmosphere. We therefore need to consider ways to reduce electricity consumption whilst retaining the safety and security benefits.

**5.6.12** The following measures have already been implemented:

- Dimming high wattage lanterns on larger roads.
- Installing energy efficient lanterns via the street lighting capital and Salix funded programmes.
- Installing solar powered and non-illuminated traffic bollards in various locations around the borough.
- De-illuminating sign-posts where traffic regulations allow.
- Reducing lamp wattage in signs and traffic bollards.
- Using a photocell array located on the town hall roof to allow more accurate collection of data on street lighting operational hours for billing,
- Ensuring that the most efficient photocells are being used in our lighting stock, with new photocells saving an additional 20-40 minutes of energy per day.

**5.6.13** New technologies are coming onto the market all the time and as products become more widely adopted, so prices fall and these become more viable. The Council is currently looking at LED technology and micro-generation as additional mechanisms to deliver energy and carbon savings.

### **Policy ISS6: Street Lighting**

The Council will seek to reduce the amount of energy used by its street lights, illuminated signs and bollards, taking advantage of emerging low-energy technologies, where these offer a whole-life cost benefit.

## **5.7 Performance Indicators**

**5.7.1** The following performance indicators will be used to measure progress towards objectives:

- Number of people killed or seriously injured in road traffic crashes on the borough's roads (excluding motorways and trunk roads) (police STATS 19 data)
- Number of people slightly injured in road traffic crashes on the borough's roads (excluding motorways and trunk roads) (police STATS 19 data)
- Percentage of the principal and non-principal classified road networks where maintenance should be considered (SCANNER data)
- Percentage of residents who consider that carriageway and footway repairs are improving (residents' survey)
- Percentage of street lights operating as planned (contractor records)
- Instances of bicycle theft (police crime data)
- Instances of vehicle crime (police crime data)

**5.7.2** There are also other national indicators that the Department for Transport are developing as part of the National Road Safety Strategy, which may be used to inform future performance indicators locally.

## **6. SUPPORTING SUSTAINABLE ECONOMIC GROWTH**

### **6.1 Introduction**

**6.1.1** The Royal Borough lies at the heart of the Thames Valley, which has been described as “UK plc’s engine room” and has consistently been one of the top performing economies in Europe. It has the highest levels of knowledge intensive businesses than anywhere outside the City of London and is consistently one of the top performing economies in Europe. Our current economic success has been based on the following fundamental building blocks:

- Proximity to Heathrow Airport
- High quality transport links to and from London
- Access to a highly skilled workforce
- Advanced sector development

**6.1.2** However, we cannot be complacent, since we operate in a competitive global marketplace and face challenges from emerging economies. Maintaining our leading role in the UK economy depends on sustaining economic growth and our ability to anticipate and adapt to changing business needs in the coming years.

**6.1.3** There are a number of key challenges to sustained economic growth in the area, with transport infrastructure and congestion at the top of the list. Investment is required in both strategic and local transport networks.

**6.1.4** It is also important that any economic growth and associated investment in transport networks is sustainable in terms of its impact on Climate Change. The vast majority of the world's vehicles are powered by fossil fuels, which release greenhouse gases when burnt and carbon emissions are significantly higher in congested conditions.

**6.1.5** The possible effects of climate change include rising temperatures and more frequent extreme weather events. If these were to take place, there could be impacts upon the natural and built environment, and upon human health, which all ultimately have an economic impact. The prudent approach would therefore be to take action now to cut our emissions of greenhouse gases in order to minimise any adverse impacts.

**6.1.6** The cost of transport is also an issue, with fuel prices increasing as oil supplies diminish. This makes it increasingly important to improve the efficiency of travel and make use of alternative and renewable fuel sources wherever possible.

**6.1.7** As well as being a key centre for the knowledge and financial economies, the Royal Borough is also a nationally important visitor destination. It is home to two of the UK’s top 20 visitor attractions, Legoland and Windsor Castle, and is host to several world class events, such as Royal Ascot, the Royal Windsor Horse Show and the Windsor Castle Royal Tattoo, as well as a host of other events across a variety of venues.

**6.1.8** Over 7 million visitors come to the Royal Borough each year. It is important that they have access to fast and efficient transport to and from the area and that they can easily travel around the borough once they have arrived. We also need to effectively manage visitor travel and parking so as to minimise its impact on local residents and businesses.

**6.1.9** In addition, Dorney Lake is situated just over the Borough boundary, which will be the venue for the Olympic rowing and canoe sprint and the Paralympic rowing events during the London 2012 Games. This will bring many more visitors to the area, presenting additional transport challenges.



**6.1.10** In terms of the local economy, the towns of Maidenhead and Windsor are important retail centres. The proximity of competing centres such as Slough, Reading and High Wycombe means that it is essential to have good levels of accessibility by a variety of different forms of transport, as well as sufficient levels of car parking. However, within the main shopping streets priority must be given to pedestrians to ensure that they are attractive for shopping and leisure uses.

**6.1.11** Although Windsor town centre remains economically buoyant, Maidenhead has fared less well. There has been a steady decline in the town centre’s quality, vibrancy and popularity. Plans are underway to regenerate Maidenhead and encourage inward investment, creating a larger and revitalised shopping area, with residential and employment uses as well. Transport improvements will be necessary to support this investment.

**6.1.12** The Royal Borough is situated within an area of high demand for housing, and the local mis-match between jobs and homes is inflating house prices and encouraging higher levels of inbound commuting, which in turn puts pressure on our transport networks. It is important to ensure that housing is considered in tandem with investment in our transport networks to ensure that we can deliver sustainable development.

**6.1.13** Finally, road works can have a significant impact on travel times and journey reliability. Our transport networks can be affected by construction of new infrastructure, or maintenance of existing infrastructure by transport authorities as well as activity by third parties such as utility companies. All works needs careful planning, management and coordination so as to minimise the impacts on transport users and the local economy.

**6.1.14** This chapter sets out how we intend to work with our partners to ensure that necessary transport investment is secured and appropriately directed to support our local economy.

## 6.2 Policy Context

**6.2.1** The following table summarises the main policies relating to sustainable economic growth at all levels.

Strategy	Key Objectives & Priorities
<b>Local</b>	
Maidenhead Area Action Plan	<ul style="list-style-type: none"> <li>• Regenerate Maidenhead Town Centre, including:               <ul style="list-style-type: none"> <li>• A major new retail-led development focused on Broadway</li> <li>• New office developments</li> <li>• Additional hotels and other visitor accommodation</li> <li>• Housing development throughout the town centre</li> <li>• Improved community, culture and leisure facilities</li> </ul> </li> <li>• Optimise town centre accessibility for all modes of transport, particularly for pedestrians, cyclists and public transport</li> <li>• Support the growth and improvement of the town centre with the following transport infrastructure:               <ul style="list-style-type: none"> <li>• Transport interchange next to Maidenhead rail station</li> <li>• Maintaining traffic flow along the A4</li> <li>• Stafferton Way link</li> </ul> </li> </ul>



	<ul style="list-style-type: none"> <li>• Improvements along Oldfield Road and Forlease Road</li> </ul>
Sustainable Community Strategy	<ul style="list-style-type: none"> <li>• Priorities under the 'Promoting Sustainable Economic Growth' challenge include: <ul style="list-style-type: none"> <li>• Supporting local businesses to thrive</li> <li>• Encouraging more people to work and shop locally</li> <li>• Improving Maidenhead town centre</li> <li>• Maintaining our visitor attractions and cultural heritage</li> </ul> </li> <li>• Tackling Climate Change is one of seven key challenges identified in the strategy, which seeks to encourage more people to make their journeys using sustainable forms of transport by: <ul style="list-style-type: none"> <li>• improving transport infrastructure and facilities</li> <li>• supporting schools and businesses in managing their travel</li> <li>• ensuring new development is located and designed to aid accessibility</li> </ul> </li> </ul>
Visitor Management Strategy	<ul style="list-style-type: none"> <li>• Ensure visitors can get in, out and about with ease.</li> <li>• Provide for and influence the use of alternatives to car travel.</li> </ul>
Sustainability Strategy	<ul style="list-style-type: none"> <li>• Reducing energy demand and carbon consumption is one of three core strands of the strategy.</li> <li>• Transport and alternative fuels feature in the Sustainability Panel's constitution.</li> <li>• All high energy user departments within the Council (including Highways &amp; Engineering) are asked to look at how energy and carbon savings can be achieved and report back to the Sustainability Panel on a regular basis.</li> </ul>
<b>National</b>	
Transport White Paper: Creating Growth, Cutting Carbon	<ul style="list-style-type: none"> <li>• Regional Growth Fund to provide £1.4 billion as direct support for private sector investments and some basic infrastructure.</li> <li>• Local Enterprise Partnerships (LEPs) to bring together business and civic leaders to set strategy and take decisions that will allow their area to prosper</li> <li>• Better design and management of local roads is encouraged to address congestion, including improvements in signalling and removing sign clutter</li> <li>• Partnership working with LEPs is promoted to agree a joint approach to tackling the worst congestion hotspots in the major urban areas</li> <li>• Seeks to: <ul style="list-style-type: none"> <li>- deliver an early reduction in carbon emissions from transport</li> <li>- encourage sustainable transport use through Smarter Choices initiatives (supported by the Local Sustainable Transport Fund)</li> <li>- make public transport more attractive by improving end-to-end</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>- journey experience and rolling out smart / integrated ticketing</li> <li>- support the market in electric / ultra-low emission vehicles</li> <li>- manage traffic so as to tackle congestion and reduce carbon emissions, through traffic signal improvements, parking strategies and pedestrianisation schemes</li> </ul>
Climate Change Act 2008	<ul style="list-style-type: none"> <li>• Sets legally binding targets for achieving cuts in greenhouse gas emissions of at least 80% by 2050 and at least 34% by 2020, compared with 1990 levels, or 1995 for fluorinated compounds</li> </ul>
National Planning Policy Framework	<ul style="list-style-type: none"> <li>• Develop strategies for the provision of viable infrastructure necessary to support sustainable development.</li> <li>• Ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised.</li> <li>• Improve the quality of parking in town centres, with appropriate parking charges that do not undermine the vitality of town centres, and proportionate parking charges.</li> <li>• All developments which generate significant amounts of movement should be required to provide a Travel Plan.</li> <li>• Encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion.</li> </ul>
<b>International</b>	
Copenhagen Accord 2009	<ul style="list-style-type: none"> <li>• Keep the increase in global temperatures to below 2 °C</li> </ul>

## 6.3 Supporting Evidence

### Background

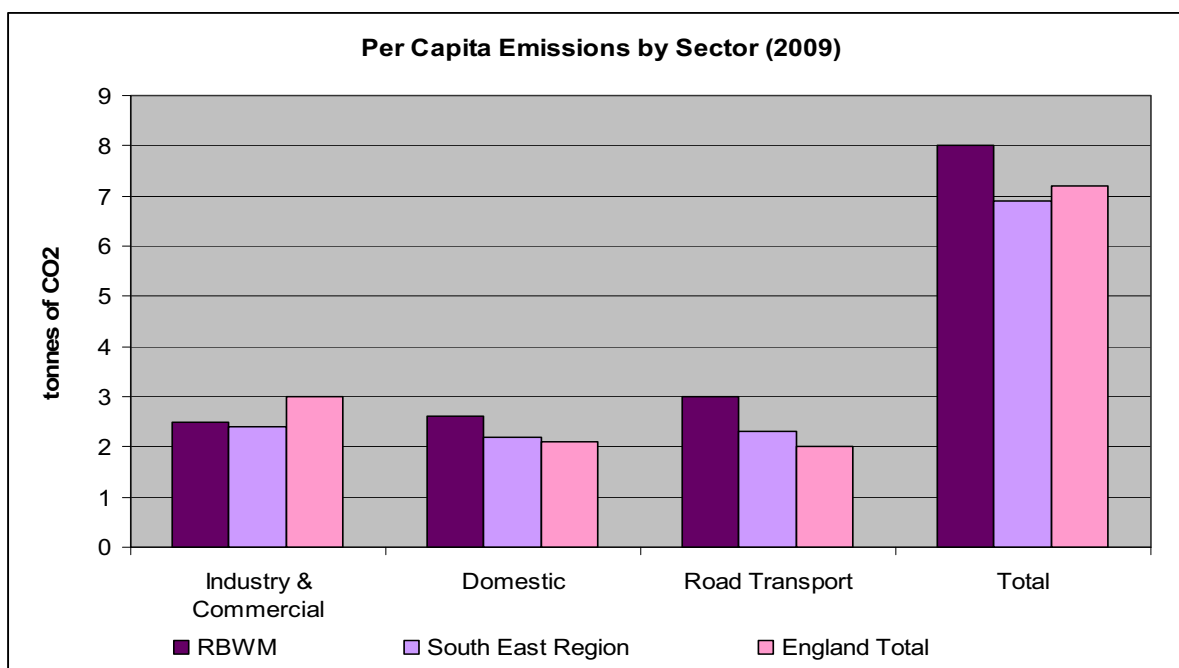
**6.3.1** The Eddington Report<sup>17</sup> concluded that a high-performing transport system is an important enabler of sustained productivity and competitiveness, supporting effective labour markets and facilitating domestic and international trade. Conversely, congested transport networks result in delays and unreliable journey times, which have direct costs for individuals and businesses. Road congestion now costs the economy an estimated £7-8 billion a year and is predicted to more than double by 2025 unless action is taken.

**6.3.2** Capacity constraints on the UK transport infrastructure make it increasingly difficult for companies to reach their customers, attract staff and manage the delivery of their goods. The CBI Transport Survey 2009 showed that:

- 80% of businesses see roads as vital to their business
- 96% feel that congestion is a very serious issue for the country
- 75% of businesses in locations that rely on road networks felt that transport delays had a strong or moderate impact on the ability of their staff to get to work on time.

<sup>17</sup> The Eddington Transport Study – The Case for Action: Sir Rod Eddington’s Advice to Government, HMSO, December 2006

**6.3.3** Detailed analysis of carbon emissions at local authority level has been carried out by AEA on behalf of the Department for Energy and Climate Change (DECC)<sup>18</sup>. This shows that in 2009 (latest published data at the time of writing), the estimated carbon emissions were 8.0 t per borough resident. This is significantly higher than both the regional and national averages of 6.9 t and 7.2 t respectively. Road transport accounts for just over 37.5% of local emissions, which is higher than both industry / commercial and domestic sector emissions.



**Figure 6.1: Local, regional and national CO<sub>2</sub> estimates**

### Motorway and Trunk Road Network

**6.3.4** The Highways Agency (HA) manages the motorway and trunk road network. The borough is crossed by the M4 and M25, while the M3 and M40 lie to the south and north. These roads link London with the rest of the UK, and serve international gateways, such as Heathrow Airport and the UK's major ports. The HA is also responsible for the A308(M), which connects Maidenhead to the M4, and for the A404/(M), which links the M4 and M40 and forms a key link across the River Thames.

**6.3.5** The motorways are used for a mix of short commuting trips and long-distance journeys. Short-to-medium trips are most common on the M4 between junctions 5 and 6 during the AM peak, with more than half of all traffic travelling less than 40km. Also, up to 20% of vehicles on the M4 around the airport are travelling to or from Heathrow. Detailed analysis suggests that nearly half (49%) of carbon emissions from road transport in the Royal Borough are linked to motorways and trunk roads.

**6.3.6** Analysis of traffic data indicates that the M4 already operates at or close to capacity between junctions 5 and 12. Even minor incidents can cause major disruption, with traffic diverting to parallel routes.

**6.3.7** The M25 connects the radial motorways and trunk roads serving London and provides a bypass for through traffic. The section between the M3 and M4 was widened in

<sup>18</sup> Local and Regional CO<sub>2</sub> Emissions Estimates for 2005-2009

2005 to cope with the high traffic flows using the M25 and to cater for access to Heathrow Terminal 5, with construction of a new spur road. Despite this widening, peak hour congestion is still an issue on this stretch and traffic often diverts onto the A308 to avoid any disruption.



**Figure 6.2: Forecast Stress Levels on Strategic Road Network (2021)**

**6.3.8** The A404(M) links the M4 Junction 8/9 with the M40 Junction 4. At peak periods, there are heavy traffic flows between the two motorways, leading to acute traffic congestion. The M40 Handy Cross Junction improvement, completed in 2006, provided some additional capacity and helped to reduce delays at the northern end. However, acute peak hour congestion occurs on the approach to the M4 Junctions 8/9. Congestion is also a problem at the Bisham roundabout, with long delays on the side roads from Maidenhead and Marlow.

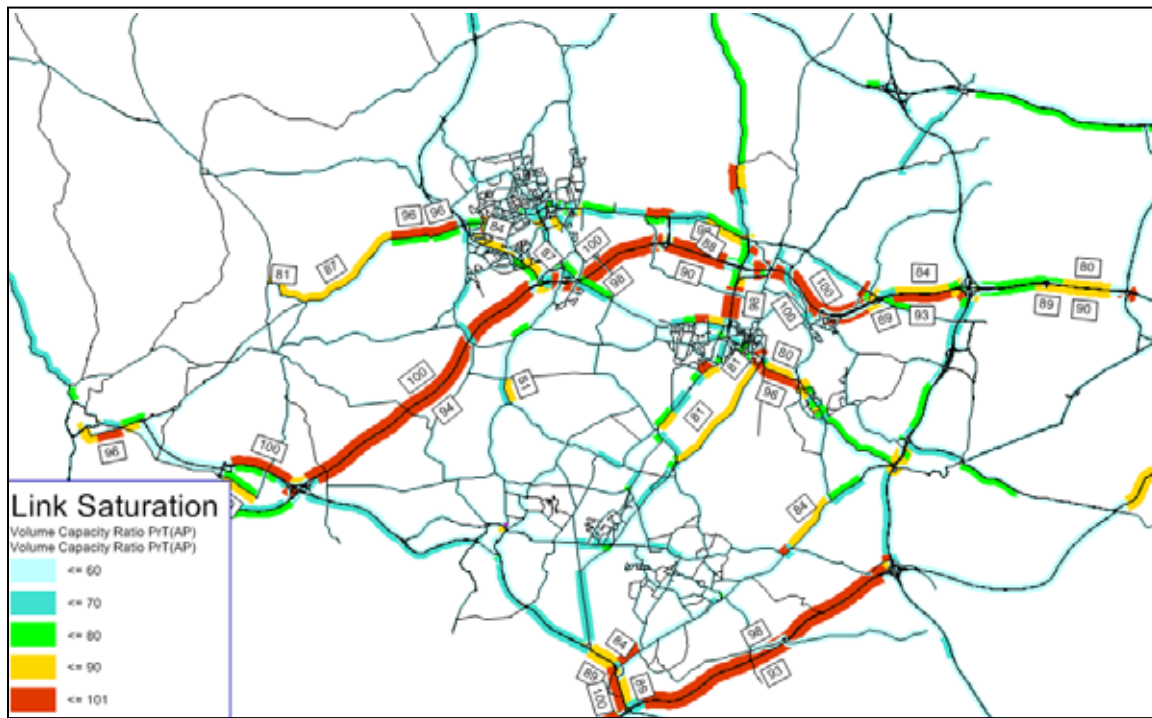
**6.3.9** By 2021, demand is forecast to exceed 130% of capacity during peak hours on the eastbound M4 between junctions 5 and 12, and 125% for the equivalent westbound section. Congestion outside of peak hours is also set to worsen. For the A404(M), demand is forecast to exceed capacity during peak hours on the southbound approach to the M4 Junctions 8/9.

### Local Road Network

**6.3.10** Local authority roads provide key links between the motorway and trunk road network and urban centres. These include the A4 which runs east-west parallel to the M4, and the A308/A332 which links the M3, M4 and M25. The 2009 borough traffic model shows that congestion is focused on key access routes to the main towns, particularly:

- A4 (west of Maidenhead)
- A4 (east of Maidenhead);
- A332 Windsor and Eton Relief Road;;
- A308 Maidenhead Road;
- A308 Albert Road
- B3022 Winkfield Road

**6.3.11** Our LTP Issues and Options Survey showed that tackling peak hour congestion is one of the highest priorities residents, businesses and other stakeholders. The majority of local congestion is associated with commuting, with a significant proportion associated with the school run. The borough has one of the highest levels of car use for the school run in England (37.3% in 2011). The Issues and Options Survey showed that tackling the school run is a priority for residents, with 75% indicating that it is a high or top priority.



**Figure 6.3: Peak Hour Congestion on Local Road Network (2026)**

**6.3.12** By 2026, it is forecast that, without intervention, traffic levels will have risen by around 12% across the borough, resulting in more congestion on many local roads.

### Car Parking

**6.3.13** Car parking remains important to the economic success of our retail centres, as part of a balanced strategy that ensures good quality access for all forms of transport. The Council owns and operates the majority of the public car parks in the Royal Borough as well as being responsible for enforcement of on-street parking.

**6.3.14** While there is undoubtedly pressure on car parks in Windsor Town Centre during peak summer months, recent improvements to park and ride and overall parking capacity across the town, coupled with a new variable message sign system have helped to keep on top of the problem. Local surveys show that satisfaction with the ease of parking was rated as 3.98 out of 5, while the cost of parking was rated as 3.00 out of 5.<sup>19</sup>

**6.3.15** In Maidenhead, pressure on parking is less of a problem, with Hines Meadow in particular having spare capacity at all times. This is reflected in higher levels of user satisfaction – local surveys show that satisfaction with the ease of parking was rated as 4.48 out of 5, while the cost of parking was rated as 3.75 out of 5.<sup>20</sup>

<sup>19</sup> Windsor Visitor Survey 2011, Tourism South East

<sup>20</sup> Maidenhead Visitor Survey 2011, Tourism South East



**6.3.16** Residents are given discounted parking with their Advantage Card, including free on-street parking for up to 1 hour in Windsor and Datchet, while there is no charge for on-street parking in Maidenhead.

### Rail Network

**6.3.17** Much of the area's rail network operates at or close to capacity in peak periods, with overcrowding now commonplace. The 2010 surveys show that the greatest overcrowding occurs on the Great Western Main Line (18.5% in the morning peak). On Windsor Lines services to London Waterloo, overcrowding levels were 3.4% in the morning peak.

**6.3.18** Car parking at stations is also operating at or close to capacity. For example, the Great Western Route Utilisation Strategy (RUS) identified that Maidenhead station car park is operating at 90% of capacity.

**6.3.19** Punctuality levels on rail services to London have improved in recent years. The 12 month moving annual average figures for the period to 28 April 2012 were as follows:

Operator	Punctuality	Reliability
First Great Western (London and Thames Valley)	89.4%	99.4%
South West Trains (Suburban Lines)	92.6%	99.5%

**Table 6.1: Rail Punctuality Statistics by Operator**

**6.3.20** The Great Western Route Utilisation Strategy highlights a number of significant capacity constraints (or pinch-points) that will affect network performance. These include:

- A lack of spare all day capacity between London Paddington and Reading and between Slough and Windsor, which will present a significant barrier to future growth;
- Potential crowding at Windsor and Eton Central station; and
- Short platforms at stations in the Thames Valley, which make it difficult to deliver increases in passenger capacity through train lengthening.



**Figure 6.4: Rail Links Where AM Peak Volume Over Seated Capacity > 85% (2021)**

**6.3.21** The London and South East RUS forecasts a 30% increase in rail commuters travelling to London by 2031. Even with additional capacity provided at Reading station and by Crossrail, it is predicted that there will be a shortfall of around 5,200 seats in the peak hour by 2031 resulting in significant overcrowding between Reading and Maidenhead.

**6.3.22** On the Windsor Lines, the planned move to ten-car operation and increase from 15 to 16 trains in the busiest peak will provide adequate capacity in the short to medium term. However a shortfall of 70 seats is predicted by 2031.

### Commuting Patterns

**6.3.23** The 2001 Census shows that the Royal Borough experiences significant inbound and outbound commuting. Greater London is the most popular commuting destination for residents, while Slough is the biggest source of inbound commuting and the second most popular destination for outbound trips. The Census also highlights significant levels of commuting to and from Bracknell, Wycombe, Wokingham, South Bucks, Reading and Runnymede.

**6.3.24** The average commuting journey length is 13.64 km, which is slightly above the national average of 13.39 km. Around half of all local residents in regular employment work in the borough and a higher than average proportion of residents work from home.

**6.3.25** Most commuting trips by residents and inbound commuters are made by car. The lack of a single dominant centre in the Thames Valley results in complex travel patterns between towns. Congestion on strategic and local transport networks in peak periods is widespread.

	% of residents aged 16 – 74 in employment who usually:											
	Work mainly from home	Travel to work by:										Total
		Underground, metro, tram ,etc	Train	Bus, mini-bus, coach	Motorcycle, scooter, moped	Driving a car or van	Passenger in a car or van	Taxi	Bicycle	On Foot	Other	
<b>RBWM</b>	11.5	0.3	6.3	1.8	1.0	62.1	4.2	0.4	2.8	9.2	0.6	100
<b>Berkshire</b>	9.6	0.2	5.1	5.1	0.9	60.5	5.2	0.4	3.0	9.6	0.4	100
<b>South East</b>	9.9	0.2	5.6	4.4	1.1	59.2	5.7	0.4	3.1	9.9	0.5	100
<b>England &amp; Wales</b>	9.2	3.0	4.1	7.4	1.1	55.2	6.3	0.5	2.8	10.0	0.5	100

**Table 6.2: Commuting Travel Patterns for Borough Residents (2001 Census)**

**6.3.26** The cost of housing is a major barrier to continued local economic growth. Lack of housing supply and affordability contributes to problems in staff recruitment and retention and encourages longer distance commuting, which adds to congestion. The Thames Valley is forecast to accommodate 102,100 new dwellings between 2006 and 2026, of which 6,900 are likely to be within the Royal Borough and many more in neighbouring boroughs. The transport needs of these new households will need to be carefully planned and managed.

**6.3.27** The Thames Valley is also expected to accommodate the largest employment growth in the South East, with an estimated 79,300 new jobs to be provided between 2006 and 2026. This growth will put further traffic on already crowded transport networks.

### **Tourism**

**6.3.28** The Windsor Visitor Survey 2010 found that 51% of visitors arrive by car. This places a burden on local transport infrastructure, with parking capacity and traffic congestion being particular issues for Windsor and Eton. The £5 million Windsor Transport and Parking Package is helping to address these issues in the short to medium term, providing a ring of small park and ride sites, together with improvements to local car parks, bus and cycle facilities and variable message signing.

**6.3.29** Nearly a quarter of day visitors arrive by train. The Great Western Main Line RUS identifies crowding on the platform at Windsor and Eton Central Station as being an issue in the medium to long term.

**6.3.30** Legoland Windsor is Britain's third most popular paid for tourist attraction, with around 1.9 million visitors per year. The vast majority of visitors arrive by car, and in the summer months this leads to extensive traffic congestion at the junctions along the A332 Windsor and Eton Relief Road, the B3175 and B3022.

**6.3.31** Of the many events that take place in the Royal Borough each year, the Royal Ascot race meeting attracts the most visitors, with around 300,000 people travelling to the racecourse each year over the five days of racing. This puts pressure on transport infrastructure in the vicinity of the racecourse and travel needs to be carefully managed.

**6.3.32** Eton Dorney will be host to the rowing and flatwater canoe events for the 2012 Olympic and Paralympic Games. The events will attract up to 30,000 spectators and 5,000 Games Family members each day during the height of the tourist season. The challenge will be to manage visitor travel and keep the Borough moving during the Games.



## 6.4 SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Cross-boundary and multi-agency approach to tackling congestion on the strategic road and rail networks</li> <li>• Many key employers already have workplace travel plans in place</li> <li>• Number of people commuting by rail is higher than the national and regional averages</li> <li>• Levels of home / remote working are higher than the national or regional averages</li> <li>• 100% of state schools and several independent schools have school travel plans in place</li> <li>• Sustained downward trend in numbers of pupils travelling to school by car</li> <li>• Sustained upward trend in bus passenger numbers</li> </ul>	<ul style="list-style-type: none"> <li>• Proportion of people commuting by car is higher than the national / regional averages</li> <li>• Proportion of people commuting by bus is lower than the national / regional averages</li> <li>• Motorways operate at or above capacity in peak periods, leading to significant congestion and unreliable journey times</li> <li>• Overcrowding on peak hour rail services</li> <li>• Mis-match between jobs and housing generating significant inbound commuting</li> <li>• Significant congestion associated with visitor traffic</li> <li>• Weak retail offering in Maidenhead encourages residents to shop elsewhere</li> <li>• Lack of rail access to Heathrow Airport from the west</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Crossrail will create additional rail capacity between Maidenhead and London Paddington</li> <li>• Western Access to Heathrow would help to encourage modal shift from road to rail for travel to the airport</li> <li>• Maidenhead town centre regeneration will promote development within the most accessible location and improve access by all modes of transport</li> <li>• Windsor Parking and Transport Package will help to manage traffic and alleviate pressure on town centre car parking</li> <li>• Advances in electric / low carbon transport technologies and in information and communications technologies</li> <li>• Significant scope to increase sustainable transport use from low baseline</li> </ul>	<ul style="list-style-type: none"> <li>• Rising cost of travel due to fuel price increases.</li> <li>• Lack of capacity on peak hour rail services west of Maidenhead</li> <li>• Possible disruption associated to rail networks associated with works for Crossrail and Great Western Main Line electrification</li> <li>• Possible loss of through services from the Marlow branch upon completion of Crossrail</li> <li>• Peak hour traffic levels in the Borough are forecast to increase by an average of 12% between 2009 and 2026</li> </ul>

## 6.5 Objectives

6.5.1 The objectives for the Sustainable Economic Growth Strategy are:

- Reduce the need to travel and increase the proportion of trips made by public transport, cycling and walking
- Promote and facilitate the use of renewable fuels / low carbon technologies in local road transport.
- Improve traffic flow in congested areas and improve journey time reliability for all forms of transport
- Ensure that new development is focussed in sustainable locations well served by public transport, walking and cycling networks
- Improve public transport access to Heathrow Airport

## 6.6 Policies

### Partnership Working

**6.6.1** Given the complex, nature of travel patterns in the Thames Valley, and the number of agencies involved in managing and operating the various local and strategic transport networks, it is vital that there is a common understanding of the issues that affect our everyday travel and a shared approach in addressing these issues. It is also important that the various local authorities work together with the Highways Agency, Network Rail, BAA and other partners to integrate investment in transport infrastructure and services across the wider Thames Valley area and to avoid adverse cross-boundary impacts when considering new measures that will affect traffic movements.

### **Policy SEG1: Partnership Working**

Through the Berkshire Strategic Transport Forum, the Royal Borough of Windsor and Maidenhead will work with strategic road and rail authorities, neighbouring transport authorities, transport operators and other partners to identify and address cross-boundary transport issues, delivering a coordinated approach to investment.

### Smarter Choices

**6.6.2** Smarter Choices initiatives seek to influence travel behaviour by reducing the need for travel and encouraging better use of alternatives to the private car for everyday journeys, thus helping to tackle traffic congestion and.

**6.6.3** Evidence from the Sustainable Travel Demonstrations Towns project showed that high intensity smarter choice campaigns delivered the following benefits:

- Car trips by residents fell by 9%
- Bus trips per person grew by 10% – 22%
- Cycling trips per head increased by 26% – 30%
- Walking trips per person rose by 10% - 13%

### **Policy SEG2: Smarter Choices**

A programme of Smarter Choices initiatives designed to influence travel behaviour and encourage a modal shift from private car use to public transport, walking and cycling, will be implemented to complement investment in new transport infrastructure

**6.6.4** Our Smarter Choices programme will be based around the following elements:

- *Workplace Travel Plans* - Businesses and other organisations will be encouraged to develop travel plans to reduce the impacts of travel associated with their operations. We will secure travel plans through the planning process as well as encouraging voluntary take up.
- *School Travel Plans* - The council will work with local schools to address problems associated with the school run. We will seek to minimise car use and encourage more walking, cycling and public transport use by helping schools develop, implement and review school travel plans and keep them up to date.
- *Residential Travel Plans* – For major new housing developments, developers will be required, through the planning process, to develop and implement travel plans that seek to ensure sustainable travel patterns.
- *Travel Information* - We will work with neighbouring transport authorities, local transport operators, user groups and other stakeholders to improve the quality and provision of travel information. This will be provided in multiple formats using various communications media so that it is accessible and relevant to users.
- *Incentive Schemes* – The council will look to build on the success of the School Travel Reward Scheme (STaRS), which offers free, fun and healthy activities as rewards to pupils who regularly walk or cycle to school.
- *Marketing & Events* – We will encourage changes in travel behaviour through targeted marketing campaigns and regular events, including support of national initiatives such as Walk to School Week and Bike Week.
- *Car Clubs* – Car clubs enable residents and businesses to hire vehicles parked in their neighbourhood for short periods as and when required. They help to reduce car travel, with members using a car when that is the best option, but travelling by public transport, cycling or walking at other times. We will work with private and public sector partners to explore the viability of introducing a car club locally.
- *Lift Share* – Most commuting journeys are made by car with the driver travelling alone. Lift share schemes aim to match people making similar journeys so they can travel together. As well as helping to reduce congestion and air quality, life sharing can also save participants money by sharing travel costs. We will promote lift sharing to both residents and businesses.

**6.6.5** The council is developing a Local Sustainable Transport Fund bid. If successful, this would enable us to greatly expand our Smarter Choices programme to include aspects such as personalised travel planning; intensive work with schools, and establish an independent body to work with employers to develop and monitor travel plans.

**6.6.6** It is important that the Council leads by example. The Council's Staff Travel Plan seeks to reduce car use for commuting and business trips and improve the efficiency of its own fleet and the 'grey fleet' (i.e. employees own vehicles that are used for Council business).

### **Policy SEG3: Council Activities**

The Council will lead by example, through its Carbon Management Plan and Staff Travel Plan to cut its carbon emissions and manage its transport operations more effectively.

#### Low Emission Technologies / Sustainable Biofuels

**6.6.7** In May 2009 the New Automotive Innovation and Growth Team (NAIGT) set out a roadmap agreed by UK industry that shows how automotive technology will need to develop from the present day to 2050 in order to meet our carbon reduction commitments and deal with the problems posed by diminishing supplies of fossil fuels:

- Efficiency improvements to conventional combustion engines
- Early hybrids combining conventional electric power and conventional fuels
- Full hybrids, with electric plug in options
- Mass-market electric vehicles
- Hydrogen fuel cell powered vehicles

**6.6.8** Sustainable bio-fuels are also likely to play a small but significant role in reducing emissions.

**6.6.9** Our existing vehicles, fuels and infrastructure are long established, and our economy, business and lifestyle has built up around them. If low-carbon transport fuels are to play a significant part in reducing overall emissions of greenhouse gases, a comprehensive network of supporting infrastructure and services must be put in place. Local authorities will have to play a significant role in helping to mainstream the emerging technology by providing public facilities and encouraging the private sector to do the same.

### **Policy SEG4: Electric Vehicle Charging Points (Public)**

Charging points for electric vehicles will be provided within public car parks operated by the Royal Borough of Windsor and Maidenhead and operators of other public and car parks will be encouraged and supported to do the same

### **Policy SEG4: Electric Vehicle Charging Points (Private)**

Major residential and commercial developments will be required, as a condition of planning permission, to incorporate electric charging points within any associated on-site car parking

**6.6.10** Opportunities also exist for the Council to promote increased use of low-emission vehicles through procurement of public transport services. At the time of writing, the Borough Bus network, which serves the Maidenhead area, is operated by buses that run on sustainably sourced bio-fuels. A range of other low-carbon technologies are available from hybrid electric / diesel buses to vehicles powered by hydrogen fuel cells.

### **Policy SEG5: Transport Contracts**

Carbon emissions will form a material consideration when tendering for new public transport contracts with preference given to operators whose vehicles have low or zero emissions

## Network Management

**6.6.11** Road space is limited and building new roads to accommodate the growing demand for traffic has a high economic, social and environmental cost. However, targeted improvements combined with more effective management of existing networks can help to ease congestion hot spots and improve movement through specific junctions and wider areas.

**6.6.12** Network management is about increasing the efficiency of the road network by enabling smoother traffic flow and by ensuring that there are no unnecessary traffic movements or obstructions within the network. It can also be used to restrict general vehicular access within certain areas and/or to promote access for certain transport user groups.

### **Policy SEG6: Network Management**

The efficiency of operation of the local road network will be improved in order to minimise unnecessary congestion and delay and associated carbon emissions, whilst giving appropriate levels of priority to pedestrians, cyclists, equestrians and buses.

**6.6.13** Our Network Management programme will be based around the following measures:

- *Urban Traffic Control* - This is used to co-ordinate traffic signals across an area. It can help to reduce delays to vehicles and the number of times they have to stop. It can also be used to balance capacity in a network, to attract or deter traffic from particular routes or areas, to give priority to specific categories of vehicles such as public transport, or to hold traffic queues in suitable parts of the network. These control systems are developing all the time and it is likely that more could be done by introducing new features and techniques. Use of new techniques will be considered and, if implemented, monitored and refined to make the best use of the existing road network. We will also review existing traffic signals to see where these can be switched off to improve traffic flow.
- *Variable Message Signing* – The council will seek to make effective use of variable message signing to provide real-time information to road users, thus helping them to make appropriate decisions regarding their journeys. This could have a number of uses, such as informing drivers of incidents on the network and alternative route options, or highlighting car parks with available capacity, thus reducing unnecessary delay and circulating traffic.
- *Priority Measures* – There are certain locations where it is undesirable to have unrestricted vehicular access, such as in town centres. Similarly, there are locations where sustainable modes of transport need to be given priority to help encourage, or to ensure the safety of users (e.g. cycle lanes, bus gates, etc.). Use of priority measures will be considered in suitable locations.
- *Road Works* – The Council will seek to minimise traffic disruption and delay caused by road works - our own activities as well as third parties such as utility companies. Solutions that will be considered include off-peak operation on traffic sensitive routes, coordination of activities between agencies and provision of comprehensive information before and during road works to help motorists plan their journeys.

## Parking Management

**6.6.14** The availability, cost, convenience and safety of car parking facilities can have a significant impact on how people travel, the destinations that they choose to visit and how long they stay at their destination.

**6.6.15** On and off-street car parking needs to be carefully managed in order to balance competing demands from different users, such as residents, commuters and shoppers.

**6.6.16** In order to be effective, parking and loading restrictions require enforcement. This helps to improve turnover of spaces, improve safety and prevent unnecessary obstructions to traffic.

### **Policy SEG7: Parking Management**

The Council will make effective use of parking management tools to support the economic viability of our town centres and visitor economy, encourage sustainable transport patterns associated with new development and prevent abuse of parking restrictions.

**6.6.17** Our Parking Management programme will include the following measures:

- *Public Car Parking* - In town centre locations, car parks will be managed in such a way that favours short and medium stay. Long-stay commuter parking will be provided in edge-of-town-centre locations or in park and ride sites. In rural areas, parking provision may need to be managed at key locations such as public transport interchanges and popular visitor destinations to improve safety and minimise conflict with residential and other adjacent land uses. Detailed policies are set out in the Borough's Parking Strategy.
- *Residents Parking Reviews* – Some residents, particularly in terraced streets, experience difficulties finding a parking space due to a lack of off-street parking. Since January 2008, over 400 parking schemes have been reviewed in consultation with residents. As part of these reviews, over 600 on-street spaces have been created. The final phases of these reviews will be completed in 2012.
- *Parking and New Development* – Parking associated with new development will be provided in accordance with local parking standards as set out in the Borough's Parking Strategy. Maximum parking standards are utilised in order to encourage sustainable transport patterns. Where appropriate, opportunities will be sought to make private non-residential parking available to residents or the general public in the evenings and at weekends to alleviate pressure on public parking.
- *Park and Ride* – Park and ride can be effective in intercepting traffic before it enters congested town centre locations, helping to alleviate urban congestion. The Council has recently implemented the Windsor Parking and Transport Project, which includes a sustainable ring of small-scale park and ride sites. Operation of existing facilities will be kept under review and the need for new or expanded sites will be considered as and when the need arises.
- *Parking Enforcement* – As many roads are already operating close to their capacity, even minor incidents and obstructions can cause congestion (e.g. badly parked vehicles). Other locations must be kept clear for safety reasons (e.g. outside school gates). Also, turnover of parking spaces is necessary in town centres to ensure their continued economic viability. The Council has responsibility for parking enforcement and will continue to ensure that parking restrictions are enforced. We will continue to work with parish councils and other partners to ensure that our parking attendants are directed to areas where parking is a problem.
- *Parking Charges* – The Council will continue to set parking charges at commercially sound levels, whilst providing discounted parking for residents with Advantage Cards.

- *Payment* – Pay by phone facilities will be introduced for all on and off-street parking from July 2012, with consideration given to rolling out ‘pay on exit’ schemes in all multi-story car parks from 2013, making use of automatic number plate recognition systems. Parking smartphone apps will be introduced in 2012 and online facilities for payment and renewals for residents parking will be introduced from 2013.

## Rail

**6.6.18** Although rail travel does not fall within the remit of the Council, it impacts upon local transport networks and therefore needs to be considered as part of the LTP. Planned improvements to rail infrastructure (e.g. Crossrail, Great Western Main Line electrification and new, high-capacity rolling stock) will make rail travel more attractive and will therefore have knock-on implications, increasing demand for access by all forms of transport.

### **Policy SEG8: Rail**

The Council will work with Network Rail, Crossrail and train operating companies to encourage sustainable travel to and from stations and ensure that major rail infrastructure and service improvements are properly planned and integrated with investment in local transport networks.

**6.6.19** Our strategy includes the following:

- *Rail Services* – Working with rail industry partners to ensure that future rail operations meet the needs of local residents, businesses and visitors with appropriate capacity, frequency, hours of operation, connections and calling patterns.
- *Construction Management* – Working with Crossrail and Network Rail to ensure that disruption associated with major rail works (including Crossrail and the Great Western Main Line electrification) is kept to a minimum.
- *Maidenhead Station* – Working with Crossrail and other stakeholders to develop proposals for a multi-modal transport hub on the station forecourt, including a bus interchange, improved taxi facilities, additional cycle parking, improved access for pedestrians and cyclists, and passenger drop-off facilities, with displaced parking reprovided / enhanced with a new facility in a nearby location.
- *Station Travel Plans* – Working with Network Rail and the train operating companies to improve passenger facilities at local stations and encourage more passengers to arrive on foot, by bike or via public transport.
- *Parking* – Working with train operating companies to ensure that there is sufficient parking at rail stations and that charges are proportionate. Where necessary, parking restrictions will be imposed on nearby roads to ensure that rail users do not impact unduly on nearby residents and businesses.
- *Community Rail* – Working with rail industry partners, neighbouring local authorities and passenger associations to ensure appropriate investment, operation and promotion of local branch lines.

## New Development

**6.6.20** In order to deliver sustainable development, it is vital to ensure that land use and transport planning are considered together. With much of the local and strategic transport



networks already operating at or above capacity in peak periods, it is important to ensure that new development does not place a significant additional burden on these networks.

### Policy SEG9: New Development

The Council will seek to ensure that new development takes place in sustainable locations within urban areas that are well served by public transport, cycling and walking networks – improvements to existing transport networks will be sought through the planning process to mitigate the impacts of any new development

**6.6.21** Our approach to new development will encompass the following:

- *Location of New Development* – For new development, emphasis will be placed on minimising the need to travel and on ensuring that realistic alternatives to the car are available for travel to and from the site. The Local Borough Local Plan will identify the most sustainable sites for new development, where the transport barriers to growth are less and where dependence on the car will be less. These locations will be informed by the borough's traffic model.
- *Transport Modelling* – For major new developments, developers will be required to make use of the council's traffic model to show what the impacts will be on the highway network. The current model is expected to produce reasonable responses for schemes where:
  - The increase in vehicle trips on affected links is >100 per hour; or
  - The increase in traffic is expected to be >15%; or
  - Ratio of flow to capacity (saturation) on access roads is expected to be >80%;
  - In case of housing, the number of units is >50 in a single development.
- *Mitigation Measures* - New development will be expected to mitigate its impacts on transport networks. Developer-led transport improvements, including public transport service improvements, must be in accordance with the council's transport strategies. Where development has a wider impact on transport networks, contributions toward the relevant strategy area and implementation programme will be sought.

### Heathrow Airport

**6.6.22** As the country's largest international airport, Heathrow is a major influence on the success of the area's economy. High quality public transport access is critical for businesses with global operations, as well as residents and visitors using the airport for holiday flights. With around 68 million passengers and 72,000 employees, it is also important to ensure that as many as possible of the trips to and from the airport are made by sustainable travel modes in order to minimise the impact on local and strategic road networks.

**6.6.23** While there are comprehensive public transport connections to Heathrow from London and the east, there is no direct rail link from the west and public transport access from the Thames Valley is confined largely to bus and coach operations which cater for a small minority of trips. As a consequence, local businesses are spending considerable sums of money on taxis for airport related travel.



## Policy SEG10: Heathrow Airport

The Council will work with BAA, the Highways Agency, the Department for Transport, Network Rail, neighbouring transport authorities, local transport operators and other stakeholders to improve surface access to Heathrow from the west and encourage a mode shift toward sustainable modes for travel to and from the airport

**6.6.24** Our strategy to improve surface access to Heathrow Airport will be focused in the following areas:

- *Rail Access to Heathrow* – Through the Berkshire Strategic Transport Forum, the Council and its partners are lobbying for investment to create a new rail link to Heathrow to improve access for residents of the Royal Borough. This will include working with the Berkshire Strategic Transport Forum and neighbouring authorities as well as with BAA, Network Rail and other stakeholders. The Royal Borough notes that there are three current schemes to provide Western and Southern access to Heathrow; via a link from the Great Western Main Line, a link from the Windsor to Staines line and a new line from Staines. The Royal Borough will consider all proposals for rail access to Heathrow on their merits and benefits to residents and businesses.
- *Bus Links* – The Council will work with BAA, neighbouring authorities and local transport operators to improve bus links to Heathrow Airport from Maidenhead, Windsor and other communities in the Royal Borough. We will seek to ensure that services cater for passengers as well as staff (including shift workers), with fast and reliable journey times.

### Visitor Management

**6.6.25** While the tourist economy is clearly important, the impacts of travel to and from major attractions and events needs to be carefully managed in order to mitigate the impacts on local residents and businesses, but also to preserve the character and amenity that attracts people to the area in the first place.

## Policy SEG11: Visitor Travel

The Council will work with local visitor attractions and event organisers to encourage and promote visitor travel by sustainable forms of transport and manage car based trips so as to minimise the impact on local residents and businesses

**6.6.26** In delivering this policy, we will consider the following:

- *Improving public transport, cycling and walking access* – The Council will work with key partners to improve access by sustainable forms of transport to key visitor destinations. Integrating them within the wider transport networks will ensure that visitors can travel quickly and easily to and around the Royal Borough without the need to travel by car.
- *Travel information* – Providing visitors with high quality information prior to travelling will help them to make appropriate decisions about how and when to travel. Providing in-trip information will help visitors to respond appropriately to travel situations as they arise (e.g. taking alternative routes to avoid congestion). Providing information upon arrival will help visitors to navigate the local area and discover points of interest.

- *Visitor and event travel plans* – The Council will work with the tourism industry and Thames Valley Police to develop formal travel plans to cater for any significant influx of visitors to local attractions or major events.

### London 2012 Olympic and Paralympic Games

**6.6.27** The events at Eton Dorney will bring particular transport challenges in terms of getting spectators, officials, sponsors and spectators to the venue, whilst ensuring that the borough keeps moving. We also need to be mindful that it is an opportunity to showcase the local area on the world stage, which could lead to increased visitor numbers in future.

### **Policy SEG12: London 2012 Olympic and Paralympic Games**

The Council will work with our partners to deliver high quality, accessible and sustainable transport to the Eton Dorney venue, while minimising travel disruption for our residents, businesses and non-Games visitors

**6.6.28** Travel arrangements for the Eton Dorney Venue are being coordinated by the Local Organising Committee for the Olympic Games (LOCOG), working with the local authorities, the Highways Agency, Thames Valley Police and other partners. The key elements of this work are:

- *Olympic and Paralympic Route Networks* – These roads link competition venues and key non-competition venues and have appropriate measures to ensure that athletes, officials and other Games Family members can reach their destination quickly and safely. For Eton Dorney, roads affected include the M25, M4 and A4, while the A308 and A332 Windsor Relief Road form part of the Alternative Route Network.
- *Venue Transport Plan* – This sets out temporary transport measures for managing spectator travel to the venue. The aim of the Games is for as many people as possible to arrive by sustainable forms of transport. Measures will include:
  - A temporary transport hub at Windsor Racecourse
  - Walking and cycling routes and temporary cycle parking
  - Local bus services
  - Arrangements for taxi / private hire
  - Arrangements for private hire coaches
  - Park and ride with shuttle buses to the transport hub
  - Additional rail capacity, with free train travel from London and shuttle bus services from Maidenhead, Slough and Windsor & Eton Riverside stations
  - Facilities for motorcycle and blue badge parking.
- *Local Area Traffic Management and Parking Plan* – Temporary parking controls and traffic management measures will be in place around the venue and the transport hub during the Games. These will ensure that traffic moves freely and prevent spectators from parking in residential streets, while still allowing access for residents and local businesses.
- *Travel Information and Advice* – The Games could impact on businesses in four main areas: staff commuting trips; business travel; travel for customers / visitors; and deliveries / collections. Large businesses likely to be significantly affected by events at Eton Dorney have been offered free assistance from a dedicated 2012 travel advisor. For other businesses, a number of online tools have been produced to help businesses create an action plan and continue to run smoothly during the Games.

## 6.7 Performance Indicators

6.7.1 The following performance indicators will be used to measure progress towards objectives:

- Percentage of residents who perceive that levels of traffic congestion are improving (residents survey)
- Change in traffic flows (permanent counter sites)
- Number of public electric vehicle charging points (RBWM data)
- Use of public electric vehicle charging points (RBWM / utility company data)
- Carbon emissions from the Council's vehicle fleet (RBWM fleet mileage / fuel data)
- Estimates of carbon emissions from transport in the Royal Borough (Defra)
- Visitors arriving by non car modes (annual visitor survey)

## 7. IMPROVING QUALITY OF LIFE

### 7.1 Introduction

7.1.1 Traffic and transport can affect the quality of life of local residents in a number of ways, including:

- Air pollution
- Noise
- Health impacts
- Impacts on the natural and built environment

7.1.2 **Air Pollution** - A variety of air pollutants have known or suspected harmful effects on human health and the environment, including nitrogen oxides, particulates and carbon monoxide. Within the Royal Borough, the main source of these pollutants is motor vehicle exhaust emissions. Emission levels increase significantly with traffic congestion as engines work less efficiently in stop-start conditions.

7.1.3 Generally, if you are young and in a good state of health, moderate air pollution levels are unlikely to have any serious short term effects. However, elevated levels and/or long term exposure to air pollution can lead to more serious symptoms and conditions affecting human health. This mainly affects the respiratory and inflammatory systems, but can also lead to more serious conditions such as heart disease and cancer. People with lung or heart conditions may be more susceptible to the effects of air pollution.

7.1.4 The Committee on the Medical Effects of Air Pollutants (COMEAP) has published the results of studies that have shown the average loss of life due to air pollution (acting together with other factors) may have contributed to the early death of up to 200,000 people in a single year<sup>21</sup>.

7.1.5 **Noise** - Traffic noise accounts for 66% of the total noise generated outside dwellings in the UK<sup>22</sup>, with 32 million people being exposed<sup>22</sup> to high levels of noise. Traffic noise is caused by a combination of engine noise, the vibration of tyres on the road surface and aerodynamic noise. Tyre noise is dominant at higher speeds (above 50mph) and this can be a particular problem for people living near motorways and other high speed roads.

7.1.6 Traffic calming may also lead to increased noise, if it results in more stop-go movements, but other forms of traffic calming which are designed to ensure the smooth running of traffic, can cut both casualties and noise levels.

7.1.7 **Light Pollution** - Light pollution is probably best described as artificial light that is allowed to illuminate, or intrude upon, areas not intended to be lit. This includes the intrusion of over bright or poorly directed street lights onto neighbouring property, which affect the residents' right to enjoy their own property. It also includes sky glow, which is the orange glow seen over towns and roads from upward light.

7.1.8 **Health** - UK obesity rates have trebled since 1980, such that today nearly one in four adults in England are obese. Based on current trends it has been estimated that nearly 60% of the UK population could be obese by 2050. Obesity is a serious public health concern because it is strongly linked with many chronic and serious illnesses such as heart disease, cancers, diabetes and strokes.

---

<sup>21</sup> COMEAP Report New Calculations Of The Effects Of Air Pollution On Health In The UK, December 2010

<sup>22</sup> Traffic Noise Briefing Sheet, UK Noise Association

**7.1.9** At least 30 minutes of physical activity at least five times a week is enough to significantly reduce a person’s risk of many of the major diseases associated with physical inactivity and to effectively extend their life expectancy. Research on commuting has suggested that those who walk or cycle to work are significantly less likely to be overweight or obese<sup>23</sup>.

**7.1.10 Natural and Built Environment** - Transport can impact on a number of different aspects of the natural and built environment, including the landscape, water environment, biodiversity and heritage. Transport may impact upon the landscape through visual impact, by affecting local character and use of farmland.

**7.1.11** Transport may impact upon biodiversity directly through loss of habitats as a result of land consumption or fragmentation of habitats due to the positioning of transport infrastructure. Indirect effects may include species disturbance from transport operations as a result of noise, lighting and surface run-off. Sensitive sites are protected through a variety of international and national designations such as Special Protection Areas, Special Areas of Conservation, Ramsar sites and Sites of Special Scientific Interest.

**7.1.12** Transport networks may impact upon the local water environment by: affecting water quality through surface run-off; improving or restricting access to rivers and riverside areas for recreation; and affecting drainage and water flow characteristics within the flood-plain.

**7.1.13** Transport can affect the historic environment in a wide range of ways, both negative and positive. For example, new infrastructure may risk damaging archaeology or affect the setting of a listed building. On the other hand, a sensitively designed high street, free of unnecessary street clutter such as signs, guardrails and road markings, can be a positive benefit to an historic area. Transport impacts on sensitive sites such as conservation areas, listed buildings and ancient monuments need special consideration.

## 7.2 Policy Context

**7.2.1** The following table summarises the main policies relating to quality of life factors at the international, national, regional and local levels.

Policy	Key Objectives, Targets and Actions
LTP Strategic Environmental Assessment Scoping Report	<ul style="list-style-type: none"> <li>• A comprehensive list of policies at the local, national and international levels is provided within the SEA scoping report.</li> </ul>

<sup>23</sup> Walking and Cycling to Health: A Comparative Analysis of City, State, and International Data, American Journal of Public Health, October 2010

## 7.3 Supporting Evidence

### Air Quality

7.3.1 The local air quality 'Review and Assessment' process is an ongoing requirement, being progressively more focused at each stage. This involves monitoring of relevant pollutants and identification of any areas where residents may be exposed to concentrations of pollutants that exceed National Air Quality Objectives. Where such an area is identified Local Authorities are required to designate an Air Quality Management Area (AQMA).

7.3.2 Air quality across the Borough is generally good. However, there are areas where the annual mean Air Quality Objective for Nitrogen Dioxide is exceeded. There are currently three AQMAs declared in the Royal Borough:

- Maidenhead - in and around the town centre and A4
- Windsor - around the Clarence Road roundabout and Barry Avenue
- Bray/M4 - along A308 around the M4 flyover

7.3.3 Detailed monitoring suggests that additional AQMAs may need to be declared within the Royal Borough.

7.3.4 Following the declaration of an AQMA a Local Authority is required to formulate and implement an Air Quality Action Plan (AQAP). This plan details the measures that the Authority in association with relevant stakeholders will put in place to work towards achieving the National Air Quality Objectives. Where the NO<sub>2</sub> Objective is not met within the Royal Borough, this is primarily due to road traffic emissions and therefore the AQAP forms an integral part of the LTP.

### Noise

7.3.5 The Department of Environment, Food and Rural Affairs (DEFRA) has recently published First Priority Locations and Important Area strategic noise maps for 37 locations and areas within the Royal Borough of Windsor and Maidenhead where road traffic noise on both local major roads (A roads) and major national roads (motorways) that cross the Borough are predicted to give rise to detrimental impact on local residents.

7.3.6 The Royal Borough of Windsor and Maidenhead in response will be carrying out an assessment of these locations and areas with the objective of managing the environmental noise and its effects, and including noise reduction schemes if necessary, in the context of government policy on sustainable development. Within this policy context, the Royal Borough of Windsor and Maidenhead will produce an Environmental Noise Action Plan (ENAP) aimed at promoting good health and improving quality of life.

7.3.7 The Environmental Noise Action Plan will be based on the results of strategic noise mapping produced by DEFRA, and other agencies (BAA for aircraft noise) and is based on using validated complex noise models. In respect of road traffic noise these models use the Calculation of Road Traffic Noise prediction methodology and include variables, such as the number of road vehicles and HGVs composition, traffic speeds, and road surface characteristics, and gradient, which are used to estimate levels of road traffic noise. The prediction modelling produces contours that are overlaid onto a base map of the Royal Borough and this highlights households that may be affected by excessive noise. Defra uses Census data to estimate the number of residents who are likely to be affected by excessive road traffic noise. The strategic noise maps will be produced and updated every 5 years.

**7.3.8** The first priority sites have been identified as those sites where the LA10, 18h noise level is predicted to be greater than 76dB and other Important Areas are defined as those sites and areas where 1% of the population are affected by the highest road traffic noise levels from major roads.

**7.3.9** The responsibility for the management of noise relating to road traffic rests with the highways authority, which for local major roads is the Royal Borough of Windsor and Maidenhead. For the motorway and trunk road network, it is the Highways Agency. The Royal Borough of Windsor and Maidenhead will actively liaise and consult with the Highways Agency to implement road traffic noise mitigation measures along these motorways and trunk roads that affect our residents.

**7.3.10** In addition to dealing with traffic noise, the Council has a long history of representing local residents' interests in relation to mitigating the adverse impacts of aviation operating in and out of Heathrow Airport.

**7.3.11** While aircraft noise is not directly within the scope of the LTP, other existing Council policies relate to: the impact of aviation noise generally; noise mitigation (reflected in local Planning policies for developments under the flight paths); controlling night flights; securing sustainable airport developments and infrastructure such as new terminals and runways; and support for the abolition of the Cranford Agreement and introduction of easterly alternation. These are the key aviation concerns over which the Borough adopts a robust community leadership role.

**7.3.12** Actions have usually taken the form of robust representations to relevant government departments; action through the courts; giving evidence at Public Inquiries and soliciting the assistance of local Members of Parliament. The Council has also set up a local Aviation Forum, comprising local councillors, stakeholders and officers. It is also an active member of several aviation interest groups and local authority networks.

**7.3.13** Recent changes in government policy and the development and imminent release of a new national aviation strategy is likely to be of significant interest to the Borough and local residents over the life of the LTP.

## **Lighting**

**7.3.14** Problems with intrusive light from street lighting can generally be dealt with by judicious use of appropriate lantern designs and by sensitive positioning of columns.

**7.3.15** However, sky glow is more difficult to resolve. As with most areas within the UK, the Royal Borough has its share of sky glow from lighting in urban areas and also from street lighting along the motorway and trunk road network. This obscures the view of the night sky and detracts from the rural character of our smaller communities.

**7.3.16** The Council receives several requests each year for new street lighting schemes and must adopt street lighting in new development, all of which has the potential to increase light pollution.

## **Health**

**7.3.17** The health of people in Windsor and Maidenhead is generally better than the England average, with longer life expectancy and lower levels of early deaths from cancer, heart disease and strokes<sup>24</sup>.

---

<sup>24</sup> Windsor and Maidenhead Health Profile 2011, Association of Public Health Observatories

**7.3.18** Around 14% of Year 6 children are classified as obese, which puts the Royal Borough amongst the best English authorities. However, the proportion of physically active children is significantly lower than the England average.

**7.3.19** A similar pattern can be observed amongst adults, with lower levels of obesity than is typical across England as a whole, but physical activity levels are only average.

**7.3.20** These low levels of physical activity are mirrored by high levels of car use for both commuting trips<sup>25</sup> and the school run<sup>26</sup>, which are higher than either the national or regional averages, with correspondingly lower levels of walking and cycling.

## **Natural Environment**

**7.3.21** Large parts of the Royal Borough are recognised for their biodiversity value. These include a number of internationally important sites designated through the European Union (Special Areas of Conservation and Special Protection Areas) and by international convention (Wetlands of International Importance or Ramsar sites). Internationally important sites wholly or partially within the Royal Borough are:

- Chiltern Beechwood Special Area of Conservation
- South West London Water Bodies Special Protection Area and Ramsar
- Thames Basin Heaths Special Protection Area
- Thursley, Ash Pirbright and Chobham Special Area of Conservation
- Windsor Forest and Great Park Special Area of Conservation

**7.3.22** There are also 11 Sites of Special Scientific Interest, a number of areas of Ancient Woodland and many sites of local biodiversity importance.

**7.3.23** In partnership with the other Berkshire local authorities, the Council has produced a number of Biodiversity Action Plans covering a range of habitats. We have also prepared a Supplementary Planning Document on the Thames Basin Heaths Special Protection Area, which sets out how the impacts of new development upon the SPA will be mitigated.

**7.3.24** Maintenance regimes can play an important part in protecting habitats and encouraging biodiversity in highway verges and around our public rights of way.

**7.3.25** Water quality in the River Thames and its tributaries has historically been a problem, due to contamination from run-off from roads and agricultural land. However, a survey carried out by the Environment Agency showed that the Thames experienced the biggest improvement in water quality in England between 2002 and 2010. A resurgence in otter numbers, and an international river award (Theiss River Prize), are just two examples of how improved water quality is having a positive environmental impact.

**7.3.26** However, there is still more work to be done. The Water Framework Directive has set the target to achieve 'good status' in all waters by 2015. Currently, around a quarter of all rivers, lakes and estuaries in the Thames River Basin District are now at good status<sup>27</sup>.

---

<sup>25</sup> 2001 Census data

<sup>26</sup> School Census 2010/11

<sup>27</sup> River Basin Management Plan, Thames River Basin District, Environment Agency, December 2009



## Landscape

**7.3.27** The Royal Borough contains diverse urban and rural landscapes including nearly 4km<sup>2</sup> of National Trust land and almost 30km<sup>2</sup> of land owned by the Crown estate as well as Grade 1 and 2 agricultural land.

**7.3.28** While the River Thames setting is seen as the defining character for much of the local landscape, the northern areas are defined as being within the Chilterns, while the southern tip is part of the Thames Basin Heaths area<sup>28</sup>. However, this broad brush categorisation conceals a more complex landscape character, including several different types of parkland, farmland and flood plain.

**7.3.29** The Borough is crossed by several motorways, including the M4, M25, A404(M) and A308(M), as well as major rail lines to London. There are also several busy A-roads that cross the borough, including the A4, A30, A329, A330 and A335. These fragment the landscape, creating visual and audible impacts, adding to the impression of being in close proximity to urban areas. Due to the flood plain either side of the Thames, many of the major transport corridors are elevated, which further increases the landscape impacts.

**7.3.30** Equally, there are areas where road and rail networks are relatively sparse, such as in Windsor Great Park and areas which are relatively devoid of major transport corridors, such as Cookham Dean, where rural lanes contribute to the landscape character of the area.

## Townscape and Heritage

**7.3.31** The borough has three distinct urban areas – Maidenhead, Windsor, and Ascot and the Sunnings. There are also numerous smaller villages scattered across the Green Belt. A recent Townscape Assessment<sup>29</sup> found 17 distinct townscape types within the borough from historic town cores and Victorian villages to late 20<sup>th</sup> century suburbs and industrial estates.

**7.3.32** The Royal Borough has a rich architectural history, with approximately 900 listed building entries (approximately 1,500 individual listed buildings) and 27 Conservation Areas. Transport is an integral element of this heritage. In the 18<sup>th</sup> century, Maidenhead was a busy stop on the coach route from London, while in the 19<sup>th</sup> century Brunel's railway crossed the Thames via the magnificent Grade II\* listed Sounding Arch Bridge. There are several other important bridge links across the Thames within the local authority area from William Tierney Clark's historic suspension bridge to Marlow in the west to the more contemporary M25 bridge at Hythe End in the east.

**7.3.33** However, transport also has a detrimental impact on our townscape and important historic structures. Some impacts merely affect the character of the area, such as the high levels of traffic that cut through the heart of the conservation areas such as Pinkney's Green, Bray village and Cookham High Street. Others have a direct physical impact – for example, damage to a significant Georgian wall in Datchet as a result of vibration from passing lorries.

**7.3.34** Traffic and parking particularly affect some of our historic towns and villages, which were not designed to accommodate the car. Our historic centres attract large numbers of visitors, requiring significant space for car parking, whilst narrow roads such as Eton High Street suffer from traffic congestion. Our Victorian terraced streets similarly suffer with parking issues due to high levels of car ownership in what is a relatively affluent area and traditional front gardens and historic garden boundaries are often lost to off-street parking. There has also been a steady increase in road markings, traffic signs and other street furniture over the years that detracts from the historic townscape setting

---

<sup>28</sup> Landscape Character Assessment for the Royal Borough of Windsor and Maidenhead, September 2004

<sup>29</sup> Royal Borough of Windsor and Maidenhead Townscape Assessment, June 2010



## 7.4 SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Initial results from the Clarence Road roundabout scheme show that there have been improvements in congestion and air quality.</li> <li>• Numbers of children walking to school are increasing.</li> <li>• Levels of walking and cycling are increasing, particularly in Windsor.</li> <li>• Water quality across the Thames Basin has improved significantly.</li> <li>• Traffic levels have decreased in most parts of the borough in the last 5 years.</li> </ul>	<ul style="list-style-type: none"> <li>• Residents in 37 areas are exposed to noise levels likely to impact upon health and quality of life.</li> <li>• Air quality exceeds national objective levels in several areas, including Maidenhead, Windsor and Bray.</li> <li>• Levels of car use on the school run are amongst the highest in England and levels of walking and cycling are amongst the lowest.</li> <li>• Levels of car use for commuting trips are higher than national and regional averages, with correspondingly lower levels of walking and cycling.</li> <li>• Fragmentation of sensitive habitats by transport networks.</li> <li>• Less than 25% of waters are of a 'good' standard in the Thames Basin.</li> <li>• High traffic levels and congestion in local conservation areas / historic centres.</li> <li>• High visual impact of parking in historic centres / Victorian terraces.</li> <li>• Traffic damage to historic structures</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Transport improvements delivered as part of the regeneration of Maidenhead Town Centre will help to reduce congestion, lower road noise levels, and improve air quality.</li> <li>• Development of the Allen's Field SANG will help to alleviate pressure on the Thames Basin Heaths Special Protection Area.</li> </ul>	<ul style="list-style-type: none"> <li>• Increasing levels of through-traffic from major development in neighbouring areas is likely to adversely impact on noise, air quality and the natural and built environment.</li> </ul>

## 7.5 Objectives

### 7.5.1 The objectives of the Improving Quality of Life Strategy are:

- Minimise the adverse impacts of transport upon the natural and built environment.
- Minimise the adverse impacts of transport upon the health and well-being of local residents.

## 7.6 Policies

### Partnership Working

7.6.1 Tackling environmental and health issues associated with transport will require the Royal Borough to work with partner organisations at all levels from national regulatory bodies such as English Heritage, the Environment Agency and Natural England to local partners such as neighbouring authorities and hospital trusts.

### **Policy QOL1: Partnership Working**

The Royal Borough of Windsor and Maidenhead will work in partnership with regulatory bodies, neighbouring local authorities, healthcare trusts and local communities to improve the quality of the natural and built environment and improve health outcomes.

### Air Quality

7.6.2 Most local air quality problems relate to vehicle exhaust emissions, with elevated levels of pollutants experienced in congested areas. Measures designed to improve traffic flow and manage travel demand are therefore likely to be most effective in tackling air quality problems. Monitoring has shown a significant improvement in air quality during the first few months following reconstruction of the Clarence Road roundabout in Windsor.

7.6.3 Additional measures have been introduced or are planned for Windsor as part of the Windsor Transport and Parking Strategy, which should have a beneficial impact on air quality at both the existing AQMA at the Clarence Road roundabout and the proposed AQMA at the Imperial Road / St Leonard's Road / Winkfield Road junctions. These include:

- Improved park and ride operations at the existing Home Park and Legoland sites.
- New park and ride sites at Centrica and Windsor Racecourse.
- Variable message signing on approaches to Windsor, providing motorists with information on traffic conditions and parking availability, which will help them avoid congested routes and minimise circulation time when looking for parking spaces.
- Improved cycle routes between Dedworth and central Windsor.

7.6.4 We will seek to apply the lessons learned in Windsor when looking at air quality problems in Maidenhead. Here, the focus is on rejuvenating the town centre, with major retail, office and residential development proposed. Transport improvements will be key to this rejuvenation. These include the construction of the Stafferton Way link road, connecting to Oldfield Road and Forlease Road, thus completing the ring road around the town centre. This will help to route through-traffic away from the A308 past the station and Grenfell Island, which will improve links with the rail station and facilitate walking and cycling access. A multi-modal transport interchange is also proposed for Maidenhead Station, which will enhance

Maidenhead's status as the western terminus for Crossrail and facilitate access to the station and town centre by modes of transport other than the car.

**7.6.5** The existing AQMA at Bray and the potential AQMA at Hythe End are more related to traffic on the motorway network. We will work with the Highways Agency to identify whether improvements to noise barriers could help to reduce air quality impacts. Measures implemented on the local transport network will have less of an impact, but, recent / proposed improvements to local walking and cycling networks should help by encouraging alternatives to the car for local journeys.

**7.6.6** The above will be complemented by a borough-wide 'smarter choices' programme, which will seek to encourage more sustainable travel patterns through travel planning, education, information and marketing campaigns (see Chapter 5 for details). We will seek to learn from the Sustainable Travel Demonstrations Towns project, which managed to cut traffic use by up to 9% across the three towns.

## Policy QOL2: Air Quality

The Council will actively seek to reduce concentrations of atmospheric pollutants in order to meet National Air Quality Objectives by implementing traffic management measures that tackle congestion and improve traffic flow, complemented by a 'smarter choices' programme that minimises the need to travel and encourage use of alternatives to the car.

### Noise

**7.6.7** Vehicle engines are the dominant source of noise at low speeds (under 20 miles per hour for cars and under 30 miles per hour for lorries). Tyre noise starts to dominate above these speeds (and is the main source of noise above 50mph), with aerodynamic noise also becoming louder with vehicle speed.

**7.6.8** Most areas with actionable levels of traffic noise relate to high speed roads (with speed limits of 50mph or more), so reducing vehicle speeds may therefore be an appropriate mechanism in some cases for dealing with noise issues. However, reducing vehicle speeds is not a realistic option in all cases, and other mechanisms may need to be considered.

**7.6.9** There are currently several approaches taken to control the impact of excessive road traffic noise on the public highway including, but not limited to:

- Installing low noise (quiet) road surfaces;
- Implementing local traffic management measures;
- Erecting noise barriers; or
- Improving the sound insulation of affected dwellings (note this option does not address the existing noise climate outside the residential dwelling)

**7.6.10** The structure and texture of road surfaces can also have an impact upon the level of noise that is generated by the passing of car tyres. 'Quiet' surfaces can cut tyre noise by up to three quarters compared to standard asphalt and shall be considered for local resurfacing schemes. While, these low noise surfaces can be comparatively expensive to construct and maintain, the costs must be considered in comparison with the total benefits of reducing traffic noise in terms of money saved on constructing noise barriers and / or providing building insulation, which are common mitigation measures where intervention is required to address road traffic noise.

7.6.11 Where noise problems related to traffic on the motorway and trunk road network, the Royal Borough will actively work with the Highways Agency to review maintenance regimes and promote the use of noise mitigation measures.

### Policy QOL3: Noise

The Council will actively seek to ensure that road traffic noise levels are kept within acceptable national guideline levels to protect the health and enhance the well-being of local residents and school children, and where this cannot be achieved the Council will adopt noise mitigation measures for those residents and school children affected by excessive road traffic noise.

#### Lighting

7.6.12 The Institution of Lighting Engineers has produced guidance<sup>30</sup> for reducing light pollution. This highlights a number of ways in which light pollution can be minimised, including:

- Ensuring that areas are not 'over-lit', with illumination levels appropriate to the conditions
- Dimming or switching off lights when traffic levels are at their lowest.
- Use specifically designed lighting equipment that minimises the upward spread of light near to and above the horizontal.

### Policy QOL4: Lighting

The Council will seek to minimise light pollution from street lighting by adopting best practice in terms of street light design and operation for all new and replacement schemes, including those associated with new development.

#### Health

7.6.13 The National Institute for Health and Clinical Excellence has produced guidance<sup>31</sup> suggesting that adults who are not physically active should be advised to be moderately active for at least 30 minutes, 5 days a week. They recommend that healthcare professionals should promote walking and cycling as a means of incorporating regular physical activity into people's daily lives.

7.6.14 The EU funded ASTUTE programme identified 10 barriers to walking and cycling, namely:

- Safety and security concerns
- Inadequate information
- Inadequate urban environment and design
- Lack of infrastructure and support
- Poor public awareness and lack of awareness
- Accessibility and health issues
- Lack of public sector support
- Lack of private sector support
- Congestion and air pollution
- Lack of education and training

<sup>30</sup> Guidance Notes for the Reduction of Obtrusive Light, Institution of Lighting Engineers, 2005

<sup>31</sup> Public Health Intervention Guidance no. 2, NHS National Institute for Health & Clinical Excellence, March 2006

**7.6.15** The experience of the Sustainable Travel and Cycling Demonstration Towns in the UK has shown how these barriers can be addressed through programmes of capital investment to address shortcomings with infrastructure, supported by extensive Smarter Choices programmes to address the remaining issues. The Sustainable Transport Demonstration towns achieved average increases in walking and cycling of 10-13% and 26-30% respectively.

#### **Policy QOL5: Health**

The Council will work with partners in the healthcare sector to encourage active forms of travel for everyday journeys to contribute to tackling obesity and improving long-term health outcomes for both adults and children.

#### Natural Environment

**7.6.16** The Thames Basin Heaths Special Protection Area (SPA) is a network of internationally important heathland sites straddling the boundary with Surrey and Bracknell Forest. These sites support rare birds such as the Dartford warbler, woodlark and nightjar that are highly sensitive to visitors. To prevent harm to the SPA, new development must now contribute towards enhancements of Suitable Alternative Natural Greenspaces (SANGs) such as Allen's Field, and encourage their use to reduce recreational pressure on the SPA. This includes provision of new paths and car parking facilities as well as woodland thinning and management. Where proposals for transport interventions are considered likely to cause significant harm to areas covered by national and international statutory designations, these will not be progressed,

**7.6.17** Much can be done to minimise the impact of transport upon local wildlife and plant life through sensitive choices about the location of new infrastructure as well as its design, construction and maintenance. For example, tunnels beneath roads on routes known to be used by wildlife can help to reduce instances of road kill amongst a range of species from toads to badgers. Avoiding the use of bituminous materials near water courses and sensitive design of highway drainage systems can help to prevent contamination of water courses by surface water run-off, which can affect aquatic plants and wildlife. Also, carriageway verges have become rich habitats, with diverse ranges of plants insects, mammals and birds. Avoiding use of herbicides and sensitive cutting regimes are deployed in order to support biodiversity.

#### **Policy QOL6: Natural Environment**

The Council will actively seek to mitigate the impacts of transport movements and highways works on the natural environment by routeing traffic and people away from sensitive sites, and through appropriate choices concerning design, materials, construction methods and maintenance regimes, taking opportunities to enhance biodiversity where practicable.

#### Landscape

**7.6.18** As the first truly green space to the west of London, the Royal Borough is recognised for its landscape value, whether this is the rolling hills around Cookham Dean, the River Thames and its environs or the open spaces and vistas of Windsor Great Park. This is important for residents and visitors alike and it is vital that transport and its associated infrastructure do not unduly affect the local landscape.

**7.6.19** As mentioned previously, much can be achieved through sensitive routeing of roads and paths so they are not visually intrusive. Where route choices are limited, sensitive use of screening using planting material can help to mitigate the impact. The choice of surfacing

material also has an impact. Bituminous asphalt and macadam surfaces are chosen for their durability and load bearing capability, but are visually unappealing. Crushed aggregate paths are more in keeping for visually sensitive settings where non-motorised traffic is expected. Where a more substantial surface is required, natural stone surface dressing materials can be available to soften the appearance of bituminous roads and paths.

### **Policy QOL7: Landscape**

The Council will seek to minimise the impact of transport infrastructure upon the local landscape through sensitive choice of transport routes, construction materials and screening.

#### Townscape and Heritage

**7.6.20** We are fortunate in the Royal Borough to have so many locations with a historic built environment, which is part of the area's appeal for both residents and visitors. In such areas, a careful balance has to be struck between access and protecting the character and fabric of the area.

**7.6.21** Over time many of our streets have become victims of street clutter due to excessive amounts of street furniture, regulatory and direction signs. These combine with advertising hoardings and A-frames to create an environment that is not only confusing for the road user, but also detracts from the quality of the built environment.

**7.6.22** It is important to strike a balance between essential signing and unnecessary, unsightly clutter. Opportunities will be taken to remove unnecessary signs and to minimise and combine those signs that remain. Similarly opportunities will be taken to remove illumination of signs where this is not necessary. Some signs do require illumination for safety reasons, but for other signs illumination is optional and these will be reviewed and removed wherever possible.

### **Policy QOL8: Townscape and Heritage**

The Council will seek to minimise the impact of transport infrastructure on the townscape and particularly in our historic centres and conservation areas, routing traffic away from sensitive locations wherever possible and minimising sign clutter and illumination.

## **7.7 Performance Indicators**

**7.7.1** The following performance indicators will be used to measure progress towards objectives:

- Number of residents / schools that experience road traffic noise levels in excess of  $L_{A10, 18h}$  76dB(A) in respect of the local authority road network
- Number of residents / schools that experience road traffic noise levels in excess of  $L_{A10, 18h}$  76dB(A) in respect of the motorway and trunk road network
- Annual average concentration of nitrogen oxides (NO<sub>x</sub>) within the Air Quality Management Areas
- Number of physically active children
- Number of physically active adults



## **8. SUPPORTING DOCUMENTS**

### **8.1 Background**

**8.1.1** The Local Transport Plan has a number of supporting plans and strategies covering particular topics that demand coverage in greater depth due to their complexity, have particular requirements covered by specific legislation, or which operate to different timescales. Supporting documents that already exist or which are currently being prepared include:

- Air Quality Action Plan
- Environmental Noise Action Plan
- Equalities Impact Assessment
- Habitats Regulations Assessment
- Highways Maintenance Management Plan
- Neighbourhood Plans
- Parking Strategy
- Public Rights of Way Improvement Plan
- Strategic Environmental Assessment

### **8.2 Air Quality Action Plan**

**8.2.1** The aim of the Air Quality Action Plan is to reduce road traffic emissions within each AQMA. The AQAP will be developed as an integral part of the LTP through shared objectives to tackle congestion, reduce car journeys and to work towards the attainment of National Air Quality Objectives (NAQO).

**8.2.2** The current AQAP is based on the following strategy themes:

- Mobility Management
- Network Management
- Improving Sustainable Travel Options
- Demand Management
- Vehicle Emissions Testing
- New Technologies

**8.2.3** Initiatives within the above strategy themes include:

- School Travel Plans
- Active Work Place Travel Plans
- Walk to School initiatives
- Travel Reward Scheme
- Speed indicator devices at various locations
- Supported Bus Services
- Better understanding of congestion hotspots

**8.2.4** These initiatives are designed to bring improvements in terms of reducing car journeys within congested areas including Air Quality Management Areas.

**8.2.5** Since the development of the last LTP and AQAP, the Royal Borough has declared a third AQMA and has identified other hot-spot areas.

**8.2.6** A review and an update of the AQAP, due within the next few months, will take these new areas into account and will consider whether any new measures are required to help improve local air quality.

### **8.3 Environmental Noise Action Plan**

**8.3.1** The Environmental Noise Action Plan (ENAP) will be a key supporting document for the Local Transport Plan (LTP) and Borough Local Plan and will set out the Royal Borough's approach to identifying, monitoring, mitigating excessive environmental noise.

**8.3.2** It will set out the policies, at international, national and local level, and strategies in addressing road traffic noise and identify programmes and schemes to implement noise mitigation, where required with respect to roads which give rise to noise level in excess of the government action level (e.g.  $L_{A10\ 18h}$  76dB(A)).

**8.3.3** The plan will also address all other environmental noise sources that fall outside of the scope of the LTP including aircraft noise, railway noise and significant industrial noise. This will aid the adoption of environmental noise policies and environmental noise conditions to be included within the LDF, and applied to specific planning applications where residential dwellings will be built in areas of high environmental noise. This will also include where necessary the preparation of supplementary planning documents.

**8.3.4** With respect to the addressing excessive road traffic noise the plan will look specifically at appropriate noise mitigation measures in consultation and liaison with the highways department who will commission the works for the local road network. The aim is to implement these schemes through a staged and planned approach and the mechanism for implementation is likely to be through Highways Maintenance Management Programme.

**8.3.5** The plan will be prepared in consultation with all the relevant stakeholders and once completed will be subject to annual review to take into account changes in international and national policy in respect of environmental noise. The plan once completed will be published on the council's website. It is envisaged the first draft of the Environmental Noise Action Plan will be published in April 2013.

### **8.4 Habitats Regulations Assessment**

**8.4.1** The Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna – the 'Habitats Directive' provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of interest to the EU in a favourable condition. This is implemented through a network of protected areas referred to as Natura 2000 sites.

**8.4.2** Articles 6(3) and 6(4) of the Habitats Directive require Appropriate Assessment of plans and projects likely to have a significant effect on a European site. This means that the effects of such plans/projects on Natura 2000 sites need to be assessed to ensure that the integrity of these sites is maintained. This Local Transport Plan is such a plan.

**8.4.3** The Natura 2000 sites are of two types – Special Area of Conservation (SAC) and Special Protection Areas (SPA). SACs are mainly habitat features, whereas SPAs are features comprising populations of bird species. Each Natura 2000 site has a number of qualifying features, for which conservation objectives have been developed.

**8.4.4** The purpose of a Habitat Regulations Assessment (HRA) is to assess the impacts of a land-use plan against the conservation objectives of the Natura 2000 Site. The assessment must determine whether the plan would adversely affect the integrity of the site

in terms of its nature conservation objectives. Where negative effects are identified other options should be examined to avoid any potential damaging effects. This process has been used to identify any necessary changes to policy, or alternatives/ mitigation that could improve the Third Local Transport Plan prior to its final adoption.

## **8.5 Highways Maintenance Management Plan**

**8.5.1** The Highways Maintenance Management Plan (HMMP) is a key supporting document for the Local Transport Plan and sets out the Royal Borough's approach to providing the highways maintenance service in accordance with statutory duties and noting the framework and guidance provided in the 2005 National Code of Practice for Highways Maintenance Management entitled 'Well Maintained Highways'.

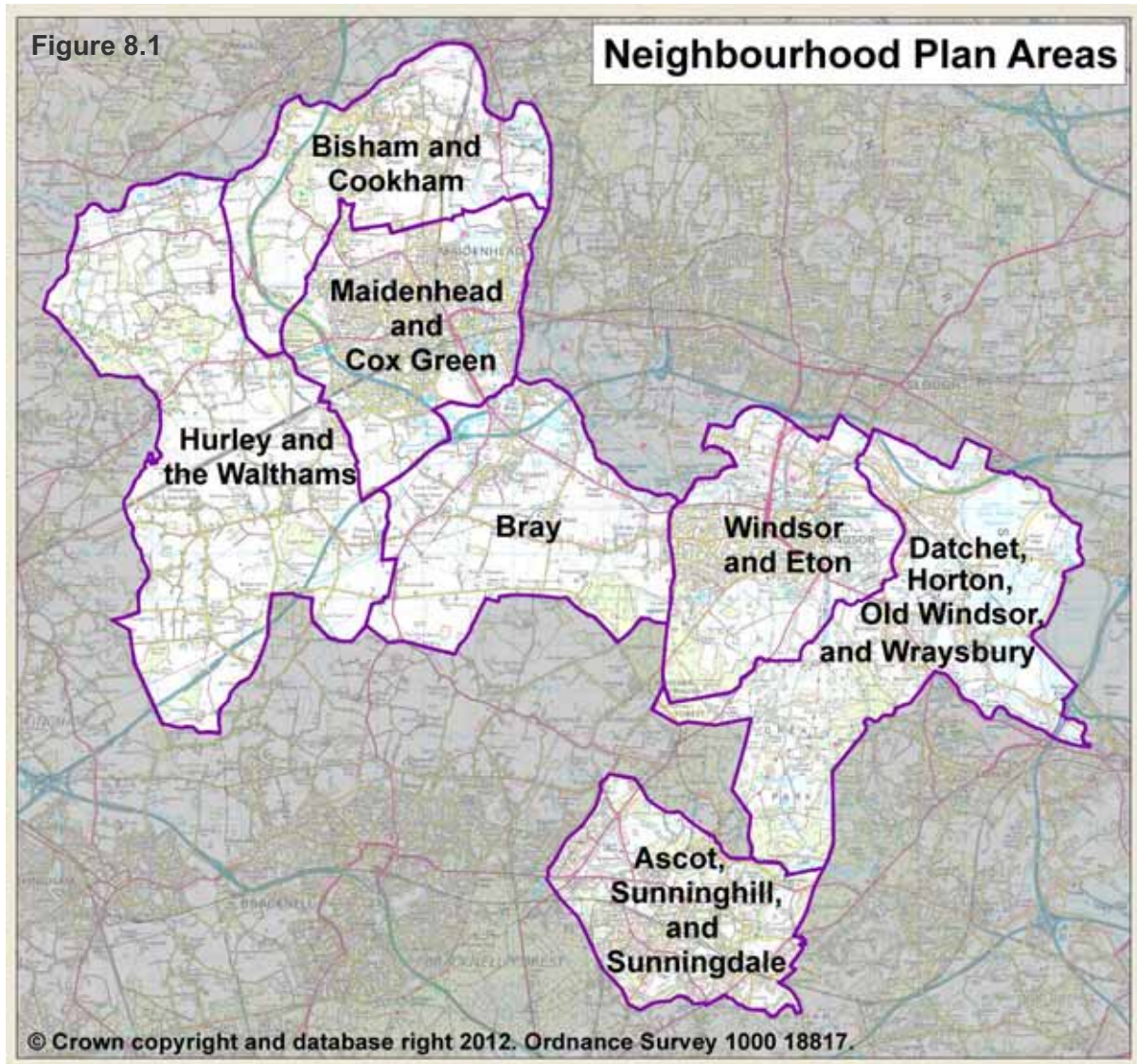
**8.5.2** The HMMP describes the policies, strategies and processes that shape the way the Royal Borough will develop and deliver its highway network maintenance service. The Plan will be reviewed as necessary and certainly during the development of the Royal Borough's Highways Asset Management Plan (HAMP). The aims of the HMMP may be summarised as:

- Maintaining safety for all users of the network
- Supporting community safety and accessibility
- Maintaining the value of the network asset
- Ensuring consistent and appropriate maintenance standards throughout the network with regard to strategic importance and usage
- Maintaining, so far as possible, safe and efficient traffic movement throughout the Royal Borough by coordinating works in the highway
- Ensuring optimum use of available funds
- Facilitating technical and financial monitoring to establish network condition trends and assessing performance against expenditure
- Ensuring that all highway maintenance is carried out with due regard for the community served and the local environment
- Implementing the recommendations and principles outlined in the Codes of Practice and continuing development of our current systems and practices
- Promotion of the constant review of policies and standards to ensure continual development of network maintenance strategies
- Providing a systematic approach to decision making
- Providing a uniform and common basis for assessing maintenance needs and resource requirements.

**8.5.3** A copy of the full HMMP can be found on the council's website.

## **8.6 Neighbourhood Plans**

**8.6.1** In the Royal Borough, the aspiration is to deliver neighbourhood plans as part of a wider comprehensive approach to localism across the borough. Using a process of dialogue between the borough council and parish councils, the borough has been divided into seven areas for neighbourhood planning – see map below.



8.6.2 These are based on:

- a) common interests and characteristics and
- b) providing a manageable number of areas, in terms of the borough council's resource to provide any support necessary to go through the process.

8.6.3 These plans will be progressed over the next two years and will include proposals for particular transport interventions as well as additional policies specific to each area.

## 8.7 Parking Strategy

8.7.1 The Strategy covers all aspects of parking across the borough. Its overall aim is to manage the stock of public parking subject to public control in a manner that is consistent with, and contributory to, the objectives of the Local Transport Plan. Particular concerns are to reduce congestion and aid traffic movement, improve road safety and balance the supply of car parking with the needs and priorities of users.

8.7.2 The Strategy seeks to achieve its objectives by means of several mechanisms:

- 1) **Parking Provision** - A key element of the management of parking supply is ensuring that spaces are available at locations that maximise the potential for achieving wider transportation, social, economic and environmental goals. Additionally, the cost of parking at point of use contributes to achieving a balance between supply and demand, both for on and off street parking.
- 2) **Parking Enforcement** - The Council has responsibility for parking enforcement in the borough, which is required to ensure that parking supply is managed effectively to limit congestion and dangers for other road users.
- 3) **Parking Quality** - The Borough's parking stock needs to be designed and maintained to ensure high standards in the following areas: personal safety, property security, accessibility, highway safety, environmental impact and traffic management.
- 4) **Parking Standards** - New and expanded developments will be designed with standards of parking appropriate to the form of development and to the location of that development. This approach should reduce both the amount of land dedicated to parking and the need to travel by car; this will support town centre regeneration objectives and lessen development pressure on the Green Belt.

**8.7.3** Although the Strategy is fundamentally a Borough-wide policy document, it also includes strategies for the Borough's two main town centres of Windsor and Maidenhead, which have their particular parking and congestion issues.

**8.7.4** All the elements of the Strategy have targets identified whose degree of achievement can be measured by assessment against performance indicators.

**8.7.5** For the Parking Strategy to remain a useful document in the light of future changes to policy at national and local level, it may prove necessary to review it from time to time.

**8.7.6** The Parking Strategy is available to view or download on the council's website.

## **8.8 Public Rights of Way Improvement Plan**

**8.8.1** The Countryside and Rights of Way Act 2000 places a duty on all highway authorities to produce a Public Rights of Way Improvement Plan (ROWIP) for their area. This 10-year strategic plan is the prime means by which the Council will identify the changes to be made in respect to the management and improvement of the local public rights of way network in order to attain better provision for walkers, cyclists, equestrians and people with mobility problems.

**8.8.2** In drawing up the plan, the Council is required to assess:

- The extent to which public rights of way meet the present and likely future needs of the public;
- The opportunities provided by public rights of way for exercise and other forms of open-air recreation and enjoyment;
- The accessibility of public rights of way to blind or partially sighted persons and others with mobility problems.

**8.8.3** The plan sets out a statement of action that the Council will adopt for the improvement of the public rights of way network, covering the following areas:

- Improvement of existing paths

- Creation of new routes and links
- Information and promotion.

**8.8.4** The Council publishes an annual Milestones Statement, which includes a progress report on Public Rights of Way Improvement Plan actions carried out in the previous year, and a forward plan setting out proposed actions for the coming year.

**8.8.5** The ROWIP and Milestones Statements can be accessed via the Council's website.

## **8.9 Strategic Environmental Assessment**

**8.9.1** Strategic Environmental Assessment (SEA) involves the systematic identification and evaluation of the environmental impacts of a plan. Its aim is "to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes, with a view to promoting sustainable development".



## 9. LOCAL TRANSPORT PLAN FUNDING

### 9.1 Background

9.1.1 The Local Transport Plan Capital Programme is funded from a variety of sources, including:

- LTP grant funding;
- major transport scheme grant funding;
- developer contributions; and
- the council's own funds.

9.1.2 The total LTP Capital Programme for 2012/13 is £7.15 million (including slippage) of which approximately £1.4 million is related to local major transport schemes and over £0.8 million is related to transport related elements of the Maidenhead Regeneration project.

9.1.3 Central government has confirmed LTP grant funding for 2012/13 and has provided indicative figures for the next two years – 2013/14 and 2014/15. No information is available about LTP funding beyond this date, but it is assumed that this will continue to be allocated using a needs based formula. On this basis, capital maintenance block funding is expected to level off within the next few years, before increase towards the middle and end of the LTP period, while integrated transport block funding is expected to continue to increase over time, broadly keeping pace with inflation.

	2012/13 £000s	2013/14 £000s	2014/15 £000s
Integrated Transport Block	697	697	980
Capital Maintenance Block	1,983	1,858	1,797
<b>Total LTP Grant Funding</b>	<b>2,680</b>	<b>2,555</b>	<b>2,777</b>

Table 9.1: Local Transport Plan Grant Funding Allocations

9.1.4 The Royal Borough has previously benefited from Major Transport Scheme funding, including £10 million secured for Windsor and Eton Relief Road and the Windsor Parking and Transport Strategy. These projects should be concluded in 2012/13. The Government recently consulted upon the future of Major Transport Scheme funding and is expected to announce future arrangements later this year.

9.1.5 The Council will also take opportunities to bid for additional funding as the opportunity arises. For example, in February 2012 the Council submitted a £3.156 million bid to the Local Sustainable Transport Fund for infrastructure and “smarter choices” initiatives to support the Maidenhead Regeneration project. If successful, funding should be confirmed in June and will be paid over three years from 2012/13 to 2014/15 inclusive.

9.1.6 Developer funding remains an important element of funding for LTP projects, accounting for approximately 10% of the LTP annual programme (excluding major transport schemes and the Maidenhead Town Centre Regeneration schemes).

9.1.7 This is currently secured through Section 106 (s106) Agreements. However, the Royal Borough is also working towards the introduction of the Community Infrastructure Levy (CIL). This is a new levy that local authorities will need to charge on new developments because the current S106 developers' contributions process will be severely curtailed in April

2014 as a result of changes to legislation. CIL is charged on each square metre of new floor space created. There is a greater flexibility for spending CIL as funds are not ring-fenced, however there is still a legal requirement on the Borough to demonstrate that the funds have been spent appropriately in respect to the three tests within CIL regulations:

- They must be necessary to make the development acceptable in planning terms
- They must be directly related to the development in question
- They must be fairly and reasonably related in scale and kind to the development

## **9.2 Implementation Plans**

**9.2.1** Further financial information will be provided in the Implementation Plans, which will set out the schemes and initiatives that we intend to deliver over the course of the next financial year as well as an indicative programme for future years. It is intended that this will be updated on an annual basis.

**9.2.2** The rate at which schemes and initiatives can be progressed will vary depending on the availability of funding and resources. This will be reflected in the Implementation Plan updates. It is acknowledged that there is considerable uncertainty regarding budgets and that future levels of funding may change as a result of future Spending Reviews. A robust prioritisation process will be used to ensure that the most effective schemes are implemented using the available level of resources.



## GLOSSARY

Accessibility	How easily everyday services and facilities can be reached
Active Travel	Modes of travel that promote physical activity, such as walking and cycling
AQAP	Air Quality Action Plans set out how national air quality objectives will be achieved in areas where residents are likely to be affected by airborne pollutants
AQMA	Air Quality Management Areas are declared in areas where national objective levels for certain pollutants are not achieved and where residents are affected
BAA	BAA Airports Limited operates Heathrow Airport and several other airports across the UK
Borough Local Plan	This will contain planning guidance and policies that apply across the whole of the borough.
Capital Expenditure	This is incurred when money is spent to build or buy a physical asset (e.g. a new footway, cycle parking, bus shelter, car park, etc), or to improve an existing physical asset
Carriageway	The part of a road used by vehicular traffic
CCTV	Closed circuit television
Climate Change	A process that causes adjustment to a climate system – for example humans are understood to be causing climate change through the release of heat-trapping greenhouse gases into the air
CO <sub>2</sub>	Carbon dioxide is probably the most important of the greenhouse gases as it accounts for 60% of the 'enhanced greenhouse effect'
Community Transport	Community Transport is for people who cannot use conventional public transport, because they do not have access to these services, or because they are unable to use it due to sensory / mobility problems
Crossrail	Crossrail is a new east-west railway providing direct links to and through Central London, with Maidenhead as the western terminus
DEFRA	Department for Environment, Food and Rural Affairs
Demand Management	This seeks to restrict travel demand at peak times through measures such as Road User Charging or Workplace Parking Levies
DfT	Department for Transport
Footway	Path alongside the carriageway over which the public have a right of way on foot only (often referred to by the public as the 'pavement')
HAMP	The Highways Asset Management Plan sets out

	how the council will manage the highway assets on the local transport network to keep them safe for use and fit for purpose
HGV	Heavy Goods Vehicle (also know as a Large Goods Vehicle) is a lorry of over 3,500kg
HMMP	The Highways Maintenance Management Plan describes the policies, strategies and processes that shape the way the council will develop and deliver its highway network maintenance service
HRA	Habitats Regulation Assessment
Implementation Plan	The delivery component of LTP3 that sets out how, where, and when the strategy will be delivered, including investment programmes and the performance indicators and targets that will be used to measure the success of the LTP
Interchange	The transfer between different legs of a journey (e.g. changing trains, walking to a bus stop, etc)
LEP	Local Enterprise Partnerships bring together local authorities and businesses to determine local economic priorities and undertake activities that support economic growth and local job creation
LSP	Local Strategic Partnerships bring together representatives from the public, private and third sectors to identify local priorities and to develop and deliver of the Sustainable Community Strategy
LTP	The Local Transport Plan sets out the transport policy and implementation plan for the borough
Modal Shift	The change from one mode of transport to another over a period of time
Network Management	Ensuring the safe and efficient movement of people and goods around the transport network (e.g. coordination of traffic signals, real-time and static signing, controlling access for utilities, timely maintenance, etc)
Network Rail	Network Rail runs, maintains and develops Britain's rail infrastructure
NO <sub>2</sub>	Nitrogen Dioxide – a key airborne pollutant from vehicle exhaust emissions and the trigger for declaring local Air Quality Management Areas
Noise Action Plans	These set out how problems with environmental noise (including traffic noise) will be addressed in areas where modelling shows that noise levels are above key thresholds
Park and Ride	Motorists are intercepted on the outskirts of a town and encouraged to complete their journey by dedicated public transport services, thereby reducing town centre congestion and car parking requirements

Particulates	These are specks of solid material suspended and transported in the air. There is a wide range of particles in the air that we breathe, including very fine particles from vehicle exhausts that can penetrate deep into our lungs leading to health impacts with prolonged exposure
Personalised Travel Planning	This involves direct contact with local households to look at how they currently travel, then provide information on alternatives they may not have previously considered, and offer incentives to encourage them to substitute regular car journeys with more sustainable forms of transport
Public Transport	Shared transport services such as buses and trains that are available for use by the general public, as opposed to taxis, chartered coaches or lift sharing, which are not shared by strangers without prior arrangement
Punctuality Improvement Partnerships	A voluntary agreement between a local authority and bus operator designed to achieve improvements in, and maintain consistency of, punctuality and bus journey times in their area
Real-Time Information	This is data that is provided directly to the user as soon as it is collected (e.g. live information on arrival times for buses or trains)
Revenue Expenditure	Deemed to be an ongoing expense (e.g. support for local bus services, or mowing highway verges)
RUS	Route Utilisation Strategies are prepared by Network Rail and provide recommendations for the future development of train services on specific parts of the national rail network
SEA	Strategic Environmental Assessment
Smarter Choices	Smarter choices are techniques for influencing people's travel behaviour towards more sustainable options (e.g. travel planning and marketing campaigns)
SMS	Short Messaging Service is used for sending text messages on mobile phones
Social Exclusion	This refers to the inability to access opportunities in society due to a lack of resources (e.g. residents without access to a car being unable to get to work, education, shops, or healthcare facilities)
SPA	Special Protection Areas are strictly protected sites classified in accordance with Article 4 of the EC Birds Directive (1979)
Sustainable Development	'Development which meets the needs of the present without compromising the ability of future generations to meet their own needs.' (Brundtland Commission, 1987)

Sustainable Travel	Sustainable travel is considered to be any form of transport that minimises its environmental, social and economic impacts
Third Sector	Also known as not-for-profits, these include voluntary and community organisations, social enterprises, mutuals and cooperatives that are independent of government and exist to achieve social goals rather than to distribute profit
Traffic Calming	This includes elements of highway design that reduce vehicle speeds in urban areas (e.g. road humps, speed cushions, build-outs, chicanes, etc)
Traffic Management	This refers to measures that impose restrictions on the movement or parking of vehicles (e.g. speed limits, access restrictions, parking restrictions, banned turns, traffic signals, etc)
Travel Plans	Packages of measures that seek to reduce the number of car journeys to / from a particular development or organisation and encourage people to adopt more sustainable travel patterns
Trunk Road	A public highway that forms part of the strategic road network managed by the Highways Agency
Vulnerable Road Users	These include pedestrians and cyclists who have less physical protection compared to other roads users, and those who have reduced capability to recognise / respond to traffic danger (e.g. young children)